



**FIVE-YEAR
WATER RESOURCE
DEVELOPMENT
WORK PROGRAM**

Introduction

Water Management Districts are required by 373.709, F.S., to evaluate their water resources to ensure that existing sources of water are adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems for a 20-year planning period. A Regional Water Supply Plan (RWSP) is developed when a District determines that there is not enough water to meet the region's needs in a sustainable manner. RWSPs include a technical analysis of the current and future demands, evaluate available sources, and identify water resource development projects and water supply development projects to meet those demands.

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

- Address all the elements of the water resource development component in the District's approved RWSPs, as well as the water supply projects proposed for District funding and assistance;
- Identify both anticipated available District funding and additional funding needs for the second through fifth years of the funding plan;
- Identify projects in the Work Program which will provide water;
- Explain how each water resource and water supply project will produce additional water available for consumptive uses;
- Estimate the quantity of water to be produced by each project;
- Provide an assessment of the contribution of the District's RWSPs in supporting the implementation of minimum flows and minimum water levels and water reservations; and
- Ensure sufficient water is available to timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies.

This Work Program covers the period from fiscal year (FY) 2018-19 through FY 2022-23 and is consistent with the planning strategies of the District's North Florida Regional Water Supply Plan, (NFRWSP), a regional water supply plan produced and implemented jointly between this District and the SJRWMD (see Figure 1). The NFRWSP was approved by both Districts in 2017 and covers the 2015-2035 planning horizon. The next update is scheduled for January 2022. The planning region includes all or portions of Hamilton, Columbia, Baker, Suwannee, Union, Bradford, Gilchrist, Putnam, and Alachua Counties, as well as Region 1 of the SJRWMD. For additional information about the NFRWSP, please see <https://northfloridawater.com/watersupplyplan/index.html>.

Five-Year Water Resource Development Work Program

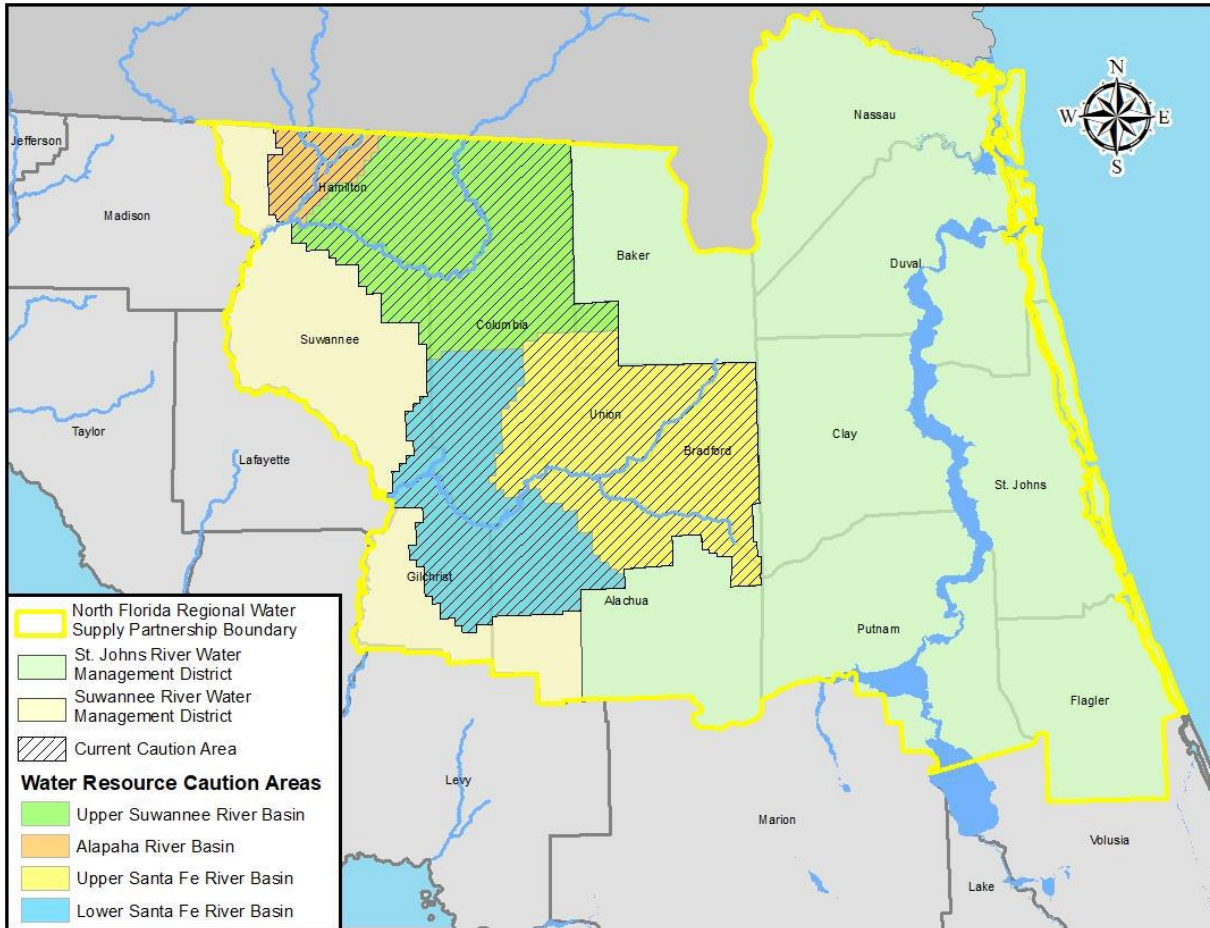


Figure 1: North Florida Regional Water Supply Plan Partnership Area

Work Program Summary

The projects listed in the Five-Year Water Resource Development Work Program demonstrate progress in implementing projects which are listed in the North Florida Regional Water Supply Plan (NFRWSP) or support the Plan's objectives. Implementation of projects listed in the NFRWSP supports the recovery strategy for the Lower Santa Fe and Ichetucknee Rivers and Priority Springs (LSFI). The District believes that this work program is adequate to further the recovery of LSFI, to ensure water is available to timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10 -year drought event, and to avoid the adverse effects of competition for water supplies based on the District's established MFLs.

