

JANUARY 2020

# FY2019 Water Conservation Summary Report







# TABLE OF CONTENTS

<b>I</b>	<b>Executive Summary .....</b>	<b>4</b>
<b>II</b>	<b>Cost-Share Funding .....</b>	<b>5</b>
<b>III</b>	<b>Utilities Services .....</b>	<b>9</b>
<b>IV</b>	<b>Water Conservation Initiative .....</b>	<b>10</b>
<b>V</b>	<b>Education and Outreach .....</b>	<b>12</b>
<b>VI</b>	<b>Regulation .....</b>	<b>14</b>
<b>VII</b>	<b>Research .....</b>	<b>15</b>

# I. EXECUTIVE SUMMARY

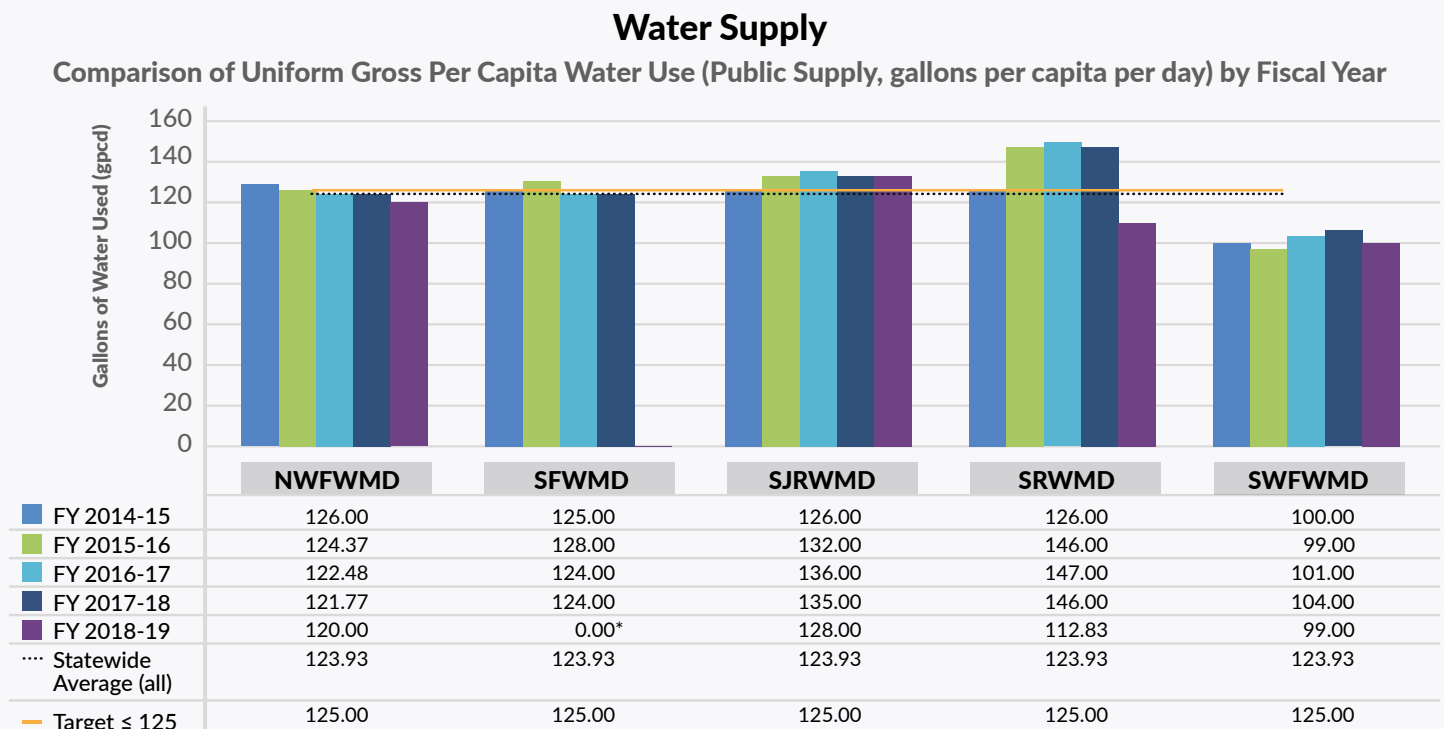
Water conservation is a key component of the District's mission to ensure the public's water needs are met and is one of the 11 Strategic Initiatives outlined in the District's 2019-2023 Strategic Plan. Within the Conservation Strategic Initiative, the District's goal is to enhance efficiencies in all water-use sectors to ensure beneficial use.

