

Cooperative Funding Initiative: FY 2013

**RECLAIMED WATER**

Reclaimed water projects are considered for funding if they meet the general Cooperative Funding Initiative criteria and contribute to the following **overall objectives**:

- (1) directly offsetting demands on traditional, high-quality water supplies
- (2) indirectly offsetting the impacts of water demands by protecting existing fresh water resources (maintenance of MFLs, natural system restoration, etc.).

This information has been compiled to assist potential cooperators in developing complete and acceptable funding proposals. For additional information, contact the project manager present at the FY 2013 Cooperative Funding Kick-off meeting.

**PART I: TYPES OF PROPOSALS**

Projects eligible for funding include the following. Required elements must be provided in accordance with **Part II** and in the format described in **Part III** in order for proposals to be considered complete.

**A. Feasibility studies** provide confidence that planned construction projects will meet the overall water-related objectives, and ensure that District priorities are addressed.

**REQUIREMENTS:**

- In addition to the typical technical feasibility elements, (size, water quality, capacities, locations and costs of pipes, storage, pumps, appurtenances, etc.) other elements that must be considered as part of the study are: (1) identification of the numbers and types of customers anticipated to be served; (2) historical (if existing) or planned (if new) water use of customers by type; (3) anticipated hook-up dates; (4) opportunities for the use and storage of wet-weather flows; and (5) opportunities for connections with other reuse systems.

**B. Master plans** are tools for determining the best use of available reclaimed water quantities and illustrate a planning-level design of the potential location and types of infrastructure.

**REQUIREMENTS:**

- In addition to the typical technical elements, such as potential flows and general infrastructure location, other elements that must be considered part of the planning include: (1) identification of the customer types, location and existing/planned use; potential flow and offset quantities associated with the system; (2) plans to maximize the reuse flows in terms of the percent of available flows used per day on an annual average basis; (3) plans to ensure the efficient use of reclaimed water sources; (4) identification of opportunities for storage and use of wet-weather flows; (5) and operation/maintenance measures related to achieving and maintaining optimum use and efficiency; and (6) opportunities for connections with other reuse systems.

**C. Transmission system projects** refer to the major components necessary to distribute large quantities of reclaimed water throughout the system. Typically, they consist of the major trunk lines, and related appurtenances (valves, reducers, etc.). Funding for design and construction of transmission projects will be considered; however, no funds for design will be reimbursed until construction of the proposed project begins.

**REQUIREMENTS:**

- Provide the following information *in accordance with Part II:*
  - Location, length and diameter of pipelines (include maps)
  - Number and types of customers anticipated to be served
  - Anticipated online dates for customers associated with the project
  - Capacity as well as annual average flow and offset associated with the project upon construction and at build-out
  - Cost-benefit of the project
- Identify the source of water being offset (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
- Describe capability for providing GIS data for map development
- Confirm meters will be used at significant connections (i.e., large users, subdivisions, etc.)
- Demonstrate that at least 50% of the flow will be used to offset high-quality, traditional water sources
- Demonstrate that after the project is implemented the reclaimed water utility will have a system-wide minimum offset efficiency of 60% (which will assist in achieving the District's goal of 75% system-wide reclaimed water offset efficiency by 2030)
- Demonstrate that at least two of the following efficiency measures are required
  - (1) Install meters and implement volume-based water-conserving rates
  - (2) Develop and implement an aggressive community education program
  - (3) Develop and implement a strong restrictions enforcement program
  - (4) Require and monitor the use of emerging innovative technology for irrigation
- Describe specific efforts that are/will be underway to educate reuse customers of the benefits of, and need for, efficient use of reclaimed water, and provide samples or materials
- Describe the role of the project within the overall reclaimed water system; and
- Confirm that commitments are in place with customers to provide at least 50% of the offsets for a minimum of 20 years
- Confirm wastewater treatment plant is capable of providing quality and quantity of water suitable for targeted use

**D. Distribution system projects** refer to infrastructure that delivers reclaimed water to individual customers, and consist of the lines and appurtenances (valves, reducers, 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 distribution elements can be considered, if all requirements are met.

