# *Fiscal Year 2021*
# Cooperative Funding Initiative Guidelines
## Southwest Florida Water Management District

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## DISTRICT CONTACTS

For any questions relating to the CFI program please call 800-423-1476 and follow the instructions to enter the extension of the person you would like to reach. Online you may also click on their name to send an email.

| Region | Counties Represented | Government Affairs Regional Manager (GARM) | Extension |
|---|---|---|---|
| Northern | Citrus, Hernando, Lake, Levy, Marion, Sumter | Frank Gargano | 4759 |
| Tampa Bay | Hillsborough, Pasco, Pinellas | Joel Brown | 2015 |
| Heartland | Hardee, Highlands, Polk | Cindy Rodriguez | 6000 |
| Southern | Charlotte, DeSoto, Manatee, Sarasota | Dennis Ragosta | 6530 |

To reach any of the personnel listed below please call 800-423-1476 and follow the instructions to enter the extension of the person you would like to reach. Online you may also click on their name to send an email.

| Program | Point of Contact | Extension |
|---|---|---|
| CFI Online Application Issues (logging in, uploading required documents, etc.) | Rita Harrod, CFI System Administrator | 4269 |
| Third-Party Review | JP Marchand, P.E. | 4229 |
| Alternative Water Supply Projects | | |
| Aquifer Recharge Projects | Robert Peterson | 4253 |
| Aquifer Storage and Recovery Projects | Don Ellison | 4292 |
| Brackish Water Projects | John Ferguson | 4871 |
| Regional Transmission Projects | Lisann Morris<br>John Ferguson | 4562<br>4871 |
| Seawater Desalination Projects | John Ferguson | 4871 |
| Surface Water/Stormwater Projects | Lisann Morris | 4562 |
| Water Conservation Projects | Josh Madden | 4197 |
| Flood Protection Projects | Terese Power | 4243 |
| LiDAR, aerial imagery, and UAS Mapping | Nicole Hewitt | 4393 |
| Data Collection, Application Development, and Mapping and GIS Projects | Axel Griner | 4204 |
| Natural Systems Projects | Stephanie Powers | 2213 |
| Reclaimed Water Projects | Anthony Andrade | 4196 |
| Septic Conversion Projects | Claire Stapley | 4423 |
| Water Quality Projects | Nicole Mytyk | 6591 |

## GENERAL COOPERATIVE FUNDING INITIATIVE INFORMATION

The following is provided as guidance for applicants to the District's Cooperative Funding Initiative (CFI) Program for Fiscal Year (FY) 2021. In accordance with Chapter 373, Florida Statutes, the Governing Board (Board) may cooperate with county governments, municipalities, water supply authorities, and other interested entities in water management programs and projects of mutual benefit, provided such programs and projects are consistent with the District's statutory authority and will ensure proper development, utilization, and conservation of water resources and ecology within the jurisdictional boundaries of the District.

Priority consideration will be given to projects designed to further the implementation of the District's Strategic Plan, Water Management Program (WMP), Surface Water Improvement and Management (SWIM) Plans, and Regional Water Supply Plan (RWSP). Final decisions regarding the funding of projects are the exclusive responsibility of the Board.

Funding may be provided to assist with the cost of:

- Data collection
- Research
- Feasibility studies
- Water conservation
- Ecosystem restoration
- Water resource investigation and plan development
- Design, permitting and construction of capital projects

Project costs for design and permitting will not be reimbursed until construction begins. Exceptions to this are projects identified for third-party review. The engineer's design to 30 percent level to support a required third-party review is eligible for reimbursement without having to begin construction. However, final design and permitting costs, if approved by the Governing Board, will still not be reimbursed until construction begins. See additional information on third party reviews below.

The District may consider land costs incurred by the local governments as a funding match if the land was purchased recently and solely for the project for which funding is being requested. District practice has been to exclude land costs incurred by local governments as a funding match for water supply projects. If land costs will be used as a funding match and the project is for construction only, a letter to the District must be provided by April 1st following submittal of the application that provides a schedule of tasks necessary to secure land rights, list of required parcels, and appraised or actual cost for each parcel. Land control actions required to implement the construction project need to be completed by December 1st of the FY the funding is available. If the project is requesting funding for both design and construction, a reasonable estimate of the cost of the land intended to be purchased and used for the project will be required with the application. In addition, for projects including design and construction, the agreement between the cooperator and the District will require that property appraisals be provided as a deliverable. The District will only consider the appraised value of the property as eligible for a funding match.

Funding is not available for:

- Operation and maintenance
- Renewal and replacement expenses of infrastructure
- Payment of debtor submittal
- Permit violation compliance
- Fees for District permits

- Responses to required District permits
- Projects that generate credits (for example wetland mitigation credits that could be sold)
- Recreation improvements or amenities (e.g. boat ramps, bike paths, boardwalks, side-walks, pavilions) that do not provide a water resource benefit
- Contamination clean-up projects or costs for contamination clean-up as part of a CFI project

Funding assistance will be contingent upon concurrent project action and commitment of matching funds by the applicant to ensure the project goals will be implemented. Each project should address one or more of the District's four areas of responsibility (AOR): **water supply, flood protection, water quality, and natural systems**.

**Any state or federal appropriations or local grant monies received by the applicant for a specific project shall be first applied toward the total cost of the applicants proposed project.** The District will typically fund up to 50 percent of the remaining costs with an equal match from the cooperator. Pursuant to the provisions of Section 288.0656, Florida Statutes, Rural Economic Development Initiative (REDI) provisions, the Board may reduce or waive requirements for matching funds when requested by rural counties or municipalities. For more information on the eligibility requirements for the REDI please review REDI Guidelines.

The following project sections provide project-specific guidance on additional information required with each application. If the proposed project is a combination of project types (i.e. Flood Protection and Water Quality) the applicant needs to provide the required information for both project types.

District staff will consider the following when evaluating and ranking project applications:

- Application Quality: Inclusion and accuracy of all information specified in the FY2021 CFI Guidelines; general and project specific information.
- Project Benefit: Effectiveness of the project to protect, conserve, restore, or augment the area's water resources and ecology. Project application cannot claim benefits from previous projects.
- Cost-effectiveness: Based upon cost-effectiveness metrics developed or approved by the District.
- Past Performance: Performance is based upon timely execution of cooperative funding agreements, maintaining budget and schedules on current cooperatively funded projects, as well as continuing to operate and maintain previously funded projects as contractually obligated.
- Complementary efforts: Efforts include water conservation and flood protection ordinances, stormwater utilities, conservation land programs, and other efforts to address similar resource issues.
- Project readiness: Potential of the project to start and proceed in a timely manner, generally recognized as ready to start on or before December 1st of the FY the funding is being requested.
- Strategic Goals: If the project aligns with the District's Strategic Initiatives and Regional Priorities outlined in the District's Strategic Plan.
- Regional Nature: Of the project and the participating entities.

**Third-Party Review:**

Contact JP Marchand, P.E., at (800) 423-1476 x4229 for any questions related to third party review reports.

Construction projects estimated to cost over $5,000,000 will undergo a third-party review at the completion of the 30 percent design stage. This review is to confirm the project cost, schedule, and ability of the project to meet the proposed resource benefit. Additionally, projects that cost between $1,000,000 and $5,000,000 that staff has determined will benefit from a third-party review will also undergo such review at the completion of the 30 percent design stage. Results of the third-party review will be presented to the Governing Board before the project can proceed to final design.

**Owner Direct Purchase:**

Florida law allows government entities to buy goods and services tax-free when the government entity makes payment directly to the vendor. This is commonly referred to as an "owner-direct purchase program." The District encourages utilizing this program when suitable and requests cooperators evaluate and provide documentation on the use of owner-direct purchasing for projects cooperatively funded by the District.

**Guidelines for Evaluating Projects Requesting Cost Increases and/or Scope-of-work Changes:**

The District's Governing Board has expressed concern with projects that request cost increases and/or scope-of-work changes. This usually applies to multi-year projects. A project that requests a cost increase and/or a scope-of-work change will be re-ranked (will not be ranked 1A) based on the project changes. The following tables provides guidance for District staff to assign the overall recommendation. Projects that request a cost increase and/or a scope-of-work change will be individually discussed at the Governing Board sub-committee meetings.

| Change to Project | Original Project Ranking | Overall Project Recommendation |
|---|---|---|
| Scope Change | High or Medium | Evaluate as a new project |

| Change to Project | Original Project Ranking | Cost Increase Requested | Overall Project Recommendation |
|---|---|---|---|
| Cost Increase | Medium | Any | Not recommended for funding. |
| | High | Up to 10% | Overall recommendation is "High" if resource benefits and cost effectiveness are maintained. |
| | High | Up to 20% | Overall recommendation is "Medium" if resource benefits and cost effectiveness are maintained. |
| | High | >20% | Not recommended for funding, |
| | High | <$100,000 | Not recommended for funding, with exceptions. |

**How to Apply:**

The District will host a CFI Workshop/Webinar at the Tampa Service Office on August 16, 2019 at 10:00 a.m. The workshop will be recorded and available on the District's CFI website. FY2021 CFI applications will be available online at Cooperative Funding Initiative immediately following the Workshop. **The deadline for submittal of FY2021 CFI applications will be 5:00 p.m. on October 4, 2019.** Incomplete applications and applications received after the deadline will not be evaluated or considered for funding unless otherwise directed by the Board.

**Online Application:**
The following Guidelines assist in completing the Online CFI Application for a variety of projects, including guidance for information required in each of the application fields. Specific project information requirements can be found in the applicable project section of this document.

Application Tab: General information required for every project.

- Project number – If this is a new project leave this field blank. The District project number will be assigned after receipt of completed application. For ongoing multi-year project requests, please insert the District project number that was assigned in previous years.
- Project name – For ongoing multi-year project requests please insert the exact project name that was used in prior years
- Cooperator – Choose from drop down list
- Cooperator contact information
- Cooperator project manager
- Select REDI program if the applicant is requesting a reduction or waiver of the financial match pursuant to the REDI Guidelines.
- Select all Counties that will benefit from this project.

Project Type Tab: The applicant must select the project type Area of Responsibility (AOR) and the strategic initiative the project addresses. Multiple project types and strategic initiatives can be selected.

Description/Benefit/Cost Tab: This tab includes three sections. Additional guidance regarding project specific requirements can be found in the applicable project section of this document. The Description section should include specific details about the proposed project including, but not limited to: project objective; description of all project components for which funding is being requested; regional nature of the project; and identify if this project furthers the implementation of the District's Strategic Plan, any SWIM plan, WMP or RWSP. The Benefits section should describe and quantify applicable resource benefits the project will achieve.

The Cost section should include:

- Total District and Cooperator share; for multi-year request, list future funding by fiscal year.
- Breakdown of individual project component costs for which funding is being requested. Examples of itemized components include planning, land acquisition, design, construction, and costs for construction engineering and inspection services (CEI).
- The basis of the cost estimate.
- Cost savings estimate from owner direct purchase program (if applicable).
- Cost benefit calculations (method varies by project type).
- An estimated monthly or quarterly expenditure plan for the life of the project (what will be spent each month or quarter from project start to finish).

Complementary Efforts Tab: The Board will consider the applicant's efforts in developing, implementing, and enforcing best water management practices, including but not limited to, conservation water rate structures and irrigation, landscape and flood protection ordinances. Additional information regarding eligible complementary efforts is available in the applicable project section of this document.

Funding Table Tab: The funding table must include all funding sources (including State or federal appropriations or grant monies), the amount requested for FY2020 and any future funding requests. Multi-year, ongoing projects must also include any previously approved funds.

Documents Tab: The following documents are required to be uploaded to the application. Sample documents are available for viewing on the documents tab of the online CFI application.

- **Location Map:** All project applications must include a map clearly indicating the location of the project. Certain projects such as Reclaimed Water, Alternative Water Supply, and Flood Protection projects require specific information to be included with the location map. Please refer to the specific project type section of this document for required information.
- **Funding Letter:** If the applicant's matching funds are included in an approved capital improvement plan or budget at the time of the application, the appropriate documentation from the plan or budget must be attached to the application. Also, the documentation should include any ancillary funding agreements with partners required to successfully implement the project. Otherwise, the applicant's senior administrator shall attest the applicant's matching funds will be included in the proposed budget or to the implementation of ancillary funding agreements.
- **Ranking Letter**: If multiple projects are submitted by the same entity, a letter must be submitted that ranks the proposed projects based on the applicant's priorities. The ranking letter must be signed by a single senior administrator and included with each application.

Milestones Tab: A realistically achievable and accurate project timeline must be included and must contain the significant project milestones with the dates they are expected to be achieved. The timeline should include a schedule for project elements associated with the current year CFI request. Multi-year projects must also include a schedule for overall project completion. Examples of significant milestones that should be included in the application's project timeline are identified below. Additional milestones associated with specific project types can found in the respective sections.

- Study/Feasibility
- Study/Conceptual Design
- Project Site Acquisition/Easement acquisitions
- Design
- Permitting
- Request for Bids (RFB) Advertisement and Award
- Construction
- Construction Engineering and Inspection (CEI)
- As-Built Survey and Record Drawings
- Project Close-out

Future Milestones: The timeline detail will increase with each phase of a project (feasibility, conceptual, preliminary design, full design and permitting, and construction). A list of expanded milestones that may be included during future phases of a project are listed below.

***Study/Feasibility & Study/Conceptual Design***

- Data Collection and Evaluation
- Draft Documents
- Final Documents

***Design***

- 30% Design
- 60% Design
- 90% Design (includes draft RFB)
- Proposed Final Design (includes final RFB)

***Permitting***

- Permit submittal(s)
- Permit(s) issued

***Request for bids (RFB) advertisement and award***

- RFB Advertisement
- RFB Evaluation and Award
- Notice to Proceed (NTP) to Contractor

***Construction***

- Commence Construction
- Substantial Completion
- Construction Complete

Data Collection Assessment Tab: To eliminate duplication of effort and capture all useful and available data, all applicants must complete the Data Collection Assessment tab. Applicants must either check that no data will be collected or identify the applicable data collection types that will be collected as part of the proposed project. These projects will be reviewed by the District's project manager who will work with the Cooperator to assess if the data can be incorporated into the District's databases. Not all collected data will meet the requirements for inclusion into these databases; however, this will not impede the project from moving forward.

Contract Terms: To efficiently process CFI Agreements and ensure fairness to all cooperators, the District has developed a standard contract template (located on the CFI website) to be used for all FY2021 CFI projects. **Before the system will accept your application, you will be prompted to acknowledge that you have read and understand the terms contained in the template**. The District recommends you provide the template to your legal counsel for review prior to formal submittal to the District. The District reserves the right to revise the template as needed. Certain project types, such as septic conversion projects in springsheds and indirect potable reuse projects will require special contract terms which are currently in development by the District.

**Additional Information:**

For more information on the District's CFI Policy please refer to Board Policy 130-4 located at the following link Policy 130-4. Please note applications for project types that have not been approved by the District's Governing Board will not be evaluated (such as wastewater treatment plant upgrades or septic to sewer conversions outside of first magnitude springsheds). Applicants can also contact one of the government affairs regional managers for questions relating to the CFI program. Contact information for the government affairs regional managers can be found on the CFI webpage at the following link GARM. Project specific questions can be directed to the staff contacts identified in the applicable project section of this document.

If you experience any issues with the online CFI application (logging in, uploading required documents, etc.) please contact the CFI System Administrator Rita Harrod at (800) 423 - 1476 x4269.

