

Water for Nature

Water for People



Strategic Plan 2016-2020

Suwannee River Water Management District



SRWMD STRATEGIC PLAN



A message from the Chairman

During Fiscal Year 2014-2015 the District made significant strides in refining its foundation of science-based decisions by introducing critical projects to achieve strategic initiatives and establishing partnerships to accomplish core mission objectives.

The Governing Board took a progressive step forward to enhance the District's groundwater monitoring network. The monitoring well network improvement plan will eliminate the monitoring data "gaps" in areas throughout the District. Closing these gaps is essential for groundwater modeling improvements and long-term trend monitoring assessments.

The District has reached agreements with the four major electrical cooperatives providing service primarily to agriculture. These agreements enable the District to gather essential water

use monitoring data necessary for water supply planning, water use demand projections and environmental modeling.

The District's efforts in collecting continuous real-time first magnitude spring water quality data is another technological enhancement that provides the public with access to improved data. This new data collection effort involves a collaborative partnership between the District, the Florida Department of Environmental Protection, and the US Geological Survey. As a result of the enhanced tools and partnership, water quality measurements are taken several times an hour.

The District will present the data on its website employing a springs dashboard that provides an at-a-glance view of water quality and flow, contributing factors affecting the first magnitude springs, and interactive maps. Manatee Springs is the District's first dashboard to launch. Additional first magnitude springs will be added to the dashboard throughout the coming year.

More comprehensive monitoring of springs will allow a better understanding of how activities in a springshed and regional aquifer conditions affect springs. The enhanced data will help implement effective strategies to reduce nutrient loading and meet minimum flows and levels. Efforts to reduce nutrient concentrations and ensure

adequate flows support healthy spring ecosystems. The District is enhancing its structural foundation to ensure comprehensive science-based decisions are made to protect and restore our water resources.

We count the prior year a success and optimistically look forward to new opportunities to serve our communities.



Governing Board

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Chairman,**

Lower Suwannee Basin

**Alphonas Alexander - Vice
Chairman,**

Upper Suwannee River Basin

**Donald R. "Ray" Curtis III -
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Coastal Rivers Basin

**Kevin W. Brown,
Santa Fe, Waccasassa Basins**

**George M. Cole,
Aucilla River Basin**

**Virginia H. Johns,
At Large**

**Gary F. Jones,
At Large**

**Virginia Sanchez,
At Large**

**Guy N. Williams,
At Large**

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District Overview

Vital Statistics

- **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
- **Contributing River Basins:**13
 - Suwannee, Santa Fe, Withlacoochee, Aucilla, Alapaha, Ichetucknee, Fenholloway,
 - Steinhatchee, Econfina, Waccasassa, and Wacissa. (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 (District) works to protect and manage 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's organization is structured by the Executive Office, Administration and Operation Division, Water Supply Division, Water Resources Division, and Resource Management Division.

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 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. 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 an additional resource management issue. The District employs voluntary, locally based, incentive programs like the Suwannee River Partnership to conserve water and improve nutrient management to reduce loadings. Additionally, the District partners with the Florida Department of Environmental Protection (FDEP) to help implement Basin Action Management Plans.

The District faces challenges in managing the water and related resources as the region continues to grow and develop. Groundwater withdrawals both inside and outside of its boundaries may affect the District's water resources. Increasing water use efficiently, water storage and aquifer replenishment are key strategies to ensuring adequate water supplies

District Overview

The District's core mission is to implement the programs described in Chapter 373, Florida Statutes, 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.

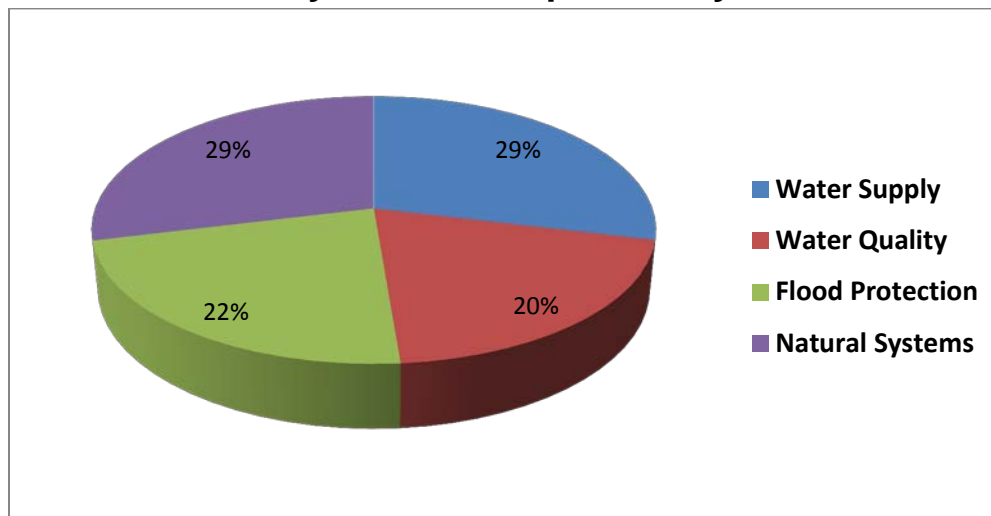
- To provide a land acquisition and management program that provides conservation and water resource management.

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 tax base, funding from the state legislature is necessary to achieve statutory requirements. Federal, state, and other sources of our funding are essential to assisting the District accomplishing 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. Federal, state, and other sources make up approximately 57% of our current funding.

