STATE OF FLORIDA FUNDING CONSIDERATION
ALTERNATIVE WATER SUPPLY PROJECT APPLICATION

Applications are limited to 25 pages and all submittals must uploaded at https://www.sfwmd.gov/doing-business-with-us/coop-funding by **February 26, 2021 at 4:00 PM**. Please refer to the example applications located on the website for help in completing your application.

PROJECT SUMMARY

Project Name: Reverse Osmosis (RO) Water Treatment Plant Expansion – Phase 3a	
Applicant: City of Springfield Utilities	
Authorized Representative: Laura Jones	**Project Manager (if different):** Mike Smith
Address: 123 North Harbor Drive	**Address:** 123 North Harbor Drive
City/Zip: Springfield/33333	**City/Zip:** Springfield/33333
Telephone: 954-555-1234 ext. 1098	**Telephone:** 954-555-6543 ext. 2835
Email: ljones@springfield.com	**Email:** msmith@springfield.com
Federal ID Number: 59-6000000	
Project Latitude (decimal degrees): 26.493675	**Project Longitude (decimal degrees):** -80.329744
Phase Construction Cost ($): 4,000,000	**Total Capital Cost ($):** 6,000,000 N/A ☐
Requested State Funding ($): 1,000,000	**Applicant's Match Funding ($):** 3,000,000
Third-Party Match Funding ($): 0	**State Appropriation Funding ($):** 0
SFWMD Planning Region: Lower East Coast	**County:** Palm Beach
AWS Project Type (reclaimed, brackish, ASR, etc.): Brackish Water	
Multi-year Project? Yes ☒ No ☐	
Anticipated Construction Start Date: 10/1/2021	**Anticipated Completion Date:** 09/31/2022
Phase Capacity (mgd): 0.0	**Total Capacity (mgd)** (upon completion)**:** 4.0
Storage Capacity (mg): 0.0	**Distribution Capacity (mgd):** 0.0
Are other agencies contributing funding to this project? Yes ☐ No ☒ If yes, source(s): Enter text. If yes, amount(s): Enter text.	
Does any contractor or other affiliate of the Applicant have a financial interest in this project, the property associated with this project, or with any party that may profit financially from this project? Yes ☐ No ☒ If yes, list the parties and interests: Enter text.	
Is the project part of your institution's capital/facilities work program? Yes ☒ No ☐	
This is a State of Florida reimbursement program with the entire project scope expected to be completed within the funding period, regardless of amount awarded. There is no guarantee the Applicant will be awarded the amount requested. Are budgeted funds available to pay for the entire scope of the project? Yes ☒ No ☐	
Does the Applicant understand that if, for any reason, the project scope is not 100% completed as outlined in the statement of work, the funding amount may be reduced to match the original percentage of funding in the contract that was based on the estimated construction cost provided in the application? Yes ☒ No ☐	

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Does the Applicant understand that funds are only for applicable expenses incurred during the funding period?
Yes ☒ No ☐

Does the Applicant have a Water/Consumptive Use Permit? Yes ☒ No ☐ N/A ☐
If yes, provide permit number: 50-12345-W

If applicable, does the Applicant have an irrigation ordinance that is consistent with Ch. 40-E-24?
Yes ☐ No ☒ N/A ☐
If yes, provide ordinance number:

Is the Applicant a REDI Community? Yes ☐ No ☒ N/A ☐

Has this project received previous SFWMD or State funding? Yes ☒ No ☐
If yes, provide the following information:

Year Awarded	Contract Number	Amount Awarded	Awarded Amount Spent
2016	4600009876	$1,000,000	1,000,000
Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.

SHORT DESCRIPTION

In the box below, provide two to three sentences describing the project for which funding is being requested.