## ALTERNATIVE WATER SUPPLY PROJECTS

This section is for cooperators wanting to participate in the District's CFI program for assistance with developing alternative water supply (AWS) projects. The District seeks to leverage available funds to encourage regional approaches for developing alternative water supplies from diverse sources. AWS projects assist in meeting future demands, reduce dependency on stressed water resources, and reduce reliance on fresh Upper Floridan aquifer groundwater supplies. Examples of AWS projects include the following:

- Aquifer Recharge
- Aquifer Storage and Recovery
- Brackish Water Desalination
- Regional Transmission Systems
- Seawater Desalination
- Surface Water/Stormwater

AWS projects are considered for funding if they meet the general CFI criteria. These projects should complement the District's Strategic Plan and contribute to the following overall objectives:

- Help meet projected water demands in a sustainable manner.
- Assist with District recovery strategies for water bodies with significant harm.
- Be maintained into the future by the cooperator upon completion according to the terms of the agreement.
- Maintain the use of the source water perpetually, including replacement of system components with newer, more efficient technologies or other new methods that allow continued use of the source water.
- Develop alternative water supplies in a cost-effective manner.
- Provide additional benefits of water conservation, flood protection, and natural system enhancement.
- Develop multijurisdictional projects that achieve an economy of scale and diversify water sources for reliability.

Additional guidelines apply to potable AWS projects, as noted in District Board Policy 130-4. When evaluating AWS projects, the District considers whether the project is multijurisdictional in nature. The District gives priority to AWS projects submitted by a regional water supply authority (RWSA) and multijurisdictional projects submitted by multiple utilities. Multijurisdictional means two or more water utilities or local governments have organized into a larger entity or have entered into a contract (i.e. interlocal agreement) to more efficiently pursue water supply development, or to develop AWS projects listed pursuant to a regional water supply plan. (Chapter 373.019, F.S.) The water supply systems of the multijurisdictional entity must be interconnected and must have a formalized operational management agreement that ensures the interconnected supplies are managed to take advantage of Florida's climatic cycles to ensure reliable, sustainable, and drought resistant systems; and maximize the use of AWS to the greatest extent practicable. All operational agreements between multijurisdictional entities will be evaluated by the District and must be deemed consistent with the Board's intent.

If a potable AWS project is within the service area of a RWSA and being submitted by a non-member public utility, the utility should review its project plan with the RWSA to ensure the project is not inconsistent with the RWSA's planning. An affirmative written statement from the RWSA indicating that the project is not inconsistent will be required to be considered for District funding.

The District will consider AWS feasibility investigations. If the project is proven feasible and the local government decides to move forward with the project, additional phases of the project for design and construction must follow the multijurisdictional policy as provided in District Policy 130-4.

Base Supply

All potable AWS construction projects are required to identify the quantity of AWS that will be made available upon completion of the project. This quantity is the projects base supply. The base supply will be clearly defined by the cooperator for the project and will include, at a minimum:

1. The AWS system capacity (such as 10.0 mgd),
2. The expected annual average use for the life of the project (such as 5.0 mgd over 20 years),
3. The frequency and timing of use of the AWS quantities (such as 7.5 mgd January-June and 2.5 mgd July-December for first ten years).

This information should be provided as a part of the description of the project benefit in the CFI application.

The base supply defined by the cooperator will be evaluated by District staff and presented to the Governing Board. The base supply will be used to define the project's measurable benefit and will be included in the CFI agreement executed between the cooperator and the District.

The base supply information is collected to provide the District an assurance that, because District funds are involved, the AWS facility will be used at a minimum capacity and frequency to ensure the project is cost effective and utilized as intended. Once a CFI agreement is executed, the base supply definition and quantity can be considered for adjustment by the Governing Board through a contract amendment.

The District Board Policy 130-4 establishes additional guidelines that apply to potable water supply projects. It is recommended that all applicants review the policy, which is available at the following link Policy 130-4.

The following information has been compiled to assist potential cooperators in developing complete and acceptable funding proposals for AWS projects.

**Aquifer Recharge Projects (including indirect potable reuse projects):**
Contact Robert Peterson at (800) 423-1476 x4253 for any questions related to Aquifer Recharge projects.

Project type is determined by the expected project benefit. Aquifer Recharge projects are projects using wet weather surface water flows, brackish water, saltwater or reclaimed water and treated to the appropriate standards, for application to increase or support groundwater levels.

Indirect potable reuse projects are based on the use of aquifer recharge to augment an aquifer to create a new source of water supply or expand the water supply available for an end user. These projects are typically used to develop new water supplies that involve aquifer recharge and recovery. Close coordination with the District is required for eligible projects, which will be considered on a case-by-case basis.

What types of aquifer recharge projects and components are eligible for funding?

- Desktop feasibility studies
- Initial site assessment feasibility studies
- Testing programs for District WUP and FDEP Under Ground Injection Control (UIC) permitting and application preparation
- Full project design, permitting, construction, and testing of the following:
  - pilot water treatment plant and wells
  - pre-treatment systems of AWS necessary to meet required UIC standards, such as

degasification or chemical oxygen scavenging to manage arsenic mobilization for existing or proposed aquifer recharge projects
    - surface appurtenances for recharge sites
    - transmission infrastructure for aquifer recharge projects
    - indirect potable reuse projects, including recovery and advanced treatment of reclaimed water
- Preparation and administration of bid documents for construction activities
- Consultants' time for construction engineering and inspection
- Consultants' time for preparation of permit applications
- Consultants' time associated with recharge testing during project implementation/startup
- Cost of chemicals used to condition water during pilot testing
- Cost for preparation of required reports specified in the CFI agreement
- Water quality analytical costs during project implementation/startup

What types of aquifer recharge projects and components are not eligible for funding?

- AWS disposal without a net resource benefit
- Land and easement acquisition
- Debt service for project financing
- Lobbying, litigation and any legal fees
- Any other items not consistent with District objectives. Examples of such items include: Staff time of the cooperator necessary to complete projects (does not include staff time billed by a consultant); and equipment such as computers or vehicles used by cooperators to accomplish a project (does not include rental of heavy equipment for construction).
- Redesign
- Operation and Maintenance

What information is required in the application?

- Provide the name and location of the proposed project and indicate if it is a direct or indirect application of aquifer recharge. Indicate where the source water is located and the locations where the aquifer recharge is proposed, and groundwater basin where the application will occur (Study Area).
- Demonstration of the need for the project
- Indicate if a desktop feasibility study or site-specific geotechnical investigation has already been completed
- Indicate if the property where the proposed recharge injection wells, RIBs or withdrawal facilities are to be located is already owned by the CFI applicant.
- Provide a description of the AWS source or sources, the water quality and the seasonally available volumes
- If necessary, describe the approach to address the potential for arsenic mobilization and describe the ability of the project to meet UIC water quality standards necessary for the proposed recharge zone
- Provide a general description of the regional and local hydrogeology around the proposed recharge operation and indicate if it is conducive for the proposed recharge application.
- Indicate if any geospatial analysis, groundwater modeling and Site Capacity Analysis has been performed.
- If the proposed project is a recharge project indicate what the anticipated resource benefits will be (examples - aquifer level improvements, water quality improvements, flood protection and natural systems enhancement).
- If the proposed project is an indirect potable reuse project, indicate what the new potable water supply development benefit will be.

- Indicate if a project cost analysis has been completed.
- Indicate if the FDEP has been contacted and if UIC permitting procedure has been initiated or that existing RIB locations are suitable based on regulatory considerations.
- Indicate the potential number, size and distribution of RIBs to be located in study area.
- Indicate if there will be an appropriate buffer area to meet setback requirements for regulatory agencies.
- Indicate the number of injection or withdrawal wells and monitor wells to be used for the feasibility study and full project build out.
- Indicate the hydrogeologic zone where the aquifer recharge will occur or where the withdrawal will occur and indicate if the injection zone is considered a non-USDW or USDW aquifer.
- Indicate if AWS source water treatment will be required prior to injection.
- Indicate if the CFI applicant has existing permitted public supply withdrawals in the vicinity of the aquifer recharge site(s) and if they intend to use the proposed recharge to potentially increase or develop new permitted withdrawal quantities.
- Demonstrate the current level of project readiness.
- Indicate ultimate project quantity goal.
- Indicate the intended end user of proposed new water supplies.
- For indirect potable reuse projects, the project scope needs to include both the recharge of water into the aquifer and the removal of water from the aquifer.
- For aquifer recharge projects that might evolve into indirect potable reuse projects in the future, special contract conditions might apply. Please discuss these conditions with District staff prior to application submittal.
- For indirect potable reuse projects involving multiple parties, the District requires a signed memorandum of understanding between the entity controlling the recharge water and recharge facilities and the entity withdrawing water dependent on the recharge prior to contract execution.

What cost information is required to be provided for this project?

- Costs associated with the requested funding year activities
- Costs associated with the final project build out and whether it is known or anticipated
- Future FY funding requests until final build out and testing of the full system and issuance of the UIC operation permit for direct recharge projects and whether they are known or anticipated
- Cost associated with system operation and whether they are known or anticipated
- Project cost effectiveness and methodology used to calculate
- District share, cooperator share, and any additional funding sources
- Operational cost per thousand gallons
- Cooperators maximum operational cost limit (i.e. cost per thousand gallons if exceeded the cooperator will not utilize the system)

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. Timeline should include a schedule for project elements associated with the FY cooperative funding request as well as a schedule for overall project build out associated with potential future funding requests. The timeline detail shall increase with each phase of a project (desktop study, conceptual - feasibility, site specific testing and preliminary design, full design and permitting, and construction). An example list of significant project milestones can be found on page 8. Examples of additional milestones specific to aquifer recharge projects that may be considered are listed below.

- Desktop Feasibility
- Project Site Acquisition
- Phase I and/or II Site Assessment Project Plan
- FDEP UIC Construction Permit Application
- Water Use Permit Application (for water supply development projects)
- Phase I and/or II Project Design Approval with UIC Permit
- Bidding Services for Well Drilling
- Notice to Proceed with Site Assessment
- Phase I Exploratory Well Construction and Testing and Report
- Phase II Aquifer Recharge Well or RIB site and Monitor Well Construction
- Phase II Treatment Plant / Surface Facilities Design and Permitting
- Phase II Construction of Treatment plant / Surface Facilities

**Aquifer Storage and Recovery:**
Contact Don Ellison at (800) 423-1476 x4292 for any questions related to ASR projects.

Aquifer Storage and Recovery (ASR) involves the injection of water taken during periods of high surface water flows or periods of excess treatment capacity into discrete intervals of an aquifer for storage; followed by recovery through the same well, usually during the dry season. Sources of water include fully-treated surface water, partially-treated surface water, reclaimed water, reverse osmosis water and in some instances groundwater from another aquifer. Eligibility for ASR funding may be contingent on the estimated recovery efficiency as calculated in the feasibility study. Recovery efficiencies greater than 30% are favorable. Projects that provide less than 30% efficiencies but have additional resource benefit or aquifer recharge may still be eligible for funding.

What types of ASR projects and components are eligible for funding?

- Preparation of feasibility studies
- Preparation of UIC permits
- Procurement of FDEP administrative or consent orders pertaining to the arsenic mobilization issue
- Establishment of institutional controls
- Preparation of Water Use Permits associated with the ASR system
- Design, construction, engineering construction services and testing of exploratory wells and surface appurtenances (surface appurtenances include pumps, pipes, valves, meters, SCADA, site preparation, water treatment systems, buildings, electrical, well heads and chemical storage facilities)
- Preparation and administration of bid documents for construction activities
- ASR and monitoring well construction and testing costs (testing includes geophysical logs, packer tests, water quality, aquifer performance tests, cycle tests, whole rock geochemical analysis, core leaching studies)
- Well construction and testing engineering services
- Consultant time associated with cycle testing
- Water quality analytical costs
- Cost of chemicals necessary to condition water for injection
- Water treatment equipment necessary to meet UIC injection standards
- Pre-treatment systems, such as degasification or chemical oxygen scavenging, to manage arsenic mobilization
- Preparation of cycle testing reports, annual reports, well construction reports, permit renewals
- Pilot testing of existing or new pre-treatment methods to manage arsenic mobilization

What type of ASR projects and components are **not** eligible for funding?

- Projects that are primarily disposal with low recovery percentages or recharge benefits to the resources
- Land and easement acquisition
- Debt service for project financing
- Lobbying, litigation and any legal fees
- Any other items not consistent with District objectives. Examples of such items include: Staff time of the cooperator necessary to complete projects (does not include staff time billed by a consultant); and equipment such as computers or vehicles for the use of cooperators to accomplish a project.
- Cost of water used in cycle testing that is sold for use

What information is required in the application?

- Location description with map
- Size of property
- Owner of project site
- Demonstration of need
- Purpose of the ASR (emergency backup, meet existing or growing demand, part of a regional system, environmental flow or level restoration)
- Primary users of the water
- Current level of project readiness (i.e. early project conceptualization moving towards desktop feasibility study; feasibility study complete and ready for either an exploratory well or ready for design, permitting and implementation; or, feasibility study completed including installation and testing of the initial ASR well and is now ready for build out of the final system)
- Identification of the water source and whether the quantity and quality are known and appropriate for the site-specific ASR requirements
- Demonstration that adequate treatment system capacity will exist to supply the ASR wells at build out
- Approach to handle the arsenic mobilization issue and whether it's preliminary or known
- Storage zone and depths and whether it's known or anticipated
- Water quality of the storage zone either known or anticipated
- Ability to meet UIC injection water quality necessary for the selected storage zone
- Ultimate project storage volume goal
- Discussion of ASR utilization (e.g. annual use, average use over multiple years, diurnal)
- Number of ASR wells for feasibility study and at build out and whether it is known or anticipated
- Number of monitoring wells
- Method of transmission from source to ASR wells
- Description of piping and pumps necessary to complete project
- Description of any post recovery treatment
- Current Level of permitting discussions with FDEP
- Recovery efficiency and whether it is known or anticipated
- Description of any prior ASR studies co-funded by the District with the cooperator
- Discussion of the current understanding of the project costs
- Discussion of any unique research components beneficial to ASR or recharge programs in general
- Discussion of any new water treatment technologies or processes proposed

What cost information is required to be provided for this project?

- Costs associated with the requested funding year activities
- Costs associated with the final project build out and whether it is known or anticipated
- Anticipated future funding requests through final build out and testing of the full system and issuance of the UIC operation permit and whether they are known or anticipated
- Cost associated with system operation and whether they are known or anticipated
- Project cost benefit and methodology used to calculate
- District share, cooperator share, and any additional funding sources
- Operational cost per thousand gallons
- Cooperator's maximum operational cost limit (i.e. cost per thousand gallons if exceeded the cooperator will not utilize the system)

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. The timeline detail shall increase with each phase of a project (desktop study, conceptual, preliminary design, full design and permitting, and construction). A list of significant project milestones that should be included in a project timeline can be found on page 8. Examples of additional milestones specific to ASR projects that may be considered are listed below.

- Feasibility study completion
- Well and surface facilities designs (30%, 60%, 90%)
- UIC well construction and testing permit issuance
- Water use permit issuance
- Drilling contractor notice to proceed
- Exploratory well completion
- ASR and monitoring wells completion
- Surface facilities completion
- Completion dates of each cycle test
- Operation permit issued

**Brackish Groundwater Desalination:**

Contact John Ferguson at (800) 423-1476 x4871 for any questions related to Brackish Groundwater Desalination projects.

Brackish groundwater is defined as groundwater having a total dissolved solids concentration that exceeds drinking water standards but is less saline than seawater. Generally, the treatment range is 1,000 -10,000 mg/L due to the limitation of mid-pressure reverse osmosis (RO) systems. The source of water may be groundwater from surficial or intermediate aquifers, the Upper Floridan aquifer in coastal non-potable zones, or the Lower Floridan aquifer in inland areas where adequately confined from the Upper Floridan. Contact the District representative for additional guidance.

The District's funding policy strongly favors potable AWS projects that will benefit utilities that meet the regional definition. The benefit of developing any new potable AWS capacity will be evaluated to the practicality of interconnecting with neighboring public supply systems that already utilize other existing AWS sources. Please review Board Policy 130-4 for more information.

What types of brackish water projects and components are eligible for funding?

