

Town of Eatonville

Public Works Department

Water Supply System

Action Plan

including

Water Treatment Plant Building Replacement,
Water Main Replacement, Water Tower
Maintenance

8

Kennedy Blvd. Widening Project Schedule

1/30/2024

Prepared by:

Valerie W. Mundy, P.E. – Public Works Director

Purpose

The purpose of this report is to identify the status of the Water Supply System for the Town of Eatonville and to present the 10-Year Water Supply Facilities Work Plan (WSFWP) and its relationship with the Kennedy Blvd. Widening Project. The WSFWP, as prepared by CPH, is detailed in a separate document.

It is required is for the Town Council to adopt this 10-yr WSFWP into the Town's Comprehensive Plan by reference through a resolution.

This report also documents the status of the Consent Order OGS Case No. 22-2847.

The existing CDBG MIT Grant and special SRF Funding for Hurricane Ian (DW SRF) has been sought to implement all water supply infrastructure improvements discussed in this report.

Summary of Improvements

Item	Description	Date	Cost	Funding	Comment
				Source	
O&M #1	Exercise Valves	1/2024	\$25,000	O&M	Complete
O&M #2	Maintenance of	2/2024	\$418,030	O&M	Under contract.
	200,000 Gallon Elevated		funded		
	Tank		over 5		
			years		
CIP #1	Design PVC water main	8/2024	TBD	DW SRF	Required before Phase
	along Kennedy Blvd.			or CDBG	1 Kennedy Blvd.
	from Lake Weston to			MIT grant	widening project
	Keller Rd. Figure 9-1				
CIP #2	Replace old A/C pipe	12/2024	TBD	DW SRF	Required before Phase
	with new 16" WM			or CDBG	2 Kennedy Blvd.
	Figure 9-1			MIT grant	widening project
CIP #3	Modify Consumptive	TBD	TBD		
	Use Permit (CUP) to				
	meet potable water				
	demands.				
CIP #4	Increase well pumping	TBD	TBD	DW SRF	
	rate capacity from 1000			or CDBG	
	gpm to 2300 gpm			MIT grant	
CIP #5	Design/Construct new	4/2025	\$3M	CDBG	
	WTP to			MIT grant	
	refurbish/replace				
	existing WTP				

CIP #6	Upsize pipes to improve fireflow reliability.	2025	TBD	DW SRF or CDBG	\$14.5 M submitted
				MIT grant	
CIP #7	Design/Construct/Test Lower Floridan Aquifer (LFA) to meet demands beyond 2025	2025	TBD	DW SRF	\$14.5 M submitted
CIP #8	Emergency interconnect with Maitland	2026	TBD	DW SRF	\$14.5 M submitted

ACTION: CLOSE OUT FDEP CONSENT ORDER OGS CASE NO. 22-2847

The Town has met all compliance requirements of the consent order case, including the P-2 Inkind project, accepted by FDEP on October 4, 2023. This in-kind project was accepted in lieu of the \$13,125 in civil penalties. Final documentation is in progress and will be submitted to FDEP on on 2/5/2024 for final closeout.

The project used for the P2 In-kind is the generator refurbishment and relocation project for the Vereen and Campusview lift stations, started in September 2023. All generators have been relocated and refurbished by vendor Detroit Diesel along with electrical and general contractors Scott Electrical Contractors and Stephenson Construction. All lift stations have back up emergency power to ensure the lift stations will operate in the event of a power shutdown.

ACTION: OPERATION AND MAINTENANCE PROJECTS

Operations and Maintenance Project #1 - Valve Exercise Program

A valve exercising program was performed on the Town's water distribution system during the month of December by Hydromax. By exercising valves, we were able to identify the valves that were inoperable and require replacement. Many of the valves at critical locations shown in the exhibit below in red, were found to be inoperable. These valves requiring replacement will be scheduled with future pipe replacement capital improvements.

East Valves



West Valves



According to the National Environmental Services Center, it is recommended that water systems exercise their valves at least once every two years, if not annually. However, some valves may need to be exercised more or less frequently depending on their location or unusual operating conditions.

Valve exercising is an industry-standard recommendation to help maintain the valves' useful life, safety, and operation. Regular valve exercising can help ensure that the valves will operate when they're needed for a repair on that section of line, to turn off the water to a broken line. Not being able to shut down a section of pipe only hinders the repairs.

Inoperable Valves (partial list)

ValveID	Inspector	InspectDate	Street Name	Operating ConditionID	Surface CoverID
WATERVALVE_SE_009	Nick	1/11/2024	College Ave S	Conditionid	Surface Coverib
WATERVALVE_SE_009	Oliver	12:46	College Ave 3	Inoperable	Asphalt
P1-HF12	Nick	1/11/2024	Lemon St	Порегавіс	Aspirart
F1-11F12	Oliver	14:12	Lemon 3t	Inoperable	Concrete
WATERVALVE_SE_074	Nick	1/12/2024	Lime St	Порегавіе	Concrete
WATERVALVE_3E_074	Oliver	19:42	Lillie St	Inoperable	Asphalt
WATERVALVE_SE_112	Nick	1/12/2024	Berthann Ln	Порегавле	Aspilait
VVAILIVALVL_SL_112	Oliver	18:37	Der triaini En	Inoperable	Asphalt
WATERVALVE_SE_104	Nick	1/12/2024	Ruffell St	Порегавле	7 ispirate
	Oliver	18:23	- Name in St	Inoperable	Concrete
WATERVALVE_SE_012	Nick	1/12/2024	S College Ave	Пороголого	
<u>-</u> <u>-</u>	Oliver	13:49		Inoperable	Concrete
P1-HF14	Nick	1/12/2024	Lime St		
	Oliver	19:42		Inoperable	Asphalt
P1-HF17	Nick	1/12/2024	Lime St		
	Oliver	16:02		Inoperable	Concrete
P1-HF18	Nick	1/12/2024	Lime St		
	Oliver	16:14		Inoperable	Concrete
WATERVALVE_SE_071	Nick	1/16/2024	People St		
	Oliver	13:20		Inoperable	Concrete
WATERVALVE_NE_081	Nick	1/16/2024	N E St		
	Oliver	19:16		Inoperable	Concrete
WATERVALVE_NE_035	Nick	1/16/2024	Clark St		
	Oliver	15:25		Inoperable	Concrete
WATERVALVE_SE_085	Nick	1/16/2024	S E St		
	Oliver	14:15		Inoperable	Concrete
WATERVALVE_NE_017	Nick	1/16/2024	Clark St		
	Oliver	15:12		Inoperable	Concrete
WATERVALVE_NE_078	Nick	1/16/2024	N E St		
	Oliver	14:37		Inoperable	Asphalt
WATERVALVE_SE_089	Nick	1/16/2024	People St		
	Oliver	13:50		Inoperable	Brick
P1-HF20	Nick	1/16/2024	Gabriel Ave		
	Oliver	16:16		Inoperable	Concrete
P1-HF25	Nick	1/16/2024	People St		
	Oliver	13:44		Inoperable	Concrete

