



MEMORANDUM

City of Venice

Choose an item.

TO: Ed Lavalley, City Manager

THROUGH: Javier Vargas, Utility Director Kathleen Weeden, City Engineer

FROM: Brenda Westlake, Finance

DATE: September 5, 2019

COUNCIL APPROVAL: Yes

MEETING DATE: September 24, 2019

STRATEGIC PLAN GOAL: Upgrade and Maintain City Infrastructure and Facilities

SUBJECT: Southwest Florida Water Management District (SWFWMD) Cooperative Funding Program Application and Letters

Background: Engineering, Stormwater Department and Utilities Department would like to submit SWFWMD Cooperative Funding Grant Applications for consideration of FY2021 funding.

- 1) Stormwater Outfall Monitoring – Outfall #1 & #2 – Total Cost \$350,000 (SWFWMD \$175,000 /City \$175,000)
 - 2) Aquifer Storage and Recovery Well System – Phase 3 ASR Design/Bidding – Total Cost \$300,000 (SWFWMD \$150,000/City \$150,000)
 - 3) Toilet Rebate and Retrofit Project Phase 8 – Total Cost \$58,900 (SWFWMD \$29,450/City \$29,450)
- The SWFWMD applications require a Priority Listing letter that outlines the City's priority ranking of the projects and also a Funding Commitment letter that states the City has the matching funds because the grants require a 50% match.

Requested Action: Request the City Council's permission to submit the SWFWMD grant applications. If grants are funded, the agreements will be reviewed by City Attorney and Risk Management, prior to requesting grant agreement approval from the City Council.

If for an agenda item, this document and any associated backup created by City of Venice staff has been reviewed for ADA compliance: Yes

City Attorney Review/Approved: N/A

Risk Management Review: N/A

Finance Department Review/Approved: Yes

Funds Availability (account number): 480-0000-334.36-00 and 421-0000-337.30-13



"City on the Gulf"

CITY OF VENICE

401 W. Venice, Venice, Florida 34285

(941) 486-2626 Fax (941) 480-3031

www.venicegov.com

September 5, 2019

Southwest Florida Water Management District
Attn: Cooperative Funding Initiative (CFI) Administrator
2379 Broad Street
Brooksville, FL 34604

Dear CFI Administrator:

Please accept this letter as the priority listing for the Southwest Florida Water Management District fiscal year 2021 Cooperative Funding applications for the City of Venice.

Priority	Project Name
1	Stormwater Outfall Monitoring – Outfalls #1 and #2
2	Aquifer Storage and Recovery Well System
3	Toilet Rebate and Retrofit Project – Phase 8

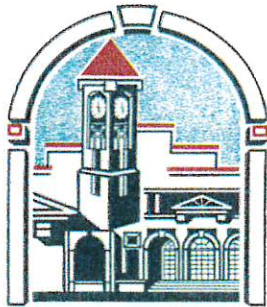
If there are any questions or additional information needed, please contact me at (941) 882-7399.

Sincerely,

Edward Lavallee
City Manager

CC: Javier Vargas, Utilities Director
John Banks, Utilities Project Manager
Kathleen Weeden, City Engineer





CITY OF VENICE

401 West Venice Ave, Venice, Florida 34285
(941) 882-7399 Fax (941)480-3031
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9/5/2019

Southwest Florida Water Management District
Attn: Cooperative Funding Initiative (CFI) Administrator
2379 Broad Street
Brooksville, FL 34604

Dear CFI Administrator:

The City of Venice Utilities Department has submitted three CFI applications for FY2021 consideration. We have detailed the matching funds as stated below:

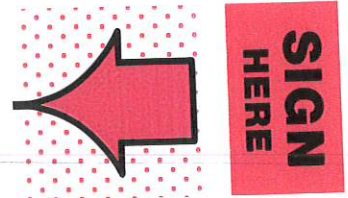
- City of Venice – Stormwater Outfall Monitoring – Water Quality Project Outfall #1 & #2 – The City is committed to fund this project and will include matching funds in the City's FY2021/FY022 budget.
- City of Venice - Utilities Aquifer Storage and Recovery Well System – The City is committed to funding this project and will include matching funds in the City's FY2021/FY022 budget.
- City of Venice - Toilet Rebate Phase 8 – The City is committed to funding this project and will include matching funds in the City's FY2020/FY2021 budget.

If there are any questions or additional information needed, please contact me at (941)882-7399.

Sincerely,

Edward Lavallee
City Manager

CC: Javier Vargas, Utilities Director
John Banks, Utilities Project Manager
Kathleen Weeden, Engineer



SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

FY2021 Cooperative Funding Initiative Application Form

Project Name COV - Water Quality Improvements - Outfalls 1 & 2

Project Number

Cooperator City of Venice

Department Utilities

Contact Person Javier Vargas

Address 200 North Warfield Ave.

