Applications are limited to 25 pages, and all submittals must be uploaded at <a href="https://www.sfwmd.gov/doing-business-with-us/coop-funding">https://www.sfwmd.gov/doing-business-with-us/coop-funding</a> by **February 26, 2024, at 5:00 PM**. Please refer to the example applications located on the website for help in completing your application. Applications must be submitted in Word format and not PDF.

#### **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 ex. 1098	<b>Telephone:</b> 954-555-1234 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	<b>Total Capital Cost (\$):</b> 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
CELLARD DI L. D. L. L. E. L.C. L.	
SFWMD Planning Region: Lower East Coast	County: Palm Beach
Municipal area (area[s] benefited): Springfield City	Constructed on state-owned land: Yes □ No ⊠
AWS Project Type (reclaimed, brackish, ASR, etc.): Brack	kish water
Multiyear Project? Yes ⊠ No □	
Anticipated Construction Start Date: 10/1/24	Anticipated Completion Date: 9/30/25
Phase Capacity (mgd) (within 1-2 years): 0.0	Total Capacity (mgd) (upon completion): 4.0
Storage Capacity (mg): Enter text.	Reclaimed only: Distribution Capacity (mgd): Enter
Storage capacity (mg). Enter text.	text.
	CONC
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	t have a financial interest in this project, the property
associated with this project, or with any party that may	
If yes, list the parties and interests: Enter text.	
Is the project part of your institution's capital/facilities	
	work program? Yes 🗵 No 🗆
	work program? Yes ⊠ No □
This is a State of Florida reimbursement program with the	work program? Yes ⊠ No □ he entire project scope expected to be completed within
the funding period, regardless of amount awarded. The	he entire project scope expected to be completed within nere is no guarantee the applicant will be awarded the
	he entire project scope expected to be completed within nere is no guarantee the applicant will be awarded the
the funding period, regardless of amount awarded. The amount requested. Are budgeted funds available to pa	he entire project scope expected to be completed within nere is no guarantee the applicant will be awarded the sy for the entire scope of the project? Yes 🗵 No 🗆
the funding period, regardless of amount awarded. The amount requested. Are budgeted funds available to particular to the applicant understand that if, for any reason,	he entire project scope expected to be completed within here is no guarantee the applicant will be awarded the hy for the entire scope of the project? Yes $\boxtimes$ No $\square$ the project scope is not 100% completed as outlined in
the funding period, regardless of amount awarded. The amount requested. Are budgeted funds available to particular to the applicant understand that if, for any reason, the statement of work, the funding amount may be red	he entire project scope expected to be completed within here is no guarantee the applicant will be awarded the by for the entire scope of the project? Yes 🗵 No 🗆 the project scope is not 100% completed as outlined in duced to match the original percentage of funding in the
the funding period, regardless of amount awarded. The amount requested. Are budgeted funds available to particular to the applicant understand that if, for any reason,	he entire project scope expected to be completed within here is no guarantee the applicant will be awarded the by for the entire scope of the project? Yes 🗵 No 🗆 the project scope is not 100% completed as outlined in duced to match the original percentage of funding in the

Does the applicant under Yes $\boxtimes$ No $\square$	rstand that funds are only fo	r applicable expenses incurre	ed during the funding period?		
Does the applicant have	a Water/Consumptive Use P	<b>Permit?</b> Yes $oxtimes$ No $oxtimes$ N/A $oxtimes$			
If yes, provide permit nu	mber: 50-12345-W				
Administrative Code (F.	es the applicant have an irri <sub>l</sub> A.C.) (Mandatory Year-Round		with Chapter 40E-24 Florida vation Measures)?		
Yes ⊠ No □ N/A □		. 1 5 10 02			
	number: Ch. 15 Article III, Div		omport with Chapter 40E-24		
	rill be deemed ineligible for f		omport with Chapter 40E-24		
Yes ⊠ No □ N/A □	in be deemed mengible for it	anding consideration:			
TC3 🖾 NO 🗀 N/A 🗀					
Local governments: Do	es the applicant have an ag	proved Water Supply Facili	ties Work Plan pursuant to		
Section 163.3177(6)(c), I					
Yes ⊠ No □ N/A □					
If yes, provide date appr	oved and ordinance number:	City Ordinance Ch. 11, Article	2, Sec. 10-7(c). Adopted May		
19, 2021			·		
		oposed Water Supply Facilities	es Work Plan to be approved		
before February 26, 202	4?				
Yes □ No □					
	date and ordinance number:				
			an above does not meet		
Yes $\boxtimes$ No $\square$ N/A $\square$	F.S., the application will be de	eemed ineligible for funding	consideration?		
res 🖾 NO 🗆 N/A 🗆					
Is the applicant in a REDI Community? Yes $\square$ No $\boxtimes$ N/A $\square$					
is the applicant in a Nebi Community: Tes - No - NyA -					
Has this project received previous SFWMD or state funding? Yes $oxtimes$ No $oxtimes$					
If yes, provide the follow		and and a second			
Year Awarded	Contract Number	Amount Awarded	Award 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**