Operations and Maintenance Project #2 – West Water Tower Maintenance

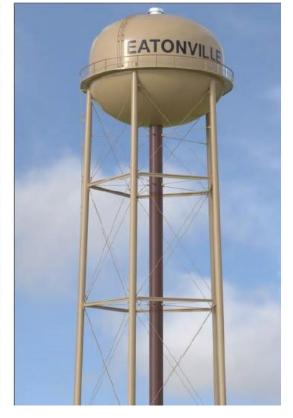


The contract for the West Water Tower maintenance was executed on February 15, 2022. The work engaged Utility Service, Inc. and the contract was later assigned to USG, Inc. This work was for the repair and maintenance of the 200,000 gallon elevated water storage tank.

Condition of Existing West Elevated Water Storage Tower

Proposed improvements to the existing West Elevated Water Storage Tower





West Elevated Water Storage Tower Schedule

- A. Preliminary coordination activities with vendors including Biometrics, Process Control, Inc., CPH Engineers and USG, Inc (Tank Contractors) (December 1 January 29, 2023)
 - 1. Ensure all systems at water plant are functioning
 - 2. Exercise valves
 - 3. Conduct fireflow demonstrations to meet fireflow demands and pressures
 - 4. Coordinate with Lake Weston Apartments maintenance personnel
 - 5. Update SCADA programming to ensure monitoring of water system is functioning
- B. Westside Storage Tank Refurbish & Repair (February 12- May 3, 2024)
 - a. Town issues Notice to Proceed (February 12-19, 2024)
 - b. Drain Water Tower
 - c. Interior Repairs, Blasting and Priming
 - d. Interior Stripe Coating
 - e. Interior Finish Coating
 - f. Exterior Blast & Priming
 - g. Exterior Stripe
 - h. Exterior Finish Coat
 - i. Exterior Logo
 - j. Disinfection & Closeout
 - k. Fill and Reconnect storage tank to system (May 3, 2024)

Note: During the maintenance process, the Tower will be covered in a curtain for protection of the environment. See photos below:





Capital Improvements Recommendations:

The 10-yr Water Supply Study shown in a separate document, summarizes major capital improvements necessary to develop, treat, and distribute water for the period of 10 years. The proposed capital improvements are based on the projected demands to supply source water and meet treatment, storage and pumping needs to 2040.

4.1 Major Capital Improvements in CIP Budget

The total probable project cost to implement the proposed projects is approximately \$30 Mil over the next 10 years.

Major improvements in the current CIP budget identified in this WSFWP to meet future demands include the following:

Capital Improvements Projects

CIP #1 - Figure 9-1

Design and replace pvc pipe on West Kennedy from Lake Weston Apartments to Keller Rd.

CIP #2 - Figure 9-1

Design and Replace A/C pipe along Kennedy Blvd from East Street to Deacon Jones. \$2.0 Mil

CIP #3 - Figure 9-2

Modify Consumptive Use Permit to meet future potable water demands

CIP #4 - Figure 9-2

Increase existing well pumping rated capacity by at least 1,300 gpm (from 1,000 gpm to 2,300 gpm).

- a. Conduct well pump yield step drawdown test. \$25,000 each = \$50,000
- b. Upsize well pump and motors. \$75,000 each = \$150,000

CIP #5 - Figure 9-2

Design/Construct New WTP to refurbish/Replace Existing WTP.

- a. Design/Construct new HSP Building (Includes new HSPs, chemical feed systems and diesel generator). \$4.6 Mil
- b. Design/Construct new 0.5-MG GST. \$1.0 Mil

Prototype: City of Orlando Downtown Lift Station #1. This building was designed to blend in with the residential environment.

The Town of Eatonville's new water treatment plant building will make the building habitable for operators and other personnel maintaining the plant.

Sample Photos:





CIP #6 - Figures 9-3/9-4

Upsize lines to provide fire flow reliability - Eatonville East

CIP #7 - Figure 9-3

Modify CUP limit to 0.420-mgd AADD relative to the CFWI 2025 UFA limitations.

- a. Permit LFA well to meet future demands. Includes Extended Period Simulation (EPS) hydrogeologic modeling impact evaluation. \$75,000
- b. Design/Construct/Test LFA well to meet demands beyond 2025. \$2.0 Mil

<u>CIP #8A/B – Figure 9-4</u>

Explore opportunity to provide an emergency interconnect with the City of Maitland

ACTION: State Revolving Fund Hurricane Ian – Request for Inclusion Grant Application

Application was made on December 31, 2023 for the Florida Department of Environmental Protection, Request for Inclusion in the Drinking Water Priority List. This was a special funding issue for municipalities impacted by Hurricane Ian. The amount requested is \$14.5 Million.

Additional technical assistance for this application was provided by SERCAP.

