MARCH 1, 2018

SUWANNEE RIVER
Water Management District

2018

CONSOLIDATED ANNUAL REPORT

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Consolidated Annual Report

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For More Information

For further information regarding this report, contact the Planning Section at 386.362.1001, or planning@srwmd.org. This report is also available on the District's website at: www.mysuwanneeriver.org.

ADA Statement

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

2018-2022

STRATEGIC PLAN AND ANNUAL WORK PLAN REPORT

Strategic Plan
2018 - 2022

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.

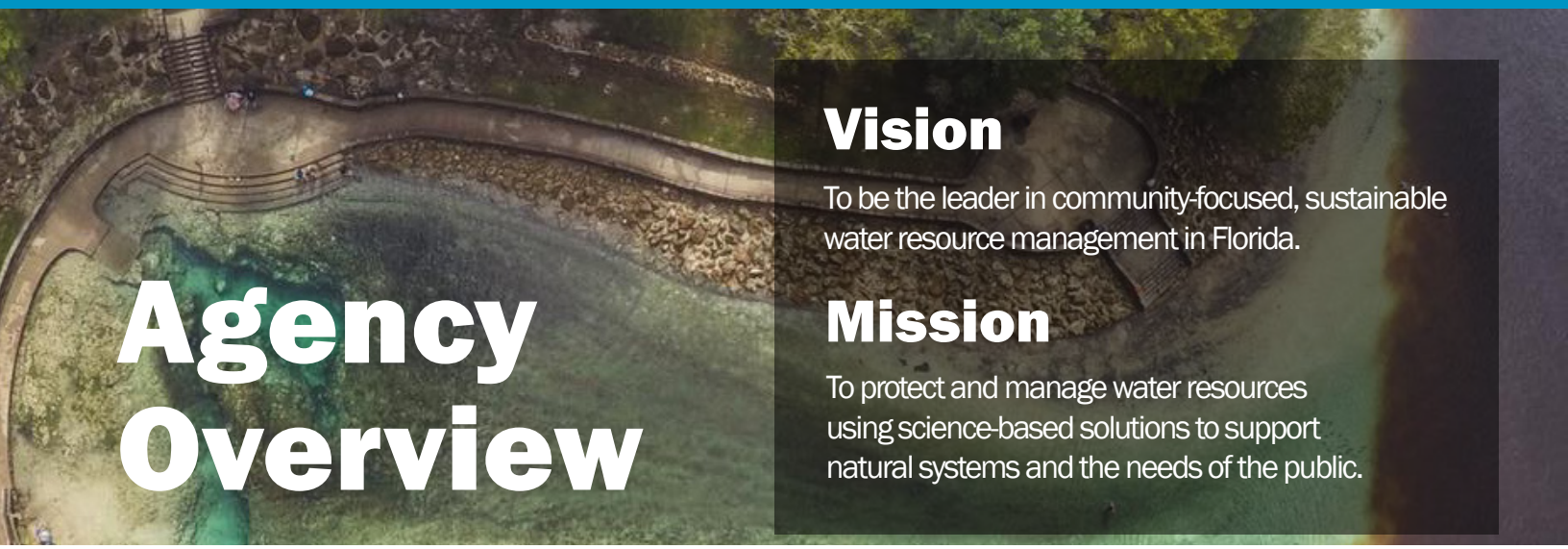
Key to improved regional water conservation efforts is effective joint planning between the St. Johns River Water Management District (SJRWMD) and are our own district. This year the two districts have completed the North Florida Regional Water Supply Plan (NFRWSP). This first-ever, joint-planning document 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 roadmap, I look forward to what we can accomplish together.

Updated January 2018



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.

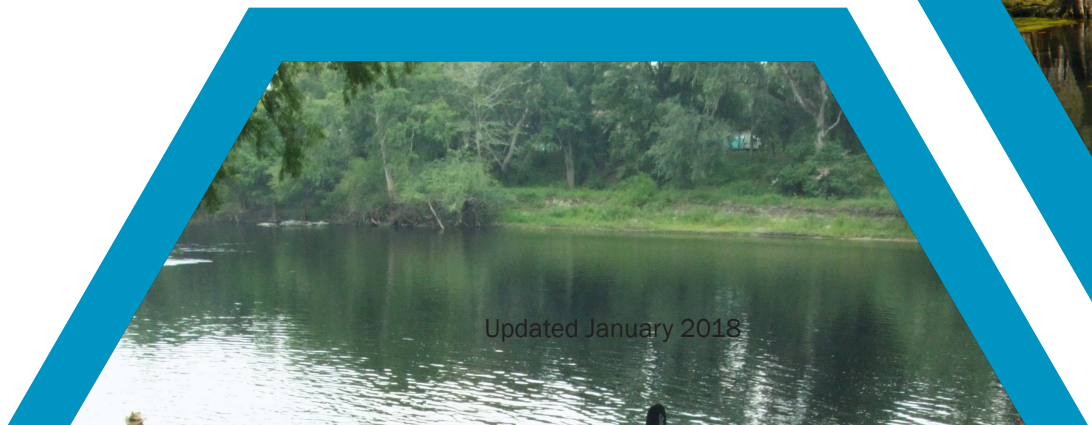
While the District is the smallest of the five water management districts in geographic area, population served, tax base, and agency staff, it holds many of the most unique and valuable natural resources in Florida. The District encompasses 7,640 square miles in north-central Florida. The District includes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

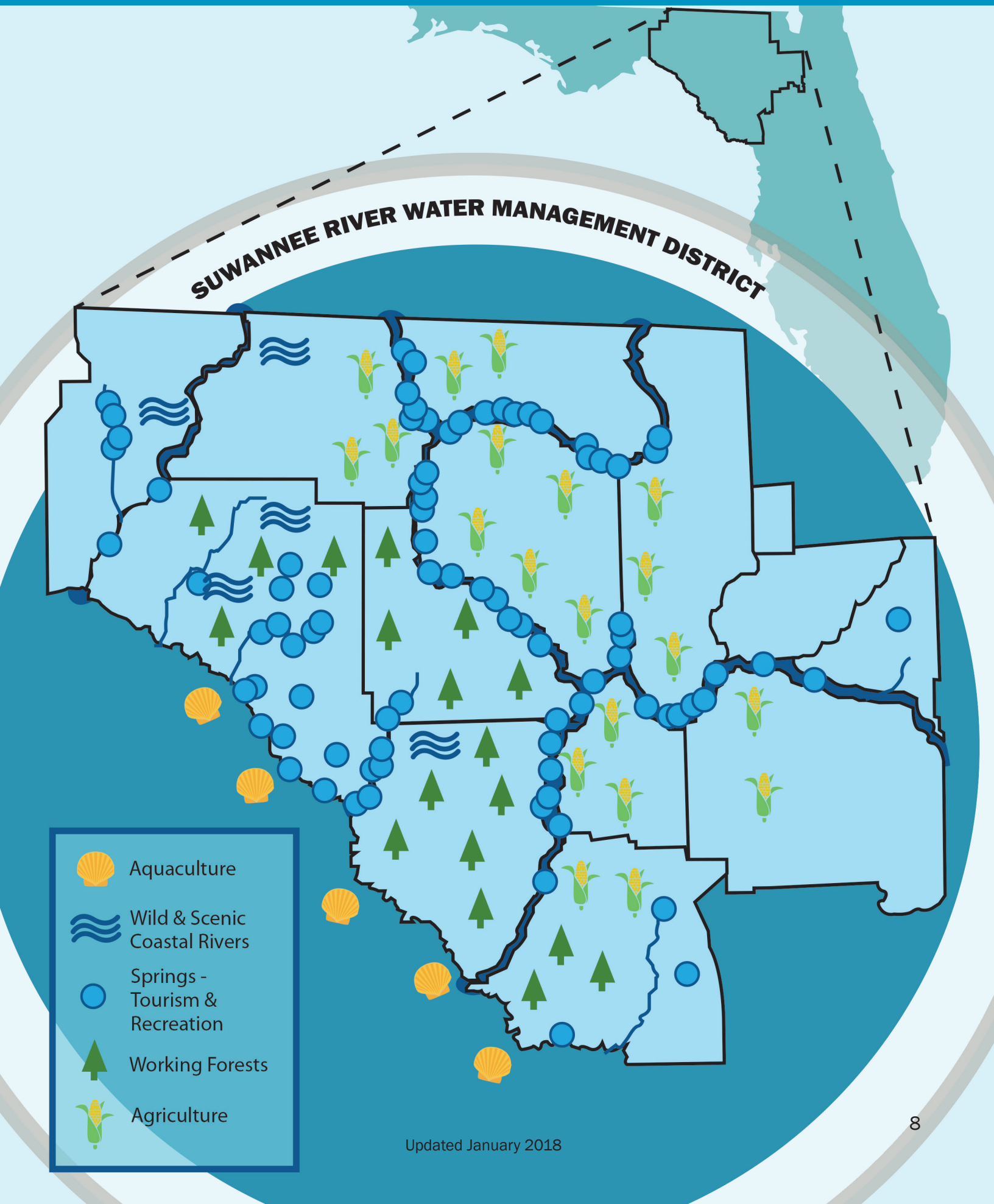
SPRINGS-BASED RECREATION AND TOURISM

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.

ENVIRONMENTAL AND ECONOMIC CONNECTIONS MAP



Updated January 2018

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

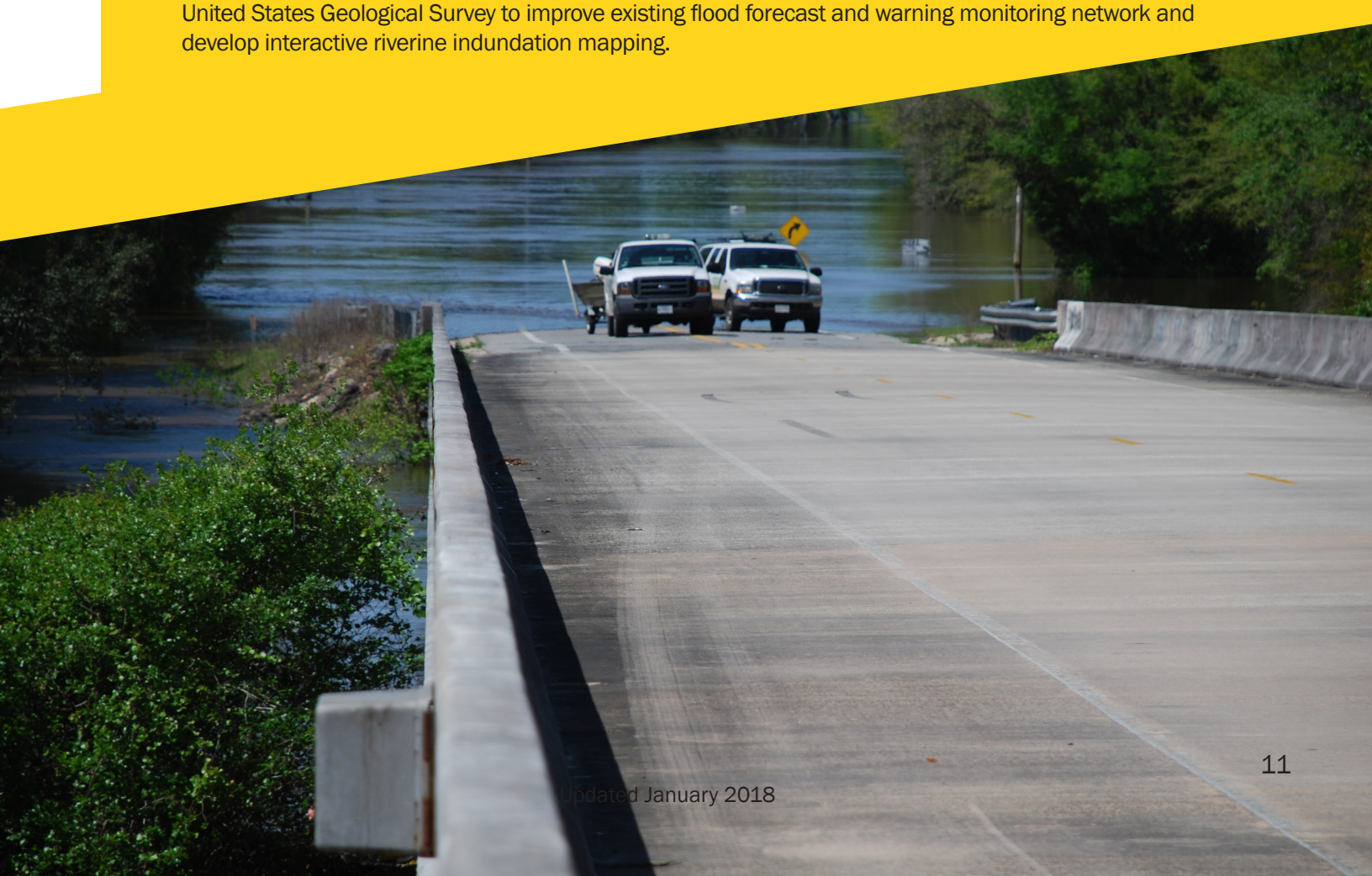
- In conjunction with local entities, identify areas through the FEMA discovery process as under significant risk of flooding and offer cost-share on flood abatement projects through the District's Regional Initiative Valuing Environmental Resources (RIVER) program, as funding is available.
- Partner 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

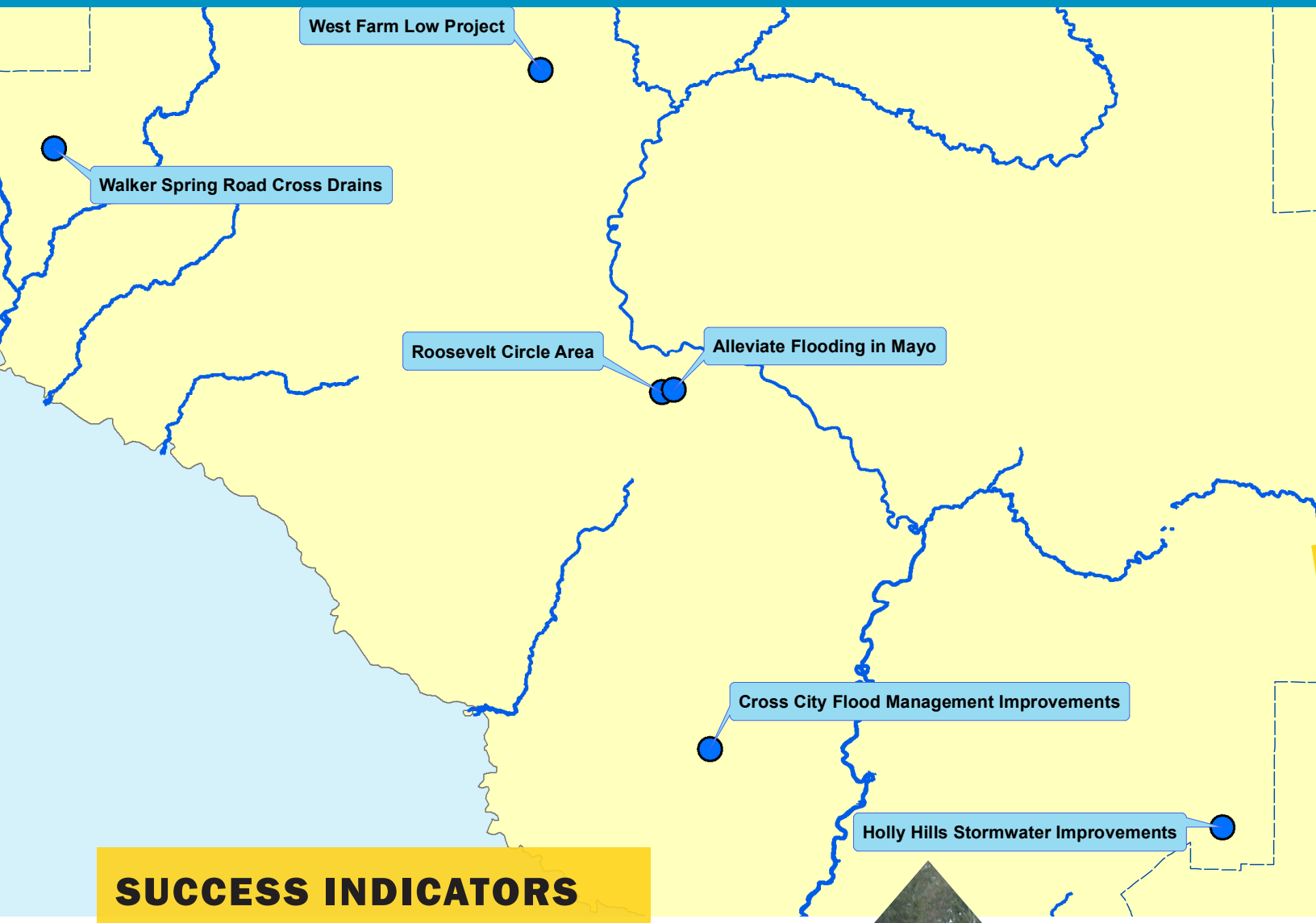
PROTECT LIFE AND PROPERTY FROM FLOODING THROUGH PUBLIC EDUCATION AND RESEARCH

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.