Water use data provides evidence of the District's continued commitment to water conservation. For several years, the District has maintained the lowest public supply per capita rate in the state, currently at 99 gallons per day (see Figure 1). While the population in the District has grown 150 percent over a 40-year period from 1975-2015, total water use has remained essentially flat at about 1 billion gallons per day due to increased conservation and development of alternative water supplies. Conservation is generally one of the most cost-effective tools of water supply planning for population growth, allowing the deferral of development of more expensive traditional or alternative water supply projects.

This report summarizes the District's water conservation efforts, including annual accomplishments and measurable water savings, for Fiscal Year 2019 (Oct. 2018 – Sept. 2019). Information on reclaimed water or source substitution can be found in the District's Annual Reuse Report.

The following report covers conservation efforts throughout the District, including cost-share funding, technical assistance, the Water Conservation Initiative, education and outreach, research and regulation.

**Figure 1. Comparison of Uniform Gross Per Capita Water Use by Fiscal Year (Source: Water Management District Performance Metrics for the fourth quarter of FY2019 by the Florida Department of Environmental Protection)**



**NFWMD** = Northwest Florida Water Management District

**SFWMD** = South Florida Water Management District

**SJRWMD** = St. Johns River Water Management District

**SRWMD** = Suwannee River Water Management District

**SWFWMD** = Southwest Florida Water Management District

\*FY2018-2019 water supply metrics for SFWMD were not available at time of report

## II. COST-SHARE FUNDING

### Cooperative Funding Initiative

The Cooperative Funding Initiative (CFI) is a key program for building partnerships with external stakeholders, including local governments and regional water supply authorities. The CFI covers up to 50 percent of the costs of projects that help create sustainable water resources, enhance conservation efforts, improve water quality, restore natural systems and provide flood protection.

The District has provided CFI funding assistance since 1988, with the first water conservation program funded in 1991. In recent years, District staff have actively worked to encourage more conservation programs, particularly retrofit programs and outdoor water conservation. Conservation projects are generally more cost effective in comparison to other types of CFI projects related to water supply.

Common indoor conservation programs include toilet rebates for converting to high-efficiency models and conservation kits that include low-flow showerheads and faucet aerators. Common outdoor water conservation programs include irrigation system evaluations, landscape and irrigation modifications and irrigation smart controllers. Additional program types eligible for CFI funding are line looping, advanced metering analytics, Florida Water Star<sup>SM</sup> builder rebates and industrial/commercial-related efficiency improvements.



***Rain sensor inspections and replacements increase water efficiency in irrigation systems. This is one of the many projects funded through the CFI.***