ACTION: Kennedy Blvd. Widening Project

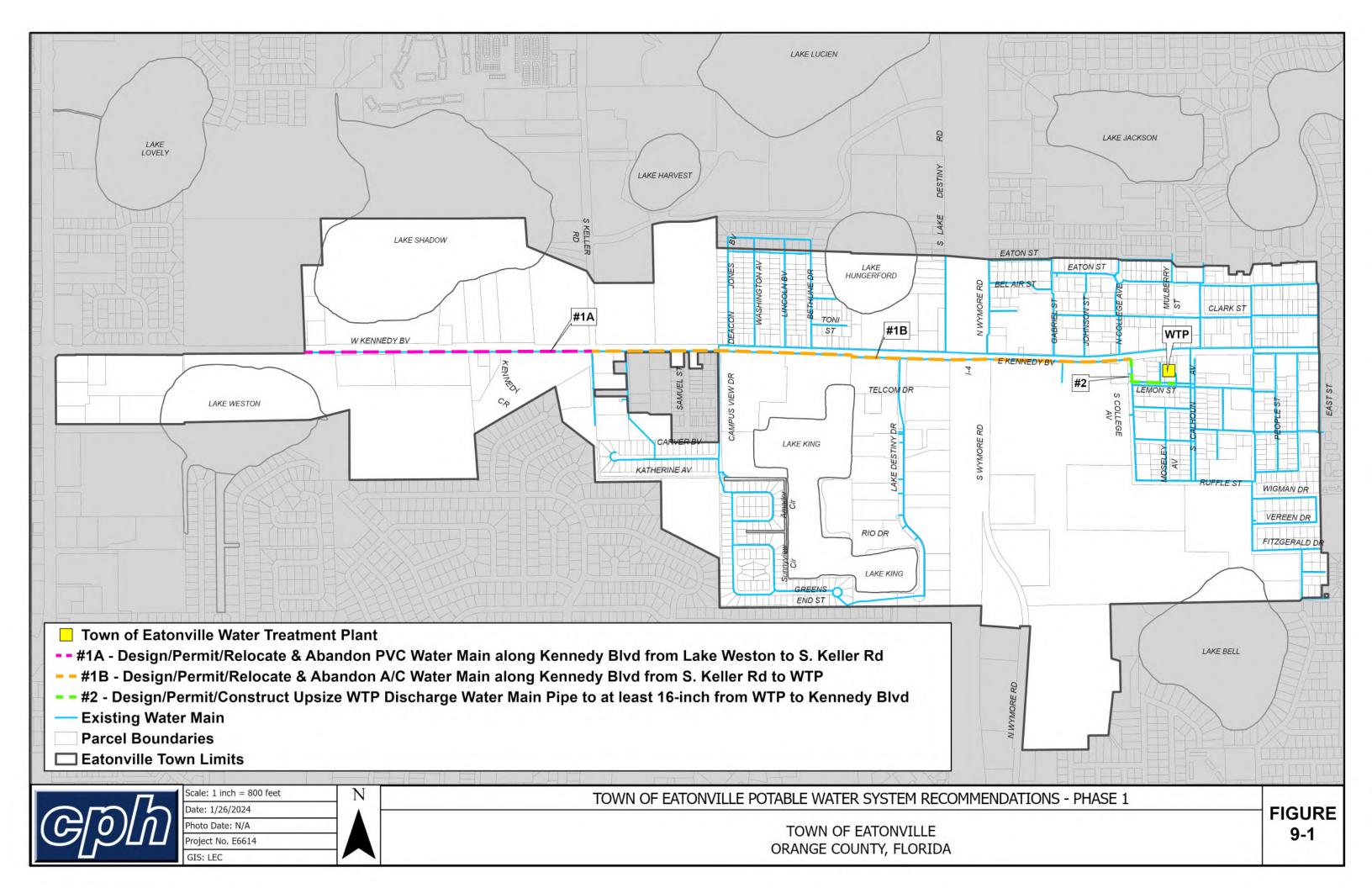
Through our communications with Orange County Public Works Department, we were notified that the design plans are complete, and construction is planned as follows:

