

Consolidated Annual Report

March 1, 2016



9225 CR 49
Live Oak, Florida 32060
386-362-1001

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SUWANNEE RIVER WATER MANAGEMENT DISTRICT

February 28, 2016

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Chiefland, Florida

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Vice Chairman
Madison, Florida

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Alachua, Florida

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Alachua, Florida

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Old Town, Florida

RICHARD SCHWAB
Perry, Florida

BRADLEY WILLIAMS
Monticello, Florida

VACANT
At Large

NOAH VALENSTEIN
Executive Director

The Honorable Rick Scott, Governor
State of Florida
The Capitol
400 S. Monroe Street
Tallahassee, FL 32399-0001

Subject: 2016 Consolidated Annual Report

Dear Governor Scott:

In accordance with Section 373.036 (7), Florida Statutes, please find enclosed a copy of the Suwannee River Water Management District's 2016 Consolidated Annual Report. The report is also available for viewing on our website at www.mysuwanneeriver.com in the Business & Financial section.

This year's report emphasizes the following:

- Continuing emphasis on solution-oriented projects;
- Continuing strategic focus on water supply, water conservation, and springs projects; and
- Continuing fiscal accountability and efficiency in all areas of responsibility.

Please contact me at 800.226.1066 should you have any questions or like additional information.

Sincerely,



Noah Valenstein
Executive Director

NV/pf

Enclosure

cc: SRWMD Governing Board
Jonathan P. Steverson, Secretary, DEP

Recipients of the District's Fiscal Year 2016-2017 Standard Format Consolidated Annual Report:

The Florida Senate

The Honorable Andy Gardiner, President
Florida Senate
409 Senate Office Building
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Tallahassee FL 32399-1100

The Honorable Tom Lee, Chair
Senate Committee on Appropriations
and Joint Legislative Budget Commission
Alternating Chair
404 S. Monroe Street
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The Honorable Charles Dean, Chair
Senate Committee on Environmental
Preservation and Conservation
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The Honorable Alan Hays, Chair
Senate Appropriations Subcommittee
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The Honorable Anitere Flores, Chair
Senate Committee of Fiscal Policy
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The Honorable Dorothy L. Hukill, Chair
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The Florida House

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Florida House of Representatives
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The Honorable Richard Corcoran, Chair
House Appropriations Committee
and Joint Legislative Budget Commission
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The Honorable Matthew Caldwell, Chair
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The Honorable Tom Goodson, Chair
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Ms. Tiffany Harrington, Policy Chief
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Mr. Mike Atchley, Budget Chief
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Office of Water Policy
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County Commissions

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Lake Butler, FL 32054

Five-Year Strategic Plan
(District Water Management Plan)

In accordance with
Subsection 373.036(2)(e)
Florida Statutes

Water for Nature

Water for People



Strategic Plan 2017-2021

Suwannee River Water Management District



Behrooz Shafiq 2014

SRWMD Strategic Plan



Chairman Quincey's Message

A commitment to water resource protection and restoration requires moving forward with the implementation of innovative projects, programs and plans that focus on our core mission and invest in our communities.

Noah Valenstein, the District's new Executive Director, is committed to partnering with the counties and municipalities within the District to implement projects that ensure that this region has an adequate water supply to grow its communities and protect that natural resources that define north Florida.

Collaborative efforts with partners have proven to be efficient and beneficial, particularly with respect to protecting the health and restoration of our springs. Thanks to the leadership of Governor Scott and historic funding from the Legislature during the past three years, the District and local cooperators have initiated more than \$34 million in springs restoration projects.

Together these springs projects are estimated to save up to 52 million gallons per day (mgd) of water and reduce nutrient loadings by an estimated 2.1 million pounds annually.

Governor Scott's "Florida First" Budget recommends \$50 million dollars in recurring revenue for 20 years for Florida's springs. This level of sustained funding shows a true long-term commitment to partnering with our communities to protect Florida's springs.

During 2015, the District acquired lands that offer both flood abatement and water resource development opportunities.

Acquisitions included the 2nd magnitude Turtle Spring in Lafayette County and over 1,900 acres of land in Bradford County that will provide natural system protection, flood abatement, aquifer recharge and military buffer lands for Camp Blanding in Bradford County.

Water quality and quantity data collection, synthesis and distribution of information remain high priorities for the District. Monitoring well networks, springs dashboards and data sondes deployment are some of the mechanisms used to collect and share data with the public. These tools also provide significant insight into the health of water bodies in the District.

Natural connections to the Floridan aquifer are being restored through noteworthy projects such as Brooks Sink and the Middle Suwannee River and Springs Restoration and Aquifer Recharge project. Collectively, these projects will recharge the aquifer daily with millions of gallons of water.

The success of these and many other endeavors are reflective of partnerships between the District, Department of Environmental Protection, US Geological Survey, local governments, stakeholders and private landowners.

Guided by science and clear vision, the District staff presses onward to protect our water resources for current and future generations.

Governing Board
Donald J. Quincey Jr. -
Chairman,
Lower Suwannee Basin
Alphonas Alexander - Vice
Chairman,
Upper Suwannee River Basin
Virginia H. Johns
Secretary/Treasurer,
At Large
Kevin W. Brown,
Santa Fe, Waccasassa
Basins
Gary F. Jones,
At Large
Richard Schwab,
Coastal Rivers Basin
Virginia Sanchez,
At Large
Bradley Williams,
Aucilla River Basin
Vacant
At Large

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District Overview

- **District Population:** approx. 320,000
- **Counties in District Boundaries:** all or part* of 15 counties in north-central Florida.
 - Alachua,* Baker,* Bradford,* Columbia, Dixie, Gilchrist, Hamilton, Jefferson,* Lafayette, Levy*, Madison, Putnam*, Suwannee, Taylor and Union
- **River Basins:**13
 - Alapaha, Aucilla, Econfinia, Fenholloway, Ichetucknee, Santa Fe, Steinhatchee, Suwannee, Waccasassa, Wacissa, and Withlacoochee
 - Over 50% of the Aucilla, Alapaha, Withlacoochee, and Suwannee river basins are located in Georgia
- **Springs:** Over 300 documented springs, 19 first-magnitude springs in the District
- **Square miles:** 7,640 square miles (12% of the State's land area)

SRWMD Boundary Map

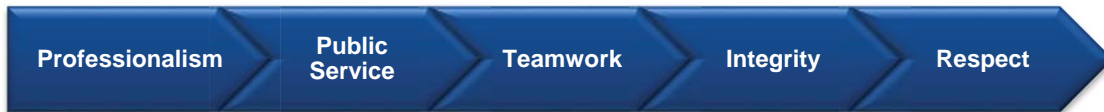


District Overview

Mission

The Suwannee River Water Management District protects and manages water resources to support natural systems and the needs of the public.

Values



Governance Structure

A Governing Board of nine members, appointed by the Governor and confirmed by the Florida Senate, sets policy and direction for the District. Board members serve four-year terms. The Board holds monthly meetings and workshops, usually at the headquarters in Live Oak.

Under the direction of its Governing Board, the District is organized into an Executive Office, and the Divisions of Administration and Operations, Water Supply, Water Resources and Resource Management.

Attributes

The region includes the highest concentration of first magnitude freshwater springs in the United States and the highest concentration of freshwater springs in the State. Additionally, some of the State's most scenic and least-developed rivers, streams, lakes, and landscapes are located in the District.

Focal Points

The District has projected future water supply challenges in the Alapaha, Upper and Lower Santa Fe and Upper Suwannee River Basins. District science has also determined that the Lower Santa Fe and Ichetucknee Rivers and

Associated Priority Springs are in recovery. Additionally, in both the northeastern and northwestern portions of the District, there is a regional declining trend in water levels within the Upper Floridan Aquifer water levels.

Water quality problems related to nutrient enrichment are another resource management issue. The District employs voluntary, local, incentive based programs like the Suwannee River Partnership (SRP) and cost-share programs to conserve water and improve nutrient management to reduce loadings. Additionally, the District partners with the Florida Department of Environmental Protection (DEP) to help implement Basin Action Management Plans (BMAPs).

The District faces challenges in managing the water and related resources as the region continues to grow and develop. The District's groundwater resources are influenced by withdrawals inside and outside of the boundaries. Increasing water use efficiency, water storage, aquifer replenishment, disbursed water storage and alternative water supply development are key strategies to ensuring an adequate water supply for the region.

District Overview

The District's core mission is to implement the programs described in Chapter 373, Florida Statutes (F.S.), in order to manage water and related natural resources for the present and future residents of the region and the state. The guiding principles of the mission are:

- To provide for the availability of water of sufficient quantity and quality to maintain natural systems and meet the full range of water needs.
- To develop and implement regulatory programs that will ensure conservation and reasonable uses of water and related natural resources.
- To ensure District priority water bodies are protected for current and future generations.
- To encourage nonstructural surface water management techniques to manage flooding risks.

- To use public funds in an efficient and effective manner and operate without debt.

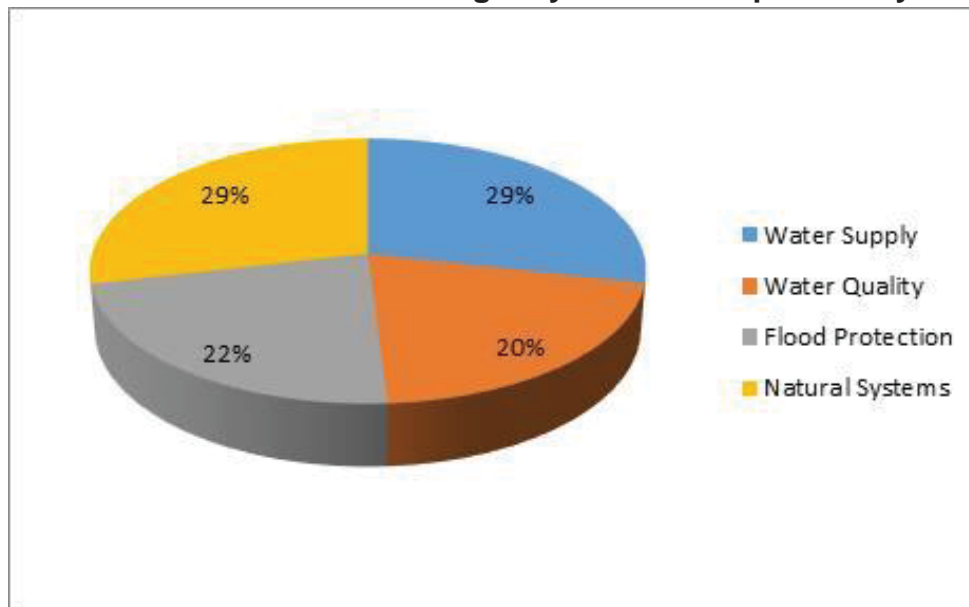
- To provide a land acquisition and management program that provides conservation and protects water resources.

Budget

To carry out the mission and vision, the financial tools utilized by the District include a combination of local property tax revenues, state appropriations and grants, and federal grants. Due to the District's small tax base, funding from the state legislature is necessary to achieve statutory requirements. State, federal, and other sources of our funding are essential to assisting the District accomplish its mission.

The District has limited financial and staff resources and relies on state and federal assistance to help it implement core mission programs and projects. State, federal, and other sources make up approximately 66 percent of the District's current funding.

FY 2015-2016 District Budget by Area of Responsibility



District Overview

The District Strategic Plan addresses our four areas of responsibility in accordance with Chapter 373, F.S.: water supply, flood protection, water quality and natural systems.

Strategic Priorities for 2017 – 2021

Water Supply

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

Water Quality

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

Natural Systems

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

Flood Protection

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

2015 Accomplishments

Water Supply

- Agricultural cost-share programs implemented irrigation efficiency and improvements for 46 irrigation systems, with estimated groundwater savings of over 1.17 mgd.
- Continued collaboration with the North Florida Regional Water Supply Partnership with the SJRWMD, DEP, and DACS and with the regional Stakeholder Advisory Committee.
- Continued the development of the North Florida Southeast Georgia Regional Groundwater Flow Model.
- Received Stakeholder Advisory Committee consensus recommendations on water demand projection methodologies and values for all non-agricultural water user groups for the regional water supply plan.
- Received Stakeholder Advisory Committee consensus recommendations on methodologies and values for reclaimed water projections for the regional water supply plan.
- Initiated an update to the District's Water Supply Assessment.
- Continued implementation of the Middle Suwannee River and Springs Restoration and Recharge Project.
- Completed the Brooks Sink Restoration Project, providing up to 0.6 mgd of additional daily recharge to the Upper Floridan Aquifer.
- Continued implementation of the groundwater well monitoring enhancement plan.
- Participated with the State's water management districts, DEP, DACS and DOT in the development of the Senate Bill 536 statewide report on alternative water supplies.
- Implemented the regulatory portion of the Lower Santa Fe River and Ichetucknee River and Associated Priority Springs Recovery Strategy.
- Continued Project Planet and Water Conservation Hotel and Motel Program (CHAMP).
- Expanded agricultural water use monitoring to over 500 systems, some in partnership with electric cooperatives.
- Initiated Regional Initiative Valuing Environmental Resources (RIVER) programs conserving an estimated 0.23 mgd.
- Initiated RIVER programs that improved reliability of water supply services for 8,938 customers and several businesses.

Water Quality

- Developed Springs Dashboards for Fanning, Ichetucknee, Madison Blue, and Manatee Springs, that provide real-time data on water quality and flows.
- Implemented Agricultural cost-share partnerships reducing nutrient loadings by 1.4 million pounds annually.
- Completed the engineering, permitting and design phases and started construction on the Ichetucknee River Springshed Water Quality Improvement Project to convert Lake City's spray field to a wetland treatment system that will reduce nutrient loadings by up to 85% to the Ichetucknee River.

2015 Accomplishments

- Initiated the construction of a RIVER project to remove 35 septic tanks resulting in 1,095 pounds annually reduced nutrient loading.
- Initiated the construction of a RIVER project to prevent potential discharge of 2.4 mgd of wastewater from entering nearby surface waterbodies during flood conditions.
- Funded RIVER projects to prevent 1.37 tons of suspended solids from entering surface waterbodies by providing stream bank stabilization.
- Funded a RIVER project improving wastewater collection serving 1,935 residents and 350,000 visitors per year.

Natural Systems

- Acquired Turtle Spring, a 2nd magnitude spring.
- Acquired the Double Run Creek tract in Bradford County providing a buffer for Camp Blanding while protecting natural systems and supporting flood abatement and water resource development initiatives.
- Continued the development of MFLs for the Upper Suwannee River, Middle Suwannee River, Econfina River, Aucilla River, Steinhatchee River and Lake Alto.
- Initiated development of MFLs for Lake Hampton and Santa Fe Lake.
- Conducted prescribed burning on 11,908 acres.
- Completed reforestation of 274 acres of slash pine and 745 acres of longleaf pine.
- Treated 338 acres of invasive plants, 52 active exotic invasive plant infestations and monitored 41 active exotic invasive plant infestations.
- Completed selective timber harvests at Buck Bay, Steinhatchee Springs and Steinhatchee Rise.
- Harvested 473 acres of timber on the Little River Tract.
- Completed a tract by tract assessment of District roads to ensure long-term cost-effective sustainable maintenance.
- Obtained a National Wild Turkey Federation and Florida Fish and Wildlife Conservation Commission (FWC) Grant for an Upland Pine Restoration project.
- Continued the Silviculture Water Yield research project at Little River Tract.
- Received a FWC Grant for exotic invasive species control on Lake Rowell and Withlacoochee Quail Farms Tracts.
- Coordinated the re-route of the Florida National Scenic Trail through the Town of White Springs, Bell Springs Tract and Big Shoals Tract.
- Participated with Florida State Parks, Florida Forest Service, and FWC to update Big Shoals Public Lands Management Plan.
- Issued 470 Special Use Authorizations (SUAs) for public recreation and 20 commercial SUAs.
- Completed the restoration of Hart Springs and Charles Springs that included the removal of sediments and will prevent erosion.

2015 Accomplishments

Flood Protection

- Continued the RiskMAP discovery process for the Santa Fe River, Upper Suwannee River, Coastal Rivers and Withlacoochee River Basins.
- Completed the preliminary Digital Flood Insurance Rate Maps (DFIRMS) for the Santa Fe River Basin.
- Initiated RiskMAP discovery in Waccasassa and Alapaha River watersheds.
- Provided RIVER funding for flood protection for 225 residents and several public facilities.
- Received grants from Florida Department of Emergency Management (DEM) to conduct a public information campaign on upgrading the District's flood risk communications.
- Continued feasibility analysis of flood mitigation projects in Bradford County.
- Acquired the 14 acre Steffan tract which will be an integral part of the Edwards Bottom Land flood mitigation project in Starke.
- Completed the West Ridge Water Development Area conceptual design for flood protection and water resource development.



Econfina River, October 2015

Strategic Priority — Water Supply

Sustainable Water Supply

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

Projects

- Eagle Lake/ Upper Suwannee River Springs Enhancement Project
- Middle Suwannee River and Springs Restoration and Aquifer Recharge Project, Phase II
- Falling Creek Aquifer Recharge Project
- West Ridge Water Resource Development Area
- Double Run Creek Water Resource Development Area
- Brooks Sink II Aquifer Recharge Project
- Cost-Share Projects
- Otter Sink Dispersed Water Supply Project
- Lower Santa Fe and Ichetucknee Rivers and Associated Springs Recovery Strategy
- Ichetucknee Trace-Cannon Creek Aquifer Recharge Projects
- Alternative Water Supply Projects
- Dispersed Water Storage Projects

Progress

- First Cross-boundary MFLs established in the State of Florida

Plans

- Florida Forever Work Plan
- 2010 Regional Water Supply Assessment
- Nature Coast Regional Water Authority Feasibility Study

Program Funding

- State appropriations
- Federal grants
- Permit fees
- Ad valorem taxes
- Reserves

The delicate balance of sustaining water supplies and demands throughout the District can only be addressed by effective partnerships with state agencies, neighboring water management districts, counties, municipalities, universities, water authorities and public sector entities. Public supply, agriculture, commercial and industry entities and other users both within and outside district boundaries influence this delicate balance.

Water is a precious and limited resource on which is placed a multitude of demands. A critical aspect of the District's core mission is to ensure, plan and protect the supply of water for all reasonable and beneficial uses.

Within the District's toolbox of mechanisms to protect the supply of water is the Water Use Permitting program. It ensures that water resources, natural systems and legal users are protected. Additional District strategies such as alternative water supply projects, aquifer recharge projects, monitoring wells and strategic partnerships are used to further address issues related to water withdrawals and demand.

Partnerships

The District is endowed with water resources provided by the Floridan aquifer, 13 major rivers basins, an abundance of lakes and over 300 documented springs. Although there are a variety of interests competing for water, these very competitors make excellent partners. Successful collaborations between these partners have resulted in endeavors that forward the goal of building sustainable water supplies.

Strategic Priority - Water Supply

Water is an integrated and interconnected resource. The interconnectivity of water bodies and natural systems with the regional aquifer is evident through the cyclic and fluctuating levels of rivers, springs and the groundwater. The development of minimum flows and levels (MFLs) is critical to the work of the District and protection of natural systems. In 2011, a relationship was forged between the District, DEP and St. Johns River Water Management District that has yielded cooperative planning efforts

to maintain sustainable water supplies. The North Florida Regional Supply Partnership actively engages community stakeholders across varied disciplines to efficiently, plan and develop alternative water supply projects. The partnership has yielded the first cross-boundary MFLs in the State for the Lower Santa Fe River and Ichetucknee River and Associated Priority Springs.

Making the most of relationships with agricultural producers who are invested in preserving water and water quality has successfully worked to preserve and restore natural systems.



North Florida Regional Water Supply Partnership Planning Region

With assistance from the Florida Department of Agriculture and Consumer Services (DACCS), the District has forged partnerships with agricultural producers to reduce nutrient loading, and save water. Both our natural resources and producers are benefitting from these projects. In addition, to ensure there are adequate data for future decisions, the District has identified measures to track outcomes.