The City of Springfield's RO WTP expansion is a design-build project that will increase the overall capacity of the existing brackish water RO treatment system from 8.0 million gallons per day mgd (mgd) to 12.0 mgd while increasing overall RO WTP reliability. This funding request is for Phase 3a of the project to be constructed in FY2022 (completed in September 2022). Phase 3a includes the installation of two RO treatment trains with a feed pump, which will provide 4.0 mgd of capacity when the remainder of Phase 3 is complete in FY2023.

PROJECT FIGURES

Note: Each figure should fit on a sheet of 8.5" × 11" paper and include a North arrow.

Figure 1: Project Location. City or town map clearly showing the project location in relation to the nearest major street or road intersection.

Figure 2: Project Details. Project-level map showing sufficient detail depicting the proposed project (e.g., show a proposed pipeline between two intersections bounding the project; show a plant layout with the proposed project phase components highlighted, such as storage/chlorination tank, etc.).

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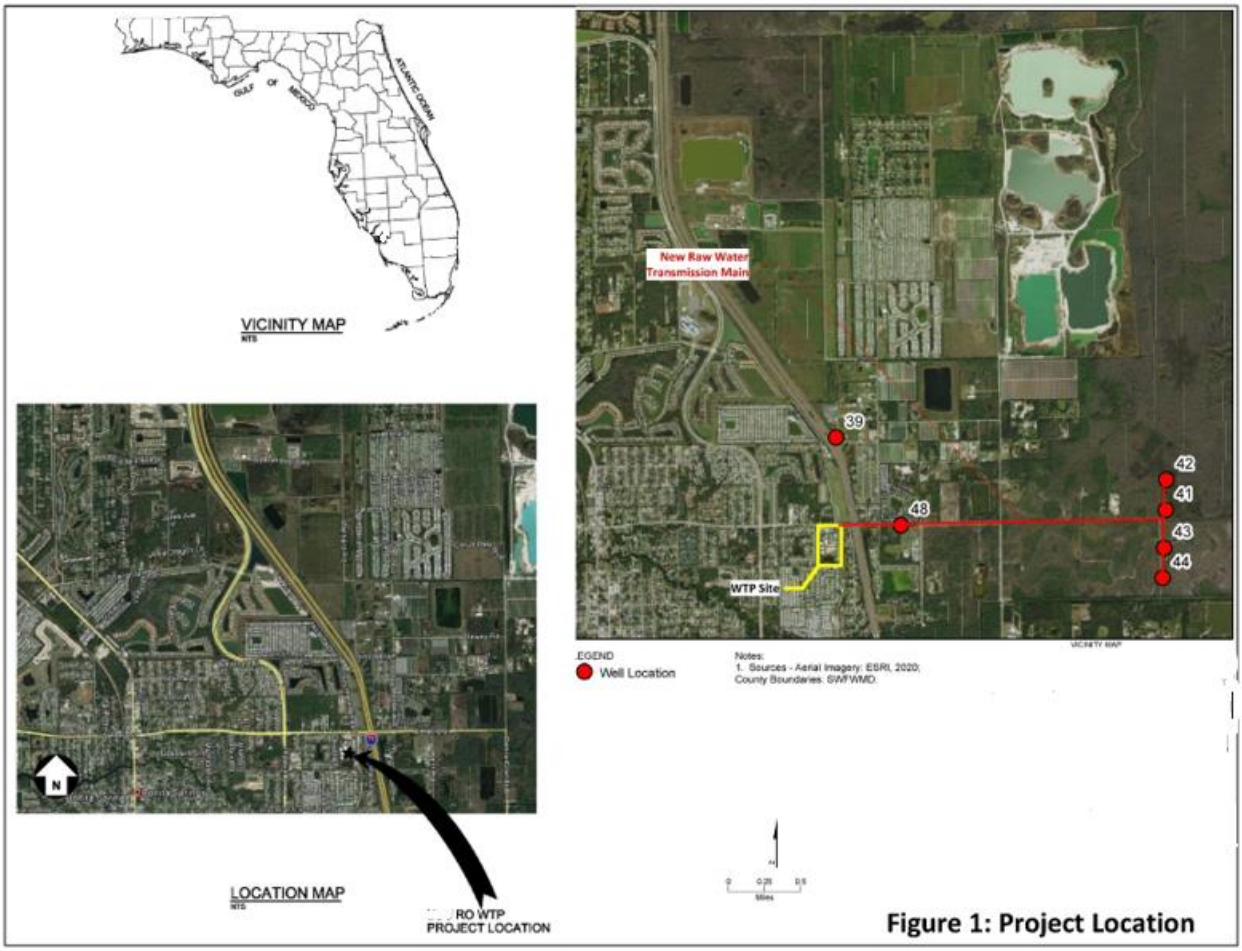