Over the next five years, the District will continue to implement projects and support regional water management programs, including water supply planning, water resource data collection and monitoring, and establishment of minimum flows and minimum levels to ensure the availability of adequate water supplies for all reasonable-beneficial uses and to maintain the function of natural systems. This work program illustrates the contributions of the District in support of minimum flows and minimum water levels (MFLs). Establishment of MFLs will proceed according to the District's MFL Priority List. The most current version of the District's MFL priority list, and an overview of the District's MFL program is available on the District's website (<http://www.srwmd.state.fl.us/index.aspx?nid=55>).

In total, this Work Program outlines projects that, upon completion, will make available 47.34 mgd of water, including reuse and non-reuse water. These projects are detailed in Appendix A. These benefits are associated with approximately \$32,767,048 budgeted for FY 2018–19. The proposed funding for projects identified the 5-year Work Program is approximately \$32,767,048 through FY 2022–23. The District also funds Water Resource Development Activities that are regional in nature and are therefore primarily the responsibility of the District, these activities are described in Table 1 and 2, and are associated with approximately \$5,738,451 budgeted in FY 2018-19.

In addition, these projects set forth a commitment to develop projects associated with implementation of MFLs. The projects benefitting MFLs are anticipated to make available 47.14 mgd of reuse and non-reuse water upon completion. Of that, 20.37 mgd of reuse and non-reuse water that will benefit MFLs in recovery.

Water Resource and Water Supply Development Project Funding

The District funds projects that support water resource development and water supply development. Water resource development components are those that involve the “formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments, government-owned and privately owned water utilities, and self-suppliers to the extent assistance to self-suppliers promotes the policies as set forth in s. 373.016.”¹ Water supply development components are those that involve “planning, design, construction, operation, and maintenance of public or private facilities for water collection, production, treatment, transmission, or distribution for sale, resale, or end use.”² A list of all projects meeting these statutory definitions is provided in Appendix A.

The District provides funding assistance to public supply, agriculture, and other water use permittees, including industrial and commercial users, for projects that are consistent with the District’s RWSP and meet the District’s criteria for cost-share.

Water Resource Development Activity Funding

The District also funds Water Resource Development Activities that are regional in nature and are therefore primarily the responsibility of the District. These Water Resource Development Activities are listed in Table 1 below; and the projected expenditures for these ongoing programs are listed in Table 2. The District has identified the need for additional Regional Water Supply Planning. These planning efforts will be ongoing for FY 2018-19 through 2022-23 and are reflected in the projected expenditures in Table 2.

¹ Section 373.019(24), F.S.

² Section 373.019(26), F.S.

Five-Year Water Resource Development Work Program

Table 1: District water resource development activities and descriptions

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

Five-Year Water Resource Development Work Program

Table 2: Fiscal year 2018-19 through Fiscal Year 2022-23 projected expenditures (including salaries, benefits, and operating expenses) for ongoing water resource development activities. Except as noted below, the table estimates future year expenditures based on recurring expenses.

| Regional Water Activity | Fiscal Year 2018-19 | Fiscal Year 2019-20 | Fiscal Year 2020-21 | Fiscal Year 2021-22 | Fiscal Year 2022-23 | Total |
|--|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| Water Supply Planning (1.1.1) | \$697,543 (includes recurring and non-recurring expenses) | \$577,543 | \$577,543 | \$577,543 | \$577,543 | \$3,007,715 |
| Minimum Flows and Minimum Water Levels (MFL, 1.1.2) | \$1,891,604 (includes recurring and non-recurring expenses) | \$1,831,604 | \$1,831,604 | \$1,831,604 | \$1,831,604 | \$9,218,020 |
| Research, Data Collection, Analysis and Monitoring (1200-00, 31, 32, 33, 36) | \$2,417,287 (includes recurring and non-recurring expenses) | \$2,277,287 | \$2,277,287 | \$2,277,287 | \$2,277,287 | \$11,526,435 |
| Water Resource Development Projects (2.2.1) | \$373,734 | \$373,734 | \$373,734 | \$373,734 | \$373,734 | \$1,868,670 |
| Water Supply Development Assistance (2.2.2) | \$72,060 | \$72,060 | \$72,060 | \$72,060 | \$72,060 | \$360,300 |
| Other Cooperative Projects (2.4) | \$206,223 | \$206,223 | \$206,223 | \$206,223 | \$206,223 | \$1,031,115 |
| Total | \$5,658,451 | \$5,338,451 | \$5,338,451 | \$5,338,451 | \$5,338,451 | \$27,012,255 |

Basin Management Action Plan Appendix

Basin Management Action Plans are the “blueprint” for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL). In 2016, the Florida Legislature amended Section 373.036, F.S., to require the identification of all specific projects that implement a Basin Management Action Plan (BMAP) or a recovery or prevention strategy in the Work Program. The District’s Work Program has historically identified water resource development projects that support MFL recovery and prevention but has not included specific descriptions of projects primarily intended to implement BMAPs. Consistent with section 373.036, F.S., and in a manner that has been coordinated with DEP and all five water management Districts, the District makes available as part of this Work Program a five-year funding outlook for projects specifically identified in an adopted BMAP in Appendix B.