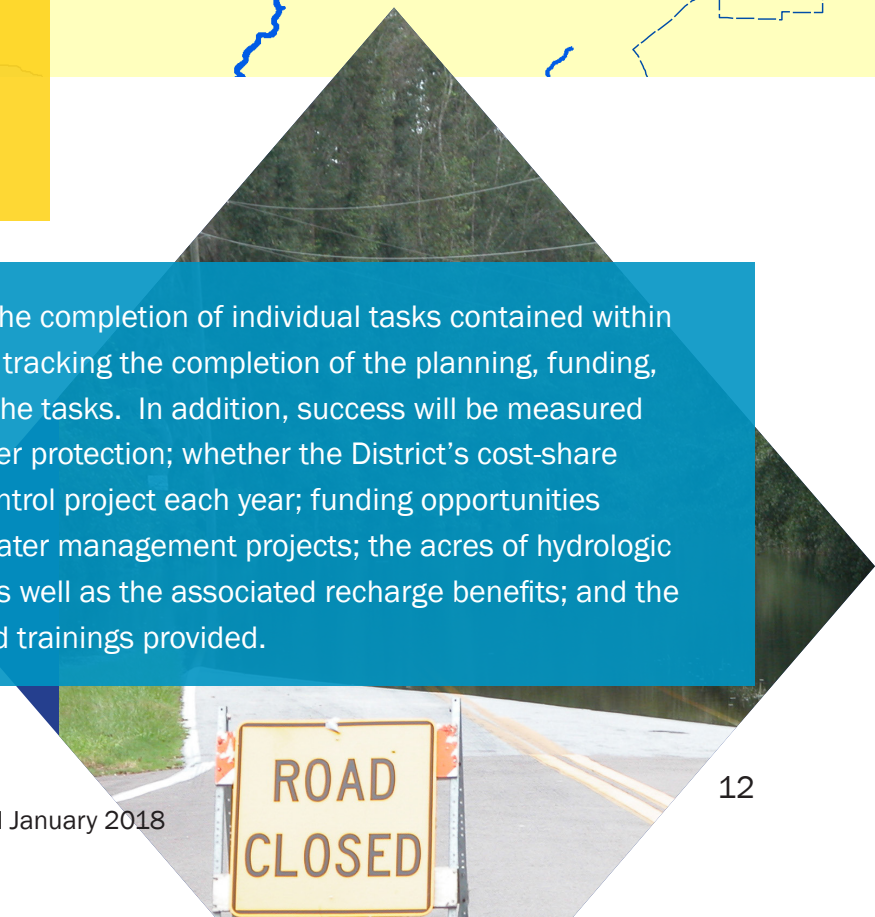


FLOOD CONTROL AND FLOOD PROTECTION PROJECT MAP



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

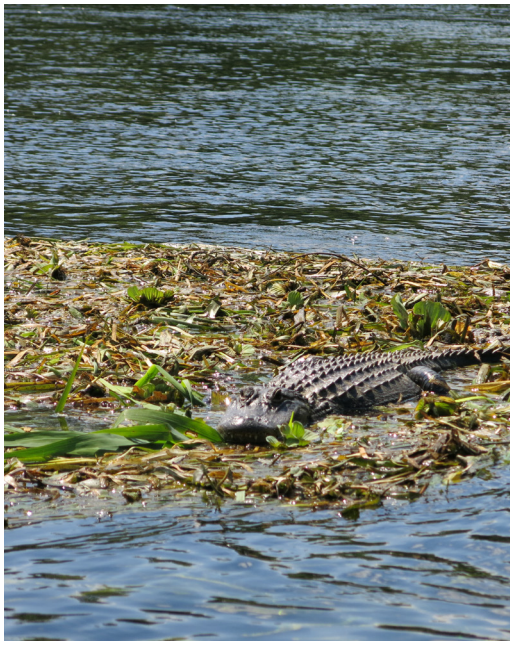
District projects, regulations, and land acquisition and management activities protect and restore the overall health of the ecological system. As discussed above, hydrologic restoration projects in the district re-establish and improve natural systems such as wetlands, floodplains, native ecological 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.

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 areas, 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.

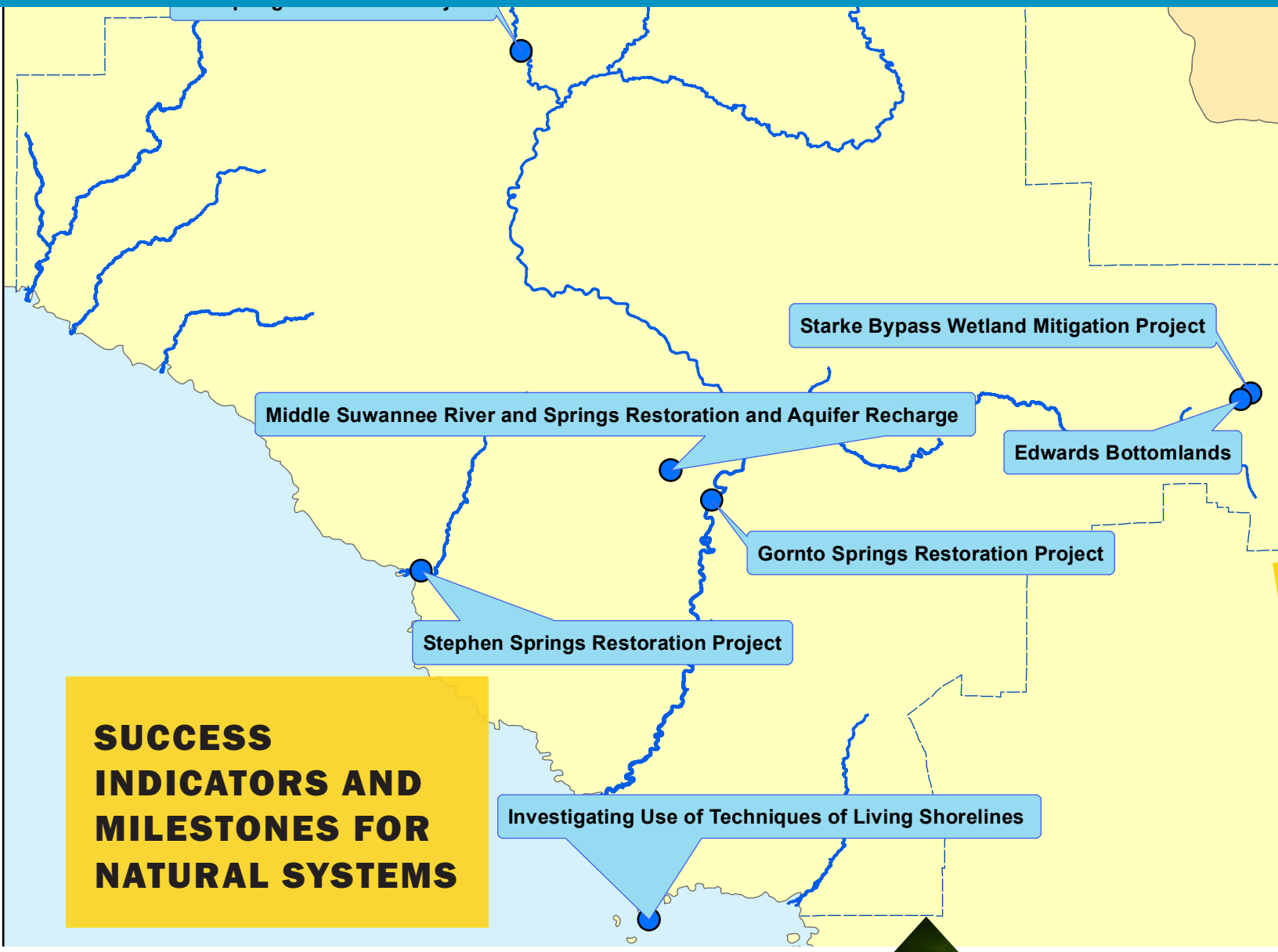
GOAL TWO

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

STRATEGIES

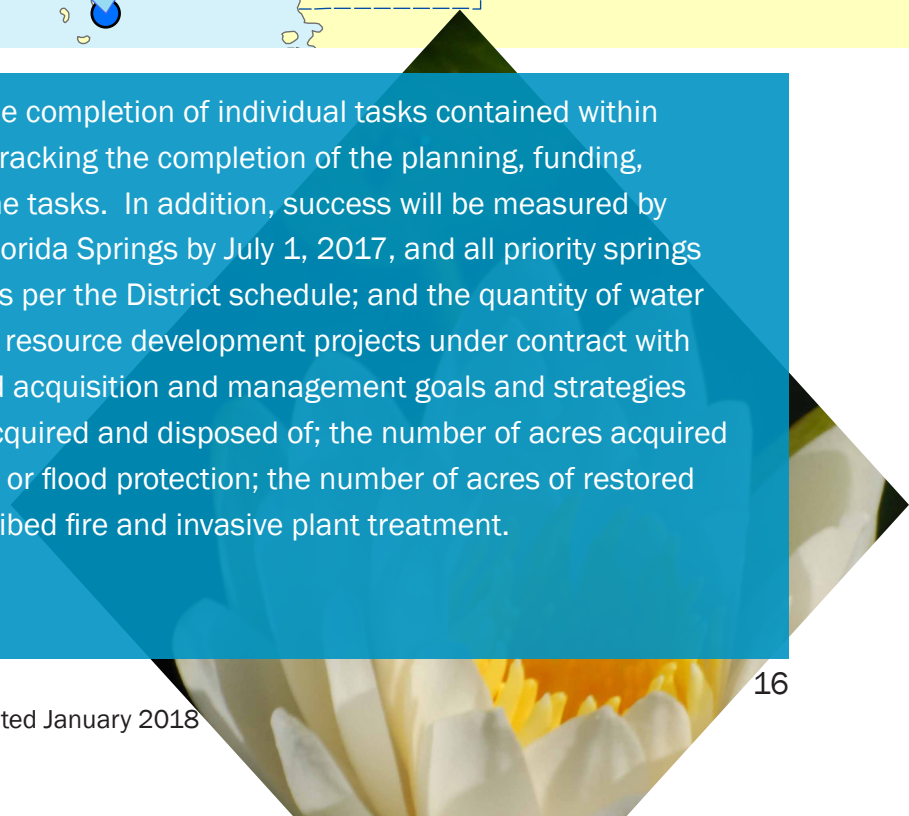
- Manage District lands to achieve the highest natural resource value possible, leading the region in quality of public lands, while still generating sustainable revenue streams from the properties.
- Maximize the water resource values of District-owned property by identifying opportunities to restore 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.

NATURAL SYSTEMS PROJECT MAP



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.

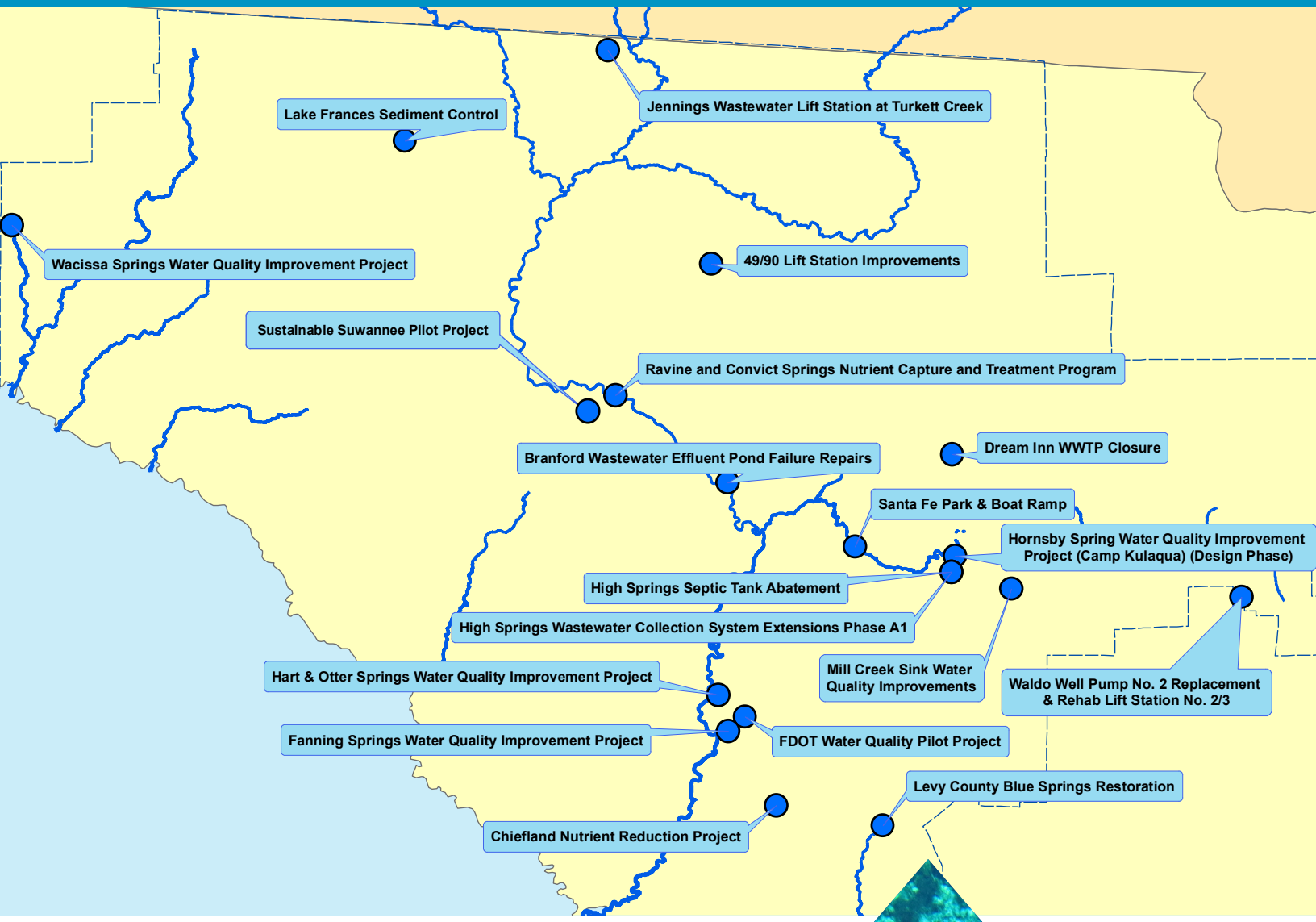
GOAL THREE

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

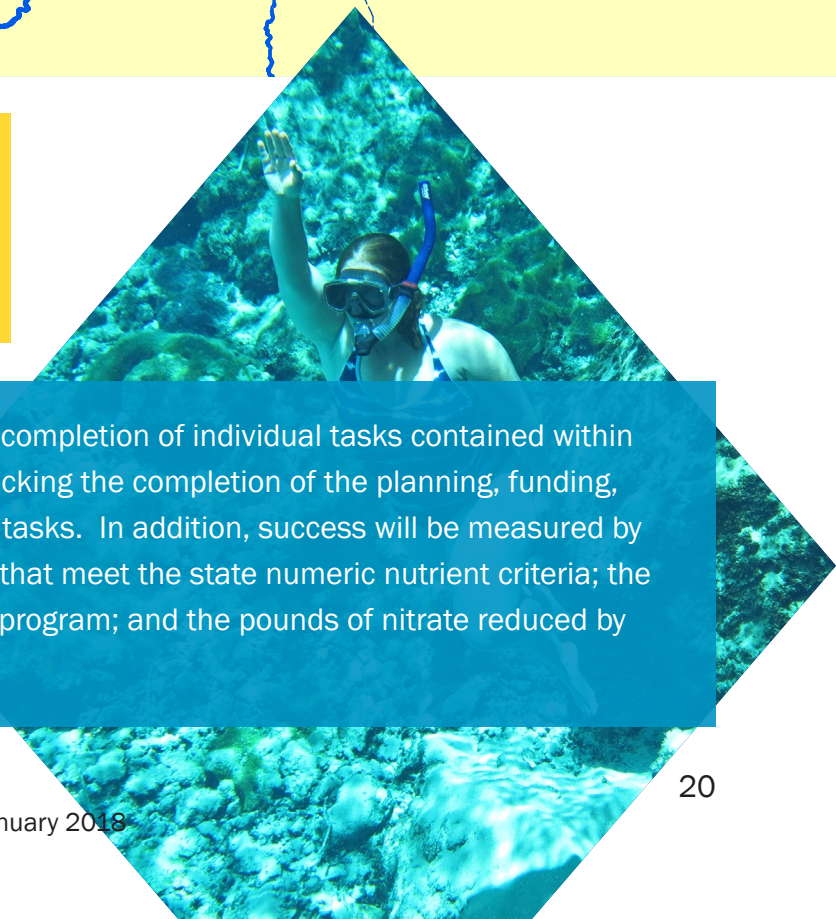
STRATEGIES

- 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.

WATER QUALITY PROJECT MAP



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 with infrastructure efficiency and improvements, through RIVER and Springs grants programs.
- 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.

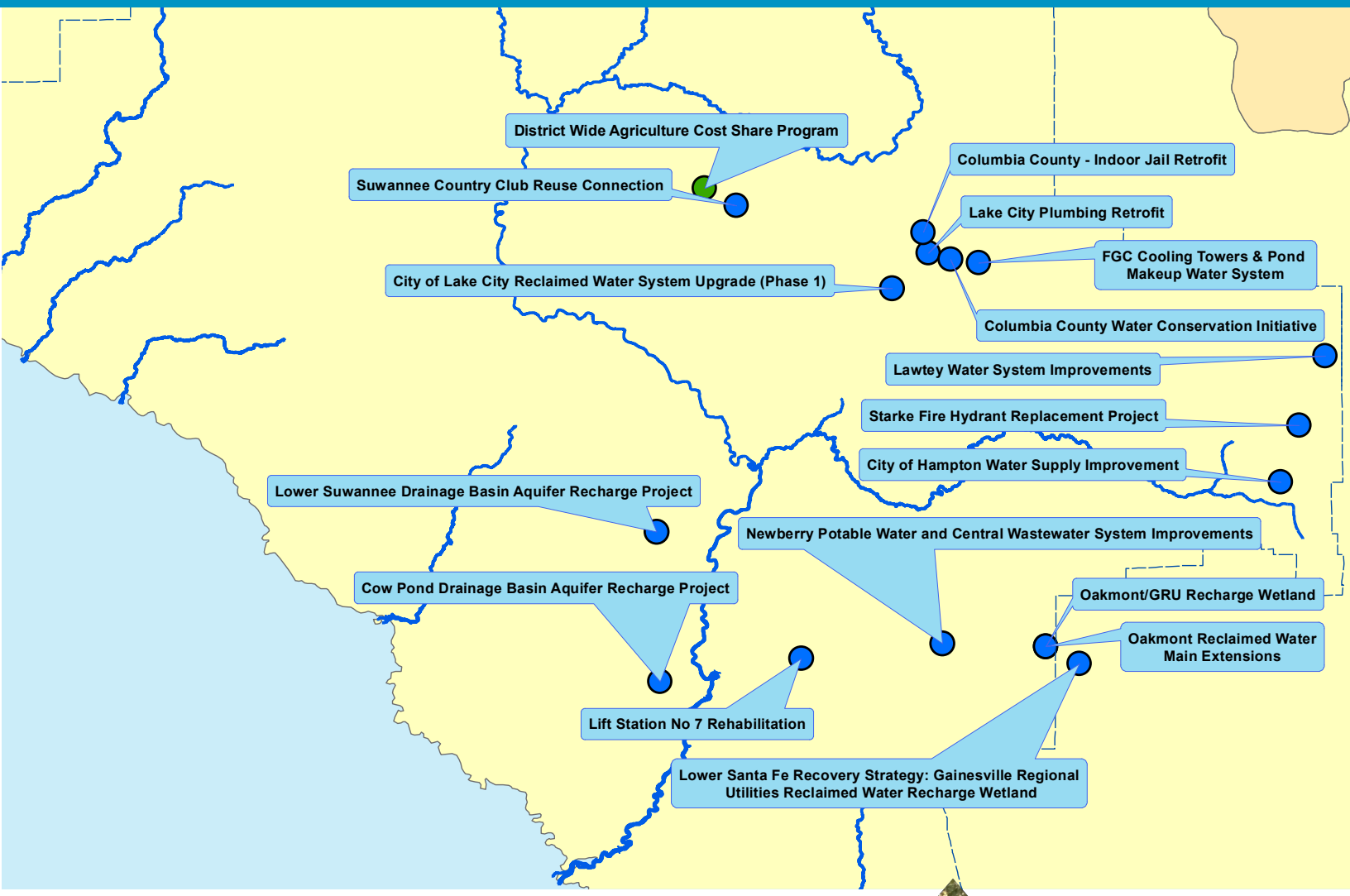
GOAL THREE

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.