Priorities of the District include projects that implement alternative water supplies to offset groundwater withdrawals, promote water conservation, recharge the Upper Floridan Aquifer and address water supply issues in MFL recover strategies. These priorities are critical components of the District's plan to provide an adequate water supply for all reasonable and beneficial uses.

Strategic Priority –Water Supply

Conservation and alternative water supplies offset dependency on our traditional water sources and assist making the region more drought resistant. Water resource development projects help to expand available sources.

Projects

The past several years of springs grants have implemented projects that are estimated to save up to 52 mgd of water. During FY 2015, the District received a DEP springs grant for the Eagle Lake / Upper Suwannee River Springs Enhancement Project. This project is a private-public partnership with PotashCorp that will offset groundwater by up to 20 mgd, benefiting spring flows to Blue Sink Spring, Mattair Springs and Suwannee Springs.

Another significant project nearing completion is the Middle Suwannee River and Springs Restoration and Aquifer Recharge project. Made possible through a springs grant and a partnership between the District, the DEP and Dixie County, the project is designed to provide hydrologic restoration activities in Dixie and Lafayette counties. The District began restoration efforts at Mallory Swamp 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 also 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. Construction is scheduled for completion by the end of September 2016.

Horizon

The District has begun improvements to its groundwater monitoring program with the implementation of the Monitor Well Network Enhancement Plan. Five of twenty-six locations have been identified for the installation of additional monitoring wells to be used for filling of gaps in the water level and water quality monitoring networks that will be used for long-term groundwater trend analysis and calibration of groundwater models.

Additionally, the District continues to expand its agricultural water use monitoring program. The program is now monitoring roughly 60% of agricultural wells of 8" diameter or greater. The intent of this program is to assist agricultural water users on a voluntary basis as a convenient and unobtrusive alternative to recording, compiling, and transmitting data to the District. This water use data is used only for estimation purposes.

The District is continuing its two cost-share programs that partner with agricultural producers and local governments that invest in conservation and alternative water supplies. These programs have been highly successful in saving water and offsetting groundwater withdrawals.

Over the past several years, Governor Scott and the Legislature have provided historic levels of funding for springs protection and restoration. Furthermore, Governor Scott's "Florida First" Fiscal Year 2016-2017 Budget recommends \$50 million in recurring revenue for 20 years. This dedicated source of springs funding is important for the District's partners. A dedicated source of funding will enable them to advance plans that will result in construction ready projects that will save water and protect and restore water flows and levels.

Strategic Priority — Water Supply

Water Conservation

Goal: Maximize water conservation for all water uses.

Projects

- RIVER Cost-Share
- Ag Cost-Share
- Mobile Irrigation Lab
- Suwannee River Partnership
- Water CHAMPSSM
- Florida Water StarSM
- Florida-Friendly LandscapingTM
- WaterSense

Plans

- Lower Santa Fe and Ichtecknee Rivers and Priority Springs Recovery Strategies
- 2010 Water Supply Assessment
- Water Use Permitting Handbook

Progress

- North Florida Regional Water Supply Partnership Conservation Springs Grant
- Local Government Year-Round Conservation Measure Ordinances
- Suwannee River Partnership
- The Ichetucknee Partnership
- Ag Cost-Share Projects
- RIVER Cost-Share Projects

Program Funding

- State grants
- Federal grants
- Ad valorem taxes

Conserving water is the most cost-effective way to reduce long-term demands for water and stretch our current water supply. Committed participation ranging from residential, commercial and agricultural users is crucial for successful conservation efforts.

Achievements

With a steadfast dedication to increasing water conservation efforts, the District and its partners surpassed several milestones.

The District encourages partnerships with communities that assist residents, businesses and municipalities to decrease water consumption and implement water savings programs. The District's champion program for local cooperators, the Regional Initiative Valuing Environmental Resource (RIVER), continued in 2015. RIVER provides funding assistance to governmental entities for projects that further this aspect of the District's core mission. During FY 2015, the District funded 16 RIVER projects that are estimated to conserve 0.23 mgd of water.

Striking the balance of producing food and conserving water is a continual challenge for farmers and agriculture producers. Conservation tools include measures that result in permanent and cost-effective improvements in water use efficiency. The District's agricultural cost-share program partners with agricultural producers to implement irrigation efficiencies to reduce groundwater pumpage. In FY 2015, the District collaborated with producers and achieved an estimated groundwater savings of over 1.17 mgd.

The Suwannee River Partnership (SRP) has been instrumental in implementing conservation partnerships with the agriculture community in the Suwannee River Basin. During 2015, SRP coordinated with the District and agricultural water users to bring Mobile Irrigation Lab (MIL) services to area farmers. The MILs performed 188 evaluations throughout the District to determine irrigation system efficiencies.

Water Conservation

During the past year, the District funded 46 irrigation systems of which 23 are retrofits. These projects include irrigation system retrofits, soil moisture sensors, remote access for irrigation system control, as well as other Best Management Practices (BMPs) that provide cost-effective water savings.

Participants in the District's agricultural cost-share program are required to implement best management practices and voluntarily participate in the District's water use monitoring program.

Conservation measures are encouraged through management incentives and regulatory mechanisms.

Additional options for public suppliers include conservation rate structures, water audits to ensure system efficiencies, and implementation of reclaimed water.

Outreach

Other ongoing programs include the Florida Water StarSM and EPA's WaterSense programs. The Florida Water StarSM provides water efficiency audits for residential, business and commercial enterprises. The WaterSense program provides simple ways for consumers to use less water with water-efficient products, new homes and services.

The District encourages implementation of urban conservation practices such as Florida-Friendly LandscapingTM and Water

CHAMPSM (Water Conservation Hotel and Motel Program). It is estimated that over half of residential water use is for lawn and landscape irrigation. Installation of Florida-Friendly LandscapingTM results in significant savings to our water sources.

Year-round lawn and landscaping irrigation measures are in effect throughout the District. These measures apply to residential landscaping, public or commercial recreation areas, and businesses that are not regulated by a District water use permit. The District has made available for our local governments a model year-round irrigation and water shortage ordinance. To date 28 local governments throughout the District have adopted some form of the model ordinance.

Horizon

The District continues to emphasize and encourage water conservation projects and practices for all use categories. This includes, but is not limited to, education, outreach, high efficiency retrofits, public supply water conservation rate structures, outdoor and indoor cost-share rebates and replacing landscape with Florida-Friendly LandscapingTM.

The North Florida Regional Water Supply Partnership received a springs grant that was proposed by the District to implement residential and commercial conservation programs. This initiative will go a long way in reducing demands in priority springsheds.

Strategic Priority — Water Quality

Heartland Springs Initiatives

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



Continuous monitoring equipment in Ichetucknee springhead, February 2015

Projects

- Water Quality Improvement Projects
- Reduce Nutrient Loading
- Flow Improvement Projects
- Aquifer Recharge Projects
- Dispersed Water Storage Projects

Progress

- Enhance Springflows
- Springshed Delineation
- Increase Flow and Water Quality Real-time Monitoring

Plans

- Santa Fe River Basin Management Action
- Nature Coast Regional Water Authority Feasibility Study
- Lower Santa Fe and Ichetucknee Rivers and Priority Springs Recovery Strategy
- Florida Forever Work Plan

Program Funding

- State Appropriations
- Florida Forever
- State Grants
- Ad Valorem Taxes

Visitors from around the globe are drawn to the District's natural resources. The District has the highest concentration of first magnitude springs in the United States and the highest concentration of springs in Florida.

With over 300 documented springs, of which at least 19 are first magnitude springs that have a minimum output of 65 mgd, springs in this District are vital elements of natural systems, drive local economies and provide recreation to Florida residents and visitors.

The interconnectivity between the Floridan aquifer, springs and rivers is often conspicuous. During low flow periods, the Suwannee River, Santa Fe River and Withlacoochee River essentially become spring runs due to substantial groundwater inputs. During periods of abundant rainfall, rivers often suppress the output of springs until floodwaters are assuaged. Other rivers, such as the Ichetucknee and Wacissa, are primarily springfed year round.

In order to safeguard the health of springs, and the biological communities within them, the District actively monitors, collects and analyzes water quality and quantity data. Over the last calendar year the District has launched several springs dashboards that share real-time water quality data.

This unique environmental setting truly makes the District's springs the heartland of Florida. The Heartland Springs Initiative is a comprehensive, multi-faceted approach involving every aspect of the District's management and regulatory programs. Therefore, preserving the flows, water quality and biological health of our springs will best reflect our ultimate success in

Heartland Springs Initiatives

protecting the water resources of the region and the State.

Projects

Thanks to the leadership of Governor Scott and the Legislature, cornerstone springs projects are moving ahead with noteworthy improvements for communities and natural systems. These springs projects provide water quantity and quality benefits, while restoring the region's unique ecosystems. Examples of springs projects initiated during the past three years include:

- **Ichetucknee Springshed Water Quality Improvement Project:** The project will reduce the City of Lake City's wastewater nutrient loadings to the Ichetucknee River by an estimated 85%. The City's wastewater sprayfield will be converted into wetlands that will provide additional treatment to reduce nitrogen loading and improve water quality in the Ichetucknee River and springs.
- **Fanning Springs Water Quality Improvement Project:** The project will reduce nutrient loading to groundwater by an estimated 1,300 pounds annually by extending wastewater treatment lines to residences and business.
- **Middle Suwannee River and Springs Restoration and Aquifer Recharge Project:** This project re-establishes natural drainage patterns by constructing and modifying hydraulic structures such as culverts, low-water crossings, and flashboard risers along the southeastern margin of Mallory Swamp; thereby optimizing available surface water for wetland hydration and groundwater recharge, which will enhance springs restoration.
- **Eagle Lake / Upper Suwannee River Springs Enhancement Project:** The project is estimated to reduce approximately 110,000 pounds of

phosphorous annually and 140,000 pounds of nitrogen annually to the Upper Suwannee River.

- **Ichetucknee Trace-Cannon Creek Project:** The project is a partnership with DEP, SRWMD and Columbia County that will benefit spring flows and water quality for springs along the Ichetucknee River. This project is estimated to recharge the aquifer from 2.24 to 3.81 mgd to benefit spring flows and improve water quality by removing approximately 10,000 pounds of nutrients annually.
- **Improved Nutrient Application Practices in Dairy Operations Project:** The project will enable dairy operations to reduce nutrient leaching by an estimated 34,000 pounds annually while saving roughly 320,000 gallons of water per day. This will be accomplished by retrofitting irrigation systems to improve irrigation uniformity and efficiency.
- **Advanced Nutrient Management through Center Pivots Project:** This project will reduce nutrient loadings in the Suwannee River. The project will implement between 100 and 130 efficient fertilizer application systems that deliver only the necessary amount of fertilizer required. Nutrient reduction estimates provided by DACS state that 2.3 million pounds of nitrogen fertilizer would be saved annually by this project.

Partnerships

A model for springshed management is establishing and working with partners. Within the District, there are several successful partnership examples. Monitoring is a fundamental element of the District's Heartland Springs Initiative in which partnerships are employed. Hydrologic, water quality and biological monitoring of water resources linked to springs provides the assessment tools available to gauge springs' health and the effectiveness of restoration efforts.

Heartland Springs Initiatives

The collected data is used to identify long-term trends and identify management challenges.

The District monitors 38 priority springs to assess their condition and plans to increase the monitoring of key biological features. Working with the DEP and U.S. Geological Survey, the District has begun continuous monitoring, including nitrate, at 13 priority springs across the District. This data is available on the District's website.

SRP brings landowners and agencies together to implement BMPs to reduce nutrient inputs and implement water conservation measures. SRP farmer participation is significant and involves 90% of dairy, 100% of poultry and 76% of crop farmers throughout the District. During the past year, an additional 243 BMP Notices of Intent (NOI) were signed with agricultural producers representing 94,877 acres. The SRP program has a total of 966 NOIs encompassing 386,726 acres within the District. BMP enrollment for this year has resulted in approximately 2,372 fewer tons of fertilizer being applied in the basin due to more efficient use of nutrients. Cumulatively, the program is estimated to reduce nitrogen loading throughout the District by 5,622 tons per year.

Progress

The support of springs protection and restoration funding from Governor Scott and the Legislature has resulted in significant water savings and nutrient load reduction for numerous springs throughout the District. During the past three years, the District has received \$22 million in springs grants and has leveraged that into more than \$34 million in springs restoration and protection projects. These projects are estimated to save up to 52 mgd of water and reduce nutrient loads by more than 2.1 million pounds annually.

Additionally, the District's RIVER and agricultural cost-share programs have been instrumental in establishing partnerships which resulted in water quality improvement to numerous springs throughout the District.



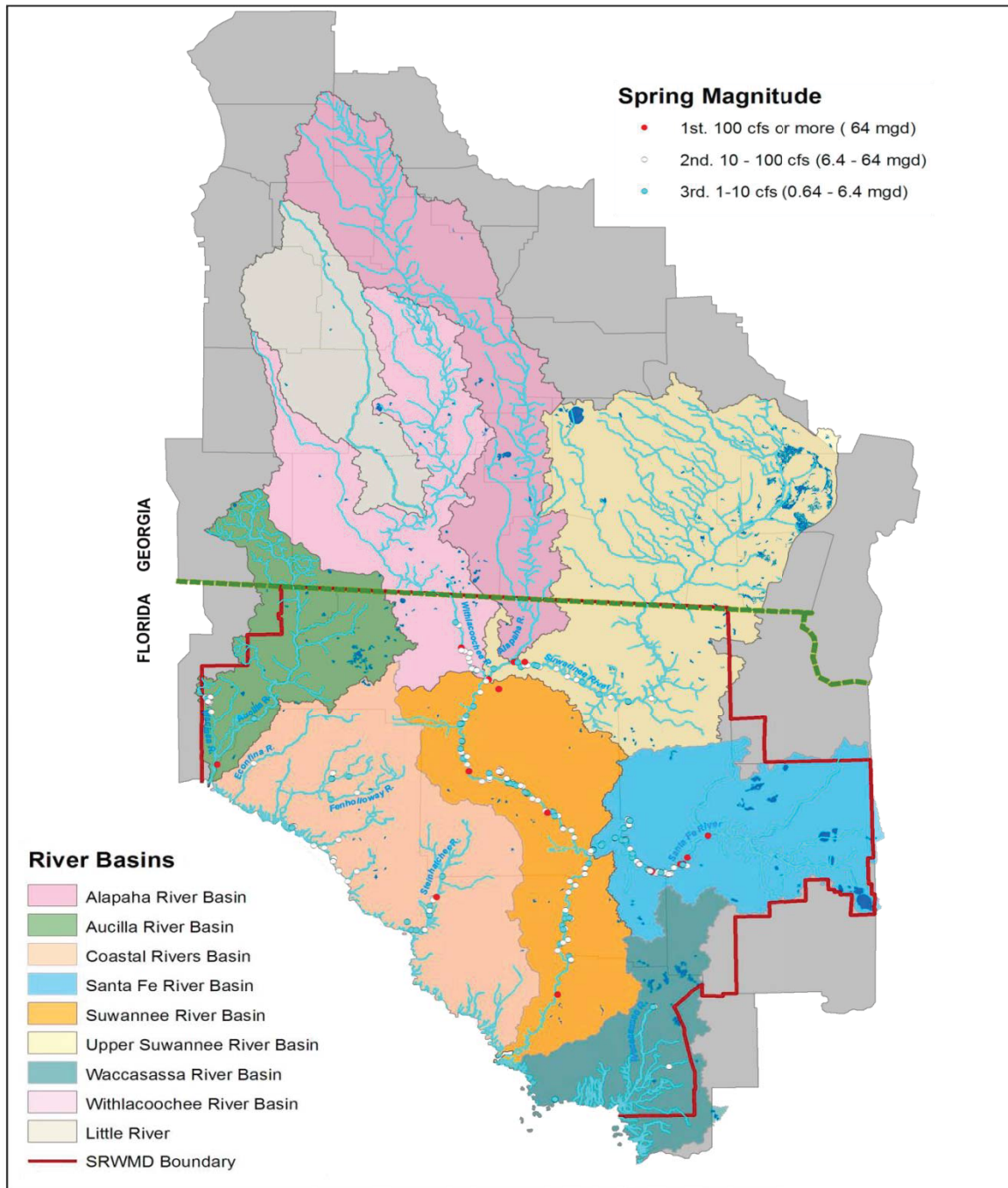
Fanning Springs, Gilchrist County, October 2015

The District also continues to protect springs through land acquisitions. During FY 2015, the District acquired Turtle Spring in Lafayette County. Turtle Spring is one of ten second magnitude springs in Lafayette County. The tract is positioned along the west bank of the Suwannee River and includes approximately 3,800 feet of Suwannee River frontage.

Horizon

Continued funding support by Governor Scott and the Legislature will ensure continued progress in protecting the water quantity and quality in priority spring basins. The District, DEP and DACS partnership efforts with agricultural producers will continue to reduce the quantity of water used, as well as the amount of nutrients applied. The District will also continue collaboration with its communities to implement projects to protect and restore priority springsheds.

General Springs and River Basins Map



Strategic Priority — Natural Systems

Minimum Flows and Levels

Goal: Ensure District priority water bodies are protected for current and future generations.

Projects

- Aullica River and Priority Springs
- Wacissa River and Priority Springs
- Middle Suwannee River and Priority Springs
- Upper Suwannee River and Priority Springs
- Steinhatchee River and Priority Springs
- Alapaha River
- Withlacoochee River
- Lake Hampton
- Lake Butler

Plans

- Lower Santa Fe and Ichetucknee Rivers and Priority Springs Recovery Strategy

Progress

- Lower Suwannee River and Priority Springs
- Upper Santa Fe River and Priority Springs
- Lower Santa Fe River and Priority Springs
- Ichetuchnee River and Priority Springs
- Waccasassa River
- Levy Blue Spring
- Madison Blue Spring

Program Funding

- State Appropriations
- Ad Valorem Taxes

Minimum flows and levels (MFLs) for priority rivers, springs and lakes are vital metrics for protecting the health of the District's water resources and the availability of water to supply reasonable, beneficial uses. Existing and proposed MFLs for the District's rivers and springs verify that water supplies are limited. Thus, management efforts must be adaptive and focus on protecting existing legal uses, water resources and related natural systems.

The District Governing Board establishes MFLs as necessary to prevent significant harm from water withdrawals to the water resources and ecology of an area.

The District's MFLs program is a science-based process that uses the best available information to determine the recommended MFLs. Information sources include: meteorological, hydrological and ecological data, reflecting a historical range of drought and flood conditions. The science supporting MFLs is voluntarily subjected to an independent peer review process initiated by the District.

The District develops recovery strategies for any water body that currently does not meet its MFLs as well as prevention strategies for any water body that is projected to fall below its MFLs. The prevention and

Minimum Flows and Levels

recovery strategies, if needed, are adopted concurrently with the MFLs.

Annually, the District publishes a priority list of MFLs for water bodies with an anticipated completion schedule. This list is reviewed and submitted to the DEP for approval. The District has also identified priority water bodies that are potentially affected by withdrawals from adjacent water management districts. This is known as the cross boundary affect. For these water bodies, the District can engage a statutory process, to request that the DEP adopt the MFLs and any associated prevention and recovery strategies, with the District providing technical support during adoption.

Partnerships

Development and adoption of MFLs and recovery or prevention strategies for water bodies that have cross-boundary affects presents a new paradigm for Florida. DEP's adoption of the MFLs and recovery strategy will mean that existing and future water users in each water management district will need to work together in the consumptive use permitting process to ensure the recovery strategy is effective.

Progress

To date, the District has adopted and implemented MFLs for the Lower Suwannee River, Upper Santa Fe River, Waccasassa River, Little Fanning Spring, Fanning Spring, Madison Blue Spring, Levy Blue Spring and Manatee Spring.