- Feasibility studies for treatment and concentrate disposal methods
- Hydrogeologic investigations to evaluate potential source water quality and sustainability

- Well construction and aquifer testing necessary for preparing WUP applications
- Pilot testing of treatment systems
- Engineer's preliminary design (30 percent level), and third-party review of the project's viability and projected capital costs (see page 6).
- Final design, permitting, construction, and CEI services for
    - Treatment facility including membrane systems, blending wells, chemical systems and storage;
    - Brackish wellfield including raw water transmission;
    - Concentrate disposal system.

  (No funds for final design will be disbursed until all necessary permits are acquired and construction activity commences.)

What type of brackish water projects and components are not eligible for funding?

- Land and easement acquisition
- Post-treatment local distribution
- Debt service for project financing
- Regulatory Permit requirements
- Lobbying, litigation and any legal fees
- Any other items not consistent with District objectives including cooperator's staff time and equipment such as computers or vehicles for cooperators to accomplish a project (does not include contracted labor or rental of heavy equipment for construction).

What information is required in the application?

- Location description with map
- Owner of project site
- Demonstration of need
- Primary users of water
- Multijurisdictional agreements between partnering utilities
- Current level of project readiness (i.e. early project conceptualization; feasibility study complete and ready for exploratory well drilling; ready for bidding and construction; etc.)
- Project's finished water treatment capacity in annual average, max daily, and firm capacities
- Level of permitting discussions with FDEP and WMD
- If necessary, written statement from a RWSA indicating that the project is not inconsistent with regional planning (see page 10)

What cost information is required to be provided for this project?

For multi-year projects, the amount requested should match the projected expenses within each funding year. For design/construction project applications exceeding $5 million in capital costs, it's recommended to schedule for the 30 percent design and third-party review within one fiscal year and plan the continuing development in following years. For smaller conceptual studies and groundwater investigations, the detail associated with project cost is relative to the phase of the project. Appropriate cost information may include:

- Project cost for the funding year activities
- Anticipated future annual funding requests through completion of project
- Basis of the latest capital cost estimate
- Project unitary cost per thousand gallons and methodology used to calculate
- Projected annual costs for operation & maintenance, along with owner's anticipated renewal & replacement funding
- Estimates of major project elements as combined into total project cost

- Cooperator's maximum operational cost limitation (i.e. cost per thousand gallons if exceeded the cooperator will not utilize the system)
- District share, cooperator share, and any additional funding sources
- Comparative cost of other sources including alternate projects and imported water from neighboring utilities or water supply authorities.

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. The timeline's detail will increase with each phase of a project (conceptual; preliminary design and third-party review; final design, permitting, and construction). A list of significant project milestones that should be included in a project timeline can be found on page 8. Examples of additional milestones specific to brackish groundwater desalination projects are:

- Release date of RFP/RFB
- Completion of well construction and testing (report submitted)
- Written funding and/or user agreements

**Regional Transmission Systems:**

Contact John Ferguson at (800) 423-1476 x4871 for any questions related to Regional Transmission Systems projects.

Public utilities, developers, and regional water providers are encouraged to participate in the District's CFI program for assistance with developing Regional Transmission Systems (RTS). Favorable RTS projects will expand transmission of alternative water sources to a demand center point of connection, create regional partnerships for water supply development, and help diversify supply sources for utility systems to improve reliability and reduce their dependency on groundwater.

A RTS project is considered for funding if it meets the general CFI criteria **and meets all of the following guidelines**: **1)** Provides regional transmission capacity between treatment locations and/or centralized distribution points; **2)** distributes water that is at over 50 percent acquired from alternative sources including seasonally captured surface water, advanced membrane treatment, or other established AWS technology; and **3)** helps establish a multijurisdictional system that maximizes the use of AWS and increases reliability during climatic cycles. Projects that are developed solely as stand-by connections for emergencies or redundancy receive a low ranking.

The cooperator submitting the project must maintain perpetual ownership of the project's capacity. Funding for the final design, construction, and construction engineering services of RTS projects will be considered; however, no funds for final design will be disbursed until all necessary permits are acquired and construction of the project begins.

What types of RTS projects and components are eligible for funding?

- Feasibility & Routing Studies provide confidence that planned construction projects will meet the overall water-related objectives and ensure that basin priorities are addressed. Studies illustrate a planning-level design, types of infrastructure, and help identify routing obstacles that need to be addressed in final design.
- Engineer's Preliminary (30 Percent) Design and Third-Party Review for projects anticipated to exceed $5 million in capital costs. Completing work to this level within one fiscal year will best prepare for the final design/permitting/construction project application in the following year.

- Regional Transmission Pipelines necessary to distribute large quantities of water from a supply source to a treatment facility, from an Authority wholesale supplier to a customer utility, or the sale transfer of water between multijurisdictional entities.
- Storage facilities and pumping stations at water source points (i.e. treatment facility) are eligible for funding when they are a component of a RTS system and are necessary to achieve the transmission capacity of the new system.

What RTS projects and components are **not** eligible for District funding?

- Interconnect systems for transmitting potable water from traditional groundwater sources of 50 percent or more
- Any component to be used as a portion of a utility's local distribution system
- Emergency interconnects or other interconnects that are not part of a formalized operational water supply agreement
- Land and easement acquisition
- Debt service for project financing
- Lobbying, litigation and any legal fees
- Any other items not consistent with District objectives including cooperator's staff time and equipment such as computers or vehicles for cooperators to accomplish a project (does not include contracted labor or rental of heavy equipment for construction)

What information is required in the application?

The type of information to be included with the CFI application will vary depending on the design/construction phase and project components:

Feasibility & Routing Studies:

- Conceptualized technical elements (size, water quality, capacities, locations and costs of pipes, storage, pumps, appurtenances, etc.)
- Identification of the utilities, distribution points, and potential flow quantities associated with the system
- Planned water use of customers in relation to meeting District projected demands.
- Opportunities for future connections with other potable systems
- Demonstration of increased AWS availability because of the pipeline system
- Identification of opportunities for storage and use of seasonal supplies

RTS Pipelines:

- Location, length, and diameter of pipelines with maps
- Service areas anticipated to be served
- Anticipated on-line dates
- Contractual documentation verifying capacity ownership and funding commitments
- Transmission design capacity for annual average and maximum flow
- Expected transmission quantities at build-out and over 20-year planning horizon
- Source(s) of water being transmitted to demonstrate that the majority of the flow will come from AWS

Storage Facilities:

- Describe the location(s) including a map
- Capacity in millions of gallons

Pumping Stations:

- Describe the location(s) including a map
- Number of pumps and the size of each
- Pumping capacity in millions of gallons per day

What cost information is required to be provided for this project?

The detail associated with project cost is relative to the phase of the project (conceptual, preliminary design, full design and permitting, and construction).

- Estimates for each major element of the project cost and how it was estimated
- Projected annual costs for operation & maintenance, along with anticipated renewal & replacement funds
- District share, Cooperator share, and other funding sources
- Anticipated future funding requests

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. The timeline detail will increase with each phase of a project (conceptual, preliminary design, full design and permitting, and construction). A list of significant project milestones that should be included in a project timeline can be found on page 8. Contact the District representative to discuss additional milestones for the application.

**Seawater Desalination:**

Contact John Ferguson at (800) 423-1476 x4871 for any questions related to Seawater Desalination projects.

The District supports the use of seawater desalination systems to ensure the reliability of existing but degrading water supplies, and to reduce stress on fresh groundwater resources. Applicants are encouraged to conduct feasibility/pilot studies to provide confidence in the permitability of the source, reasonable cost efficiency, and practical design approach.

The District's funding policy strongly favors potable AWS projects that will benefit two or more interconnected utilities. The benefit of developing any new potable AWS capacity will be evaluated to the practicality of interconnecting with neighboring public supply systems that already utilize existing AWS sources. Please review Board Policy 130-4 for more information.

What types of seawater desalination projects and project components are eligible for funding?

- Feasibility studies for treatment and concentrate disposal methods
- Hydrologic and ecologic investigations
- Data collection activities necessary for permitting by DEP and Army Corps of Engineers
- Pilot testing
- Engineer's preliminary design (30 percent level), and third-party review of the project's viability and projected capital costs (see page 6)
- Engineering final design and permitting; however, no funds for final design will be disbursed until all necessary permits are acquired and construction of the project begins.
- Construction of treatment facility, intake and raw water transmission, and concentrate disposal system
- Engineering construction services

What type of seawater desalination projects and components are not eligible for funding?

- Land and easement acquisition
- Operation and maintenance costs
- Post-treatment local distribution
- Debt service for project financing
- Lobbying, litigation and any legal fees
- Any other items not consistent with District objectives including cooperator's staff time and equipment such as computers or vehicles for cooperators to accomplish a project (does not include contracted labor or rental of heavy equipment for construction).

What information is required in the application?

- Location description with map
- Owner of project site
- Demonstration of need
- Primary users of water
- Current level of project readiness (i.e. early project conceptualization moving towards feasibility study; feasibility study complete and ready for exploratory well or ready for design; permitting and implementation; etc.)
- Ultimate project quantity goal
- Level of permitting discussions with FDEP and WMD

What cost information is required to be provided for this project?
The detail associated with project cost is relative to the phase of the project (conceptual, preliminary design, full design and permitting, and construction).

- Cost associated with the requested funding year activities
- Costs associated with the final project build out
- Estimated future funding schedule
- Unitary cost per thousand gallons
- Cooperators maximum operational cost limit (i.e. cost per thousand gallons if exceeded the cooperator will not utilize the system)
- Projected annual costs for operation & maintenance, along with anticipated renewal & replacement funds
- District share, cooperator share, and any additional funding sources

What items should be included in the application's project timelines?
A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. The timeline detail shall increase with each phase of a project (conceptual, preliminary design, full design and permitting, and construction). A list of significant project milestones that should be included in a project timeline can be found on page 8. Contact the District representative to discuss additional milestones for the application.

**Surface Water\Stormwater:**
Contact Lisann Morris at (800) 423-1476 x4562 for any questions related to Surface Water\Stormwater projects.

The District supports the use of surface water\stormwater in developing Alternative Water Supply Facilities. These projects can cover all or a portion of the elements: intake, storage, treatment and transmission for potable and non-potable use. Operation and maintenance are not eligible for funding.

The District's funding policy favors potable AWS projects that are multijurisdictional. The benefit of developing any new potable AWS capacity will be evaluated to the practicality of interconnecting with neighboring public supply systems that already utilize existing AWS sources. Please review Board Policy 130-4 for more information.

What types of surface water\stormwater projects and components are eligible for funding?

- Desktop feasibility studies
- Initial site assessment feasibility studies
- Pilot water treatment plant and surface water\stormwater system design, construction, and testing
- Engineer's preliminary design (30 percent level), and third-party review of the project's viability and projected capital costs
- Testing programs for District WUP and application preparation
- Full project design, permitting and construction (including transmission)
- Pre-treatment systems of AWS
- Storage of surface water\stormwater for water supply projects

What type of surface water\stormwater projects and components are not eligible for funding?

- Land and easement acquisition
- Operation and maintenance
- Debt service for project financing
- Lobbying, litigation and any legal fees
- Any other items not consistent with District objectives. Examples of such items include: Staff time of the cooperator necessary to complete projects (does not include staff time billed by a consultant); and equipment such as computers or vehicles for the use of cooperators to accomplish a project.

What information is required in the application?

- Location description of project with map
- Size of property
- Owner of project site
- Demonstration of need
- Base supply (see earlier discussion on Page 11)
- Purpose of the project (emergency backup, meet existing or growing demand, part of a regional system, environmental flow or level restoration)
- Primary users of the water
- Current level of project readiness (i.e. early project conceptualization moving towards desktop feasibility study; feasibility study complete and ready for pilot testing or ready for design, permitting and implementation)
- Identification of the water source and the quantity and quality.
- Level of permitting discussions already completed or in process.
- Written statement from RWSA indicating that the project is not inconsistent with regional planning (see page 10)
- Treatment Facility: Any infrastructure size and capacities, technologies and if any bench scale, pilot testing will be included.
- Storage and pumping station facilities: indicate what type of facility proposed: offline reservoir, storage tank or other. Indicate capacity and describe intent. A project narrative including relationship to other projects, entities to be served, treatment capacities, expected flows at completion and at build-out, and water sources.

- Transmission lines: Purpose, relationship to other projects, entities to be served, pipeline sizes and transmission capacities, expected flows at completion and at build-out, and water sources.

What cost information is required to be provided for this project?

For multi-year projects, the amount requested should match the projected expenses within each funding year. For design/construction project applications exceeding $5 million in capital costs, it's recommended to schedule for the 30 percent design and third-party review within one fiscal year and plan the continuing development in following years. For smaller conceptual studies and surface water investigations, the detail associated with project cost is relative to the phase of the project. Appropriate cost information may include:

- Project cost for the funding year activities
- Anticipated future annual funding requests through completion of project
- Basis of the latest capital cost estimate
- Project unitary cost per thousand gallons and methodology used to calculate
- Projected annual costs for operation & maintenance, along with owner's anticipated renewal & replacement funding
- Estimates of major project elements as combined into total project cost
- Cooperator's maximum operational cost limitation (i.e. cost per thousand gallons if exceeded the cooperator will not utilize the system)
- District share, cooperator share, and any additional funding sources
- Comparative cost of other sources including alternate projects and imported water from neighboring utilities or water supply authorities.

What items should be included in the application's project timelines?

A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. The timeline detail shall increase with each phase of a project (conceptual, preliminary design, final design and permitting, and construction). A list of significant project milestones that should be included in a project timeline can be found in **Online Application: Milestone Tab and Future Milestone Tab earlier in this document.** Additional milestones specific to the surface water\stormwater projects may be considered such as written funding and/or user agreements.

## WATER CONSERVATION PROJECTS

Contact Josh Madden at (800) 423-1476 x4197 for any questions related to Water Conservation projects.

Water conservation projects funded by the District are those that result in quantifiable water savings. Due to the District's interest in promoting best management practices and emerging technologies, innovative project ideas not mentioned below are encouraged. Cooperators are invited to contact District staff prior to submitting their application for an innovative project.

A combination of conservation measures that target indoor water use, such as toilet, faucet aerator, showerhead retrofits can be included in one application and performed as one larger all-encompassing project. Similarly, a combination of measures that target outdoor water use can be combined into one larger project.

What types of conservation projects and project components are eligible for funding?

- Plumbing Retrofits
- Landscape & Irrigation Modification
- Landscape & Irrigation Technology
- Industrial/Commercial/Institutional (ICI)
- Potable Water Flushing Reduction Infrastructure
- Advanced Metering Analytics (AMA)
- Florida Water Star (FWS) Rebates

What types of conservation projects and project components are **not** eligible for funding?

- Those that do not provide a cost-effective water resource benefit to the District
- Projects in response to permit or legislative obligations
- Inconsistent with District objectives and Governing Board policies
- Projects that address operations and maintenance, i.e. service meter replacement or leak repairs
- Cooperator staff time is not reimbursable

What items should be included in the project timelines?

A project timeline must be included and contain the significant project milestones and the dates they are expected to be achieved. A list of significant project milestones that should be included in a project timeline for conservation projects are listed below.

- Implementation Period
- For construction projects i.e., line looping, include dates for milestones such as Design, Permitting, and Construction
- Savings Analysis (not needed for most indoor programs)
- Draft Final Report
- Final Report

What information is required in the application?

- Description of the device(s) and/or service(s) offered
- Potential water savings in gallons per day (gpd) and documented method of calculating savings including applicable benchmarks
- Description of how the project fits into the cooperator's water conservation plan
- Description of related codes/ordinances in place to require water efficiency

- Identification of the numbers and types of customers anticipated to participate, a general marketing plan designed to communicate the project to potential participants, and description of the service area
- Historical water use (average gpd) of customers by type, and source of water anticipated to be saved (i.e., potable water from public supply system, groundwater from private wells, etc.)
- Life of the projected savings from the device(s) or service(s)
- Methods for administering, monitoring and evaluating the project

This information has been compiled to assist potential cooperators in developing complete and acceptable funding proposals.