WATER SUPPLY PROJECT MAP



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 TRAINING, 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 knowledge base of senior employees.

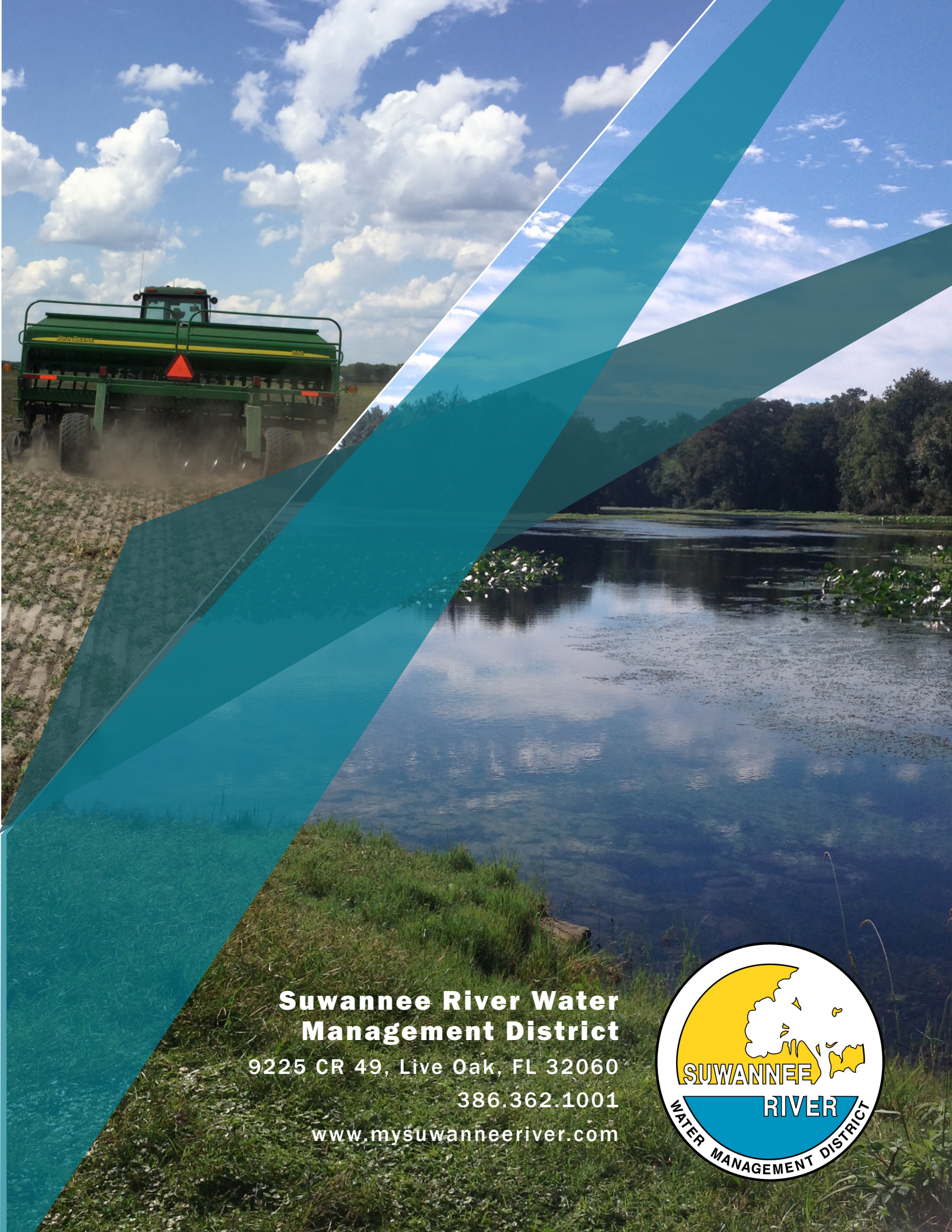
GOAL FIVE – STRENGTHEN STAKEHOLDER RELATIONSHIPS AND DISTRICT PARTNERSHIPS

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.



Suwannee River Water Management District

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ANNUAL WORK PLAN REPORT

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 2016-2017 (FY 2017), are provided below. This report will describe District efforts over the past fiscal year to achieve these goals.

Flood Protection

- Reduce and mitigate the risk of flooding for District communities
- Protect life and property from flooding through public education and research

Natural Systems

- Establish minimum flows and minimum levels and improve water quality of priority springs and water bodies
- Acquire and manage District lands to preserve and protect exceptional water resource values and related natural systems

Water Quality

- Reduce nitrate levels in Outstanding Florida Springs to assist in compliance with the state's numberic nutrient criteria.
- Improve and protect water quality of the District 's priority water bodies, assisting in improving the region's economy
- Assist in identifying and analyzing trends in water quality for surface water bodies throughout the District

Water Supply

- Implement mult-district water supply planning and complimentary regulatory practices
- Work with all partners to increase water conservation efforts across the District
- Environmental data collection and dissemination

Mission Support

- Maintain and increase the level of skill and expertize among District staff and leadership
- Maintain a balanced District budget for existing and future needs
- Ensure the safety of District employees, properties and facilities through repairs and preventative maintenance
- Reduce risks in management of data and maintain institutional knowledge
- Stregnthen stakeholder relationships and District partnerships

Flood Protection

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

The District works with multiple cooperators including the 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

1. In conjunction with local entities, identify areas through the FEMA discovery process 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.

2. 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.

3. Continue to assist in mitigating flood impacts by purchasing floodplain properties, when fiscally appropriate, and with a focus on simultaneously achieving additional core missions.

4. 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.

5. 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 United States Army Corps of Engineers (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 PROERTY FROM FLOODING THROUGH PUBLIC EDUCATION AND RESEARCH

STRATEGIES

1. 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.

2. 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.

3. 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.

4. 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.

5. 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 inundation 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.

- *There are 2.1 million acres within the 100-year floodplain in the District. The District currently has 10% (219,615 acres) of the total acreage under ownership or conservation easement.*

- *As of December 2017, 292.2 riverine miles contain a Minimum Flow and Minimum Levels. Tributaries of major rivers not mentioned in the rule were not included in the total mileage.*

- *The District has initiated agreements with five local entities for flood abatement projects in Bradford, Dixie, Jefferson, Madison and Suwannee counties.*

- *The District worked with Bradford County and City of Starke officials to identify projects throughout the county that would reduce natural resource and property loss due to flooding. Additionally, the USACE has visited Bradford County with the District and agrees the county's flooding issues merit consideration for flood control assistance (Section 205, Flood Control Act of 1948, as amended).*

- *The Division of Resource Management has designated Warren Zwanka as the Compliance and Enforcement Officer (CAEO).*

- *To increase productivity, the District will hold consultant meetings ahead of upcoming rule changes in the future, the next being in the first quarter 2018 ahead of FEMA map rule adoption instead of bi-annual training sessions...*

- *The District continues use of its Current River and Lake Levels web page to maintain flood warning awareness. This page was operated and updated heavily throughout Hurricane Irma. The webpage received just under 20,000 hits from September 13-15. That is a nine-fold increase from the same time period one month prior.*

- *The District has increased its utilization of social media to communicate water level and flood-related information on a routine basis, as well as in times of high-water incidences.*

- *In cooperation with National Weather Service, the District is implementing three new forecast points on the Upper Santa Fe River for improved flood forecasting and warning which were*

identified during Hurricane Irma.

- *191 Environmental Resource Permits were issued in 2017, 140 of those were within the 100-year floodplain.*
- *New FEMA flood risk maps were completed for Madison, Suwannee, Levy and Lafayette counties.*
- *Flood protection was restored on almost 2,000 acres in 2017 with 1,638 acres of forested and herbaceous wetlands being rehydrated in the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project and an additional 292 acres in conservation easements as part of the Edwards Bottomlands, Steffen, Mooneyhan properties.*
- *The District provided flood protection improvements for 87 residences and 10 commercial buildings in Hamilton and Lafayette counties. As well as sewage overflow protection for 870 residences and two commercial buildings in Gilchrist, Hamilton and Suwannee counties and a Class V drainage well at District headquarters.*

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

1. 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.

1. 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.

2. 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.

3. Leverage District cost-share funding to assist with meeting water quality goals.

4. 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

1. 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.

2. 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.

3. Surplus District lands that are not needed for conservation or water resource development projects, investing revenue back into the District's natural systems programs.

4. 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.

5. 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.

- *The District conveyed 151.0 acres +/- of surplus lands to the Town of Greenville, 100.22 acres +/- of surplus lands to the Town of Horseshoe Beach, and 147.0 acres +/- to the Dixie County School Board. Also, the District approved the conveyance of 10.63 acres +/- of surplus lands to Suwannee County.*

- *MFLs were set on all Outstanding Florida Springs by July 1, 2017. The District continues to work on developing MFLs for its priority springs.*

- *The District is working to create a schedule and procedures for MFL re-evaluation. Reassessment of Madison Blue Spring (the District's first MFL) and the Lower Santa Fe and Ichetucknee Rivers are in process.*

- *Almost 20 tons per acre of sediment was reduced through hydrological wetlands restoration projects throughout the District.*

- *In 2017, the District's Ag Cost-Share Program conserved 4.8 mgd of groundwater between three programs – Irrigation System Retrofits and Controllers, Soil Moisture Probes, and Dairy Wastewater System Upgrades.*

- *1,638 acres of forested and herbaceous wetlands were rehydrated in the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project. Including an additional 292 acres in conservation easements as part of the Edwards Bottomlands, Steffen, Mooneyhan properties.*

- *In FY 16-17, 5,683 acres of District lands were managed by prescribed fire, 13,700 acres are expected to be burned in FY 17-18. Restoration activities were performed on 9,200 acres throughout the District in FY 16-17 including timber thinning, roller chopping, prescribed burning, and herbicide application. Additionally, 860 acres were treated for invasive plant management.*

- *The acquisition of Rock Bluff Springs (169 +/- acres, in Gilchrist County) is a partnership with the Florida Department of Environmental Protection through a SPRINGS grant which will provide for springs protection and restoration, water quality and flood protection. Additionally, the District will be partnering with the Gilchrist County Sheriff's Office to provide law enforcement and with the Alachua Conservation Trust to manage the Rock Bluff Springs tract.*

- *The acquisition of Ware Forest is a facilitated partnership with Tall Timbers Land Conservancy that will provide for springs protection and restoration.*

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

1. Implement pilot projects in key springsheds that reduce nitrate levels beyond those achieved by full implementation of BMPs for non-point sources of pollution.

2. Encourage the development of new technologies that can achieve significant reduction in nutrients on any scale.

3. 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

1. 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.

2. 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

1. 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.

2. 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.

3. Publish an annual water quality report for the District's website.

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.

- *The updated Suwannee and Coastal SWIM plans were adopted by the District's Governing Board in December 2017.*
- *The District worked with FDEP to develop language for the Suwannee BMAP which is scheduled to be adopted in early 2018 and outlines a 2,353,286 -pound reduction in nitrate loading needed to achieve 0.35 goal.*
- *Five of the 14 Outstanding Florida Springs meet the requirements for state numeric nutrient criteria based on current available data - Poe, Columbia, Treehouse, Ichetucknee Springs Group and Wacissa Springs group.*
- *In 2017, the District's Ag Cost-Share Program signed contracts for projects that will remove 307,355 pounds of Nitrogen per year between two programs – Fertigation Equipment and Dairy Wastewater System Upgrades*
- *Currently, 555,720 acres within the District are enrolled in the FDACS BMP program. An additional 1,500 acres have signed a Notice of Intent to participate.*

OAWP BMP Program Enrollment with the SRWMD

Commodity/BMP Manual	Enrolled Acres	# NOIs
Dairy Operations	8,502	13
Nurseries	1,191	22
Poultry Operations	171	4
Specialty Fruit & Nut	2,328	23
Citrus	18	3
Cow/Calf	229,913	514
Equine	226	5
Sod	1,646	6
Vegetables & Agronomic Crops	311,725	909
Grand Total	**555,720**	**1,499**

- *In 2017, the District introduced the Precision Ag cost-share program which covers 49,072 acres within the District, removing an estimated 1,223,800 pounds of Total Nitrogen applied.*
- *The District received funding for the Sustainable Suwannee pilot program which is still in the planning phases. The $5 million program which will assist producers in converting practices into less nutrient intensive land uses in the Ichetucknee, Fanning and Convict springshed areas.*

- *A total of 78,300 pounds of Total Nitrogen loading was reduced in 2017 for RIVER and non-agricultural cost share projects.*
- *The District worked to identify new technologies for water quality improvements. The District implemented the FDOT Water Quality Pilot Project to investigate the benefits of biosorption activated media (BAM) material on water quality for stormwater runoff. Project construction is complete and sampling is underway.*
- *The District has reinvigorated the Suwannee River Partnership in 2017 which works to overcome water quality challenges in the Suwannee River Valley by pooling resources with sister agencies who have similar goals for water quality throughout the District.*

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

1. Update the Joint Regional Water Supply Plan with the SJRWMD no later than 2022.

2. Coordinate with FDEP to ensure that regulatory efforts between water management districts adequately reflect cross-boundary challenges identified within water supply planning efforts.

3. 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

1. Lead the state in the implementation of agricultural water conservation through targeted cost-share and education efforts.

2. 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.

3. 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

1. 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.

2. Complete the establishment of a comprehensive groundwater monitoring network to support the water supply planning efforts of the District within two years.

3. 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 of groundwater use within the District on the aquifer.

- *The District conducted water conservation education and public outreach to local communities and stakeholders through online education, presentations, civic engagement, tours and demonstrations.*

- *The District continued to work through the North Florida Regional Water Supply Partnership with FDEP and other water management districts on regional concerns.*

- *FDEP, at the request of the District's Governing Board, agreed to adopt the Upper and Middle Suwannee river and priority spring MFLs. The MFL is currently under review.*

- *In, 2017 the District's Ag Cost-Share Program conserved 2.8 MGD of groundwater within the North Florida Regional Water Supply Planning Region.*

- *Based on the North Florida Regional Water Supply Plan, which was adopted in 2017, from the base year of 2010 to 2035 average year water demand is projected to increase by 71 mgd from 229 to 300. Between 29 and 32 MGD of the projected increase of 71 MGD in demand could be met by conservation across all use types (45%). Additional projects were identified to make up the difference.*

- *As of December 2017, the District monitored 99% of eligible agricultural Water Use Permits either by manual or automated monitoring. This makes up 54% of total agricultural water use allocations in the District (194.4 MGD/~360 MGD). The remaining 46% of agricultural water use allocations will become eligible for a monitoring condition during a permit modification or permit renewal.*

- *For RIVER and non-agricultural cost share SPRINGS projects, the District made water supply improvements saving 10,066 gallons per day in the Water Use Caution Area, Santa Fe Basin Management Action Plan area for 1849 customers.*

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

1. 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.

2. 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

1. 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.

2. 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.

3. 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 activities and Suwannee River Partnership meetings held in the last year.

- *District staff hold over 35 different professional certifications, five associates degrees, 20 undergraduate degrees, 19 graduate degrees and two doctoral degrees.*

- *While training has always been a part of the District's culture, an official training program with emphasis of leadership, communication and conflict management development has been created for staff and executive leadership. The goal of the program is to allow team members to think critically and innovatively on how best to solve our natural resource challenges while better communicating and serving stakeholders.*

- *The District updated its tuition reimbursement and professional certification policies to encourage employee participation and professional development. Four employees utilized the tuition reimbursement program in 2017 and four staff hold leadership positions within professional organizations.*

- *District leadership has adopted a culture of succession and knowledge transfer for retiring employees in mission critical and leadership positions. New hires are being brought on early to overlap and shadow work processes for a seamless transition.*

- *The District's administrative overhead for Fiscal Year 2016-17 was 8.1%. The FY 2017-2018 Amended Budget administrative overhead is approximately 2.0%.*

- *Based on the Fiscal Year 2017-18 Amended Budget, approximately 77% of the budget is spent on water quality, water supply and natural systems projects.*

- *Assuming appropriations and timber remain recurring, 2.34% of the District's budget is funded by non-recurring dollars within the District fund balance.*

- *Almost 20%, or three of the 16 items, identified on the most recent 10-year facility inspection report have been completed. For 2018, 75% or 12 of the 16 items listed on the 10-year facility*

inspection report will be completed.