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
 FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Project Description | Project Status | Construction Completion Date | RWSP Region Supported | Primary MFL Supported | Quantity of Water Made Available upon Completion (MGD) | Reuse Flow Made Available upon Project Completion (MGD) | Project Total |
|-------------------------|--|---------------------------|---|------------------------|------------------------------|-----------------------|-----------------------|--|---|---------------|
| 89 | Precision Agriculture | Agricultural Conservation | The project will provide cost share funds to agricultural producers within the District BMAP areas to implement precision management technology. Additional priority will be given to producers within both the BMAP and Florida Outstanding Springs areas. The project will assist producers implement practices that allow for precision nutrient and irrigation management. This project is anticipated to reduce TN by 7,500,000 pounds per year and conserve 8 mgd. | Construction /Underway | 12/1/2020 | SR NFRWSP | LSFI | 8 | | \$ 2,500,000 |
| 103 | Sustainable Suwannee Pilot Program - Low Input Agriculture and Land Conservation | Agricultural Conservation | The Sustainable Suwannee Pilot Program will incentivize land uses that conserve water and reduce nutrient loading. Agricultural operations within specific springsheds will be invited to submit proposals to transition to less intensive cropping systems, change the type of cropping system or agriculture crop altogether, including changes to silviculture, or change the land use to a fallow or native landscape for a certain amount of time or even a permanent conservation easement. The project is anticipated to reduce nutrients by 375,000 pounds per year and conserve approximately 5.10 mgd of water. | Design | 1/31/2023 | SR NFRWSP | LSFI | 5.1 | | \$ 5,000,000 |
| 7 | Improved Nutrient Application Practices in Dairy Operations (Phase 2) (ACS) | Agricultural Conservation | The Improved Nutrient Application Practices in Dairy Operations project will assist dairy operations in reducing nutrient leaching by an estimated 34,000 pounds annually while saving an estimated 0.32 mgd. Within the District, most dairies use overhead impact sprinklers on center pivots to apply their effluent. The project will enable the dairies to retrofit their irrigation systems from overhead impact sprinklers to drop nozzles and therefore, apply wastewater more uniformly over their crops. | Construction /Underway | 6/30/2019 | SR NFRWSP | LSFI | 0.32 | | \$ 2,670,000 |

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Project Description | Project Status | Construction Completion Date | RWSP Region Supported | Primary MFL Supported | Quantity of Water Made Available upon Completion (MGD) | Reuse Flow Made Available upon Project Completion (MGD) | Project Total |
|-------------------------|---|---------------------------|---|-------------------------|------------------------------|-----------------------|-----------------------|--|---|---------------|
| 5 | Suwannee BMAP Center Pivot Retrofits Water Conservation Project | Agricultural Conservation | 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. | Construction /Underway | 6/5/2019 | SR District-wide | LSFI | 5.26 | | \$ 2,428,975 |
| 132 | Santa Fe Springs - Nursery Water Conservation (Task 4 S0796) | Agricultural Conservation | Assist nurseries in the conversion of overhead irrigation to micro spray or drip irrigation systems to reduce groundwater use | RWSP or RPS Option Only | | SR NFRWSP | LSFI | 0 | | \$ 1,880,000 |
| 130 | Agricultural Conservation Cost-Sharing Soil moisture probes | Agricultural Conservation | Multi-year cost share program to assist agricultural producers for projects that increase irrigation efficiency and water conservation and assist with nutrient management technology. Used as match funds for various initiatives. | Construction /Underway | 09/30/23 | SR District-wide | | 4.54 | | \$ 2,000,000 |
| 75 | Madison Blue Spring Aquifer Recharge | Groundwater Recharge | Four existing drainage wells will be rehabilitated or replaced to improve recharge rates. | Design | 8/31/2020 | SR NFRWSP | Madison Blue Springs | 3.4 | | \$ 2,275,000 |
| 111 | Upper Suwannee River Regional Aquifer Recharge | Groundwater Recharge | Installation of at least four recharge wells in the Upper Suwannee River basin in locations where wetlands were historically ditched and drained into the river. This project intends to capture water during high flow conditions that occur after large rainfall events and during the winter months, provide additional water quality treatment, and provide significant beneficial aquifer recharge to the Upper Floridan. Recharge is estimated at 4 mgd. This project was funded through a FDEP FY18 springs grant in August 2017. | Design | 12/31/2020 | SR NFRWSP | Lower Suwannee River | 4 | | \$ 2,500,000 |