FY 2014-2015 District Budget by Area of Responsibility



District Overview

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

Strategic priorities for 2016 – 2020

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 efficiently for all water uses.*

Natural Systems and Water Quality

- **Minimum Flows and Levels**
 - *Goal: Ensure District priority water bodies are protected for current and future generations.*
- **Heartland Springs Initiative**
 - *Goal: Ensure springs have adequate flow, maintain good water quality, and sustain healthy biological communities.*
- **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.*

Accomplishments of 2014

Water Supply

- District, FDACS, and DEP along with its cost-shared program has resulted in 460 agricultural irrigation efficiency systems for an estimated offset of 13.5 million gallons per day (mgd) of groundwater use
- Continued the joint Regional Water Supply Plan with St Johns River Water Management District (SJRWMD)
- Completed an update to the District's regional groundwater flow model (North Florida Model version 2.0)
- Continued the North Florida Regional Water Supply Partnership with the Florida Department of Environmental Protection (FDEP), Florida Department of Agriculture and Consumer Science (FDACS), and the SJRWMD
- Continued water resource coordination with the State of Georgia
- Continued Project Planet and Water Conservation Hotel and Motel Program (CHAMP)
- Continued development of the North Florida Southeast Georgia Regional Groundwater Flow Model
- Completed the consumptive use permitting consistency process
- Expanded agricultural water use monitoring to over 300 systems, some in partnership with electric cooperatives, saving the District over \$1,000 per monitoring site
- Initiated Regional Initiative Valuing Environmental Resources (RIVER) programs conserving an estimated 0.156 mgd, of which 0.120 mgd is in water resource caution areas.

- Initiated RIVER programs that improved water supply services for 8,938 customers and several businesses
- Initiated the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project
- Initiated the Brooks Sink dispersed water storage project
- Initiated the ground water well monitoring improvement plan

Water Quality

- Continued Agricultural cost-share partnership reducing nitrates use by 1.4 million pounds annually
- Initiated the Ichetucknee River Springshed Water Quality Improvement to convert the City of Lake City's spray field to a wetland treatment system that will reduce nitrogen loadings by up to 85%
- RIVER program funded the removal of 64 septic tanks resulting in reduced nutrient loading (approximately 1 ton of nitrates per year) to natural water resources
- RIVER program funded two public supply wells to provide adequate capacity to customers and reduce lead in drinking water for customers
- RIVER program funded a project to prevent 17 tons of suspended solids from entering surface waterbodies by providing stream bank stabilization
- RIVER program funded a project to prevent sediment discharge from discharging into the aquifer and Outstanding Florida Waters
- RIVER program funded a project which repairs a public storage tank which improves that water quality to its customers

ACCOMPLISHMENTS

Natural Systems

- Rule adoption pending for the Lower Santa Fe and Ichetucknee Rivers and Priority Springs MFLs
- Continued development of MFLs for the Upper Suwannee River, Middle Suwannee River, 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
- Completed selective timber harvests at Buck Bay, Steinhatchee Springs, Steinhatchee Rise and harvested on 473 acres of Little River Tract with additional 199 acres of timber sold
- Treated 52 active exotic invasive plant infestations and monitored 41 active exotic invasive plant infestations
- Completed a tract by tract assessment of District Roads to ensure long-term sustainable maintenance
- Acquired National Wild Turkey Federation and Florida Fish and Wildlife Conservation Commission (FWC) Grant for an Upland Pine Restoration project
- Initiated the Silviculture Water Yield research project at Little River Tract
- Coordinated the herbicide treatment of 388 acres to meet the District vegetative goals for upland restoration
- Acquired FWC Grant for exotic invasive species control on Lake Rowell and Withlacoochee Quail Farms Tracts

- Coordinated and participated in 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

Flood Protection

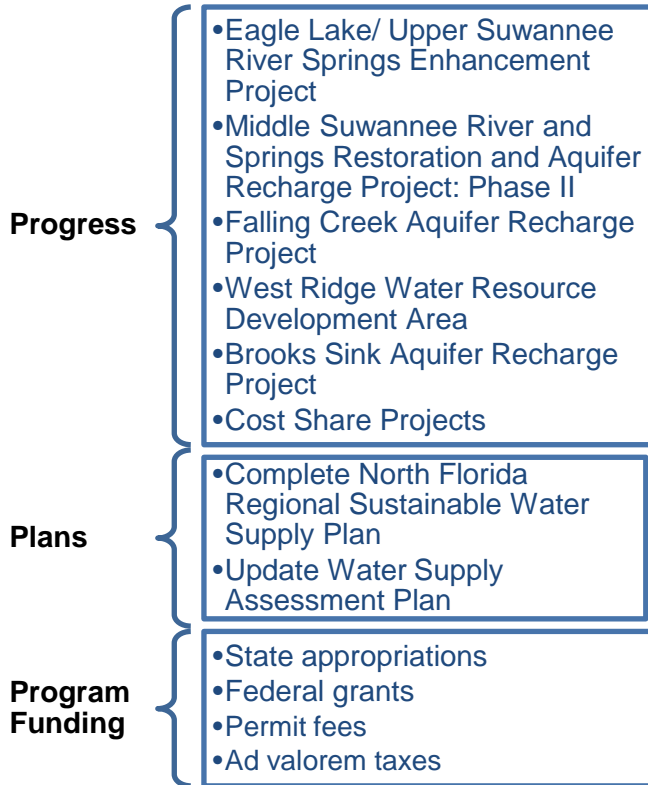
- Continued the Risk Map discovery process for the Santa Fe River, Upper Suwannee River, Coastal Rivers and Withlacoochee river basins
- Completed 550 square miles of Light Detection and Ranging (LiDAR) mapping bringing District-wide coverage to approximately 90%
- Completed Digital Flood Insurance Rate Map (DFIRM) updates for the City of Live Oak and Suwannee County; DFIRMs now exist for all counties within the District boundaries
- RIVER program funded flood protection for 55 homes in Bradford County and 5 homes and several public facilities in the City of Perry while providing 130 acre feet of flood storage
- Received grants from Florida Department of Emergency Management (FDEM) to support purchase of backup generator for District headquarters and conduct a public information campaign on upgrading the District's flood risk communications
- Initiated feasibility analysis of flood mitigation projects in Bradford County
- Acquisition of West Ridge Water Development Area including buffer zone for Camp Blanding

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

Fast Facts:



Partnerships

The delicate balance of sustainable water supply and demand in north Florida is approached and addressed using partnerships. State agencies neighboring water management districts, counties, municipalities, universities, water authorities and public sector. Population, agriculture commercial entities and other users both within and outside district boundaries influence this delicate balance. For example, the District’s partnership with Florida Department of Agriculture and Consumer Services (FDACS) will improve agricultural water use efficiency and reduce nutrient loading with water-saving equipment through cost-sharing agreements with farmers. The District also partners with farmers

to collect water use data, which is vital information for the water supply planning process.

