





TABLE OF CONTENTS

Ι	Executive Summary	4
II	Cost-Share Funding	5
III	Utilities Services	9
IV	Water Conservation Initiative	11
V	Education and Outreach	14
VI	Regulation	17
VII	Research	18

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 2021-2025 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 103 gallons per day (see Figure 1). While the population in the District has grown 126 percent over a 38-year period from 1982-2020, total water use has decreased by 26 percent 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 2021 (Oct. 2020–Sept. 2021). 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 FY2020-21 by the Florida Department of Environmental Protection)



NWFWMD = 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

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 generally covers 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 enhancements, and irrigation smart controllers. Additional program types eligible for CFI funding are line looping, advanced metering analytics, Florida Water Star[™] builder rebates and industrial/commercial-related efficiency improvements.

County	Project #	Cooperator	Title	Total Costs	District Costs	Estimated Savings (gpd*)
Citrus	Q137	Citrus County	Water Sense Labeled Irrigation Controller Install—Phase 4	\$60,000	\$30,000	17,458
Multi-County	Q138	WRWSA	Regional Irrigation System Audit Program— Phase 6	\$121,000	\$60,600	32,184
Pinellas	Q140	City of Tarpon Springs	Tarpon Springs Toilet Rebate Phase II	\$20,000	\$10,000	3,143
Manatee	Q168	Manatee County	Manatee County Toilet Rebate Project, Phase 14	\$165,000	\$82,500	26,380
Sarasota	Q145	Longboat Key Club	Longboat Key Club Advanced Irrigation System	\$1,115,000	\$508,516	94,600
Sarasota	Q179	City of Venice	City of Venice Toilet Rebate and Retrofit Project—Phase 8	\$47,800	\$23,900	5,371
Polk	Q166	City of Bartow	Bartow Golf Course Advanced Irrigation System	\$500,000	\$250,000	50,700
Multi-County	Q215	Tampa Bay Water	Tampa Bay Water Demand Management Program Phase 2**	\$2,864,476	\$1,432,238	680,000
Marion	Q211	Bay Laurel	Bay Laurel 2021 Irrigation Controller and ET Sensor Project	\$97,500	\$48,750	22,485
Polk	Q187	PRWC	Demand Management Plan Strategic Implementation**	\$168,710***	\$42,177	23,300
Sarasota	Q185	City of North Port	North Port Water Distribution Hartsdale/ Aldonin/Totem Area Looping Project	\$415,000	\$207,500	16,884
Citrus	Q193	City of Crystal River	Crystal River Conservation Phase 1 Project	\$18,180	\$9,090	7,098
Manatee	Q214	City of Palmetto	Palmetto Toilet Rebate Program—Phase II	\$40,000	\$20,000	10,660
Total				\$5,632,666	\$2,725,271	990,263

Table 1. FY2021 CFI Conservation Projects

* gallons per day

**Project encompasses a multitude of water conservation initiatives in partnership with member governments.

***Total costs include \$27,726.38 of Florida Department of Environmental Protection funds available through the South Florida Water Management District.

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.

In FY2021, FARMS approved two water conservation related projects with a total estimated savings of 100,000 gpd (see Table 2). Mini-FARMS approved 50 conservation-related projects with a total estimated savings of between 150,000 gpd and 200,000 gpd (see Table 3). More information on the FARMS program can be found in the FARMS Biennial Report.

Table 2. FARMS Conservation Projects Approved in FY2021

Project # / Name	County	District Share Reimbursement	Estimated Water Savings (gpd)
H790–M & R Farms	DeSoto	\$96,235	25,000
H791–Wauchula Road Duette LLC Phase 2	Manatee	\$62,713	75,000
Total	\$158,948	100,000	



Weather station installed at Creekside Nursery through the FARMS Program to increase irrigation efficiency.