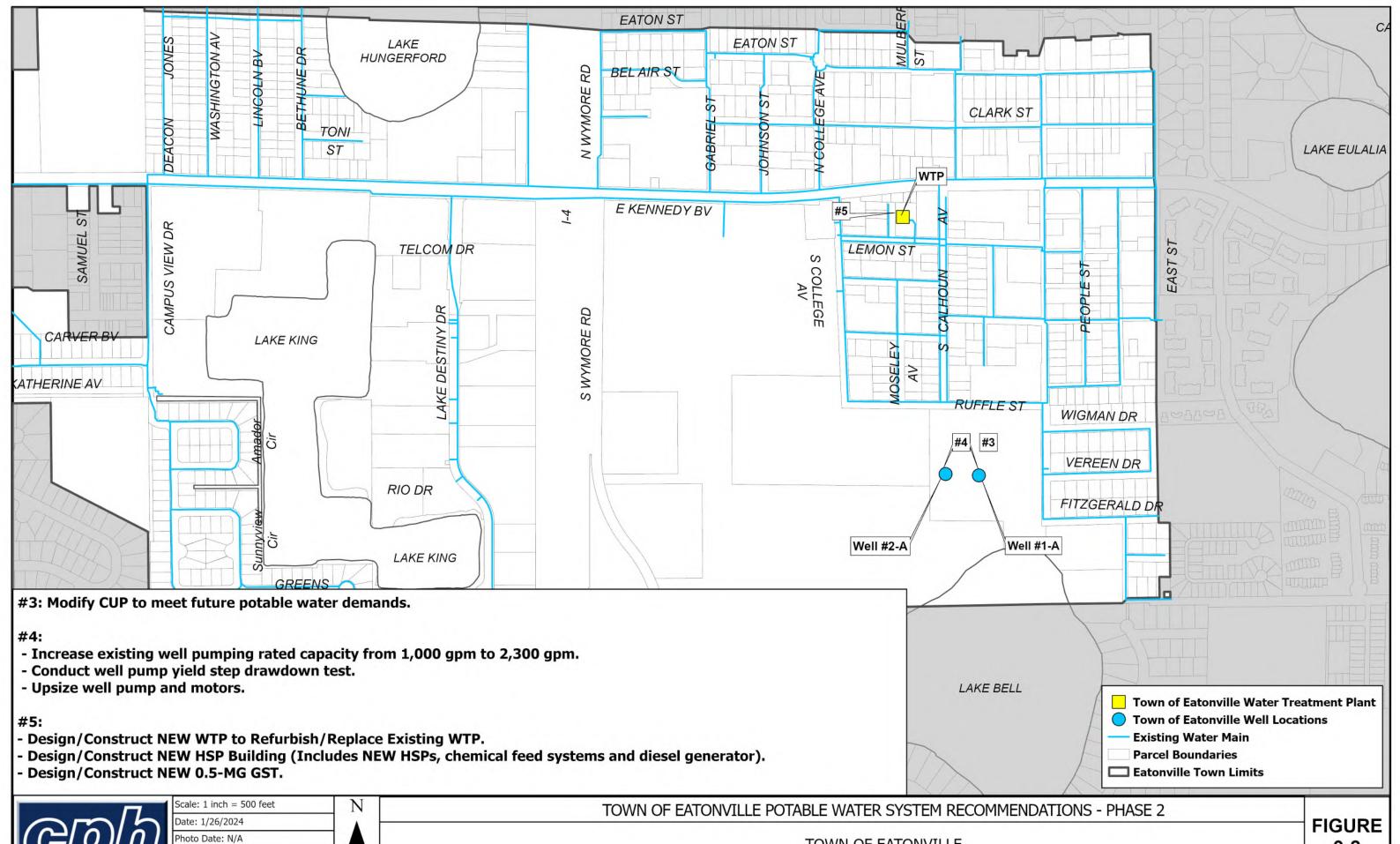
Kennedy Blvd. Widening Construction

Phase	Limits	Construction Start	Construction End
Phase 1	All American Blvd to west of Keller Blvd	October 2024	October 2026
Phase 2	West of Keller Rd. to Wymore	October 2026	October 2028

Note: Dates are estimated and are a function of acquisition and bidding activity.

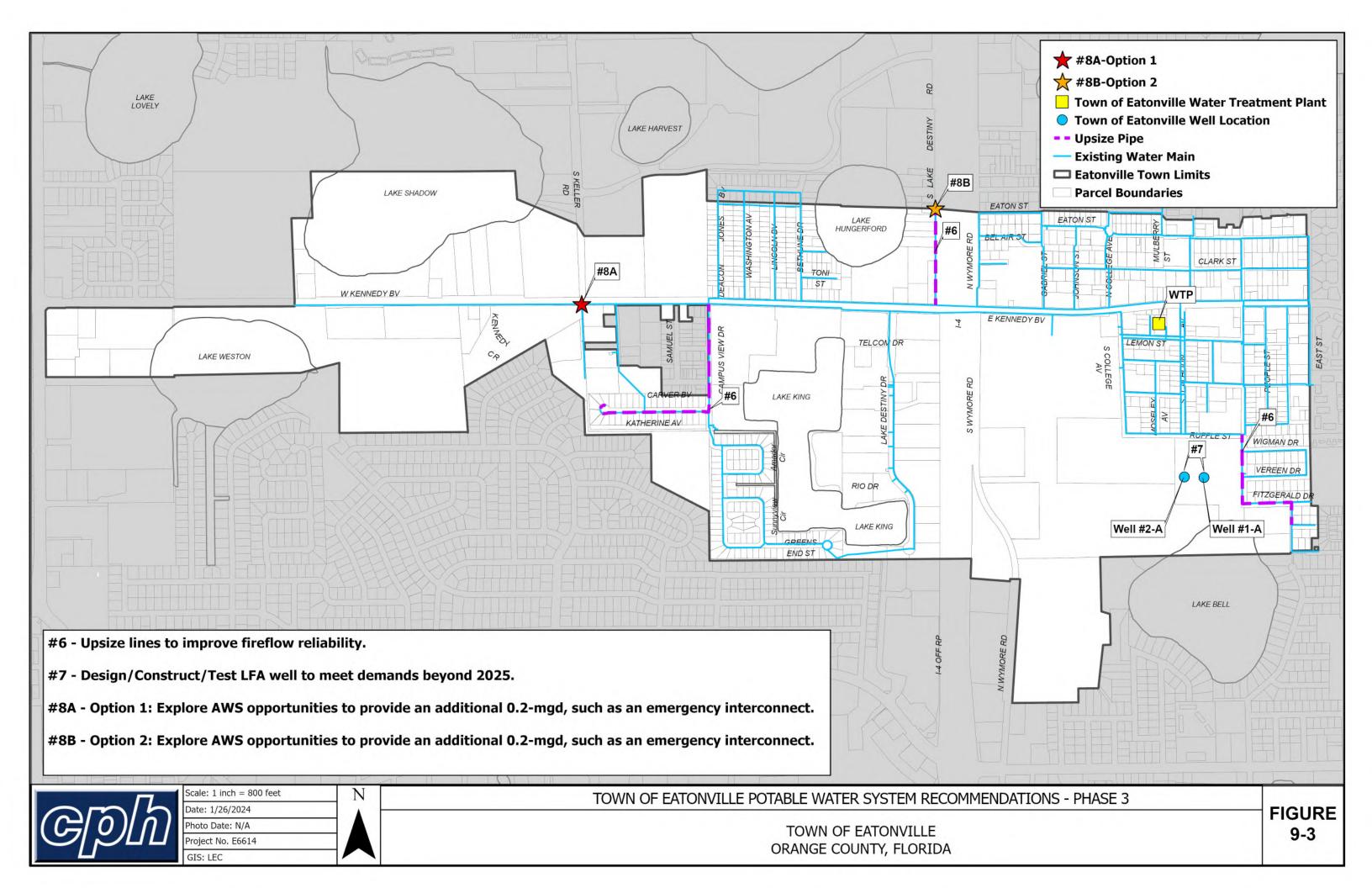
Note: All watermain replacement within the limits of the Kennedy Blvd. Phase 1 widening project, should be currently scheduled for improvement and funded during the 2024 calendar year.