City State Zip Venice, FL 34285

Phone # 941-882-7310

Email jvargas@venicegov.com

Project Type:

☐ Water Supply ☒ Water Quality ☐ Flood Protection ☐ Natural Systems

Strategic Initiatives:

☒ Water Quality Maintenance and Improvement ☐ Water Quality Monitoring
☐ Alternative Water Supply ☐ Conservation
☐ Reclaimed Water ☐ Regional Water Supply Planning
☐ Emergency Flood Response ☐ Floodplain Management
☐ Minimum Flows and Level Establishment and Monitoring ☐ Minimum Flows and Levels Recovery
☐ Natural Systems Conservation and Restoration ☐ Natural Systems Identification and Monitoring

Indicate All Counties to Benefit From Project:

☐ Charlotte ☐ Citrus ☐ Desoto ☐ Hardee ☐ Hernando ☐ Highlands ☐ Hillsborough ☐ Lake
☐ Levy ☐ Manatee ☐ Marion ☐ Pasco ☐ Pinellas ☒ Sarasota ☐ Sumter ☐ Polk

Project Description/Benefit/Cost

Description:

This project is intended to decrease the intensity and duration of harmful algal blooms, such as last year's Kerenia brevis and elevated bacteria levels along the Gulf Coast of Florida. Consistent with the FY2020 Cooperative Funding Initiative Application, Phase 1 is funded and underway to fully evaluate nutrient and bacterial loading at the major outfalls. Early Prioritization has been completed and Outfalls 1 & 2 have been identified as the construction project to be implemented in FY2021.

To address a critical location at Venice Beach (Outfall #1) and just south (Outfall #2), the city is proposing a design/build project to increase the capacity and effectiveness of the swale and underground chamber system installed in 2015. Increasing the capacity will further reduce the amount of untreated stormwater that is discharged to the Gulf thus effectively removing the pollutant loading from the runoff from the Gulf system. As Outfall #1 discharges immediately adjacent to the bathing beach (Venice Beach) which is the only location within the City of Venice with lifeguards, improving water quality and reducing the surface water runoff will also improve the health of the beach for the public use.

Outfall #1 - Venice Beach - Granada Ave & The Esplanade S - 36" PVC - Lat: 27.098703/Long: -82.460404

Outfall #2 - Venice Sands-Alhambra Rd - Double 46" PVC - Lat: 27.095574/Long: -82.459311

Benefit:

Water quality improvements measured based on pre- and post- construction discharge flow rates and sampling results for both nutrient loading and bacteria levels. These benefits will be measurable based on calculated reduced outfall flow volume and water quality sampling results.

Cost:

Previous Phase (Underway)Phase 1 - Funded in FY2020 - Grant Agreement being executed for start of Fall 2019City 75,000/
SWFWMD Grant Funded \$75,000 - Total \$150,000

Phase 2 - This ApplicationPhase 2 - Outfall 1 & 2 - Design/BuildCity 175,000/SWFWMD Grant Funding \$175,000 -Total \$350,000

Engineering oversight will be conducted in-house to monitor the Design/Build Team. No land acquisition will be required as work will be within the existing city owned property and right-of-way. Basis of cost estimate is an evaluation of the previous project constructed at a cost of \$564,000 plus design and sampling costs. Based on the location and anticipated scope of work, the City Engineer developed a cost estimate of \$350,000 for Phase 2 with 50/50 cost share between cooperative funding and City Stormwater Enterprise Fund 480 allocation included in the FY 2020 proposed budget including future FY2021 funding that is scheduled for adoption on September 24, 2019, by the Venice City Council.

\ 200- 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).

Describe your complementary efforts in developing, implementing and enforcing water conservation, water quality and flood protection ordinances.

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 Source	Prior Funding	FY2020 Budget	FY2021 Budget	Future Funding	Total Funding
Applicant Share		75,000	175,000		250,000
Manasota		75,000	175,000		250,000
Total		150,000	350,000		500,000

Matching Fund Reduction

☐ Check here if requesting a reduction in matching funds requirement pursuant to s.288.06561, F.S.

Timelines

Construction Initiated	06/01/2021
RFQ for Design/Build Team	10/01/2021
Design/Permitting Complete	12/01/2021
Construction Complete	04/01/2022
Project Close-out & Final Reporting	06/30/2022

Data Collection Assessment:

☒ Surface Water Flow (Discharge) measurements ☒ Groundwater or Surface Water Quality measurements

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

FY2021 Cooperative Funding Initiative Application Form

Project Name ASR-City of Venice Reclaimed Water ASR - Phase 3

Project Number

Cooperator City of Venice

Department Utilities

Contact Person Javier Vargas

Address 200 North Warfield Ave.