**Plumbing Retrofits:**
These projects typically involve the replacement of fixtures and devices in pre-1995 structures with Environmental Protection Agency (EPA) WaterSense™ fixtures and devices. The EPA WaterSense™ Program was created to encourage the use of water-efficient products and practices and to identify products that improve water efficiency by at least 20 percent over the average product. Certified products include but not limited to toilets (dual flush, flushometers, flapperless or other related high efficiency not to exceed a combined1.28 gpf), bathroom sink faucets (1.5 gpm), urinals (0.5 gpf or less), and showerheads (2.0 gpm or less).

These projects may also involve the installation of pre-rinse spray valves in restaurants, hotels, schools or other establishments with food service or flushometer fixtures and must include a method to ensure low-flow spray valves (1.6 gpm or less) will replace high-flow spray valves.

The eligible funding elements include rebates/credits, fixture purchase/installation, program information/education, promotion, reporting, analysis, and program administration if contracted to an outside party consultant.

Additional Information required in the application for Plumbing Retrofit projects:

- An educational component of the project that addresses leak detection, proper replacement flapper selection and installation for toilet replacement projects will be included.

**Landscape & Irrigation Modification:**
These projects typically involve evaluations of existing landscape and/or irrigation systems, recommendations for efficiency improvements (capping unnecessary heads, adjusting run times, identifying leaks, reducing overspray on impervious surfaces, uniform distribution, matched precipitation rates and reducing mixed zones) and a rebate for implementing the recommendations. The projects must target existing irrigation water use and result in measurable savings.

Projects may include the installation of rain sensors, soil moisture sensors, and smart (ET) irrigation controllers. Other irrigation equipment may also be acceptable. For projects involving soil moisture sensors, the *Field Guide to Soil Moisture Sensor Use in Florida* (IFAS, 2008) is required for the installation, calibration and maintenance. Projects should target existing irrigation water use (high users specifically) and result in measurable savings and include an educational program for participants to ensure long-term, effective equipment operation.

The eligible funding elements include rebates/credits, irrigation equipment or landscaping purchase/installation, program information/education, promotion, reporting and analysis, and

program administration if contracted to a consultant. Contractors must have the appropriate current certifications from organizations such as FNGLA (Florida Nursery, Growers, and Landscape Association), FIS (Florida Irrigation Society), IA (Irrigation Association), and/or FDACS (Florida Department of Agriculture & Consumer Services).

Additional Information required in the application for Landscape & Irrigation Modification projects:
Cooperators are required to adopt an ordinance or amend an existing code or ordinance as described in 373.62, F.S., requiring all automatic irrigation systems to use technology that inhibits or interrupts operation of the landscape irrigation system during periods of sufficient moisture.

**New and Emerging Landscape & Irrigation Technology:**
These projects typically demonstrate new technologies or unique practices that significantly reduce water use. Projects will be evaluated for merit, need and available funding. Applicants are expected to pursue partnerships and demonstrate that projects are consistent with the latest science. These partnerships may include one or more of the following: utilities, irrigation companies, landscape companies, landscape architects, nurseries, turf producers, manufacturers of the technology, environmental organizations, etc. Partnerships may also include those with other stakeholders including commercial/residential developers, builders, sports/golf facilities, commercial building owners, apartment/condominium owners, hotel owners and others who have significant existing and potential investments in landscaping or in conserving water resources. Applicants must also ensure all professionals associated with the project, from planning and design phases through maintenance phases, have the appropriate current certifications from organizations such as FNGLA, FIS, IA, FDACS and/or other associations with industry-recognized water conservation and water quality curricula.

Additional information required in the application for landscape & irrigation technology projects include but not limited to the following:

- Describe how the demonstration is different from traditional or recommended best management practices
- Estimate the potential benefits when new technology or unique practice is transferred to other areas of the District
- Justify the need for the project and provide assurance that it does not create redundancy with similar sites in proposed area
- Identify the goals and objectives of the project
- Identify the strategy for reaching the goals and objectives
- Identify the methods planned to implement the strategy
- Identify the anticipated life of the technology
- Estimate the benefits in terms as appropriate (gallons per day saved, etc.)
- Provide a plan, to be approved by District staff and incorporated in the funding agreement, detailing the way the communication/education goals of the project will be met. This includes a long-term plan for communicating the benefits of the new technology or unique practice being demonstrated to the target audience(s).

**Industrial/Commercial/Institutional (ICI):**
These types of water conservation programs typically involve a comprehensive evaluation with recommendations for water use efficiency and a financial incentive (rebate or payback period) for the implementation of recommendations. Other potential programs include individual specific end use improvements such as cooling tower efficiency, plumbing retrofits and the introduction of other use-specific best management practices.

The eligible funding elements include monitoring equipment, data collection, program promotion, fixture retrofits or replacement of inefficient water-use equipment, program and water use analysis and reporting, and program administration if it is contracted to a consultant and may include performance contractors.

Additional Information required in the application for ICI projects:

- Description of the facility if undergoing a full ICI evaluation
- Estimation of water usage including building age, service meter size, employee/staff levels, and any major products being produced.
- Benchmark of gallons used per heated square foot of facility or similar metric such as gallons per student, gallons per hotel room, or other gallons used per business-specific unit
- Facility contact
- Number of expected ICI water efficiency evaluations to be conducted

**Cooling Towers Efficiency Measures:**
These types of water conservation programs might involve equipment and products to allow more efficient operation of a cooling tower, such as installing conductivity controls or submeters to monitor and control water use. Additional ways to increase water use efficiency is by reducing bleed-off quantities through pre-treatment of source water through side stream filtration, water softening and/or the application of polymers, polyesters and/or polyacrylates.

Rainwater, non-consumptive geothermal, and A/C condensate harvesting systems can also significantly reduce cooling tower demands on potable water. These or other similar types of projects may be eligible for CFI funding.

**Potable Water Flushing Reduction Infrastructure:**
Public water supply utilities routinely conduct water quality flushing as a part of normal operations to resolve various water quality issues. The need for flushing may be eliminated or greatly reduced by targeted infrastructure projects to improve water quality.

Prior to applying, the utility should conduct an evaluation of their current flushing practices and operations. If the utility has implemented operational flushing reduction efforts to the extent practicable, application for flushing reduction projects may be considered for funding. Projects submitted for funding shall demonstrate improved local water quality and a measurable reduction in the volume of water being flushed. The program is not intended for new customer acquisition, planned expansion of utility service, or delivery of service to new development.

The eligible funding elements include design, permitting, and construction cost.

What type of projects are eligible for funding?

- Distribution line looping projects where flushing efforts can be eliminated or greatly reduced.
- New or proven flushing reduction capital infrastructure that can quantifiably demonstrate a reduction in flushing volumes.

What project types are not eligible for funding?

- Projects that expand a utility's service area, extend the transmission main for additional customer acquisition, or significantly increase distribution capacity.
- Line looping projects greater than or equal to 12-inch diameter.

- Projects anticipated to have more than 40 new customer connections at time of construction.

Additional Information required in the application:

- A completed annual water audit using either the AWWA M36 method or District water audit tools. The Cooperator may request assistance from the District to complete a water audit.
- A quantified summary of annual flushing volumes and methodology for calculation.
- Map identifying project and flushing location and, if potable lines are being installed, the pipeline route, feet of pipe to be installed, and diameter of the pipe.
- A summary of existing and planned operational efforts to reduce water quality flushing. The Cooperator may request assistance from the District to complete an assessment of flushing reduction practices.
- For line looping projects, the number of new customer connections and the anticipated new customer water demands that are expected to occur as result of the project.
- Evidence of a mechanism that prohibits or prevents new dead-end creation.
- Calculations demonstrating that the proposed infrastructure improvements will eliminate or greatly reduce the need for flushing in the project area, that are signed and sealed by a licensed P.E.

**Advanced Metering Analytics (AMA):**

AMA when coupled with advanced metering infrastructure (AMI) technology has the capacity to impact water usage and encourage water conservation. AMA has been identified as a critical link between the water use data that "smart" meters collect and customer behavior changes that result in water use reduction. Communication between the utility and customer is extremely important and will need to be described in detail in the application. The District is interested in funding AMA projects. The eligible funding elements for AMA projects are software purchase, set-up and implementation to promote and encourage water conservation Hardware components (meters, repeaters, towers) are not eligible for funding.

Given the evolving nature of this type of project, it is strongly encouraged for applicants to start with pilot scale project to provide proof of concept and a more reliable water savings estimate, before moving to utility wide full implementation.

Listed below are ways AMA can prompt water conservation. Applicants must implement a minimum of three for project consideration and implementing more than three may result in a higher ranking.

| |
|---|
| 1. Compare water use to neighbors (social norming) |
| 2. Provide a customer portal to log-in and graph customer water use over time (1-year min). The portal should be accessible via smartphone. |
| 3. Targeted promotion of utility sponsored conservation incentives and rebates based on property appraiser data and actual water use data |
| 4. Notify customers of suspected leaks as they occur |
| 5. Notify customers of a faulty rain sensor based on weather data and actual daily or hourly usage. |
| 6. Regularly analyze actual daily or hourly water usage and notify customers of potential violations of watering/irrigation restrictions |
| 7. Alert customers to a pre-set threshold usage amount |

Additional information required in the application for AMA projects:

- Number of accounts to be included
- Determination of whether hard copy materials will be dispersed, and if so, the associated quantity and schedule.
- Estimated savings per account in gallons per day
- Timeframe in which active outreach will be performed or life of the project
- Description of utilities current methods of meter data collection
- Commitment to implement specific communication/education items (select from the list above, one through seven)

**Florida Water Star (FWS) Rebates:**
A single-family home built to meet FWS criteria may use 40% less water outdoors and approximately 20% less water indoors than a home built to the current Florida Building Code. For homes that have in-ground irrigation, it is estimated that a minimum cost of $1,000 per home will be incurred by builders to meet FWS criteria.

For applicants who wish to incentivize builders to build and certify homes under the FWS Program, a rebate in the amount of $1,000 covers the estimated cost to make the upgrade from a traditional home to a FWS home. The District may reimburse 50% of the $1,000 rebate ($500) for each FWS proof of certification submitted.

An estimated 132 gallons per day (gpd) per home could be conserved with this program. Estimated water savings is conservatively based on the difference between water use of a FWS home (60% high volume irrigation, WaterSense™ labeled fixtures) and a conventional home (100% high volume irrigation, traditional fixtures). The District can provide FWS outreach material.

This program is not intended to be a revenue source for home builders year after year, but instead will be short term (two year) incentive to builders to encourage adoption of FWS building practices.

Additional information required in the application for FWS rebates:

- Number of residential building permits issued each year for the last 2 years
- Estimated number of residential building permits that will be issued during the project time frame
- Map of region/ boundary where new home construction will be eligible for the rebate
- Number of rebates requested

**How to Calculate Water Savings:**
The total water savings related to the project should be calculated based on the number of implementations, types and demographics (persons per household, irrigable area, etc.) of participants. Please see the utility data worksheet for persons per household estimations available at https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/020119_completion_data_for_appendix_c.xlsx .

For non-residential projects, savings are expressed in a reduction of gallons used per square foot of facility per day, per student per day or per industry specific unit per day. All such information must be provided as part of the calculation documentation.

District staff are available to assist in providing benchmarks and savings estimates for many conservation practices.

Acceptable data

Where possible, metered water use data should be used. The data provided in Table 1 represents a conservative estimation approach and may be used to calculate savings. For project elements not represented in Table 1, the cooperator should provide sufficient data and calculation documentation in estimating project savings.

**Table 1. Acceptable Data for Estimating Indoor Water Conservation Savings**

| Targeted Water Use | Years Manufactured | Application | Use/Unit | Avg. Use/Unit | Frequency of use | | Service or Device | Use/ Unit | Est. Savings GPD |
|---|---|---|---|---|---|---|---|---|---|
| Toilet | 1980-94 | Residential | GPF | 3.5 | 5.1 | Flushes per person per day | HET* | 1.28 | 11 |
| | | Commercial | NA | NA | NA | | ULFT | 1.6 | 16 – 57 (Table 2) |
| Urinal | 1980-94 | Commercial | GPF | 3.0 | 2.0 | Flushes per person per day | HEU* | 0.5 | 5.0 |
| | | | | | | | Waterless | 0.0 | 6.0 |
| Showerhead | 1980-94 | Residential | GPM | 4.0 | 5.3 | Min./person per day | Low-flow Showerhead* | 2.0 | 10.6 |
| Faucet/ Aerators | 1980-94 | Residential - Kitchen | GPM | 3.0 | 8.1 | Min./person per day | Low-flow Faucet* | 1.5 | 12.2 |
| | | Residential - Bathroom | | | | | | | |
| Dishwasher | 1990-95 | Residential | GPL | 12.0 | 0.1 | Loads/day per person | Efficient Machines | 7.0 | 0.5 |
| Pre-Rinse Spray Valve | 1980-2000 | Commercial | GPM | 3.0 | NA | Gallons/min/ Day | Low-flow spray Valve | 1.6 | 100-300 |

*Signifies WaterSense™ Specification

**Table 2. Savings per Toilet Replaced for Non-Residential**

| Market Segment | Estimated Savings | Market Segment | Estimated Savings | Market Segment | Estimated Savings |
|---|---|---|---|---|---|
| Wholesale | 57 | Automotive | 36 | Health Care | 21 |
| Food Store | 48 | Religious | 28 | Office | 20 |
| Restaurant | 47 | Manufacturing | 23 | Hotel/Motel | 16 |
| Retail | 37 | | | | |

Source: Tampa Bay Water. Potable Water Conservation Best Management Practices for the Tampa Bay Region, 2004

**Table 3: Cooling Tower Estimated Water Savings with Increasing Concentration Ratios**

| Concentration Ratios Before Adjusting Cycles | Concentration Ratios After Adjusting Cycles | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **12** | **15** | **20** |
| **1.5** | 33% | 50% | 56% | 58% | 60% | 61% | 62% | 63% | 63% | 64% | 64% | 65% |
| **2** | | 25% | 33% | 38% | 40% | 42% | 43% | 44% | 44% | 45% | 46% | 47% |
| **3** | | | 11% | 17% | 20% | 22% | 24% | 25% | 25% | 27% | 29% | 30% |
| **4** | | | | 6% | 10% | 13% | 14% | 16% | 17% | 18% | 20% | 21% |
| **5** | | | | | 4% | 7% | 9% | 10% | 11% | 13% | 14% | 16% |
| **6** | | | | | | 3% | 5% | 6% | 7% | 9% | 11% | 12% |
| **7** | | | | | | | 2% | 4% | 5% | 6% | 8% | 10% |
| **8** | | | | | | | | 2% | 3% | 5% | 6% | 8% |
| **9** | | | | | | | | | . | 3% | 5% | 6% |
| **10** | | | | | | | | | | 2% | 4% | 5% |
| **12** | | | | | | | | | | | 2% | 4% |
| **15** | | | | | | | | | | | | 2% |

## Costs and Cost/Effectiveness:

Total Project Costs

Include all elements that apply, such as:

- Program administration (may include consultant fees)
- Devices/materials (may include advertising materials, but not including staff time or equipment purchased by the cooperator, such as printers or office space)
- Data analysis (may include consultant fees, but not cooperator staff time)
- Reporting (costs of report production)
- Promotion/Education (all print work must be done through an outside vendor and proofs must be approved by District Project Manager to qualify for reimbursement)

Cost/Effectiveness

A calculation of the cost to develop the project, amortized at 8%, versus the effectiveness of the project over its anticipated life. The calculation enables all types of projects to be compared to each other, as well as other potential uses (investments) of District funds. Generally, unless acceptable documentation is presented, the confident life of water savings for each conservation measure is:

| | | |
|---|---|---|
| Toilets = 20 years | FWS = 10 years | Rain sensors = 5 years |
| Plant materials = 5 years | Showerheads = 5 years | Irrigation system = 5 years |
| Cooling tower = 10 years | Line looping = 30 years | Major appliances = 11 years |

## FLOOD PROTECTION PROJECTS

Contact Terese Power at (800) 423-1476 x4243 for any questions related to Flood Protection projects.