**REQUIREMENTS:**

- All requirements for transmission system projects must be met
- 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 customers in the targeted area will be connected to the reclaimed water system within one year of project completion
- 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 2010.
- Confirm an ordinance requiring reclaimed water customer metering and water-conserving rates

**E. 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 and reservoirs.

**REQUIREMENTS:**

- 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
- Describe the costs and cost/benefit in accordance with Part II

**F. Pumping stations** (and related appurtenances) eligible for funding are typically associated with storage tanks and transmission lines. Proposals must demonstrate the pumping project directly improves utilization of reclaimed water sources leading to the offset of potable-quality water supplies.

**REQUIREMENTS:**

- 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
- Describe the impact of the pumping facilities on the reclaimed water system
- Describe the costs and cost/benefit in accordance with Part II

**G. Best Management Practices (BMPs)** generally describes a set of measures designed to improve system efficiency. On a case-by-case basis, the funding of BMPs that require infrastructure, such as customer meters, telemetry or hook-ups, may be considered if the efficiency is increased to a significant degree. In addition to telemetry and meters, the projects listed in the water conservation guidelines for FY 2013 Cooperative Funding Initiative proposals may be eligible for funding, if the associated requirements can be met.

## REQUIREMENTS:

- If reclaimed water education requirements are associated with an existing or past cooperative funding agreement, demonstrate that they have been fully satisfied (or will be by the start of the fiscal year for which the project is proposed).
- If funding for retrofitting existing customers with individual meters, provide documentation of an approved volume-based rate structure in place, or confirm that a volume-based rate will be applied within one year of project completion.
- Provide the data requirements associated with the specific BMP (or the most-similar BMP) as described in the FY 2013 Water Conservation proposal guidelines.

**H.** Projects typically **not eligible for funding** include reclaimed water system components that (1) do not provide any direct benefit to 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
  - Current exceptions to this rule are reclaimed water 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 (does not include staff time billed by a consultant)
- **Equipment** such as computers or vehicles for the use of cooperators to accomplish a project (does not include rental of heavy equipment for construction)

## PART II: DEFINITIONS AND CALCULATIONS

### **A. FLOW & OFFSET**

Flow = the amount of reclaimed water produced/delivered as a direct result of the project, expressed as an annual average in mgd.

Offset = the amount of traditional, potable quality water supplies that will be replaced by reclaimed water, expressed as an annual average in mgd.

Efficiency = the amount of offset versus the amount of flow.

EXAMPLE: Reclaimed water is sent to a subdivision of 100 homes that uses an historical average of 300 gallons of water for irrigation per day per home before receiving reclaimed water. All homes have signed necessary agreements for reclaimed water service. The project is designed to provide 60,000 gpd (ADF) to the subdivision.

(1) 100 homes x 300 gpd = 30,000 gpd average offset for the project

(2) 30,000 offset / 60,000 flow = **50% efficiency.**

### A-1 Acceptable data

Only metered water use data is acceptable. Unless metered data is provided and documented, the following averages will be used:

Residential (single-family) or commercial aesthetic irrigation:

- 300 gpd of per household/building offset
- 600 gpd per household/building flow, if metered connections (50% efficiency)
- 900 gpd per household/building flow, if unmetered (33% efficiency note: does not meet minimum District efficiency requirement)

Golf Course irrigation (includes common areas):

- 193,000 gpd offset per 18 holes (75% efficiency)
- 258,000 gpd flow per 18 holes

Large landscapes, industrial and agricultural flow will be based on billing or permits data. Unless other, documented and verifiable data is presented, the following efficiencies will be used:

- Industrial process uses = 100%
- Natural system benefits = up to 100%
- Large landscapes, professionally managed = 75%
- Other landscapes = 60%
- Agricultural irrigation = 75%

Example: A transmission project is proposed, which provides reclaimed water to a mix of metered and unmetered customers too small for a water use permit. The customers include (1) a school athletic field, (2) a small citrus grove, and (3) a shopping plaza with some aesthetic landscape. The flow planned for the project is 90,000 gpd. Estimate the share of the flow each customer will receive (and explain).

