# **Cooperative Funding Program**

**Alternative Water Supply & Water Conservation** 

**FY23 Guidelines** 

December 2021







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## 1. APPLICATION DEADLINE AND CONTACTS

**Deadline**: March 1, 2022 at 4:00 p.m.

**Submittal**: Applications must be uploaded electronically at

https://www.sfwmd.gov/doing-business-with-us/coop-funding

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#### 2. POLICIES AND GUIDELINES

#### **Overview**

Since 2020, Governor DeSantis and the Florida Legislature have approved an investment of \$40 million each year statewide to develop water resource and water supply projects to help protect water resources and meet the needs of existing and future users. In anticipation of Fiscal Year 2022-2023 legislative appropriations, the South Florida Water Management District (District) is accepting applications for alternative water supply (AWS) and water conservation (WC) projects for funding consideration. Any appropriations are directed from the Florida Legislature through the Florida Department of Environmental Protection (FDEP) to the water management districts, who will provide oversight to eligible partners for projects within their districts. This Cooperative Funding Program (CFP or Program) is a cost-share reimbursement program with up to a 50% match.

The District will review project applications within its boundaries, according to the priorities and guidelines presented in the following sections of this document. Applications will be accepted from December 1, 2021 to March 1, 2022 for proposed "shovel-ready" projects (i.e., implemented between October 1, 2022 and September 30, 2023; <a href="https://www.sfwmd.gov/doing-business-with-us/coop-funding">https://www.sfwmd.gov/doing-business-with-us/coop-funding</a>.

## **Program Objective**

The Program's objective is to assist local governments, public and private water providers, and other entities with construction and/or implementation of AWS and WC projects that support or complement the District's mission. AWS projects are associated with development of nontraditional water sources and/or storage to meet current and future water demands. WC projects are associated with the use of hardware and/or technology to increase water use efficiency. Other types of projects (e.g., water quality, stormwater) currently are not eligible for funding under the Program.

#### **District Mission**

The District's mission is to manage and protect water resources of the region by balancing and improving flood control, water supply, water quality, and natural systems. Part of the District's water supply mission is achieved by supporting implementation of AWS development and WC measures.

## **General Program Requirements**

The following is provided as guidance for CFP applicants. The District is responsible for identifying projects suitable for cost-share funding and recommending funding amounts for each eligible project. The District Governing Board will review and approve the identified projects and recommended funding amounts for transmission to the FDEP for funding consideration. It is the FDEP's responsibility to balance and prioritize statewide funding requests. The remainder of this section describes the application process, considerations during review of project applications, and potential funding levels. Every applicant must satisfy these requirements.

## **Project Eligibility**

Applicants must include all required documentation, as outlined in the application, and other applicable documents, or the project may be deemed ineligible. Projects must be a) located within the District boundaries or have benefits to the District, b) feasible, and c) ready to implement and completed within the funding period. Project implementation shall not be initiated before October 1, 2022.

To be eligible, entities must meet the following requirements:

- Be a public or private entity, including water providers and large users; local governments; water, wastewater, and reuse utilities; municipal, industrial, commercial, institutional, agricultural, and nursery water users; homeowners' and condominium associations; or non-profit organizations
- Adhere to the application instructions.
- Adhere to applicable laws and regulations.
- Comply with allowable funding costs.

The following user groups are not eligible:

- Individual homeowners (e.g., single-family residential users).
- Permittees that are out of compliance with District- or FDEP-issued permits.
- New: Local governments and municipalities without an approved irrigation ordinance that comports with the District's Mandatory Year-Round Landscape Irrigation Conservation Measures. For more information refer to Chapter 40E-24, Florida Administrative Code (F.A.C.) CHAPTER 40E-24 (sfwmd.gov) and Model Irrigation Ordinances for Local Governments.

#### **Cost Considerations**

General cost considerations are presented below. More specific cost considerations are presented in **Section 3**.

#### Allowable Costs for All Projects

- Funds may only be used for the project identified in the application.
- Construction costs for AWS projects or implementation costs for WC projects starting on or after October 1, 2022.

#### Non-Allowable Costs for All Projects

- Expenses incurred or obligated before or after the funding period.
- Pilot tests, planning, permitting, design, engineering, etc.
- Regular operations and maintenance costs (see definition in **Section 4**) including, but not limited to, replacement of utility meters, sewer lines, finished water lines, irrigation lines, pumps (some exceptions apply), supply wells, and storage tanks (some exceptions apply).
- Projects that are out of compliance with permit conditions, are proposed to bring a facility back into compliance, or are proposed as settlement for enforcement activities.
- Lobbying or attempting to influence federal, state, or local legislation.
- Bad debts, contingencies, fines and penalties, interest, and other financial costs.
- Private entertainment, food, beverages, plaques, awards, or scholarships.