The following is provided as guidance for cooperators wanting to participate in the District's CFI program in the area of **Flood Protection**. The guidelines focus solely on projects associated with flood protection beyond the "local system" level, which is defined below. Watershed Management and Stormwater Improvement — Flood Protection projects funded by the District represent a wide variety of issues in water resource management that require evaluation, analysis, reporting, mapping, surveying, preliminary engineering, engineering design, permitting, production of construction documents, land and easement acquisition, and construction. The District's CFI program seeks to leverage funds available at local governments to address flood protection issues on a watershed basis, above the local system level. The District encourages Cooperators to maximize opportunities to provide water quality improvements above permit requirements for any flood protection BMP project.

### System Levels

Since the District generally does not cooperatively fund local system flood protection projects, it is important to understand the local, intermediate, and regional stormwater system scale.

### Local System

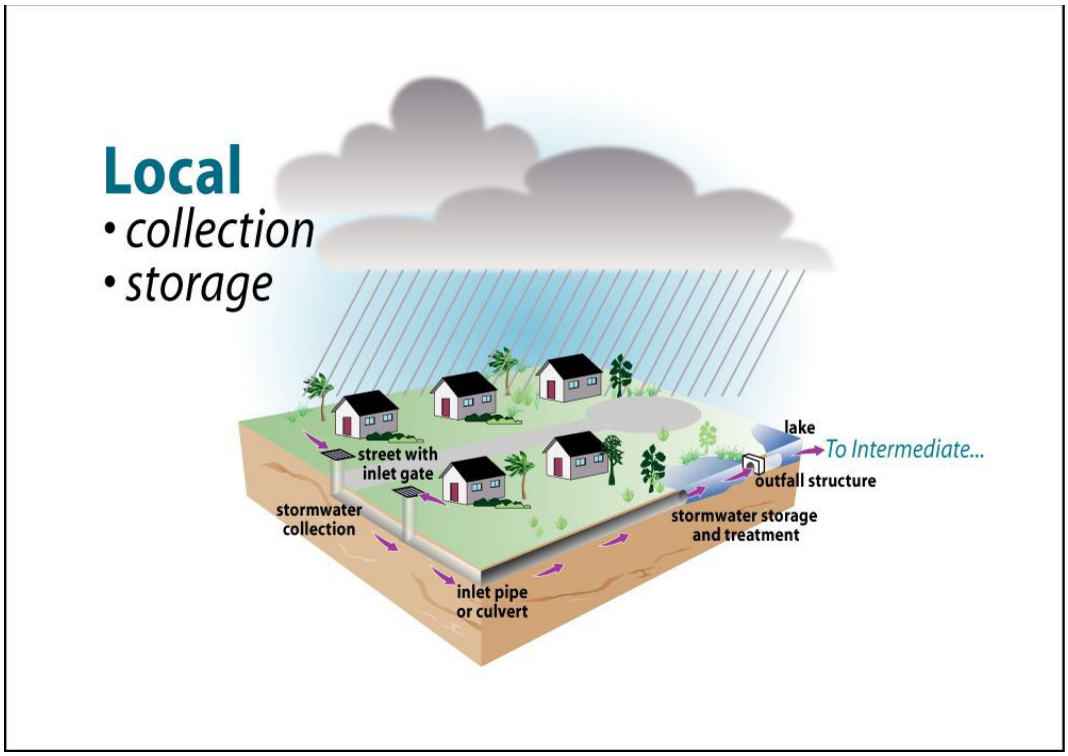
The best way to define local systems is to view it from the standpoint of ownership (the infrastructure itself and the land it sits upon) and/or the purpose the system serves either in its entirety or its components.

The examples below and Figure 1 provide guidance as it relates to ownership of the infrastructure itself, ownership or control of the land on which the infrastructure sits, and the system purpose. Before proceeding, a definition of infrastructure is appropriate. For the purposes of this guideline, the definition of "Works" found in Chapter 373 F.S., Part IV, Section 373.403(5) is adequate. "Works" are defined as, "all artificial structures including, but not limited to, ditches, canals, conduits, channels, culverts, pipes and other construction that connects to, draws water from, drains water into, or is placed in or across the waters in the state."

**A project is local when:**

- *Works* are under the ownership of private entities such as homeowners' associations, businesses or individuals
- *Works* are under the ownership of local governments and the systems primary purpose is to provide flood protection for maintaining the level of service for a road (how much rainfall can fall and still allow for safe vehicular access)
- *Works* are not located on sovereign lands or do not connect to jurisdictional waters
- Activities involving *Works* don't require alteration of the receiving natural or altered water course (creek, slough, river, channel, etc.)
- The system's primary purpose is to provide flood protection for a defined private subdivision, industrial park, business district, etc.
- The system's primary purpose is to provide flood protection for a road system, either under private, local or state control

**Figure 1: Local System**




**Intermediate and Regional Systems**

For the design and construction of flood protection projects, the District's consideration of cooperative funding begins at the intermediate system level. While some intermediate flood protection projects involve *Works* associated with local systems, the difference is that intermediate systems involve activities that affect or serve multiple local systems and generally require construction in waters of the state. Not just the final outfall that discharges to those waters, but the construction of *Works* or improvements to the conveyance and storage capacity of the associated waters. Waters of the state are defined in FS 403.021 (13) as including, but are not limited to, "rivers, lakes, streams, springs, impoundments, wetlands, and all other waters or bodies of water, including fresh, brackish, saline, tidal, surface, or underground waters. Waters owned entirely by one person other than the state are included only in regard to possible discharge on other property or water."

Regional systems are, in turn, those stormwater systems that affect multiple intermediate systems and serve a regional or watershed-wide area. See Figures 2 and 3 for examples.

***Local System Flood Protection Project with Water Quality Component***

A project that improves water quality by treating stormwater runoff prior to entering Waters of the State while addressing flood protection on a local level can be eligible for funding. The applicant must show improvements in pollutant removal and provide estimates for annual removal of Total Nitrogen (TN) and/or Total Phosphorus (TP). This project approach is particularly useful for coastal communities that, due to the proximity to the coastline, often have only local stormwater systems. By including water quality treatment into the design, the water quality component of the project can be cooperatively funded. The applicant must identify the water quality components of the project. The District will consider these projects on a case by case basis to be evaluated as a water quality project. For more information on requirements for the water quality projects, please refer to the Water Quality Project section of this document.

**Figure 2: Intermediate System**

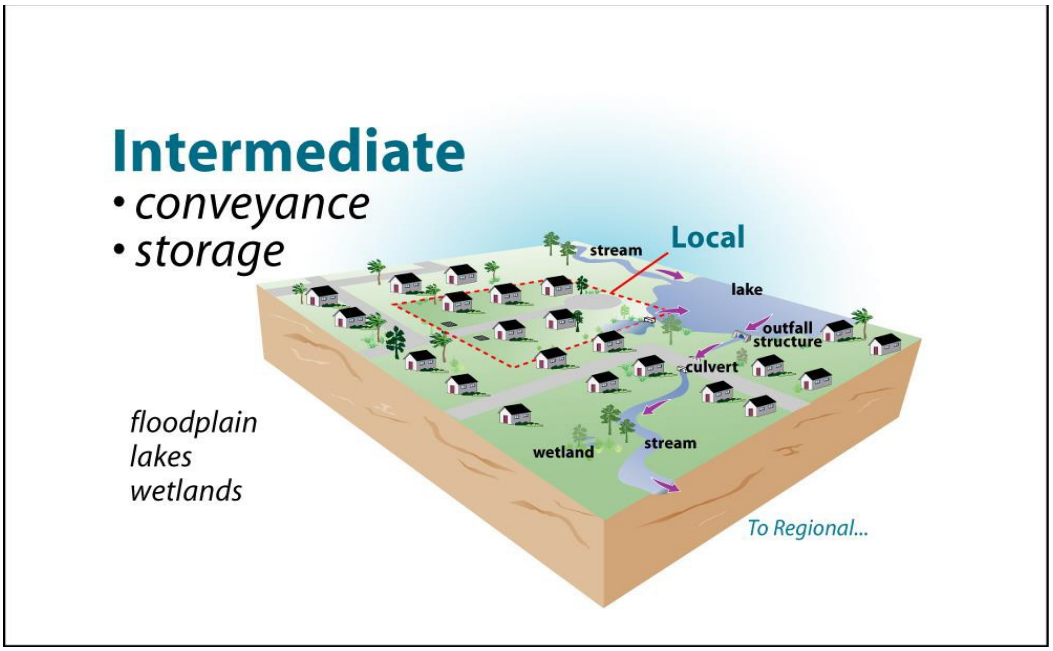
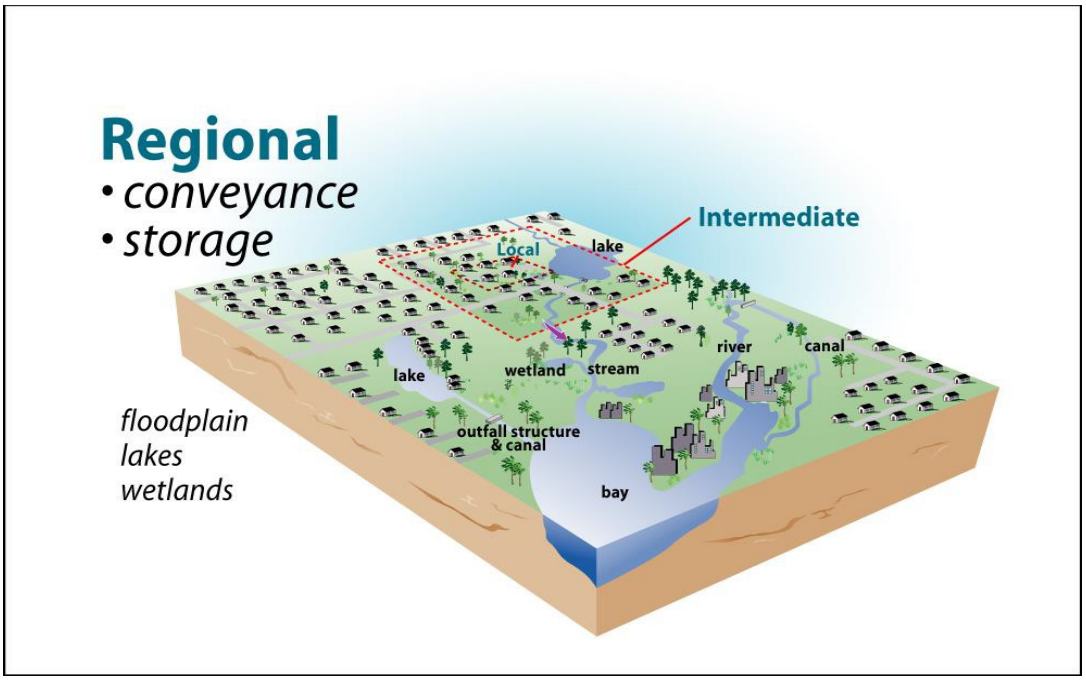



**Figure 3: Regional System**




***Types of Flood Protection Funded Projects***

**Watershed Evaluation:** The watershed evaluation provides information used for management decisions and regulatory review. Information gathered is used to define costs for future elements. It includes:

- Topographic mapping
- GIS inventory of wetlands, water bodies and infrastructure

- GIS data to District Data Standards for soils, land use, sub-basins and storage
- Survey of identified stormwater infrastructure elements and control points
- Preliminary Link-Node Watershed Connectivity Map
- Peer review of Watershed Evaluation

**Watershed Management Plans:** The watershed management plan provides an understanding of the stormwater management capacity of the watershed, its level of service and an alternative analysis to address stormwater management deficiencies. It includes:

- Development of a watershed model
- Floodplain analysis. The watershed model is used to project response of watershed's storage and conveyance elements to storm events
- Peer review of watershed parameters and preliminary floodplain results
- Public meeting with review and comment period
- Board approval to use floodplain results for regulatory purposes or for submittal to FEMA
- Final floodplain results
- Surface Water Resource Assessment (Water Quality)
- Level of Service (LOS) determination
- Alternative analysis of best management practices (BMPs) — Preliminary design, probable construction costs, alternative benefit/cost and permit analysis

**Implementation of Stormwater Improvements:** Implementation of BMPs for flood protection is addressed through structural and non-structural methods. The District encourages Cooperators to maximize opportunities to provide water quality improvements above permit requirements for any flood protection BMP project. Project components eligible for funding include:

- Design and permitting
- Land acquisition and easements — **NOTE:** District may recognize land costs incurred by local government as match if the land was acquired recently with the specific purpose of implementing the proposed stormwater improvements.
- Construction of BMPs
- Construction engineering and inspection
- Benefit/Cost Analysis

**Data Management of Watershed Parameters and Updates to Watershed Models:** The District will consider funding updates to existing watershed management plans and models provided the update leads to and includes better definition of flood elevations and flood risk or new or improved BMP alternative analysis to better address existing flood problems. Updates can include:

- Updated digital terrain model
- Update of GIS parameters (soils, land use, digital Ortho Quads and national wetlands inventory)
- Infrastructure changes

**Stormwater Utilities:** The District will assist local governments in establishing a dedicated funding source to manage their stormwater infrastructure.

***Types of projects that are not eligible for funding***

**Maintenance or replacement projects:** Projects that are essentially the restoration or replacement of existing works to a previous design condition will not be considered for funding. For example, canal or ditch restoration or water control structure replacement that restores the original dimensions, configuration, and function of the works would be considered maintenance

and not recommended for funding. A restoration or replacement type project could be considered for funding if the works were modified to enhance the function of the works for flood protection, water quality, natural systems, or water supply. In the case of a flood protection project, the applicant must demonstrate that the modified works will address an existing flooding problem.

**Stormwater Utility Modification**: Once the stormwater utility is established, the local government is solely responsible to fund any modifications to the funding methodology.

***Multiple Year versus Single Year projects***

Stormwater projects, particularly Watershed Evaluations and Watershed Management Plans, can take several years to complete. These projects can be funded as a multi-year project. Funding for the project must be applied for each year of the multi-year project. The total project cost must be listed in the application with the funding for each previous year, the current application year, and future years. The application must indicate the final complete deliverable for the entire multi-year project as well as the current year funding deliverable. For instance, deliverables may include floodplain analysis completed and presented to the District Board, LOS and alternative analysis completed, or watershed evaluation completed.

Implementation projects also can take several years from design to construction completion. These projects are reimbursed during the construction phase only, but funding should be programmed for the year in which the actual expenditure is expected to occur. Total project cost must be provided. Clearly describe the aspects of the project (design, permitting, land acquisition, or construction) for which funding is being requested. Larger projects may be phased. Phased projects are discussed below.

***Phased Implementation Projects***

Implementation projects are often designed, permitted, and constructed at different times due to urgency of flooding concerns in specific areas of the project or due to funding constraints. These projects may be divided into phases. For cooperative funding purposes, a phase must be a stand-alone project that can be designed, permitted, and constructed as a single project that achieves certain specified benefits on its own. Typically, each phase of the project is applied for as a single project and the resource benefits of one phase do not depend on another phase being completed. If the resource benefits realized by one phase depends on other phases being completed, then the overall project should not be divided into phases but must be applied for as a single project.

***Information required in the Application.***

Below is a list of information which must be included in the application for cooperative funding consideration.

- Description - Brief project narrative describing how the project will protect, enhance and/or restore flood protection related benefits and, if applicable, improve surface water quality.
- Previous work - Identify any previous studies or watershed management plans that have been performed in the watershed and the date completed. In the case of an Improvement Project, be sure to note if the project was identified and recommended in a previously completed study or watershed management plan.
- Project Components - Clearly list the components of the project for which District funds are being requested and specifically what is to be funded using the fiscal year funds of this request. (Examples - For Improvement Projects: Feasibility, Design, Land Acquisition, Construction, CEI; For Watershed Management Plan Projects: LiDAR, Watershed Evaluation, Model Development; Floodplain Delineation; Alternative Analysis).
- Schedule and Budget - Develop a schedule and budget for the project, which will become more refined as the project steps are accomplished.