Three years ago, as a strategic result of a mutual desire to ensure sustainable supply the North Florida Regional Water Supply partnership (NFRWSP) was created. Suwannee River and St. Johns water management districts along with the FDEP applied a cooperative approach to protect natural resources in a cost-effective manner, maintain sustainable water supplies in both districts through collaborative planning, scientific-tool development and other partnership efforts.

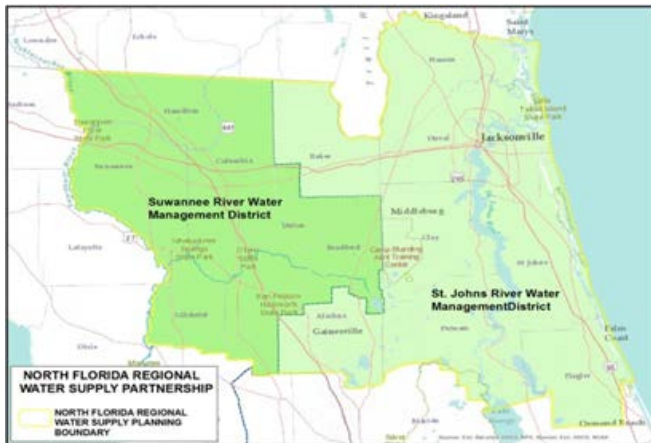
Overall, these partnerships are instrumental in the development of water supplies protecting water resources, aquifer recharge and implementing alternative water supply projects.

Progress

Since its inception in 2011 the NFRWSP has reviewed and made substantial recommendations on the joint regional water supply planning area, on the methodologies for the projecting water use, and the Lower Santa Fe and Ichetucknee minimum flows and levels (MFLs) and recovery strategies.

The interconnectivity of water bodies and natural systems with the regional aquifer is evident through the fluctuations of levels of rivers, springs and the groundwater. The development of minimum flows and levels is critical to the work of the District and protection of resources. Science-based data employed by the will allow for proper planning recharge the

STRATEGIC PRIORITY – Water Supply
Sustainable Water Supply continued



North Florida Regional Water Supply Partnership Planning Region

aquifer, employ alternative water supplies, and develop regional solutions.

Developing alternative water supplies that offset groundwater withdrawals encourage water conservation and regional water supply developments are critical components to ensure adequate water supply. Alternative water supplies offset dependency on groundwater and water resource development projects expand available sources to assist in maintaining sustainable resources and help make water sources more drought resistant.

Projects

Projects slated for 2015 include the Middle Suwannee River and Springs Restoration, Aquifer Recharge project, Eagle Lake Project and Brooks Sink Aquifer Recharge Project.

The Middle Suwannee River and Springs Restoration and Aquifer Recharge project began in 2013 and is in the final stages of permitting. Construction is scheduled to begin

in early 2015. The project will increase groundwater discharge to the Middle Suwannee River, and augment groundwater supplies in Lafayette and Dixie Counties, which also benefits springs and agricultural users. This project is made possible through funding from the State of Florida, Dixie County and the District.

The Eagle Lake / Upper Suwannee River Springs Enhancement Project (Project) is a public-private partnership with Potash Corp and the District. The project will reduce the nutrient loading to the Upper Suwannee River and reduce withdrawals from the Upper Floridan aquifer (UFA) by up to 20 million gallons per day, thereby benefitting spring flows. The project will facilitate the recovery of a portion of the water from Eagle Lake that would otherwise discharge into Swift Creek and the Upper Suwannee River. This reduction in flow from Eagle Lake will reduce total nutrient loading to the river between the White Springs and Ellaville.

Focus Points

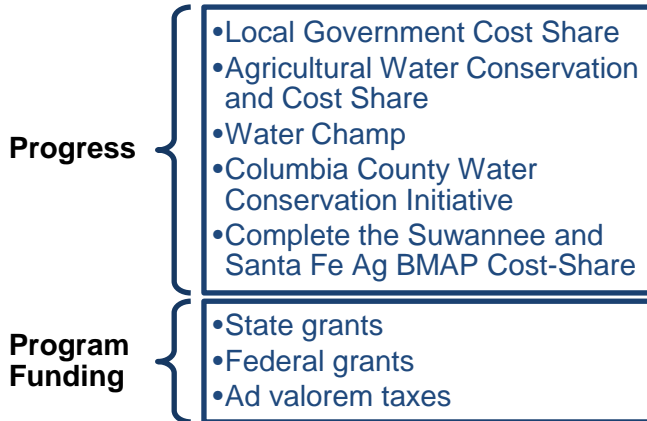
The District is pursuing enhancements to its groundwater monitoring program through a Monitor Well Improvement Plan approved by the Governing Board at its November 2014 meeting. The current groundwater monitoring program will be enhanced through the location of properties and installation of additional 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.

The District's water use permitting program also helps ensure that adverse impacts to our water supplies and natural systems do not occur and existing legal users are protected.

Strategic Priority — Water Supply Water Conservation

Goal: Maximize water conservation for all water uses.

Fast Facts



Committed to increasing water conservation efforts, the District and its partners surpassed several milestones. Conservation measures are encouraged through management incentives and regulatory mechanisms.

Partnerships

The City of Lake City, Columbia County and the District are moving with a water conservation project that will save an estimated 32 million gallons per year (mgy) benefiting Ichetucknee Springs. The project engages local businesses through a cost-share rebate to replace existing toilet and faucet fixtures with high efficiency units.

An effective program the District continued in 2014 was the Regional Initiative Valuing Environmental Resource (RIVER). RIVER provides funding assistance to governmental entities for projects that further the District's core mission. During 2014, five conservation projects were funded with an estimated water savings of 0.156 mgd or 56.9 mgy and one reclaimed water project was funded, yielding an

estimated groundwater savings of more than 0.08 mgd or 29 mgy.