LSFI - Lower Santa Fe Ichetucknee

SR NFRWSP - Suwannee River portion of the North Florida Water Supply Plan

Projects listed appear in Appendix C of the current Budget

Project Summary

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Project Description | Project Status | Construction Completion Date | RWSP Region Supported | Primary MFL Supported | Quantity of Water Made Available upon Completion (MGD) | Reuse Flow Made Available upon Project Completion (MGD) | Project Total |
|-------------------------|--|------------------------------|--|------------------------|------------------------------|-----------------------|-----------------------|--|---|---------------|
| 28 | Cow Pond Drainage Basin Aquifer Recharge Project | Groundwater Recharge | Eliminating ditched stormwater runoff and re-establishing flow patterns from the drainage basin to recharge wells and rehydrate lakes and wetlands for natural recharge. | Design | 12/31/2019 | SR NFRWSP | Lower Suwannee River | 1.69 | | \$ 1,600,000 |
| 74 | Lower Suwannee Drainage Basin Aquifer Recharge Project | Groundwater Recharge | Eliminating ditched stormwater runoff and re-establishing flow patterns from the drainage basin to rehydrate lakes and wetlands for natural recharge. | Design | 12/1/2020 | SR NFRWSP | Lower Suwannee River | 3.26 | | \$ 2,406,359 |
| 78 | Middle Suwannee Springs Restoration Project: Mallory Swamp Improvements - Phase II | Groundwater Recharge | hydrologic restoration activities on the property to rehydrate roughly 1,500 acres of ponds, 4,000 acres of wetlands and recharge the aquifer up to an estimated 10 million gallons per day. | Construction /Underway | 12/1/2020 | SR NFRWSP | Lower Suwannee River | 10 | | \$ 1,900,000 |
| 94 | Scriven Avenue Drainage Improvements | Groundwater Recharge | Replacement of a Class V injection well in the City of Live Oak. Existing well will be properly abandoned and new well will be constructed of the same diameter, casing depth, and total depth. Suwannee BMAP. | Design | 7/10/2019 | SR NFRWSP | Lower Suwannee River | 0.03 | | \$ 107,639 |
| 43 | Florida Gateway College Cooling Tower Retrofit | Other Non-Traditional Source | This project will replace the college's aging cooling towers with retrofitted cooling towers that will use surface water from a local pond instead of potable water from the aquifer. | On Hold | | SR NFRWSP | LSFI | 0.09 | | \$ 212,000 |
| 6 | Dairy Wastewater Conservation & Nutrient Optimization Project (ACS)Task 3 | Other Non-Traditional Source | The Dairy Wastewater Water Conservation & Nutrient Optimization Project will improve the management of dairy wastewater by increasing storage pond sizes to achieve greater nutrient uptake and irrigation efficiencies. By having additional storage in wastewater storage ponds, dairies can more effectively manage effluent irrigation. This project is estimated to reduce nutrient loadings by 62,000 pounds annually and increase irrigation efficiency by saving an estimated 0.3 mgd, benefitting springs within Upper and Lower Santa Fe Basins and Middle and Lower Suwannee. | Construction /Underway | 4/5/2019 | SR NFRWSP | LSFI | 0.3 | | \$ 1,885,590 |

LSFI - Lower Santa Fe Ichetucknee

SR NFRWSP - Suwannee River portion of the North Florida Water Supply Plan

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FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Project Description | Project Status | Construction Completion Date | RWSP Region Supported | Primary MFL Supported | Quantity of Water Made Available upon Completion (MGD) | Reuse Flow Made Available upon Project Completion (MGD) | Project Total |
|-------------------------|---|------------------------------|---|------------------------|------------------------------|----------------------------|-----------------------|--|---|---------------|
| 8 | Dairy Wastewater System Improvement | Other Non-Traditional Source | The project will provide cost share funds to dairies throughout the Middle Suwannee and Lower Santa Fe watershed to improve their wastewater systems. Improvements could include additional wastewater storage, advance manure solids separation, and/or advanced treatment technologies. The project will result in approximately 10,000 pounds of nutrient reductions each year in addition to conserving approximately 0.14 mgd. The project will benefit the springs along the Middle Suwannee and Lower Santa Fe river basins. | Construction /Underway | 12/31/2019 | SR NFRWSP | LSFI | 0.14 | | \$ 1,800,000 |
| 210 | FY19 Springs Grants - TBD | Other Project Type | Projects pending approval of funding | On Hold | | SR District-wide | | | | \$ 4,580,000 |
| 88 | Potable Water and Central Wastewater System Improvements (Newberry) | PS and CII Conservation | Replace existing water and wastewater lines to a community within close proximity to the City of Newberry's historic district. Conserve water by eliminating losses in broken pipes. | Complete | 8/27/2018 | SR NFRWSP | LSFI | 0.003 | | \$ 127,080 |
| 98 | Starke Fire Hydrant Replacement Project | PS and CII Conservation | The Starke Fire Hydrant Replacement project will reduce unaccounted for water loss throughout the City, which is currently estimated at 24%. This project will replace fire hydrants that are non-functional, broken, leaking, inaccessible, and/or difficult to use. It is estimated that replacement of these hydrants will reduce water loss by 0.0056 mgd. | Complete | 8/10/2018 | SR NFRWSP | LSFI | 0.0056 | | \$ 142,080 |
| 32 | Cross City Hydrant and Water Main Replacement | PS and CII Conservation | Replacement of 7 hydrants and 10 isolation valves within Town's distribution network; installation of a 1450 feet of 6" water main, replacing lines that have had recent breaks. | Construction /Underway | 11/7/2018 | SR District outside NFRWSP | Lower Suwannee River | 0.0014 | | \$ 90,400 |