Table 1. FY2019 CFI Conservation Projects

County	Project #	Cooperator	Title	Total Costs	District Costs	Estimated Savings (gpd*)
Citrus	N958	Citrus County	Conservation – Citrus County Water Sense Labeled Irrigation Controller Installation – Phase 2	\$33,750	\$16,875	11,106
Hillsborough	N988	Hillsborough County	UF/IFAS Soil Moisture Sensor Project	\$50,000	\$25,000	13,380
Manatee	Q020	Braden River Utilities	Soil Moisture Sensor Retrofit Program Phase 2	\$308,000	\$154,000	55,000
Manatee	N982	Manatee County	Conservation – Manatee County Toilet Rebate Project, Phase 12	\$151,000	\$75,500	26,380
Marion	N999	Marion County	Marion County Utilities Toilet Rebate Program Phase 5	\$64,000	\$32,000	10,190
Multi-County	Q040	WRWSA	WRWSA Regional Irrigation System Audit Program Phase 5	\$145,000	\$72,500	38,740
Pasco	Q014	Pasco County	Conservation – Pasco County – Toilet Rebate – Phase 12	\$100,000	\$50,000	13,956
Pasco	Q041	New Port Richey	Conservation – New Port Richey Toilet Rebate – Phase 5	\$14,940	\$7,470	1,874
Pinellas	N955	City of St. Petersburg	Conservation – St. Petersburg Toilet Rebate Program – Phase 17	\$50,000	\$25,000	6,725
Pinellas	N961	City of St. Petersburg	Study – St. Petersburg Satellite Based Potable Water Leak Detection	\$120,000	\$60,000	110,000
Polk	N996	Town of Lake Hamilton	Conservation – Town of Lake Hamilton Distribution System Looping	\$521,000	\$124,610	19,554
Polk	N948	PRWC	Polk Regional Water Cooperative Indoor Water Conservation Incentives	\$156,000	\$78,000	92,000
Polk	N971	PRWC	Polk Regional Water Cooperative Outdoor Water Conservation Best Management Practices	\$192,500	\$96,250	113,000
Polk	N973	City of Winter Haven	Winter Haven Consumption and Conservation Programs Data Management Software	\$120,000	\$60,000	16,000
Polk	Q023	PRWC	Polk Regional Water Cooperative Water Demand Management Plan	\$340,000	\$170,000	N/A**
Sarasota	N979	City of North Port	Conservation – North Port Water Distribution System Looping	\$704,000	\$352,000	36,493
Sarasota	N992	City of Venice	Conservation – City of Venice Toilet Rebate Project – Phase 6	\$58,900	\$29,450	4,990
Sumter	Q018	NSCUDD	The Villages Rain Sensor Inspection/Replacement Program	\$40,000	\$20,000	9,600
<b>Total</b>				<b>\$3,169,090</b>	<b>\$1,448,655</b>	<b>578,988</b>

\* gallons per day

\*\*This project involves the development of a demand management plan, rather than the provision of water-conserving fixtures.



## Facilitating Agricultural Resource Management Systems Program

The Facilitating Agricultural Resource Management Systems (FARMS) Program is an agricultural cost-share reimbursement program that reduces groundwater withdrawals from the Upper Floridan aquifer through conservation and alternative water supply best management practices (BMPs). The program is designed to serve as an incentive to the agricultural community to conserve groundwater use and promote resource sustainability. FARMS reimbursement can amount to 50-75 percent of total project costs for eligible BMPs.

FARMS is a public/private partnership developed by the District and the Florida Department of Agriculture and Consumer Services (FDACS). FARMS includes both conservation and alternative water supply projects. Within FARMS is also the Mini-FARMS Program. Mini-FARMS provides cost-share funding for agricultural operations of 100 irrigated acres or less. The same principles of the FARMS program apply.

Mini-FARMS approved 27 water conservation related projects in FY2019 (see Table 2). These projects are estimated to save between 100,000 gpd and 133,000 gpd. All approved FARMS projects in FY2019 were alternative water supply projects and are therefore not included in this report. More information on these projects and the FARMS program can be found in the FARMS Biennial Report.



***Automated irrigation system valves installed, which can be opened and closed remotely to reduce irrigation run times.***