City State Zip Venice, FL 34285

Phone # 941-882-7310

Email jvargas@venicegov.com

Project Type:

☒ Water Supply ☐ Water Quality ☐ Flood Protection ☐ Natural Systems

Strategic Initiatives:

☐ Water Quality Maintenance and Improvement ☐ Water Quality Monitoring
☐ Alternative Water Supply ☐ Conservation
☒ Reclaimed Water ☐ Regional Water Supply Planning
☐ Emergency Flood Response ☐ Floodplain Management
☐ Minimum Flows and Level Establishment and Monitoring ☐ Minimum Flows and Levels Recovery
☐ Natural Systems Conservation and Restoration ☐ Natural Systems Identification and Monitoring

Indicate All Counties to Benefit From Project:

☐ Charlotte ☐ Citrus ☐ Desoto ☐ Hardee ☐ Hernando ☐ Highlands ☐ Hillsborough ☐ Lake
☐ Levy ☐ Manatee ☐ Marion ☐ Pasco ☐ Pinellas ☒ Sarasota ☐ Sumter ☐ Polk

Project Description/Benefit/Cost

Description:

The City of Venice (COV) Eastside Water Reclamation Facility (EWRF) has a permitted capacity of 8 MGD. The demand for reclaimed water (RCW) is projected to be 4.8 MGD by 2020 based on the amount of RCW available (i.e., demand is expected to meet or exceed the amount available). The use of this RCW offsets the need for pumping shallow coastal wells to meet irrigation needs or the use of potable water for this purpose. However, during periods of peak irrigation demands, spring and early summer, the demand for RCW is greater than Plant flow and must be met from storage. Current storage is limited to 65 million gallons. Conversely, during low irrigation demand periods the COV must dispose of excess RCW through alternative methods. In order to maximize the availability of RCW for current peak demand periods an estimated additional 31 million gallons of storage is needed. One alternative is to construct storage facilities on the land surface at an estimated cost of \$40 million. The other alternative is the addition of an aquifer storage and recovery well which could provide well in excess of the 31 million gallons currently needed, thus allowing the COV system to meet irrigation demands well into the future. The estimated cost of this alternative would be \$4.4 million. The COV RCW system includes bulk users (golf courses, parks, development common areas) as well as individual commercial and residual properties. The ASR Well will be located on the EWRF site.

Benefit:

This project will maximize the use of RCW for irrigation purposes thus reducing the amount of withdraws from shallow wells or using potable water for irrigation. Reduced shallow well withdraws reduces salt-water intrusion in the upper aquifer. Reduced use of potable water for irrigation reduces the demand on the potable water supply system.

Cost:

Project Cost :

Phase 3 - ASR Design and Bidding \$300,000 (150,000 COV, 150,000 District)

Overall Phases: 1) Feasibility Study (ongoing COV funded) \$175,000, 2) Preliminary Design, Permitting, 3rd Party Review (CFI Funded 2020) \$165,000 3) ASR Design and Bidding: (Phase 3) \$300,000, 4) ASR Construction: \$4,400,000, 5) Cycle Testing: \$100,000, 6) Operational Permit: \$100,000

Describe your complementary efforts in developing, implementing and enforcing water conservation, water quality and flood protection ordinances.

The City of Venice is actively working to develop additional RCW customers, extending RCW distribution and transmission lines, enforcing shallow irrigation well prohibitions where RCW distribution is available, and enforcing existing RCW use requirements for new development. The COV has self-funded the initial feasibility study of the project that is currently ongoing.

Funding Source	Prior Funding	FY2020 Budget	FY2021 Budget	Future Funding	Total Funding
Applicant Share	175,000	82,500	150,000	2,300,000	2,707,500
Manasota		82,500	150,000	2,300,000	2,532,500
Total	175,000	165,000	300,000	4,600,000	5,240,000

Matching Fund Reduction

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Timelines

Feasibility Study (On-going) COV	01/31/2020
Preliminary Design and permitting (COV/CFI)	09/30/2020
ASR Design and Bidding	10/01/2021
Construction	09/30/2022
Cycle testing	09/30/2023
Project Complete	09/30/2024
Operational Permit	09/30/2024
Project Closeout and final reporting	12/31/2024

Data Collection Assessment:

- ☒ Groundwater or Surface Water Level measurements ☒ Monitor Well Installation
- ☒ Lithologic/Geophysical data ☒ Aquifer Testing