The Suwannee River Partnership (SRP) has been instrumental in implementing conservation partnerships with the agriculture community in the Suwannee River Basin. During 2014, SRP coordinated with the District and agricultural water users to bring Mobile Irrigation Lab (MIL) services to area farmers. The MILs in SRWMD performed 156 evaluations to determine irrigation system efficiency and uniformity for agricultural producers on 11,490 acres of irrigated land. The MILs identified approximately 3.5 million gallons per day (mgd) of actual water savings, which have been achieved via irrigation efficiency improvements, as well as 4.3 mgd of future potential water savings.

The District initiated an agricultural cost-share program to agricultural producers to implement irrigation efficiencies to reduce ground-water pumpage. Since initiation of the program, the District and it funded 460 irrigation efficiency projects that are estimated to have a water savings of 13.5 mgd. 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. Other agricultural cost-share projects include: aquiculture reuse, denitrification reactors pilot projects, precision irrigation/fertigation, dairy The District's Ag Team provides assistance to

**STRATEGIC PRIORITY — Water Supply:
Water Conservation**

wastewater and tailwater recovery projects. agricultural operations for conserving optimal irrigation conservation measures are implemented in the permitting process. The District encourages implementation of urban conservation practices such Florida-Friendly Landscaping™ and Water CHAMPSM (Water Conservation Hotel and Motel Program).

The District is partnering in 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.

Conservation is an efficient and effective means to reduce demands on our water supplies. It is estimated that over half of residential water use is for lawn and landscape irrigation. Installation of Florida-Friendly Landscaping™ will result 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 20 local governments throughout the District have adopted some form of the model ordinance.

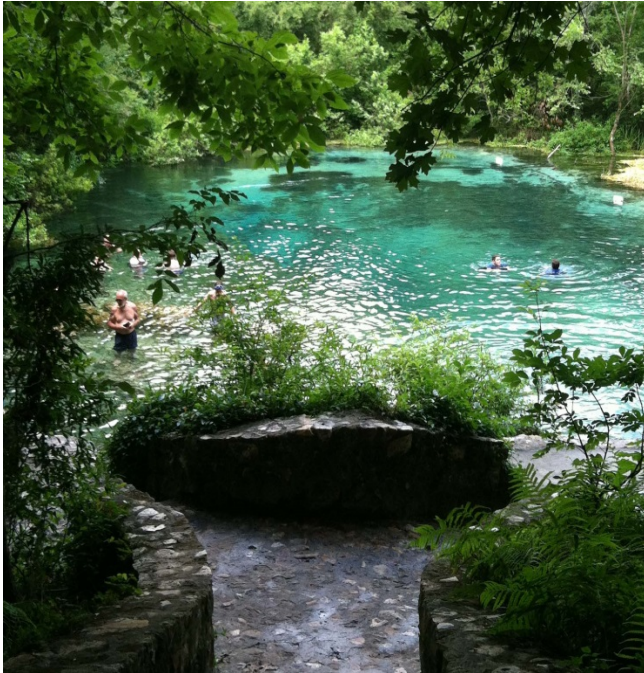


Suwannee County Nursery uses water conservation through drip irrigation September 2014

Strategic Priority — Natural Systems and Water Quality

Minimum Flows and Levels

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



Ichetucknee Springs, Columbia County, FL, June 2014

Fast Facts:

- Progress** {
- Adopted and implemented MFLs for the Lower Suwannee River, Upper Santa Fe River, Waccasassa River, Little Fanning Spring, Fanning Spring, Madison Blue Spring, Manatee Spring, and Levy Blue Spring.
 - Rule Adoption for Lower Santa Fe and Ichetucknee and priority springs MFLs underway
 - Implementing projects to reduce water use, offset groundwater withdrawals and beneficial recharge

- Program Funding** {
- State appropriations
 - Ad valorem taxes

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

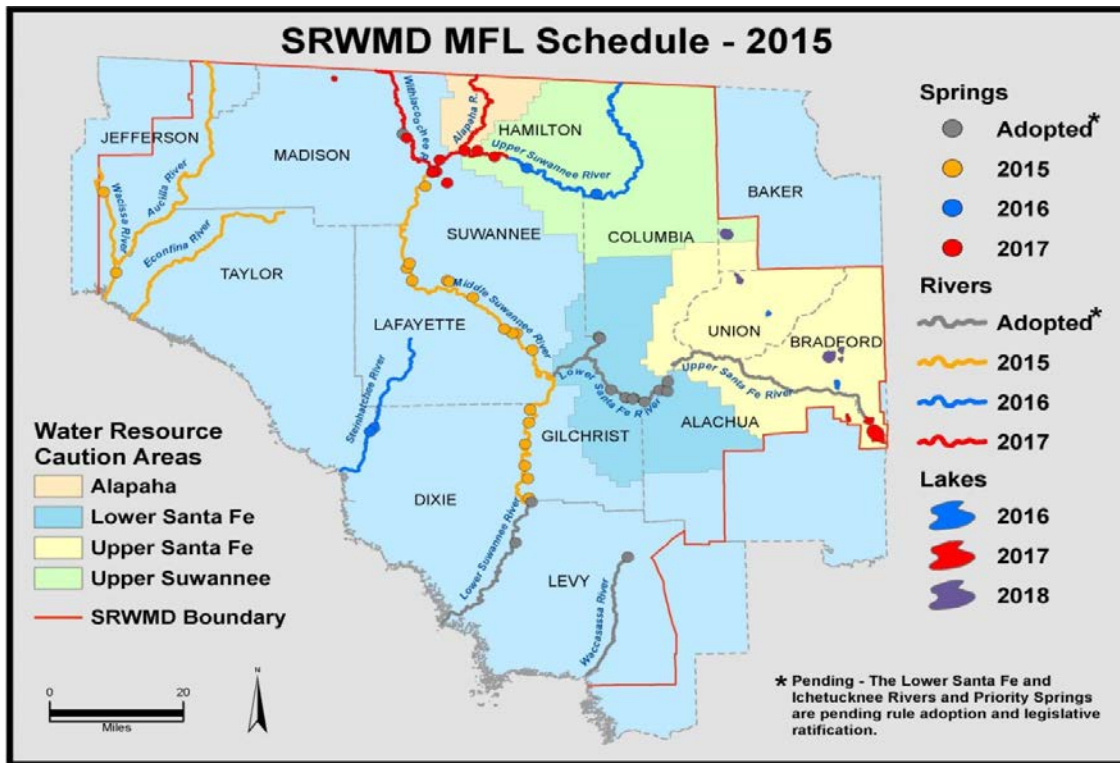
The District Governing Board establishes minimum water levels (MFLs) and/or flows as necessary to prevent significant harm from water withdrawals to the water resources or ecology of an area.