- Projects restricted to exclusive participation, including restricted-access programs based on protected bases under law.
- Funding used to underwrite other funding programs.
- Expenses associated with the preparation, submission, or presentation of the application.
- Contributions or donations to other organizations.
- Other ineligible costs such as non-paid volunteer hours; educational programs and materials (e.g., coloring books, stickers, etc.); waived fees; and an individual's entire annual salary.

#### Withdrawal of Application/Project

Applications, once received, become the property of the District and become a public record. Applicants may withdraw their submitted application from consideration by notifying the District in writing (e-mail preferred) through an authorized representative at any time. Application documents are <u>not</u> returned to the applicant.

## **Application Development Costs**

Neither the District nor its representatives shall be liable for any expenses incurred through the preparation, submission, or presentation of the funding application, nor shall said expenses be reimbursed using program funds (see non-allowable costs section above). All information in the application shall be provided at no cost to the District.

#### Award

The applicant understands that the application does not constitute a contract or purchase order with the District. No contract or purchase order is binding or official until applications are reviewed and accepted by the District, approved by the District Governing Board, allocated funding by the FDEP, and duly executed by the parties as an official contract or purchase order. The FDEP reserves the right not to issue any funding whatsoever if it is in the best interest of the FDEP or the District.

This is a <u>reimbursement</u> program. Applicants must commit to fully fund the project without funds from the CFP. Awarded funds will be distributed upon project completion. Any state or federal appropriations or local grant monies received by the applicant for a specific project shall first be applied toward the total construction or implementation cost of the applicant's proposed project. Funding generally can be <u>up to</u> 50% of the project's construction or implementation cost. However, funds allocated from the Water Protection and Sustainability Trust Fund are eligible for <u>up to</u> 40% of the project's construction or implementation cost.

Funds will be awarded based on estimated project costs, as included in the application. The District may prorate and reduce the funding amount if the project scope is not 100% completed as outlined in the Statement of Work. In no event shall the funding amount exceed percentages of the expenditures approved by the District Governing Board. If actual project implementation costs are less than estimated costs, a reduced award may result. During project closeout, actual costs must be accounted for and supported by evidence, including but not limited to the following: a completion/certification letter, vendor invoices/pay applications, check payments, records for all services, and verification of project completion. Failure to supply evidence of all financial expenditures will result in the withholding of funds.

#### **Funding Compliance Review**

If selected and after contracting, the District will ensure the proper use of funding by requiring applicants to comply with the terms and conditions of the contract(s) or purchase order(s). Additionally, the District will ensure compliance through the following:

- If applicable, site visits to verify commencement, installation, and/or progress of the project and/or before and after photo documentation.
- Review of quarterly status reports required by the contract or purchase order.
- Thorough review of deliverables (financial expenditure documentation may include, but is not limited to, a certification letter from the entity; vendor invoices/pay applications; check payments; in-house labor, materials, and equipment use; and any required reports/exhibits) and verification of project completion.
- Periodic financial audits to ensure funding objectives are met.

#### Application

Applications must be submitted via <a href="https://www.sfwmd.gov/doing-business-with-us/coop-funding">https://www.sfwmd.gov/doing-business-with-us/coop-funding</a> by March 1, 2022 at 4:00 p.m. Applications should include detailed project information, timelines, funding commitments, benefit quantifications, and locational data (e.g., GIS shapefile, latitude/longitude data in decimal degrees). A realistic project timeline must be included and contain project dates. The timeline also should include a schedule for project components associated with the funding request as well as a schedule for the overall project. A full breakdown of project costs will be required. A project may include multiple components submitted under one application. For assistance completing the application, example AWS and WC applications are available at <a href="https://www.sfwmd.gov/doing-business-with-us/coop-funding">https://www.sfwmd.gov/doing-business-with-us/coop-funding</a>. Section 3 provides specific project guidelines.

District staff will review all applications and present the project list to the District Governing Board for review and approval. The approved project list then will be submitted to the FDEP. The FDEP will allocate funding at its discretion. The District review will consider, but not be limited to, the following elements (no implied priority) when reviewing applications (refer to **Tables 1** and **4** for additional details):

- District mission, resource management plans, and regional water supply plans
- Environmental, resource, and/or community benefits
- Cost effectiveness
- Project readiness
- Continuation phase of a previously funded project
- For local governments and municipalities, presence of a local irrigation ordinance that comports with the District's Mandatory Year-Round Landscape Irrigation Conservation Measures, Chapter 40E-24, F.A.C.
- Proposed project is in a Rural Economic Development Initiative (REDI) or Rural Area of Critical Economic Concern community

Projects ready for immediate construction or implementation will receive higher consideration than those that are not ready. For WC projects, those with greater cost-benefits (lower cost per gallon saved, \$/Kgal) will receive more favorable consideration. Projects requiring more than 2 years to complete are eligible to be funded; however, such projects should be broken down into shorter phases that can be completed

within the funding period, if appropriate. Funding of one project phase does not guarantee that subsequent phases will be selected, receive similar levels of funding, or be funded at all.