Component	Component Flow (%)	Component flow (mgd)	Efficiency (mgd)	Offset (mgd)
School	33.33	30,000	75%	22,500
Citrus Grove	33.33	30,000	75%	22,500
Shopping Plaza	33.33	30,000	60%	18,000
<b>TOTAL</b>		<b>90,000</b>	<b>70%</b>	<b>63,000</b>

A-2 Assignment of Benefits

Where funds are requested for a project located in more than one basin, the cooperator must determine and document the flow and offset benefiting each affected basin.

**B. STORAGE**

B-1 Capacity and ADF

Capacity = the volume of water that the storage vessel is designed to support, reported in millions of gallons (mg).

ADF = Average Daily Flow, annualized, reported in mgd

B-2 Benefits

The benefits of diurnal storage are anticipated to be related to optimizing flows and ensuring reliable supply to customers. The storage and, if applicable, pumping capacity should be reported, along with the service area(s) and customers realizing the benefit.

Where additional customers will be able to receive reclaimed water as a result of

storage, the flow and offset should be reported. Typically significant seasonal storage is the only storage capable of bringing new year-round customers on line. The flow should be reported in mgd for the amount of time additional flows are available (i.e., 100-day ADF is 1.25 mgd), and the offset should be calculated in mgd. The customers (number and type) and anticipated hook-up dates must be identified.

**C. COSTS and COST/BENEFIT**

**C-1 Project Costs**

Total Project Cost = the TOTAL project cost, including all elements that apply, such as:

- Feasibility (may include consultant and permitting\* fees)
- Design (may include consultant and permitting\* fees)
- Construction (may include contractors fees, contingency, construction equipment/materials and their storage, related traffic control and roadway/sidewalk reparation)

Eligible Cost = portion of total project cost normally eligible for cooperative funding

\* permitting, mapping or other fees assessed by the District are not eligible for cooperative funding.

Other Grants Received = portion of eligible cost funded by another agency (other than the District) Examples include, but are not limited to State and Federal line items.

District cost = portion of eligible cost requested of the District.

- For multi-year projects, list amount of funds requested in each fiscal year
- Where funds are requested for projects in multiple basins, the costs requested from each basin must be reflective of the benefit achieved in each
- Where there are multiple cooperators, the District cost should not exceed 50% of the total eligible cost minus third-party cooperators
- As funding allows, and as funds may be available from the Water Protection and Sustainability Trust Fund, projects focusing on industrial and commercial customers to provide the greatest resource benefits may be considered for a maximum amount of available Trust Funds, providing up to 60% of eligible project costs

Cooperator cost = portion of the total project cost the cooperator will fund (equal to the difference between the total project cost and the District cost/other grants).

- All cooperators must be identified, along with their contribution, as in the example below:
- Do not include non-eligible components in the grant application (i.e. WWTP upgrades)

<b>Example: City of Sample Skylark Reclaimed Water Project</b>				
	<b>TOTAL</b>	<b>PRIOR</b>	<b>FY2013</b>	<b>FUTURE</b>
Total Project Cost	\$11,838,000			
DEP Grant (WWTP upgrade)	\$1,000,000			
State Line Item Grant (reclaimed)	\$838,000			



The cost benefit is \$3.50 per thousand gallons (Kgal) offset.  
 (1)  $\$32.40 * \$733.77 = \$23,774.14 * 12 = \$285,289.68$   
 (2)  $\$285,289.68 / 365 = \$781.61$   
 (3)  $[\$781.61 / (223,000 \text{ gpd} / 1000)] = \mathbf{\$3.50/Kgal \text{ offset}}$

**D. 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. Examples of significant project milestones are listed below.

- |                                       |  |
|---------------------------------------|--|
| Execute Agreement                     | Draft Bid Documents to District          |
| Develop Project Plan                  | Bid List to District with Recommendation |
| Release RFP                           | Select Contractor                        |
| Select Consultant                     | Issue Construction NTP                   |
| Issue Design NTP                      | Adopt Dual Distribution Ordinance        |
| 30% Complete (Design or Construction) | Obtain Written 20- Year User Agreements  |
| 60% Complete (Design or Construction) | ASR Cycle Testing (Phase 1,2,3 etc)      |
| 90% Complete (Design or Construction) | Monitoring                               |
| Design Documents to District          | Completion Certification                 |
| Final Design Certification            | Final Report                             |
| Construction Permit Application       | Final Invoice to District                |
| Release RFB                           | Project Close-out                        |

**PART III: PROPOSAL FORMAT GUIDELINES**

**A. SAMPLE PROJECT DESCRIPTION:**

This example is for a fictitious reclaimed water design and construction project, which includes design and permitting, transmission, distribution, storage, and pumping. It is provided as a guideline for the type of information and format in which proposals should be submitted.