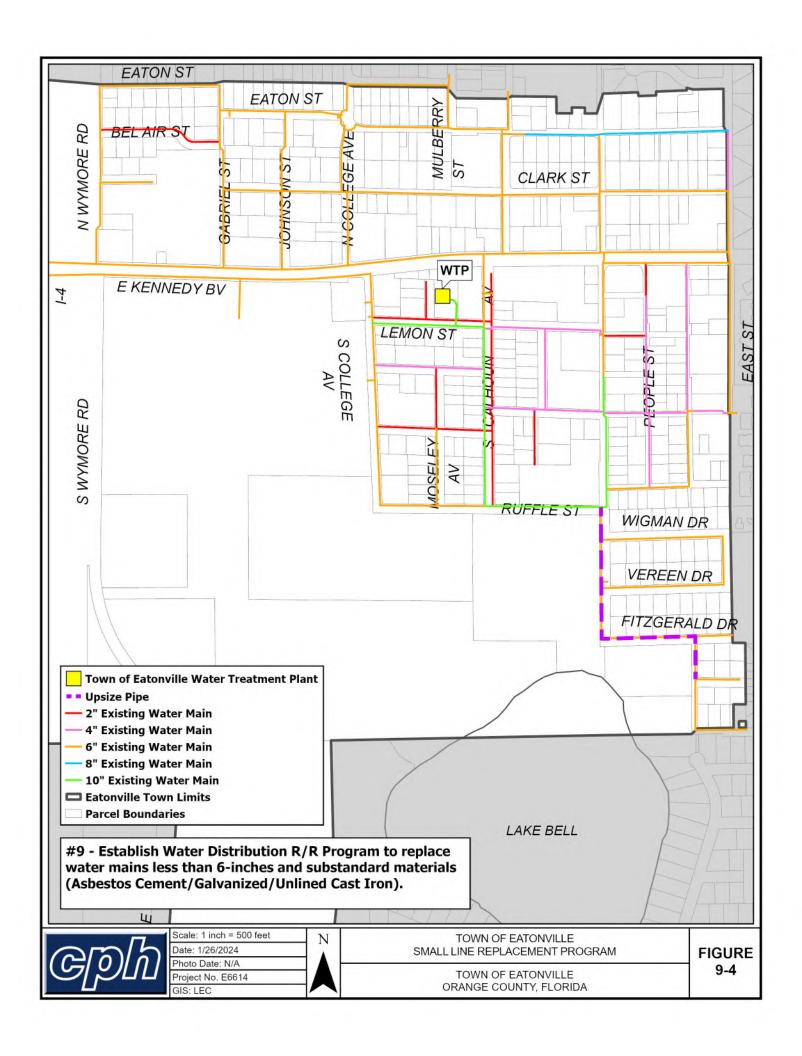




roject No. E6614 GIS: LEC

TOWN OF EATONVILLE ORANGE COUNTY, FLORIDA 9-2







Florida Department of Environmental Protection

REQUEST FOR INCLUSION ON THE DRINKING WATER PRIORITY LIST

Drinking Water State Revolving Fund Program
Douglas Building, 3900 Commonwealth Blvd, Tallahassee, Florida 32399-3000

The information in this Request for Inclusion (RFI) application is used to determine project eligibility and priority scoring. The priority score is used to rank projects for placement on the State Revolving Fund (SRF) priority list. Only projects placed on the fundable portion of the priority list receive consideration for a loan. Please note that costs incurred before the adoption of the project on the fundable or waiting portion of the priority list are not eligible for reimbursement.

1. Applicant's Nam	e and Address.					
Project Sponsor: To	wn of Eatonv	ille Contact Person:	Valerie Mundy, P.E. Title	Public Works Director		
307 E Kennedy Bl	vd.					
(street address)						
Eatonville			Orange	32751		
(city)			(county)	(zip code)		
407 576-2642			vmundy@townofeatonville.org			
(telephone)	(ext.)		(e-mail)			
Contact Person Addre	ess (if different):					
		(street address)	(city)	(state) (zip code)		
2. Name and Addre	ess of Applicant's Co	Contact Person:	Amanda Giorgio Tit	le: TAP		
2222 NW 40th	Terrace A					
(street address)						
Gainesville			32605			
(city)			(zip code)			
289 572-3564			agiorgio@sercap	o.org		
(telephone)	(ext.)		(e-mail)			
3. Type of Loan Req	uested in this Appli	cation. (select only one lo	oan category and project type)			
Planning Loan	D	esign Loan P	lanning and Design Loan	Construction Loan		
Project Type: Desi		Design/Build (D/B) must meet the requirements of	Construction Manag	ger at Risk (CMR)		

Eligibility for a Loan. In order to be considered for a priority listing, the following conditions must be met:

- The respondent to this solicitation must qualify as a "project sponsor" as defined in subsection 62-552.200(27), F.A.C.
- The minimum construction loan amount is \$75,000.
- The project sponsor must agree to submit biddable plans and specifications within 1-year after execution of the loan agreement to qualify for a combined planning and design loan.
- The project is part of a public water system as defined in subsection 62-552.200(28), F.A.C., and may include drinking water supply, storage, transmission, treatment, disinfection, distribution, residuals management, and appurtenant facilities.

REQUEST FOR INCLUSION ON THE DRINKING WATER PRIORITY LIST

- 4. Median Household Income, Population and Principal Forgiveness Percentage (PF%). (complete a. through e. below)
 - a. Median household income (MHI): \$29,667 (current U.S. Census data or verifiable estimates)
 - b. State median household income (SMHI): \$61,777 (current U.S. Census data)
 - c. Population (P) served 2690 = number of service connections 1076 times 2.5 persons per connection to include proposed connections.
 - d. Is the project sponsor applying for a planning and/or design loan with principal forgiveness? Yes No . If yes, then PF is 50%. Only a sponsor that qualifies as a financially disadvantaged small community is eligible for a planning/design loan with PF.
 - e. Is the project sponsor applying for a construction loan with principal forgiveness? Yes \blacksquare No \square . If yes, then PF% is calculated using the formula: PF% = 1760/9 160 x (MHI/SMHI) 7/4500 x P.