- Benefit/Cost - For Improvement Projects, provide benefit/cost analysis for the proposed project and the source of the cost estimate. For Watershed Management Plans, provide estimated cost for the project, source, and cost per square mile of watershed.
- Pollutant removal estimates – Provide water quality calculations for Total Nitrogen and Total Phosphorus removals for BMP implementation projects (see Resource Benefit below)
- Project area - Identify the study area required and any analysis performed addressing economic feasibility and permitability, as well as a map of the drainage area/watershed indicating approximate size in acres/square miles.
- Project phase - List the current phase of the project being applied for. List previous phases and completion dates. In the case of the WE or WMPs, the description must indicate what step of the process is to be completed with the application funds. Examples are: "the Floodplain analysis will be completed and presented to the District Board", or "the LOS and alternative analysis will be completed".
- System scale and general land use density - Identify the stormwater system scale that the project addresses (Regional, Intermediate, or Local system). Address criteria provided above in the case of a local system designation. List the land use (Urban or rural).

**Description**

The description should be as concise as possible. The first three sentences must contain the following information:

- The type of project - Watershed Evaluation (WE), Watershed Management Plan (WMP), Watershed Management Plan Updates, feasibility study, Stormwater Improvement or Best Management Practices Implementation, stormwater or water quality improvements.
- The area or location of the project - Indicate the watershed in which the project is located.
- Phase of the project if applicable - List which phase the application is for and how it fits in the overall project.
- Background information must follow this initial description of the project. Background information includes:
    - Description and quantification of previous flooding in the area (i.e. extent of structure and road flooding). Prefer to have a map showing the flooded structures and roads along with a map showing the flooding conditions after the proposed project has been implemented.
    - Description of any previous project or phase of the project. If the project is an update to a WMP, then the completion date of the last WMP must be included.

**Resource Benefits**

Flood protection implementation projects must demonstrate a reduction in existing street or structure flooding for a storm event or series of events. List the design storm event. Examples are: This project will: "decrease the 100-year/24-hour floodplain in the project area", "decrease the duration of roadway and structure flooding during the 100-year/24-hour rain event". WE or WMP projects improve the knowledge available for the watershed to improve the analysis of existing flooding problems within the watershed and is used to identify BMPs projects. If it is a phased project, the resource benefit must be for the current phase only.

All flood protection projects are required to also quantify any water quality benefits that may be achieved through implementation of the project. This includes pollutant removal estimates for Total Nitrogen (TN) and Total Phosphorus (TP) reported in pounds per year (lbs/yr). Please refer to the Water Quality Projects section for more information on how this may be determined.

**Measurable Benefits**

The Measurable Benefit is the final deliverable for the project. For a planning type project, the Measurable Benefit is the completed watershed evaluation, watershed management plan, or floodplain delineation. For an improvement project, the Measurable Benefit is the list and quantification of the physical improvements to the watershed. Implementation projects would list and quantify, for instance, retention ponds, structures, pipe, storage or pumping facilities.

**Costs**

The following information must be included for the cost of the project in the application.

- Total project costs and source (bid, engineer's estimate, conceptual estimate)
  Note: Costs associated solely with water quality improvement components of the project may be broken out separately from flood protection components.
- Costs associated with the requested funding year activities
- Future funding anticipated for completion of the project if a multi-year project.
- District share, cooperator share, and any additional funding sources

**Cost Effectiveness**

The following must be included in the application.

- Cost per square mile of watershed for WE, WMP, WMP Updates, and feasibility study
- Benefit/Cost (B/C) ratio for flood protection implementation projects costing $500,000 or more. Benefits are to be based on avoided damages calculated consistent with FEMA methodology and expressed in monetary terms. If the B/C ratio is not provided, then the cost effectiveness will be ranked low.
- For flood protection implementation projects costing less than $500,000, provide project costs, status, and source (i.e. conceptual information or completed design) along with costs for similar projects if available.

The District has developed a benefit/cost spreadsheet tool which can be used by cooperators during the alternative analysis portion of the WMP and/or to prepare applications for CFI funding. The benefit/cost tool can be downloaded from the District ftp site at the link below. The District will be using this tool to make sure the B/C ratio provided with the application is reasonable.

ftp://ftp.swfwmd.state.fl.us/pub/GWIS/WMP_Guidance_Documents/

Username: anonymous
Password: <enter your email address>
Filename: SWFWMD_CFI_SIFP_BCA_template.zip

Costs associated specifically and only for water quality components of the project may be removed from the B/C ratio calculation. The District may consider these additional costs separately to be evaluated based on criteria specified for water quality projects.

**Milestones**

A realistic project timeline must be included and contain the significant project milestones and the dates they are expected to be achieved. Timeline should include a schedule for project elements associated with the current year CFI request as well as a schedule for overall project completion for multi-year projects. A list of significant project milestones that should be included in a project timeline can be found on page 8. Examples of additional milestones specific to WMP projects that may be considered are listed as specified on the following page.

For Flood Improvement Implementation Project

- See page 8

For a WMP project

- Data Acquisition
- Geodatabase of Model Features
- Watershed Evaluation
- WMP Project Development
- Watershed Model Development
- Peer Review
- Floodplain Results
- LOS Determination
- Surface Water Resource Assessment
- BMP Alternative Analysis
- Final Approved Deliverables

All WMP projects completed through floodplain results must perform a peer review and open house to present the results of the WMP. These two tasks are requirements for the District Governing Board to approve results of the WMP. The cost to perform these tasks shall be included in the total cost of project. Any BMP Alternative Analysis must include water quality considerations as part of the analysis. Pollutant removal estimations are required as part of this portion of the WMP.

**Attachments**

The following is a list of attachments to accompany the projects depending on applicability and project readiness. Supplying this type of information supports the application.

- Map of project area (See WMP and BMP Map Guidelines below)
- Consultant Cost Estimates
- Conceptual Plans
- Construction Plans
- Benefit/Cost calculations
- Pollutant removal estimates for TN and TP

**WMP Map Guidelines**

The following is a list of minimum requirements for the WMP Maps to supports the application.

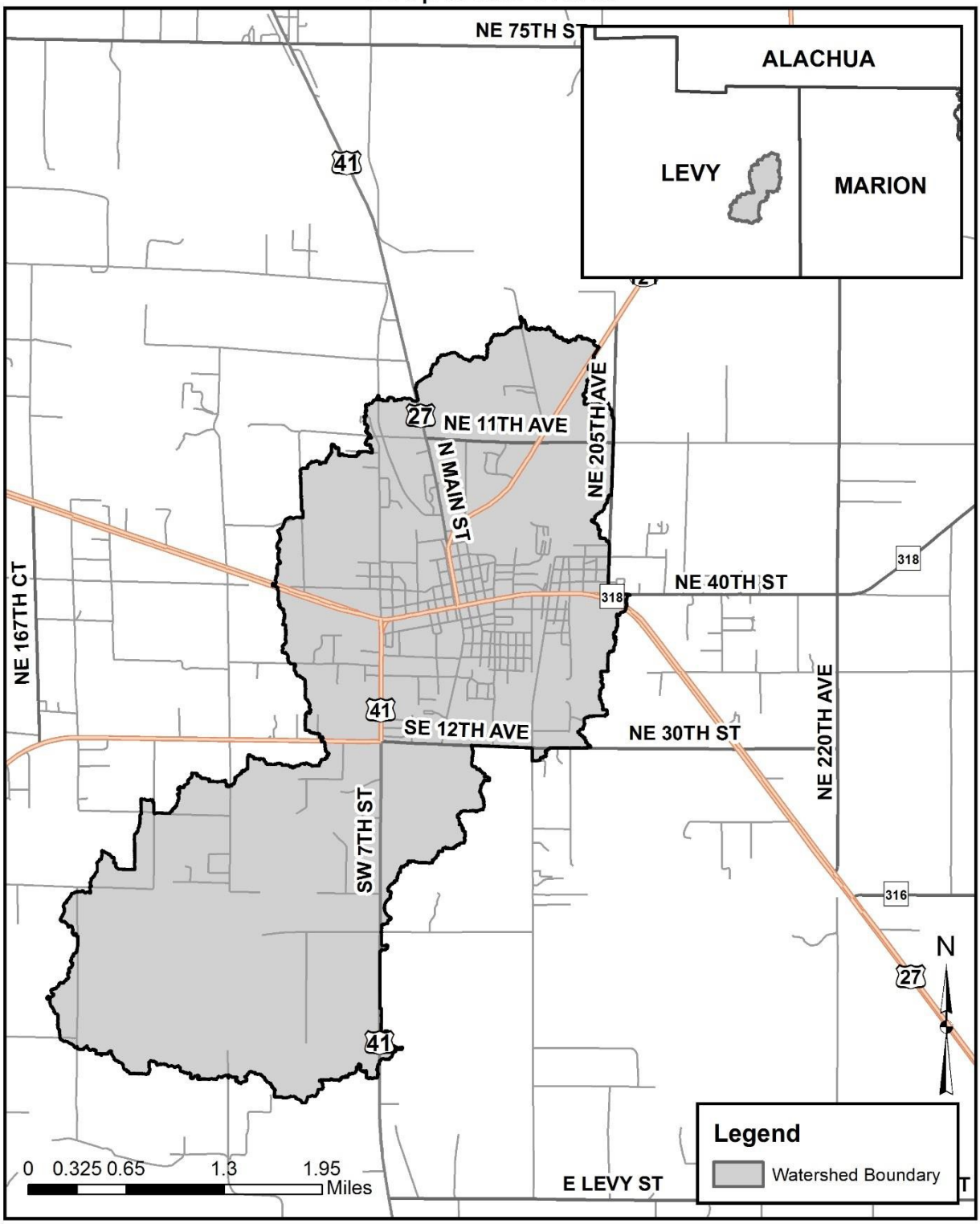
- Map Title with Watershed Name and Cooperator Name
- Scale and North Arrow
- Major Roads and Labels
- Extent of the project area (Watershed Boundary)

**BMP Map Guidelines**

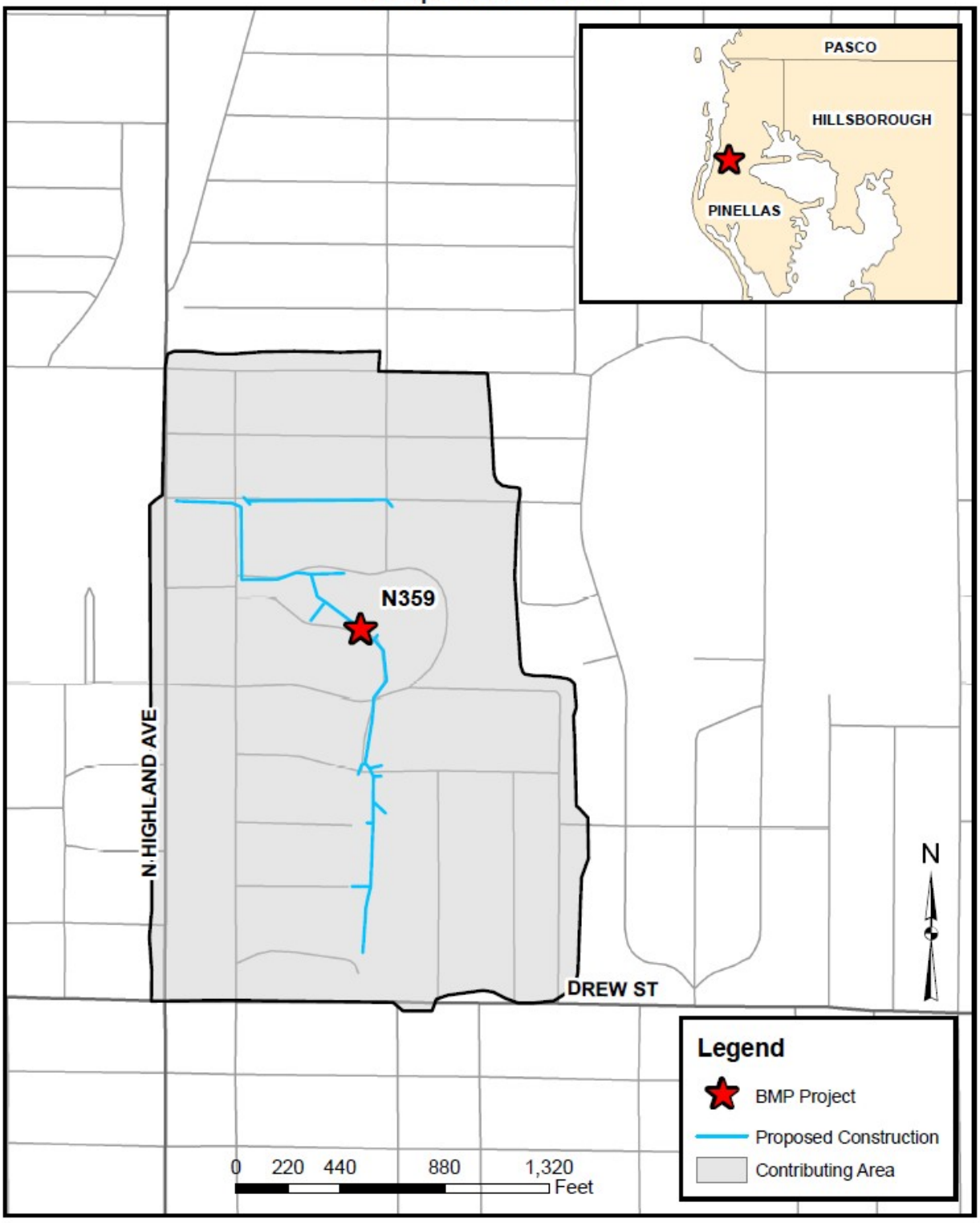
The following is a list of minimum requirements for the WMP Maps to supports the application.

- Map Title with BMP Name and Cooperator Name
- Scale and North Arrow
- Major Roads and Labels
- Extent of the project area and contributing basin area
- Location and sketch of proposed BMPs
- Avoided Damages to Roads & Structures (Optional if provided in B/C calculations)

Project Number - Watershed Name
Cooperator Name



Project Number - Project Name
Cooperator Name



## MAPPING AND GEOGRAPHIC INFORMATION SYSTEMS PROJECTS

Contact Nicole Hewitt for additional information and coordination for LiDAR, aerial imagery and UAS mapping at (800) 423-1476 x4393.

Contact Axel Griner at (800) 423-1476 x4202 for more information about data collection, application development, and any other questions related to Mapping and GIS projects.

The following is provided as guidance for cooperators wanting to participate in the District's CFI program in the area of **Mapping and Geographic Information Systems (GIS)**. The following Mapping and GIS data collection activities are candidates for funding under the Cooperative Funding Initiative.

**LiDAR MAPPING:** LiDAR (Light Detection and Ranging) technology is used to capture digital elevation data which are utilized primarily in the District's watershed modeling program. A copy of the District's current LiDAR mapping specifications can be obtained from the District's Mapping & GIS Section. Mapping costs can vary widely, and District staff must be contacted when developing the funding requirements for a project. All CFI applications must include the following:

- Map of the proposed project area
- Description of specific activities that the mapping will support
- Discussion of why the existing topographic information will not meet your mapping requirements

Priority will be given to projects that are done in coordination with District-funded watershed modeling activities**.**

**AERIAL IMAGERY MAPPING:** The District does not anticipate providing funding for digital orthoimagery or oblique aerial imagery in FY21.

**MAPPING USING UNMANNED AERIAL SYSTEMS (UAS):** An UAS is comprised of cameras and/or other sensors mounted on an unmanned aerial vehicle. UAS provides capabilities for efficiently collecting very high-resolution imagery and/or topographic data over small areas and/or hard to reach areas. UAS activities are strictly regulated under the Federal Aviation Authority (FAA) and also under Florida state statutes. FAA regulations are continuing to evolve. District staff should be contacted when developing requirements for data collection activities using UAS in support of a Cooperative Funding application.