LSFI - Lower Santa Fe Ichetucknee

SR NFRWSP - Suwannee River portion of the North Florida Water Supply Plan

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FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Project Description | Project Status | Construction Completion Date | RWSP Region Supported | Primary MFL Supported | Quantity of Water Made Available upon Completion (MGD) | Reuse Flow Made Available upon Project Completion (MGD) | Project Total |
|-------------------------|--|--|--|----------------|------------------------------|----------------------------|-----------------------|--|---|---------------|
| 109 | University Oaks Water System - Phase 3 | PS and CII Conservation | Replacement of approximately 2,350 LF of 6" watermain that will provide service to 15 customers within a subdivision 3 miles northeast of Bronson. This is phase 3 of a multi-phase project; phases 1 and 2 were funded through a single District RIVER Cost-Share grant in the 2015 cycle. This project is estimated to conserve .019 mgd. This project was recently funded through the District's RIVER cost-share program in August 2017. | Design | 5/30/2019 | SR NFRWSP | None | 0.02 | | \$ 127,500 |
| 26 | Columbia County Water Conservation Initiative | PS and CII Conservation | The Columbia County Water Conservation Project will provide local businesses, such as hotels/motels or office buildings, and multi-family residential units with ultra-high efficiency technology (UHET) indoor plumbing retrofit packages. Retrofitting toilets and faucet aerators with high efficiency fixtures will save water that would otherwise be wasted. This project is estimated to conserve 0.5 mgd. | On Hold | | SR NFRWSP | LSFI | 0.05 | | \$ 350,000 |
| 113 | Waldo Pump No. 2 Replacement & Rehab Lift Station Nos. 2&3 | PS and CII Conservation | Replace submersible pump in well 2 and rehabilitation of lift station nos. 2 and 3. | Design | 01/10/20 | SR NFRWSP | | | | \$ 100,000 |
| 208 | Dixie County Water Main | PS and CII Conservation | transition an unincorporated residential area from well water usage to Community Potable Water service. | Design | 12/30/19 | SR District outside NFRWSP | | 0.00 | | \$ 416,500 |
| 82 | Oakmont Groundwater Recharge Wetlands | Reclaimed Water (for groundwater recharge or natural system restoration) | Construction of groundwater recharge wetlands at Oakmont subdivision. | Design | 5/30/2019 | SR NFRWSP | LSFI | 1 | | \$ 230,000 |
| 105 | Suwannee Country Club Reuse Connection | Reclaimed Water (for potable offset) | Connect the Suwannee County Club golf course to the City of Live Oak reuse line; install pump station. Reduce groundwater withdrawals for irrigation | Complete | 7/12/2018 | SR NFRWSP | LSFI | | 0.1 | \$ 129,344 |

LSFI - Lower Santa Fe Ichetucknee

SR NFRWSP - Suwannee River portion of the North Florida Water Supply Plan

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FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
 FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Project Description | Project Status | Construction Completion Date | RWSP Region Supported | Primary MFL Supported | Quantity of Water Made Available upon Completion (MGD) | Reuse Flow Made Available upon Project Completion (MGD) | Project Total |
|-------------------------|---------------------------|-----------------------|--|----------------|------------------------------|----------------------------|-----------------------|--|---|---------------|
| 205 | McNulty Street Drainage | Stormwater | This project involves sediment removal and the replacement in kind of a Class V injection well in the City of Live Oak | Design | 09/30/20 | SR District outside NFRWSP | | 0.03 | | \$ 264,310 |
| 212 | FY19 Springs Grants - TBD | Surface Water | Projects pending approval of funding | On Hold | | SR District-wide | | | | \$ 5,000,000 |
| 213 | FY19 Springs Grants - TBD | Surface Water Storage | Projects pending approval of funding | On Hold | | SR District-wide | | | | \$ 5,000,000 |

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Historic District Expenditures | WRDWP Current FY Funding | WRDWP Current FY+1 Funding | WRDWP Current FY+2 Funding | WRDWP Current FY+3 Funding | WRDWP Current FY+4 Funding | Budget Reference | Total District Funding | Project Total |
|-------------------------|--|------------------------------|--------------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------|------------------------|---------------|
| 89 | Precision Agriculture | Agricultural Conservation | \$ 1,000,000 | \$ 1,000,000 | | | | | 2- 2.4 | \$ - | \$ 2,500,000 |
| 103 | Program - Low Input Agriculture and Land Conservation | Agricultural Conservation | \$ 1,000,000 | \$ 4,000,000 | | | | | 2- 2.4 | | \$ 5,000,000 |
| 7 | Practices in Dairy Operations (Phase 2) (ACS) | Agricultural Conservation | \$ 963,750 | \$ 1,176,250 | | | | | 2- 2.4 | \$ 20,000 | \$ 2,670,000 |
| 5 | Retrofits Water Conservation Project | Agricultural Conservation | \$ 755,724 | \$ 150,000 | | | | | 2- 2.4 | \$ 885,000 | \$ 2,428,975 |
| 132 | Santa Fe Springs - Nursery Water Conservation (Task 4 S0796) | Agricultural Conservation | \$ - | \$ 250,000 | | | | | 2- 2.4 | \$ 39,325 | \$ 1,880,000 |
| 130 | Agricultural Conservation Cost-Sharing Soil moisture probes | Agricultural Conservation | | \$ 2,000,000 | | | | | 2-2.4 | \$ 2,000,000 | \$ 2,000,000 |
| 75 | Madison Blue Spring Aquifer Recharge | Groundwater Recharge | \$ 500,000 | \$ 1,700,000 | | | | | 2- 2.2.1 | \$ 50,000 | \$ 2,275,000 |
| 111 | Upper Suwannee River Regional Aquifer Recharge | Groundwater Recharge | \$ 500,000 | \$ 2,000,000 | | | | | 2- 2.2.1 | | \$ 2,500,000 |
| 28 | Cow Pond Drainage Basin Aquifer Recharge Project | Groundwater Recharge | \$ 450,000 | \$ 1,100,000 | | | | | 2- 2.2.1 | \$ 50,000 | \$ 1,600,000 |
| 74 | Lower Suwannee Drainage Basin Aquifer Recharge Project | Groundwater Recharge | \$ 600,000 | \$ 1,600,000 | | | | | 2- 2.2.1 | \$ 106,359 | \$ 2,406,359 |
| 78 | Restoration Project: Mallory Swamp Improvements - Phase II | Groundwater Recharge | \$ 1,575,000 | \$ 250,000 | | | | | 2- 2.2.1 | \$ 277,000 | \$ 1,900,000 |
| 94 | Scriven Avenue Drainage Improvements | Groundwater Recharge | | \$ 47,600 | | | | | 2- 2.2.2 | \$ 89,246 | \$ 107,639 |
| 43 | Florida Gateway College Cooling Tower Retrofit | Other Non-Traditional Source | \$ - | \$ 212,000 | | | | | 2- 2.2.2 | \$ - | \$ 212,000 |
| 6 | Nutrient Optimization Project (ACS)Task 3 | Other Non-Traditional Source | \$ 738,950 | \$ 341,629 | | | | | 2- 2.4 | \$ 298,004 | \$ 1,885,590 |
| 8 | Dairy Wastewater System Improvement | Other Non-Traditional Source | \$ 250,000 | \$ 1,250,000 | | | | | 2- 2.4 | | \$ 1,800,000 |
| 210 | FY19 Springs Grants - TBD | Other Project Type | \$ - | \$ 4,580,000 | | | | | 2-2.4 | \$ - | \$ 4,580,000 |
| 88 | Wastewater System Improvements (Newberry) | PS and CII Conservation | | \$ 10,000 | | | | | 2- 2.2.2 | \$ 26,566 | \$ 127,080 |
| 98 | Starke Fire Hydrant Replacement Project | PS and CII Conservation | | \$ 25,000 | | | | | 2- 2.2.2 | \$ 119,040 | \$ 142,080 |
| 32 | Cross City Hydrant and Water Main Replacement | PS and CII Conservation | | \$ 45,000 | | | | | 2- 2.2.2 | \$ 90,400 | \$ 90,400 |
| 109 | University Oaks Water System - Phase 3 | PS and CII Conservation | | \$ 45,000 | | | | | 2- 2.2.2 | \$ 122,250 | \$ 127,500 |
| 26 | Columbia County Water Conservation Initiative | PS and CII Conservation | \$ - | \$ 280,000 | | | | | 2- 2.4 | \$ 30,000 | \$ 350,000 |