Calculate PF% for a construction loan using the above formula: 90 (minimum 20% and maximum 90%). If the sponsor is connecting a financially disadvantaged small community as defined below, a maximum 50% PF is available.

Please note that the calculated PF% is an estimate and the actual percentage will be determined by the Department. The amount of loan available with principal forgiveness for a project is dependent upon the amount of funds_allocated for the fiscal year.

Eligibility for a loan with principal forgiveness. In order to be considered for a loan with principal forgiveness, the following conditions must be met:

- The project sponsor must qualify as a financially disadvantaged small community public water system as defined in Rule 62-552.200, F.A.C., unless the sponsor is specifically exempted from this requirement.
- The median household income (MHI) of the sponsor's service area must be less than the state median household income (SMHI) as reported from the current U.S. Census data or from verifiable estimates, unless the sponsor is specifically exempted from this requirement.
- The population (P) of the sponsor's service area must be less than 10,000 (to include the population from the project's proposed future connections), unless the sponsor is specifically exempted from this requirement.
- The project sponsor is allowed only one open loan with principal forgiveness. A loan is deemed open until the final disbursement of the project has been paid by the department.
- A project sponsor is eligible for a construction loan with principal forgiveness (maximum 50%) if connecting a community
 with less than 250 residential wells; an existing public water system with less than 250 service connections; or a separate, noninterconnected public water system owned by the sponsor. The project area must qualify as a financially disadvantaged small
 community.
- A financially disadvantaged community with a population of 10,000 or more is eligible for a construction loan with 20% principal forgiveness if dollars are available after funding all eligible financially disadvantaged small communities.
- A project sponsor that is a for-profit entity is not eligible for principal forgiveness.
- A construction project for a financially disadvantaged small community that uses a Construction Manager at Risk delivery method is ineligible for principal forgiveness.

5. Interest Rate Percentage.

The interest rate for a loan with the Department is determined using the following formula:

% of MR = $40 \times (MHI/SMHI) + 15$ % of MR = Percentage of Market Rate.

Calculate and enter the % of MR below:

% of MR for a loan: 35 (35% \leq % of MR \leq 75%)

Please note that the calculated % of MR is an estimate and the actual interest rate will be determined by the Department. The interest rate for a loan shall not be less than 0.2 percent.

6. Base Priority Score. Each project shall receive a base priority score (BPS) dependent on the weighted average of its components. The BPS shall be determined using the below formula where CPS means the component priority score and CCC means component construction cost.

```
BPS = [CPS_1 \times CCC_1 + ... + CPS_n \times CCC_n]/Total \ Construction \ Cost
```

Select each component and component score in Table 1 below that apply to the project, enter the estimated construction costs, and calculate the base priority score.

- Component priority scores that are based on contaminant levels must be justified by sample analytical data (see exception in notes at bottom of Table 1). The date of sample collection must be less than 24-months from the submittal date of the Request for Inclusion.
- The project sponsor must provide documentation demonstrating that contaminant levels (e.g. disinfection byproducts) cannot be reduced by adjusting system operations, if applicable.

REQUEST FOR INCLUSION ON THE DRINKING WATER PRIORITY LIST

 A compliance-1 category component score of 400 points, if selected in Table 1, must be supported by documentation demonstrating the need for the project; otherwise, a component score of 300 points shall be assigned.

Table 1

Project Component (select all components that apply)	Companent	Commonat
<u>Потеля Сотронета</u> (виеся ин сотронения ини арруу)	Component Priority Score	Component Construction Cost
Acute Public Health Risk 1a. E-Coli or Fecal Coliform Exceed MCL (62-550.310(5), F.A.C.) 1b. Nitrate, Nitrite, or Total Nitrogen Exceed MCL (62-550.310(1), F.A.C., Table 1) 1c. Lead or Copper Exceed Action Level (62-550.800, F.A.C) 1d. Surface Water Filtration/Disinfection Noncompliance (62-550.817(2), F.A.C.)	800 points	
Potential Acute Public Health Risk 2a. Nitrate, Nitrite, or Total Nitrogen 50% of MCL (62-550.310(1), F.A.C., Table 1) 2b. Microbiologicals Exceed MCL (62-550.310(5), F.A.C.) 2c. Surface Water Enhanced Filtration/Disinfection Noncompliance (62-550.817(3), F.A.C.) 2d. State Health Certification of Acute Health Risk, Unregulated Microbiological Contaminant 2e. Violation of Disinfection Requirements (62-555.320(12), F.A.C.)	700 points	
Chronic Public Health Risk ☐ 3a. Inorganic/Organic Contaminant Exceed MCL (62-550.310(1) & (4), F.A.C., Tables 1,4,5) ☐ 3b. Disinfection Byproducts Exceed MCL (62-550.310(3), F.A.C., Table 3) ☐ 3c. Radionuclides Exceed MCL (62-550.310(6), F.A.C)	600 points	<u></u>
Potential Chronic Public Health Risk 4a. Inorganic/Organic Contaminant 50% of MCL (62-550.310(1) & (4), F.A.C., Tables 1,4,5) 4b. Disinfection Byproducts 80% of MCL (62-550.310(3), F.A.C., Table 3) 4c. State Health Certification of Chronic Health Risk, Unregulated Chemical Contaminant	500 points	
Compliance-1 Projects (documentation must be attached or default to Compliance-2 score) 5a. Infrastructure upgrades to facilities undersized, exceed useful life, or with equipment failures 5b. Insufficient water supply source, treatment capacity, or storage 5c. Water distribution system pressure less than 20 psi 5d. Eliminate dead ends and provide adequate looping in a distribution system 5e. Replace distribution mains to correct continual leaks, pipe breaks, and water outages 5f. New water system or extension of existing system to replace contaminated or low yield wells 5g. Lack of significant safety measures (e.g. chemical containment) 5h. Secondary Contaminant MCL Exceedance (62-550.320, F.A.C.) 5i. Drinking water supply project as defined in 403.8532(9)(a), F.S.	400 points	14,565,300
Compliance-2 Projects Ga. Treatment, Storage, Power, and Distribution Requirements (62-555.320, F.A.C) Gb. Minimum Required Number of Wells (62-555.315(2), F.A.C) Gc. Well Set-back and Construction Requirements (62-555.312 and 62-555.315, F.A.C) Gd. Cross-Connection Control Requirements (62-555.360, F.A.C) Ge. Physical Security Project Documented in a Vulnerability Analysis Gf. Consolidation or regionalization of public water systems Gg. Water or Energy Conservation Project	300 points	
☐ 7. All Other Projects (including land or public water system acquisition projects)	100 points	