- *The District is updating facilities to meet ADA compliance, repairing interior structures and exterior roofing, installing safety flood lighting, and improving air quality with duct cleaning.*
- *The District has created "Safety Centers" in the main office areas, breakroom and vehicles which provide safety items and contact information in the event of an emergency. Vehicles include first aid kits and emergency road side kits in the event of an accident.*
- *The District recently added Active Shooter training to its safety training program and continues to host annual safety training including Defensive Driving, Harassment and Workplace Safety, and CPR/First Aid.*
- *The District reinvigorated the Suwannee River Partnership by setting up environmental and agricultural advisory groups and hosting listening sessions with each to discuss major issues affecting the District's natural resources. Additionally, the Steering Committee has been brought together to rewrite the Articles of Organization, mission and vision and create a new strategic plan. A total of six SRP meetings were held in 2017.*
- *District staff participated in a number of educational outreach activities including tours, speaking engagements, project showcases, demonstrations, school activities, and festivals.*
- *In response to Hurricane Irma, the District has updated its Continuity of Operations Plan (COOP) to better respond to stakeholder needs and ensure employee safety.*

MINIMUM FLOWS AND MINIMUM LEVELS PRIORITY LIST AND SCHEDULE

MINIMUM FLOWS AND MINIMUM LEVELS PRIORITY LIST AND SCHEDULE

Past Year Accomplishments

- Four Outstanding Florida Springs (OFS) were adopted by emergency rule effective July 1, 2017. They were Falmouth, Lafayette Blue, Peacock, and Troy.
- MFLs currently in development are listed in the following table.

Current progress of MFLs in development

Waterbody or System	Current Progress
Upper Suwannee River and Priority Springs	Initial Draft Completed
Middle Suwannee River and Priority Springs	Peer Review Underway
Alapaha River	Data Collection/Tool Development Underway
Withlacoochee River and Priority Springs	Data Collection/Tool Development Underway
Steinhatchee River and Priority Springs	Peer Review Underway
Lake Hampton	Peer Review Completed
Lake Butler	Peer Review Completed
Lake Santa Fe	Analysis and Assessment Underway
Lake Altho	Analysis and Assessment Underway
Cherry Lake	Data Collection/Tool Development Underway

Changes to the Priority List from 2017 to 2018

- No waterbodies were added to the Priority List
- No waterbodies were removed from the Priority List, however, waterbodies anticipated to have MFL development later (i.e., beyond three years) are simply listed with no assigned date.
- Priority waterbodies with established MFLs that are not scheduled for re-evaluation within the next three years do not have specific dates for adoption listed.
- The dates for all new MFLs on the list (and one re-evaluation, Madison Blue spring) have been delayed. Last year's priority schedule had a projected end date of 2018 for all priority water bodies. However, due to the complexity of these natural systems and the time needed to complete the voluntary peer reviews and status assessment, the schedule has been delayed as shown in the attached tables.
- Of particular note, the prior scheduled technical completion date for the Upper and Middle Suwannee River was carried through to last year's priority list (2016). The date of 2016 was retained and the draft technical report was completed by September 30, 2016. The draft technical report was submitted for peer review, which is still underway. Initial comments by the Middle Suwannee peer reviewers are under District review and have highlighted the advisability of awaiting completion of the peer reviewed NFSEG model.

Suwannee River Water Management District
2017 Priority List and Schedule – Tables

Suwannee River Water Management District Minimum Flows and Minimum Levels to be Adopted in 2018

New or Re-Evaluation	Waterbody Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMDs?	Latitude	Longitude
New	**Steinhatchee River**	River	Taylor	Yes	No	29.78639	-82.67833
New	Steinhatchee River Rise	Spring (Mag. 1)	Dixie	Yes	No	29.76991	-83.32504
New	Tay76992	Spring (Mag. 2)	Taylor	Yes	No	29.76139	-83.33500
New	Lake Hampton	Lake	Bradford	Yes	Under evaluation	29.86444	-81.83861
New	Lake Butler	Lake	Union	Yes	Under evaluation	30.02722	-81.66167
New	Lake Santa Fe	Lake	Alachua	Yes	Under evaluation	29.74500	-81.90139
New	Lake Altho	Lake	Alachua	Yes	Under evaluation	29.78861	-81.83861
New	Cherry Lake	Lake	Madison	Yes	Under evaluation	30.61833	-82.57778

Note: Voluntary Peer Review is listed for all waterbodies as initiated in 2014

Suwannee River Water Management District Minimum Flows and Minimum Levels to be Adopted in 2019

New or Re-Evaluation	Waterbody Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMDs?	Latitude	Longitude
New	**Upper Suwannee River**	River	Columbia	Yes	Yes**	30.32583	-81.26139
New	• White Sulphur Springs	Spring (Mag. 2)	Hamilton	Yes	Yes**	30.32995	-82.76085
New	• Suwannee Springs	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.39448	-82.93454
New	• Blue Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.42229	-83.01376
New	• Holton Creek Rise	Spring (Mag. 1)	Hamilton	Yes	Yes**	30.43792	-83.05761
New	• Alapaha River Rise	Spring (Mag. 1)	Hamilton	Yes	Yes**	30.43758	-83.08993
New	• Stevenson Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.41709	-83.15295

Suwannee River Water Management District Minimum Flows and Minimum Levels to be Adopted in 2019

New or Re-Evaluation	Waterbody Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMDs?	Latitude	Longitude
New	**Middle Suwannee River**	River	Suwannee	Yes	Yes**	30.38444	-82.82806
New	• Lime Springs	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.39122	-83.16870
New	• Lime Sink Rise	Spring (Mag. 1)	Suwannee	Yes	Yes**	30.38785	-83.16108
New	• Falmouth Spring (OFS) *	Spring (Mag. 1)	Suwannee	Yes	Yes**	30.36116	-83.13499
New	• Suwanacoochee Spring	Spring (Mag. 2)	Madison	Yes	Yes**	30.38667	-83.17177
New	• Anderson Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.35341	-83.18973
New	• Charles Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.16736	-83.23035
New	• Allen Mill Pond Springs	Spring (Mag. 2)	Lafayette	Yes	Yes**	30.16284	-83.24307
New	• Lafayette Blue Spring (OFS) *	Spring (Mag. 1)	Lafayette	Yes	Yes**	30.12583	-83.22613
New	• Peacock Springs Group (OFS) *	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.12323	-83.13315
New	• Bonnet Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	30.12432	-83.13818
New	• Royal Spring	Spring (Mag. 3)	Suwannee	Yes	Yes**	30.08371	-83.07478
New	• Troy Spring (OFS) *	Spring (Mag. 1)	Lafayette	Yes	Yes**	30.00603	-82.99750
New	• Ruth Spring	Spring (Mag. 2)	Lafayette	Yes	Yes**	29.99577	-82.97681
New	• Little River Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	29.99686	-82.96632
New	• Branford Spring	Spring (Mag. 2)	Suwannee	Yes	Yes**	29.95487	-82.92841
New	• Turtle Spring	Spring (Mag. 2)	Lafayette	Yes	Yes**	29.84739	-82.89029
New	• Pothole Spring	Spring (Mag. 2)	Dixie	Yes	Yes**	29.81068	-82.93586
New	• Guaranto Spring	Spring (Mag. 2)	Dixie	Yes	Yes**	29.77980	-82.93996
New	• Rock Sink Spring	Spring (Mag. 2)	Dixie	Yes	Yes**	29.72790	-82.94928
New	• Hart Springs	Spring (Mag. 2)	Gilchrist	Yes	Yes**	29.67500	-82.95124
New	• Otter Spring	Spring (Mag. 2)	Gilchrist	Yes	Yes**	29.64480	-82.94275
New	• Bell Spring	Spring (Mag. 3)	Gilchrist	Yes	Yes**	29.59744	-82.94117

Suwannee River Water Management District Minimum Flows and Minimum Levels to be Adopted in 2019

New or Re-Evaluation	Waterbody Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMDs?	Latitude	Longitude
Re-Evaluation	**Lower Santa Fe River**	River	Gilchrist	Yes	Yes**	29.84861	-81.28472
Re-Evaluation	• Santa Fe River Rise	Spring (Mag. 1)	Alachua	Yes	Yes**	29.87389	-82.59164
Re-Evaluation	• Siphon Creek Rise	Spring (Mag. 1)	Gilchrist	Yes	Yes**	29.85619	-82.73305
Re-Evaluation	• July Spring	Spring (Mag. 1)	Columbia	Yes	Yes**	29.83618	-82.69640
Re-Evaluation	• Devils Ear Spring (OFS)	Spring (Mag. 1)	Gilchrist	Yes	Yes**	29.83535	-82.69660
Re-Evaluation	• Rum Island Spring	Spring (Mag. 2)	Columbia	Yes	Yes**	29.83352	-82.67983
Re-Evaluation	• Columbia (Col101974)	Spring (Mag. 2)	Columbia	Yes	Yes**	29.83400	-82.67668
Re-Evaluation	• Poe Spring (OFS)	Spring (Mag. 2)	Alachua	Yes	Yes**	29.82572	-82.64897
Re-Evaluation	• Columbia Spring (OFS)	Spring (Mag. 1)	Columbia	Yes	Yes**	29.85411	-82.61195
Re-Evaluation	• Treehouse Spring (OFS)	Spring (Mag. 1)	Alachua	Yes	Yes**	29.85489	-82.60288
Re-Evaluation	• Hornsby Spring (OFS)	Spring (Mag. 1)	Alachua	Yes	Yes**	29.85036	-82.59320
Re-Evaluation	**Ichetucknee River**	River	Columbia	Yes	Yes**	29.95250	-81.21389
Re-Evaluation	• Ichetucknee Group (OFS)	Spring (Mag. 1)	Suwannee	Yes	Yes**	29.98419	-82.76187
Re-Evaluation	• Blue Hole Spring	Spring (Mag. 1)	Columbia	Yes	Yes**	29.98053	-82.75844
New	Alapaha River	River	Hamilton	Yes	No	30.59806	-82.92667
New	**Withlacoochee River**	River	Madison	Yes	No	30.59528	-82.74028
New	• Pot Spring	Spring (Mag. 2)	Hamilton	Yes	Under evaluation	30.47080	-83.23440
Re-Evaluation	• Madison Blue Spring	Spring (Mag. 1)	Madison	Yes	Under evaluation	30.48044	-83.24436

Note: Voluntary Peer Review is listed for all waterbodies as initiated in 2014

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

** Waterbodies for which SRWMD has previously requested MFL adoption by the Florida Department of Environmental Protection

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

New or Re-Evaluation	Waterbody Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMDs?	Latitude	Longitude
New	Ocean Pond	Lake	Baker	Yes	Under evaluation	30.21528	-81.55806

Note: Voluntary Peer Review is listed for all waterbodies as initiated in 2014

Suwannee River Water Management District Minimum Flows and Minimum Levels to be Adopted *after 2020*

New or Re-Evaluation	Waterbody Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMDs?	Latitude	Longitude
New	Lake Crosby	Lake	Bradford	Yes	Under evaluation	29.94972	-81.84750
New	Lake Rowell	Lake	Bradford	Yes	Under evaluation	29.92111	-81.83306
New	Lake Sampson	Lake	Bradford	Yes	Under evaluation	29.92972	-81.82750
New	Lake Palestine	Lake	Union	Yes	Under evaluation	30.12944	-81.59056

Note: Voluntary Peer Review is listed for all waterbodies

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

FIVE YEAR CAPITAL IMPROVEMENTS PLAN

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 2017-2018 through 2021-2022. 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 / Springs Restoration Grants / Military Base Protection Funds); and the restoration of lands and water bodies.

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

2.2 Water Source Development
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 CAPTIAL IMPROVEMENTS PLAN
FISCAL YEAR 2017-2018 THROUGH FISCAL YEAR 2021-2022

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS

2.1 LAND ACQUISITION

REVENUES	FY117-18	FY18-19	FY19-20	FY20-21	FY21-22
Fund Balance	3,047,500	47,500	47,500	47,500	47,500
State Revenue	2,902,968	1,700,000	-	-	-
Federal Revenue	707,950	707,950	-	-	-
District Revenue	57,627	59,034	59,034	59,034	59,034
Total	6,716,047	2,514,484	106,534	106,534	106,534

EXPENDITURES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
Total	6,716,047	2,514,484	106,534	106,534	106,534

2.2.1 WATER RESOURCE DEVELOPMENT PROJECTS

REVENUES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
State Revenue	12,337,083	12,200,000	300,000	300,000	300,000
Fund Balance	379,646	30,244	10,244	10,244	10,244
Local Revenue	120,500	121,000	4,000	4,000	4,000
District Revenue	185,197	139,952	139,952	139,952	139,952
Total	13,024,426	12,491,196	454,196	454,196	454,196

EXPENDITURES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
Total	13,024,426	12,491,196	454,196	454,196	454,196

2.3 SURFACE WATER PROJECTS

REVENUES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
State Revenue	18,591,186	12,898,000	205,500	205,500	205,500
District Revenue	30,873	61,257	36,257	36,257	36,257
Fund Balance	3,423,544	935,000	-	-	-
Total	22,045,603	13,894,257	241,757	241,757	241,757

EXPENDITURES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
Total	22,045,603	13,894,257	241,757	241,757	241,757

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 LAND MANAGEMENT

REVENUES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
State Revenue	2,510,119	2,180,119	2,047,619	2,047,619	2,047,619
Fund Balance	577,298	636,800	638,800	638,800	638,800
District Revenue	805,247	656,953	656,953	656,953	656,953
Total	3,892,666	3,473,872	3,341,372	3,341,372	3,341,372

EXPENDITURES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
Total	3,892,666	3,473,872	3,341,372	3,341,372	3,341,372

3.3 FACILITIES

REVENUES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
Fund Balance	275,000	-	-	-	-
District Revenue	445,655	539,171	489,171	489,171	489,171
Total	720,655	539,171	489,171	489,171	489,171

EXPENDITURES	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22
Total	720,655	539,171	489,171	489,171	489,171

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 2018.

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, Florida Forever programs, Springs Restoration Grants and Military Base Protection Funds have resulted in the protection of over 286,983 acres of fee title and conservation easement water resource lands. Approximately 160,158 acres of river floodplains, freshwater springs, headwater wetlands, bottomland hardwood and buffering upland forests are protected in full-fee ownership. Conservation easements, access easements and deed restricted from less-than fee purchases have protected nearly 127,825 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 2018, Five-Year Strategic Plan 2018-2022, FY 2018 Budget, FY 2019 Preliminary Budget, 5-Year Water Resource Development Work Program

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

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

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): - None

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY18 - $6,655,918; FY19 - $2,452,950

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY18 - $57,629; FY19 - $59,034

Anticipated Additional Operating Costs/Continuing: FY18 – $2,500; FY19 – $2,500

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 funding 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: Florida Forever Work Plan 2018, Five-Year Strategic Plan 2018-2022, FY 2018 Budget, FY 2019 Preliminary Budget, 5-Year Water Resource Development Work Program

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): - FY18 - $7,087,052, FY19 - $5,900,000

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY18 - $5,498,677; FY19 - $6,142,000

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY18 - $438,697; FY19 - $449,196

Anticipated Additional Operating Costs/Continuing: None.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS
ACTIVITY: 2.3 Surface water 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 2018, Five-Year Strategic Plan 2018-2022, FY 2018 Budget, FY 2019 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): - None

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY18 - $21,824,730; FY18 - $13,668,000

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY18 - $220,873; FY19 - $226,257

Anticipated Additional Operating Costs/Continuing: - None

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: 160,158 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 2018, Five-Year Strategic Plan 2018-2022, FY 2018 Budget, FY 2019 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): - None

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY18 - $3,015,000; FY19 - $2,570,835

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY18 - $877,666; FY19 - $903,037

Anticipated Additional Operating Costs/Continuing: - None

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 2018 Budget, FY 2019 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): FY18 - $275,000; FY19 – 50,000

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY18 - $265,500; FY19 - $272,000

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY18 - $165,155; FY19 - $177,171

Anticipated Additional Operating Costs/Continuing: - FY18 - $15,000, FY19 - $40,000

ALTERNATIVE WATER SUPPLY REPORT

ALTERNATIVE WATER SUPPPLY REPORT

In 2005, the Florida Legislature created the Water Protection and Sustainability Program, section 373.707, Florida Statutes (F.S.). As part of this program, the Legislature made State funds available through the Water Protection and Sustainability Trust Fund to water management districts for the development of the alternate 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. In 2017 the Board adopted the NFRWSP (North Florida Regional Water Supply Plan). The NFRWSP includes fourteen counties, of which all or portions of the following are within the SRWMD District – Alachua, Baker, Bradford, Columbia, Gilchrist, Hamilton, Putnam, Suwannee and Union.

Water Protection and Sustainability Program

During the four years of the Water Protection and Sustainability program, the District received over $21 million dollars from the Water Protection and Sustainability Trust Fund (WPSTF). With this funding, the District formed collaborative partnerships with the cities of Lake City, Live Oak, Monticello, and Alachua to provide funding assistance for establishing reclaimed water programs. Consistent with subsection 373.707(8)(c), F.S., the District has also used funding from the WPSTF for water resource development projects and springs protection.

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
2006	City of Lake City	$3,000,000	1.0 MGD
2006	City of Monticello	$1,500,000	0.5 MGD
2007	City of Alachua	$1,000,000	3.0 MGD
2007	City of Live Oak	$3,000,000	1.5 MGD

Summary of Continuing Efforts

The District works with its local and state partners to identify, develop and fund alternative water supply, conservation, and water resource development projects. The Districts 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 four **alternative water supply projects** and twenty **water conservation projects** with a total estimated benefit of 0.751 MGD.

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. From 2014 through 2016 the estimated benefit has been 11.12 MGD. In 2017 FDEP approved **Precision Agricultural Practices** with an estimated benefit of 8.0 MGD.