In June 2013, the District Governing Board requested that DEP adopt MFLs it proposed for the Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs. The decision was based on the technical work conducted for the proposed MFLs by District staff, and the potential for cross-basin impacts originating outside of the District. The District staff also assessed the streamflows observed in the recent historical

record and recent trends in the flow regime, and determined that a recovery strategy was required.

Due to cross-boundary impact, DEP accepted the District's request to adopt the Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs MFLs and regulatory portions of the recovery strategies to effectively introduce sustainable solutions across water management district boundaries. These MFLs indicate that the amount of water needed to sustain the natural systems from water withdrawals is not currently being met. Therefore, recovery strategies for these water bodies have been established and are being implemented.

The Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs MFLs were adopted by DEP. DEP's proposed rule and regulatory recovery strategy were ratified by the Legislature through House Bill 7081 and signed into law by Governor Scott with an effective date of June 10, 2015.

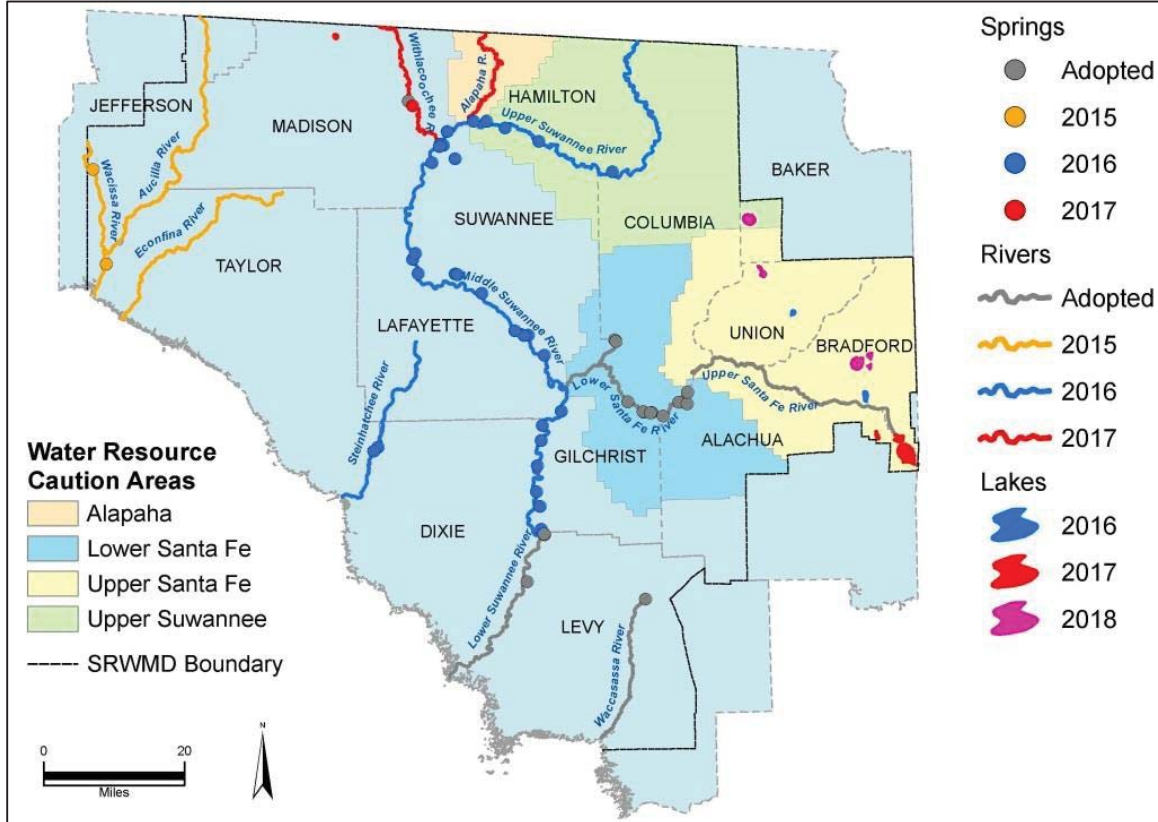
Horizon

The District has an accelerated schedule to establish minimum flows and levels (MFLs) for its priority water bodies.

Technical work for the development of MFLs for the Withlacoochee River, Alapaha River, Lake Santa Fe, Lake Alto and Cherry Lake will be completed in 2017. Rulemaking for these waterbodies is anticipated by the end of 2017. The Upper Suwannee River, Middle Suwannee River, Steinhatchee River and their associated priority springs, along with Lake Butler and Lake Hampton, are planned for completion prior to the end of 2016. Based on the 2016 MFLs Priority List, the District is proposing to set MFLs on all of its priority water bodies by 2018.

Minimum Flows and Levels

MFL Schedule



Strategic Priority — Natural Systems

Water Management Lands

Goal: Manage land interests to protect springs, provide non-structural flood control, protect surface and groundwater quality, and enhance water-resource related natural systems.



Middle Suwannee River and Springs Aquifer Recharge project kick-off.

Projects

- West Ridge Water Development Area
- Double Run Tract
- Turtle Springs
- Prescribed Burns
- Invasive Species Control
- Middle Suwannee River and Springs Restoration and Aquifer Recharge Project
- Hydrologic Restoration

Progress

- Partnerships
- Acquisitions

Plans

- Florida Forever Work Plan

Program Funding

- Florida Forever
- Land Acquisition Trust Fund
- Surplus lands sales
- National Guard Bureau
- Timber sales
- State appropriations
- Reserves

The acquisition and management of land interests incorporates a set of tools to achieve the District's water resource objectives. The majority of District-owned fee and conservation easement lands are located along rivers and streams, headwaters and water recharge areas. Public ownership of these lands and conservation easements provides a host of benefits including:

- Preserving and restoring springs and surrounding areas to protect and improve surface and groundwater quality,
- Preserving floodplain areas to maintain storage capacity, attenuate floodwaters, and mitigate flood risk,
- Preserving natural buffers along water bodies where adjacent uses have a high potential to degrade surface water quality,
- Protecting groundwater quality by maintaining low intensity land uses,
- Providing land for dispersed water storage, restoration, water resource development projects and
- Preserving and/or restoring natural communities to support or enhance populations of native species.

Partnerships

Under the Save Our Rivers, Preservation 2000, and Florida Forever programs, the District has acquired over 287,083 acres, of which 160,203 acres are held in fee simple and 126,821 are held as conservation easements. The land acquisition program is strictly voluntary.

Water Management Lands

Over the past couple of years the District has partnered with the National Guard Bureau to acquire large tracks needed as military buffer areas that also provide flood protection and water resource development opportunities.

In 2015, the District acquired over 2,000 acres in Bradford County that functions as a buffer to Camp Blanding and gives the District significant options to develop water resource development projects. The acquisition also allows for flood abatement projects to help ease significant flooding issues Bradford County faces.

Also, during 2015 the District acquired Turtle Spring in Lafayette County. Turtle Spring is one of ten second magnitude springs in Lafayette County. The purchase will allow the District to provide floodplain protection for the Suwannee River, Turtle Spring, and a portion of Fletcher Spring run. The tract is positioned along the west bank of the Suwannee River and includes approximately 3,800 feet of Suwannee River frontage.

Land acquisition is also an important part of the District's groundwater monitor well network enhancement initiative. Many of the new monitor wells are likely to need permanent access to enable drilling of wells and long-term operation and maintenance of monitoring equipment.

Lands titled to the District are managed under a multiple-use policy that emphasizes water resource protection, maintenance and restoration of the land's natural state and condition, and provisions for public access and recreation within those lands. The District follows policy and protocol established in the District Land Management Plan.

With regard to surplus lands, the District evaluates all holdings and identifies lands that may not be needed for conservation

purposes. 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 value.

In addition to the acquisition and disposal of property, the District also works to improve the water resources value of public and private property in the District. One example of this is the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project. This project will rehydrate natural systems along and adjacent to the southeastern margin of Mallory Swamp.

The project's objectives are to restore wetlands and sandy bottom lakes, increase springs flows and augment water supplies for Lafayette and Dixie Counties. To achieve the objectives the District is reestablishing natural drainage patterns adjacent to Mallory Swamp, and using natural recharge features and an aquifer recharge well at strategic locations. Construction is anticipated to be completed during 2016.

The District reverses past drainage practices to rehydrate wetlands and store water on the landscape. This water can then recharge the aquifer or help maintain stream flow during times of drought. Where past land uses have degraded wetlands, the District implements wetland restoration projects.

The District's activities for upland restoration projects are aimed at restoring natural community heterogeneity to attain a multi-aged and vertically diverse forest with native groundcover.

Since many natural communities in Florida, particularly those dominated by pine, are adapted to fire, the District makes extensive use of prescribed burning. All District

Water Management Lands

operations follow best management practices minimizing negative impacts.

Increasingly, the District's natural areas are under threat from invasive exotic plants. These plants have the potential to displace native species and disrupt sensitive ecosystems. The District monitors and treats infestations in order to keep the invaders under control.

District lands are a valuable recreational resource for the region. Besides providing public access to the Suwannee and other rivers in the District, these lands offer opportunities for hunting, camping, and trail use. Recreational improvements on District lands are designed to improve the user experience without degrading the water resource benefits for which the land was acquired.

Approximately 97% of District-owned lands are open to the public. There are 242 miles of trails, 30 trailheads, 17 picnic areas and 11 interpretive sites on District property. Additionally, over 105,000 acres or roughly 65% of District lands are open to hunting.

Lands not open to the public are properties such as local government wellfields and sprayfields, and properties purchased for the purpose of water resource projects.

In addition to the acquisition and disposal of property, the District works to improve the water resource value of public and private property in the District.

Horizon

The District will continue to explore acquisition opportunities that meet the core mission of the District and provide a clear return on investment for any surrounding communities.

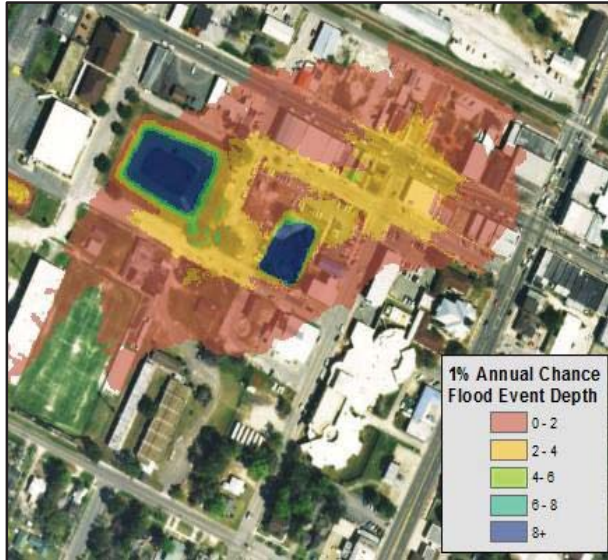


Paddlers along the Suwannee River, 2015

Strategic Priority — Flood Protection

Non-Structural Flood Protection

Goal: Enhance flood risk information to protect life and property against flood hazards.



Aerial map shows depth of flooding

Projects

- RiskMAP products for:
 - Waccasassa River Basin
 - Withlacoochee River Basins
 - Upper and Lower Suwannee River Basins
 - Santa Fe River Basin
 - Steinhatchee River Basin
 - Wacissa River Basin
- Light Detection and Ranging (LiDAR)

Progress

- FEMA Flood Risk Maps Completion
- 90% of District with LiDAR

Plans

- FEMA
- USGS

Program Funding

- Ad valorem
- Federal grants

The District applies a non-structural approach to address flood issues. Technological advances allow the District to apply both conventional methods as well as new methodologies to assist and empower

residents to minimize flooding hazard risks and provide ample warning of threatening flooding conditions.

Examples of the District’s non-structural approaches include educating the public, assisting communities with the best available data, making data electronically available, acquiring floodplains and having more stringent regulations for developments in floodplains.

Partnerships

The District and U. S. Geological Survey are partnering to provide light detection and ranging (LiDAR) data over approximately 670 square miles in portions of Gilchrist, Levy, Madison and Taylor counties by March 2016.

LiDAR data is utilized by many of the District’s programs including setting minimum flows and levels, floodplain mapping and modeling, water supply planning and natural systems management.

The District is continuing its partnership with the Federal Emergency Management Agency (FEMA) as a Cooperating Technical Partner for FEMA’s Risk Mapping, Assessment and Planning (RiskMAP) program.

The vision for RiskMAP is to deliver quality data that increases public awareness, which will lead to actions that reduce risks to life and property. RiskMAP builds on flood hazard data and maps produced during the Flood Map Modernization (Map Mod) program.

Non-Structural Flood Protection

The District will continue its partnership with local communities to develop accessible and accurate floodplain data through the FEMA partnership. The District's FEMA floodplain mapping information webpage provides current FEMA floodplain elevations through the Flood Information Report Tool Portal.

In addition to floodplain mapping, the District implements an environmental resource permitting (ERP) program to help ensure that development does not increase flooding. Permit reviews are performed to ensure that there is no net loss of the 100-year floodplain and no increase in flood levels. Also, permit evaluations consider specific storm design conditions and any associated impacts to upstream and downstream properties.

Groundwater and surface water levels and rainfall data are collected at numerous sites around the District. River levels and rainfall data are provided to the National Weather

Service for use in flood forecasting. During flood events, the District is the primary source of flooding information for other agencies and the public. The public also uses the District's real-time river level webpage as a source of information. There were over 1,600 District webpage visits for updates on river levels and rainfall amounts for flood events and high rainfall periods in 2015. When there are major flood events monthly page visits will exceed 100,000.

Land acquisition within the 100-year riverine floodplain also helps protect against the destructive effects of flooding. One of the District's land acquisition criteria is to protect areas that have flood storage and conveyance potential.

Horizon

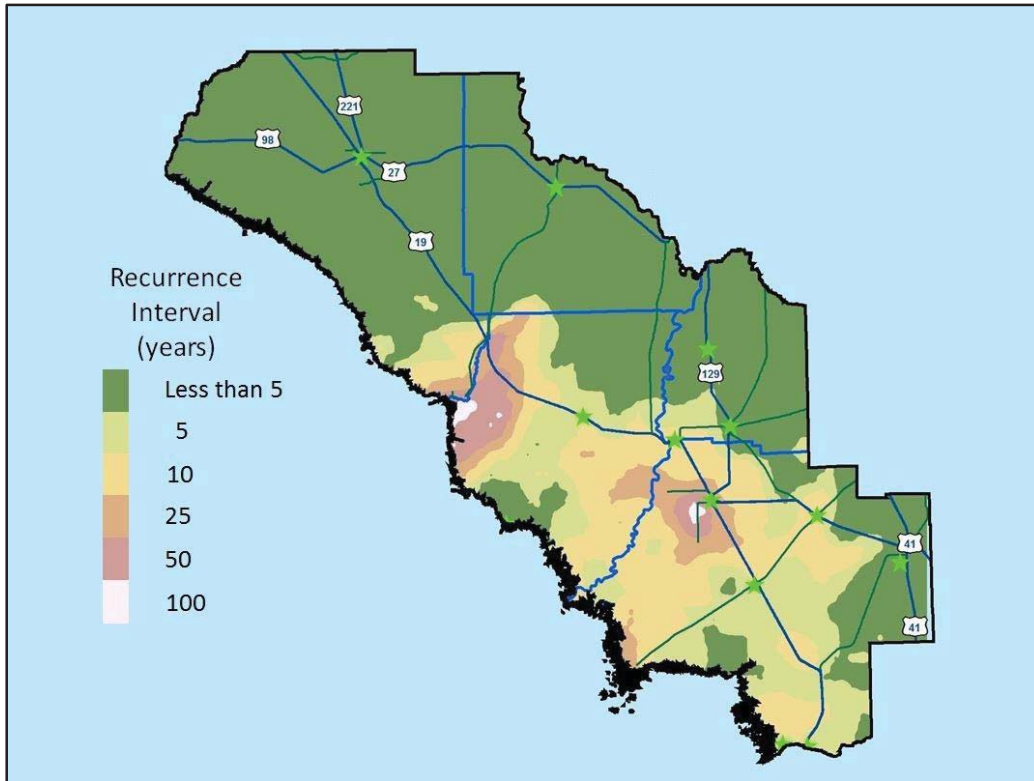
The District will continue its partnership with FEMA to assist our communities to reduce the risk and mitigate of flood risk.

Additionally, the District will continue efforts to modernize flood hazard maps and to make them more user friendly and accessible to the public.

Risk MAP Deliverables by Basin

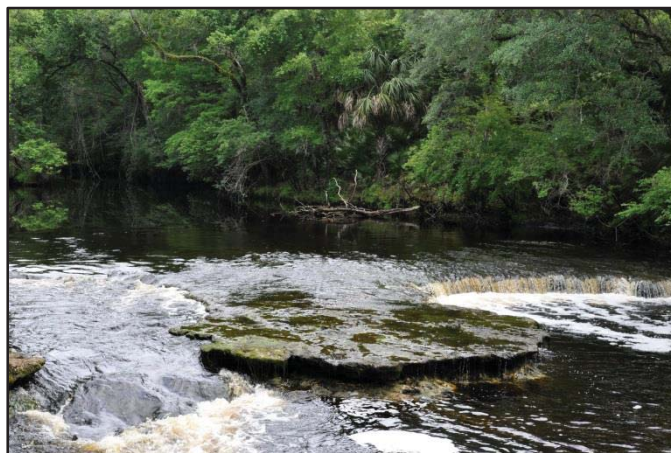
Basin	Community Engagement	Discovery	Study	Preliminary Maps
Alapaha	✓	✓		
Aucilla	✓			
Econfina / Steinhatchee	✓	✓	✓	✓
Santa Fe	✓	✓	✓	✓
Lower Suwannee	✓	✓	✓	✓
Upper Suwannee	✓	✓	✓	
Waccasassa	✓			
Withlacoochee	✓	✓	✓	

100-Year Rainfall Event, 2015



Significant rain event in the District from July 24 to August 2, 2015

Milestones and Deliverables	
Priorities	Responsibility
Sustainable Water Supply	Adequate water supply, water resource development, natural system protection, regulatory compliance, water quality protection, local assistance, monitoring and analysis.
Water Conservation	Implement retrofit water conservation program, regulatory strategies, agriculture conservation, residential conservation and community assistance
Minimum Flows and Levels	Establish and adopt MFLs on priority list and protect water resources from significant harm.
Heartland Springs Initiative	Ensure springs flows meet adopted MFLs and water quality is not impaired. Improve springshed delineation and gather more frequent data to focus management actions. Gather sufficient data to assess conditions on priority springs and make available via website and dashboards.
Water Management Lands	Protect groundwater and surface water sources, recharge areas, water quality, flood water storage and protect natural habitats.
Non-Structural Flood Protection	Monitoring and analysis, regulatory compliance, flood hazard mapping and data accessibility.



Steinhatchee Falls, May 2015

Performance Measures			
Strategic Priority	Success Indicators	Milestones	Deliverables
Sustainable Water Supply	Water made available Percentage increase of demand met	Total amount of water available Quantity created	Regional Water Supply 2015 Number of projects implemented
Water Conservation	Groundwater offsets Percentage using Conserve Florida Per capita under 150 gpd Number of irrigation retrofits	Amount of water conserved per capita demand less than 150 gallons	Implemented Project Per Capita Demand Number of retrofits MGD conserved
Minimum Flows and Levels	Cumulative number of MFLs adopted	Middle Suwannee 2015 MFLs for Wacissa, Aucilla and Econfina	MFL priority schedule Number of water bodies meeting MFLs
Heartland Springs Initiative	Percentage of springs meeting MFLs Percentage of springs meeting numeric nutrient criterion for nitrate	Percentage of springs with sufficient flow and water quality to support healthy biota and provide recreational opportunities	100% Springs meeting adopted MFLs and numeric nutrient criterion
Water Management Lands	Managed cost per acre Percentage of lands evaluated for surplus	Less than \$10 per acre 100% evaluated	Number of surplus parcels sold
Non-Structural Flood Protection	Percentage of communities with RiskMAPS completed	Number of communities with RiskMAPS	Communities with Completed RiskMAPS

Performance Measures

Natural System Primary Goal: To restore the hydrology of natural systems and improve water quality of natural systems.