**OTHER GIS DATA COLLECTION:** GIS data collection activities other than LiDAR or aerial imagery should be at least regional in nature and preferably District-wide. Preference will be given to projects that update or revise existing District GIS data layers such as land use/land cover mapping, United States Department of Agriculture Natural Resources Conservation Service Soils maps, scanned and rectified historical aerial photographs, or National Wetland Inventory maps. GIS data must be delivered to District data standards.

**GIS APPLICATION DEVELOPMENT:** This category includes the development of desktop or web-based mapping applications that provide data display, query, modeling or data download activities. Priority for GIS application development will be given to projects that directly support cooperatively funded watershed modeling activities. CFI applications should specifically identify projects that are supported by these activities. The District does not fund the acquisition or maintenance of GIS computer hardware or software. GIS applications must be delivered to SWFWMD applications development standards.

## NATURAL SYSTEMS PROJECTS

Contact Stephanie Powers at (800) 985-7481 ext 2213 for any questions related to Natural Systems projects.

The following is provided as guidance for cooperators wanting to participate in the District's CFI in the area of **Natural Systems** as it relates to water resource management. The District seeks participation with cooperators in projects that result in measurable resource benefits to streams, lakes, wetlands, springs and aquifers, and their supporting uplands within its boundaries. Priority projects are those that benefit existing and future water supply sources, Surface Water Improvement and Management (SWIM) priority water bodies, and regionally significant water features. The District's CFI program seeks to leverage funds available at the District and local governments to promote and restore the natural characteristics and hydrologic functions of water bodies and lands on a watershed basis.

Funding is not available for compensatory water quality treatment or wetland mitigation or any other required mitigation. The project can be used to self-mitigate impacts specifically associated with project construction.

Important Considerations:

- As a part of an application for funds, the applicant must demonstrate control of the land to be restored, including ingress and egress to property
- Where appropriate, a conservation easement or equivalent measure to protect the District's investment in the project will be required. Final payment will not be made until final conservation easement, or equivalent, is recorded.
- Long-term operation and maintenance of the site will be the cooperators responsibility and will be a requirement of the cooperative agreement
- The District may consider land costs incurred by the local governments as a funding match if the land was purchased recently and solely for the project for which funding is being requested. Please provide the source of funding for the land purchase.
- Project objectives must demonstrate a net resource benefit to existing habitats and hydrology to be considered for funding
- Consideration must be given to potential impacts as a result of sea level rise

Types of projects encouraged:

**Shoreline Restoration –** Projects located along the shoreline edge of a water body and extending upslope to the upland edge that provide erosion control, establishment of littoral and near-shore plant communities, and/or removal or softening of seawalls or shoreline structure. These projects typically involve earthwork, exotic removal, and replanting with native plants. The water bodies are typically SWIM priority water bodies or river/stream systems connected to SWIM priority water bodies (i.e. the Hillsborough River). The evaluation of the project is based upon linear feet restored and cost effectiveness is based on cost/linear foot restored.

**Ecosystem Enhancement/Restoration –** These projects consist of non-native and nuisance plant removal projects and/or native vegetation installation with minimal earthwork involved. The evaluation is based upon number of acres restored and cost/acre restored.

**Hydrologic Restoration –** These projects are typically done in areas that have been historically ditched, drained, and/or dammed and involve earthwork, such as the creation or removal of ditch blocks, to restore natural hydrology to large tracts of land. Projects might also include non-native/nuisance plant removal and installation of native plants. For construction, please note the potential for flooding impacts must be fully evaluated prior to applying for cooperative funding. The evaluation of the project is based on acres restored and cost/acre restored.

**Submerged Lands Restoration –** Submerged sediment removal and dredge hole filling projects should only be proposed when the sediments or dredge hole are directly contributing to water quality impairment or negatively impacting native communities or critical fish or wildlife habitat. Projects in water bodies listed as impaired by FDEP will receive greater consideration. Dredging for navigational purposes will not be considered for funding. The cooperator should clearly identify proposed sediment disposal sites or suitable fill sources and demonstrate the "permitability" of the project, commonly done through pre-application meetings with the appropriate permitting agencies. The McKay Bay Dredge Hole Restoration Project is an example and an appropriate project. The evaluation of the project is based upon a number of factors including cubic yards removed, benefit of the removal (water quality and/or natural system), and the cost/cubic yard of material removed.

**Large-Scale Restoration Projects Incorporating Multiple Elements –** Large-scale restoration projects consist of a combination of the previously described restoration types, including significant earthworks. Projects typically include the creation, restoration, or enhancement of multiple ecosystems such as wetland restoration with supporting upland enhancement. Previously funded projects such as the Manatee County Robinson Preserve are an example. The focus of this type of project is based on acres restored and the cost- effectiveness is based on cost/acre restored.

What information is required in the application?

- Description of how the project will protect, improve, or restore natural systems
- Quantification of the resource benefit (acres restored, feet of shoreline restored, cubic yards of sediments removed, etc.)
- Cost benefit of project (cost/acre restored, cost/foot of shoreline restored, cost/cubic yard of material removed, cost/acre of enhancement)
- Identify any Surface Water Improvement and Management priority water bodies and/or regionally significant water features that will benefit from the project
- Identify any FDEP impaired water bodies that will benefit from the project
- A list of any previous work completed for the project (i.e. feasibility studies, conceptual designs, etc.)
- Description of complementary efforts done by the applicant to restore/protect natural systems such as: 1) environmentally sensitive land purchase program, 2) exotic removal/treatment programs, 3) Land Management Plan for property involved in application, 4) adopt a pond or adopt a highway program, 5) applicant maintains "nature parks" within its park system
- Proposed realistic schedule for design, permitting, and/or construction of project including mid-term milestones (30, 60, 90 percent and final design plans). Seasonal impacts to consider include: rainy season, nesting season, and manatee thermal refuge season.
- Proposed upland restoration projects must separately identify (if applicable) acres to be treated for removal of non-native/nuisance vegetation and acres to be planted.
- A description of how the project meets the District Strategic Initiatives and Regional Priorities outlined in the Districts Strategic Plan.
- A map of the project location with parcel boundary.

What cost information is required to be provided for this project?

- Total project cost (broken down by feasibility, design, construction, CEI) as well as basis for cost estimates (30, 60, 90 percent or final design plans)
- District share, cooperator share, and any additional funding sources
- Anticipated future funding requests

- Cost effectiveness calculation and methodology
  - Per acre (ac) for both wetland and upland restoration
  - Per linear foot (lf) for shoreline restoration
  - Per cubic yard (cy) for submerged sediment removal or placement

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the start and end dates that are expected to be achieved. The timeline should include a schedule for project elements associated with the FY cooperative funding request as well as a schedule for the overall project associated with potential future funding requests. Detail of the timeline shall increase with each phase of a project (feasibility, data collection, conceptual design, full design, permitting and construction). Project funding will be available October 1 of the fiscal year requested and should be considered for the timeline. A list of significant project milestones that should be included in a project timeline can be found on page 8. Examples of additional milestones specific to natural systems projects that may be considered are listed below.

- Sampling plan
- Time frame for sampling
- Data Analysis

## RECLAIMED WATER PROJECTS

Contact Anthony Andrade at 1-800-423-1476 x4196 for any questions related to Reclaimed Water projects.

This information has been compiled to assist potential cooperators in developing complete and acceptable funding applications for reclaimed water projects. Reclaimed water projects are considered for funding if they meet the general Cooperative Funding Initiative criteria and contribute to the following overall objectives, directly replacing or reducing demands for traditional, high-quality water supplies and/or indirectly reducing the impacts of water demands by protecting existing freshwater resources (maintenance of MFLs, natural system enhancement, aquifer recharge, etc.).

What type of reclaimed water projects and components are eligible for funding?

- Feasibility Studies
- Reclaimed Master Plans
- Reclaimed Transmission Systems
- Single Family Residential Reuse Systems
- Non-Residential/Commercial Reuse Systems
- Storage
- Pumping Stations
- Recharge Projects (also see Aquifer Recharge section)
- Natural System Enhancement Projects (also see Natural Systems section)

What type of reclaimed water projects and components are **not** eligible for funding?
Projects typically not eligible for funding include reclaimed water system components that (1) do not provide any direct benefit within the District; (2) are the responsibility of the cooperator according to a permit or legislation; and (3) are not consistent with District objectives and priorities. Examples of such items include:

- Any item related to DEP requirements for wastewater treatment (including upgrades) and disposal of wastewater. (Exceptions to this rule are reclaimed water treatment and infrastructure associated with ASR wells, innovative industrial/commercial uses, and natural system enhancement projects, where additional treatment may be an integral part of the success of the project)
- Staff time of the cooperator necessary to complete projects
- Equipment such as computers or vehicles for the use of cooperators to accomplish a project (Exceptions include rental of heavy equipment for construction)

Projects eligible for funding are listed below:

**Feasibility Studies:** These projects provide confidence that planned construction projects will meet the overall water-related objectives and ensure that District priorities are addressed.

Additional information required in the application:
Provide assurance that the proposed study will include the following:

- Typical technical feasibility elements (size, water quality, capacities, locations and costs of pipes, storage, pumps, appurtenances, etc.)
- Identification of the numbers and types of customers anticipated to be served
- Historical (if existing) or planned (if new) water use of customers by type

- Anticipated hook-up dates
- Opportunities for the use and storage of wet-weather flows
- Opportunities for connections with other reuse systems

**Reclaimed Master Plans:** Studies designed to improve and expand the utilization of available reclaimed water quantities, illustrate a planning-level design for the potential locations and types of reclaimed infrastructure, and guide the long-term development of reclaimed water supplies.

Additional information required in the application:
Provide assurance that the proposed plan will include the following:

- Typical technical elements, such as potential flows and general infrastructure location
- Identification of the customer types, location, benefits and existing/planned use
- Potential flow and offset quantities associated with the system
- Plans to maximize reuse flows in terms of the percent of available flows used per day on an annual average basis
- Plans to ensure the efficient use of reclaimed water sources
- Identification of opportunities for storage and use of wet-weather flows
- Operation/maintenance measures related to achieving and maintaining optimum use and efficiency
- Opportunities for connections with other reuse systems
- Options and capital cost estimates

**Reclaimed Transmission Systems:** Defined as infrastructure necessary to convey available reclaimed water supplies to service areas. Typically, they consist of the major trunk lines, and related appurtenances (valves, telemetry, etc.). Funding for design and construction of transmission projects will be considered; however, no funds for design will be disbursed until construction of the proposed project begins.

Additional information required in the application:

- Location, length and diameter of pipelines (include maps)
- Number and types of customers anticipated to be served (also see Single Family Residential & Non-Residential/Commercial requirements)
- Anticipated on-line dates for customers associated with the project (also see Single Family Residential & Non-Residential/Commercial requirements)
- Capacity, and annual average flow and benefit associated with the project upon construction completion and at build-out
- Identify the source of water benefitted (name public supply system; name/location of aquifer or surface water intake), and describe its significance as a water supply source, both locally and regionally
- Confirm meters will be used at significant connections (i.e., large users, subdivisions, etc., (also see Single Family Residential & Non-Residential/Commercial requirements)
- Demonstrate the benefits to high-quality, traditional water sources equal to at least 50% of the project's proposed reclaimed water flow (i.e. if a customer was using 10,000 gpd of groundwater for irrigation, then after conversion they won't use more than 20,000 gpd of reclaimed).
- Demonstrate that at least two of the following efficiency measures are implemented:
  - Install meters and implement volume-based water conserving rates (also see Single Family Residential & Non-Residential/Commercial requirements)
  - Develop and implement an aggressive community education program
  - Develop and implement a strong irrigation restriction enforcement program

- Require and monitor the use of emerging innovative technology for irrigation
- Describe the role of the project within the overall reclaimed water system
- Confirm that commitments are in place with customers to provide the specified benefits for a minimum of 20 years (also see Single Family Residential & Non-Residential/Commercial requirements).
- Confirm wastewater treatment plant is permitted to and capable of providing the quality and quantity of water suitable for the targeted use
- Provide WUP # of proposed customers, if applicable

**Single Family Residential Reuse Systems:** Infrastructure that delivers reclaimed water to residential customers, and consists of the lines and appurtenances (valves, service boxes, meters, etc.) up to, but not including, the customer connection. Funding for design and construction of these projects is available by the District where certain conditions are met. Funding for projects containing both transmission and residential elements can be considered, if all requirements are met. System expansion in several areas can be considered under one application and be funded as one larger project.

Additional information required in the application:

- Include all information required for transmission system projects (listed above)
- Confirm an ordinance requiring construction of reclaimed water lines in new construction (where reclaimed water is reasonably anticipated to be available) will be adopted before the issuance of the first invoice to the District, OR cite existing ordinance(s) that accomplish the same goal objective
- Confirm the existence of a policy to guarantee that at least 50% of the residential customers in the targeted area will be connected to the reclaimed water system within one year of project completion (within 3 years if new developing subdivisions)
- Provide the average single-family residential potable water use (actual annual GPD indoor & outdoor combined) for the specific subdivisions to be served by the reclaimed water distribution project. Example: the 200 single-family residences in the proposed project area of Rio Bravo subdivision used an average of 526 gpd of potable water in 2015
- Confirm an ordinance requiring reclaimed water customer metering (a minimum of a master meter per subdivision) and reclaimed water conserving language is in place
- If non-residential customers are also served by the proposed project, provide documentation that each proposed non-residential customer will execute connection commitments prior to construction, and that proposed customers with existing WUPs have agreed to modify WUPs to place existing permitted water use quantities on standby
- Provide WUP # of proposed customers, if applicable

**Non-Residential/Commercial Reuse Systems:** Infrastructure that delivers reclaimed water to non-residential customers (such as golf courses, condominiums, parks, industry, schools, commercial properties etc.), and consists of the lines and appurtenances (valves, service boxes, meters, etc.) up to, but not including, the customer connection. Funding for design and construction of these projects is available by the District where certain conditions are met. Funding for projects containing both transmission and non-residential elements can be considered, if all requirements are met. System expansion in several areas can be considered under one application and be funded as one larger project.

Additional information required in the application:

- Include all information required for transmission system projects (listed above)

- Confirm the existence of a policy to guarantee that 100% of the non-residential customers specified in the project plan will be connected and utilizing the reclaimed water system within one year of project completion.
- Confirm a non-residential reclaimed water customer metering requirement.
- Confirm and provide documentation that the non-residential customers to be served by the proposed project will execute connection commitments prior to construction, and that proposed customers with existing WUPs have agreed to modify WUPs to place existing permitted water use quantities on standby
- Provide WUP # of proposed customers, if applicable

**Storage:** Facilities designed to maximize reclaimed water utilization are eligible for funding assistance. Typically, reclaimed water storage includes traditional diurnal storage using ground or elevated tanks, ASR systems, or ponds, and the related appurtenances (controls, site piping, pond lining, etc.). It also includes seasonal storage for regional maximization, including ASR systems, or reservoirs.

Additional information required in the application:

- Describe the location(s) of the storage facilities and provide a map
- Describe the capacity in millions of gallons and, if seasonal, millions of gallons per day for the 100-day average daily flow
- Describe the impact of the storage on the reclaimed water system
- Additional requirements for ASR (see ASR section)

**Pumping stations:** (and related appurtenances) Projects eligible for funding are typically associated with storage tanks and transmission lines. Proposals must demonstrate the pumping project directly improves utilization of reclaimed water and benefits traditional high-quality water supplies.

Additional information required in the application:

- Describe the location(s) of the pumping facilities and provide a map
- Describe the number of pumps, and the size of each
- Describe the capacity in millions of gallons per day (average daily)
- Describe the impact of the pumping facilities on the reclaimed water system

**Recharge Projects:** See aquifer recharge projects section on page 11

**Natural System Enhancement Projects:** See natural systems requirements page 42

What cost information is required to be provided for this project?