**City of Sample Skylark Reclaimed Water Project**

Description: This alternative water supply project consists of the design and construction of reclaimed water transmission mains, distribution piping, a 5 mg storage tank, 5 mgd+ high service pump station, and reuse system telemetry in the Skylark area of the City of Sample. The project includes approximately 16,500 linear feet of 24-inch and approximately 47,000 linear feet of 4-inch and 6-inch diameter reclaimed water lines. The project will connect the city's east reclaimed water service area with their west service area and provide service to nearly 700 residential and commercial reclaimed water customers in central Sample, of which approximately 500 are anticipated to connect to the system.

Benefits: The project will provide 0.41 mgd of reclaimed water to offset 0.25 mgd of potable quality water. The project will also interconnect the city's three WWTP's, give the ability to move reclaimed water to areas of high demand, and provide for the pumping and storage necessary to serve additional customers in central Sample.

Costs: The total eligible cost of this project is estimated to be \$10,838,000, of which \$838,000 is funded by a State Appropriation received by the City, and the District's share is expected to be 50 percent of the remaining, or \$5,000,000. Benefits are split evenly between the Pinellas-Anclote River and Hillsborough River basins as the project's service area and benefits occur within both basins. The Governing Board funded \$1,000,000 in FY2012, and is requested to fund \$2,000,000 in FY2013, with the remaining \$2,000,000 anticipated to be requested in future fiscal years. The cost amortized at 8 percent over 30 years is \$10.44 per thousand gallons offset; however, the cost effectiveness is not as excessive as it appears. More than half of the project costs are associated with the interconnect and storage facility portions of the project, which are imperative for the continued expansion of reclaimed water in the City of Sample.

Timeline:

Initial design of the project will commence by December 1, 2011; full design will commence by May 30, 2012; and construction of the project will commence by December 31, 2012. The project will be completed by June 30, 2015.

Additional Information:

The city has implemented reclaimed water efficiency measures, including metering and volume based rates, and has instituted an education program to promote the efficient use and conservation of reclaimed water. The city's existing reclaimed water system currently provides 0.17 mgd to offset 0.10 mgd of high-quality water resources (= 59% system-wide efficiency). Upon completion of this project the city's system-wide reclaimed water offset efficiency will be 60% (0.58mgd supplied/ 0.35 mgd offset), which meets the District required minimum of 60%. The total estimated cost of the project is \$10,838,000, of which \$838,000 is funded by a State Appropriation received by the city. Please note that the project cost does not include the additional \$1,000,000 for WWTP upgrades (DEP Grant) that are not eligible for District funding.

**B. Sample Cooperative Funding Project Plan**

The following is sample information that should be submitted as supporting documentation, which is sufficient for the eventual Project Plan, should the proposal be approved for funding.

**EXHIBIT B, PROJECT PLAN**

**APPLICANT:** City of Sample, Florida

**PROJECT:** City of Sample Skylark Reclaimed Water Project (L999)

**NARRATIVE:** This alternative water supply project consists of the design, permitting and construction of reclaimed water transmission mains, distribution piping, a 5 million gallon (mg) storage tank a high-service pump station and telemetry system that will interconnect the city's east and west reclaimed water systems and provide service to the Skylark area of the City of Sample.

## PROJECT INFORMATION

### **1. TYPE OF PROJECT:**

The project consists of the design, permitting and construction of reclaimed water transmission mains, distribution piping, a 5 mg storage tank, a high-service pump station and Supervisory Control and Data Acquisition (SCADA) telemetry system in the Skylark area of Sample.