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

FY2021 Cooperative Funding Initiative Application Form

Project Name Conservation – City of Venice Toilet Rebate and Retrofit Project – Phase 8
Project Number
Cooperator City of Venice
Department Utilities
Contact Person Javier Vargas
Address 200 North Warfield Ave.
City State Zip Venice, FL 34285
Phone # 941-882-7310
Email jvargas@venicegov.com

Project Type:

☒ Water Supply ☐ Water Quality ☐ Flood Protection ☐ Natural Systems

Strategic Initiatives:

☐ Water Quality Maintenance and Improvement ☐ Water Quality Monitoring
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☐ Reclaimed Water ☐ Regional Water Supply Planning
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☐ Levy ☐ Manatee ☐ Marion ☐ Pasco ☐ Pinellas ☒ Sarasota ☐ Sumter ☐ Polk

Project Description/Benefit/Cost

Description:

The City of Venice Toilet Rebate and Retrofit Program consists of offering financial incentives to potable water customers for replacing conventional toilets and urinals with water-conserving equivalents, providing rebates for certain water saving improvements, providing do-it-yourself kits, and an educational component. The City will provide a \$100 credit to the customer's water bill upon WaterSense toilet or urinal installation and inspection. In order to assure that the replaced conventional toilets or urinals will not be reinstalled at another location, the City will require permanent disposal of the conventional toilet or urinal as a condition of the rebate. It is estimated that 50 percent of the City's water customers are eligible for this component. The other component of the program consists of providing 400 water conservation do-it-yourself kits and educational materials at no charge to City potable water customers. These kits contain such items as a low-flow showerhead, bath and kitchen faucet aerators, toilet flapper valve, toilet tank leak detection dye tablets, and water conservation educational materials. The total project cost is \$58,900, and the City is requesting \$29,450 from the District in FY2020. The City of Venice will match the funding request with funds within the Utilities Department water production budget. The City's per capita water usage for 2011 was 59 gpd per person. The city plans to hire a consultant to administer the project. The consultant will perform the rebate qualifications, educational component, installation inspections, and customer surveys while the City will track actual pre and post water usage. Toilet installation rebates and conservation kit distribution will begin by January 1, 2021. It is anticipated that the project will be complete by December 31, 2021 with project close out and final reporting occurring no later than April 1, 2022.

Benefit:

The project will replace approximately 249 high-volume toilets or urinals and provide up to 400 water conservation DIY kits, producing a water savings of approximately 16,330 gpd. The project's estimated cost/ benefit ratio is \$1.44 per thousand gallons (20 years at 8% interest). This cost/benefit ratio is based on the project cost of \$58,900 over a 20 year life of toilets/urinals.

Cost:

- Estimated Cost: \$58,900
- 249 Toilet Rebates to include, Single, & Multi-family, and Commercial toilets @ \$100.00, with the total cost of \$24,900.00
- Program Administration, 249 @ \$50.00, with a total cost of \$12,450.00
- 400 DIY Kits at a total cost of \$8,400.00
- Educational Materials and Program Promotion at a total cost of \$13,150.00
- In no instance will the rebate exceed the actual cost of the related toilet(s) and installation(s)

Describe your complementary efforts in developing, implementing and enforcing water conservation, water quality and flood protection ordinances.

The City of Venice makes water conservation a priority. The Utilities Department has in place a comprehensive water distribution and supply system with a tiered water rate structure along with a robust reclaimed water distribution system. Periodic water

provides water conservation education and promotional materials, and in prior years provided plumbing retrofit kits. Under the Water Conservation Plan, utilities staff researches other water conservation practices for possible use. The stormwater division oversees flood protection ordinances. New subdivision regulations require all properties with a SWFWMD permit to recertify their system yearly. Public outreach, regular stormwater system inspections and a capital improvement program are just a few of the flood protection and water quality improvement initiatives performed.

The Utilities Department educates the public on water conservation and offers promotional materials

(i.e. toilet leak tablets, water charts, contests and water saver gadgets). Yearly, utilities sponsors a water conservation poster contest with the local schools. The city provides reclaimed water for commercial and residential properties in portions of the city. The watering restriction ordinance is regularly updated to be consistent with the restrictions implemented by SWFWMD and adopted by Sarasota County.

Funding Source	Prior Funding	FY2020 Budget	FY2021 Budget	Future Funding	Total Funding
Applicant Share	114,950	29,450	29,450	29,450	203,300
Manasota	144,400	29,450	29,450	29,450	232,750
Total	259,350	58,900	58,900	58,900	436,050

Matching Fund Reduction

☐ Check here if requesting a reduction in matching funds requirement pursuant to s.288.06561, F.S.

Timelines

Project Start	01/01/2021
Project Complete	12/31/2021
Project Closeout and Final Reporting	04/01/2022

Data Collection Assessment:

☒ Other data collection: Number of rebates and conservation kits