

Local Funding Initiative Request Fiscal Year 2019-2020

LFIR#: 2397

Title of Project: Belleair Reverse Osmosis Pilot Testing

Senate Sponsor: Jeff Brandes
 Date of Submission: 03/12/2019

4. Project/Program Description:

The Town's freshwater supply is quickly deteriorating due to increased chlorides (saltwater). Pilot testing is essential to understanding the true cost of a Reverse Osmosis treatment system and will result in better plant and injection well design by uncovering any potential challenges in treating the water before the full-scale plant is constructed. This study will identify critical design criteria and environmental impacts of the system in order to maintain a sustainable water supply. The Town of Belleair will install a pilot Reverse Osmosis system that would simulate final potable water quality, as well as simulating the reject water quality for deep well injection. The Reverse Osmosis test skid is the smallest unit that simulates full scale hydraulics and recovery, without the use of concentrate recycle. The results of this research will aid in the selection of membrane technology, chemical mixtures, as well as other Reverse Osmosis treatment investment options. See attachments.

5. State Agency to receive requested funds : Department of Environmental Protection State Agency Contacted? No

6. Amount of the Nonrecurring Request for Fiscal Year 2019-2020

Type of Funding	Amount
Operations	122,450
Fixed Capital Outlay	
Total State Funds Requested	122,450

7. Total Project Cost for Fiscal Year 2019-2020 (including matching funds available for this project)

Type of Funding	Amount	Percent	
Total State Funds Requested (from question #6)	122,450	100.00%	
Federal		0.00%	
State (excluding the amount of this request)		0.00%	
Local		0.00%	
Other		0.00%	
Total Project Costs for Fiscal Year 2019-2020	122,450	100.0%	

8. Has this project previously received state funding? No

Fiscal Year	Am	ount	Specific	
(yyyy-yy)	Recurring	NonRecurring	Appropriation #	Vetoed

9. Is future-year funding likely to be requested? No

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10. Details on how the requested state funds will be expended

Spending Category	Description	Amount
Administrative Costs:		
Executive Director/Project Head Salary and		
Benefits		
Other Salary and Benefits		
Expense/Equipment/Travel/Supplies/Other		
Consultants/Contracted Services/Study		
Operational Costs:		
Salary and Benefits		
Expense/Equipment/Travel/Supplies/Other	Reverse Osmosis Pilot Skid Rental, Cleaning System, Media	90,650
	Filtration, Pilot Consumables, Chemicals	
Consultants/Contracted Services/Study	RO Pilot Vendor setup, startup, training; Engineering support	31,800
	through study and Pilot Report. Report delivery. Public education,	
	outreach and communications.	
Fixed Capital Construction/Major Re	novation:	
Construction/Renovation/Land/Planning		
Engineering		
Total State Funds Requested (must e	qual total from question #6)	122,450

11. Program Performance:

a. What is the specific purpose or goal that will be achieved by the funds requested?

The Town of Belleair will install a pilot Reverse Osmosis system that would simulate what final water quality would be like after undergoing the full process, as well as simulating reject water quality. The Reverse Osmosis test skid is the smallest unit that stimulates full scale hydraulics and recovery, without the use of concentrate recycle. Please see the attachment for more details.

- b. What are the activities and services that will be provided to meet the intended purpose of these funds?
 - Utilizing these funds, Belleair will engage with a specific vendor for the leasing of a pilot Reverse Osmosis system. Professional engineers and town staff will examine membrane and chemical selection, as well as system outputs.
- c. What are the direct services to be provided to citizens by the appropriations project?
 - Higher quality of groundwater and drinking water due to an overall reduction of bacteriological and treatment byproducts.
- **d.** Who is the target population served by this project? How many individuals are expected to be served? Approximately 4,200 residents of the Town of Belleair and Belleair Bluffs.
- e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

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An actionable report with scalable data regarding finished water qualities, chemicals, and membrane composition required for a full-scale Reverse Osmosis system. This project will ultimately help improve the groundwater quality by cycling well utilization. This will be measured by a comparative before and after measure of Total Dissolved Solids (TDS). Benchmarking and regression analysis will be utilized to projects finished water qualities. This project will also improve drinking water quality by reducing bacteriological/treatment byproducts which will also be measured by a comparative before and after measure of TDS, bacteriological, and treatment byproducts with a 3rd party lab.

- f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for in the contract?
 Refund of proceeds.
- 12. The owner(s) of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owner(s) of the facility and the entity.

N/A

13. Requestor Contact Information:

a. Name: JP Murphy

b. Organization: Town of Belleair

c. E-mail Address: jmurphy@townofbelleair.net

d. Phone Number: (727)647-7483

14. Recipient Contact Information:

a. Organization: Town of Belleair

b. County: Pinellasc. Organization Type:

O For Profit

O Non Profit 501(c) (3)

O Non Profit 501(c) (4)

Local Entity

O University or College

O Other (Please specify)

d. Contact Name: JP Murphy

e. E-mail Address: jmurphy@townofbelleair.net

f. Phone Number: (727)647-7483

15. Lobbyist Contact Information

a. Name: H. Lee Moffitt

b. Firm Name: H. Lee Moffitt P. A.



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c. E-mail Address: MrSpeaker@aol.com d. Phone Number: (813)760-5712

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<u>Please complete the questions below for Water Projects only</u>		
16.	Have you applied for alternative state funding?	
	□Wastewater Revolving Loan	
	□Drinking Water Revolving Loan	
	☐Small Community Wastewater Treatment Grant	
	□Other (Please describe)	
	☑N/A	
17.	What is the population economic status?	
	☐Financially Disadvantaged Community (ch. 62-552, F.A.C)	
	☐Financially Disadvantaged Municipality (ch. 62-552, F.A.C)	
	☐Rural Area of Economic Concern	
	☐Rural Area of Opportunity (s. 288-0656, Florida Statutes)	
	☑N/A	
18.	What is the status of construction? Ready	
19.	What percentage of construction has been completed? 0%	

20. What is the estimated completion date of construction? 7/30/2019