Figure 1: Project Location

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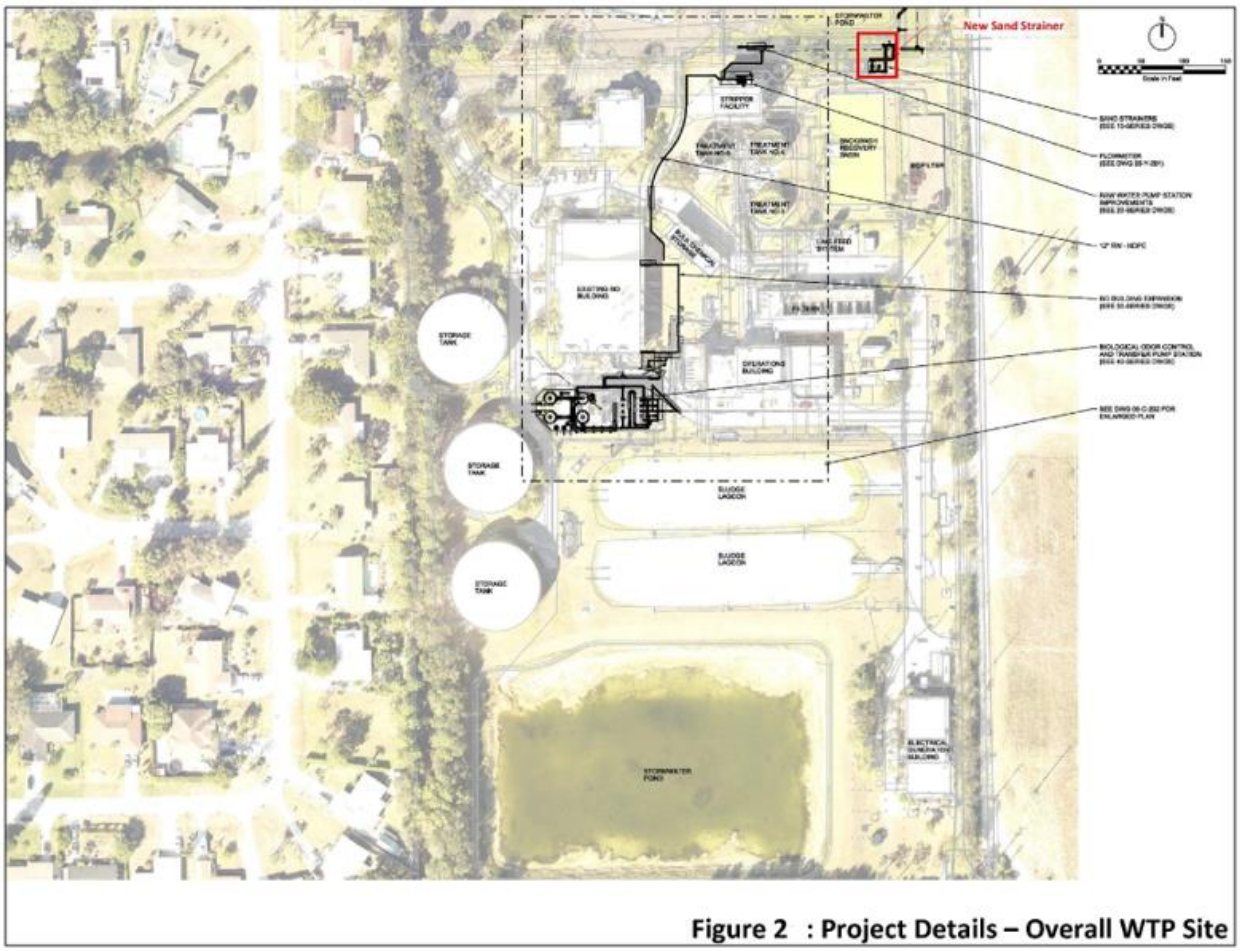