Note: Item 2d. and 4c. of Table 1 requires a State Health Officer to complete the form "Certification of a Public Health Risk". If 50% or more of wells meet contaminant levels from Table 1 above, then select the appropriate health risk category in Table 1. Flooded wells and wells under the direct influence of surface water are considered an unregulated microbiological potential acute public health risk and require documentation of occurrence in lieu of

7. Affordability Score. The extent of affordability existing in a small community to be served by the project shall be reflected in the priority score. Points shall be awarded based upon two affordability criteria: median household income (MHI) and population (P) served. These points are to be added to the base priority score. Calculate the affordability score using the following formulas:

Affordability Score = (MHI Score + Population Score)

MHI Score = $100 \times (1.00 - MHI/SMHI)$, zero \leq MHI score \leq 75, rounded to nearest whole number

Population Score = 50.0 - (P/200), population score ≥ zero, rounded to nearest whole number

sampling data.

REQUEST FOR INCLUSION ON THE DRINKING WATER PRIORITY LIST

8. Water Conservation Score. A project sponsor with a qualifying water conservation project is eligible to receive an additional 100

	points added to their base priority score if the sponsor provide Conservation Plan Guidelines document number EPA-832-D-98-0		accordance with EPA's Water
9.	Total Priority Score. Total priority score equals the base priority	= .	. (complete a. through d. below)
	a. Base priority score: b. Affordability score: c. Water Conservation score: d. Total priority score: 1000 points. 89 points (> zero). points. 1089 points (sum of iter	ns a. and c.)	
10.	Estimated Project Cost. (complete a. through i. below)		
	(enter \$0 if activity is not applicable)		
	Project Activity		Cost
	a. Planning.		
	b. Design (not applicable if a D/B project).		-
	c. Eligible land (necessary land divided by total land times pure		12,623,000
	 d. Constr., equip., material, demo. & related procurement (incle e. Construction contingency (10% of 'd', only applicable for D 		1,262,300
			500,000
	1 (0.550 J00/J) F. I. G	•	180,000
	g. Asset management plan per 62-552.700(7), F.A.C.h. <i>Total project costs</i> (sum of a. through g.).		14,565,300
	i. Loan amount requested by the sponsor in this RFI (assume n	o principal forgiveness)	14,565,300
	List all funding sources (including grants for this project):	· F	
11	Project Schedule. (complete a. through d. below)		
11.	Project Activity		(M/D/YY)
			3/1/24
	a. Submit planning documents.b. Submit design/bid documents or RFQ/RFP for CMR & D/B	t projects	10/1/24
	c. Start construction.	projects.	11/1/24
	d. Complete construction.		10/1/26
12.	Project Information. Provide the following information, if apple (select all items below that are attached to this RFI)	icable.	
	■ Project description, location with lat/long (degrees), water sys	tem PWS ID, and project need (to	his is a required attachment).
	■ Map of city and county limits, existing and proposed service a		
	■ Lab data, lab data with operational records, or substantiated de	ocumentation in lieu of lab data f	or public health risk projects.
	■ Certification of a Public Health Risk form completed by a Sta	te Health Officer.	
	■ Supporting documentation for projects identified under the Co	ompliance-1 project categories fro	om Table 1 above.
	■ Project schedule showing plans and specs completion within	-year of the execution date of a p	olanning/design loan.
	☐ Supporting documentation if MHI not taken from current U.S	. Census data.	
	■ Water Conservation Plan in accordance with EPA guidelines.		
13	. Certification by an Authorized Representative. I certify that	his form and attachments have be	een completed by me or at
	direction and that the information presented herein is, to the best		
1	14/11/11/11/11	4/23 Vmvnde	etown of eatonville or
-(e	gnature) (date	(a mail)	etown of eatonville.og
(a.) (C-man)	1
*		ublic Works Direc	tor
(p	rint name) (prin	t title)	
Fm	ail the completed RFI form with attachments to SRFRFI@Florid	aDEP gov or mail to the Florid	a Department of Environmental

Email the completed RFI form with attachments to <u>SRFRFI@FloridaDEP.gov</u> or mail to the Florida Department of Environmental Protection, State Revolving Fund Program, 3900 Commonwealth Blvd, Tallahassee, Florida 32399-3000.

PROJECT DESCRIPTION

Town of Eatonville, Florida

Request for Inclusion on the 2024 FDEP Drinking Water Priority List

Project Description

Project Sponsor	Town of Eatonville			
PWS ID	3480327			
Location	Latitude 28.61472000			
	Longitude -81.38062000			
Мар	Attached			
Description	Project funding is requested to design and construct			
	hardened water wells, well pumps and piping to supply			
	the City's residents with potable water that is reliable			
	during and immednately after storm events as well as			
	addressing the DBP compliance consent order.			
Amount Requested	\$14,565,300			

Background

The Town of Eatonville is a historically black community, established by formerly enslaved people ten years after the Emancipation Proclamation, in Central Florida. The town owns the public drinking and wastewater system, as well as stormwater infrastructure including Lake King, which serves as both a recreational area and a stormwater basin. Eatonville's median household income is \$27,917, which is less than half of the state median household income, and this limited access to resources has exacerbated the long-term impacts of hurricanes and other natural disasters for residents.