### **Funding Commitment**

If a third party is providing funding, commodities, or permissions for the project, a letter indicating such commitment, on the third-party provider's letterhead, is required. The letter must be signed by a person authorized to bind the third party and indicate the person's title and authority. The applicant shall be required to obtain all relevant documentation from the third party to support reimbursement.

## 3. PROJECT TYPES – SPECIFIC GUIDELINES

## **Alternative Water Supply Projects**

The focus of the CFP AWS component is to share costs of projects that provide alternative water supply. Meeting the growing need for water hinges on efforts to develop water sources that offer an alternative to traditional fresh groundwater and surface water. Alternative water sources are important to Florida's future and help communities diversify supply sources. Reducing reliance on regional freshwater sources makes communities less susceptible to the effects of drought.

One objective of the CFP is to support the District's <a href="www.sfwmd.gov/our-work/water-supply">www.sfwmd.gov/our-work/water-supply</a>, which are developed for each of the District's five planning regions. The goal of each regional water supply plan is to identify sufficient sources of water to meet existing and projected reasonable and beneficial uses while sustaining water resources and related natural systems. Plan objectives include the following: increase available water supplies, maximize overall water use efficiency, and reduce reliance on traditional water sources through development of alternative water supplies, including non-traditional sources. Such sources include saltwater or brackish water, reclaimed or recycled water, surface water captured during heavy rainfalls, sources made available through additional new storage capacity, and stormwater (for use by a water use permittee), among others. To meet plan goals and objectives, water supply plans contain suggested measures such as the following:

- Develop AWS sources, where possible.
- Increase water use efficiency through effective WC.
- Explore aquifer storage and recovery to extend water availability during peak demand periods.
- Construct storage for reclaimed water to extend use of seasonal water supplies and interconnects.
- Utilize membrane treatment concentrate water beneficially, including blending it with reclaimed water
- Increase reuse through construction of additional reclaimed water lines for landscape irrigation.
- Construct new or retrofitted surface water storage systems for agricultural operations.
- For applicable utilities in the Lower East Coast Planning Area, develop AWS projects to reduce and/or eliminate use of ocean outfalls in compliance with Section 403.086(9), Florida Statutes (F.S.).
- In the Lower East Coast and Lower West Coast planning areas, develop AWS sources to minimize saltwater intrusion potential.
- In the Central Florida Water Initiative Planning Area, develop WC projects and expand use of reclaimed water.

Examples of eligible projects from previous years include aquifer storage and recovery systems, reclaimed water production facilities and transmission mains, reverse osmosis plants, brackish water supply wells, and tailwater recovery projects.

### **Alternative Water Supply Specific Cost Considerations**

#### Allowable Costs for Alternative Water Supply Projects

- AWS raw water transmission lines
- Reclaimed water storage tanks
- Reverse osmosis trains, pumps, and associated appurtenances
- Aquifer storage and recovery wells, brackish water production wells, and concentrate disposal wells associated with development of an AWS source

## Non-Allowable Costs for Alternative Water Supply Projects

- Designs, permits, as-built plans, videos, early completion bonus, bonds, insurance, etc.
- Finished water storage tanks and transmission lines
- Operations and maintenance work (e.g., lift stations, meters, replacement wells)
- End-user service line connections
- Backup generators
- Replacement landscaping, concrete pads, protective coverings (e.g., roofs, sheds)

## **Alternative Water Supply Project Review Considerations and Guidelines**

The District will review AWS projects based on program considerations and guidelines (no implied priority), as presented in **Table 1**.

**Table 1**. Alternative Water Supply Considerations and Guidelines

Consideration	Guideline
Regional benefits	Does the project provide regional water supply benefits (e.g., multiple entities, amount of water created, greatest need, project location)?
Benefits a water body with adopted MFL(s)	Does the project support an adopted Minimum Flow and Minimum Water Level (MFL)?
Other environmental benefits	What other environmental benefits does the project provide? To what degree does the project enhance natural systems (e.g., the Everglades, other environmentally sensitive areas), facilitate aquifer protection, reduce saltwater intrusion, etc.?
Reduces dependence on traditional resources	Does the proposed project replace or reduce dependence on a traditional water source and/or reduce competition with other water users for the same source?
Supports 2008 ocean outfall legislation	Does the project implement reuse that assists in the elimination of domestic wastewater ocean outfalls, as provided in Section 403.086(9), F.S.?