NS Objective 1: Maintain the integrity and functions of water resources and related natural systems		
Annual Measures	Fiscal Year 2014-2015	
Number of MFLs and Reservations, by water body type, established annually (fiscal year) and cumulatively	Annual	Cumulative
Aquifer	0	0
Estuary	0	2
Lake	0	0
River	2	6
Spring	16	21
Wetland	0	0
Number and percentage of water bodies meeting their adopted MFLs	Annual	Percent
Number of water bodies meeting MFLs	9	32.14%
Number of water bodies with adopted MFLs	28	

NS Objective 2: Restore or improve degraded water resources and related natural systems to a naturally functioning condition.		
Annual Measures	Fiscal Year 2014-2015	
For water bodies not meeting their adopted MFLs, the number and percentage of those water bodies with an adopted recovery or prevention strategy.	Annual	Percent
Number of water bodies with an adopted recovery or prevention strategy	19	0.00%
Number of water bodies supposed to have an adopted recovery or prevention strategy	19	

NS Objective 3: To evaluate district owned lands to ensure that lands owned are necessary for the protection and restoration of water resources										
Quarterly Measures	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annualized Performance	
Number of acres and percentage of District lands evaluated for surplus.	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Fiscal Year 2014-2015
Number of acres evaluated for surplus	0.00	-	0.00	-	0.00	-	1,067.09	0.68%	1,067.09	0.68%
Total acres of District lands held at the beginning of the fiscal year	157,984		157,984		157,984		157,984		157,984	
Number of acres and % of surplus lands sold, exchanged, or leased.	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Annualized Average
Number of acres of surplus lands sold, exchanged, or leased	0.00	-	0.00	-	0.00	-	610.00	98.51%	610.00	98.51%
Total acres of land approved for sale, trade or lease by the Governing Board during the quarter	0.00		0.00		0.00		619.25		619.25	

NS Objective 4: To identify the efficiency and relative cost of restoration and land management activities										
Quarterly Measures	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annualized Cost per Acre	
Cost/acre for lands managed by the District (not total).	Number	Cost/Acre	Number	Cost/Acre	Number	Cost/Acre	Number	Cost/Acre	Number	Fiscal Year 2014-2015
Dollars expended in land management where the District serves as the lead manager	\$229,336.24	\$1.48	\$357,085.71	\$2.31	\$310,827.98	\$2.01	\$726,510.65	\$4.70	\$1,623,760.58	\$10.50
Number of acres where the District serves as the lead manager	154,587.00		154,587.00		154,587.00		154,587.00		154,587.00	
Cost/acre prescribed fire.	Number	Cost/Acre	Number	Cost/Acre	Number	Cost/Acre	Number	Cost/Acre	Number	Annualized Average
Dollars expended for prescribed burning	\$55,816.03	\$36.70	\$134,588.31	\$25.95	\$104,149.85	\$46.68	\$22,516.80	-	\$317,070.99	\$35.47
Number of acres burned	1,521.00		5,187.00		2,231.00		0.00		8,939.00	
Cost/acre for invasive plant control.	Number	Cost/Acre	Number	Cost/Acre	Number	Cost/Acre	Number	Cost/Acre	Number	Annualized Average
Dollars expended controlling invasive plants	\$6,024.98	\$1,772.05	\$250.14	\$0.00	\$3,464.21	\$51.17	\$15,867.46	\$294.93	\$25,606.79	\$205.02
Number of acres treated	3.40		0.00		67.70		53.80		124.90	

Flood Control Primary Goal: Prevent or minimize loss of life and property from flood events

FC Objective 1: Minimize damage from flooding			
Annual Measure		Annualized Average	
Percentage of Maintenance Activities Completed on Schedule		Number	Percent
Number of maintenance activities completed		0.00	0.00%
Number of maintenance activities planned		0.00	0.00

Water Quality Primary Goal: To achieve and maintain surface water quality standards

WQ Objective 1: Identify the efficiency of permit review, issuance and relative cost of permit processing.										
Quarterly Measures	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annualized Performance	
For closed applications, the median time to process ERP by permit type and total.	Median		Median		Median		Median		Median	
Exemptions and noticed general permits	19.00		16.00		19.00		18.00		18.50	
Individually processed permits	30.50		45.00		29.00		40.00		35.25	
All authorizations combined	22.00		17.00		22.00		29.00		22.00	
For ERPs, cost to issue permit for all permit types	Number	Cost/Permit	Number	Cost/Permit	Number	Cost/Permit	Number	Cost/Permit	Number	Cost/Permit
Total cost	\$24,566.32	\$356.03	\$18,424.98	\$279.17	\$34,316.00	\$357.46	\$38,305.97	\$440.30	\$115,613.27	\$363.56
Number of permits	69		66		96		87		318	
For ERP, In-House Application to Staff Ratio for All Permit Types	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio
Total number of open applications	69	17.25	66	16.50	96	24.00	87	34.80	318	87.70
Number of staff for the permit area	4.00		4.00		4.00		2.50		3.63	

Water Supply Primary Goal: To ensure a safe and adequate source of water for all users

WS Objective 1: Increase available water supplies and maximize overall water use efficiency to meet identified existing and future needs.		
Annual Measure	Fiscal Year 2014-2015	
District-wide, the estimated amount of water (mgd) made available through projects that the District has constructed or contributed funding to, excluding conservation projects.	MGD	
	0.00	
Uniform residential per capita water use (Public Supply) by District	126	
Percentage of domestic wastewater reused		
Quantity (mgd) of domestic reused wastewater	10.21	91.28%
*Quantity (mgd) domestic wastewater produced	11.68	
*Based on the 2012 DEP Reuse Inventory Report		

WS Objective 2: To identify the efficiency of permit review and issuance and relative cost of permit processing.										
Quarterly Measures	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annualized Performance	
For closed applications, the median time to process CUP by permit type and total.	Median		Median		Median		Median		Median	
Individually processed permits	31.00		27.00		37.00		28.00		30.00	
All authorizations combined	29.00		25.00		34.00		27.00		29.00	
For CUPs, cost to issue permit for all permit types (BPM and Metric - Report Quarterly Measures)	Number	Cost	Number	Cost	Number	Cost	Number	Cost	0.00	Cost
Total cost	\$24,925.79	\$377.66	\$24,569.07	\$416.42	\$37,177.00	\$652.23	\$25,232.10	\$573.46	\$111,903.96	\$495.15
Number of permits	66		59		57		44		226	
For CUP, In-House application to staff ratio for all permit types (Metric - Report Quarterly Measures)	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio
Total number of open applications	66	44.00	59	40.14	57	24.46	44	20.95	226	122.16
Number of staff for the permit area	1.50		1.47		2.33		2.10		1.85	

*Database was under development during Quarter 1 and Quarter 2.

WS Objective 3: To identify the efficiency of developing water resources and water supply.		
Annual Measures	Fiscal Year 2014-2015	
Water Supply planning cost per capita.	Number	Cost
Water Supply Planning Cost	525,970.36	\$1.64
FY2012 District Population	320,000.00	
Cost per million gallons a day for Water Resource Development.	Number	Cost
Water Resource Development Cost	0.00	NA
Quantity (mgd) produced	0.00	
Cost per million gallons a day for Water Supply Development	Number	Cost
Water Supply Development Cost	0.00	NA
Quantity (mgd) produced	0.00	

Mission Support Primary Goal: Support District core programs both effectively and efficiently.

MS Objective 1: To assess the ongoing costs of administrative and support operations in order to achieve optimal efficiency to minimize costs.										
Quarterly Measures	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annualized Performance	
Administrative Costs as a Percentage of Total Expenditures (report cumulative totals for each quarter during a fiscal year)	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Administrative costs	297,622.56	8.86%	620,719.17	8.92%	996,920.24	9.16%	1,328,534.06	6.58%	1,328,534.06	6.58%
Total expenditures	3,360,015.65		6,958,422.41		10,883,536.37		20,204,160.27		20,201,160.27	

Water Quality Primary Goal: To achieve and maintain surface water quality standards

WQ Objective 1: Identify the efficiency of permit review, issuance and relative cost of permit processing.										
Quarterly Measures	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annualized Performance	
For closed applications, the median time to process ERP by permit type and total.	Median		Median		Median		Median		Median	
Exemptions and noticed general permits	19.00		16.00		19.00		18.00		18.50	
Individually processed permits	30.50		45.00		29.00		40.00		35.25	
All authorizations combined	22.00		17.00		22.00		29.00		22.00	
For ERPs, cost to issue permit for all permit types	Number	Cost/Permit	Number	Cost/Permit	Number	Cost/Permit	Number	Cost/Permit	Number	Cost/Permit
Total cost	\$24,566.32	\$356.03	\$18,424.98	\$279.17	\$34,316.00	\$357.46	\$38,305.97	\$440.30	\$115,613.27	\$363.56
Number of permits	69		66		96		87		318	
For ERP, In-House Application to Staff Ratio for All Permit Types	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio
Total number of open applications	69	17.25	66	16.50	96	24.00	87	34.80	318	87.70
Number of staff for the permit area	4.00		4.00		4.00		2.50		3.63	

Suwannee River Water Management District
Strategic Plan
2017-2021



Water for People
Water for Nature

February 29, 2016

Minimum Flows and Levels

MINIMUM FLOWS AND LEVELS

Pursuant to Section 373.042, Florida Statutes, the District is required to identify priority water bodies for the establishment of minimum flows and levels (MFLs).

In much of the Suwannee River Water Management District, the springs, rivers, lakes and aquifer are highly interconnected. Due to this connection, groundwater, via springs, provides a significant portion of river flow. In all but a few cases, the setting of a spring MFL is linked to setting the MFL for the receiving body of water—usually a river.

The attached table and figure provide the District's 2016 priority list and schedule for the establishment of minimum flows and levels (MFLs). The District Governing Board approved the MFL priority list and schedule on November 12, 2015.

Establishment of MFLs is a District strategic priority for the protection of our springs, rivers and lakes. For MFLs that are affected by cross-boundary withdrawals, the District is coordinating its work through the North Florida Regional Water Supply Partnership which also includes the St. Johns River Water Management District and the Department. Most recently, a coordination effort has been initiated with both the Northwest Florida Water Management District and the Southwest Florida Water Management Water Management Districts for Minimum Flows and Levels work in potential cross-boundary areas.

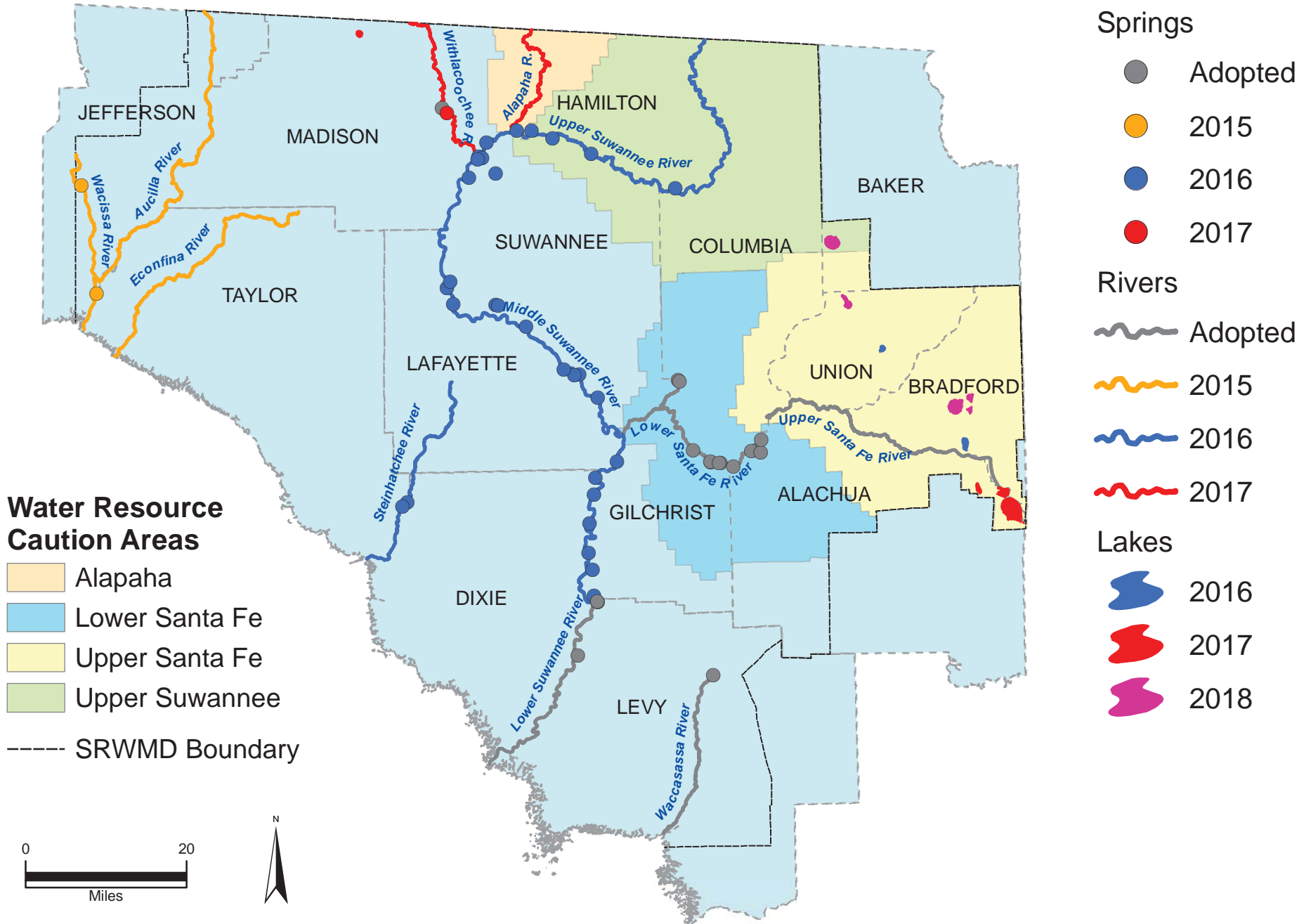
SRWMD 2016-2018 MFL PRIORITY LIST

Basin	Water Body Name	Schedule	Water Body Type	Spring Magnitude	Voluntary Peer Review	Potential Cross-boundary MFLs
Aucilla	Aucilla River	2015	River	n/a	Yes	Yes
Aucilla	Wacissa River	2015	River	n/a	Yes	Yes
Aucilla	Wacissa group	2015	Spring	1	Yes	Yes
Aucilla	Nutall Rise	2015	Spring	1	Yes	Yes
Econfina	Econfina River	2015	River	n/a	Yes	
Middle Suwannee	Middle Suwannee River	2016	River	n/a	Yes	
Middle Suwannee	Bell	2016	Spring	3	Yes	
Middle Suwannee	Otter	2016	Spring	2	Yes	
Middle Suwannee	Hart	2016	Spring	2	Yes	
Middle Suwannee	Rock Sink	2016	Spring	2	Yes	
Middle Suwannee	Guaranto	2016	Spring	2	Yes	
Middle Suwannee	Pothole	2016	Spring	2	Yes	
Middle Suwannee	Turtle	2016	Spring	2	Yes	
Middle Suwannee	Branford	2016	Spring	2	Yes	
Middle Suwannee	Little River	2016	Spring	2	Yes	
Middle Suwannee	Ruth/Little Sulfur	2016	Spring	2	Yes	
Middle Suwannee	Troy	2016	Spring	1	Yes	
Middle Suwannee	Royal	2016	Spring	3	Yes	
Middle Suwannee	Peacock	2016	Spring	2	Yes	
Middle Suwannee	Bonnet	2016	Spring	2	Yes	
Middle Suwannee	Lafayette Blue	2016	Spring	1	Yes	
Middle Suwannee	Allen Mill Pond	2016	Spring	2	Yes	
Middle Suwannee	Charles	2016	Spring	2	Yes	
Middle Suwannee	Anderson	2016	Spring	2	Yes	
Middle Suwannee	Falmouth	2016	Spring	1	Yes	
Santa Fe	Lake Hampton	2016	Lake	n/a	Yes	
Santa Fe	Lake Butler	2016	Lake	n/a	Yes	
Steinhatchee	Steinhatchee River	2016	River	n/a	Yes	
Steinhatchee	Steinhatchee Rise	2016	Spring	1	Yes	
Steinhatchee	TAY76992 - Unnamed	2016	Spring	2	Yes	
Upper Suwannee	Upper Suwannee River	2016	River	n/a	Yes	Yes
Upper Suwannee	White	2016	Spring	2	Yes	Yes
Upper Suwannee	Lime Run Sink	2016	Spring	1	Yes	
Upper Suwannee	Lime	2016	Spring	2	Yes	
Upper Suwannee	SUW923973 (Stevenson)	2016	Spring	2	Yes	
Upper Suwannee	Alapaha Rise	2016	Spring	1	Yes	
Upper Suwannee	Holton Creek Rise	2016	Spring	1	Yes	
Upper Suwannee	SUW1017972 - Unnamed	2016	Spring	2	Yes	
Upper Suwannee	Suwannee	2016	Spring	2	Yes	Yes
Withlacoochee	Suwanacoochee	2016	Spring	2	Yes	
Alapaha	Alapaha River	2017	River	n/a	Yes	
Santa Fe	Lake Santa Fe	2017	Lake	n/a	Yes	
Santa Fe	Lake Altho	2017	Lake	n/a	Yes	
Withlacoochee	Cherry Lake	2017	Lake	n/a	Yes	
Withlacoochee	Withlacoochee River	2017	River	n/a	Yes	
Withlacoochee	Pot	2017	Spring	2	Yes	
Santa Fe	Ocean Pond	2018	Lake	n/a	Yes	
Santa Fe	Lake Palestine	2018	Lake	n/a	Yes	
Santa Fe	Lake Rowell	2018	Lake	n/a	Yes	
Santa Fe	Lake Crosby	2018	Lake	n/a	Yes	
Santa Fe	Lake Sampson	2018	Lake	n/a	Yes	
Lower Suwannee	Lower Suwannee River	Adopted	River	n/a	Yes	
Lower Suwannee	Fanning	Adopted	Spring	1	Yes	
Lower Suwannee	Little Fanning	Adopted	Spring	2	Yes	
Lower Suwannee	Manatee	Adopted	Spring	1	Yes	
Santa Fe	Upper Santa Fe River	Adopted	River	n/a	Yes	Yes

SRWMD 2016-2018 MFL PRIORITY LIST

Basin	Water Body Name	Schedule	Water Body Type	Spring Magnitude	Voluntary Peer Review	Potential Cross-boundary MFLs
Santa Fe	Lower Santa Fe River	Adopted	River	n/a	Yes	Yes
Santa Fe	Ichetucknee River	Adopted	River	n/a	Yes	Yes
Santa Fe	GIL1012973 (Siphon Creek Rise)	Adopted	Spring	1	Yes	Yes
Santa Fe	July	Adopted	Spring	1	Yes	Yes
Santa Fe	Devil's Ear (Ginnie group)	Adopted	Spring	1	Yes	Yes
Santa Fe	Rum Island	Adopted	Spring	2	Yes	Yes
Santa Fe	COL101974 - Unnamed	Adopted	Spring	2	Yes	Yes
Santa Fe	Poe	Adopted	Spring	2	Yes	Yes
Santa Fe	Columbia	Adopted	Spring	1	Yes	Yes
Santa Fe	ALA112971 (Treehouse)	Adopted	Spring	1	Yes	Yes
Santa Fe	Hornsby	Adopted	Spring	1	Yes	Yes
Santa Fe	Santa Fe Rise	Adopted	Spring	1	Yes	Yes
Santa Fe	Blue Hole	Adopted	Spring	1	Yes	Yes
Santa Fe	Ichetucknee group	Adopted	Spring	1	Yes	Yes
Waccasassa	Waccasassa River	Adopted	River	n/a	Yes	
Waccasassa	Levy (Bronson) Blue	Adopted	Spring	3	Yes	
Withlacoochee	Madison Blue	Adopted	Spring	1	Yes	

SRWMD MFL Schedule - 2016



Five-Year Capital Improvements Plan

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

As required by Section 373.536(6)(a)3, Florida Statutes

I. INTRODUCTION

The Suwannee River Water Management District's (District's) Five-Year Capital Improvements Plan (CIP) is submitted in compliance with the reporting requirements of 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 2015-2016 through 2019-2020. As directed by Section 373.536(6)(a)3, F.S., the CIP has been prepared in a manner comparable to the fixed capital outlay format set forth in Section 216.043, F.S. Those two programs and their activities and sub-activities are:

2.0 Acquisition, Restoration and Public Works

- 2.1 Land Acquisition
- 2.2 Water Source Development
 - 2.2.1 Water Resource Development Projects
 - 2.2.2 Water Supply Development Assistance
 - 2.2.3 Other Water Source Development Activities
- 2.3 Surface Water Projects
- 2.4 Other Cooperative Projects
- 2.5 Facilities Construction and Major Renovations

3.0 Operation and Maintenance of Lands and Works

- 3.1 Land Management
- 3.2 Works
- 3.3 Facilities
- 3.4 Invasive Plant Control
- 3.5 Other Operation and Maintenance Activities

The activities and sub-activities under program 2.0 Acquisition, Restoration and Public Works that may include capital improvement projects are:

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

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

- 3.1 Land Management, and
- 3.3 Facilities.