### **2. PROJECT OBJECTIVE:**

The goal of this project is to replace existing potable water and potable-quality groundwater used for irrigation with reclaimed water. This endeavor represents a timely opportunity to leverage city and District funds for a project that will be integral in interconnecting the city's two reclaimed water systems and offset high potable water use in areas that do not have access to reclaimed water.

The City of Sample's overall reclaimed water objective is to develop a system that will offset potable quality water by providing reclaimed water for irrigation and other approved non-potable uses. The project described below will assist the city in building a citywide reclaimed water system.

### **3. PROJECT DESCRIPTION:**

A. A project location map for the project and the Skylark area is attached and titled Figure 1, page 8.

B. The project includes:

- Approximately 16,500 linear feet of 24" diameter reclaimed water transmission mains
- Approximately 47,000 linear feet of 4" to 6" diameter reclaimed water distribution system lines
- A 5 mg storage tank
- A high-service pump station & SCADA system

C. The project will connect the city's east reclaimed water service area with their west reclaimed water service area. The project will also interconnect the city's three

wastewater treatment plants, give the ability to move reclaimed water to areas of high demand, and provide for the pumping and storage necessary to serve additional customers in central Sample.

- D. There are approximately 700 single-family residential customers in the project's distribution service area, of which 492 have in-ground irrigation systems and are currently irrigating (450 using potable water and 42 using deep wells). These nearly 500 residential irrigation customers anticipated to connect to the system will use 0.33 million gallons per day (mgd) of reclaimed water to offset 0.17 mgd of potable quality water. The main distribution portion of the project is located north of Highway 10, west of Tucson Road, east of Bonanza Road and south of Chaparral Drive.
- E. Eight commercial customers including Sample Putt-Putt Golf Park (6,400 gpd flow; 4,800 gpd offset WUP#0029XX), Lorne Green Baseball Complex (6,400 gpd flow; 4,800 gpd offset WUP#0029XX), are also anticipated to connect. In addition to the Skylark portions, this project also includes minor distribution piping to Dillon High School (60,000 gpd flow; 45,000 gpd offset WUP#0079XX), and to cooling towers at the Oak County Government Complexes in Sample (6,000 gpd flow; 6,000 gpd offset). The remaining customers are churches, commercial properties and common areas. At project build-out the city anticipates serving more than 600 customers; however, the offsets above only include the initial 500 customers.

#### **4. DEMONSTRATION OF NEED:**

- This project will optimize water management in the City of Sample by reducing the water withdrawn from well fields and from irrigation wells, and reduce the disposal of effluent water to Tampa Bay and Sample Harbor.
- This project will help meet District priorities by reducing groundwater withdrawals, reducing pollutant loading to Tampa Bay and Sample Harbor, and helping to recharge aquifers.
- This project is supported by goals found in the District Regional Water Supply Plan, State Water Policy, the Florida Water Plan, reports of the Tampa Bay National Estuary Program, the Water Use Caution Area Management Plan and area Comprehensive Planning Documents to maximize the reuse of highly treated wastewater.
- This project is consistent with the update of the City of Sample Reclaimed Water Expansion Plan.
- Funding for the project is included in the City of Sample's Capital Improvement Plan.

#### **5. MEASURABLE BENEFITS:**

This project will interconnect the city's east and west Reclaimed Water Service Areas and support the delivery of 0.41 mgd of reclaimed water to the project area. The expansion of reclaimed water service to these areas will offset an estimated 0.25 mgd of current potable water and potable quality groundwater used for non-potable uses, as well as enable future

expansion of the city's system.

**6. DELIVERABLES:**

- A. Bi-Monthly design/construction status reports
- B. Preliminary project design
- C. 20-year customer commitment agreements
- D. Copy of city ordinance/code requiring dual distribution lines in new developments
- E. Copy of city ordinance/code which provides for the efficient use of reclaimed water
- F. Construction bid packages
- G. Construction contract for District approval
- H. Construction completeness letter from the Public Utilities Director
- I. Reclaimed water GIS information
- J. Annual reclaimed water summary reports