Consideration	Guideline
Project readiness	Can the project be implemented in a timely manner (i.e., "shovel ready")? Does it demonstrate a high level of detail and planning? For example, are designs complete and permits in place?
Return on investment	What is the amount of funding the State grant will leverage?
Complementary benefits	Are there benefits complementary to water supply such as water quality, flood protection, water conservation, recreation, etc.?
Matching funds	Are any listed matching funds available during Fiscal Year 2022-2023 to avoid delay in project completion?
Resource limited areas	Does the project contribute to alternative water supply development in limited areas such as restricted allocation areas?
Geographic distribution	Does the project provide diversity in terms of geographic distribution? In other words, without consideration of this project, could a region be under-represented?
Rural Economic Development Initiative	Is the project in a Rural Economic Development Initiative or Rural Area of Critical Economic Concern community?
Multi-year project	Is the project a continuation phase of a previously funded project?
Efficient reuse	If it is a reclaimed water project, does it increase efficient use of reclaimed water as a source? From a regional perspective, where is reclaimed water currently underutilized?
Irrigation ordinance status	For local governments and municipalities, do they have an adopted irrigation ordinance that is consistent with the District's Mandatory Year-Round Landscape Irrigation Conservation Measures (Chapter 40E-24, F.A.C)?
Other funding	Did the applicant receive funding from other sources (e.g., state, local, federal)?

## **Water Conservation Projects**

The focus of the CFP WC component—formerly known as the Water Savings Incentive Program (WaterSIP)—is to share costs on WC efforts of public and private water providers and/or users. As discussed in the AWS section above, one objective of the CFP is to support the District's regional water supply plans. Projects that use hardware and/or technology to implement WC improvements are eligible for funding consideration. Examples of previously funded WC projects include high-efficiency indoor plumbing retrofits, automatic line flushing devices, and irrigation system retrofits in urban and agriculture/nursery settings. The District encourages industrial, commercial, institutional, and agricultural water users as well as homeowners'/condominium associations to apply for funding.

#### **Water Conservation Project General Requirements**

- Total project costs must be at least \$15,000 in total expenditures for water supply utilities, municipalities, or government agencies. This limit does not apply to non-government agencies.
- Verification of hardware installation is required. Proof may include an invoice indicating hardware installation or a signed statement by the recipient affirming all products were visually inspected in their final state of installation.
- Applicants are responsible for the proper disposal of all inefficient hardware/technology replaced as part of any project. Inefficient hardware/technology must not be made available/recycled for use by other users.

## Water Conservation Project-Specific Considerations: Indoor and Other Water Conservation Projects

For the purposes of this guidance document, three major WC project types have been identified. The following sections focus on each of the three major WC project types individually. Those three types are as follows:

- Indoor and General Water Conservation Projects
- Urban Irrigation Efficiency Improvement Water Conservation Projects
- Agriculture/Nursery Irrigation Efficiency Improvement Projects

Applicants are encouraged to review the section(s) that applies to their project. Applicants are reminded to download and examine the example WC application(s) most relevant to their project type. For assistance completing the application, example applications for each major project type are available at <a href="https://www.sfwmd.gov/doing-business-with-us/coop-funding">https://www.sfwmd.gov/doing-business-with-us/coop-funding</a>.

#### **Indoor and General Water Conservation Projects**

#### Allowable Project Elements

- Implementation costs (e.g., hardware, technology, installation) incurred between October 1, 2022 and September 30, 2023; *however, dates are subject to change*.
- WaterSense-labeled plumbing fixture and device retrofits and/or rebates (e.g., high-efficiency toilets, showerheads, and faucet aerators; <u>must</u> be WaterSense labeled). Not applicable to prerinse spray valves.
- Pre-rinse spray valves for commercial kitchen facilities (must replace models with flow rates greater than 1.28 gallons per minute [gpm]).
- Potable water flushing reduction infrastructure, including automatic line flushing devices or other capital infrastructure that can quantifiably demonstrate a reduction in flushing volumes.
- Rebates to incentivize builders to build and certify new construction (residential or commercial/institutional) under the Florida Water Star program. The rebate helps defray the costs incurred by builders or property owners/managers when upgrading indoor and outdoor components associated with meeting Florida Water Star criteria.
- Advanced meter analytic software and online customer portals directly related to WC savings such
  as customer portals/apps that provide water use management tools (e.g., the ability to view
  consumption data, leak/boil alerts).

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• Other hardware and/or technology-based retrofits or applications that increase water efficiency (e.g., cooling tower or industrial process water use efficiency improvements).