**Table 2. Mini-FARMS Conservation Projects Approved in FY2019**

Project #	County	District Share Reimbursement
WMD 168 Little Pond Farm	Sumter	\$1,387.09
WMD 169 Frosty Blue Farm, Inc	Hillsborough	\$8,000.00
WMD 170 Mickie Blue Berries, LLC	Pasco	\$1,953.75
WMD 172 Hidden Acres Ranch Inc	Citrus	\$7,796.39
WMD 174 Tuck Hwy 60 Grove	Polk	\$5,576.25
WMD 175 Tuck Tanner Grove	Highlands	\$5,576.25
WMD 176 Tuck Frostproof Naval	Polk	\$5,576.25
WMD 177 Blueberry Hill, LLC	Lake	\$8,000.00
WMD 178 Tuck Chen Grove	Highlands	\$5,576.25
WMD 179 Tuck Godwin Grove	Polk	\$5,576.25
WMD 180 Tuck Hickory 1 Grove	Polk	\$5,576.25
WMD 181 Tuck Hickory 2 Grove	Polk	\$5,576.25
WMD 182 Tuck KT Grove	Highlands	\$5,576.25
WMD 183 Tuck Frostproof Valencia	Polk	\$5,576.25
WMD 186 E.W. Simmons	Hillsborough	\$6,750.00
WMD 187 Jared Williams	Hernando	\$1,687.50
WMD 188 Peace River Farms LLC Ph1	Hardee	\$8,000.00
WMD 189 Peace River Farms LLC Ph2	Hardee	\$8,000.00
WMD 190 Keel Farms, Inc.	Hillsborough	\$3,114.17
WMD 191 KLM Farms - Cheshire 1	Polk	\$8,000.00
WMD 192 Camarillo Berry Farms, LP	Hillsborough	\$7,045.88
WMD 193 Down South Blues Corp	Desoto	\$1,237.50
WMD 197 Gant Lake Farms	Sumter	\$4,720.88
WMD 198 Blue Cypress Farms	Polk	\$1,762.50
WMD 199 Sweet Life Gallagher Farm	Hillsborough	\$1,257.37
WMD 200 Sweet Life Strawberry Station	Hillsborough	\$1,257.37
WMD 173 Brookdale Farms	Hillsborough	\$8,000.00
<b>Total</b>		<b>\$138,156.65</b>



### III. UTILITIES SERVICES

#### Utilities Services Group

The District's Utilities Services Group assists public water utilities in increasing system efficiency and reducing system losses. It includes the following services:

- Leak detection surveys
- Water audit guidance and evaluation
- Meter accuracy testing
- Flushing reduction assistance

Since inception of the program in 1990, the leak detection team has conducted 154 comprehensive leak detection surveys throughout the District, locating 1,553 leaks of various sizes, with an estimated 5.9 million gallons daily (mgd) of potential water savings.

*Table 3. FY2019 Utilities Services Group Activity*

Program*	Quantity Conducted	Results
Leak Detection Surveys	14	Estimated 412,560 gpd water savings identified
Water Audits	29	Estimated 10.8 mgd water loss identified
Meter Accuracy Tests	18	Estimated average meter error of 5.35%

*\*Please refer to Table 1 for distribution system looping projects related to flushing reduction assistance.*

#### Mobile Irrigation Laboratory

The Mobile Irrigation Laboratory (MIL) is a cooperative project that is funded and managed by the District and operated by the United States Department of Agriculture – Natural Resources Conservation Service. MILs evaluate agricultural irrigation system efficiencies on a voluntary and confidential basis and provide help with new technology awareness. The District uses the MIL program to assist growers in reducing water use which in turn provides cost savings to the grower. The water savings realized from the MIL evaluations can be significant per project and regionally benefits groundwater supply.

The MIL has evaluated more than 1,400 systems since the project began and the agricultural community has provided a great deal of positive feedback concerning its usefulness. The MIL project contract has been in place since the mid-1980s. Contracts are approved for five-year terms with funding at \$50,000 per year and a renewal contract is anticipated through 2024.

*Table 4. FY2019 Mobile Irrigation Laboratory Activity*

Site Visits*	Total Acres Served	Potential Water Savings**
81	3,167	52.4 million gallons

*\*Site visits include, but are not limited to, system evaluations, catch can tests, pressure tests and new equipment install and training.*

*\*\*Potential Water Savings are savings that could be obtained if all improvements are implemented as recommended.*

## Water Conservation Project Cost Model

The Water Conservation Project Cost Model is a calculator available on the District's website that illustrates the potential effectiveness of various water conservation programs. The model is designed to calculate estimated program costs and water savings benefits associated with different water users and conservation measures. As a result, it can assist utilities in choosing projects that will provide the greatest benefits. In addition to standard costs associated with implementing a conservation measure, the model provides an option to include the costs for research and development, and equipment or training, if applicable.