**7. PROJECT COST:**

The total eligible cost of this project is estimated to be \$10,838,000, of which \$838,000 is funded by a State Appropriation received by the city, and the District's share is expected to be 50 percent of the remaining, or \$5,000,000. Benefits are split evenly between the Pinellas-Anclote River and Hillsborough River basins as the project's service area and benefits occur within both basins. The Governing Board funded \$1,000,000 in FY2012, and is requested to fund \$2,000,000, in FY2013, with the remaining \$2,000,000 anticipated to be requested in future fiscal years. The cost amortized at 8 percent over 30 years is \$10.44 per thousand gallons offset; however, the cost effectiveness is not as excessive as it appears. More than half of the project costs are associated with the interconnect and storage facility portions of the project, which are imperative for the continued expansion of reclaimed water in the City of Sample.

The total project cost is estimated to be \$10,838,000 categorized as follows:

	Total Project	State Grant	City Share	SWFWMD Share
Design and Permitting	\$ 2,167,600		\$ 1,083,800	<b>\$ 1,083,800</b>
Transmission	\$ 2,851,200	\$838,000	\$ 1,006,600	<b>\$ 1,006,600</b>
Distribution	\$ 2,030,400		\$ 1,015,200	<b>\$ 1,015,200</b>
Storage	\$ 1,400,000		\$ 700,000	<b>\$ 700,000</b>
Pumping & Telemetry	\$ 2,388,800		\$ 1,194,400	<b>\$ 1,194,400</b>
<b>Totals</b>	<b>\$10,838,000</b>	<b>\$838,000</b>	<b>\$ 5,000,000</b>	<b>\$ 5,000,000</b>

The city will fund its share of project costs from the Water and Sewer Enterprise funds including revenues from the sale of reclaimed water. The funds for the project are included in the adopted Capital Improvement Plan.

**8. COMPLETION SCHEDULE:**

L999 Agreement Approved .....	October 30, 2012
L999 Agreement Executed .....	December 1, 2012
Notice to Proceed (reimbursement contingent upon full execution) .....	December 1, 2012
Initial Design Commence .....	December 1, 2012
Full Design and Permitting Commence .....	May 30, 2013
Construction Commence .....	December 31, 2013
Complete Construction .....	June 30, 2015
Agreement Termination .....	December 31, 2015

**9. IMPLEMENTATION:**

The City of Sample’s Public Utilities staff will be responsible for implementing this project. The City will utilize an engineering consultant to design the systems and will construct the project using approved general contractors through normal public bid procurement.

**10. KEY PERSONNEL:**

The city’s contact with District staff and project manager will be:

Primary Contact  
 Chuck Connors,  
 Reclaimed Water Manager  
 City of Sample  
 P.O. Box 28XX  
 Sample, FL 337XX-28XX  
 (727) 893-7XXX

Secondary Contact  
 James Arnes  
 Public Utilities Director  
 City of Sample  
 P.O. Box 28XX  
 Sample, FL 337XX-28XX  
 (727) 892-5XXX

**ADDITIONAL REQUIREMENTS**

A. DISTRIBUTION REQUIREMENTS. The City of Sample will adhere to the following terms and conditions and will provide written documentation of the implementation of each prior to requesting any reimbursement.

1. Prior to submitting the first invoice for District reimbursement the City of Sample will submit a copy of their current ordinance/code, requiring dual distribution (potable and reclaimed) lines in new developments within their reclaimed water service area, and will provide assurances of enforcement.
2. Prior to submitting the first invoice for District reimbursement, the City of Sample will submit a copy of their existing current ordinance/code, which provides for the efficient use of reclaimed water for aesthetic landscape irrigation which results in at least a 50% offset to groundwater, surface water, and/or potable water supplies. Examples may include, but are not limited to: eliminating daytime reclaimed water irrigation, odd/even reclaimed watering schedules and residential reclaimed water metering coupled with water-conserving rates. Such measures will be developed/implemented with the intent of eliminating practices, which do not result in the beneficial offset of potable or groundwater uses.
3. The City of Sample will enforce a policy to guarantee a rate of connection to the reclaimed water system that is not less than 50% of the customer accounts in the project's service area. This 50% rate of connections will be achieved in the project service area within one year of project completion. The policy and proof of this connection rate are to be submitted to the District for approval prior to proceeding with implementation of the project. The District will not unreasonably withhold its approval.
4. Prior to submitting the first invoice for District reimbursement, the City of Sample will have initiated the installation of reclaimed water meters within the project service area identified in the city's Project Plan set forth in Exhibit "B." A minimum of a master meter per subdivision will be required. The City of Sample will maintain the meter(s) and report annual utilization to the District.