#### Non-Allowable Project Elements

- Waterless urinals, toilet retrofit kits to replace internal tank components, toilet retrofits for 3.5 gallons per flush (gpf) or greater with a 1.6 gpf toilet, and dual-flush valves for commercial buildings.
- Indoor fixtures for new construction, unless part of a Florida Water Star certification program.
- Automatic meter reading/advanced meter infrastructure/advanced meter analytics hardware such as antennas, relays, meters, and decoders. (Only analytical and/or customer portal software packages are supported.)
- Hardware and/or practices considered operations and maintenance (see definition in **Section 4**).

#### **Indoor-Specific Requirements**

#### **Plumbing Retrofit Projects**

Fixture exchange programs cannot function as give-away projects (i.e., an inefficient fixture must be collected for each high-efficiency fixture distributed). Recipients' names and addresses are required as part of the closeout package.

If the applicant proposes to support toilet replacement of existing 1.6 gpf models with 0.8 gpf ones (or lower), the project must adhere to the following:

- a) Provide plausible evidence or argument in support of the claim that the target area has so few 3.5 gpf toilets that it is not feasible to limit the program to only 3.5 gpf toilets.
- b) Continue to encourage and support replacement of 3.5 gpf toilets with 1.28 gpf (or lower) models.
- c) 1.6 gpf models must be replaced with 0.8 gpf models, not 1.28 gpf models.
- d) Only rebate WaterSense-labeled models with the exception of pre-rinse spray valves.

Toilet china (bowl) and flushometer (flush valve) gpf ratings must be compatible.

All toilet retrofit projects involving toilets with flappers must include an educational component that addresses leak detection and proper flapper replacement selection and installation. Information found at <a href="https://toiletflapper.org/">https://toiletflapper.org/</a> can be used as a source.

All plumbing fixtures and appliances must meet the standards outlined in **Table 2**.

**Table 2**. Plumbing Fixture and Appliance Retrofit or Replacement Standards for Water Conservation Projects

Device	Standard				
Toilet, tank, or flushometer (flush valve) (residential and commercial)	EPA WaterSense labeled with a MaP flush score of ≥800 grams.¹				
Showerhead	EPA WaterSense labeled flow rate of 2.0 gpm or less (1.75 gpm is suggested).				

Device	Standard
Bathroom faucet	EPA WaterSense labeled flow rate of 1.0 gpm or less for residential fixtures; 0.5 gpm for commercial fixtures.
Urinal	EPA WaterSense labeled flush volume of 0.5 gpf or less (0.125 gpf is suggested)
Kitchen faucet	EPA WaterSense labeled flow rate of 1.5 gpm or less (1.0 gpm can also be used)
Commercial kitchen pre-rinse spray valve <sup>2</sup>	Flow rate of 1.28 gpm or less <sup>2</sup>
Clothes washer and dishwasher or other water-using appliance	Must be ENERGY STAR rated <sup>3</sup>

EPA = United States Environmental Protection Agency; gpf = gallons per flush; gpm = gallons per minute.

## **Urban Irrigation Efficiency Improvement Projects**

Non-agricultural irrigation controllers, sensors, and spray sprinkler bodies must be WaterSense labeled. A list of allowable models can be found on the product search page of the WaterSense website, www.epa.gov/watersense.

To receive reimbursement, projects involving irrigation technology devices on non-agricultural systems (e.g., smart irrigation controllers, sensors) must show proof that these items are installed, calibrated, and inspected by a trained professional. An invoice showing charges for project hardware installation or a signed statement indicating an inspection of devices installed by a professional is required with the closeout package.

For projects involving soil moisture sensor-based controllers, the sensor(s) must be installed and calibrated according to the manufacturer's recommendations.

#### **Allowable Project Elements**

- Irrigation retrofits and/or rebates, including smart controllers, rain or soil moisture sensors (compatible with soil moisture-based irrigation controllers), irrigation spray bodies with integral pressure regulation upgrades, irrigation conversion to more efficient systems, and weather stations, among others. Irrigation smart controllers, soil moisture sensors, and spray bodies must be WaterSense-labeled unless used for agricultural or golf course applications.
- Irrigation system evaluations, if a hardware component (e.g., rain or soil moisture sensor, smart
  controller, efficient spray body) is provided and/or offered via rebate to property owners as part
  of the project. Irrigation smart controllers, soil moisture sensors (compatible with soil moisturebased irrigation controllers), and spray bodies must be WaterSense-labeled.

<sup>&</sup>lt;sup>1</sup> Refer to <u>www.map-testing.com/</u>, then click on "Search MaP Toilets" (at left) to verify acceptable toilets that meet the flush score of ≥800 grams.