## Water-Conserving Rate Structures

The District works with utilities to adopt water-conserving rate structures to reduce per capita water use. These efforts assist utilities in achieving a compliance per capita rate of 150 gallons per capita per day (gpcd) or less. Reaching this goal by the end of the calendar year 2019 is identified in the District's Strategic Plan and rule<sup>1</sup>. As the pricing of water can signal that potable water is an increasingly scarce and valuable resource, rate structures are one way to motivate customers to conserve. To estimate the effectiveness of a water-conserving rate structure, the District provides utilities with a free water rate simulation model, WATERATE2008. WATERATE is a planning tool that simulates how changes in water and sewer rate structures impact water revenues and water demand. As part of the projection, the model allows a revenue neutral evaluation. This takes into account the decrease in water demand that results from an increase in price.

## Local Government Comprehensive Plan Amendment Reviews

The District reviews local government comprehensive plan amendments pursuant to Chapter 163, Part II, F.S., and Section 373.711, F.S. Conservation is promoted through technical assistance comments and recommendations that focus on proposed policy language and updates to Ten-Year Water Supply Facilities Work Plans. In addition, consideration of Florida Water Star<sup>SM</sup>, Florida-Friendly Landscaping<sup>TM</sup> and other water-conservation programs, methods and techniques are encouraged for land use changes that involve increases in residential density.

# IV. WATER CONSERVATION INITIATIVE

The Water Conservation Initiative (WCI) is an ongoing effort designed to maximize assistance to public suppliers and promote the implementation of best management practices to achieve conservation objectives within the District's Strategic Plan. Priority areas for the WCI are the Northern Region and Polk County. The four basic objectives for the WCI are to:

- Assist utilities within the District in achieving a compliance per capita rate of 150 gallons per capita per day (gpcd) or less by the end of calendar year 2019, as identified in the Strategic Plan and rule.
- Assist utilities in the District, to reduce regional per capita by 2020, as identified in the Strategic Plan.
- Identify public supply Water Use Permits (WUPs) expiring on a two-year basis, to ensure internal and external coordination occurs prior to and during permitting to comprehensively evaluate potential conservation measures.
- Take feedback received from utilities and develop recommendations to improve the District's conservation efforts.

Divisions within the District with representatives on the Water Conservation Initiative Team (WCIT) include Regulation, Resource Management, Employee and External Relations and the Office of General Counsel.

<sup>1</sup>Rule 40D-3.091 (a) which references the Water Use Permit Applicant's Handbook Part B (section 2.3.7.2)

**Table 5. Water Conservation Initiative Activities FY2019**

County	Activity	Outcome
Inter-District	Finalized and achieved approval for the Water Conserving Rate Technical Memorandum	Ensured applicants' overall conservation plan supports authorized allocation
Inter-District	District Water Supply and Regulation staff members coordinated conservation plan review for permit renewals	Coordinated on five Water Use Permit applications/renewals
Districtwide	Initiated the Water Incentives Supporting Efficiency program	Approved six projects and expended FY2019 budget of \$50,000
Districtwide	Initiated the Conservation Education Program	Confirmed participation and program details for four projects to be implemented in FY2020
Districtwide	Completed targeted outreach to all utilities throughout District exceeding 150 Compliance Per Capita based on 2017 Estimated Water Use Report	Provided information to assist in implementation of additional best management practices to achieve per capita compliance of less than 150 gpd
Districtwide	District Water Supply engineers conducted water audits*	Assisted water users in identifying waste and opportunities to conserve water
Districtwide	Conducted leak detection surveys*	Located a total of 95 leaks
Districtwide	Completed meter accuracy tests*	Assisted permittees in accurately measuring water usage

\*Please refer to *Utilities Services* section of report for additional information on water audits, leak detection surveys and meter accuracy tests.