The District’s MFLs program is a science-based process that uses the best available information to determine the recommended MFLs. Information sources includes 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 in those cases where a water body currently does not meet its MFL and prevention strategies in those cases where a water body is projected to fall below its MFL. The prevention and recovery strategies are adopted concurrently with the MFLs.

Annually, the District publishes a priority list of MFL water bodies with an anticipated completion schedule. This list is reviewed and submitted to the FDEP for approval.

2015 Minimum Flows and Levels Priorities Map



The District has also identified priority water bodies that are potentially affected by withdrawals in an adjacent water management district known as cross boundary affect. For these water bodies, the District can engage a statutory process, to request that the FDEP 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 a recovery strategy for the Lower Santa Fe and Ichetucknee Rivers and priority springs that have cross boundary affects present a new paradigm for Florida. FDEP'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 with the districts in the consumptive use permitting process to ensure the recovery strategy is effective. To be effective, it is necessary that regulatory strategies be consistent and

equitable across water management district boundaries.

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. Based on the proposed 2015 MFL Priority List, the District is proposing to set MFLs on its priority water bodies by 2018.

Strategic Priority — Water Quality and Natural Systems

Heartland Springs Initiatives

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



Little Fanning Spring, Fanning Springs State Park, Gilchrist County, July 2014

flow periods the Suwannee River, Santa Fe River and Withlacoochee River essentially become spring runs due to substantial groundwater inputs. Other rivers such as the Ichetucknee and Wacissa are primarily spring-fed year round.

This unique environmental condition truly makes the District the springs heartland of Florida. The Heartland Springs Initiative is a comprehensive, multi-faceted approach involving every aspect of the District's management and regulatory programs.

The highly interactive character of ground and surface water in the District makes springs much like the proverbial "canary in the coal mine." If the aquifer can't support sufficient flow of good quality water it becomes less likely our springs' biological communities will be healthy. In addition, spring health is also promoted when the harmful effects of invasive species and disturbance are minimized.

Springs provide a vast array of recreational opportunities and are important economic drivers that create jobs for the region. Therefore, preserving the flows, water quality and biological health of our springs will best reflect our ultimate success in protecting the water resources of the region and the State.

Partnerships

A model for springshed management is establishing and working via partnerships. Within the District there are several successful partnership examples. Monitoring is a fundamental element of the District's Heartland Springs Initiative. 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. Data are used to identify long-term trends and

Fast Facts

- | | | |
|------------------------|---|---|
| Projects | } | <ul style="list-style-type: none"> •Water Quality Improvement Projects •Identify long-term trends •Springshed Delineation •Increase Flow and Water Quality Real Time Monitoring |
| Program Funding | } | <ul style="list-style-type: none"> •State appropriations •State grants •Permit fees •Ad valorem taxes |

Springs are among the most visible and prized natural and recreational water resources of the District.

The District has the highest concentration of first magnitude springs in the United States and the highest concentration of springs in Florida is within the District. There are more than 300 known springs within the District. During low

Strategic Priority — Water Quality and Natural Systems
Heartland Springs Initiative

identify management challenges. The District monitors 38 priority springs to assess their condition and plans to increase its monitoring of key biological features. Working with the FDEP and U.S. Geological Survey, the District has begun continuous monitoring, including nitrate, at five priority springs, Fanning, Manatee, Ichetucknee Blue Hole, Troy and Madison Blue Springs. These data are available via the District's website www.myswanneeriver.com.

Other partnership examples include and SRP and the Ichetucknee Partnership (TIP). The District supports TIP and SRP by planning, funding, and implementing Best Management Practices; initiating projects; providing water quality and quantity data; and administering outreach and educational programs.

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. The SRP now has more than 277,000 acres within the District enrolled in one or more FDACS BMP programs. Estimated nitrogen reduction is 3,250 tons per year. Estimated water saving is one billion of gallons of water per year.

Progress

In 2014, the legislature again provided support for additional springs restoration projects within the District. This year's project will support better nutrient and water management on agricultural operations, assist water conservation efforts in Lake City and Columbia County, help Bronson and Fanning Springs expand central sewer service and in the process reduce nutrient loading associated with septic tanks, and work with cooperators to become more water efficient and in the process significantly reduce both their

groundwater use and nutrient loading throughout the District.

It is anticipated that a BMAP will be adopted for the Middle and Lower Suwannee River. The BMAP for the Santa Fe River has been adopted.