<sup>&</sup>lt;sup>2</sup> As of January 1, 2019, the United States Environmental Protection Agency has sunset the *WaterSense Specification for Commercial Pre-Rinse Spray Valves*.

<sup>&</sup>lt;sup>3</sup> ENERGY STAR (<u>www.energystar.gov</u>) maintains a list of efficiency-qualified clothes washers, which include a Water Factor Rating.

### Non-Allowable Project Elements

- Individual homeowners/residents applying for WC projects on a single residential property.
- Installation of new irrigation systems or the extension of an existing irrigation system to an area not previously irrigated.
- Hardware and/or practices considered operations and maintenance (see definition in **Section 4**).

#### **Funding Limits**

District funding limits for the purchase and installation of common WC fixtures and devices are shown in **Table 3**.

**Table 3.** Allowable Funding Limits for Common Conservation Fixtures/Devices

Conservation Fixture/Device	District Allowable Funding Limit per Unit <sup>1</sup>	Total Fixture/Device Cost <sup>2</sup>		
Automatic line flushing device	Up to \$3,000	\$6,000		
High-efficiency toilet	Up to \$145	\$290		
High-efficiency showerhead	Up to \$20	\$40		
High-efficiency aerator	Up to \$1	\$2		
High-efficiency urinal	Up to \$140	\$280		
Soil moisture sensor	Up to \$145	\$290		
Rain sensor	Up to \$120	\$240		
Pre-rinse spray valve	Up to \$55	\$110		
Clothes washer rebate	Up to \$100	Total cost could exceed \$200		
Dishwasher rebate	Up to \$100	Total cost could exceed \$200		
Irrigation evaluation	Up to \$125	\$250		

<sup>&</sup>lt;sup>1</sup> This is the <u>maximum</u> per unit amount the District will reimburse applicants for each fixture or device. Actual reimbursement funding per unit depends on actual costs and award levels.

#### **Agriculture/Nursery Irrigation Efficiency Improvement Projects**

For agricultural/nursery irrigation conversions and retrofits, a mobile irrigation lab or equivalent irrigation audit is strongly encouraged to serve as the basis for potential estimated water savings and the WC hardware being purchased and installed as part of the project. If an audit has been performed, the full report should be included as part of the application package. Agriculture/nursery application packages also should include a site map or aerial photo showing property boundaries, water use permit boundaries, well locations, existing surface water bodies, water control structures, and all proposed project components, including pump stations, pipelines, structures, and reservoirs.

For projects involving soil moisture sensors and sensor-based controllers, the sensor(s) and controller(s) must be installed and calibrated according to the manufacturer's recommendations.

<sup>&</sup>lt;sup>2</sup> This is the assumed maximum total cost paid by applicants; actual costs may differ.

### **Allowable Project Elements**

- Irrigation conversions (must convert from one method to a more efficient one)
- Replacement of inefficient irrigation heads and nozzles (must increase efficiency)
- Pump automation (remote/auto start-stop)
- Automated irrigation valves
- Precision agriculture irrigation management equipment, including weather or soil moisture-based irrigation controllers (and associated remote transmission units) soil moisture probes, tensiometers, weather stations, and wireless telemetry
- Flow meters, if part of a larger irrigation efficiency improvement project
- Irrigation pump variable frequency drive retrofit and controls (must be part of a larger irrigation efficiency improvement project, not for operations and maintenance)
- Other approved WC best management practices or measures, pending review and approval

#### Non-Allowable Project Elements

- Installation of new irrigation systems or extension of an existing irrigation system to an area not previously irrigated
- Culverts (including riser board structure replacement)
- Fertilizer application technology
- Freeze/frost protection materials
- Irrigation filtration systems
- Irrigation infrastructure
- Mainline pipe for surface water delivery
- Pump replacement
- Replacing old emitters with new ones of the same efficiency or flow rating
- Reservoirs
- Sheds for pump stations
- Surface water disinfection system
- Tailwater recovery and reuse
- Water control structures

#### **Water Conservation Project Review Considerations and Guidelines**

The District will review all WC projects based on program considerations and guidelines (no implied priority), as presented in **Table 4**.

**Table 4**. Water Conservation Considerations and Guidelines

Consideration	Guideline
Cost effectiveness, expressed as dollars per 1,000 gallons saved (\$/kgal)	Does the project demonstrate cost effectiveness in installation, design, and use?
Quantity of water saved	What are the estimated number of gallons saved per year compared to other applicants?
Complementary benefits	Does the project provide other resource benefits (e.g., habitat improvement) and/or benefits a low-income or affordable housing community in addition to meeting other considerations?
Project readiness	Does the application demonstrate readiness to be implemented on schedule and is well planned? For example, is the design complete and are permits in place?
Regional water supply benefits	Does the project provide the most benefits to the largest number of individuals?
Dual benefits	Is this a water conservation project with water quality benefits?
Water source being conserved	Savings of potable water and traditional water sources are more valuable than savings of nonpotable water
Irrigation ordinance status	For local governments and municipalities, do they have an adopted irrigation ordinance that is consistent with the District's Mandatory Year-Round Landscape Irrigation Conservation Measures (Chapter 40E-24, F.A.C.)?
Benefits a water body with adopted MFL	Does the project provide support for an adopted MFL water body?