LSFI - Lower Santa Fe Ichetucknee

SR NFRWSP - Suwannee River portion of the North Florida Water Supply Plan

Projects listed appear in Appendix C of the current Budget

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM
 FY 2018-19 TO FY 2022-23

| District Project Number | Project Name | Project Type | Historic District Expenditures | WRDWP Current FY Funding | WRDWP Current FY+1 Funding | WRDWP Current FY+2 Funding | WRDWP Current FY+3 Funding | WRDWP Current FY+4 Funding | Budget Reference | Total District Funding | Project Total |
|-------------------------|--|--|--------------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------|------------------------|---------------|
| 113 | Waldo Pump No. 2 Replacement & Rehab Lift Station Nos. 2&3 | PS and CII Conservation | \$ - | \$ 90,000 | | | | | 2-2.2.2 | \$ 90,000 | \$ 100,000 |
| 208 | Dixie County Water Main | PS and CII Conservation | \$ - | \$ 176,500 | | | | | 2-2.2.2 | \$ 176,500 | \$ 416,500 |
| 82 | Oakmont Groundwater Recharge Wetlands | Reclaimed Water (for groundwater recharge or natural system restoration) | \$ 1,006,740 | \$ 150,000 | | | | | 2-2.2.1 | \$ 150,000 | \$ 230,000 |
| 105 | Suwannee Country Club Reuse Connection | Reclaimed Water (for potable offset) | | \$ 50,000 | | | | | 2-2.2.2 | \$ 124,452 | \$ 129,344 |
| 205 | McNulty Street Drainage | Stormwater | | \$ 238,069 | | | | | 2-2.2.1 | \$ 238,069 | \$ 264,310 |
| 212 | FY19 Springs Grants - TBD | Surface Water | \$ - | \$ 5,000,000 | | | | | 2-2.3 | | \$ 5,000,000 |
| 213 | FY19 Springs Grants - TBD | Surface Water Storage | | \$ 5,000,000 | | | | | 2-2.2.1 | | \$ 5,000,000 |