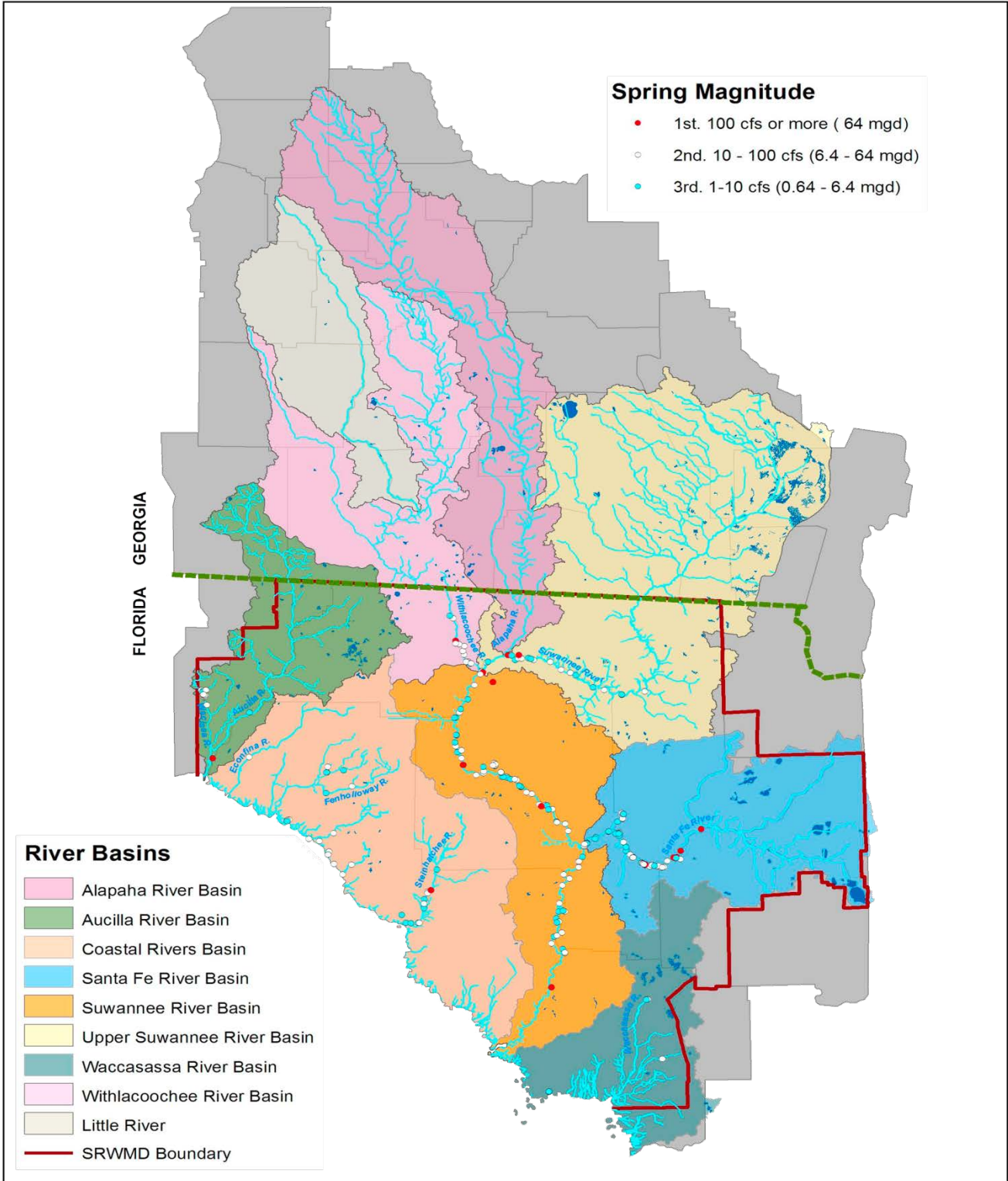
Stormwater, water quality restoration, and reuse projects have been developed and implemented in priority springshed basins to reduce groundwater declines, projects to improve water quality and offset exiting groundwater withdrawals.

The District and FDEP have joined efforts on delineating springsheds and several springs restoration projects. The first is an expansion of the Mallory Swamp recharge project that will benefit a variety of springs along the Middle Suwannee River. The second project involves the conversion of Lake City's wastewater sprayfield into a constructed treatment wetland that will reduce nitrogen concentrations before the water recharges the aquifer through a system of sinks along the Ichetucknee Trace and to springs along the Ichetucknee River. Both projects should be under construction by January 2015.



Manatee Springs, Manatee Springs State Park, Levy County Florida, July 2014

General Springs and River Basin Map



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.



West Ridge Water Development Area buffer zone

Fast Facts:

Progress

- West Ridge Water Development Area
- Prescribed burns
- Partnerships established to accomplish the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project

Program Funding

- Surplus lands sales
- National Guard Bureau for base buffering
- 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 protected through acquisition over 158,365 acres. 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. In addition to acquiring lands for conservation, the District is partnering with Camp Blanding and the FDEP to acquire lands for military base buffering. These acquisitions provide a dual benefit of expanding military base buffering while allowing the District to implement flood protection and water resource development project.

Strategic Priority — Natural Systems Water Management Lands

Partnerships are often established to address the water management on non-district owned lands. Through public-private partnerships strategies are implemented to protect natural resources.

An example of an effective ongoing partnership 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. This project will restore wetlands and sandy bottom lakes, increase springs flows and augment water supplies for domestic and agricultural uses in Lafayette and Dixie Counties. This effort also benefits springs and agricultural users. To achieve the objective the District's approach includes reestablishment of natural drainage patterns adjacent to Mallory Swamp, and using natural recharge features and an aquifer recharge well at strategic locations. Construction is scheduled to begin in early 2015.

Acquisition of land interests will play a key role in supporting the District's initiative of monitor well network expansion. Many of the new monitor wells will need permanent access to enable drilling of wells and operation and maintenance of monitoring equipment.

Ensuring the optimal public and water resource benefit, 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.