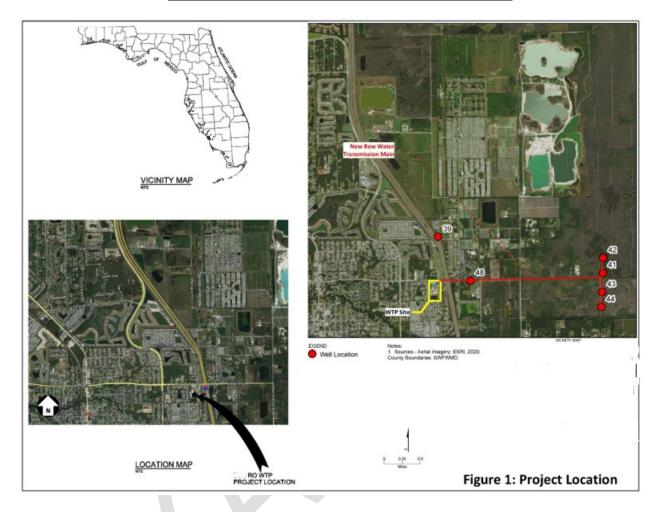
In the box below, provide two to three sentences describing the project for which funding is being requested (what will be constructed within the funding period).

The City of Springfield's (City) Reverse Osmosis Water Treatment Plant (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) to 12.0 mgd while increasing overall RO WTP reliability. This funding request is for Phase 3a to be constructed by September 2025. 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 the project (Phase 3b) is complete in FY2026.

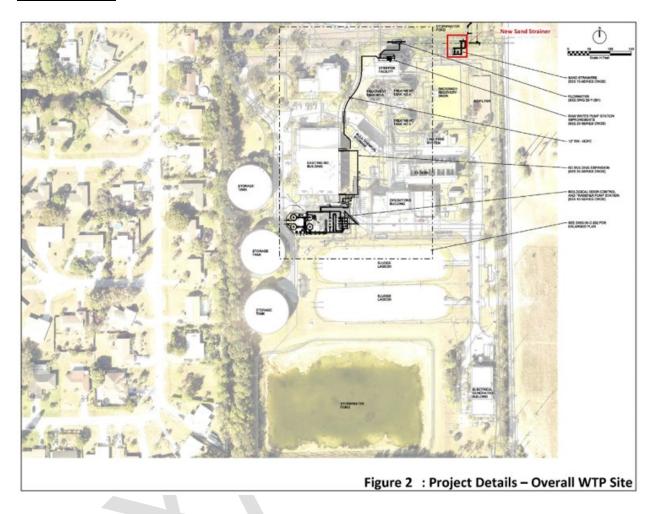
#### **PROJECT FIGURES**

**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. <u>Insert this map into the Word document as a JPEG, PNG, or GIF.</u>



**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 a storage/chlorination tank). <u>Insert this map into the Word document as a JPEG, PNG, or GIF.</u>



#### **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 currently operates a RO WTP with a rated capacity of 8.0 million gallons per day (mgd). The RO WTP currently treats brackish Upper Floridan aquifer water using four RO trains that each produce 2.0 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 8.0 to 12.0 mgd by adding 4.0 mgd of RO capacity. Phase 3a is for the installation of two RO trains, each capable of producing 2.0 mgd of permeate, along with a feed pump. The remainder of Phase 3 (outside of this requested funding) will be completed in FY2026.

#### B. Objectives (1-2 sentences)

The primary 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 – what work will be constructed during the funding period)

Phase 3a 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 4.0 mgd expansion to the existing 8.0 mgd brackish water treatment includes two RO trains, including a feed pump with a variable frequency drive (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.