MFL = Minimum Flow and Minimum Water Level.

The order of source water value is as follows, with 1 being the most valued:

- Potable water from a utility at risk for saltwater intrusion based on elevated chloride levels in monitor wells or a utility within a Restricted Allocation Area (Section 3.2.1 of the Applicant's Handbook for Water Use Permit Applications; <a href="https://www.sfwmd.gov/doing-business-with-us/permits/water-use-permits">https://www.sfwmd.gov/doing-business-with-us/permits/water-use-permits</a>)
- 2. Potable water from a utility not at risk for saltwater intrusion or not in a Restricted Allocation Area
- 3. Surficial groundwater in the service area of a utility at risk for saltwater intrusion based on elevated chloride levels in monitor wells
- 4. Surficial groundwater in the service area of a utility not at risk for saltwater intrusion
- 5. Water from a canal or stormwater catchment area (e.g., a man-made lake within a housing development)
- 6. Reclaimed water

The following examples were prepared to assist applicants in understanding the District reimbursement rules and guidelines.

Avoid these two budget planning pitfalls:

Pitfall 1 If the project is budgeted anticipating a funding level of 50% of the total project cost (or anticipating that the project will be granted the maximum funding level of \$50,000) and project funding support is approved at a lower level, the Recipient will still be obligated to fulfill the proposed project scope to receive the full award.

For example:

Proposed project cost: \$40,000 (to purchase and install 1,000 items)

Anticipated funding level: \$20,000 Anticipated Recipient share: \$20,000

If the approved funding level is granted at \$10,000, the Recipient is still obligated to purchase and install 1,00 items and is thus responsible to produce and spend the remaining \$30,000. Failure to purchase and install all 1,000 items will result in prorated reduction of the actual funding level below the \$10,000. In this example, the award is 25% of total cost. If the Recipient expends \$20,000 for 500 items, they would receive \$5,000. If they purchase and expend \$32,000 for 800 items, they would receive \$8,000. If they purchase all 1,000 items for \$30,000 they may be eligible to receive the full \$10,000 but are not guaranteed to receive the full award.

Pitfall 2 If the project's budgeted funds are spent before the scope of the project is fulfilled and the additional funds cannot be secured, the actual funding level will be prorated and reduced to the proportion of the fulfilled scope.

For example:

If your proposed project cost is \$50,000 to purchase and install 1,000 items, and you spend \$50,000 to purchase and install only 800 items and do not have additional funds to complete the 1,000 items scope, then your actual funding level will be reduced as follows (assuming an approved level of \$25,000):

\$25,000 approved funding
1,000 items in project scope

becomes

\$20,000 actual funding
800 items actually intstalled

#### 4. **DEFINITIONS**

**Applicant** – All governmental entities, including the following: water providers and large users; local governments; water, wastewater, and reuse utilities; municipal, industrial, commercial, institutional, and agricultural water users; and homeowners' or condominium associations, submitting an application to seek an award from the South Florida Water Management District, pursuant to this Cooperative Funding Program.

**Application** – A written document from an applicant seeking an award from the South Florida Water Management District, pursuant to this Cooperative Funding Program.

**Approved Funding** – The allocation of monies to an applicant based on estimated costs, as presented in the application.

**Capital** – Part of a public water provider's or user's capital improvement program.

**Funding (or Actual Funding)** – An allotment of monies disbursed towards the payment based on actual costs incurred and the percentage of the scope of work fulfilled for the construction/implementation of an alternative water supply or water conservation project.

**Ineligible** – A determination by the South Florida Water Management District Governing Board that the application does not comply with the material requirements of this Cooperative Funding Program.

MaP – MaP scores represent the number of grams of solid waste (soybean paste and toilet paper) that a particular toilet can flush and remove completely from the fixture in a SINGLE FLUSH. Essentially, the MaP test is a TEST TO FAILURE. MaP Testing is an INDEPENDENT testing program not affiliated with nor controlled by any manufacturer or group.

**Operations and Maintenance** – The functions, duties, and labor associated with routine operations and normal repairs, replacement of parts and structural components, and other activities needed so that the project continues to provide acceptable service and/or achieves its expected life.