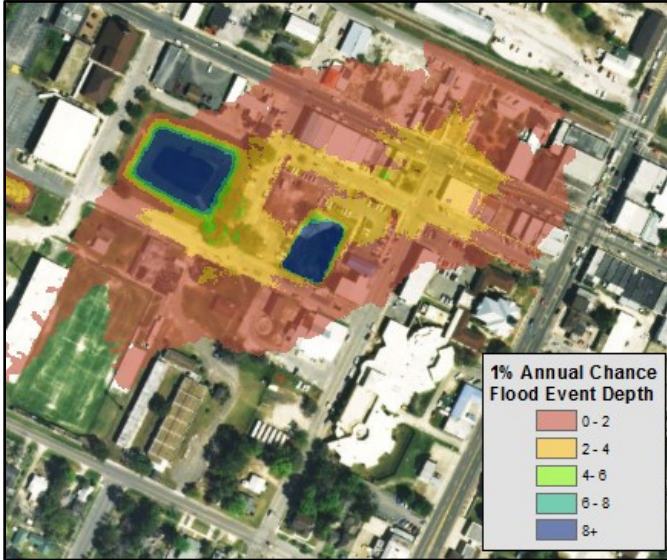
A primary role of the District's land management effort is to restore or enhance the natural systems that provide water resource benefits. This is accomplished first by restoring the historic hydrologic regime. The District is reversing past drainage practices to rehydrate wetlands and store water on the landscape. This water can then recharge the aquifer or help to maintain stream flow during times of drought. Next, District staff works to restore and maintain the natural plant communities on the property. Where past land uses have degraded wetlands, the District may plant wetland species or in some other way manage the mix of species occurring on the site. The District's timber management activities are aimed at restoring the multi-aged stands of pine on their appropriate sites. Since many natural communities, particularly those dominated by pine, are adapted to fire, the District makes extensive use of prescribed burning. All District operations follow best management practices to ensure that there are no offsite impacts.

Increasingly, all of Florida'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.

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

Fast Facts

- | | | |
|------------------------|---|--|
| Projects | } | <ul style="list-style-type: none"> • Enhance regulatory flood maps • Provide Risk MAP products for the Waccasassa and Withlacoochee River basins |
| Program Funding | } | <ul style="list-style-type: none"> • Ad valorem • Permit fees • Federal grants |

Rain and flooding are naturally occurring events throughout the State of Florida. 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 prevent flooding.

The District's non-structural approaches consist of 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

District and US Geological Study 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 2015.

LiDAR data is applied across several of research and practical applications 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 (Risk MAP) program.

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

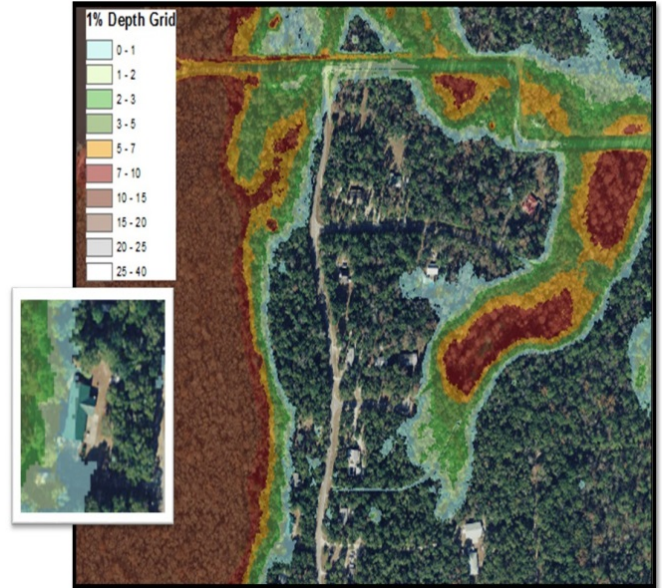
The District will continue its partnership with local communities to develop accessible and accurate floodplain data through the FEMA partnership. The District's webpage provides current FEMA floodplain elevations through the Flood Information Portal.

In addition to floodplain mapping, the District implements an environmental resource permitting program (ERP) 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.

Strategic Priority — Flood Protection Non-Structural Flood Protection

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.

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 system.



Inundation map shows the depth of flooding



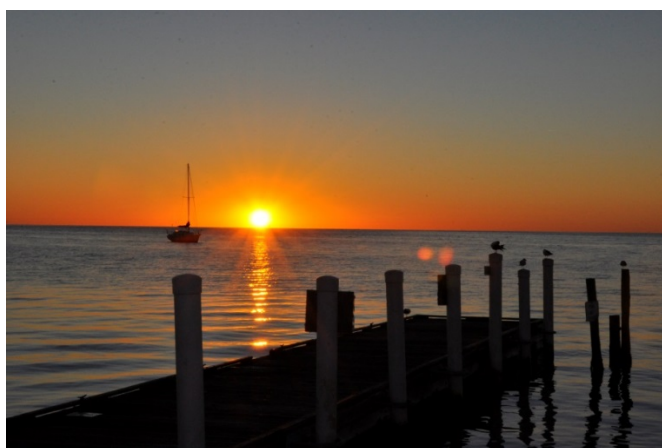
Convergence of the Suwannee River and Withlacoochee River, September 2014

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 Gross per capita 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 good 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 | Assessment Number of surplus parcels sold |
| Non-Structural Flood Protection | Percentage of communities with Risk MAPS completed | Number of communities with Risk MAPS | Communities with Completed Risk MAPS |

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 |



Sunrise at Cedar Key, October 2014

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Appendix

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 2013-2014 | |
|--|-----------------------|------------|
| | Annual | Cumulative |
| Number of MFLs and Reservations, by water body type, established annually (fiscal year) and cumulatively | | |
| Aquifer | 0 | 0 |
| Estuary | 0 | 0 |
| Lake | 0 | 0 |
| River | 0 | 3 |
| Spring | 0 | 5 |
| Wetland | 0 | 0 |
| Number and percentage of water bodies meeting their adopted MFLs | | |
| Number of water bodies meeting MFLs | 9 | 100.00% |
| Number of water bodies with adopted MFLs | 9 | |

NS Objective 2: Restore or improve degraded water resources and related natural systems to a naturally functioning condition.

| Annual Measures | Fiscal Year 2013-2014 | |
|---|-----------------------|---------|
| | Annual | Percent |
| For water bodies not meeting their adopted MFLs, the number and percentage of those water bodies with an adopted recovery or prevention strategy. | | |
| Number of water bodies with an adopted recovery or prevention strategy | 0 | 0.00% |
| Number of water bodies supposed to have an adopted recovery or prevention strategy | 0 | |