- Total project cost (broken down by design, construction, CEI as well as basis for cost estimates for major components (i.e. pipelines, storage, pumps, membranes).
- District share, cooperator share, and any additional funding sources
- Anticipated future funding requests

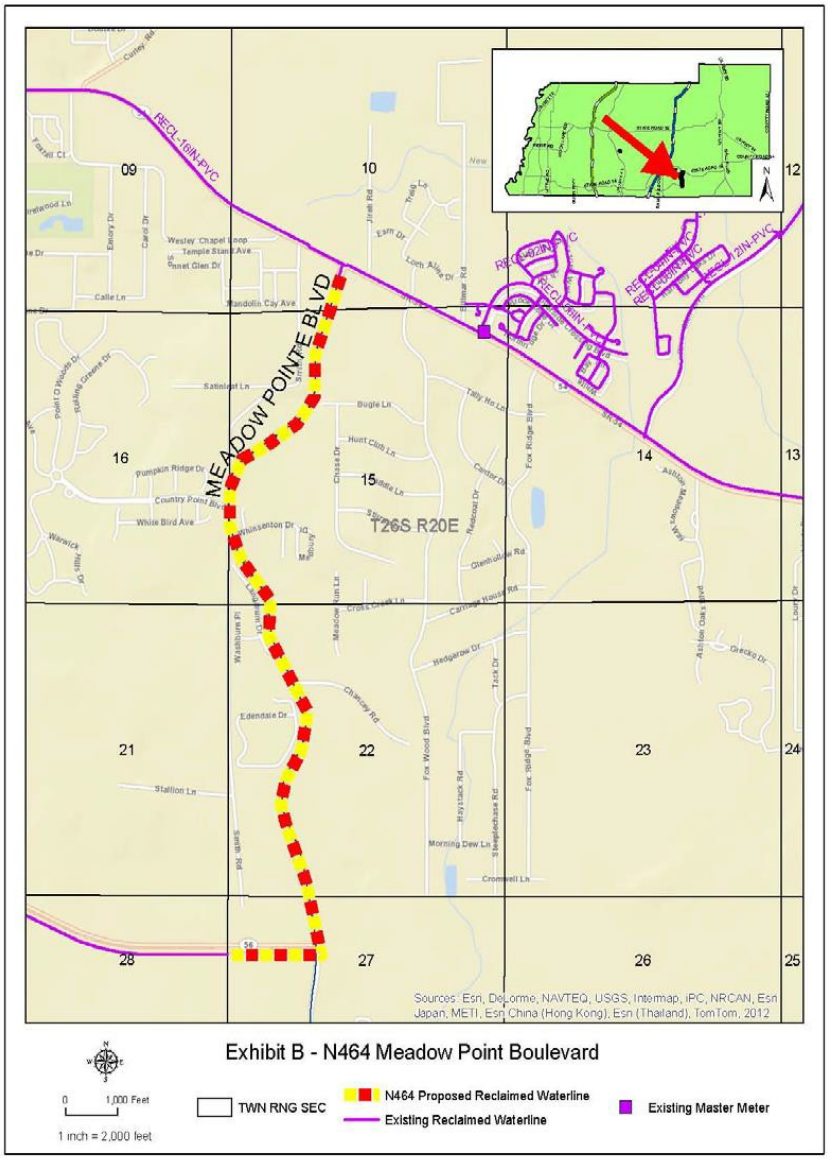
What items should be included in the application's project timelines?

A project timeline must be included and contain the significant project milestones and the dates (as opposed to number of months) they are expected to be achieved. The timeline's detail will increase with each phase of a project (conceptual; preliminary design and third-party review; final design, permitting, and construction). A list of significant project milestones that should be included in a project timeline can be found on page 8.

## Required Map Format for Reclaimed Water Projects

Existing reclaimed lines and appurtenances drawn in solid purple, and proposed project related lines and appurtenances drawn in hash-mark red and yellow (see example below).

### Example Reclaimed Water Projects Map Format



## SEPTIC CONVERSION PROJECTS

Contact Claire Stapley at (800) 423-1476 x4423 for any question related to Septic Conversion projects.

Please note this section is in a draft format and is subject to change based on Governing Board direction and is for cooperators wanting to participate in the District's CFI program for assistance with certain septic conversion projects. Examples of eligible projects include:

- Studies
- Septic to Sewer Projects
- Package Plant Decommissioning

For funding consideration projects must address issues within a Priority Focus Area (PFA) in a Basin Management Action Plan (BMAP) area as identified by the FDEP and within the SWFWMD boundaries.

Important Considerations:

- Septic/package plant to sewer construction projects must also be funded by the FDEP/State via the Springs funding program. Typical funding splits are DEP 50%, District 25% and cooperator 25%, but these amounts can be changed by the Governing Board. A separate application for FDEP Springs funding is required.
- Studies and/or master plans for septic conversions can be considered for funding at District 50% and cooperator 50%.
- Cooperators must have a local ordinance that requires proper abandonment of a septic system and connection to an available sewerage system, as defined by in Section 381.0065(2), F.S. The requirement for a local ordinance will be a contract condition of the Cooperative Funding Agreement (CFA).
- If one or more properties is not connected to a completed sewer project within one year following construction in accordance with Section 381.00655(1)(a), F.S., the project applicant is responsible for refunding the allocable amount of District funding for the unconnected property(ies). There is a repayment contract condition included in the CFA.
- Cooperators must have a local ordinance that prevents construction of new septic systems on lots of less than 1 acre within the PFAs, unless the new system includes enhanced treatment of nitrogen as approved by FDOH, or unless sewer connection will be available within 5 years. There will be a repayment contract condition included in the CFA.
- Project resource benefit will be defined based on DEP guidance for nitrogen load reduction estimates or best available information.
- For projects that have estimated construction costs exceeding $5 million, the District requires that the design (at 30 percent level), schedule, and cost estimates be subject to review by a third party. For complex projects over $1 million, the District may require third party review. See page 6 for additional details.

What types of projects will we consider for funding?

**Studies:** Studies should illustrate a planning-level design for the potential locations and types of wastewater disposal to achieve water quality goals and guide long term development. Please note that costs for these studies should be in-line with similar studies.

- Studies need to include specific, identified wastewater management options, identify prioritized management options, provide estimated costs, and the cost/benefit.

**Septic Conversion:** Infrastructure necessary to convey wastewater currently treated in septic systems or package plant(s) to a centralized/regional wastewater treatment facility and abandonment or demolition/removal of septic tanks, lateral lines connecting buildings to sewer system and any other necessary components.

Project components not typically funded:

- Operation and maintenance
- Payment of debtor submittal
- Permit violation compliance
- Responses to required permits

What information is required in the application? Use all applicable components.

- A list of any previous work completed for the project (i.e. feasibility studies, conceptual designs, etc.)
- Anticipated future funding requests for the project
- Identification of the receiving water body and/or springshed
- Phase(s) (design and/or construction) for which funds are requested
- Number of homes to be connected
- For projects with commercial septic tanks, provide type of commercial use and square footage of the associated buildings
- Anticipated dates for homeowner/package plant connection to sewer
- Annual average flows of package plant in millions of gallons (MGD) (actual, not permitted)
- Information on the package plant, including yearly average of TN, NO3 in mg/L (actual not permitted)
- Information on where sewage flows will be sent for treatment
- Information on available capacity at treatment facilities
- Information on the wastewater treatment facility (WWTF), including yearly average of TN, NO3 in mg/L (actual not permitted)
- Fate of effluent (RIB, spray field, reclaimed to golf course, etc.)
- Map showing location of homes/package plant and location of WWTF to assess the nutrient loadings based on the DEP guidance document (GIS format is helpful)
- Include location, length, and diameter of pipe to be installed
- Identify if the cooperator has ordinances in place or plans for ordinances as identified in *Important Considerations* above
- Provide the estimated nitrogen reduction and anticipated resource benefit(s) based on the DEP guidance document. Please note any calculations that deviate from this document with an explanation.
- Description of the level of outreach that has been performed or is planned with the affected homeowners/package plant owners

What cost information is required to be provided for this project?

- Total project cost requested for cost-share (broken down by phases) including detailed probable cost estimates.
- Project costs must include any proposed resident connection and/or impact fees and costs for septic tank abandonment, even if not requesting reimbursement for those components.
- District share, cooperator share, and any additional funding sources expected.
- Cost effectiveness calculation (cost/pound) for each target pollutant for a 30-year period. Exclude costs associated with operation and maintenance.

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the dates that are expected to be achieved. The timeline should include a schedule for project elements associated with the FY cooperative funding request as well as a schedule for the overall project associated with potential future funding requests. Detail of the timeline shall increase with each phase of a project (feasibility, data collection, conceptual design, full design, permitting and construction). Project funding will be available October 1 of the fiscal year requested and should be taken into account for the timeline. A list of significant project milestones that should be included in a project timeline can be found on page 8.

## WATER QUALITY PROJECTS

Contact Nicole Mytyk at (800) 836-0797 x6591 for any question related to Water Quality projects.

The following is provided as guidance for cooperators wanting to participate in the District's CFI in the area of **Water Quality**. The District seeks participation with cooperators in projects that focus on the improving water quality through Best Management Practices (BMPs) prior to entering State Waters, as well as in-lake or in-stream water quality improvement projects. Of priority are projects that discharge into or directly improve Surface Water Improvement and Management (SWIM) priority water bodies and other regionally significant water features. Priority is also given to projects that support the District Strategic Initiatives including the assessment, planning and improvement of water quality. The District's CFI program seeks to leverage funds available at the District and with local government funding to address water quality issues on a watershed basis.

All water quality projects must include annual total nitrogen removal for evaluation purposes. Total phosphorus will be accepted in known phosphorus limited systems. Projects only reporting total suspended solids (TSS) will not be accepted for cooperative funding consideration.

Important Considerations:

- As a part of an application for funds, the applicant must demonstrate ownership or control of the land where any water quality BMP's will be constructed
- Long-term operation and maintenance of the BMP will be the cooperator's responsibility and will be a requirement of the cooperative agreement. District expectations are that project will be operated and maintained for 20 years.
- The District may consider land costs incurred by the local governments as a funding match if the land was purchased recently and solely for the project for which funding is being requested. If the land has not been purchased land appraisals should be submitted with funding application. Please provide the source of funding used for the land purchase.
- Funding is not available for compensatory water quality treatment or wetland mitigation or any other required mitigation due to impacts
- Consideration should be given to potential impacts because of sea level rise

What types of projects will we consider for funding?

**Feasibility studies:** Funding to collect and analyze data to determine local and regional water quality status and trends to support the identification of nutrient related BMPs and alternatives. Please note that costs for these studies should be in-line with similar studies. Feasibility studies include but are not limited to:

- Nutrient source tracking and evaluation
- Water Quality Studies/Plans
  - Pollutant/Watershed loading models
  - Hydrodynamic and water quality models
  - BMP Alternatives Analysis
- Water quality and biological sampling for alternatives analyses
- All studies completed need to include specific, identified BMP options, prioritization of these BMP options, estimated costs, and the cost /benefit

**Implementation of Stormwater Improvements:** Implementation of nutrient related BMPs for water quality is addressed through structural and non-structural methods to provide a net water quality benefit. Projects that are required to meet a permit requirement (e.g. to provide required water quality treatment for new construction) or an enforcement/compliance action are

not eligible for consideration. It is important to note that any funding expended on design tasks will not be reimbursed until construction commences. Past projects have included:

- New treatment systems
- Expanding the capacity of an existing treatment system
- Implementing retrofit projects to provide water quality treatment where none was originally required
- Projects that have been identified in a feasibility study
- Projects that support local governmental efforts in implementation of basin management action plans (BMAPs) or other local goals
- Low Impact Development (LID) or Green Infrastructure

Project examples include:

- Stormwater treatment ponds
- Chemical treatment systems
- Modifications to existing systems to increase detention time
- Rain gardens
- Stormwater harvesting
- Bioswales/vegetated swales
- Addition of biosorption activated material to increase removal efficiency
- Replacement of impervious materials with pervious material as part of a treatment train approach with other implements included. (Note: include current condition of the area that will be covered in pervious pavers in application)

Project components not typically funded:

- Pervious pavement without a net water quality benefit and the conversion of natural land areas to pervious pavement.
- Maintenance of existing ponds or infrastructure
- Sediment removal without sediment source control
- Recreation improvements (e.g. boat ramps, bike paths, boardwalks, sidewalks, pavilions) that do not provide a water quality resource benefit
- Projects utilized for required compensatory treatment (Environmental Resource Permits) or required by an enforcement/compliance action

What information is required in the application?

- Description of water quality benefit proposed to be improved – Annual nutrient removal required, TSS alone will not qualify
- A list of any previous work completed for the project (i.e. feasibility studies, conceptual designs, etc.)
- Phase(s) (design, construction or both) for which funds are requested
- Anticipated future funding requests for the project
- Details on the type(s) of BMPs that will be incorporated to provide water quality treatment and the estimated percentage, if applicable, of BMPs that will utilize LID technologies.
- Description of how the project meets the District Strategic Initiatives and Regional Priorities outlined in the Districts Strategic Plan.
- Identification of the receiving water body
- Impairment status of the water body as determined by the FDEP 303(d) list
- Identify and describe any complementary efforts done by the applicant to improve water quality in the following categories 1) an active stormwater utility that collects fees, 2) street sweeper program, 3) stormwater maintenance program, 4) fertilizer use ordinance, 5) pet waste ordinance, 6) active education campaign on stormwater (drain labels, etc.), 7) other

initiatives to improve water quality.

- Provide in the description the target pollutant load(s), the anticipated resource benefit(s), and a cost effectiveness calculation for each parameter.
- Please provide the following for each type of system proposed:
  - Size or expanded size of the BMP
  - Total contributing area, in acres (ac) treated
  - Map of the contributing drainage area
  - Existing land use(s) served by the proposed BMP(s)
  - Pollutant removal estimates for Total Nitrogen (TN) and/or Total Phosphorus (TP)
    - Estimates must be in the units of pounds per year (lbs/yr)
    - At a minimum, an estimate for either TN or TP must be provided
    - The methodology and backup calculations and supporting information used to arrive at the estimate must be provided. Examples of models used in the past for this effort include BMPTrains (https://stormwater.ucf.edu/) or STEPL(http://it.tetratech-ffx.com/steplweb/models$docs.htm).

What cost information is required to be provided for this project?

- Total project cost requested for cost-share (broken down by phases) including detailed probable cost estimates
- District share, cooperator share, and any additional funding sources expected
- Cost effectiveness calculation (cost/pound) for each target pollutant for a 20-year period. Exclude costs associated with operation and maintenance.

What items should be included in the proposed project timeline?

A project timeline must be included and contain the significant project milestones and the dates that are expected to be achieved. The timeline should include a schedule for project elements associated with the FY cooperative funding request as well as a schedule for the overall project associated with potential future funding requests. Detail of the timeline shall increase with each phase of a project (feasibility, data collection, conceptual design, full design, permitting and construction). Project funding will be available October 1 of the fiscal year requested and should be taken into account for the timeline. A list of significant project milestones that should be included in a project timeline can be found on page 8. Examples of additional milestones specific to water quality projects that may be considered are listed below.

- Sampling plan
- Time frame for sampling
- Data Analysis

# FY2021 CFI EVALUATION FORM

| | | | |
|---|---|---|---|
| Project No.<br>Cooperator Name | Project Name<br>Fiscal Year | | |
| Risk Level: | | Multi-Year Contract: | |
| **Description** | | | |
| Description: | | | |
| Measurable Benefit: | | | |
| Costs: | | | |
| **Evaluation** | | | |
| Application Quality: | | | |
| Project Benefit: | | | |
| Cost Effectiveness: | | | |
| Past Performance: | | | |
| Complementary Efforts: | | | |
| Project Readiness: | | | |
| **Strategic Goals** | | | |
| Strategic Goals: | | Strategic Initiative:<br>Region Priority: | |
| **Overall Ranking and Recommendation** | | | |
| | | | |
| **Funding** | | | |
| Funding Source | Prior | | Future | Total |
| | | | | |
| Total | | | | |