## Water Incentives Supporting Efficiency

The Water Incentives Supporting Efficiency (WISE) program is a 50 percent cost-share program aimed to financially incentivize water conservation projects with nonagricultural water users. WISE was initiated under the WCI based on the District's recognition for the need to offer an alternative funding opportunity for smaller projects that may not be supported through the CFI. This includes projects implemented by small utilities, hospitals, schools, prisons, homeowners associations, golf courses, hotels, manufacturers, food processing facilities and other commercial users.

The WISE program was first initiated in October 2018 with a total approved budget of \$50,000. At a cost share of up to 50 percent, approved applicants were eligible to receive up to \$20,000 per project in District funds. The budget was fully allocated in FY2019, supporting a total of six conservation projects.

**Table 6. WISE Projects Approved in FY2019**

Project #	Project Name	County	District Share Reimbursement	Estimated Water Savings (gpd)
1	Ringling College of Art and Design, Cooling Tower	Sarasota	\$20,000	4,356
7	Courtyard by Marriott, Toilet Replacement	Hillsborough	\$14,150	2,154
8	Holiday Inn Express, Toilet Replacement	Citrus	\$6,084	711
9	Quality Inn Hernando, Toilet Replacement	Citrus	\$4,880	606
12	Extended Stay America, Flow Management Device	Pinellas	\$2,740	878
13	Extended Stay America, Flow Management Device	Hillsborough	\$2,146	1,664
<b>Total</b>			<b>\$50,000</b>	<b>10,369</b>



## Conservation Education Program

The Conservation Education Program (CEP) provides utilities with support for educational projects that enhance existing efforts to increase residents' knowledge and behaviors that lead to water conservation. The CEP was developed through the WCI in response to utility feedback that residential education is needed to help reduce water use. Through the CEP, the District will work with participating utilities to promote, develop, implement and evaluate approved projects.

The Governing Board approved an allocation of \$30,000 to launch the CEP in FY2020. In FY2019, District staff conducted outreach to utilities in the Northern Planning Region and confirmed participation from four utilities. Project planning was completed throughout the fiscal year in order to streamline project implementation for the following projects in FY2020:

- Citrus County Utilities: Social Norms Based Home Water Use Mail-Out
- Hernando County Utilities: Demonstration Turf-Swap Program
- The Villages: Conservation Media Campaign
- Bay Laurel: Social Norms Based Home Water Use Mail-Out

## V. EDUCATION AND OUTREACH

### Water Conservation Programs

#### Florida Water Star<sup>SM</sup>

The Florida Water Star (FWS) program is a voluntary water conservation certification program for new residential and commercial construction and existing home renovation. The program encourages water efficiency in appliances, plumbing fixtures, irrigation systems and landscapes, as well as water quality benefits from best management practices in landscapes. The program was developed by the St. Johns River Water Management District in 2006 and became a statewide program in 2012.

Through the CFI, the District currently offers FWS rebates in select communities in partnership with local utilities. New homes and commercial buildings receiving FWS certification are eligible for the rebates. The following rebates were offered to builders within the District in FY2019:

- Bay Laurel Utilities distributed 75 FWS rebates in the amount of \$700 each.
- The Polk Regional Water Cooperative distributed 50 FWS rebates in the amount of \$700 each.

An average FWS homeowner with outdoor irrigation can save up to 48,000 gallons of water each year and up to 6,560 gallons of water each year without irrigation. Since 2006, more than 2,075 properties have been certified by the District. In FY2019, the District certified more than 230 properties, as well as attended approximately 40 builder, landscape and irrigation meetings to promote the FWS program.