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. From 2014 to 2016, the District with the FDEP and local partners implemented 8 water resource development projects with an estimated benefit of 29.36 MGD. In 2017 FDEP approved four projects with an estimated benefit of 9.125 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 Development:

Infiltrative Wetlands for WWTF (High Springs)

This project will convert the City's existing effluent sprayfield into infiltration wetlands. Only 10 acres would be constructed in Phase 1 which would provide sufficient capacity for the City's current wastewater treatment capacity of 0.24 MGD. The project is located within the Santa Fe BMAP area. The project is estimated to provide 0.03 MGD of aquifer recharge.

Oakmont GRU Water Main Extension Project

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

Suwannee Country Club Reuse Connection:

The City of Live Oak reclaimed water project is to connect a golf course to the City’s Public Access Reuse System (PAR). The County Club currently uses onsite wells for irrigation. This project is projected to offset groundwater withdrawals of 0.10 million gallons per day (MGD).

Suwannee Valley Ag Extension Center Surface Water Project:

The Suwannee Valley Ag Extension Center Surface Water Project is a 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 projected to offset approximate 0.05 MGD of groundwater withdrawals and was completed in 2015.

Hilltop Dairy Reuse Project

The Hilltop Dairy Wastewater Reuse Project makes wastewater from Alliance Dairies available to Hilltop Dairy through connection of both dairy’s wastewater systems for the primary purpose of flushing free stall barns at Hilltop Dairy. A secondary benefit of this project is it makes more wastewater available to Alliance Dairies for irrigation purposes offsetting groundwater usage. This project is projected to offset approximately 0.34 mgd of groundwater withdrawals and was completed in 2017.

ALTERNATIVE WATER SUPPLY PROJECTS

Year Funded	Project	Total Project Cost	District Match	Local Match	Capacity MGD
2017	Hilltop Dairy Reuse Project	$390,991	$180,000	$210,991	0.34
2017	Infiltrative Wetlands for WWTF Effluent Treatment /Disposal Ph I	$1,708,500			0.03
2016	Oakmont GRU Water Main Extension	$452,571	$113,143	$339,428	0.05
2015	Suwannee Country Club Reuse	$129,345	$124,452	$4,893	0.10
2014	Suwannee Valley Ag Extension Center Surface Water Project	$125,000	$40,200	$84,800	0.05

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. Completed 11 / 2014

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. Completed 11/ 2013

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. Completed 09/2014

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. Completed 08/2014

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. Completed 04/2014

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. Completed 04/2014

City of Hampton Water Tank Revitalization Project:

The City 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. Completed 04/2016

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. Completed 12/2015

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. Completed 07/2017

City of Madison Barrsfield/Check Valve Project:

The City of Madison (Barrsfield/check valve) 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 installation of two solenoid valves that will reduce Madison's water loss by 0.01 MGD. Completed 08/2015

Columbia County Water Conservation Initiative:

The Columbia County Water Conservation Initiative project will provide local businesses, such as hotels/motels or office buildings, and multi-family residential units with ultra-high efficiency 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 0.057 MGD

Lawtey Water Conservation

This project provides potable water service to residents from a city well in lieu of individual wells. This aids in the conservation of water by metering water use and providing economic incentives for water conservation. Estimated benefit is 0.049 MGD. Completed 06/2017

Levy County University Oaks Water System Improvement Project:

Levy County water conservation project involves replacing leaking pipes and service connections estimated to reduce water loss by 0.003 MGD. Completed 02/2017

City of Hampton Water Supply Improvement and Conservation Project

The City of Hampton Water Supply and Conservation project will increase water conservation, improve water service quality, reliability and provide improved fire protection. This includes water meter replacements, new isolation valves, water storage tank repair, improved hydrant access and partial water main replacement. Meter replacement will conserve approximately 0.00006 MGD. Completed 09/2017

Starke Fire Hydrant Replacement Project

The Starke Fire Hydrant Replacement will reduce unaccounted water loss throughout the city, which is currently at 24%. It is estimated that replacement of non-functional, broken, leaking and inaccessible hydrants will conserve 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. The estimated savings is 90,000 GPY or 0.0003 MGD

City of Lake City Public and Staff Restroom Retrofit Project

City of Lake City Public and Staff Restroom Retrofit Project will upgrade 51 toilets from 1.6 GPF to 0.08 GPF and upgrade 103-2.2 GPM manual faucets to 1.0 GPM motion detection faucets. The goal is to reduce the water usage of the City's 221 restroom fixtures by 28%, saving approximately 0.002 MGD.

Leaky Fire Hydrant and Water Main Replacement (Jasper) Project:

The Jasper Fire Hydrant Replacements Project will replace 10 leaking fire hydrants, extend water main lines to create loops and add isolation valves. The looping of lines will reduce water losses due to flushing This is estimated to conserve 0.011 MGD.

Cross City Hydrant and Water Main Replacement

The Cross City Hydrant and Water Main Replacement project will replace 7 leaking hydrants, add isolation valves and replace approximately 1450 LF of water mains. This is estimated to conserve 0.0014 MGD.

University Oaks Water System Improvement – Phase 3

The University Oaks Water System Improvement – Phase 3 project will replace approximately 2,350 LF of leaking water main for 15 customers and replace missing or failing water meters that have created a 48% water loss. This is estimated to conserve 0.019 MGD.

WATER CONSERVATION PROJECTS

Year Funded	Project	Total Project Cost	District Match	FDEP Match	Local/ Other Match	Conservation MGD
2013	City of Alachua	$62,440	$31,220		$31,220	0.05
2013	City of Waldo	$153,672	$76,836		$76,836	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	City of Hampton water tank	$30,000	$25,000		$5,000	0.01
2014	Columbia County October Rd	$450,808	$201,256		$249,552	0.03
2014	City of High Springs Water Mains	$824,800	$50,000		$774,800	0.10
2014	City of Madison	$8,119	$7,675		$444	0.04
2014	Columbia County Water Conservation Initiative	$350,000	$30,000	$250,000	$70,000	0.057
2014	Lawtey Water System Improvements	$692,700	$25,000		$667,700	0.049
2015	Levy County (University Oaks Water System)	$156,390	$151,390		$5,000	0.003
2016	City of Hampton Improvements	$113,530	$105,530		$8,000	.00006
2016	Starke Fire Hydrant Replacement	$142,080	$119,040		$23,040	0.0056
2016	City of Newberry Potable Water	$65,000	$38435		$26,566	0.0003
2016	City of Lake City Public & Staff RR Retrofit	$98,850		$98,850		0.002
2017	Leaky Fire Hydrant and Water Main Replacement (Jasper)	$156,715	$141,715		$15,000	0.011
2017	Cross City Hydrant Replacement	$90,400	$90,400		$0	0.0014
2017	University Oaks Water System Improvement– Phase 3	$127,250	$122,250		$5,000	0.019

Agricultural Water Conservation

Anticipated District Agricultural Cost-Share Program Results:

Fiscal Year	Funds	Estimated Water Savings MGD	Irrigation Retrofits	Advance Irrigation Scheduling Tools	Special Projects
2012-2013	$1,200,550	5.2	70	211	8
2013-2014	$837,575	3.87	67	100	
2014-2015	$467,390	1.1	19	43	1
2015-2016	$3,363,256	2.27	24		
2016-2017	$1,314,679	4.53	24	282	3

Dairy Wastewater Water 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 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 the springs within the 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 1.0547 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.

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 spring sheds will be invited to submit proposals to transition to less intensive cropping systems, change the type of cropping system or agricultural 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.

Precision Agricultural Practices

The project will provide cost share funds to agricultural producers in the BMAP areas to implement precision management technology. Priority will be given to producers within both the BMAP and Florida Outstanding Springs areas. The project will implement practices that allow for precision nutrient and irrigation management, estimated to conserve 8.0 MGD.

DISTRICT /FDEP AGRICULTURAL COST-SHARE PROGRAMS

Year	Project	Total Project Cost	District Match	DEP Match	Local Match	Benefit MGD
2014	Dairy Wastewater Conservation & Nutrient Optimization	$1,885,590	$298,004	$920,000	$417,586	0.3
2014	Suwannee Center Pivot Retrofits Water Conservation Project	$2,428,975	$1,235,000	$885,000	$308,975	1.0547
2015	Improved Nutrient Application Practices in Dairy Operation – 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
2017	Precision Agricultural Practices	$2,250,000		$2,000,000	$250,000	8.0

Water Resource Development Projects

Ichetucknee Springshed Water Quality Improvement Project:

The Ichetucknee Springshed Water Quality Improvement Project is a partnership between the District, the 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. The project converted Lake City's largest treated wastewater effluent sprayfield to a constructed wetland to reduce the total nitrogen loading by an estimated 85 percent (up to 94% nitrate removal). The project is estimated to provide beneficial recharge to the Upper Floridan aquifer up to 1.19 MGD. Construction on the project was completed at the end of 2017.

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, the DEP, and Dixie County to provide hydrologic restoration activities in Dixie and Lafayette counties The project benefits are to restore natural hydrology, rehydrate ponds and wetlands within the vicinity of Mallory Swamp, recharge the aquifer with an estimated 10 MGD, augment domestic and agricultural groundwater supplies in Lafayette and Dixie counties, and improve spring flows along the Middle Suwannee River region.

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 recovers and stores surface water for use in mining operations, enabling a reduction in ground water withdrawals by approximately 10 MGD, benefitting Blue Sink Spring, Mattair Springs, and Suwannee Springs. The project also reduces nutrient loads to the Upper Suwannee River and local springs by approximately 110,000 lbs./yr. of total phosphorus and 140,000 lbs./yr. of total nitrogen (primarily as ammonia). Construction on the project 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. This is 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. Since project completion 190.3 million gallons have recharged the aquifer, 0.22 MGD of recharge.

Ichetucknee Trace-Cannon Creek Project

The Ichetucknee Trace-Cannon Creek Project provides flood mitigation, water quality improvement and aquifer recharge. The 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, the project is estimated to provide approximately 2.0 to 4.0 MGD of aquifer recharge and remove 10,000 lbs. of nutrients annually.

Oakmont Recharge Wetland Project Ph II:

The District is partnering with Gainesville Regional Utilities to construct a recharge wetland in western Alachua County, treating both reclaimed water and storm water. The subdivision is located within the Poe Springs Watershed. The second phase of the project will provide water quality treatment and roughly 0.5 to 1.0 MGD in aquifer recharge.

Cow Pond Drainage Aquifer Recharge Project

The Cow Pond Drainage Aquifer Recharge Project will re-establish natural drainage patterns, use natural recharge features, and recharge wells to enhance aquifer recharge and rehydrate approximately 300 acres of sand ponds and approximately 1,750 acres of wetlands. The estimated benefit is 1.69 MGD

Lower Suwannee Drainage Basin Aquifer Recharge

This project will rehydrate approximately 500 acres of sand ponds and approximately 1,250 acres of wetlands by re-establishing natural flow through recharge features and an aquifer recharge well. The estimated benefit is 3.26 MGD.

I-75 / CR 136 Wastewater Improvements, Septic Elimination

Construct a new WWTP plant with wetland treatment/aquifer recharge for effluent disposal, eliminating 32 existing commercial septic tanks. The estimated benefit is 0.095 MGD of recharge to the aquifer.

Infiltrative Wetlands for WWTF Effluent Treatment/Disposal Ph 1 (High Springs)

This project will convert the City's existing effluent sprayfield into infiltration wetlands. Only 10 acres would be constructed in Phase 1 which would provide sufficient capacity for the City's current wastewater treatment capacity of 0.24 MGD. The project is located within the Santa Fe BMAP area.

Madison Blue Springs

This project consists of the rehabilitation or replacement of up to six existing drainage wells to improve recharge rates. This may include the installation of biosorptive activated media (BAM) or the construction of treatment wetlands. This project is in the District's 2017 Florida Forever Plan. The estimated benefit is 5.0 MGD of recharge to the aquifer.

Upper Suwannee Regional Aquifer Recharge

This project includes the installation of at least four recharge wells in the Upper Suwannee River basin in locations where wetlands were historically ditched and drained into the river. This project intends to capture water during high flow conditions that occur after large rainfall events and during the winter months, provide additional water quality treatment, and provide significant beneficial aquifer recharge to the Upper Floridan. The estimated benefit is 4.0 MGD of recharge to the aquifer.

Scriven Avenue Drainage Improvements

Replacement in kind of a Class V injection well in the City of Live Oak in the adjacent stormwater management facility. A new well of the same diameter, casing depth, and total depth will be drilled in the southwest corner of the facility. Primary goal is to reduce flood vulnerability in residential area. Another benefit is an increase in runoff volume that is treated in stormwater management facility. The estimated benefit is 0.03 MGD of recharge to the aquifer.

WATER RESOURCE DEVELOPMENT PROJECTS

Year Funded	Project	Total Project Cost	District Match	DEP Match	Local Match	Benefit (mgd)
2014	Ichetucknee Springshed Water Quality Improvement Project	$4,600,000	$400,000	$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	10.0
2014	Eagle Lake/Upper Suwannee River Springs Enhancement Project	$3,600,000	$300,000	$3,070,000	$230,000	10.0
2014	Brooks Sink Aquifer Recharge	$35,000	$35,000			0.22
2015	Ichetucknee Trace Cannon Creek	$3,030,000	$30,000	$3,070,000	$230,000	2.0 -4.0
2015	Oakmont Recharge Wetland Ph II	$230,000	$150,000		$80,000	0.5-1.0
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
2017	I75 / CR 136 Waste Water Improvements/Septic elimination	$3,330,000		$2,780,000	$550,000	0.095
2017	Infiltrative Wetlands for WWTF Effluent Treatment/Disposal (High Springs)	$1,708,500		$1,708,500		0.03
2017	Madison Blue Springs Aquifer Recharge	$2,275,000	$50,000	$2,150,000	$75,000	5.0
2017	Upper Suwannee Regional Aquifer Recharge	$2,500,000		$2,500,000		4.0
2017	Scriven Avenue Drainage Improvements (RIVER)	$92,439	$81,646		$10,793	0.03

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM

FIVE YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM

Purpose

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 (District) and St. John's River Water Management District Governing Boards approved the North Florida Regional Water Supply Plan (NFRWSP) January 17, 2017. This report represents the District's first Work Program and covers the period from FY 18 – FY 22 and addresses water resource and water supply development components of the NFRWSP. Information on all projects related to water quality or water quantity as required by section 373.036(7)(b)(8), F.S., is also included. Appendix A details projects to implement adopted Basin Management Action Plans within the District.

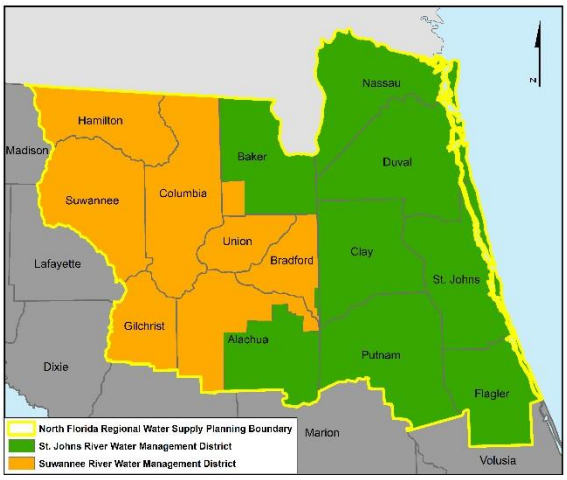
Florida water law identifies two types of projects to meet water needs: water supply development projects and water resource development projects. Water supply development projects generally involve public or private facilities for water collection, treatment, and transmission and are the responsibility of local water users. Section 373.019(24), F.S., as amended in 2016, defines **Water Resource Development** as:

"*the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments, government-owned and privately owned water utilities, and self-suppliers to the extent assistance to self-suppliers promotes the policies as set forth in s. 373.016."*

These types of projects are regional in nature and are primarily led by the District in partnership with local governments and other entities. These projects support water supply development at the local level and are intended to ensure the availability of adequate water supplies for all uses deemed reasonable and beneficial and to maintain the function of natural system.

Regional Water Supply Planning

In accordance with Chapters 163 and 373, F.S., the District is required to update regional water supply plans every five years for at least a 20-year planning horizon to ensure the availability of water to meet all existing and future reasonable-beneficial water needs and to protect natural systems from harm up to and during a 1-in-10-year drought event.



North Florida Region: Alachua, Baker, Bradford, Columbia, Gilchrist, Hamilton, Putnam, Suwannee and Union counties. Water supply planning in this area is conducted as part of the North Florida Regional Water Supply Partnership in coordination with the St. Johns River Water Management District (SJRWMD). The projects listed in the Five-Year Water Resource Development Work Program demonstrate progress in implementing projects which are listed in the North Florida Regional Water Supply Plan (NFRWSP) or support the plan's objectives.

Implementation of projects listed in the NFRWSP supports the recovery strategy for the Lower Santa Fe and Ichetucknee Rivers and Priority Springs (LSFI). The District believes that this work program is adequate to further the recovery of LSFI, and ensure water is available to timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10 -year drought event and to avoid the adverse effects of competition for water supplies based on the District's established MFLs.

Funding

The District's sources of revenue are:

- Ad valorem taxes (primary revenue source)
- State sources (general revenue appropriations and funding, when available)
- Federal sources (funding from the U.S. Fish and Wildlife Service)
- District sources (interest, regulatory fees, timber sales, etc.)
- District fund balance utilization (available until fund balance nears the amounts set aside for Economic Stabilization and Operating Reserve targets adopted by District Policy)

Water Supply Development Projects:

The following projects are water supply development options included in Appendix K of the NFRWSP. Tables 1 and 2 provide a detailed summary and funding schedule for the projects detailed below. Total project cost includes local cooperator match

Water Supply Development Project Descriptions									
Project Number	**Project Name**	**Project Type**	**Project Description**	**Project Status**	**Anticipated Completion Date**	**RWSP Supported**	**MFL Supported**	**Quantity of Water Produced (MGD)**	**Project Total**
16/17-159	Oakmont GRU Reclaimed Water Main Extension	Reclaimed Water	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.	Design	Mar-18	NFRWSP: Appendix K	LSFI	.02827 MGD	$452,571
53.2202.06.05	City of Lake City Reclaimed Water System Upgrade (Phase 1)	Reclaimed Water	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.	Planning	Jan-19	NFRWSP: Appendix K	LSFI	.54 MGD	$545,470

MFL Supported (Full titles)
*Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs (LSFI)

Water Supply Development Project Funding												
Project Number	Project Name	Project Type	Prior Year(s) Project Expenditures	Budget Link	Five-Year Work Program					Total District Funding	Project Total	
					Current FY	Current FY +1	Current FY +2	Current FY +3	Current FY +4			
08.2201.13-00; 16/17-159	Oakmont GRU Reclaimed Water Main Extension	Reclaimed Water	$113,143	2.2.1	$150,000	$36,857				$113,143	$452,571	
53.2202.06.05	City of Lake City Reclaimed Water System Upgrade (Phase 1)	Reclaimed Water		2.2.2	$194,304					$194,304	$545,470	

Water Resource Development Projects:

Detailed below are the District's water resource development projects included in the Appendices of the NFRWSP or projects that support the goals of NFRWSP as detailed in Chapter 7. Tables 3 and 4 provide a detailed summary and funding schedule for ongoing, and recently funded projects we are seeking funding for over the next five years. Total project cost includes State DEP grants and local cooperator match.