**Project** – The written description included in the application that determines eligibility for funding.

Project Cost – The total cost of the project located within the South Florida Water Management District.

**Recipient** – The applicant who has been awarded funding in support of a project.

**REDI** – The Rural Economic Development Initiative, as defined in Section 288.0656, Florida Statutes.

#### **APPENDIX**

#### Water Conservation Cost-Effectiveness Calculator (\$/kgal)

A significant metric in evaluating water conservation projects is the project cost effectiveness, expressed in cost per 1,000 gallons of water saved (\$/kgal). This allows different project types to be compared to one another.

To arrive at a \$/kgal for your project, you must use the calculator in the **Cost-Effectiveness Calculator** tab of the application file. Additional tabs have been included to help you calculate the savings for some project types and/or to show you how to calculate water savings for your project. There are slight differences in these *Estimated Water Savings* tabs, depending on whether your project is an urban project, or an agriculture/nursery project.

All project applications MUST use the **Cost-Effectiveness Calculator** tab, and submit the application with project-related data inputs/outputs.

There are only four inputs needed for the calculator: the name of the conservation item(s), the total cost for the item (or items, if your project has more than one), the annual estimated water savings, and the service life of the conservation item (**Figure A-1**). The rest of the table is automatically calculated for you and results in a final cost effectiveness for your project, which is auto-populated into the **Project Description** tab.

Conservation Items	Total Cost Per Line	Annual Estimated Savings (MGY) From Est. Wat.Sve Tab	Service Life (in years from tables below)	Total Project Gals Saved per Day	Total Gallons saved over Service Life (MG)	Cost Effective \$/kgal
Precision irrigation management equipment	\$69,680	57.7	7	158,082	403.90	\$0.19
				-	-	\$0.00
				-	-	\$0.00
				-	-	\$0.00
				-	-	\$0.00
				-	-	\$0.00
				-	-	\$0.00
				-	-	\$0.00
				-	-	\$0.00
	\$69,680	57.7				\$0.19
					(Weighted c	ost effectiveness for all Ite

**Figure A-1.** The Cost-Effectiveness Calculator. All applications must include this calculator fully completed.

For this calculator, there are a few things to keep in mind.

- The Total Cost per Item must match the costs per line presented in Tab 4: **Project Budget**.
- Service Lives entered in this table must come from one of the tables provided below the calculator if your project items are included in one of those tables.
- For urban irrigation projects, you must use the shortest service life if your project includes more than one item on the list.
- If your project does not have a listed service life, you may enter your own but will need to present documentation supporting your entry such as a manufacturer's specification.

The following paragraphs briefly describe the cost estimation tabs on two applications: Urban Water Conservation and Agriculture/Nursery Water Conservation.

The **Urban Water Conservation Application** contains two tabs to help you calculate water savings. One is for indoor projects (e.g., projects involving common water-using fixtures and appliances) and one for urban irrigation projects (e.g., projects involving smart irrigation controllers or sensors as part of a rebate for residential users or as part of a larger homeowners' association). Standard flow rates for the most common indoor items are shown on the tab and must be used. Standard savings rates for the most common outdoor items also are shown on the tab and must be used.

If you feel strongly the standard flow or savings rates provided do not represent your project, you may enter your own, but you will need to present supporting documentation or a convincing explanation for deviating from the standard rates. If your project involves less common conservation items or water use areas (e.g., cooling towers, automatic line flushing devices), you will need to provide explanations of the current water use and water savings. Estimated savings for your project may be recalculated by District staff if your supporting explanation is unacceptable or otherwise rejected.

The Agriculture/Nursery Water Conservation Application contains the same indoor water savings calculation tab for projects that may occur in an agriculture or nursery setting and include indoor or other water-saving project elements. If you are an agriculture or nursery operator and your project has project elements other than or in addition to irrigation, read the previous paragraph.

The Estimated Water Savings – Irrigation tab (abbreviated as Est. Wat. Save – Irrigation) in the Agriculture/Nursery Water Conservation Application contains a standard calculator to help you calculate savings for irrigation system conversions (e.g., converting from flood irrigation to micro-irrigation). This application does not contain standard savings rates for precision irrigation management-type projects (i.e., projects that do not increase the irrigation system efficiency but do increase the Farm Irrigation Rating Index). You will need to provide explanations of the current water use and water savings. Supporting documentation by a Florida Department of Agriculture and Consumer Services Mobile Irrigation Lab (or equivalent) audit is beneficial but not required. Estimated savings for your project may be recalculated by District staff if your supporting explanation is unacceptable or otherwise rejected.

You may request assistance in deriving your project's calculated savings from District staff by contacting Rosines Colon-Ortega at (561) 682-6715 or Jim Harmon at (561) 682-6777.