*Table 7. FY2019 Florida Water Star Activities*

County	Activity	Estimated Annual Water Savings (gallons) of Certified Homes
Hillsborough	Certified 22 properties	144,320
Marion	Certified 289 properties	8,991,657
Sarasota	Certified 2 properties	13,120
Polk	Certified 23 properties	715,599
<b>Total</b>		<b>9,864,696</b>

## Florida-Friendly Landscaping™

Florida-Friendly Landscaping (FFL) is also part of the District's educational programs. It was created by the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) to educate residents about landscape and irrigation principles that save water and protect water quality. The District promotes the use of FFL to members of the building industry, managers of community development districts and boards, homeowners associations, residents and landscape and irrigation professionals through development and distribution of program publications and materials, and staffing educational booths at FFL workshops and events. The District has supported this program since 2001.

## Water CHAMP<sup>SM</sup>

The Water Conservation Hotel and Motel Program (CHAMP) is a free towel and linen reuse program that encourages hotel and motel guests to use their linens and towels more than once during their stay. Participating lodging facilities receive free publications and materials that explain the program to staff and guests. CHAMP was initiated in 2002 as a pilot project before being expanded Districtwide.

An audit of water use before and after hotels/motels joined the program showed that properties averaged a savings of 17 gallons of water per day per occupied room, as well as saving electricity and reducing detergent use.

## Community Awareness Campaigns

The District has many community-wide outreach programs and awareness campaigns that focus on water conservation, watersheds and water quality. These include:

- **"Skip a Week" Campaign** – To encourage reduced irrigation during the winter months of January and February.
- **Water Conservation Month** – Throughout the month of April, the District works with local government partners to share the importance of water conservation and increase efforts to conserve water.
- **"Watch the Weather, Wait to Water"** – To encourage residents to watch the weather during the summer months of June, July, August and September to offset irrigation with rainfall.

## Publications and Materials

Free publications are available to download or order via [WaterMatters.org](http://WaterMatters.org) for residents within the District. These publications include posters, student worksheets, teacher guides, bookmarks, recreation guides, informational brochures, tip cards and more on a variety of topics related to the District's mission, including conservation.

The District also supplies water-conserving items, such as leak detection tablets, sink aerators, low-flow showerheads and water-efficient spray nozzles, at public events, presentations, workshops and to partner organizations. Education materials are provided concurrently to reinforce water conservation.

## Youth Education

The District provides funding to school districts within our region to help support water conservation education both in and out of the classroom. These programs allow students to gain the background knowledge to make informed decisions about water resources in the future. They include field trips, teacher trainings, classroom project supplies and Splash! school grants. Many free resources also are available to teachers, including free publications and materials, water education videos, virtual watershed excursions and the Classroom Conservation Challenge.

## Social Media

The District uses social media to promote conservation through regular posts, including tips to residents on how to conserve water through infographics, videos and promotion of free publications and additional resources.

## News Releases

The District issues news releases to inform the media and the public about District-initiated news and events, including those involving water conservation, such as water restrictions and conservation projects.

## Speaking Engagements

Through the Speakers Bureau, District staff share their expertise with a wide variety of audiences. Frequently requested topics include water resources and water conservation. The latter focuses on the limitations of our water supply and how residents can help conserve water both in the home and in the yard. Learning about leak detection, rain sensors and other conservation measures helps to ensure that residents are well-informed and can act to conserve water.

## Decision-Maker Water Schools

The District provides small grants for decision-maker water schools, which have a large focus on conservation. These programs provide elected officials, community leaders and other decision makers with factual information about their county's water resources and encourages improved public policy and decision making regarding water resource issues. In FY2019 the District sponsored one water school.

# VII. REGULATION

## Water Use Permit Conditions

A Water Use Permit (WUP) allows withdrawal of a specified amount of water, either from the ground or from a lake or river. Upon submittal of a WUP application, the District's WUP Bureau evaluation staff determine if the use of water is reasonable and beneficial, does not interfere with any presently existing legal use of water and is consistent with the public interest. WUPs issued by the District contain standard and special conditions that mandate efficient use of water and conservation measures. Requirements include use of best management practices, leak detection and repair, inspections, water audits, water-conserving rate structures, a compliance per capita rate no greater than 150 gpcd by year end 2019 and implementation of a Water Conservation Plan.