Project Number	Project Name	Project Type	Project Description	Project Status	Anticipated Completion Date	RWSP Supported	MFL Supported	Quantity of Water Produced (MGD)	Project Total
16/17-014	City of Hampton Water Supply Improvement and Conservation Project	Water Conservation	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.	Completed	Nov-17	NFRWSP: Appendix M	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.00006 MGD	$113,530
16/17-053	Columbia County Water Conservation Initiative aka "Potty Project"	Water Conservation	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.	Planning	Sep-18	NFRWSP: Appendix M	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.057 MGD	$350,000

16/17-069	Cow Pond Drainage Basin Aquifer Recharge	Groundwater Recharge	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.	Planning	Aug-19	NFRWSP: Appendix J	Lower Suwannee River	1.69 MGD	$1,600,000
17/18-029	Cross City Hydrant and Water Main Replacement	Water Conservation	Replacement of 7 hydrants and 10 isolation valves within Town's distribution network; installation of 1450 feet of 6" water main, replacing lines that have had recent breaks.	Planning	Nov-18	Outside Planning Region	Lower Suwannee River	.0014 MGD	$90,400

14/15-111(Task 3)	Dairy Wastewater Conservation & Nutrient Optimization Project	Water Conservation	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.	Construction	Apr-19	NFRWSP: Ch.7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.3 MGD	$920,000
16/17-119	Dairy Wastewater System Improvement	Water Conservation	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.	Construction	Dec-19	NFRWSP: Ch.7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.14 MGD	$1,500,000

N/A**	I-75/CR-136 Wastewater Improvements, Septic Elimination	Water Conservation	Construct a new WWTP plant with wetland treatment/aquifer recharge for effluent disposal, eliminating 32 existing commercial septic tanks.	Planning	TBD	NFRWSP: Ch.7	Lower Suwannee River	.095 MGD	$3,300,000
15/16-057	Improved Nutrient Application Practices in Dairy Operations (Phase 2)	Water Conservation	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.	Construction	Sep-18	NFRWSP: Ch.7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs Lower Suwannee River	.32 MGD	$2,670,000

N/A**	Infiltrative Wetlands for WWTF Effluent Treatment / Disposal (Phase 1)	Water Conservation	Project will involve the conversion of the City of High Springs' existing effluent sprayfield into infiltration wetlands. Initial phase of the project would involve the design and permitting of approximately 20 acres (10 lined, 10 unlined) of infiltrative wetlands having a total treatment/disposal capacity of 0.48 MGD. Only 10 acres would be constructed in Phase 1 which would provide sufficient capacity for the City's current wastewater treatment capacity of 0.24 MGD. Phase 2 would be constructed concurrently with the planned expansion of the City's WWTF to 0.48 MGD. The project is located within the Santa BMAP area.	Planning	TBD	NFRWSP: Ch.7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.03 MGD	$1,708,500

16/17-017	City of Lake City Public and Staff Restroom Retrofit Project (Task 1)	Water Conservation	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).	Construction	Sep-18	NFRWSP: Appendix M	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.002 MGD	$98,850
17/18-016	Leaky Fire Hydrant and Water Main Replacements	Water Conservation	The City of Jasper has numerous old and non-operational fire hydrants. Several fire hydrants are also located near a dead end water main, requiring quarterly system flushing. This project will conserve water through replacement of 11 leaky fire hydrants and looping water lines to reduce flushing. This project was funded through the District's RIVER cost-share program in August 2017.	Planning	Jul-18	NFRWSP: Appendix M	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.011 MGD	$156,715
16/17-131	Lower Suwannee Drainage Basin Aquifer Recharge	Groundwater Recharge	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.	Planning	Dec-19	NFRWSP: Appendix J	Lower Suwannee River	3.26 MGD	$2,406,359

06.2201.	Madison Blue Spring Aquifer Recharge	Groundwater Recharge	This Madison Blue Spring Aquifer Recharge Project involves the rehabilitation or replacement of up to six existing drainage wells to improve recharge rates. Each well will be upgraded with innovative pretreatment technology which may include the installation of biosorptive activated media (BAM) or the construction of treatment wetlands. This will prevent further clogging of the wells and improve the water quality of the recharge. This is a partnership between the District, FDEP, Madison County, City of Madison, and Nestle. It is estimated this project will recharge approximately 5 mgd. This project was funded through a FDEP FY18 springs grant for in August 2017.	Planning	Jun-22	NFRWSP: Appendix J	Madison Blue Spring	5 MGD	$2,275,000

13/14-022	Middle Suwannee River and Springs Restoration and Aquifer Recharge	Groundwater Recharge	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.	Construction	Mar-18	NFRWSP: Appendix J	Lower Suwannee River	10 MGD	$1,900,000
14/15-060	Oakmont/GRU Recharge Wetland (Phase 2)	Groundwater Recharge	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.	Design	Sep-18	NFRWSP: Appendix J	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.5-1 MGD	$230,000

17/18-030	Precision Agriculture	Water Conservation	The project will provide cost share funds to agricultural producers within the District BMAP areas to implement precision management technology. Additional priority will be given to producers within both the BMAP and Florida Outstanding Springs areas. The project will assist producers implement practices that allow for precision nutrient and irrigation management. This project is anticipated to reduce TN by 7,500,000 pounds per year.	Planning	Sep-18	NFRWSP: Ch.7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs Lower Suwannee River	8 MGD	$2,250,000
17/18-013	Scriven Avenue Drainage Improvements	Groundwater Recharge	Replacement of a Class V injection well in the City of Live Oak. Existing well will be properly abandoned and new well will be constructed of the same diameter, casing depth, and total depth. Suwannee BMAP.	Planning	TBD	NFRWSP Ch. 7	Lower Suwannee River	.03 MGD	$92,439
16/17-066	Starke Fire Hydrant Replacement Project	Water Conservation	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.	Construction	Dec-17	NFRWSP Ch. 7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs	.0056 MGD	$142,080

60.2400.06.03	Agricultural Springs Pilot Program - Low Input Agriculture and Land Conservation (Sustainable Suwannee)	Water 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.	Planning	TBD	NFRWSP: Ch.7	Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs Lower Suwannee River	5.10 MGD	$5,000,000
S0796 (task 2)	Suwannee BMP Center Pivot Retrofits Water Conservation Project	Water Conservation	The Suwannee BMP 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.	Construction	Apr-19	NFRWSP: Ch.7	Lower Suwannee River	5.26 MGD	$885,000

17/18-025	University Oaks Water System - Phase 3	Water Conservation	Replacement of approximately 2,350 LF of 6" watermain that will provide service to 15 customers within a subdivision 3 miles northeast of Bronson. This is phase 3 of a multi-phase project; phases 1 and 2 were funded through a single District RIVER Cost-Share grant in the 2015 cycle. This project was recently funded through the District's RIVER cost-share program in August 2017.	Planning	May-19	NFRWSP: Appendix M	Levy Blue / Wacasassa River	.019 MGD	$127,250
CSFA 37. 052	Upper Suwannee River Regional Aquifer Recharge	Groundwater Recharge	Installation of at least four recharge wells in the Upper Suwannee River basin in locations where wetlands were historically ditched and drained into the river. This project intends to capture water during high flow conditions that occur after large rainfall events and during the winter months, provide additional water quality treatment, and provide significant beneficial aquifer recharge to the Upper Floridan. Recharge is estimated at 4 mgd. This project was funded through a FDEP FY18 springs grant in August 2017.	Planning	TBD	NFRWSP: Appendix L	Lower Suwannee River	4 MGD	$2,500,000

Water Resource Development Project Funding											
Project Number	**Project Name**	**Project Type**	**Prior Year(s) Project Expenditures**	**Budget Link**	**Five-Year Work Program**					**Total District Funding**	**Project Total**
					Current FY	**Current FY +1**	**Current FY +2**	**Current FY +3**	**Current FY +4**		
16/17-014	City of Hampton Water Supply Improvement and Conservation Project	Water Conservation	$22,250	2.2.2	$83,280	$750				$105,530	$113,530
16/17-053	Columbia County Water Conservation Initiative aka "Potty Project"	Water Conservation	$50,000	2.4	$280,000					$30,000	$350,000
16/17-069	Cow Pond Drainage Basin Aquifer Recharge	Groundwater Recharge	$0	2.2.1	$1,550,000					$50,000	$1,600,000
17/18-029	Cross City Hydrant and Water Main Replacement	Water Conservation		(RIVER) Cost-Share Program						$90,400	$90,400
14/15-111(Task 3)	Dairy Wastewater Conservation & Nutrient Optimization Project	Water Conservation		2.2.1	$885,590					$298,004	$920,000
16/17-119	Dairy Wastewater System Improvement	Water Conservation		2.4	$1,500,000						$1,500,000
N/A**	I-75/CR-136 Wastewater Improvements, Septic Elimination	Water Conservation		2.2.1							$3,300,000

15/16-057	Improved Nutrient Application Practices in Dairy Operations (Phase 2)	Water Conservation	$785,077.04	2.4	$1,717,749					$20,000	$2,670,000
N/A**	Infiltrative Wetlands for WWTF Effluent Treatment / Disposal (Phase 1)	Water Conservation		2.2.1							$1,708,500
16/17-017	City of Lake City Public and Staff Restroom Retrofit Project (Task 1)	Water Conservation		2.2.2	$98,850					$98,850	$98,850
17/18-016	Leaky Fire Hydrant and Water Main Replacements	Water Conservation		(RIVER) Cost-Share Program						$141,715	$156,715
16/17-131	Lower Suwannee Drainage Basin Aquifer Recharge	Groundwater Recharge	$0	2.2.1	$2,200,000					$2,200,000	$2,406,359
06.2201.	Madison Blue Spring Aquifer Recharge	Groundwater Recharge	$0	2.2.1						$50,000	$2,275,000
13/14-022	Middle Suwannee River and Springs Restoration and Aquifer Recharge	Groundwater Recharge	$1,300,000	2.2.1	$589,083					$277,000	$1,900,000
14/15-060	Oakmont/GRU Recharge Wetland (Phase 2)	Groundwater Recharge	$0	2.2.1	$150,000					$150,000	$230,000
17/18-030	Precision Agriculture	Water Conservation		2.2.1							$2,250,000

17/18-013	Scriven Avenue Drainage Improvements	Groundwater Recharge	$0	(RIVER) Cost-Share Program						$81,646	$92,439
16/17-066	Starke Fire Hydrant Replacement Project	Water Conservation	$59,040	2.2.2	$59,520	$59,520				$119,040	$142,080
60.2400.06.03	Agricultural Springs Pilot Program - Low Input Agriculture and Land Conservation (Sustainable Suwannee)	Water Conservation		2.4	$5,000,000						$5,000,000
S0796 (task 2)	Suwannee BMP Center Pivot Retrofits Water Conservation Project	Water Conservation		2.2.1							$885,000
17/18-025	University Oaks Water System - Phase 3	Water Conservation		(RIVER) Cost-Share Program						$122,250	$127,250
CSFA 37.052	Upper Suwannee River Regional Aquifer Recharge	Groundwater Recharge	$0	2.2.1							$2,500,000

Appendix A

Project Title	Cooperator	Total Cost	FDEP Grant Amount	WMD Funding	Local Match	Description	Benefit	Status	Estimated Completion Date
Mill Creek Sink Water Quality Improvements	City of Alachua, FDEP	$1,400,000.00	$1,000,000.00	$400,000.00		Purchase property in order to install stormwater management facilities to capture untreated stormwater directly discharging into Mill Creek Sink and swallet. Stormwater quality enhancements will be designed to reduce nitrogen loading to the Floridan aquifer by up to 66%	Up to 66% reduction	on-going	12/7/2018
Hornsby Spring Water Quality Improvement (Design)	High Springs, FDEP	$500,000.00	$450,000.00	$50,000.00		Nutrient loads to Hornsby Spring will be reduced by decommissioning Camp Kulaqua's package wastewater treatment plant (WWTP) and transferring effluent to the City of High Springs wastewater treatment plant.	110 lbs/yr TN	on-going	6/30/2018
Sustainable Suwannee Pilot Program	SRMWD, FDEP, Ag Operations	$5,000,000.00	$5,000,000.00			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.	375,000 lbs/yr TN	on-going	N/A

High Springs Wastewater Collection Ssytem Extensions Phase A1	High Springs, FDEP	$3,432,700.00	$3,307,700.00	$0.00		This project consists of 3 phases. The project will provide central sewer service to the remaining areas of the City of High Springs currently on septic, reducing nutrient loading to the Santa Fe watershed area, and Hornsby and Poe springs. The project is anticipated to eliminate 132 septic tanks and reduce nutrients by 2,640 pounds per year.	2,640 lbs/yr TN	on-going	9/30/2018
Dream Inn WWTP Closure	Columbia County	$354,737.00	$0.00	$143,000.00	$210,437.00	Remove the current non-compliant wastewater treatment system that serves the Dream Inn Motel and hooking the motel up to Columbia County's sanitary sewer service. This also includes relocating, upgrading and enlarging the existing County wastewater treatment facility to include the flow from the Dream Inn plant, and lift stations and force mains to collect the flow.		on-going	12/1/2017
High Springs Septic Tank Abatement	High Springs	$175,000.00	$0.00	$150,000.00	$25,000.00	The project involves the removal of 13 residential septic tanks by installing grinder pump stations in the Lower Santa Fe River basin and hooking up the houses to the City of High Springs sanitary sewer system.	330 lbs/yr TN	on-going	6/29/2018
Santa Fe Park & Boat Ramp	Gilchrist County	$129,800.00	$0.00	$123,000.00	$6,800.00	Provide upgrades to the park located on SR47 adjacent to the Santa Fe River. They are also working on enhancing the access to the river at the park by replacing the boat ramp, adding docks and a separate canoe launch and fixing drainage which will reduce sediment and nutrients going to the river.		on-going	3/6/2019

Holly Hills Stormwater Improvement	Archer	$87,000.00	$0.00	$83,000.00	$4,000.00	Increase storage within existing stormwater ponds to alleviate flooding and improve water quality.		on-going	2/24/2018
I-75/SR 47 Cannon Creek Sink Public Wastewater Improvement	Lake City, FDEP	$3,400,871.00	$1,697,456.00	$0.00	$1,703,415.00	Phase 1 - elimination of septic tanks from 30 businesses and 5 residences. Future phases, if completed, will eliminate up to 900 septic tanks and reduce up to 64,600 pounds of nutrient loading per year	11,950 lbs/yr TN	Funded*	4/1/2019
Mill Creek Sink Land Acquisition for Water Quality Improvement, Phase II	Alachua County, FDEP	$2,600,000.00	$1,300,000.00		$1,300,000.00	The goal of all phases of the project is to improve water quality recharging the Upper Floridan aquifer at Mill Creek Swallet and to preserve and protect the Mill Creek Sink and Cave System and associated wetlands. Phase II proposes to expand land conservation on an additional 240 acres surrounding and upstream of Mill Creek Swallet. Mill Creek Swallet directly recharges the Upper Floridan aquifer and is connected in the subsurface to Mill Creek Sink. A dye trace conducted in 2005 detected dye released in the Mill Creek Cave System at the Santa Fe Hills public water system and Hornsby Spring, an Outstanding Florida Spring on the Santa Fe River.	240 acres conserved	Funded*	7/1/2018
Precision Agriculture	Various	$2,250,000.00	$2,000,000.00		$250,000.00	The project will provide cost share funds to agricultural producers within the District BMAP areas to implement precision management technology. Additional priority will be given to producers within both the BMAP and Florida Outstanding Springs areas. The project will assist producers implement practices that allow for precision nutrient and irrigation management.	7,500,000 lbs/yr TN	Funded*	

Infiltrative Wetlands for WWTF Effluent Treatment/Disposal Phase I	High Springs	$1,708,500.00	$1,708,500.00	$0.00	$0.00	Project will involve the conversion of the City's existing effluent sprayfield into infiltration wetlands. Initial phase of the project would involve the design and permitting of approximately 20 acres (10 lined, 10 unlined) of infiltrative wetlands having a total treatment/disposal capacity of 0.48 MGD. Only 10 acres would be constructed in Phase 1 which would provide sufficient capacity for the City's current wastewater treatment capacity of 0.24 MGD. Phase 2 would be constructed concurrently with the planned expansion of the City's WWTF to 0.48 MGD.	4870 lbs/yr TN	Funded*	6/1/2019
Poe Springs Domesitc Sewage Infrastructure Upgrade	Alachua County	$346,600.00	$0.00	$150,000.00	$196,600.00	Phase 1 - improvements consisting of installation of new waterless restrooms immediately adjacent to the springhead with larger holding tanks and assessing the on-site treatment and disposal system septic tanks. Phase 2 - septic tank replacement.	5776 lbs/yr TN	Funded*	3/1/2018

* Awarded FY 2018 Springs Grant. The District is currently working to decelop project schedule and execute contracts with DEP.