Figure 2 : Project Details – Overall WTP Site

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PROJECT DETAILS

Statement of Work

This section will be used to create the contract document if the project is selected for funding. Provide detail on your project as follows:

A. Introduction/Background (up to 6 paragraphs)

The City of Springfield currently operates a Reverse Osmosis (RO) water treatment facility with a rated capacity of 8.0 million gallons per day (mgd). The RO facility currently treats brackish Upper Floridan aquifer water using four RO trains that each produce 2 mgd of permeate, for a total of 8 mgd, with an additional 0.5 mgd of bypass/blending flow. The RO process removes salts from the brackish feed water that has gradually increased in salinity over 10 years of operation. The increasing salinity of the brackish source water has limited production capacity to 8.0 mgd.

The City's finished water-demand projections indicate the need for additional potable water production capacity. Phase 3 expansion will increase the RO WTP capacity to from 8 to 12 mgd by adding 4.0 mgd of RO capacity. Phase 3a is for the installation of two RO trains, each capable of producing 2 mgd of permeate, along with a feed pump. The remainder of Phase 3 (outside of this requested funding) will be completed in FY2023.

B. Objectives (1-2 paragraphs)

The primary project objectives are to increase the finished water production capacity by 4.0 mgd, improve source well and treatment reliability, and reduce overall facility operating cost. These objectives will be achieved by adding new treatment process components to improve facility reliability and redundancy and adding two new 2.0 mgd RO trains to increase brackish water treatment capacity that improves finished water quality and reduces operating cost. This allows an overall increase in RO WTP capacity by 4.0 mgd

C. Detailed Scope of Work (up to 6 paragraphs)

Phase 3a of this project increases RO WTP production capacity from an effective 8.0 mgd to 12.0 mgd by adding 4.0 mgd of RO treatment capacity. Other process components, which will be installed under future phases, are also being modified to support the expansion, as well as to increase overall facility reliability and redundancy.

The 4-mgd expansion to the existing 8-mgd of brackish water treatment includes two RO trains, including a feed pump with a variable frequency drives (VFD), energy recovery device, skid frame, piping, valves, instrumentation, controls, and electrical components. Pre- and post-treatment components will be installed under subsequent phases of the project.

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Table 1 – Project Breakdown

Fiscal Year	FY22	FY23	FY24	FY25	FY26 and Beyond	Project Total
Project Phase (e.g., Phase 1/3, etc.)	Phase 3a	Phase 3b	N/A	N/A	N/A	Not applicable
Major Deliverables (brief description)	Installation of two, 2.0 mgd RO treatment trains with feed pump	RO modifications including pre- and post-treatment components	N/A		-	Not applicable
Construction Cost ($)	$ 4,000,000	$ 2,000,000	$ 0	N/A	$ 0	$ 6,000,000
Planning/Design/Engineering/Other Costs ($)	$400,0000	$ 200,000	$ 0		$ 0	$ 600,000
Total Cost ($)	$ 4,400,000	$ 2,200,000	$ 0	$ 0	$ 0	$ 6,600,000
Capacity Water Made Available (mgd)[1]	0	4.0	0		0	4.0

[1]Include capacity water made available only in the year the project becomes operational.