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

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

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

2.0 Acquisition, Restoration, and Public Works

This program includes the development and construction of all capital projects (except those contained in Program 3.0), including water resource development projects/water supply development assistance, water control projects, and support and administrative facilities construction; cooperative projects; land acquisition (including Save Our Rivers/Preservation 2000/Florida Forever); and the restoration of lands and water bodies.

2.1 Land Acquisition

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

2.2 Water Source Development

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

2.2.1 Water Resource Development Projects

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

2.2.2 Water Supply Development Assistance

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

2.3 Surface Water Projects

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

3.0 Operation and Maintenance of Lands and Works

This program includes all operation and maintenance of facilities, flood control and water supply structures, lands, and other works authorized by Chapter 373, F.S.

3.1 Land Management

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

3.3 Facilities

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

II. FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

The Suwannee River Water Management District’s capital improvements involve the District headquarters facility and lands acquired for water management purposes. District Governing Board policy has historically been to use nonstructural water management means. This policy recognizes both the environmental benefits of a nonstructural approach and the fiscal reality of the District’s limited funding ability.

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

- The District’s Florida Forever Work Plan describes the District’s Land Acquisition and Management efforts.
- The annual Preliminary Budget and Tentative Budget Report provide the proposed revenues and expenditures for each fiscal year.
- The Annual Budget, adopted by the Governing Board in September of each year, provides the strategies and budgets of each District program.
- The District Water Management Plan included in Section 1 provides the long-range water resource management issues and strategies for water quality, water supply, flood protection, and natural systems management.

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

FISCAL YEAR 2015-2016 THROUGH FISCAL YEAR 2019-2020

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS
--

2.1 LAND ACQUISITION

REVENUES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Fund Balance	900,000	100,000	-	-	-
District Revenues	246,237	247,632	-	-	-
Total	1,146,237	347,632	-	-	-

EXPENDITURES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Land Acquisition	1,146,237	347,632	-	-	-
Total	1,146,237	347,632	-	-	-

2.2.1 WATER RESOURCE DEVELOPMENT PROJECTS

REVENUES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
State Appropriations	8,294,375	-	-	-	-
Fund Balance	4,859,269	11,185,350	580,000	500,000	500,000
District Revenues	88,440	-	-	-	-
Total	13,242,084	11,185,350	580,000	500,000	500,000

EXPENDITURES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Total	13,242,084	11,185,350	580,000	500,000	500,000

*Includes operating expenses, salaries/benefits, and interagency expenditures.

2.3 SURFACE WATER PROJECTS

REVENUES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
State Appropriations	2,177,135				
District Revenues	-	12,000	-	-	-
Fund Balance	8,860,243	1,800,427	-	-	-
Total	11,037,378	1,812,427	-	-	-

EXPENDITURES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Total*	11,037,378	1,812,427	-	-	-

*Includes operating expenses, salaries/benefits, and interagency expenditures.

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 LAND MANAGEMENT

REVENUES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
State Appropriations	1,177,909	1,322,821	969,400	969,400	969,400
Fund Balance	385,072	-	-	-	-
District Revenues	523,101	732,398	-	-	-
Total	2,086,082	2,055,219	969,400	969,400	969,400

EXPENDITURES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Total*	2,086,082	2,055,219	969,400	969,400	969,400

*Includes operating expenses, salaries/benefits, and interagency expenditures.

3.3 FACILITIES

REVENUES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Fund Balance	230,183	231,622	90,000	90,000	90,000
State Appropriation	50,000	50,000	-	-	-
Total	280,183	281,622	90,000	90,000	90,000

EXPENDITURES	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Field Maintenance and Supplies	90,000	90,000	90,000	90,000	90,000
Headquarters Parking Lot Repaving	60,298	-	-	-	-
Total	150,928	90,000	90,000	90,000	90,000

III. PROJECT DESCRIPTIONS

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.1 Land Acquisition

Project Title: Water Management Lands Acquisition

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

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

Square Footage/Physical Description: N/A

Expected Completion Date: Ongoing.

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

The implementation of this program, along with the cumulative efforts under the Save Our Rivers, Preservation 2000, and Florida Forever programs, have resulted in the protection of over 284,000 acres of water resource lands and more than 325 miles of river frontage along the Suwannee and other rivers of the District. Over 160,000 acres of river floodplains, freshwater springs, headwater wetlands, pristine bottomland hardwood and buffering upland forests are protected in full-fee ownership. Conservation easements and less-than fee purchases have protected over 126,000 acres of water resource lands. These lands are managed primarily for nonstructural flood protection including floodwater conveyance, storage, and attenuating floodwaters. Ancillary benefits include water quality and habitat protection, and passive public recreation areas.

During the past several of years, the District has been successful in partnering with the National Guard Bureau to acquire base-buffering lands near Camp Blanding that will benefit natural systems and provide opportunities for aquifer replenishment and natural systems restoration. At this time, the District has not identified any specific acquisition projects for FY 2017. The District is also acquiring sites that are necessary for the enhanced groundwater well monitoring network sites to close the "gaps" in the monitoring network throughout the District.

Plan Linkages: Florida Forever Work Plan 2015, Five-Year Strategic Plan 2017-2021, FY 2016 Budget, FY 2017 Preliminary Budget.

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

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

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): For FY 2017 the District is projecting that it will need

\$100,000 to acquire well monitoring sites.

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

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): For FY2016, \$115,632 is budgeted for salaries and benefits.

Anticipated Additional Operating Costs/Continuing: None.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.2.1 Water Resource Development Projects

Project Title: Springs Protection and Restoration

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

Physical Location: Activities are conducted within the District boundaries.

Square Footage/Physical Description: N/A

Expected Completion Date: Ongoing.

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

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

Plan Linkages: Five-Year Strategic Plan 2017-2021, FY 2016 Budget, FY 2017 Preliminary Budget

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

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

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

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

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Projected salaries and benefit costs for FY 2017 are \$344,070 and are funded from the total project budgeted amount.

Anticipated Additional Operating Costs/Continuing: Continuing operating cost is anticipated to be funded from the District's ad valorem revenue.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.3 Surface Water Projects

At this time, the District has not identified projects for this activity.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 Land Management

Project Title: Land Management

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

Physical Location: Various locations on District-owned lands.

Square Footage/Physical Description: 158,283 acres.

Expected Completion Date: Ongoing.

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

Plan Linkages: Florida Forever Work Plan 2015, Five-Year Strategic Plan 2017-2021, FY 2016 Budget, FY 2017 Preliminary Budget.

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

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

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): For FY 2017, survey expenditures are estimated at \$3,000.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): For FY 2017, salaries and benefits are projected to be \$608,006.

Anticipated Additional Operating Costs/Continuing: Operating costs are incorporated into the District's Land Management program.

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 2015 District Budget, FY 2016 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): For FY 2016, the District is seeking to repave the parking lot, however the project may be deferred until FY 2017.

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

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

Anticipated Additional Operating Costs/Continuing: Operating costs are incorporated into the District's Land Management program.

Alternative Water Supply Report

Introduction:

The Suwannee River Water Management District (District) continues to assess alternative water supply needs and opportunities throughout the District and its communities.

Initially, funding for the District’s alternative water supply program was provided from the Water Protection and Sustainability Trust Fund (WPSTF), created by the State Legislature in 2005.

WPSTF 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

During the four years of the Water Protection and Sustainability program, 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.

WPSTF 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

Consistent with subsection 373.707(8)(c), Florida Statutes, the District has also used funding from the WPSTF for water resource development projects, consisting of implementing its Minimum Flows and Levels program, springs restoration projects, and to address water quality issues.

The District continues to provide funding for alternative water supply and water conservation projects through various programs. In 2013 - 2015 the District budgeted \$1.5 million for its Regional Initiative Valuing Environmental Resources (RIVER) program and \$1.5 million for its Agricultural Cost-Share program each year.

Alternative Water Supply Development:

The District is committed to developing alternative water supply programs with both public and private partners. Project development focus will balance the needs of our communities and natural systems. Alternative water supply funding is directed to partnerships that foster collaborative efforts in addressing resource issues.

Cost-share funding is made available to communities and other water users that have identified needs and have provided appropriate assurances the project will be implemented where fiscally practicable. The District's RIVER and Agricultural Cost-Share programs executed cost-share contracts for development or expansion of reclaimed water systems, surface water irrigation, and water conservation projects.

Description and funding information for alternative water supply projects during 2013 - 2015 are as follows:

City of Live Oak Golf Course Reuse Connection Project:

The City of Live Oak reclaimed water project is to connect a golf course to the City's reclaimed water system. 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 to improve an irrigation system and connect to a new surface water system to reduce reliance on groundwater. This project is projected to offset approximate 0.05 MGD of groundwater withdrawals and was completed in 2015.

ALTERNATIVE WATER SUPPLY PROJECTS

Year Funded	Project	Total Project Cost	District Match	Local Match	Capacity
2015	City of Live Oak Reclaimed Water Project	\$129,345	\$124,452	\$4,893	0.10 MGD
2014	Suwannee Valley Ag Extension Center Surface Water Project	\$125,000	\$40,200	\$84,800	0.05 MGD

Description and funding information for water conservation projects during 2013 – 2015 are as follows:

City of Alachua Water Conservation Project:

The City of Alachua water conservation project will reduce leakage in a water resource caution area, conserving 0.05 MGD of unaccounted water and was completed in 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 and was completed in 2014.

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 and was completed in 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 and was completed in 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 and was completed in 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 and was completed in 2014.

Town of Hampton Water Tank Revitalization Project:

The Town of Hampton water conservation project is to repair the 64,000 gallon ground storage tank which supplies clean water to its 179 residents. This project is expected to conserve 0.01 MGD through reduced flushing and was completed in 2015.

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 and was completed in 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 and was completed in 2015.

City of Madison Barrsfield Check Valve Project:

The City of Madison (Barrsfield) water conservation project is to replace a 12-inch check valve which will reduce Madison's water loss by 0.03 MGD water and was completed in 2015.

City of Madison Solenoid Valves and Control Project:

The City of Madison (Solenoid) water conservation project is to install two solenoid valves which will reduce Madison's water loss by 0.01 MGD water and was completed in 2015.

City of Archer Water Conservation (Holly Hills) Project:

The City of Archer water conservation project involves replacing leaking pipes and service connections estimated to reduce Archer's water loss by 0.001 MGD. This project was initiated in 2015.

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. This project was initiated in 2015.

WATER CONSERVATION PROJECTS

Year Funded	Project	Total Project Cost	District Match	Local Match	Conservation
2013	City of Alachua	\$62,440	\$31,220	\$31,220	0.05 MGD
2013	City of Waldo	\$153,672	\$76,836	\$76,836	0.01 MGD
2013	City of High Springs	\$57,256	\$28,628	\$28,628	0.02 MGD
2013	City of Newberry	\$57,100	\$28,550	\$28,550	0.04 MGD
2013	City of Jasper	\$107,200	\$97,200	\$10,000	0.04 MGD
2013	Hamilton County	\$49,480	\$37,480	\$12,000	0.04 MGD
2014	Town of Hampton	\$30,000	\$25,000	\$5,000	0.01 MGD
2014	Columbia County	\$450,808	\$201,256	\$249,552	0.03 MGD
2014	City of High Springs	\$824,800	\$50,000	\$774,800	0.10 MGD
2014	City of Madison (Barrsfield)	\$5,619	\$5,175	\$444	0.03 MGD
2014	City of Madison (Solenoid)	\$2,500	\$2,500	\$0	0.01 MGD
2015	City of Archer (Holly Hills)	\$32,400	\$16,200	\$16,200	0.001 MGD
2015	Levy County (University Oaks Water System)	\$156,390	\$151,390	\$5,000	0.003 MGD

The intent of the District's Agricultural Cost-Share program is to offer funding assistance to agricultural producers to implement projects that increase irrigation efficiency and water conservation, and assist with nutrient management technology.

The following is a summary of anticipated results from previously approved cost-share funds:

Fiscal Year 2012-2013
Anticipated Resulted Funded by the District Ag Cost-Share Funds:

Funds:	\$1,200,550 obligated
Estimated Water Savings	5.2 MGD
Irrigation System Retrofits	70
Advanced Irrigation Scheduling Tools	211
Special Projects	8

Fiscal Year 2013-2014
Anticipated Resulted Funded by the District Ag Cost-Share Funds:

Funds:	\$837,575 obligated
Estimated Water Savings	3.87 MGD
Irrigation System Retrofits	67
Advanced Irrigation Scheduling Tools	100

Fiscal Year 2014-2015
Anticipated Resulted Funded by the District Ag Cost-Share Funds:

Funds:	\$459,454 obligated
Estimated Water Savings	1.63 MGD
Irrigation System Retrofits	32
Advanced Irrigation Scheduling Tools	30
Special Projects	1

Over the last three years, the District has devoted significant funding for projects to provide water quantity and quality benefits to springs within the District. Leadership from Governor Scott and landmark state appropriations for springs protection and restoration projects have helped make this commitment a reality.

The District is putting these funds to work by partnering with various agencies, local governments, landowners, and organizations through cost-share programs and projects to conduct restoration activities at numerous springs. Many of these projects are designed to restore groundwater levels and to reduce nutrient loading within priority water bodies and springsheds throughout the District.

Description and funding information for springs protection and restoration projects with water quantity benefits during 2013 - 2015 are as follows:

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 to improve water quality by reducing Lake City's wastewater nutrient loadings to the Ichetucknee River by an estimated 85 percent, to convert Lake City's wastewater effluent disposal sprayfields into constructed treatment wetlands to reduce nitrogen loading to 1 mg/L or less, and to provide beneficial recharge to the Upper Floridan aquifer up to 1.2 MGD. Construction on the project is scheduled to be completed at the end of 2016.

Middle Suwannee River and Springs Restoration and Aquifer Recharge Project:

The Middle Suwannee River and Springs Restoration and Aquifer Recharge Project is a partnership between the District, the Florida Department of Environmental Protection, 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. Construction on the project is scheduled to be completed at the end of 2016.

Oakmont Recharge Wetland Project:

The Oakmont Recharge Wetland project will be to construct a recharge wetland within an existing storm water retention basin in the Oakmont Subdivision in Alachua County. The subdivision is located within the Poe Springs springshed. This project will provide recharge to the Upper Floridan aquifer (UFA) with reclaimed water at very low nutrient levels using a recharge wetland. Recharge wetlands are constructed wetlands that are designed to biologically reduce nutrients to low levels using natural wetland processes while simultaneously recharging the aquifer up to 1.0 MGD. Construction on the project is scheduled to be completed at the end of 2016.

Eagle Lake/Upper Suwannee River Springs Enhancement Project:

The Eagle Lake/Upper Suwannee River Springs Enhancement Project is a Private-Public Partnership with PotashCorp that will reduce groundwater withdrawals by 20 MGD and reduce the nutrient loading to the Upper Suwannee River, Blue Sink Spring, Mattair Springs, and Suwannee Springs. Construction on the project is scheduled to be completed at the end of 2016.

Dairy Wastewater Water Conservation & Nutrient Optimization Project:

The Dairy Wastewater Water Conservation & Nutrient Optimization Project will 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. The project will improve the management of dairy wastewater to achieve greater nutrient uptake and irrigation efficiencies. Dairy operations began signing contracts in 2015. Each operation will develop final plans and begin implementation in FY 2015-16.

Santa Fe Springs Nursery Water Conservation Project:

The Santa Fe Springs Nursery Water Conservation Project will assist nurserymen in upgrading from overhead irrigation methods to micro-spray or drip irrigation. This initiative will reduce nutrient loadings by 45,000 pounds annually and increase irrigation efficiency by saving an estimated 0.3 MGD, benefitting springs in the Upper and Lower Santa Fe River Basins. This will benefit approximately 45 nurseries or roughly 300 acres of production nursery land. This project was initiated in 2014.

Ichetucknee Springs/Columbia County Water Conservation Project:

The Ichetucknee Springs/Columbia County Water Conservation Project will provide cost-share rebates to local businesses to replace an estimated 600 existing toilet fixtures and faucets with high efficiency units. The project is estimated to save 0.09 MGD, benefitting the Ichetucknee Springs Group as well as other springs in the Lower Santa Fe River. Local cooperators are the Lake City/Columbia County Chamber of Commerce, the Ichetucknee Partnership, the City of Lake City, and participating businesses. This project was initiated in 2014.

Suwannee BMAP Center Pivot Retrofits Water Conservation Project:

The Suwannee BMAP Center Pivot Retrofits Water Conservation Project will assist agricultural operations in retrofitting approximately 120 center pivot irrigation systems to make them more efficient. Increasing the efficiency of center pivots allows agriculture operations to use less water when irrigating crops. A 5.26 MGD reduction is estimated in the withdrawal from center pivot irrigation use due to cost share retrofits along the Middle and Lower Suwannee River on the groundwater discharge to rivers and springs in the District. This project was initiated in 2014 and to date 5 operations signed contracts to evaluate the efficiency of their irrigation systems, retrofit them and perform a post evaluation.

GRU Recharge Wetland Project:

The GRU Recharge Wetland project is a partnership with Gainesville Regional Utilities to construct a recharge wetland that will remove nutrients from both reclaimed water and stormwater and will provide approximately 0.1 MGD of recharge to the Floridan Aquifer. This project will benefit springs in the Lower Santa Fe River Basin.

Ichetucknee Trace-Cannon Creek Project:

The Ichetucknee Trace-Cannon Creek project will improve the quality of the water recharging the aquifer and increase aquifer recharge. The project includes a series of

stormwater improvements and recharge wells in the Cannon Creek Basin of Columbia County. This project is estimated to recharge the aquifer from 2.2 to 3.8 MGD that will benefit spring flows and improve water quality by removing approximately 10,000 pounds of nutrients annually.

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.

Tailwater Recovery and Reuse in Commercial Nurseries:

The Tailwater recovery project involves the construction of tailwater recovery ponds to capture leached irrigation and stormwater runoff that will then be reused for irrigation. The project will offset approximately 0.68 MGD of existing groundwater use and reduce nutrient loading.