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 | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Fiscal Year 2012-2013 |
| Number of acres and percentage of District lands evaluated for surplus. | | | | | | | | | | |
| Number of acres evaluated for surplus | 0.00 | #DIV/0! | 0.00 | #DIV/0! | 0.00 | #DIV/0! | 0.00 | 0.00% | 0.00 | #DIV/0! |
| Total acres of District lands held at the beginning of the fiscal year | 0.00 | | 0.00 | | 0.00 | | 158,283.26 | | 0.00 | |
| Number of acres and % of surplus lands sold, exchanged, or leased. | | | | | | | | | | |
| Number of acres of surplus lands sold, exchanged, or leased | 0.00 | #DIV/0! | 0.00 | #DIV/0! | 0.00 | #DIV/0! | 537.11 | 61.81% | 537.11 | #DIV/0! |
| Total acres of land approved for sale, trade or lease by the Governing Board during the quarter | 0.00 | | 0.00 | | 0.00 | | 868.90 | | 0.00 | |

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 | |
|---|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------------------|-----------------------|
| | Number | Cost/Acre | Number | Cost/Acre | Number | Cost/Acre | Number | Cost/Acre | Number | Fiscal Year 2012-2013 |
| Cost/acre for lands managed by the District (not total). | | | | | | | | | | |
| Dollars expended in land management where the District serves as the lead manager | \$124,284.26 | \$0.81 | \$395,249.31 | \$2.59 | \$700,182.42 | \$4.58 | \$489,435.80 | \$3.20 | \$1,709,151.79 | \$11.18 |
| Number of acres where the District serves as the lead manager | 152,841.33 | | 152,841.33 | | 152,841.33 | | 152,841.33 | | 152,841.33 | |
| Cost/acre prescribed fire. | | | | | | | | | | |
| Dollars expended for prescribed burning | \$5,831.34 | \$2.34 | \$195,162.46 | \$49.95 | \$126,641.90 | \$52.40 | \$42,082.53 | \$183.85 | \$369,718.23 | \$40.87 |
| Number of acres burned | 2,493.00 | | 3,907.00 | | 2,417.00 | | 228.90 | | 9,045.90 | |
| Cost/acre for invasive plant control. | | | | | | | | | | |
| Dollars expended controlling invasive plants | \$8,305.64 | #DIV/0! | \$2,110.00 | \$0.00 | \$5,780.65 | \$635.24 | \$8,678.96 | \$997.58 | \$24,875.25 | \$1,397.49 |
| Number of acres treated | 0.00 | | 0.00 | | 9.10 | | 8.70 | | 17.80 | |

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 | |
|--|--------------------|---------|
| | Number | Percent |
| Percentage of Maintenance Activities Completed on Schedule | | |
| 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 | | 12 | | 28 | | 29 | | 28 | 28.00 | |
| Individually processed permits | | 92 | | 51 | | 40 | | 50 | 51.00 | |
| All authorizations combined | | 21 | | 28 | | 36 | | 30 | 29.00 | |
| For ERPs, cost to issue permit for all permit types | Number | Cost/Permit | Number | Cost/Permit | Number | | Number | Cost/Permit | Number | Cost/Permit |
| Total cost | \$15,414.84 | \$169.39 | \$14,970.60 | \$191.93 | \$17,927.87 | \$320.14 | \$27,318.89 | \$390.27 | | |
| Number of permits | 91 | | 78 | | 56 | | 70 | | | |
| 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 | 91 | 22.75 | 78 | 19.50 | 56 | 14.00 | 70 | 17.50 | | |
| Number of staff for the permit area | 4.00 | | 4.00 | | 4.00 | | 4.00 | | | |

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 | 119 | |
| Percentage of domestic wastewater reused | | |
| Quantity (mgd) of domestic reused wastewater | 10.36 | 91.28% |
| *Quantity (mgd) domestic wastewater produced | 11.35 | |
| *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 | 36.00 | | 19.00 | | 24.00 | | 28.00 | | 26.00 | |
| All authorizations combined | 40.00 | | 19.00 | | 24.00 | | 41.00 | | 31.00 | |
| 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 | \$35,485.75 | \$695.80 | \$37,934.92 | \$592.73 | \$29,963.27 | \$535.06 | \$26,719.06 | \$954.25 | | |
| Number of permits | 51 | | 64 | | 56 | | 28 | | | |
| 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 | 2 | 10.00% | 2 | 8.33% | 0 | 0.00 | 1 | 4.55% | | |
| Number of staff for the permit area | 20.00 | | 24.00 | | 18.00 | | 22.00 | | | |

| 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 | 771,183.58 | \$2.41 |
| FY2012 District Population | 320,000.00 | |
| Cost per million gallons a day for Water Resource Development. | Number | Cost |
| Water Resource Development Cost | 358,558.13 | 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 | 303,445.11 | 16.23% | 653,413.26 | 12.85% | 985,353.50 | 10.99% | 1,459,915.16 | 10.98% | \$1,459,915.16 | 10.98% |
| Total expenditures | 1,869,311.96 | | 5,083,019.69 | | 8,963,055.81 | | 13,298,069.21 | | \$13,298,069.21 | |

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 | 20.00 | | 13.00 | | 9.00 | | 9.00 | | 12.75 | |
| Individually processed permits | 29.00 | | 18.00 | | 31.00 | | 44.00 | | 30.50 | |
| All authorizations combined | 22.00 | | 17.00 | | 11.00 | | 15.00 | | 16.25 | |
| 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 | \$74,429.62 | \$1,094.55 | \$99,101.00 | \$1,801.84 | \$105,832.00 | \$1,392.53 | \$83,307.83 | \$743.82 | \$362,670.45 | \$1,166.14 |
| Number of permits | 68 | | 55 | | 76 | | 112 | | 311 | |
| 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 | 68 | 17.89 | 55 | 9.87 | 76 | 11.09 | 112 | 32.18 | 311 | 15.79 |
| Number of staff for the permit area | 3.80 | | 5.57 | | 6.85 | | 3.48 | | 19.70 | |



*Suwannee River Water Management District
Strategic Plan
2016-2020*



*Water for People
Water for Nature*

February 10, 2015