* For BMAP related question please contact Terry Hansen (Terry.Hansen@dep.state.fl.us)

WATERBODY GRADES

WATERBODY GRADES

Section 373.036(7)(b)9., F.S., provides that the Consolidated Annual Report shall contain a "grade for each watershed, water body, or water segment in which a project listed under subparagraph 8. is located representing the level of impairment and violations of adopted minimum flow or minimum water levels. The grading system must reflect the severity of the impairment of the watershed, water body, or water segment." Table 1 lists the projects contained within the 2018 Five-year Water Resource Development Work Plan, the watershed, water body, or water segment the project impacts, and a grade for two items: 1) the water quality level of impairment and 2) the level of violation of a minimum flow or minimum water level.

Level of Impairment Grade

The Level of Impairment grade is represented as follows:

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

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

The Level of Violation of Adopted Minimum Flow and Minimum Level (MFL) is represented as follows:

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

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

> **Level 0**: This grade is assigned if the waterbody is meeting the MFL, but is projected to not meet the MFL within 20 years (that is, the waterbody is in prevention).

Level I: This grade is assigned if the waterbody is close to meeting the MFL and the waterbody is rated as a Tier 3 or Tier 2 for regional significance; or the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 3 for regional significance

Level II: This grade is assigned if the waterbody is close to meeting the MFL and the waterbody is rated a Tier 1 for regional significance; or the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 2 for regional significance; or the waterbody is not close to meeting the MFL and the waterbody is rated a Tier 3 for regional significance.

Level III: This grade is assigned if the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 1 for regional significance; or the waterbody is not close to meeting the MFL and the waterbody is rated a Tier 2 or Tier 1 for regional significance.

Contract Number	Table 2 Water Resource Development Projects (Appendix C)	Watershed, Water Body, Water Segment (WBID)	Level of Water Quality Impairment	Level of Violation of Adopted MFL
16/17-014	City of Hampton Water Supply and Conservation Improvement Project	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
16/17-053	Columbia County Water Conservation Initiative aka "Potty Project"	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
16/17-069	Cow Pond Drainage Basin Aquifer Recharge	Lower Suwannee River (3422a)	Impaired	None*
17/18-029	Cross City Hydrant and Water Main Replacement (River Funding)	Lower Suwannee River (3422a)	Impaired	None*
14/15-111	Dairy Wastewater Conservation & Nutrient Optimization Project (ACS)	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
16/17-119	Dairy Wastewater System Improvement	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
N/A**	I-75/CR-136 Wastewater Improvements, Septic Elimination (Springs Funding)	Lower Suwannee River (3422a)	Impaired	None*
15/16-057	Improved Nutrient Application Practices in Dairy Operations (Phase 2) (ACS)	Lower Santa Fe (3605C) and Ichetucknee (3519) / Lower Suwannee River (3422a)	Impaired	Level III - 2 waterbodies None* - 1 waterbody
N/A**	Infiltrative Wetlands for WWTF Effluent Treatment / Disposal (Phase 1) (Springs Funding)	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
16/17-017	City of Lake City Public and Staff Restroom Retrofit Project (Task 1)	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
17/18-016	Leaky Fire Hydrant and Water Main Replacements (River Funding)	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
16/17-131	Lower Suwannee Drainage Basin Aquifer Recharge	Lower Suwannee River (3422a)	Impaired	None*
06.2201.	Madison Blue Spring Aquifer Recharge (Springs Funding)	Madison Blue Spring (3315Z)	Impaired - High	None*
13/14-022	Middle Suwannee River and Springs Restoration and Aquifer Recharge	Lower Suwannee River (3422a)	Impaired	None*
14/15-060	Oakmont/GRU Recharge Wetland (Phase 2)	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
17/18-030	Precision Agriculture (Springs Funding)	Lower Santa Fe (3605C) and Ichetucknee (3519) /	Impaired	Level III - 2 waterbodies

		Lower Suwannee River (3422a)		None* - 1 waterbody
17/18-013	Scriven Avenue Drainage Improvements (River Funding)	Lower Suwannee River (3422a)	Impaired	None*
16/17-066	Starke Fire Hydrant Replacement Project	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
60.2400.06.03	Agricultural Springs Pilot Program - Low Input Agriculture and Land Conservation (Sustainable Suwannee)	Lower Santa Fe (3605C) and Ichetucknee (3519) / Lower Suwannee River (3422a)	Impaired	Level III - 2 waterbodies None* - 1 waterbody
S0796 (Task 2)	Suwannee BMP Center Pivot Retrofits Water Conservation Project	Lower Suwannee River (3422a)	Impaired	None*
17/18-025	University Oaks Water System - Phase 3 (River Funding)	Levy Blue (3703B)/ Wacasassa River (3699)	Not Imparied / Impaired	None*
CSFA 37.052	Upper Suwannee River Regional Aquifer Recharge (Springs Funding)	Lower Suwannee River (3422a)	Impaired	None*
Water Supply Development Projects (Appendix C)				
16/17-159	Oakmont GRU Reclaimed Water Main Extension	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
53.2202.06.05	City of Lake City Reclaimed Water System Upgrade (Phase 1)	Lower Santa Fe (3605C) and Ichetucknee (3519)	Impaired	Level III - 2 waterbodies
	BMAP Projects			
16/17-068	High Springs Septic Tank Abatement	Unnamed Slough (3660)	Not Impaired	Level III - 1 waterbody
16/17-193	High Springs Wastewater Collection Ssytem Extensions Phase A1	Lower Santa Fe (3605C)	Impaired	Level III - 1 waterbody
16/17-155	Santa Fe Park & Boat Ramp	Lower Santa Fe (3605C)	Impaired	Level III - 1 waterbody
N/A**	Infiltrative Wetlands for WWTF Effluent Treatment/Disposal Phase I**	Lower Santa Fe (3605C)	Impaired	Level III - 1 waterbody
N/A**	I-75/SR 47 Cannon Creek Sink Public Wastewater Improvement**	Cannon Creek (3520)	Impaired	Level III -2 waterbodies
16/17-128	Holly Hills Stormwater Improvement	Noncontributing Area (2692)	Not Impaired	None*
16/17-060	Dream Inn WWTP Closure	Olustee Creek (3504A)	Impaired	Level III -2 waterbodies
06-0610-0-2300-35-01	Mill Creek Sink Land Acquisition for Water Quality Improvement, Phase II	Mill Creek Sink (3644)	Impaired	Level III - 1 waterbody

53.2300.35.01	Mill Creek Sink Water Quality Improvements	Mill Creek Sink (3644)	Impaired	Level III - 1 waterbody
15/16-119	Hornsby Spring Water Quality Improvement (Design)	Hornsby Spring Run (3653)	Not Impaired	Level III - 1 waterbody
17/18-040	Poe Springs Domesitc Sewage Infrastructure Upgrade	Poe Spring (3605W)	Not Impaired	Level III - 1 waterbody

Contract Number* = No contract number has been assigned.

Contract Number** = Project was submitted by SRWMD but the Contract exists between DEP and the associated party.

None* - Project is in an area with no adopted MFLs, no MFLs recovery strategy, or is not expected to fall below a minimum flow or level in 20 years.

FLORIDA FOREVER WORK PLAN

Florida Forever Work Plan

2018 Annual Update

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

FLORIDA FOREVER WORK PLAN
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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.

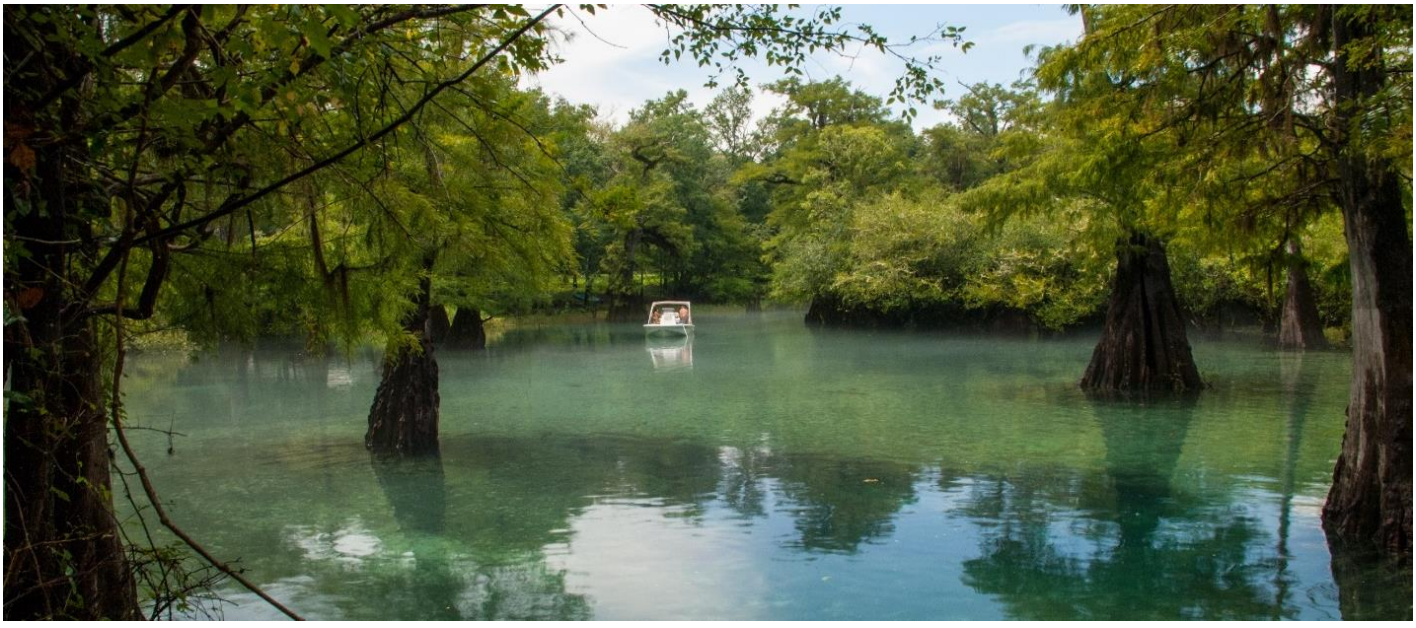


Table 1. Actual Florida Forever Expenditures

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	-
2016-2017						
2017-2018	$1,745,746**	169				
Total	**$49,673,306**	**44,035**	**$21,228,199**	**25,292**	**$568,641**	**$519,590**

*Includes pre-acquisition costs ** Includes land exchanges
***Florida Forever funded portion of acquisition of Rock Bluff Springs

Table 2. Projected Florida Forever Expenditures

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Conservation Land Acquisition	-	-	-	-	-
Water Resource Development and Restoration Projects	-	-	-	-	-
Total Projected	**-**	**-**	-	-	**-**

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.

Upper Suwannee River Basin Aquifer Recharge Projects

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.

Upper Suwannee River Basin Water Storage and Aquifer Recharge

Columbia and Hamilton Counties

This project proposes the identification of areas within the Upper Suwannee River Basin where surface water storage and aquifer recharge can be implemented to attenuate flooding, maintain baseflows in surface streams, and restore the Floridan aquifer system. The District is looking for suitable public and private lands to site water storage and recharge wells within these counties. The project cost is being determined.

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 area 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 which concepts will maximize water resource development benefits based on flexibility, 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 associated with this project will have regional cross-boundary benefits for stressed water resources in both the District and SJRWMD due to its proximity to the Keystone Heights potentiometric 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 has resulted

in 190 million gallons, or 0.2 mgd, of recharge from March 1, 2015 through October 31, 2017. 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. Estimated additional recharge benefits of 0.2 mgd are anticipated.

Bradford County Drainage Wells

Bradford County

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

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 level instrumentation. 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 Minimum Levels set for the river which are currently in recovery. Recharge benefits are estimated up to two mgd. The District is actively seeking funding sources for this project.

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, 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 more than 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 and adjacent to Mallory Swamp and adjacent to the existing boundary of the Middle Suwannee Project. The Phase II property is in excess of 6,000 acres, and the District is investigating conservation easement acquisition opportunities to optimize the water resources development potential of the Middle Suwannee Project. Phase II will rehydrate natural systems along and adjacent to the southeastern margin of Mallory Swamp; thereby increasing available surface water for wetland hydration and groundwater recharge, which will enhance springs restoration. The District's approach includes re-establishment of natural drainage patterns by modifying and constructing hydraulic structures (such as 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 with potential benefits being determined.

Spring Water Quality and Quantity Restoration

District-wide

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 increased springflow, improve erosion and sediment control, reduce nutrient (Total Nitrogen, Total Phosphorous, Suspended Solids) loading, improved recreational opportunities, support economic growth and development within our communities, and provide natural systems restoration and protection. Projects focused on springs restoration may include: construction of stormwater management systems, parking lot paving, bank repair and stabilization, sediment and debris removal from spring boils/pool/run, construction of distinct access entrance points to protect bank (i.e. steps, ramp, diving platform, canoe launch, etc.), invasive vegetation removal, and/or native aquatic plant installation. Springs restoration project costs average approximately $100,000 – $300,000 depending on scope.

Wastewater Septic to Sewer Upgrades

District-wide

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

Stormwater Treatment

District-wide

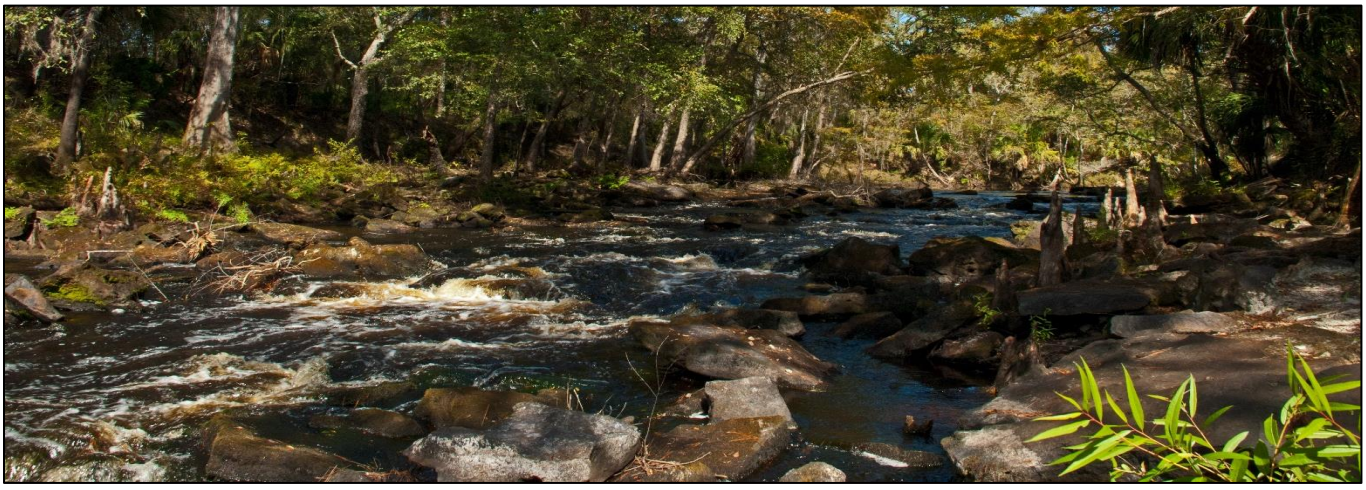
Agricultural and urban runoff has been identified as significant sources of nutrient, bacterial, and potential toxic contaminant pollution. The goal of stormwater treatment projects is to collect and treat stormwater runoff before it's discharged to surface waters and groundwater. This can be accomplished 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 storm waters. Benefits include preventing trash, debris, suspended solids, oils, and other pollutants from entering surface waters and groundwater, reducing flow rates to match predevelopment rates, reducing erosion, 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.

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 2017.

Table 3. Protected Lands by River Basins

Basin	Fee Acres	Less Than Fee Acres	Potential Acquisition Project Acres
Alapaha	2,922	1,542	2,889
Aucilla/Wacissa	15,543	12,031	6,738
Coastal River - Econfina/Steinhatchee	48,372	52,645	2,644
Santa Fe/Ichetucknee	15,606	8,632	9,920
Suwannee	65,937	28,639	23,916
Waccasassa	5,327	24,214	4,832
Withlacoochee	6,394	18	8,562
Total	**160,102**	**127,721**	**59,501**



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 the proposed 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 MFLs and the Santa Fe Basin Management Action Plan (BMAP). If benefits 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 two specific land acquisition projects for detailed assessment during Fiscal Year 2017. 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 exchanges, donations and less than fee purchases.

Table 4. Acquisition Projects Approved for Detailed Assessment

Seller	Project	Acres		Date Approved
Chemours Company TT, LLC	Bradford REPI Project	893	Bradford & Clay	06/13/2017
Mitchell G. & Paula Hancock Donation	Hixtown Swamp Addition	199	Madison	07/11/2017

The following table summarizes the District's land acquisition activity during Fiscal Year 2017.

Table 5. Acquisitions Completed in FY 2017

Seller	Acres	County	Date	Transaction	Funding Source
N/A	N/A	N/A	N/A	N/A	N/A

Surplus Lands

The District reviews its land holdings to identify any areas that may not be critical for floodplain management, aquifer recharge, and the protection of surface waters, wetlands, and springs. Such lands are declared surplus and either sold or exchanged on the private market or conveyed to other units of government. The proceeds of any sales and exchanges are dedicated to the acquisition of lands with higher water resource and conservation values. Table 6 lists surplus lands activities during Fiscal Year 2017.

Table 6. Surplus Lands Activity FY 2017

Surplus Parcels	Acres	County	Disposition Date	Transaction	Proceeds
Greenville Sprayfield	151	Madison	05/05/2017	Conveyance to Town of Greenville	$0.00
Horseshoe Beach Wellfield	100.22	Dixie	07/11/2017	Conveyance to the Town of Horseshoe Beach	$0.00
Cross City Sprayfield	147	Dixie	07/11/2017	Conveyance to the Dixie County School District	$0.00
City of Perry Sprayfield	248.5	Taylor	07/18/2017	Conveyance to Taylor County	$0.00

Land Management

Land management activities ensure District lands continue to provide important water resource functions needed to maintain natural systems and benefit the public. Annually, the District's Land Management Review Team performs a review of management objectives and activities conducted on fee-simple title lands held by the District. The 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. During Fiscal Year 2017, the Land Management Review Team met and exceeded 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 Fiscal Year 2017. A complete listing of activities and accomplishments can be found in the 2017 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 is anticipated to run through Fiscal Year 2018 and is being conducted with other water management districts, FDEP, FDACS, Florida Forest Service, and University of Florida Institute for Food and Agricultural Sciences.