Table 3. Mini-FARMS Conservation Projects Approved in FY2021

Project #	County	District Share Reimbursement
Highland Citrus, Inc. WMD 236	Polk	\$7,481.25
Calvin Yang WMD 237	Polk	\$8,000.00
Florida Sun Hops WMD 238	Hernando	\$5,363.74
Jurnigan Farm WMD 239	Hillsborough	\$1,425.00
A Reverence for Roses, Inc. WMD 240	Citrus	\$6,957.94
Berry Red Farm WMD 241	Hillsborough	\$1,637.25
Favorite Farms WMD 242	Hillsborough	\$5,700.00
Passion Organics, LLC WMD 243	Hillsborough	\$5,700.00
Sweet Life Farms, LLC WMD 244	Hillsborough	\$8,000.00
Sydney Farms WMD 245	Hillsborough	\$4,275.00
Tree Top Citrus, LLC Pump Automation WMD 246	Polk	\$8,000.00
Tree Top Citrus, LLC Field Valve Automation WMD 247	Polk	\$7,245.00
Three Star Farms WMD 248	Hillsborough	\$2,850.00
Sydney Farms 8428 WMD 249	Hillsborough	\$1,425.00
Richart Family Holding, LLC—Candle Road Block WMD 250	Polk	\$8,000.00
Carl Little Peanuts WMD 251	Hillsborough	\$8,000.00
Green Acres WMD 252	Pasco	\$6,158.36
Florida Ag Research WMD 253	Hillsborough	\$4,275.00
Legacy Land Preservation Group, LLC–WMD 254	Polk	\$8,000.00
Joyful Harvest, LLC—Pump Automation WMD 255	Polk	\$8,000.00
Joyful Harvest, LLC Precision Field Automation WMD 256	Polk	\$8,000.00
BLIA, LLC Pump Station Automation WMD 257	Polk	\$8,000.00
BLIA, LLC Precision Field Automation WMD 258	Polk	\$8,000.00
Frost Proof Farms WMD 259	Polk	\$2,850.00
Frost Proof Farms 7052 WMD 260	Polk	\$2,850.00
Hurst Farms WMD 261	Sumter	\$2,850.00
Legacy Land Preservation Group, LLC–WMD 262	Polk	\$1,886.25
Bonnie Blue Ranch WMD 263	Hillsborough	\$8,000.00
David McKay Pump Automation WMD 264	Highlands	\$8,000.00
David McKay Weather Station WMD 265	Highlands	\$4,215.00
Pioneer Grove WMD 266	Hardee	\$8,000.00
77 Acre Grove–Ben Norris WMD 267	Polk	\$8,000.00
Eileen Blair WMD 268	Hardee	\$8,000.00
Lennon Grove Service—Pump Automation WMD 269	Polk	\$7,038.75
Lennon Grove Services–Valve Automation WMD 270	Polk	\$5,142.75

Table 3. Mini-FARMS Conservation Projects Approved in FY2021 [continued]

Project #	County	District Share Reimbursement
Jeff Shaske Automation WMD 271	Highlands	\$8,000.00
Desoto Excavating-Precision Irrigation WMD 272	DeSoto	\$8,000.00
Desoto Excavating-Pump Automation WMD 273	DeSoto	\$8,000.00
Bamboo Products, LLC—Pump Automation WMD 274	Highlands	\$8,000.00
Bamboo Products, LLC–Weather Station WMD 275	Highlands	\$4,215.00
Rand Reese—Automation WMD 276	Polk	\$8,000.00
Andy Tuck–Howard Grove WMD 277	Highlands	\$8,000.00
EW Simmons 4522 WMD 282	Hillsborough	\$4,497.57
EW Simmons Drawdy Rd WMD 283	Hillsborough	\$4,497.57
EW Simmons Farms—Fertigation WMD 284	Hillsborough	\$6,556.70
EW Simmons Farms, Inc. Automation WMD 285	Hillsborough	\$7,006.94
Endless Forrest Farms—Automation WMD 286	Charlotte	\$7,798.33
Endless Forest Farms—Valves WMD 287	Charlotte	\$8,000.00
Calvin Yang—Fertigation WMD 288	Polk	\$2,101.60
Total		\$300,000.00



High-efficiency overhead irrigation spray guns installed at Creekside Nursery through the FARMS Program.

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 155 leak detection surveys throughout the District, locating 1,554 leaks of various sizes, with an estimated 5.9 million gallons per day (mgd) of potential water savings. In FY2021, 21 water audits were completed (see Table 4). There were no leak detection surveys completed in FY2021.

Table 4. FY2021 Utilities Services Group Activity

Program*	Quantity Conducted	Results
Water Audits	21	A water audit report was provided to each participating utility.

*Please refer to Table 1 for utilities services-related CFI projects.

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 (NRCS). The NRCS-MIL evaluates agricultural irrigation system efficiencies on a voluntary and confidential basis and provides 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 implementing system improvements identified by the MIL evaluations can be significant per project and regionally benefits groundwater supply, while also helping to improve water quality.