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| 2094 | SAFE | City of Newberry | Potable Water and Central Wastewater Improvements | Replace existing water and wastewater lines in close proximity to historic district, thereby reducing unaccounted water loss and preventing potential sewage spills. | 88 | Underway | 10/1/2018 | | | | 38,434.00 | 26,566.00 | 65,000.00 |
| 2099 | SAFE | GRU | Oakmont Recharge Wetland | Construct a recharge wetland in an existing stormwater retention basin that will reduce nutrients while recharging aquifer. | 82 | Underway | 5/28/2019 | | | | 150,000.00 | 80,000.00 | 230,000.00 |
| 2101 | SAFE | SRWMD | Improved Nutrient Application Practices in Dairy O | To date, 9 agreements with dairies to install screen separators to reduce wastewater solids, 1 agreement with a dairy in the Santa Fe Basin. DEP has allocated \$2,120,000 for districtwide program. Load reduction to land estimate of 1,485 lb-N/yr. | 7 | Underway | 6/30/2019 | 200,475 | | 309,600.00 | | | 309,600.00 |
| 2103 | SAFE | SRWMD | Sustainable Suwannee Springs Agriculture Pilot Pro | Agriculture operators are invited to submit proposals to transition to less intensive cropping systems, change the type of cropping system, or change the land use to fallow or native landscape for a certain amount of time or a permanent conservation easem | 103 | Underway | 9/30/2019 | 33750 | | 2,500,000.00 | | | 2,500,000.00 |
| 2104 | SAFE | SRWMD | Regional Initiative Valuing Environmental Resource (Jasper Wastewater) | Benefits of the annual cost-share projects include: improving wastewater facilities serving hundreds of residents and commercial entities, preventing potential discharge of wastewater into receiving waters during various flood events, and significantly re | 204 | Planned | 9/30/2020 | 835 | 209 | | 200,448.00 | 15,000.00 | 215,448.00 |
| 2107 | SAFE | SRWMD | Precision Agricultural Practices | Provide cost-share funds to agricultural producers within the BMAP area to implement precision nutrient and irrigation management technology. Districtwide program benefits and dollars split between Santa Fe and Suwannee BMAPs. Load reduction to land estim | 89 | Underway | 12/1/2020 | 56250 | | 625,000.00 | | 0.00 | 625,000.00 |
| 2108 | SAFE | SRWMD | Nursery Water Conservation Initiative | Assist nurseries in upgrading from overhead irrigation methods to micro-spray or drip irrigation. To date, 45 nurseries on 300 acres have received assistance. Load reduction to land estimate of 45,000 lb-N/yr. | 132 | Planned | 6/5/2019 | 8100 | | 940,000.00 | 39,325.00 | 341,825.00 | 1,321,150.00 |
| 2116 | SAFE | Alachua County | Mill Creek Sink Water Quality Improvement Project | See AL-01 for the Phase I project info. Phase II is the acquisition of 240 additional acres surrounding and upstream of Mill Creek Swallet. | 173 | Planned | 5/31/2021 | | | 1,300,000.00 | | 1,300,000.00 | 2,600,000.00 |
| 2118 | SAFE | Alachua County | Poe Springs Domestic Sewage Infrastructure Upgrade | Install new waterless restrooms with larger holding tanks adjacent to springshed. Replace OSTDS with enhanced passive nitrogen system using biosorption activated media (BAM). Reduction estimate to land surface of 5,776 lb-N/yr. | 86 | Underway | 12/21/2019 | 288 | | | 150,000.00 | 196,600.00 | 346,600.00 |
| 2124 | SAFE | Gilchrist County | Santa Fe Park and Boat Ramp | Replace boat ramp, add docks and canoe launch, and remedy drainage to reduce sediment and nutrients. | 93 | Underway | 3/6/2019 | | | | 123,000.00 | 6,800.00 | 129,800.00 |
| 2127 | SAFE | Columbia County | Dream Inn Motel WWTP Closure | Remove the noncompliant WWTP that serves the motel and connect the motel to the County's central sewer system. This also includes relocating, upgrading, and enlarging the existing County WWTF to handle flow from motel. Reduction estimated load to land sur | 35 | Underway | 8/31/2018 | 360 | | 1,000,000.00 | 144,300.00 | 505,700.00 | 1,650,000.00 |
| 2129 | SAFE | City of Alachua | Mill Creek Sink Water Quality Improvement Project | Purchase property to install water quality BMPs to reduce pollutant loads discharging directly into the sink. Nutrient loading should be reduced by 66 % and benefit Hornsby Spring. | 79 | Underway | 5/31/2021 | | | 1,000,000.00 | 400,000.00 | | 400,000.00 |
| 2133 | SAFE | City of High Springs | Wastewater Collection System Extension - Phase A1 | Provide central sewer to remaining areas served by septic systems. Elimination of 132 septic systems. Reduction estimate to land surface of 2,640 lb-N/yr. | 50 | Underway | 9/30/2018 | 1188 | | 3,307,700.00 | | 125,000.00 | 3,432,700.00 |
| 2137 | SAFE | Columbia County | Rum Island Park | Install new public restrooms with lift station and septic system in place of portable toilets. Install BAM to reduce nutrients around septic system. Project also involves bank restoration and dredging. | 91 | Underway | 5/15/2019 | | | | 150,000.00 | 150,000.00 | 300,000.00 |
| 4474 | SUWA | City of Live Oak | 9th and Scriven Regional Stormwater Management Fac | Reduce flooding by increasing runoff treatment in stormwater facility. | 94 | Underway | 7/10/2019 | | | | 89,246.00 | 18,393.00 | 107,639.00 |
| 4476 | SUWA | City of Live Oak | Suwannee County Club (SCC) Reuse Connection | Connect the SCC golf course to the City of Live Oak reuse line and install a pump station. | 105 | Underway | 12/31/2018 | | | | 124,452.00 | 4,893.00 | 129,345.00 |