SPRINGS PROTECTION AND RESTORATION PROJECTS

Year Funded	Project	Total Project Cost	District Match	DEP Match	Local Match	Benefit
2013	Ichetucknee Springshed Water Quality Improvement Project	\$4,600,000	\$400,000	\$3,900,000	\$300,000	1.2 MGD
2013	Middle Suwannee River and Springs Restoration & Aquifer Recharge	\$1,852,000	\$277,000	\$1,500,000	\$75,000	10.0 MGD
2014	Oakmont Recharge Wetland	\$1,156,740	\$150,000		\$926,740	0.5-1.0 MGD
2014	Eagle Lake/Upper Suwannee River Springs Enhancement Project	\$3,600,000	\$300,000	\$3,070,000	\$230,000	20.0 MGD
2014	Dairy Wastewater Conservation & Nutrient Optimization	\$1,081,150	\$39,325	\$920,000	\$121,825	0.45 MGD
2014	Santa Fe Springs Nursery Water Conservation Project	\$1,321,150	\$39,325	\$940,000	\$341,825	0.30 MGD
2014	Ichetucknee Springs/Columbia County Water Conservation Project	\$350,000	\$30,000	\$250,000	\$70,000	0.07 mgd
2014	Suwannee Center Pivot Retrofits Water Conservation Project	\$2,428,975	\$1,235,000	\$885,000	\$308,975	5.26 MGD
2015	GRU Recharge Wetland Project	\$1,110,000	\$150,000	\$0	\$960,000	0.1 MGD
2015	Ichetucknee Trace-Cannon Creek Project	\$3,030,000	\$30,000	\$2,250,000	\$750,000	2.2-3.8 MGD
2015	Improved Nutrient Application Practices in Dairy Operation – Phase 2	\$2,670,000	\$20,000	\$2,120,000	\$530,000	0.32 MGD
2015	Tailwater Recovery and Reuse in Commercial Nurseries	\$1,830,000	\$30,000	\$1,350,000	\$450,000	0.68 MGD

Five-Year Water Resource Development

Work Program

Five-Year Water Resource Development Work Program

Pursuant to Section 373.536(6)(a)4, Florida Statutes, 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) currently does not have an approved regional water supply plan.

In 2010, the District completed a District-wide water supply assessment to evaluate the availability of water supplies over the next 20 years. Members of the District’s Governing Board accepted the 2010 Water Supply Assessment report at the District’s December 2010 Governing Board meeting.

Regional water supply plans are being developed for areas where the assessment determined supplies will not be sufficient within the 20-year planning period (2010 to 2030). The District concluded in the 2010 Water Supply Assessment that Upper Floridan aquifer groundwater levels in the northeastern portion of the district are in decline. Declines in the Upper Floridan aquifer are predicted to impact river and spring flows in certain areas during the 2010 to 2030 planning period. In response to the water resources impacts identified and predicted in the assessment, the District designated four water supply planning regions. These planning regions, listed below, were subsequently designated water resource caution areas by the District’s Governing Board on October 11, 2011.

- Upper Santa Fe River Basin,
- Lower Santa Fe River Basin,
- Upper Suwannee River, and
- Alapaha River Basin.

Water supply plans identify programs and projects to meet future water needs, such as water conservation strategies and alternative water supply projects. All

five of Florida's water management districts are statutorily required to complete water supply plans for areas where water supplies are not sufficient to meet future demands without causing unacceptable impacts to the water resources and related natural systems.

Currently, the District is developing a joint regional water supply plan with the St. Johns River Water Management District for the north Florida region, including the four water-resource caution areas identified above. A draft regional water supply plan report covering the 2015-2035 planning period is scheduled for completion in late 2016. The District-wide water supply assessment and subsequent water supply plans are being re-evaluated every five years or sooner if needed.

Florida Forever

Water Management District Work Plan



Florida Forever Work Plan 2016 Annual Update



February 17, 2016

Florida Forever Work Plan

2016 Annual Update



Suwannee River Water Management District

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February 17, 2016

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1.0 INTRODUCTION

This report is the annual update of the original 2001 Florida Forever Work Plan as required by Section 373.199(7), Florida Statutes (F.S.). Section 373.036(7), F.S., requires this annual update be presented as a separate chapter in the Consolidated Annual Report. The purpose of the annual update is to present projects eligible for funding under the Florida Forever Act, Section 259.105, F.S., and to report on progress and changes since the 2001 submittal.

The 2016 Florida Forever Work Plan update reports land and water resource protection projects at the Suwannee River Water Management District (SRWMD, District) using Florida Forever funding. This update emphasizes the District’s strategies to implement water resource development and restoration projects and acquire and manage land interests to achieve the District’s water resource objectives.

In order to implement the District’s strategic priorities of sustainable water supply, minimum flows and levels (MFLs), the Heartland Springs Initiative, and water management lands projects, the District intends to utilize \$8,218,019 of prior years’ unspent Florida Forever balance during the Fiscal Year 2016 through Fiscal Year 2020 planning period. In addition, the District will implement these strategic priorities through the use of District fund balance, consisting of Florida Forever and Preservation 2000 funds, and proceeds from the sale of surplus lands, for water resource development, restoration, and priority land acquisition projects.

Florida Forever funding has provided for the fee purchase of 43,866 acres and 25,292 acres of conservation easements. Florida Forever Funding has also been used for completion of five restoration projects and three water resource development projects. Since inception of the Florida Forever Act, the District has expended \$69.1 million for land acquisition, \$0.52 million for restoration projects and \$0.44 million for water resource development projects.

The following provides summaries of water resource development and restoration projects, lands purchased, land acquisition strategies, surplus lands disposition and land management activities.

Table 1. Actual and Projected 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	\$565,000	85.15	\$707,850	353.66		
TOTAL	\$47,857,695	43,866	\$21,228,199	25,292	\$444,325	\$519,590
Projected						
2016-2020	-	-	-	-	\$2,083,454 *	-

*Resolution 2013-01, the SRWMD Governing Board encumbered \$2,083,454 of remaining Florida Forever fund balance.

2.0 WATER RESOURCE DEVELOPMENT PROJECTS

This section provides a brief summary of the current and projected water resource development projects that the SRWMD is pursuing. These projects focus on enhancing the water resources of the District to ensure that sufficient quantities of water are available to meet current and future needs of natural systems and water users. Some projects are proposed for Florida Forever funding, while other projects may be funded through a variety of sources.

By Resolution Number 2013-01, the SRWMD Governing Board encumbered the remaining unspent Florida Forever appropriation of \$2,083,454 for water resource development projects. The District is proposing the following projects for implementation:

Upper Suwannee River Springs Enhancement (Eagle Lake) Project

Hamilton County

The Upper Suwannee River Springs Enhancement Project (previously the Eagle Lake Project) is a Private-Public Partnership with PotashCorp and the District. The goals of the Project are to: 1) reduce the nutrient loading to the Upper Suwannee River, and 2) reduce withdrawals from the Upper Floridan aquifer (UFA) by up to 20 million gallons per day (mgd), thereby benefitting spring flows. The Project will facilitate the recovery of a portion of the water from Eagle Lake that would otherwise be discharged to Swift Creek and the Upper Suwannee River. This reduction in flow from Eagle Lake will reduce total nutrient loading to the river reach between the White Springs and Ellaville gages. The recovered water will be redirected to either the PotashCorp Suwannee River Mine or Swift Creek Mine operations and therefore reduce the amount of makeup-water required for mining operations (the makeup water would otherwise be pumped from the UFA). Total project cost is estimated at \$3,600,000, and the project is being funded through a state springs restoration grant, SRWMD funding, and cooperator match.

Oakmont Recharge Wetland

Alachua County

The Oakmont Recharge Wetland project will be to construct a recharge wetland within an existing storm water retention basin in the Oakmont Subdivision in Alachua County. The subdivision is located within the Poe Springs springshed. This project will provide recharge to the UFA with reclaimed water at very low nutrient levels using a recharge wetland. Aquifer recharge is beneficial in supporting spring flows. Recharge wetlands are constructed wetlands that are designed to biologically reduce nutrients to low levels using natural wetland processes while simultaneously recharging the aquifer.

The project will include extension of reclaimed water piping to the wetland basin. This piping will be connected to existing reclaimed water piping system installed by the City of Gainesville doing business as Gainesville Regional Utilities. The project will also include a control valve, level sensor and other instrumentation and controls. The basin will be planted with wetland vegetation. The project may include additional excavation and grading of the existing basin if needed. The estimated project cost range is \$1,000,000 - \$1,500,000.

Falling Creek Aquifer Recharge Project

Columbia County

In September 2013, the District completed a regional study (Study) of potential regionally-beneficial aquifer recharge concepts in a cooperative effort with the St. Johns River Water Management District (SRWMD). The Falling Creek Aquifer Recharge Project (Project) is a concept that was developed from that Study. The Project involves pumping up to a maximum daily capacity of 40 mgd from the Upper Suwannee River to District-owned land in Falling Creek Falls Park, where it will discharge to Falling Creek, eventually recharging the UFA through Falling Creek Sink (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 pumped to Falling Creek through an approximate 48-inch diameter, 11-mile pipeline. The pipeline will be constructed in existing roadway easements. Falling Creek naturally recharges the UFA via the Sink without treatment; therefore, it is anticipated that the surface water from the Upper Suwannee River will also not require treatment due to the high water quality at the intake location near White Springs, Florida. The preliminary design will include surface-water quality testing and analysis. Groundwater modeling analysis conducted during the Study indicated that the Project will benefit aquifer levels and spring flows in the Lower Santa Fe River. The estimated capital cost is \$48,000,000.

Ichetucknee Trace-Cannon Creek Project

Columbia County

The Ichetucknee Trace-Cannon Creek project will improve the quality of the water recharging the aquifer and increase aquifer recharge. The project includes a series of stormwater improvements and recharge wells in the Cannon Creek Basin of Columbia County, Florida. The Cannon Creek Basin is part the Ichetucknee Trace and proven to be directly connected to Ichetucknee Springs.

The goal of this project is to retrofit and reroute existing stormwater infrastructure in the Cannon Creek Basin to improve stormwater treatment, improve recharge to the Floridan aquifer via natural features and the replacement of historical drainage wells. Key components of this project include the construction of stormwater treatment wetlands, construction of new stormwater detention ponds, retrofitting poorly functioning stormwater ponds, and the replacement of historical drainage wells.

The Ichetucknee River and Associated Priority Springs are not currently meeting their adopted MFLs, and a recovery strategy has been established. Although this project was not yet developed at the time of publication of the Recovery Strategy, its goals of improving aquifer recharge in the Ichetucknee Basin support the primary aim of the adopted Recovery Strategy, and will support improved springflows on the Ichetucknee River.

This project is a partnership with the Department of Environmental Protection (DEP), SRWMD and Columbia County. This project will benefit spring flows and water quality for springs along the Ichetucknee River. It is estimated the project will recharge the aquifer from 2.24 to 3.81 mgd, which will benefit spring flows and improve water quality by removing approximately 10,000 pounds of nutrients annually. The estimated capital cost is \$3,000,000 - \$4,000,000, and the project is being funded through a state springs restoration grant, SRWMD funding, and cooperator match.

Santa Fe Basin Flood Mitigation and Aquifer Recharge Projects

WEST RIDGE WATER RESOURCE DEVELOPMENT AREA

Bradford County

The West Ridge Water Resource Development Project (Project) is located in eastern Bradford County and provides an excellent opportunity to: 1) provide flood protection, 2) natural resource enhancement and restoration (particularly wetlands), 3) augment flows to the Upper Santa Fe River, and 4) potentially provide aquifer recharge to the Upper Floridan aquifer. A portion of the Project was previously mined. The District is working closely with the mining business in order to develop a project that will benefit the water resources of the District while allowing the mining business to optimize their mining reclamation plan. The 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 as part of a program designed to secure buffers around military installations. The Project is currently in the conceptual engineering phase. The objective of this phase is to evaluate potential project concepts and eventually identify a concept that maximizes water resource development benefits based on flexibility and technical, environmental, and economic feasibility. This project is in the conceptual design phase, and the project cost is being determined.

DOUBLE RUN CREEK WATER RESOURCE DEVELOPMENT AREA

Bradford County

The Double Run Creek Water Resource Development Project (Project) is located in eastern Bradford County and provides an excellent opportunity to: 1) provide flood protection, 2) natural resource enhancement and restoration (particularly wetlands), 3) augment flows to the Upper Santa Fe River, and 4) potentially provide aquifer recharge to the UFA. The Project includes over 1,910 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 as part of a program designed to secure buffers around military installations

INTER-DISTRICT WATER RESOURCE DEVELOPMENT PROJECT

Bradford County

This Inter-district Water Resource Development Project (Project) is located in southeastern Bradford County and provides an excellent opportunity to: 1) provide natural resource enhancement and restoration (particularly wetlands), 2) augment flows to the Upper Santa Fe River, and 3) provide aquifer recharge to the UFA. The Project includes utilization of lands adjacent to the Florida National Guard's Camp Blanding. The Project is in the initial phases of feasibility and is dependent upon successful acquisition of property by the District. This potential Project is of particular value since the potential for aquifer recharge will have regional cross-boundary benefits for stressed water resources in both the SRWMD and SJRWMD due to its proximity to the Keystone Heights potentiometric high, which is a regional recharge area for the UFA. The project cost is still being determined.

Dispersed Water Storage Initiative

Several decades ago, industrial land owners excavated ditches to drain land for pine tree production. While draining the land may have increased pine production, it had several 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.

The District proposes to 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.

Table 2. Water Resource Development Projects

Project Name	Cost Estimate
Upper Suwannee River Springs Enhancement (Eagle Lake) Project	\$3,600,000
Oakmont Recharge Wetland	\$1,156,700
Falling Creek Aquifer Recharge Project	\$48,000,000
Ichetucknee Trace-Cannon Creek Project	\$3,000,000 - \$4,000,000
West Ridge Water Resource Development Area	In Development
Double Run Creek Water Resource Development Area	In Development
Inter-District Water Resource Development Project	In Development
Dispersed Water Storage Initiative	In Development

3.0 RESTORATION PROJECTS

This section provides a brief summary of the current and projected environmental restoration projects that the SRWMD is pursuing. These projects focus on restoring or enhancing the water resources of the District to protect natural systems, especially springs, streams, rivers, and wetlands. Some projects are proposed for Florida Forever funding, while other projects may be funded through a variety of sources.

Hornsby Springs Water Quality Improvement Project

Alachua County

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. High Springs has plans to expand its municipal wastewater service area, to connect portions of the town, and to reduce the loading from septic tanks. In addition, High Springs would like to expand its WWTP, and increase its treatment effectiveness, perhaps by replacing its sprayfield with a constructed treatment wetland. The High Springs plans will potentially reduce loading to Poe Springs over the long-term. Portions of High Springs are also within the Rum Island Springshed so the expansion of municipal wastewater service and removal of septic tanks has the potential to benefit Rum Island Spring. The installation of a pump station and waste water lines to connect to High Springs has an estimated project cost of \$500,000.

Guaranto Springs Restoration

Dixie County

Guaranto Springs is located in eastern Dixie County along the Suwannee River. The spring has been used by local residents for swimming for decades. Dixie County owns and maintains a recreational park around the spring. Erosion of the banks surrounding the spring and spring run cause a continuous influx of sediment into the springhead as well as the spring run to the Suwannee River. This will continue unabated unless improvements are made to stabilize the banks around the spring. The Guaranto Springs Restoration Project (Project) includes the construction of approximately 300 feet

of retaining wall, removal of sediment within the spring run, and removal of a man-made earthen dam and culvert. The Project will achieve multiple core mission values of the District, including water quality improvement and natural systems restoration and enhancement. The Project will be cooperatively-funded by the SRWMD through the Regional Initiative Valuing Environmental Resources (RIVER) Grant Program. The estimated project cost is \$110,000. The project will begin in the first quarter of 2016.

Ginnie and Gilchrist Blue Springs Enhancement - Newberry Reuse Project

Alachua County

The City of Newberry is located within the springshed for Ginnie and Gilchrist Blue Springs, along the Lower Santa Fe River. Ginnie Springs is a complex of springs which are part of the privately-owned Ginnie Springs Resort. The springs are heavily used for swimming and for cave diving. Gilchrist Blue Spring is located within Blue Springs Park and Campground, also a privately run facility.

For Newberry, this project will begin the process of converting municipal wastewater from effluent to reclaimed water and initiate beneficial reuse. To produce public access reclaimed water, DEP requires the addition of tertiary treatment and high-level disinfection. The proposed wastewater improvements needed for the initial phase of this project to produce public access reclaimed water are expected to include adding a 0.5 million gallon ground storage tank, a filtration system, a side stream pump station, a transfer pump station, and a high-service pump station. The project also includes the installation of reclaimed water lines to school ball fields, the Newberry Sports Complex and a cement batch plant. All of these facilities currently utilize Newberry's municipal potable water supply.

The Lower Santa Fe River and Associated Priority Springs are not currently meeting their adopted MFL and a Recovery Strategy has been established. The Santa Fe River was also identified as impaired by the DEP in 2008 for nitrate, therefore actions are needed to reduce nutrient loading within their springsheds. Specifically, the Ginnie and Gilchrist Blue springshed was designated in 2013 by DEP as a spring restoration focus area (RFA) within the Department's Basin Management Action Plan (BMAP). This project supports the DEP, Department of Agriculture and Consumer Sciences (DACCS) and SRWMD efforts to reduce nitrate loadings to these springs, as well as providing an alternative water source in support of the MFL Recovery Strategy.

The estimated reuse volume for this project ranges from 0.052 to 0.163 MGD and would represent a reduction in groundwater withdrawals that would support recovery of spring and river flows. In addition, by reducing the use of fertilizers on ball fields and the sports complex, a nitrogen reduction ranging from 2,197 to 6,888 pounds N/year and a phosphorus reduction of 476 to 1,491 pounds per year is anticipated. This reduction should be expressed as a reduction in Ginnie and Gilchrist Blue springs; both impaired by excess nitrate and support the ongoing efforts in the RFA and BMAP in general. The estimated project cost is \$3,000,000 to \$4,000,000.

Archer Wastewater Collection and Advanced Treatment Phase I Project

Alachua County

This project will serve the City of Archer which is located in Alachua County, Florida. This project consists of multiple phases with the first phase including the construction of a centralized 0.1 MGD wastewater treatment plant (WWTP) and a sewer collection system in the center of the City of Archer. Advanced Water Treatment (AWT) is anticipated to reduce nutrient loading to Floridan aquifer. The benefits of the project include the pollutant load reductions described on the attachment, public safety improvements, and increased economic growth.

The City of Archer resides on the border of the estimated springshed for Ginnie and Gilchrist Blue springs. District ground water models estimate a significant portion of recharge in the area reaches the Lower Santa Fe River. Ginnie Springs and Gilchrist Blue Spring are springs along the Lower Santa Fe River. The Santa Fe River was identified as impaired by the DEP in 2008 for nitrate. Ginnie Springs is a complex of springs which are part of the privately-owned Ginnie Springs Resort. The springs are heavily used for swimming and scuba diving and is a hotspot for cave diving. Gilchrist Blue Spring is located within Blue Springs Park and Campground, a privately run facility, but is being considered for purchase by the State. Both springs are enriched with nitrate and mean nitrate concentrations from 2000 to the present exceed the State's numeric nutrient criterion for nitrate in springs of 0.35 mg NO_x- N/L. In recognition of the severity of the nitrate impairment and as a practical area for springshed management evaluation, the Ginnie and Gilchrist Blue springshed was designated in 2013 by DEP as a spring restoration focus area (RFA) within the Department's BMAP.

The river and associated springs have been designated as impaired and there is an adopted BMAP for these resources. In addition, the Ginnie and Gilchrist Blue springshed is the site of the basin's Restoration Focus Area (RFA) where multiple agencies are collaborating on increased nutrient loading reduction efforts to the Floridan aquifer and increased monitoring of effects. The estimated project cost is \$3,000,000 - \$4,000,000.

Middle Suwannee River and Springs Restoration and Aquifer Recharge Project

Dixie and Lafayette Counties

The ongoing Middle Suwannee River and Springs Restoration and Aquifer Recharge Project (Project) will rehydrate natural systems along and adjacent to the southeastern margin of Mallory Swamp; thereby optimizing available surface water for wetland hydration and groundwater recharge, which will enhance springs restoration. A primary objective of the Project is to increase groundwater discharge (as diffuse leakage and spring flows) to the middle Suwannee River, and augment groundwater supplies in Lafayette and Dixie Counties, which also benefits domestic and agricultural users. To achieve increased spring and diffuse groundwater flow, the District's approach includes reestablishment 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 an aquifer recharge well at strategic locations. The Project is in the final stages of construction. The project cost is \$1,900,000, and is funded through a state springs grant, with contributions by Dixie County and the District.