The MIL has assisted with more than 1,450 systems since the project began and the agricultural community has provided a great deal of positive feedback concerning its value. 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 5. FY2021 Mobile Irrigation Laboratory Activity

Site Visits*	Total Acres Served	Potential Water Savings**
89	3,306	94 million gallons

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

**Potential Water Savings are the annual 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 assisted utilities 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 District's Strategic Plan and rule¹. 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[™], Florida-Friendly Landscaping[™] 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. The WCI objectives include the following:

- Assist utilities in the District to reduce regional per capita, 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.

County	Activity	Outcome
Districtwide	Completed the third year of the Water Incentives Supporting Efficiency (WISE) program.	Approved 14 projects in FY2021 with a total budget allocation of \$142,351.49.
Districtwide	Completed the second year of the Conservation Education Program.	Developed and implemented four projects and expended FY2021 budget of \$30,000.
Inter-District	The District's Regulation Division coordinated with Water Supply staff to develop and finalize a compliance protocol for WUPs exceeding 150 gpcd.	The compliance protocol document for identifying and addressing WUPs with compliance per capita above 150 gpcd was approved. Non-compliance letters were sent to utilities with compliance per capita above 150 gpcd.
Inter-District	District Communications and Regulation staff supported Water Supply's WISE Program.	Staff represented the WISE program at tradeshow/ conference events and notified WUP applicants of WISE availability.
Inter-District	District Regulation and Water Supply staff coordinated on the review of water conservation plans and population projection calculations.	Coordinated review for 10 public supply WUP applications.
Districtwide	Compiled information on District water conservation related efforts and activities.	Published FY2020 Water Conservation Summary Report.
Polk County	District Communications staff worked with Government and Community Affairs and Office of General Counsel staff on Florida Water Star [™] (FWS) codes and ordinances.	Wrote FWS into City of Lake Alfred's Planned Urban Development code and Town of Dundee's building ordinance.
Hillsborough County	District Communications staff coordinated with internal staff and external project partners on the "Rainfall Signage" pilot project.	Finalized sign, developed community contract, and distributed community pre-survey and educational mailout for "Rainfall Signage" pilot project.

Table 6. Water Conservation Initiative Activities FY2021

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.

In FY2021, the WISE program allocated \$142,351.49 across 14 projects with a total estimated savings of 110,809 gpd. At a cost share of up to 50 percent, approved applicants were eligible to receive up to \$20,000 per project in District funds.

Project #	Project Name	County	District Share Reimbursement	Estimated Water Savings (gpd)
22	Crescent Oaks Golf Club Irrigation Controller Upgrade	Pinellas	\$6,893.61	15,419
23	River Greens South Golf Course Weather Station	Highlands	\$2,958.17	3,912
24	Holiday Inn Crystal River Toilet and Showerhead Replacement	Citrus	\$9,575.00	1,602
25	Greyhawk Landing CDD Reclaimed Water Connection	Manatee	\$13,215.00	14,838
26	Wellington at Seven Hills High Efficiency Sprinkler Heads and Pressure Regulators	Hernando	\$4,292.50	2,528
27	Manatee County Toilet Replacement	Manatee	\$2,005.88	290
28	Deer Creek RV Golf & Country Club Irrigation System Upgrade	Polk	\$18,988.00	7,507
29	Laurel 112 LLC Toilet, Showerhead, and Aerator Replacement	Hillsborough	\$13,495.75	3,171
30	Queens Harbour HOA Smart Controllers, MP Rotators, and Weather Stations	Sarasota	\$6,964.20	10,980
31	Harbourage at Braden River CDD Reclaimed Water Connection	Manatee	\$20,000	24,493
32	Positano Condo Association Irrigation System Controller and Modifications	Manatee	\$3,487.50	1,804
34	Tropical Golf Properties Irrigation Controller and Weather Station	Pinellas	\$11,239.58	6,877
35	The Moorings at Point O'Woods HOA Decoders, Grounding Packages, and Flow Device	Citrus	\$11,500.00	2,512
36	Hillsborough County ET Irrigation Controller	Hillsborough	\$17,736.30	14,876
Total			\$142,351.49	110,809

Table 7. WISE Projects Approved in FY2021

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 works with participating utilities to promote, develop, implement and evaluate approved projects.

The District implemented the second year of the CEP in FY2021, allocating \$30,000 in support of four conservation education projects (see Table 8).