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| 4480 | SUWA | City of Fanning Springs | Fanning Springs Water Quality Improvement Project, | Expansion of wastewater collection and transmission system to convert 198 septic systems to sewer in Area 7 | 41 | Underway | 1/31/2020 | 2116 | | 3,355,100.00 | | 40,000.00 | 3,395,100.00 |
| 4481 | SUWA | City of Fanning Springs | Fanning Springs Water Quality Improvement Project, | Expansion of wastewater collection and transmission system to convert septic to sewer in Area 10 (60 septic systems). | 40 | Underway | 12/31/2019 | 1978 | | 2,000,000.00 | 120,000.00 | | 2,120,000.00 |
| 4483 | SUWA | City of Chiefland | Biosolids Treatment Unit Replacement | Reconstruct the city's aged biosolids treatment unit (digester). The project includes two new tanks and other equipment to better treat the biosolids. | 18 | Underway | 12/31/2019 | | | 376,560.00 | | 41,840.00 | 418,400.00 |
| 4484 | SUWA | Town of Branford | Branford Wastewater Effluent Pond Failure Repairs | Replace effluent pond at WWTP with tanks. | 12 | Underway | 10/27/2018 | | | 599,406.00 | 231,500.00 | 137,368.00 | 830,906.00 |
| 4492 | SUWA | SRWMD | Sustainable Suwannee Springs Agriculture Pilot Pro | Agriculture operators are invited to submit proposals to transition to less intensive cropping systems, change the type of cropping system, or change the land use to fallow or native landscape for a certain amount of time or a permanent conservation easem | 103 | Underway | 9/30/2019 | 225000 | | 3,000,000.00 | | | 3,000,000.00 |
| 4493 | SUWA | SRWMD | Sustainable Suwannee Springs Agriculture Pilot Pro | Agriculture operators, landowners, local governments, private companies, other entities may submit proposals for advanced technologies that can cost-effectively reduce nitrogen in groundwater that contributes to spring flow. | 102 | Underway | 3/30/2020 | 32700 | | 1,000,000.00 | | 234,626.00 | 1,234,626.00 |
| 4495 | SUWA | SRWMD | Precision Agricultural Practices | Provide cost-share funds to agricultural producers within the BMAP area to implement precision nutrient and irrigation management technology. | 89 | Underway | 12/1/2020 | | | 2,000,000.00 | | 500,000.00 | 2,500,000.00 |
| 4496 | SUWA | SRWMD | Middle Suwannee River Springs Restoration and Aqwi | Installation of hydraulic structures in southeast Lafayette and northeast Dixie counties with the objective of restoring natural water drainage patterns. The project will recharge the aquifer with ~ 10 mgd of water over ~ 1,500 acres of ponds and 4,000 ac | 78 | Underway | 5/9/2019 | | | 1,548,000.00 | 277,000.00 | 75,000.00 | 1,900,000.00 |
| 4499 | SUWA | SRWMD | Dairy Wastewater System Improvement | Cost-share projects with dairies to invest in advanced treatment technologies (bioreactors), additional wastewater storage, and advanced manure solid separation. | 8 | Underway | 12/31/2019 | 10000 | | 1,500,000.00 | | 300,000.00 | 1,800,000.00 |
| 4502 | SUWA | SRWMD | Dairy Wastewater Conservation and Nutrient Optimiz | Improve the management of dairy wastewater by increasing storage pond sizes to achieve greater nutrient uptake and irrigation efficiencies. | 6 | Underway | 4/5/2019 | 62000 | | 920,000.00 | 298,004.00 | 417,586.00 | 1,885,590.00 |
| 4504 | SUWA | SRWMD | Ravine and Convict Springs Nutrient Capture and Tr | Install interceptor wells to capture high nitrate groundwater. A denitrifying system will be installed at each spring basin that will reduce nutrient loads and return the groundwater at the two locations. | 121 | Underway | 5/31/2019 | 4300 | | 600,000.00 | 30,000.00 | | 630,000.00 |
| 4508 | SUWA | SRWMD | Improved Nutrient Application Practices in Dairy O | To date, nine agreements with dairies to install screen separators to reduce wastewater solids. | 7 | Underway | 6/30/2019 | 95000 | | 2,120,000.00 | 20,000.00 | 530,000.00 | 2,670,000.00 |
| 4512 | SUWA | Madison County | Madison Blue Spring Aquifer Recharge | Rehabilitate or replace up to six existing drainage wells to improve aquifer recharge rates. Recharge benefits are estimated up to 3.4 mgd. | 75 | Underway | 9/30/2021 | 41850 | | 2,150,000.00 | 50,000.00 | 300,000.00 | 2,500,000.00 |
| 4513 | SUWA | Lafayette County | County Road 300 Stormwater Improvement Project | Design and construction of a stormwater collection and conveyance system that will increase stormwater storage. | 90 | Underway | 1/5/2018 | | | 425,000.00 | 142,550.00 | 10,000.00 | 577,550.00 |
| 4514 | SUWA | Gilchrist County | Hart and Otter Springs Water Quality Improvement P | A three-phase project to decommission septic systems at Otter and Hart Springs and to decommission the wastewater package plant at Hart Springs to connect to Fanning Springs WWTP. | 85 | Underway | 1/1/2020 | 1724 | | 1,779,890.00 | 115,000.00 | 50,000.00 | 1,944,890.00 |
| 4517 | SUWA | City of Trenton | Trenton Lift Station #7 Rehabilitation | Rehabilitate existing lift station. | 69 | Completed | 12/30/2017 | | | | 150,000.00 | 57,600.00 | 207,600.00 |
| 4518 | SUWA | SRWMD | Advanced Nutrient Management Through Center Pivots | Fertigation system installation and center pivot retrofits. | 4 | Underway | 6/5/2019 | 272760 | | 885,000.00 | 33,150.00 | 242,500.00 | 1,160,650.00 |

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| 4520 | SUWA | Dixie County | Cow Pond Drainage Basin Aquifer Recharge Project | Re-establish Natural drainage patterns and use natural recharge features and aquifer recharge wells to restore approx. 300 acres of sand ponds and rehydrate approx. 1,750 acres of wetlands while conserving 1.69 MGD of water and support spring flow. | 28 | Underway | 6/30/2020 | | | 1,500,000.00 | 50,000.00 | 50,000.00 | 1,600,000.00 |
| 4523 | SUWA | Dixie County | Lower Suwannee River Springs Restoration and Aquif | Restore ~500 acres of sand ponds and rehydrate ~1,250 acres of wetlands by re-establishing N/natural flow through N/natural recharge features and an aquifer recharge well. The project will conserve ~3.26 mgd in water supporting water supply and spring flo | 74 | Underway | 6/30/2020 | | | 2,200,000.00 | 143,000.00 | 63,359.00 | 2,406,359.00 |
| 4524 | SUWA | SRWMD | Pot Spring Restoration Project | Stabilize the shoreline along the spring run to prevent sediment from entering the Withlacoochee River. | 87 | Underway | 4/20/2020 | 69 | | 183,600.00 | | | 183,600.00 |
| 4530 | SUWA | City of Madison | Lake Frances Sediment Control | This project will improve the quality of stormwater discharged to Lake Frances, which receives most stormwater in the city, a 61-acre watershed. | 64 | Underway | 5/31/2018 | | | | 42,850.00 | 34,675.00 | 77,525.00 |