Table 2 – Deliverables Schedule

Task No.	Deliverable(s) (List major tasks to be completed – add lines as needed)	Expected Completion Date	Construction Cost ($)
1	Install two, 2.0-mgd RO treatment trains	6/30/2022	$3,500,000
2	Install VFD feed pump for RO treatment trains	8/31/2022	$500,000
		Total[1]	$4,000,000

[1]Total deliverable costs should match the information in **Table 1** and the description in the Detailed Scope of Work above. Deliverables should be descriptive (e.g., number and size of pumps, length, diameter, and location of pipelines) to identify what work is being completed and funding requested.

PROJECT BACKGROUND AND SUPPORTING INFORMATION

Please clearly and briefly answer the following questions and provide supporting information.

Have the project design and bid drawings been completed? Yes ☐ No ☒
If yes, date: Enter text.
If no, anticipated date: Project design is 60 % complete. Final design will be completed by 6/30/2021

Has the contractor been selected? Yes ☒ No ☐
If no, when: The primary contractor is the design-builder that is currently designing the expansion.

Have all land purchases, agreements, rights-of-way, etc. been executed? Yes ☒ No ☐
If no, explain: Enter text.

Have all other necessary items to start construction been completed? Yes ☐ No ☒
If no, explain: Outstanding FDEP construction permit and County Building permit are scheduled to be completed by 8/31/2021 with an expected construction start date in October 2021.

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List all relevant permits required to start or continue construction in **Table 3**.

Table 3 – Permits

Agency	Permit No.	Permit Type (Water/WW, ERP, CUP, Building)	Permit Obtained?		Permit Date (expected date if not obtained yet)
			Yes	No	
FDEP	Not Available	FDEP Construction	Enter text.	Permit submission scheduled for April 2021	August 2021
Tibbs County	Not Available	Building	Enter text.	Existing permit is in the modification process	August 2021
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.

1. **If applicable, provide the name of the related project in the water supply plan (WSP) associated with the proposed work. Projects can be found in the relevant WSP. If the project is not included in a WSP, indicate if it is included in the Water Supply Facilities Work Plan and/or Capital Improvement Schedule in the applicable local government's Comprehensive Plan:**

RO WTP Expansion Project – Phase 3 (in 2018 LEC Water Supply Plan); Reverse Osmosis WTP Capacity Expansion (in 2019 City of Springfield Water Supply Facilities Work Plan, Project 193c-12)

Name of Water Supply Plan Project Title or Local Government Project Title

2. **Please address the following factors described in FDEP's Guidance Memorandum, dated July 22, 2019 and/or Section 373.707, F.S. (alternative water supply development):**

a. In addition to water supply benefits, does the project provide any water quality benefits? If so, please explain.
The project will improve the finished water quality of the RO WTP and, the increased efficiency of the reverse osmosis process will reduce the average flow and drawdown for individual brackish water wells, which is anticipated to reduce up-coning and long-term salinity increases.

b. In addition to water supply benefits, does the project provide complementary benefits such as water conservation, flood protection, or recreational benefits? If so, please explain.
N/A

c. Describe the quantity of water supplied by the project compared to its construction cost. Provide a calculation showing the average annual daily quantity of water supplied by the project (expressed in millions of gallons of water), divided by the annualized capital cost of the project. If the project will not be used continuously, please provide the annual amount of water that will be supplied by the project. Calculations can be attached as a separate document.
The project will ultimately increase RO WTP capacity by 4.0 mgd. The estimated project construction cost is $6.6M yielding an annualized capital cost of $1.90/kgal. Calculations attached – where are the calculations?.

d. Is the project going to be implemented by a multi-jurisdictional water supply entity or regional water supply authority? If yes, please provide name of entity.
No. The project is not implemented by a multi-jurisdictional water supply entity or regional water supply authority.

e. Does the project implement reuse that assists in the elimination of domestic wastewater ocean outfalls, as provided in Section 403.086(9), F.S.?

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No. The project does not implement reuse that assists in the elimination of ocean outfalls.