## Water Conservation Plans

As part of the WUP process, all applicants are required to implement a Water Conservation Plan. The plan must demonstrate that environmentally, technically and economically feasible water conservation measures applicable to the proposed use have been or will be employed. Water conservation measures that have been approved by the Governing Board by rule or water shortage order must be implemented. Where specific water conservation elements have been developed for specific use types, such as public supply or agriculture, these elements are incorporated into the permit.

## Year-Round Water Conservation Measures

Year-round water conservation measures are part of District rules (Chapter 40D-22, Florida Administrative Code). The rule primarily focuses on allowable irrigation practices, including lawn and landscape watering that are in place when there is no drought or other declared water shortage. The District generally uses the term "measures" instead of "restrictions" to distinguish the year-round practices from stricter watering limitations



that can be imposed during a water shortage. These practices are meant to reduce wasteful irrigation habits and to help condition lawns for drought survival.

## Water Shortage Plan/Orders

Water shortage orders are temporary water use restrictions and other requirements that are declared in accordance with a state-mandated water shortage plan. This plan is included in a District rule (Chapter 40D-21, Florida Administrative Code) that describes how the agency will monitor hydrologic conditions and make decisions to manage the impact of droughts and other water shortages. Management strategies include four phases of response and additional actions that can be implemented in emergency situations.

# V. RESEARCH

## Water Conservation Research

The District provides annual funding to the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) primarily for research projects involving agricultural best management practices, including those targeting water conservation. Additionally, funds have been awarded to research that relates to public supply conservation. UF/IFAS is a federal-state-county partnership that provides research and development for Florida's agricultural, human and natural resources, as well as related food industries.

From FY2005 through FY2019, the District has provided a total of \$9.93 million in funding toward 52 UF/IFAS research projects. In FY2019, the District provided \$422,250 in support of research projects involving water conservation. This amounts to approximately 89 percent of total District funds that were used toward all research projects in FY2019.

*Table 8. Current Governing Board-Approved Conservation Research Projects*

Project #	Project Name	Crop Type/ Use	Funding Years	Total Project Cost	FY19 Funding Allocation
B406	Evaluating Fertigation with Center Pivot Irrigation for Water Conservation on Commercial Potato Production	Potatoes	FY2016-2020	\$400,000	\$76,500
B407	Reduction of Water Use for Citrus Cold Protection	Citrus	FY2017-2019	\$21,000	\$7,750
B136	Florida Automated Weather Network Data Dissemination and Education	General Agriculture	FY2019	\$100,000	\$100,000
B413	Effect of Water Scheduling and Amounts on Growth of Young Citrus Trees in High Density Plantings	Citrus	FY2018-2020	\$168,623	\$70,000
B446	Evaluation of Water Use & Water Quality Effects of Amending Soils & Lawns with Compost Material	Public Supply	FY2018-2019	\$60,000	\$30,000
B414	Blueberry Water Allocation and Irrigation Scheduling Using Evapotranspiration-based Methods	Blueberry	FY2019-2020	\$210,000	\$95,000
P415	Leaching Fraction-Adjusted Irrigation Impact on Nutrient Load and Plant Water Use	Nursery	FY2019-2020	\$81,320	\$43,000
<b>Total</b>				<b>\$1,040,943</b>	<b>\$422,250</b>



The Southwest Florida Water Management District (District) does not discriminate on the basis of disability. This nondiscrimination policy involves every aspect of the District's functions, including access to and participation in the District's programs and activities. Anyone requiring reasonable accommodation as provided for in the Americans with Disabilities Act should contact the District's Human Resources Office Chief, 2379 Broad St., Brooksville, FL 34604-6899; telephone (352) 796-7211 or 1-800-423-1476 (FL only), ext. 4703; or email [ADACoordinator@WaterMatters.org](mailto:ADACoordinator@WaterMatters.org). If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).