**B. EDUCATION PROGRAM AND APPROVAL.** The City of Sample will institute/continue a customer education program promoting the efficient use and conservation of reclaimed water. Plans for the program are included in the City of Sample's Project Plan set forth in Exhibit "B" (see attachment on page \_\_\_). The city must obtain the District's approval of the educational material prior to proceeding with implementation of the project. The District will not unreasonably withhold its approval. The education program must be implemented prior to reimbursement from the District.

**C. REQUIRED RECLAIMED WATER CUSTOMERS.** The City of Sample will obtain written agreements with reclaimed water customers served by the project that provide at least 50% of the project's proposed reclaimed water offsets of existing or planned, groundwater or surface water withdrawals, under normal operating conditions for a minimum of 20 years. Written notification that all such agreements have been secured will be provided to the District's project manager prior to initiating construction of the project, and copies will be furnished upon request. Where reclaimed water will offset withdrawals under water use permits (WUPs), the City of Sample will secure long-term written agreements with those customers served by the project, ensuring utilization of reclaimed water at the proposed capacity, as described in this agreement, for a minimum of 20 years. The City of Sample will ensure these customers provide the project's proposed offsets of existing or planned, groundwater or surface water withdrawals, under

normal operating conditions. Written notification that all such agreements have been secured will be provided to the District's project manager prior to initiating construction of the project, and copies will be furnished upon request.

## Attachment 1

### **Policy to guarantee customer participation and a minimum of a 50% connection rate within one year of completion of project.**

The City of Sample will guarantee a 50% connection rate within one year of completion of the project. The policy for enforcing connection will be per a city ordinance/code, which will state "no person shall use potable water for irrigation on a property where reclaimed distribution facilities are available." A mandatory connection fee of no more than \$500 per connection is in place, resulting in nearly 85% participation. **Potable irrigation will not be allowed.** In the event a person does not comply, potable service will be disconnected after a series of letters and meetings with the customer. The city requires all large reclaimed water customers to sign a 20-year reclaimed water service agreement prior to construction of the transmission lines necessary to serve the customer's property.

### **Education promoting the efficient use of reclaimed water.**

The City of Sample provides education on reclaimed water and conservation on the city TV channel and website, with a link to the District's website. Education is also provided with brochures and educational materials provided at our customer service department, libraries and Public Utilities department. The city provides each reclaimed user with a reclaimed water policy manual that they must read and sign for before service is provided. Information is provided at the initial inspection, at homeowner meetings, in bill stuffers and through our monthly utility insert message.

### **Ordinance/code requiring efficient use of reclaimed water.**

The City of Sample will require the efficient utilization of reclaimed water. To conserve the reclaimed water resource, daytime restrictions on watering with reclaimed water will be included in a ordinance/code, which will state "To conserve the resource, the city will institute daytime restrictions on irrigation whereby no irrigation is allowed by use of reclaimed water between 10a.m. and 4p.m. on each day of the week, with no more than three days per week per property allowed. The city will install master meters on subdivisions, as well as individual meters on all connections and will monitor/report usage and discourage overuse through a variety of methods (including metering and water-conserving rates for customers, planned service interruptions, time-of-day and day-of-week irrigation restrictions) to guarantee the project achieves at least a 50% offset efficiency.

### **Ordinance/code requiring dual distribution lines in new developments within reclaimed water service areas.**

- The city developed and passed an ordinance/code (#XYZ1234) stating "all new developments within the City of Sample that will be receiving reclaimed water within seven years will be required to install dual distribution lines (reclaimed and potable) as part of the development."

## Figure 1

### Map of Project

(Existing reclaimed lines and appurtenances drawn in solid purple, and proposed project related lines and appurtenances drawn in hash-mark red and yellow. Basin boundaries must be shown if in multiple basins.)