Middle Suwannee River and Springs Restoration Project: Phase II

Lafayette County

This proposed Phase II element (Phase II Project) of the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project (Middle Suwannee Project) is a Private-Public Partnership between a timber company and the District. The Phase II Project property is east and adjacent to Mallory Swamp and north and adjacent to the existing boundary of the Middle Suwannee Project. The property is in excess of 6,000 acres, and the District is investigating conservation easement acquisition opportunities in order to optimize the water resources development potential of the Middle Suwannee Project. The Phase II Project will rehydrate natural systems along and adjacent to the southeastern margin of Mallory Swamp; thereby optimizing available surface water for wetland hydration and groundwater recharge, which will enhance springs restoration. The District's approach includes reestablishment 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. The Project is in the initial stages of investigation.

Ichetucknee Springshed Water Quality Improvement Project

Columbia County

The Ichetucknee Springshed Water Quality Improvement Project is a partnership between the District, City of Lake City, and Columbia County. The City's sprayfield is 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. DEP has developed a BMAP to restore water quality in the Santa Fe River Basin, including the Ichetucknee River.

The Ichetucknee Springshed Water Quality Improvement Project will convert the City of Lake City's wastewater effluent disposal sprayfields into constructed treatment wetlands. This is projected to reduce the facility's nitrogen loading to 1 mg/L or less. The anticipated benefits of this project include improve water quality in the Ichetucknee Springs by reducing Lake City's wastewater nutrient loadings to the Ichetucknee River by an estimated 85 percent, and providing beneficial recharge to the UFA.

This project is funded by \$3.9 million from the DEP; \$805,715 from the District; \$200,000 from the City of Lake City; and \$100,000 from Columbia County.

Cannon Creek Sink Septic Tank Removal

Columbia County

This project will construct sewer lines to the I-75/SR 47 interchange to remove septic tanks around Cannon Creek Sink. Cannon Creek Sink has a direct connection to the Ichetucknee Springs. Project would remove 30 business septic tanks and 5 homes. The project will reduce nutrient loadings to the Ichetucknee Springs.

The project will construct sewer lines to the I-75/SR 47 interchange to remove all septic tanks within an approximate 422 acre area Cannon Creek Sink. Presently, there are 30 businesses, 5 homes and 194 acres of property that may have plans for future development. The project will construct 14,500 feet of force main sewer lines, 7,600 feet of gravity sewer lines, 5 directional bores, 4 lift stations, 29 manholes and 29 driveway and road crossings. The estimated project cost range is \$2,700,000 - \$3,500,000.

Holly Factory Denitrification Bioreactor

Alachua County

The District proposes to construct an extension to an existing denitrification bioreactor located at a container nursery in Alachua County. The original project was funded through a DEP 319 grant, which showed significant nitrate reduction. Nitrate reductions at the existing bioreactor reduced loading by 6,100 pounds per year. The extension of the bioreactor will help capture and treat any water that is by passing the existing bioreactor. This project is also located within the watershed for the Santa Fe River BMAP. The estimated project cost is \$50,000 - \$100,000.

Alligator Creek Project

Bradford County

The City of Starke depends upon Alligator Creek for drainage of most of its incorporated area. Alligator Creek drains into Lake Rowell and, ultimately, into the Santa Fe River via the Sampson River.

Over many decades, Alligator Creek was dredged several times prior to environmental regulation to improve the drainage within the City of Starke. These dredging events have caused hydrologic impacts to the floodplain wetlands and destabilized the stream in many locations, causing continued erosion and water quality problems. Stream restoration is needed to improve wetland functions within the Alligator Creek floodplain and to protect this system from continued erosion and degradation.

To improve hydrologic conditions within the floodplain and reduce the sediment load from going to Lake Rowell down Alligator Creek, the District, in cooperation with the Florida Fish and Wildlife Conservation Commission (FWC), plans to conduct a floodplain restoration project. This project will re-establish the flow connection from a portion of the altered creek to a 47-acre floodplain parcel, known as the Edwards Bottomlands. The restoration project will improve water quality, fish and wildlife habitat and the hydrology within the altered wetlands. The District is also evaluating the potential acquisition of a 14 acre tract of historic floodplain, adjacent to the 47 acre parcel, as part of this project.

The District has previously committed \$363,000 in Florida Forever Funding to implement a restoration project on Alligator Creek. The project is undergoing a redesign to accommodate restoration and flood mitigation objectives and stakeholders needs. The current estimated project budget is now approximately \$900,000. Current cooperating partners include the Florida Department of Transportation (DOT) and FWC.

Otter Springs Restoration Project

Gilchrist County

The Otter Springs Restoration Project is a partnership between the District and Gilchrist County. High volumes of sediment, sand, and debris have washed into the spring run and vents, altering the magnitude of flow from the springs. Over the years, the original head spring has become almost completely blocked with debris.

The goals of this restoration project are to replace or fix deteriorating retaining walls, stabilize the springs banks to control further erosion, and construct access points to the spring and spring run. Additionally, it is anticipated this project will benefit the spring by removing nutrients, sediments, and debris from the spring vents and spring runs, and restoring the flow of the original head spring to historic levels. The District is funding the \$140,000 project. Gilchrist County will provide project management oversight.

Fanning Springs Water Quality Improvement Project

Gilchrist and Levy Counties

Fanning Springs is a popular tourist destination in the southwest corner of Gilchrist County on the Suwannee River. The City of Fanning Springs, the District, and DEP have partnered to address water quality in the Fanning Springs basin. Expanding the City's sewer service will prevent an estimated 1,300 pounds annually of nutrients from entering into the groundwater and discharging into Fanning Springs by eliminating septic tanks and connecting residents and businesses to the new system.

The master plan for the City's wastewater collection system is divided into ten service areas. The design, engineering and construction bid for service areas one through four are complete. The next phase of surveying is scheduled to begin in the spring of 2016. Five service areas will be complete by December of 2017. The two phases of the project have been funded by the District, the City of Fanning Springs, springs grants and Community Development Block Grant funds with an estimated total project cost of \$3,500,000.

Pot Spring Restoration Project

Hamilton County

The District is currently working to develop a project with the Florida Forest Service to restore Pot Spring in Hamilton County. The main goal of this project is to stabilize the shoreline along the spring run to prevent sediment from entering the Withlacoochee River. Current project plans also include the reconstruction of an existing boardwalk near the spring to improve public access and safety. The planning level cost estimate to complete construction is \$400,000 - \$500,000. This project is currently in the planning phase.

Little River Spring Restoration Project

Suwannee County

The District is helping fund a project with Suwannee County to conduct additional restoration work at Little River Spring. This project will be in addition to the previous restoration work conducted with Suwannee County in 2003. The main goal of this project is to stabilize the shoreline along the spring run to prevent sediment from entering the Suwannee River. Suwannee County's Plan is to remove rocks and fabric from the spring run shoreline, stabilize the slope of the run with an engineered system of boulders and vegetation, and to replace existing boardwalk impacted by shoreline erosion. The District will be funding up to \$90,000 of the total \$104,587 project cost. This project is currently under construction.

Northern Waccasassa Flats Conservation Easement Project

Gilchrist County

The purpose of this project is to protect surface and groundwater in a portion of the Lower Santa Fe River and associated springs by purchasing conservation easements on approximately 34,000 acres of the northern portion of the Waccasassa Flats. Fee interests may be pursued for sites with outstanding water resource values or small acreage parcels, that possess high water values, in which fee purchase would be considered more cost effective. Emphasis will be placed on purchasing less than fees interests from large parcels that would have a significant impact on water resources while reducing long-term complexities in monitoring multiple ownerships in the area. If present, artificial drainage features within the system that may be restored with dispersed water storage techniques to increase water holding capacity within onsite wetlands.

Springshed Protection Using Low Impact Agricultural Practices

Levy, Gilchrist, Columbia and Suwannee Counties

The District and its partners propose to work with Natural Resource Conservation Service (NRCS) to provide incentives and easements to private agricultural operations/landowners to maintain and increase low impact agricultural and silvicultural practices. The focus areas will include vulnerable high recharge karst landscapes in the Ichetucknee, Fanning and Manatee springsheds.

Spring Creek Restoration Project

Taylor County

The Spring Creek Restoration Project is a partnership project with the City of Perry under the District's RIVER grant program. The goals of the project are to improve water quality, provide flood protection, and improve natural systems including wetlands. These goals will be accomplished by removing the channelized banks and reshaping the Spring Creek from a channelized ditch into a meandering creek. The floodplain will be reconnected and wetlands will restored or created. Storm water

interceptors will be installed and a new retention pond constructed to clean the water before it enters the creek. The total cost of the project is estimated to be \$589,000 with the District providing cost share assistance of \$350,000.

Table 3. Restoration Projects

Project Name	Cost Estimate	Status
Edwards Bottomlands - Alligator Creek Project	\$900,000	Design and Engineering
Ginnie and Gilchrist Blue Springs Enhancement - Newberry Reuse Project	\$3,000,000-\$4,000,000	Planning
Guaranto Springs Restoration Project	\$110,000	Under Construction
Holly Factory Denitrification Bioreactor	\$50,000	Permitting
Hornsby Springs Water Quality Improvement Project	\$500,000	Contract Development
Ichetucknee Springshed Water Quality Improvement Project	\$4,600,000	Under Construction
Little River Spring Restoration Project	\$90,000	Under Construction
Middle Suwannee River and Springs Restoration and Aquifer Recharge Project	\$1,900,000	Under Construction
Middle Suwannee River and Springs Restoration Project: Phase II	In Development	Planning
Northern Waccasassa Flats Conservation Easement Project	In Development	Planning
Otter Springs Restoration Project	\$140,000	Under Construction
Pot Spring Restoration Project	\$400,000	Planning
Spring Creek Restoration Project	\$589,000	Design and Engineering
Springshed Protection using Low Impact Agricultural Practices	In Development	Planning

Table 4. Completed Restoration Projects by Basin

Project	County	Basin	Cooperators	Type	Total Project Cost
Brooks Sink – Aquifer Recharge Project	Bradford	Santa Fe River	Rayonier LLC	Water Management Lands / Aquifer Recharge	\$234,000
Charles Spring Restoration Project	Suwannee	Suwannee River	Suwannee County	Springs Restoration	\$112,380
Hart Springs Restoration	Gilchrist	Hart Springs	Gilchrist County	Springs Restoration	\$76,700
Levy Blue Springs Water Quality Improvement Project	Levy	Wacassassa River	City of Bronson	Water Quality Improvement	\$3,100,000
Columbia County Water Main and Conservation Project	Columbia	Upper Santa Fe River	Columbia County	Water Main Extension project	\$450,808
Wacissa Springs Restoration Project	Jefferson	Wacissa River	Jefferson County	Restoration	\$ 3,382,632

4.0 LAND ACQUISITION

The acquisition and management of land interests is a tool used by the District to achieve water resource objectives. This section provides an overview of the District's land acquisition and management strategies and activities. Acquisitions under the Florida Forever program must satisfy Florida Forever Goals and Measures found in section 259.105 (4), F.S.

Public ownership of lands and conservation easements provides benefits including:

- Preserving and restoring springs and surrounding areas to protect and improve surface and groundwater;
- Preserving floodplain areas to maintain storage capacity, attenuate floodwaters, and mitigate flood risk;
- Preserving natural buffers along water bodies where adjacent uses have a high potential to degrade surface water quality;
- Protecting groundwater quality by maintaining low intensity land uses;
- Providing land for dispersed water storage, restoration, and water resource development projects; and
- Preserving and/or restoring natural communities to support or enhance populations of native species.

Acquisition Project Design and Evaluation Criteria

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, reviewed by the Governing Board Lands Committee, considered by the Governing Board, and included in the District’s land acquisition process if approved by the Board.

The Save Our Rivers, Preservation 2000, and Florida Forever programs have protected over 352,096 acres and 386 miles of river corridor lands to protect the region’s river systems and public water supply.

Table 5. Protected Lands and Potential Acquisitions by Basins

Planning Area	Fee Acres Acquired	Fee River Mileage Acquired	Less than Fee Acres Acquired	Less than Fee River Mileage Acquired	Total Miles of Frontage	Total River Mileage Acquired	Potential Acquisition Project Acreage
Alapaha	2,989	15	1,503	4	46	19	2,889
Aucilla	14,985	47	11,264	154	118	61	6,738
Coastal Creeks	1,282	0	32,134	0	0	0	0
Econfina	8,490	40	0	0	70	40	2,492
Fenholloway	0	0	0	0	0	0	0
Lower Suwannee(1)	19,451	32	24,935	0	114	31	4,213
Middle Suwannee	17,599	31	1	200	32	7,694	15,196
Santa Fe	15,597	27	4,990	6	162	32	9,920
Steinhatchee(2)	59,331	38	46,852	0	56	38	152
Upper Suwannee(4)	34,582	73	19,128	12	112	85	4,507
Waccasassa	5,340	9	22,404	0	58	9	4,832
Wacissa	1,082	2	0	0	24	2	0
Withlacoochee	7,26	20	0	0	48	20	8,562
Floodplain	889	14	4	0	0	14	0
Lots(3)							
Total	188,881	348	163,215	38	1,008	386	59,501

(1) 11,716 acres were conveyed to the USFWS and are part of the Lower Suwannee National Wildlife Refuge.

(2) Mallory Swamp Fee Interest, principal watershed benefits to the Steinhatchee River Basin.

(3) River frontage is estimated.

(4) 11,743 acres in Sandlin Bay were conveyed to the USDA Forest Service.

A new focus of the FY 2016 plan is inclusion of 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 Floridan Aquifer, as well as maximizing groundwater gradients in District springsheds.

The District is also partnering with Florida Department of Military Affairs at Camp Blanding and DEP to acquire lands for a military base buffering program. These acquisitions provide lands to implement water resource development projects and buffer Camp Blanding from encroaching development. Acquisition of lands to support the District’s monitor-well network expansion initiative is also proposed in FY 2016.

Potential acquisition project areas shown in this plan were developed with Geographic Information System (GIS) layers to fulfil the objectives listed below.

Table 6. Water Resource Objectives

Water Resource Objectives	GIS Layer
Preserve floodplain to maintain storage capacity, attenuate floodwaters, and mitigate flood risk	Federal Emergency Management Agency 100-year (1% Annual Chance) Flood Zone
Protecting groundwater quality by maintaining low intensity land uses	Areas of High Recharge
Preserve natural buffers along water bodies where adjacent uses have a high potential to degrade surface water quality	Wetlands and 200’ buffers on streams
Preserving and restoring springs and surrounding areas to protect and improve surface and groundwater	1-mile, ½-mile, and ¼-mile buffers on springs with 1 st , 2 nd , 3 rd magnitude respectively
Increasing recharge to the Floridan Aquifer via Water Resource Development Projects	Areas of High Recharge near and upgradient of the Cody Escarpment
Restoring natural hydrology in headwater swamps and increasing water retention for recharge enhancement	Presence of potentiometric high groundwater potentially with drainage structures

Acquisition Projects

Land acquisition projects in Fiscal Years 2016 through 2020 will use Florida Forever and Preservation 2000 resale funds and proceeds from the sale of surplus lands for funding.

For any given acquisition, the District will consider the use of alternative acquisition techniques as a cost-effective means of protection. Many project areas identified in this update are suited for less than fee purchase, and the District will pursue this option with willing landowners.

The projects listed below, which may use Florida Forever Funds or involve exchanges involving Florida Forever lands, have been approved for detailed assessment by the Governing Board.

Table 7. Acquisition Projects Approved for Detailed Assessment

Seller	Project	Acres	County	Date Approved
George and Sharon Nyman	Suwannee River Oaks	305	Gilchrist	4/10/2012
Bridges/Azure Properties	McAlpin Landing	200	Hamilton	4/10/2012
Milton C. Hitson	Holton Creek In-holding	10	Hamilton	5/16/2013
Michael and Freda Shaw	Shaw Conservation Easement Exchange	1,027	Lafayette	12/10/2013
Rock Bluff Spring Co., LLC	Rock Bluff Springs	173	Gilchrist	3/11/2014
River Error Farms	Hardee Springs	304.5	Hamilton	10/16/2014
Virginia and John Coker	Lumber Camp Springs	37.32	Gilchrist	11/12/2015
Ware Forest, LLC	Ware Forest	160	Jefferson	12/8/2015

Table 8. Acquisitions Completed: FY 2015

Seller	Acres	County	Date	Transaction
El Trigal Farms LLC and Susan Kempton Floyd	349.61	Jefferson	10/31/2014	Exchanged
Chris and Deanna Mericle to SRWMD	4.05	Hamilton	6/23/2015	Exchanged
Rayonier Atlantic Timber Company f/k/a/ Timberlands Holding Company Atlantic, Inc.	321.95	Bradford	12/8/2014	Purchased
Winston Lovelace / Turtle Spring	85.15	Lafayette	5/13/2015	Purchased
John Steffen	14	Bradford	9/17/2015	Purchased
Rayonier Atlantic Timber Company	2007.27	Bradford	9/21/2015	Purchased

Surplus Lands

In order to maximize the water resource benefits of its lands holdings, the District has reviewed its holdings to identify any areas that may not be critical. 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.

The District Governing Board adopted Program Directive 2015-01 to provide updated guidelines and procedures for consistency in identification and disposition of surplus lands. Table 10 list activities in selling surplus lands.

Table 9. Disposition of Surplus Lands in FY 2015

Surplus Parcels	Acres	County	Disposition Date	Transaction	Proceeds
SRWMD to Chris and Deanna Mericle	0.86	Hamilton	6/23/2015	Exchange	\$0.00
SRWMD to City of Starke	14	Bradford	11/24/2015	Conveyed to Municipality	\$0.00
Total	14.86				\$0.00

Land Management

Management of District lands ensures that these public lands continue to provide important water resource functions to maintain natural systems and for the benefit of the public. The 2015 Land Management Review Team scored the District land management at 1.53 out of possible 2, indicating that the District is meeting and exceeding its goals for managing the land according to the plan and purpose for which it was acquired.

The following summarizes significant projects implementing the District Land Management Plan on fee simple lands owned by the District. A complete listing of activities and accomplishments is found in the 2015 Land Management Report at: www.mysuwanneeriver.com, under the Land Management tab.