Table 1. - Project Breakdown

	FY25	FY26	FY27	FY28	FY29 and Beyond	Project Total	
Project Phase (e.g., Phase	Phase 3a	Phase 3b	Enter	Enter	Enter	Not	
1/3, etc.)	Filase Sa	Filase 30	text.	text.	text.	applicable	
Major Deliverables (brief description)	Install two 2.0 mgd RO treatment trains with feed pump	RO modifications including pre-and post-treatment components	Enter text.	Enter text.	Enter text.	Not applicable	
Construction Cost (\$)	\$ 4,000,000	\$ 2,000,000	\$ Enter text.	\$ Enter text.	\$ Enter text.	\$ 6,000,000	
Planning/Design/	ć 400 000	¢ 200 000	\$ Enter	\$ Enter	\$ Enter	¢ 600 000	
Engineering/Other Costs (\$)	\$ 400,000	\$ 200,000	text.	text.	text.	\$ 600,000	
Total Cost (\$)	¢ 4 400 000	¢ 2 200 000	\$ Enter	\$ Enter	\$ Enter	¢ 6 600 000	
Total Cost (3)	\$ 4,400,000	\$ 2,200,000	text.	text.	text.	\$ 6,600,000	
Capacity Water Made	0	4.0	Enter	Enter	Enter	4.0	
Available (mgd) <sup>1</sup>	U	4.0	text.	text.	text.	4.0	

<sup>1</sup> Include capacity water made available only in the year the phase or project becomes operational.

Table 2. - Deliverables Schedule

Task No. <sup>1</sup>	Deliverable(s) (List major tasks to be completed. Add lines as needed.)	Expected Start Date	Expected Completion Date	Construction Cost (\$)
1	Install two 2.0 mgd RO treatment trains	10/1/24	6/30/25	\$3,500,000
2	Install VFD feed pump for RO treatment	10/1/24	8/31/25	\$5,00,000
2	trains			
			Total <sup>2</sup>	\$4,000,000

Applicant will be required to submit final vendor bid and/or contract documents and quarterly status reports, if awarded funding.

#### 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 $\square$ No $\boxtimes$
If yes, date: Enter text.
If no, anticipated date: Project design is 60% complete. Final design will be completed by 6/30/24.
Has the contractor been selected? Yes $\boxtimes$ No $\square$ If no, when: Enter text.
Have all land purchases, agreements, rights-of-way, etc. been executed? Yes $oxtimes$ No $oxtimes$
If no, explain: Enter text.

#### Have all other necessary items to start construction been completed? Yes $\square$ No $\boxtimes$

If no, explain: Outstanding FDEP construction permit and county building permit are scheduled to be completed by 8/31/24 with anticipated construction starting October 2024.

In **Table 3**, list all relevant permits required to start or continue construction.

Table 3. – Permits

		Permit Type	Permit O	btained?	Permit Date (expected	
Agency	Permit No.	(Water/Wastewater, ERP, CUP, Building)	Yes	No	date if not obtained yet)	
FDEP	TBD	FDEP Construction	Enter text.	Submit 4/2024	8/2024	
Palm Beach County	TBD	Building	Enter text.	Permit modification in process	8/2024	
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	

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.

If applicable, provide the name of the related project as it appears in the water supply plan (WSP) associated
with the proposed work. Projects can be found in the relevant WSP at <a href="https://www.sfwmd.gov/our-work/water-supply">https://www.sfwmd.gov/our-work/water-supply</a>. 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 of the applicable local government's
Comprehensive Plan:

RO WTP Expansion Project – Phase 3 (2018 LEC WSP); Reverse Osmosis WTP Capacity Expansion (2024 City of Springfield Water Supply Facilities Work Plan, Project 193c-12

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

- Please address the following factors described in the Florida Department of Environmental Protection (FDEP)
   Guidance Memorandum, dated July 22, 2019, and/or Section 373.707, F.S. (alternative water supply
   development):
  - **a1.** In addition to water supply benefits, does the project provide any water quality benefits? The project will improve the finished water quality of the RO WTP, and the increased efficiency of the RO process will reduce the average flow and drawdown for individual brackish water wells, which is anticipated to reduce upconing and long-term salinity increases.
  - a2. Are you able to quantify the total phosphorus or total nitrogen reductions in pounds per year (lb/yr) or removal efficiencies? Provide your calculations.

No.

b. In addition to water supply benefits, does the project provide complementary benefits such as water conservation, flood protection, resiliency, drought conditions, saltwater intrusion, sea level rise, green infrastructure, and/or recreational benefits? If so, please explain.