Natural Resource Management

- The Mattair Springs Restoration Project is a joint project with the U.S. Fish and Wildlife Service on approximately 680 acres of sandhill natural communities in Suwannee County. In 2017, roughly 250 acres were whole tree chipped to reduce hardwood encroachment and 88 acres were treated with herbicides to control hardwood resprouts.

- The Swift Creek Restoration Project is a joint project with the U.S. Fish and Wildlife Service on approximately 103 acres of mesic and wet flatwoods natural communities in Hamilton County. In Fiscal Year 2017,103 acres were roller chopped, burned, and treated with herbicides to control hardwood vegetation. This work was done in preparation for longleaf pine reforestation that will occur in Fiscal Year 2018.

- In Fiscal Year 2017, a $144,000 grant was obtained from the Florida Forest Service to conduct vegetation management work on the Mallory Swamp tract in Lafayette County. This money was used to roller chop approximately 1,740 acres to facilitate prescribed fire work.

- In Fiscal Year 2017, approximately 5.680 acres were prescribe burned throughout the District. On the Mallory Swamp tract, 93 miles of ditch edges were mowed and chemically treated to facilitate prescribed fire work.

- The District sold 1,472 acres of timber.

Non-native, Invasive Plant Control

- During Fiscal Year 2017, District staff monitored 82 invasive plant infestations.
- In Fiscal Year 2017, 67 infestations were chemically treated by District Staff and contractors.
- Seven infestations were reclassified as inactive.

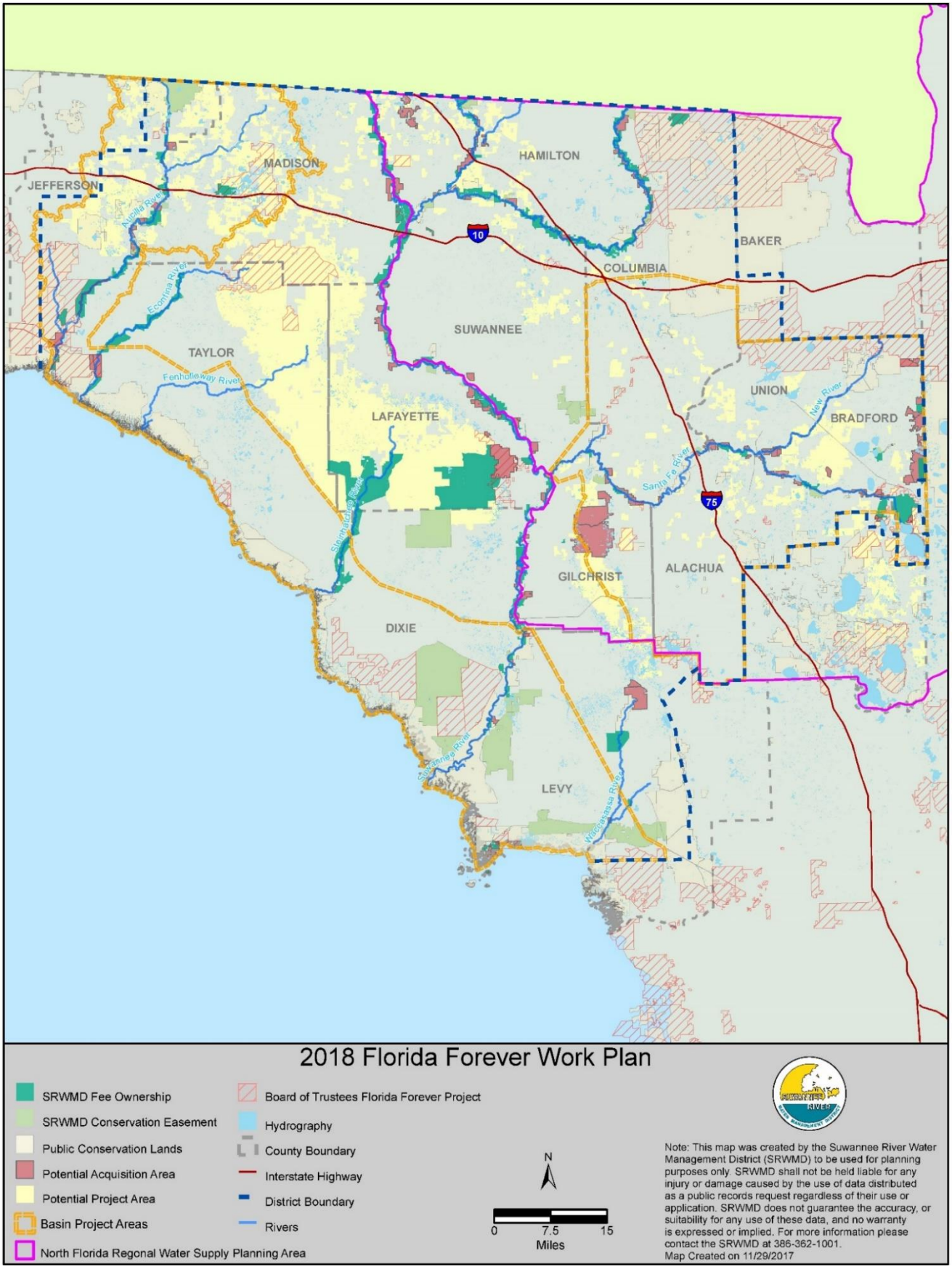
Public Use

- 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 Strutters Chapter of the Nation Wildlife Turkey Federation to sponsor a youth turkey hunt on the Peacock Slough Tract.
-
- Land Management staff worked with GIS staff to develop several GIS apps to use on tablets and iPads that will enable the staff and contractors to use and collect data. For example, the public use area has an app to collect tract inspection data to identify safety issues and repair work needed on District lands.
-
- The District cooperates with FWC and U.S. Fish and Wildlife Service to provide public hunting opportunities on almost 105,000 acres.
-
- During Fiscal Year 2017, 630 Special Use Authorizations were issued for use of District lands.

Facilities Maintenance Project

- During the Fiscal Year 2017, 99 miles of roads and 127 miles of property boundaries were maintained.

Florida Forever Plan Map



MITIGATION DONATION ANNUAL REPORT

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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 2018.

A total of 14 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: Starke By-Pass Project (SR 223) Mitigation Project: Starke Bypass Mitigation Area (SBMA)

The District issued ERP-007-213985-1 on October 22, 2017 for the construction of a 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. Construction of the bypass is ongoing. A Wetland Mitigation Project to offset these impacts was advertised under a Low Bid Design-Build procedure. The District awarded the contract to one of two shortlisted design-build firms. The winning bid was

$2,980,000 submitted by Alligator Creek Mitigation Bank, LLC. The District issued ERP-007-223088-1 on November 6, 2015 for the Starke Bypass Mitigation Area, and Alligator Creek Mitigation Bank, LLC, initiated construction activities in December 2015. Construction of the mitigation site is complete and monitoring of wetland plantings success is ongoing.

COMPLETED MITIGATION PROJECTS

AUCILLA RIVER BASIN

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

The District issued ERP-0123-212754-1 on October 24, 2011 for the 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 0.42 mitigation credits would be required to complete the project. FDOT purchased these mitigation credits from the San Pedro Bay Mitigation Bank October 27, 2017.

UPPER SUWANNEE RIVER BASIN

1) FDOT Project: CR 143 Road Widening

Mitigation Project: Woods Ferry Hydrologic Enhancements

The District issued ERP-047-209544-1 on December 13, 2005 for the widening of CR 143 in Hamilton County from CR 146 to I-75 which impacted approximately 1.23 acres of wetlands. The District contracted with consultants to identify, evaluate, and construct mitigation activities within District-owned Woods Ferry Tract in Suwannee County. Mitigation involved hydrologic enhancement of seven wetland sites by improving drainage features to restore natural water flow. Mitigation activities were completed in November 2006. 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

The District issued ERP-075-210019-1 on March 8, 2005 for the 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 Projects:

1. Cedar Key Water Quality Restoration Project
2. Cow Creek Road Restoration
3. Wetland Preservation

The District issued ERP-075-206226-1 on May 9, 2002 for the 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. The Cedar Key Water Quality Restoration Project will be evaluated by District staff in 2018. The Cow Creek Road Restoration project was evaluated November 2017 and determined to be successful. In 2003 the District acquired and recorded conservation easements for the Meeks and Mann parcels (1,000 acres) in Levy County.

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

The District issued ERP-001-206684-1 and ERP-125-205839-1 on June 13, 2000 and May 13, 1999, respectively, for the replacement of bridges crossing the Santa Fe River and impacting 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. District staff inspected the Alligator Lake and Price Creek surface water improvements project in January 2017 and further project needs will be evaluated in 2018.

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

The District issued ERP-125-209144-1 on March 11, 2003 for the widening of CR 231 in Union County between SR 100 and the Baker County line which 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 2018.

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

The District issued ERP-125-210531-1 on April 12, 2005 for the 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). The 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 an District staff will evaluate the site in 2018.

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. The District received $279,174 from FDOT. Mitigation success will be evaluated in 2018.

2) FDOT Project: SR 51 Road Widening Taylor and Dixie Counties Mitigation Credits: 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 achieved by purchase of mitigation credits from San Pedro Bay Mitigation Bank. The District received $10,200 from FDOT for mitigation. The District purchased 0.6 mitigation credits from San Pedro Mitigation Bank in 2006.

WITHLACOOCHEE RIVER BASIN

1) FDOT Project: CR 53 Road Widening
Mitigation Project: 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. The District received $75,594 from FDOT. Project was completed in 2006. The District conducted operation and maintenance improvements at this site in December 2011. Mitigation success will be evaluated in 2018.

Figure 1. General location of FDOT construction projects within SRWMD requiring wetland mitigation.

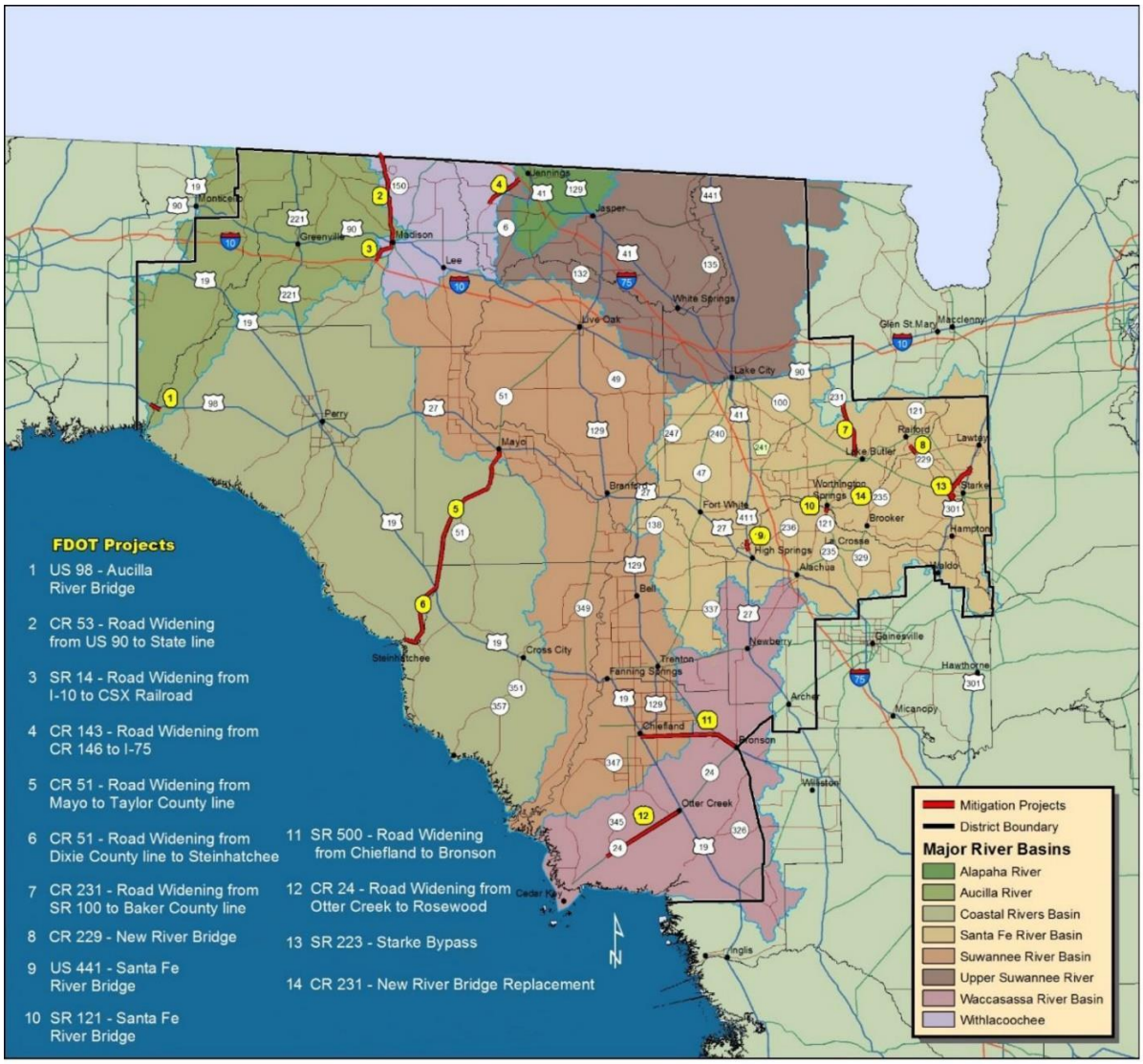

Figure 2. General location of wetland mitigation sites within SRWMD for FDOT construction projects.

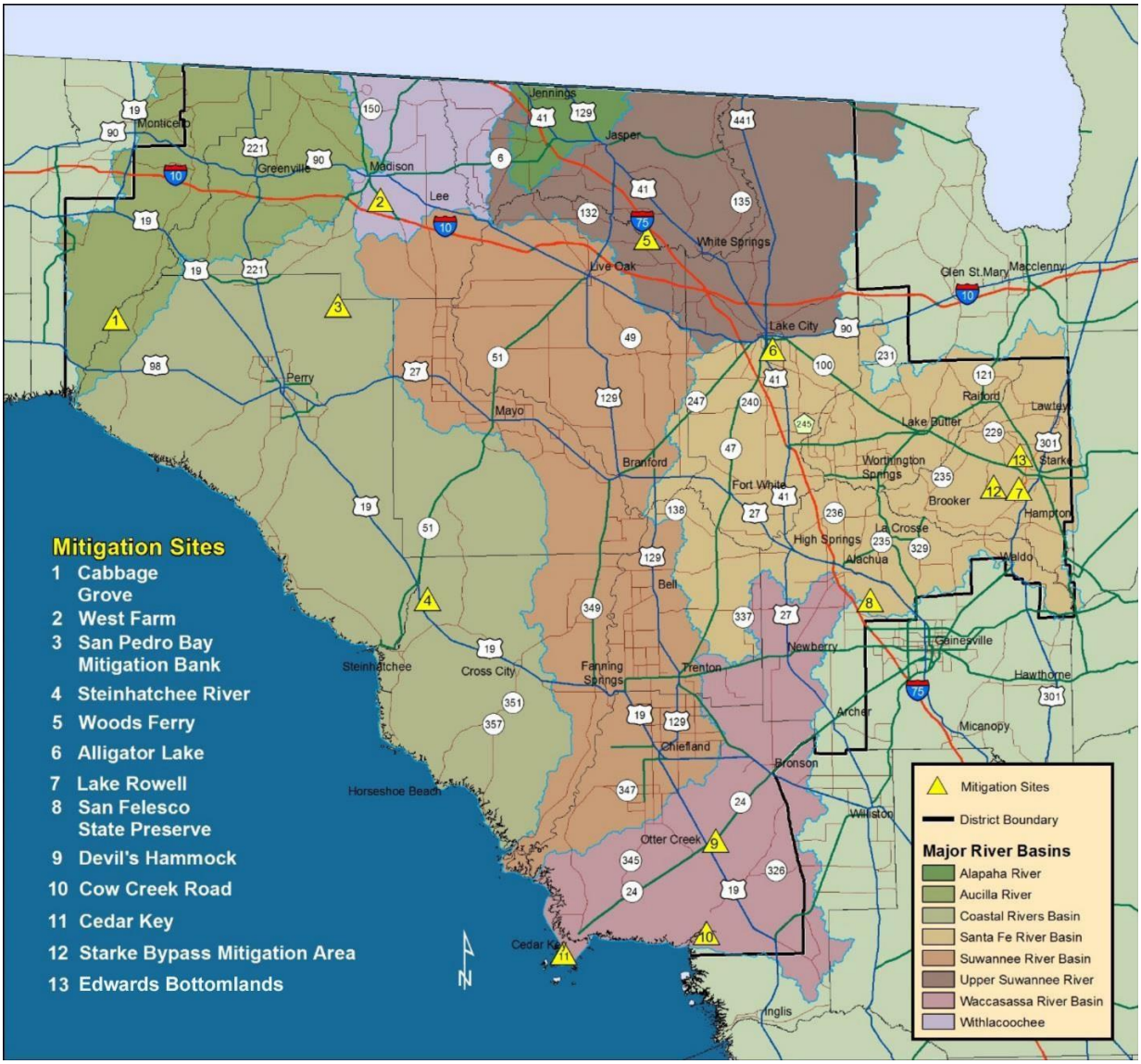

TABLE 1. FDOT CONSTRUCTION PROJECTS WITH WETLAND IMPACTS AND ASSOCIATED MITIGATION PROJECTS.

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	$100,000
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	Herbaceous and Forested	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
Withlacoochee	**1.** CR 53 Road Widening from US 90 to State Line	2117565	98-0041	1.60	Forested and 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 and Herbaceous	Cabbage Grove Wetland Enhancement	$75,594	$46,459