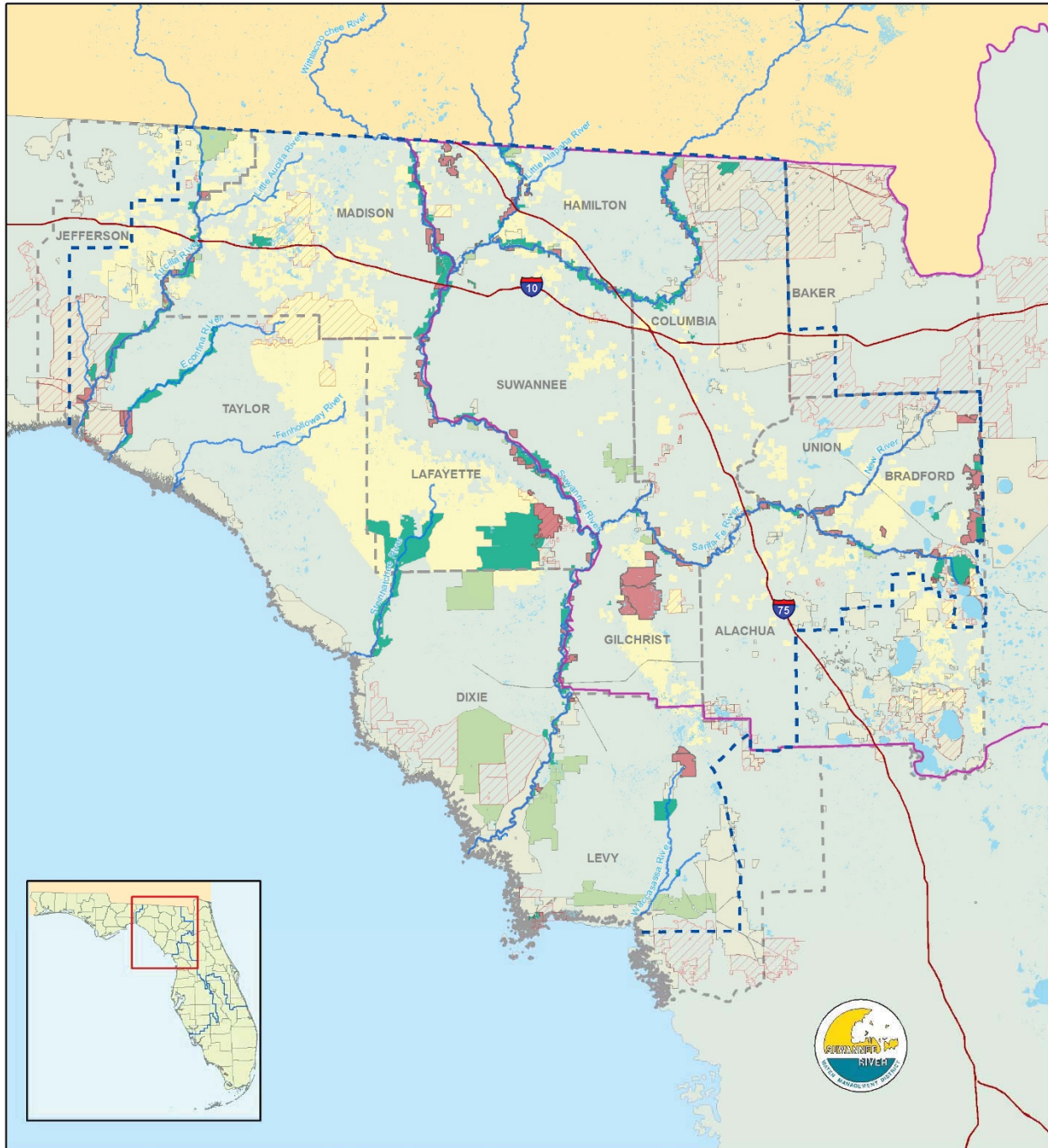
- *Middle Suwannee River and Springs Restoration and Aquifer Recharge Project*
In support of the project, staff removed debris, applied herbicide and maintained approximately 210 culverts in the Mallory Swamp tract that provide surface waters to the project.
- *Otter Springs Restoration Project*
Work in FY 2015 included the removal of 700 cubic yards of sediment from the main vent and spring pool. Efforts continue into FY 2016 to complete erosion control measures and other public use improvements to protect the spring.
- *Silviculture Water Yield Research Project*
This project is part of a statewide effort to advance the understanding of the impact of forest management practices on water yield, and whether this water is held in surficial systems or makes it way to the aquifer. This project will run through 2019.
- *Natural Resource Management Projects*
The Little River Tract Restoration Project, in cooperation with FWC and National Wild Turkey Federation, continued with prescribed burning and herbicide application for tree planting.

Project metrics in FY 2015 include prescribed burning on 8,919 acres; timber sales on 1,071 acres; and the reforestation 151 acres.
- *Non-native, Invasive Plant Control Project*
During FY 2015, 54 infestations of invasive plants were monitored and 115 infestations were treated with herbicides.

- *Public Use Project*
The District "Recreation Guide" revision and update, including both static and dynamic maps on the website, was completed in FY 2015. The District cooperates with FWC and US Fish and Wildlife Service to provide public hunting opportunities on almost 105,000 acres. During FY 2015 73 Special Use Authorizations were issued for use of District lands.
- *Facilities Maintenance Project*
During FY 2015 96 miles of roads and 142 miles of property boundaries were maintained.

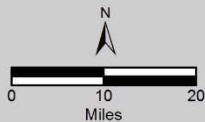
Annually the District provides an annual overview of management objectives and activities conducted on fee-simple title lands held by the Governing Board of the District. The results are published in the Land Management Report. It provides details and accomplishments on natural community resource projects which are designed to maintain or improve natural communities, forest resources, rare species, cultural and historical resources, and aesthetic and visual resources. It 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.

2016 Florida Forever Work Plan Map



2016 Florida Forever Work Plan

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



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Suwannee River Water Management District
Florida Forever Work Plan
2016 Annual Update



Water for People
Water for Nature

February 17, 2016

Florida Department of Transportation
Mitigation Plan

2016 - 2020

Suwannee River Water
Management District

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EXECUTIVE SUMMARY

Section 373.414(1)(b)2, Florida Statutes (F.S.) requires the Florida Department of Environmental Protection (FDEP) and each water management district (WMD) to report by March 1 of each year, as part of the consolidated annual report, all cash donations accepted as mitigation during the preceding fiscal year pursuant to Section 373.414(1)(b)1, F.S. No cash donations were received in FY 2014-2015.

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

The FDOT has 2 new projects in 2016.

A total of 16 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, F.S., states that environmental mitigation for the impact of transportation projects proposed by the FDOT can be more effectively achieved by regional, long-range mitigation planning rather than on a project-by-project basis. The statute sets forth specific language designed to provide funding to the FDEP and the 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, Florida Administrative Code, 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

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 with an estimated permit application submittal date of June 6, 2016 and anticipated construction date of December 2, 2019. FDOT has estimated that 1.5 acres of wetlands (FLUCCS 510, 615, 630, and 631) will be impacted as a result of the project. The project will occur in the Santa Fe River basin and the mitigation will occur in the same basin. Mitigation options are being evaluated. Total projected mitigation costs are calculated to be \$181,890.00.

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

Construction of a westbound turn lane on SR 26 at the SE 25th Avenue intersection will impact approximately one acre of wetlands. The construction of the westbound turn lane is a safety project. The wetlands impacted are part of the FLUCCS class 2112 and the project is located in Gilchrist County in the Waccasassa River Basin. The date for the submittal of the permit application has been estimated to occur on or about February 21, 2017 and the estimated date construction will begin on the project is to be determined. Mitigation options are being evaluated. Total projected mitigation costs are calculated to be \$121,260.00.

ONGOING MITIGATION PROJECTS

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

New roadway corridor which will bypass around the City of Starke in Bradford County. Project will impact 58.06 acres of wetlands with a net functional loss of 46.470 UMAM credits. A Wetland Mitigation Project to offset these impacts was advertised under a Low Bid Design-Build procedure. The District awarded the contract to one of two shortlisted design-build firms. The winning bid was \$2,980,000 submitted by Alligator Creek Mitigation Bank, LLC. Alligator Creek Mitigation Bank, LLC, initiated construction activities in December 2015.

2) FDOT Project: CR 241 Bridge Replacement over Olustee Creek
Mitigation Project: In Planning.

Replacement of CR 241 Bridge over Olustee Creek in Columbia County. Project was originally determined to impact approximately 2.0 acres of wetlands. As of December, 2015, FDOT has not determined the actual wetland impact on this project, but it appears that the impacts may be less than 0.5 acres which may qualify the project for a General Permit. If the project does not qualify for a General Permit, mitigation will most likely take place on public lands within the Santa Fe Basin.

COMPLETED MITIGATION PROJECTS

AUCILLA RIVER BASIN

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

Replacement of US 98 Bridge across Aucilla River impacted 5.7 acres of wetlands. Mitigation included purchase of mitigation credits from San Pedro Bay Mitigation Bank, and water quality improvements for District owned Cabbage Grove and Mt. Gilead tracts. Mitigation credits (0.87 units) were purchased in November 2010, by the District using a total of \$43,500 in funding received from the FDOT.

UPPER SUWANNEE RIVER BASIN

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

Widening of CR 143 in Hamilton County from CR 146 to I-75 impacted approximately 1.23 acres of wetlands. District contracted with consultants to identify, evaluate, and construct mitigation activities within District-owned Woods Ferry Tract in Suwannee County. Mitigation involved hydrologic enhancement of seven wetland sites by improving drainage features to restore natural water flow. Mitigation activities were completed in November 2006. District received \$110,970 from FDOT. Evaluation of mitigation success was conducted by Jones, Edmunds and Associates in 2010 and shown to have met mitigation requirements.

WACCASSASSA RIVER BASIN

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

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

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

Widening of US 27/SR 500 from Chiefland to Bronson impacted 23.0 acres of wetlands. Mitigation involved improvements to the Cedar Key storm water system to prevent discharge of sediments, nutrients, bacteria, and heavy metals into the Gulf of Mexico. In addition natural water flow into wetlands was restored within the Goethe State Park, and approximately 1,000 acres of wetlands in Levy County were preserved by conservation easements to the District. Mitigation activities were completed in May 2007. District received \$1,713,490 from FDOT. Mitigation success will be evaluated in 2016.

SANTA FE BASIN

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

Replacement of the bridges impacted 2.3 acres of wetlands. Mitigation restored natural water flow between wetlands adjacent to Alligator Lake and Price Creek (both in Columbia County). Mitigation activities were completed in March 2001. District received \$60,000 from FDOT. Mitigation success will be evaluated in 2016.

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

Widening of CR 231 in Union County between SR 100 and the Baker County line impacted 1.96 acres of wetlands. Mitigation restored natural water flow, and removal of exotic plant species within wetlands in San Felasco Hammock State Preserve (Alachua County). Construction activities were completed in August 2004, and exotic plant removal was completed in June, 2011. The District received a total of \$166,476 from FDOT for wetland mitigation and a final report from FDEP in January, 2011. Mitigation activities were evaluated in 2013 and deemed to be a success.

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

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

Mitigation success was evaluated in 2012. Mitigation activities conducted at the CR 229 Bridge and the Lake Rowell project area were evaluated in 2013 and deemed to be a success.

STEINHATCHEE RIVER BASIN

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

Widening of SR 51 impacted 3.5 acres of wetlands in 2002. Mitigation restored natural water connections for wetlands in District owned Steinhatchee Springs Tract. District received \$279,174 from FDOT. Mitigation success will be evaluated in 2016.

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

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

WITHLACOOCHEE RIVER BASIN

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

Widening of SR 53 impacted 1.6 acres of wetlands. Mitigation created wetland and lake habitat at the West Farm Storm Water Facility in Madison County. Mitigation activities were completed in March 2001. District received \$260,325 from FDOT. Mitigation success will be evaluated in 2016.

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

Widening of SR 14 between Interstate 10 and the Madison city limits impacted 0.89 acres of wetlands. Mitigation restored natural water flow in wetlands within District owned Cabbage Grove Tract in Taylor County. District received \$75,594 from FDOT. Project was completed in 2006. District conducted operation and maintenance improvements at this site in December 2011. Mitigation success will be evaluated in 2016.

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

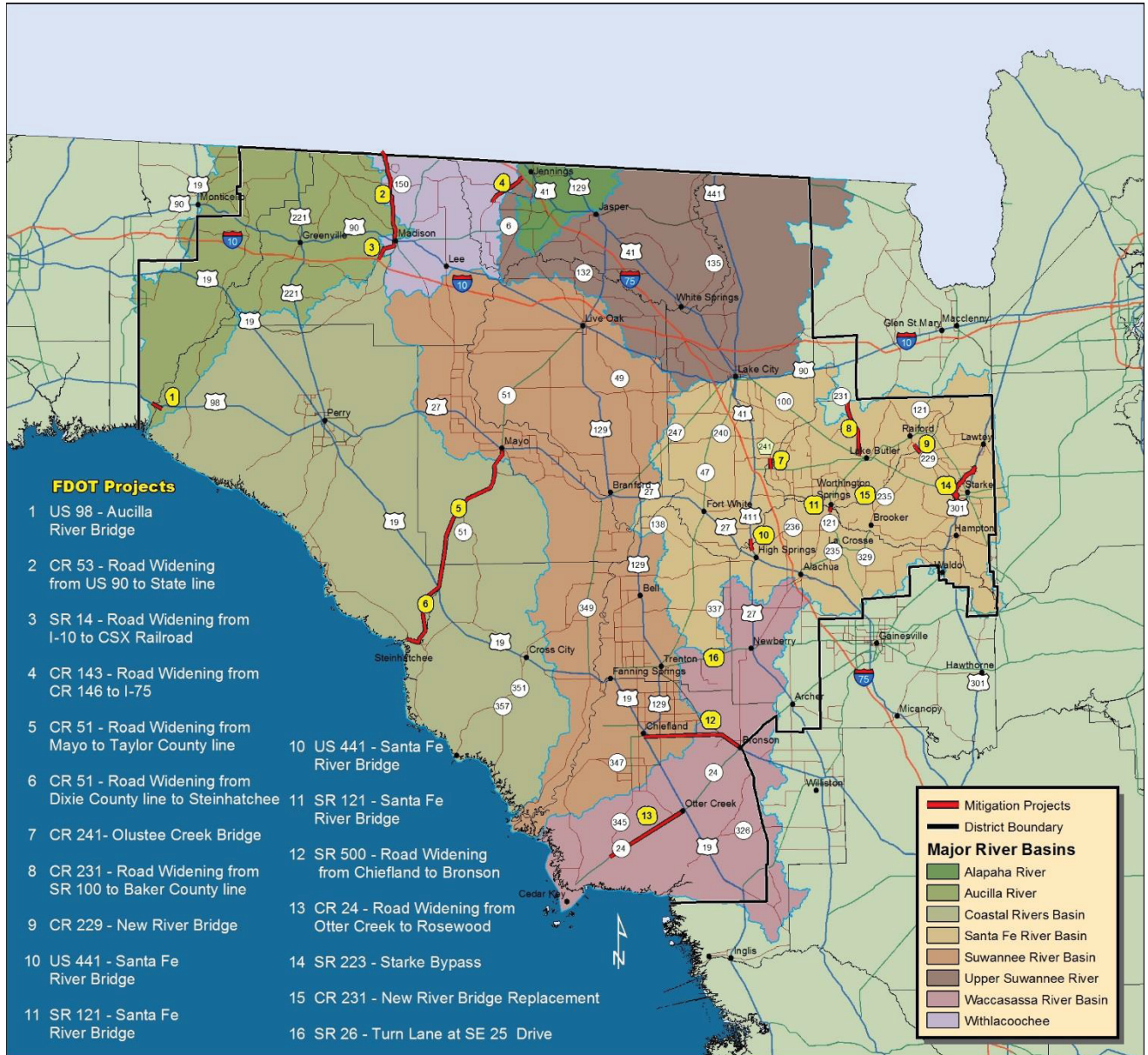


Figure 2. General location of wetland mitigation sites within SRWMD for FDOT construction projects.

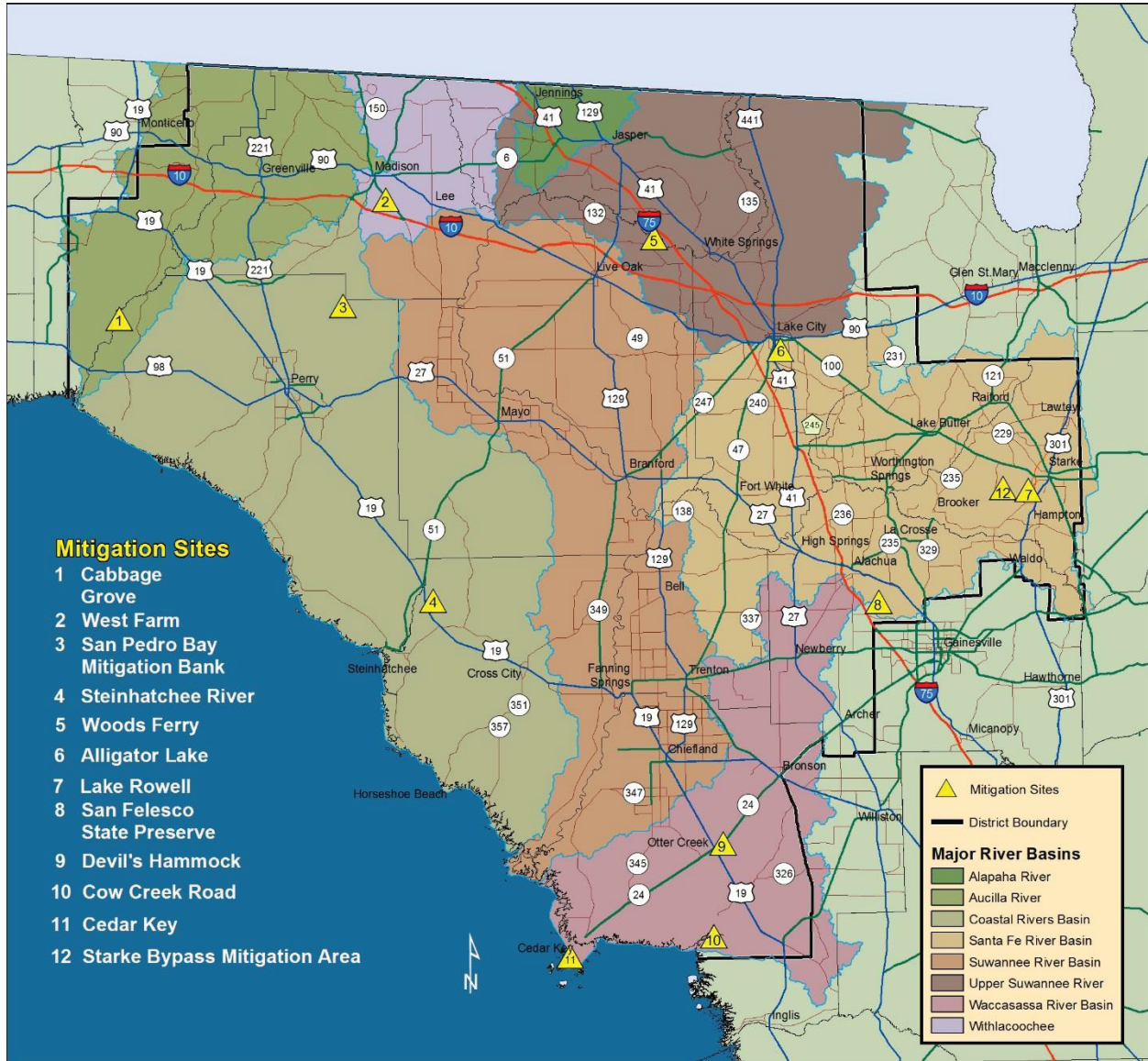


TABLE 1. FDOT CONSTRUCTION PROJECTS WITH WETLAND IMPACTS AND ASSOCIATED MITIGATION PROJECTS.

<i>River Basin</i>	<i>FDOT Project Location</i>	<i>FDOT Work Number</i>	<i>ERP Number</i>	<i>Impact Acres</i>	<i>Wetland Type</i>	<i>Mitigation Project</i>	<i>Revenue from FDOT</i>	<i>Total Funds Expended</i>
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	00-0067	1.00	Forested	Alligator Lake Surface Water Improvement and Management Program (SWIM)	\$60,000	\$60,000
		2110344	99-0069	1.30	Forested			
	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. CR 241 Over Olustee Creek Bridge Replacement	2116631	TBD	2.00	Forested	TBD	TBD	TBD
	5. SR 223 Starke Bypass	2080014,5,6	ERP-007-213985-1	58.47	Forested	Starke Bypass Mitigation Area	\$2,980,000	\$2,517,000
	6. CR 231 Bridge Replacement	433957	TBD	1.5	Forested	TBD	TBD	
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	\$1,713,490	\$1,713,490
						B. Cow Creek restoration in Goethe State Forest		
						C. Wetland preservation in Levy County		
	2. SR 24 Widening from Otter Creek to Rosewood	210384	04-0477	9.95	Forested	Devil's Hammock/47 Runs Enhancement/ Restoration	\$180,913	\$190,694
3. SR 26 Westbound Turn Lane	438077	TBD	1.0	Forested	TBD	TBD	TBD	
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

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