N/A

c. Describe the quantity of water supplied by the project compared to its construction cost. Using the SFWMD AWS CFP Cost-Effectiveness Calculator, calculate the annualized capital cost of the current project phase(s) in \$/kgal. In the space below, show the average annual daily quantity of water supplied by the project (expressed in millions of gallons of water), the estimated construction cost of the project (see the guidelines document to know which costs are and are not eligible), and the annualized capital cost of this project phase. If the project will not be used continuously, please provide the annual amount of water that will be supplied by the project. The SFWMD AWS CFP Cost-Effectiveness Calculator containing your inputs must be submitted along with this application.

Quantity of water supplied by all phases of the project	4.0 mgd	
Quantity of water supplied by this phase of the project	0.0 mgd	
Estimated construction cost	\$4,000,000	
Annualized capital cost of this phase* \$0.45/1,000 ga		
*(must come from District Cost-Effectiveness Calculator)		

d. Is the project going to be implemented by a multijurisdictional water supply entity or regional water supply authority? If yes, please provide the name of the entity.

N/A

e. Does the utility have a goal-based water conservation program? In not, briefly describe your conservation program.

Yes

f. Does the project implement reuse which assists in the elimination of domestic wastewater ocean outfalls, as provided in Section 403.086(10), F.S.? If yes, answer the follow-up questions below.

N/A

- Pursuant to subsection 373.707(9)(a-d), F.S., is reclaimed water metered for all users?
   Enter text.
- 2. Does the utility have a rate structure based on *actual use* of reclaimed water? If no, what is the basis for charged rates?

Enter text.

3. Does the utility have education programs in place to inform the public about water issues, water conservation, and the importance and proper use of reclaimed water? If yes, provide a link.

Enter text.

4. In the table below, list the reclaimed water users who will connect to the proposed reclaimed water project.

Name	User Demand (mgd)	Is an agreement executed (Y/N)?	Estimated connection date
		¥	

- 5. The following should be provided in electronic format, such as shape files or AutoCAD® to rowanves@sfwmd.gov. Files should be editable.
  - a. Existing and future wastewater service area boundary.
  - b. Existing and proposed reclaimed water distribution lines and distribution areas.
  - c. Existing and proposed reclaimed water end users.
  - d. Existence and extent of any Mandatory Reuse Zones within the service area. Include ordinance number.

This section includes additional information requested by the FDEP:

Is this project a continuation of an existing agreement with the FDEP or SFWMD? Yes $\square$ No $\boxtimes$ If yes, the FDEP or SFWMD Agreement Number: Enter text.
Project delivery method:
Design-Bid-Build ☐ Design-Build ⊠
Construction Management At-Risk $\square$ Progressive Design-Build $\square$ Other $\square$
Is the project geographically located within an FDEP-approved Restoration Plan (i.e., Basin Management Action Plan or Reasonable Assurance Plan) area?
The following link can be used as an interactive map to identify the BMAP status for the project: <a href="https://floridadep.gov/dear/water-quality-restoration/content/impaired-waters-tmdls-and-basin-management-">https://floridadep.gov/dear/water-quality-restoration/content/impaired-waters-tmdls-and-basin-management-</a>
action-plans
Yes □ No ⊠
If yes, what is the name of the Restoration Plan: Enter text.
If the project is geographically located within a Restoration Plan area, will the project be identified with a project number on the Statewide Annual Report? The following link is for the Statewide Annual Report: https://floridadep.gov/dear/water-quality-restoration/content/statewide-annual-report
nttps://nondadep.gov/dear/water-quality-restoration/content/statewide-annual-report
Yes □ No ⊠ N/A □
If yes:
Project Number: Enter text.
Unique ID: Enter text.
Project Background Questions:
<b>What is the water-related issue?</b> The City's finished water demand projections indicate the need for additional potable water production capacity.
Why is the water-related issue a problem? Without this project, the City will be unable to meet future potable water demands.
How will this project provide a solution to the problem? This project will increase RO WTP production capacity from an effective 8.0 mgd to 12.0 mgd by adding 4.0 mgd of RO treatment capacity.
What water-related benefits will result from the completion of this project? Water-related benefits of this
project include increasing the RO WTP's finished water production capacity by 4.0 mgd and improving source well
and treatment reliability.
Will this project result in a fully completed (operational) project? Yes □ No ⊠
1
Will a Florida Licensed Professional Engineer be able to certify work completed? Yes $\boxtimes$ No $\square$ N/A $\square$
Will a Florida Licensed Professional Geologist be able to certify work completed? Yes □ No □ N/A ⊠