Utility Project Name		Project Components	
Bay Laurel Center CDD	Florida-Friendly Landscaping™ Demonstration Site	 Florida-Friendly Landscaping demonstration installation at the Stone Creek Community Florida-Friendly Landscaping workshop for residents 1 resident mailout 	
Haines City Social Norms Based Water Use Mail-Out		• 3 water use mail-outs to high-volume water users	
Riverside Club Golf and Marina Community	Landscape Irrigation Evaluations and Conservation Video Series	 35 free landscape irrigation evaluations to residents 4 conservation videos posted to YouTube and promoted to residents 2 resident mailouts 	
Gasparilla Island Water Association	Water-Smart Landscapes Contractor Training and Bill Stuffers	 Development of a 5-module online training offered free of charge to landscape and irrigation contractors 3 bill stuffers with water conservation tips 	



Micro-sprays highlighted in the "Micro-Irrigation Basics" video created for residents as part of the Riverside Club's CEP project.

V. EDUCATION & OUTREACH

Water Conservation Programs

Florida Water Star™

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 FY2021:

- The Polk Regional Water Cooperative distributed 54 FWS rebates in the amount of \$700 each, resulting in a total estimated water savings of 2,608,254 gallons annually.²
- Tampa Bay Water offered rebates in the amount of \$1,000 per home. During FY2021, District staff promoted the rebates through the Tampa Bay Builder Association and conducted a FWS Accredited Professionals training at Tampa Bay Water to promote the rebates.

In addition to rebates, during FY2021 the District worked with the cities of Dundee and Lake Alfred to incorporate FWS certification and criteria into local building codes (total of 7 cities). District staff also attended approximately 40 builder, landscape and irrigation meetings to promote the FWS program.

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, 2,389 properties have been certified by the District. In FY2021, the District certified more than 150 properties.

County	Activity	Estimated Annual Water Savings (gallons) of Certified Homes
Hillsborough	Certified 19 properties	124,640
Marion	Certified 83 properties	4,008,983
Sarasota	Certified 4 properties	26,240
Polk	Certified 40 properties	1,932,040
Total		6,091,903

Table 9. FY2021 Florida Water Star[™] Certified Properties List

² FWS property certification and rebate distribution may occur in two different fiscal years. As a result, the number of rebates distributed do not coincide with the number of homes certified in Polk County in FY2021.

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.

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* 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 campaigns.

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.



New irrigation controller installed at a community in Longboat Key as part of a WISE irrigation enhancement project.

VI. REGULATION

Water Use Permit Conditions

A Water Use Permit (WUP) allows the withdrawal of a specified amount of water, either from the ground (i.e. aquifers), surface (i.e. lakes, rivers or ponds) or alternative water supplies (i.e. reclaimed water or tailwater recovery). 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, is consistent with the public interest and does not impact any sensitive environmental features. 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 and implementation of a Water Conservation Plan.

Water Conservation Plans

As part of the WUP process, all applicants for annual average quantities of 100,000 gallons per day or greater 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.

VII. 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 FY2021, the District has provided a total of \$11 million in funding toward 58 UF/IFAS research projects. In FY2021, the District provided \$407,000 in support of research projects, all of which involved water conservation.

Project #	Project Name	Crop Type/ Use	Funding Years	Total Project Cost	FY21 Funding Allocation
B416	Improved Irrigation Management on Mature Citrus Trees Productivity in High Planting Densities	Citrus	FY2020-2022	\$192,015	\$47,000
B418	Soil Amendments and Maturing Landscapes for Reduced Irrigation Potential	Urban Landscape	FY2020-2021	\$50,000	\$20,000
B420	Compact Bed Geometries for Watermelon in Southwest Florida	Watermelon	FY2020-2022	\$282,460	\$100,000
B136	Florida Automated Weather Network Data Dissemination and Education	General Agriculture	FY2020-2024	\$500,000	\$100,000
B421	Rainfall Signage to Reduce Residential Irrigation	Urban Landscape	FY2021-2023	\$125,000	\$50,000
B423	Micro-irrigation for Reducing Water Use for Bare-root Strawberry Establishment and Freeze Protection	Strawberry	FY2020-2024	\$301,629	\$90,000
Total		\$1,451,104	\$407,000		

Table 10. Current Governing Board-Approved Conservation Research Projects

NOTES



VISAV 2-22

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, services and activities. Anyone requiring reasonable accommodation, or who would like information as to the existence and location of accessible services, activities, and facilities, as provided for in the Americans with Disabilities Act, should contact the Human Resources Office Chief, at 2379 Broad St., Brooksville, FL 34604-6899; telephone (352) 796-7211 or 1-800-423-1476 (FL only), ext. 4747; or email *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). If requested, appropriate auxiliary aids and services will be provided at any public meeting, forum, or event of the District. In the event of a complaint, please follow the grievance procedure located at *WaterMatters.org/ADA*.