Eatonville was hit by hurricanes and tropical storms in the years before Hurricane Ian, including by Hurricane Irma and Tropical Storm Cristobal. Impacts from these storms included wind damage to homes, power outages, downed trees, flooding that made roads impassable, and broken water mains.

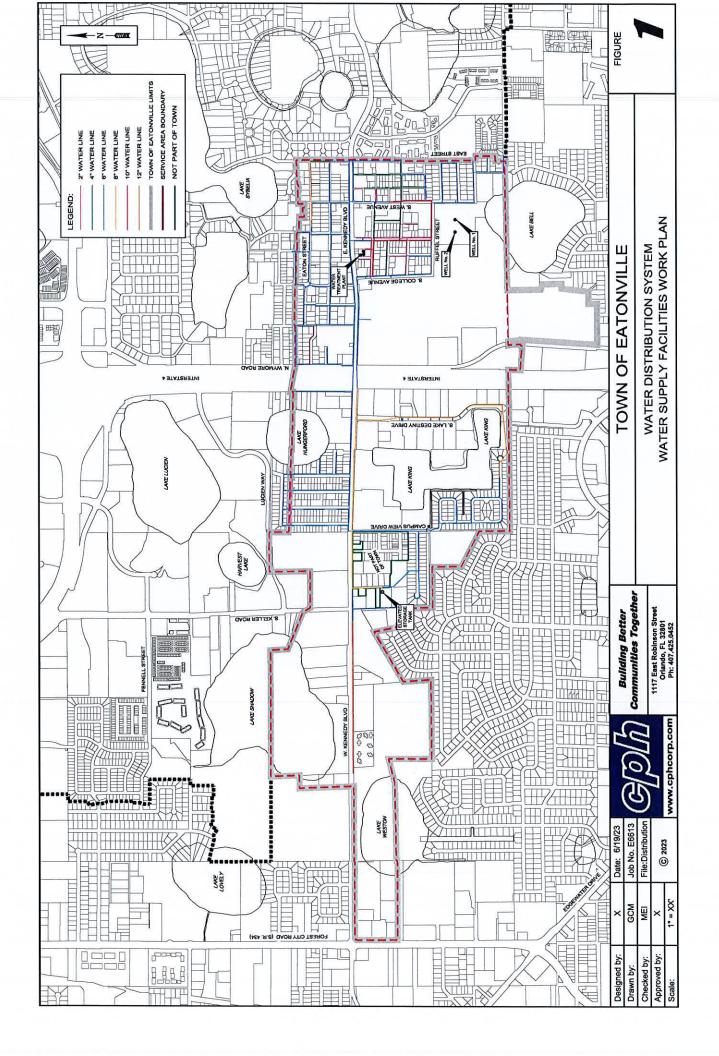
Hurricane Ian had all of the above impacts, with the addition of even greater flooding of roads, the likely incursion of stormwater into waste water lines, the flooding and overflow of Lake King and other stormwater basins and swales in the area, and residential household flooding. During and directly after the storm, the roads to the drinking water well generator were rendered impassable, so when we lost power, we were not able to refuel the emergency generator for the water supply wells.

The damages and impacts described above are typical for storm-related events in Central Florida, and due to the frequency of these events, the water facilities need to be easily accessible for servicing or repairs in the direct aftermath of flooding. This is hampered, however by the location of the town's wells

and pumps in a low-lying flood-prone area adjacent to a 100-year floodplain. Additionally, the water treatment facility does not meet current building code requirements for hurricane resiliency. The ability of the town's water system to provide continuous service for drinking water and firefighting water during and after another hurricane of the same or greater magnitude as Ian is not guaranteed, and is in fact likely to be impaired entirely.

In order to remedy this vulnerability, and make the Eatonville's drinking water system reliably resilient against hurricane damage in the future, this project has two components. First, to either move the well pump generator, or to regrade the road to and from the generator, so that even in flood conditions, it can be refueled. The second is to rebuild the water treatment plant building up to contemporary hurricane hardening standards, and to include in this rebuild any necessary flood prevention elements. Both of these projects require design and construction components, but as you can see from the timeline included, both construction elements can be undertaken within the year.

MAP



SUPPORTING DOCUMENTATION FOR PROJECTS

Request for Inclusion on the 2024 Drinking Water Priority List

			Estimated		
#		Activity	Start Date	Budget	
1		Modify CUP Limit to .420-mgd AADD relative to the CFWI			
		2025 UFA limitations			
	1a	Permit LFA well to meet future demands. Includes			
		Extended Period Simulation (EPS) hydrogeologic modeling			
		impact evaluation		\$	75,000.00
	1b	Design/Construct /Test LFA well to meet demands beyond			
		2025		\$	2,000,000.00
2		Increase well pumping rated capacity by at least 1,300		Ì	
		gpm (from 1,000 gpm to 2,300 gpm)			******
	2a	Conduct well pump yield step drawdown test.		\$	50,000.00
	2b	Upsize well pump and motors		\$	150,000.00
3		Design/Construct New WTP to refurbish/Replace existing			•
		WTP.			
	3a	Design/Construct new HSP Building (Includes new HSPs,			······································
		chemical feed systems and diesel generator)		\$.	4,800,000.00
	3b	Design/Construct new 0.5-MG GST		\$	1,200,000.00
4		Design/Construct/Upsize WTP discharge water main pipe		†	<u> </u>
-		from WTP to Kennedy Blvd including 16-inch from WTP			
		to Lemon St., 12-inch along Lemon St., 10-inch along			
		College Avd.	ļ	\$	213,000.00
5		Design and replace A/C pipe along Kennedy Blvd. from		<u> </u>	,
•		East St. to Eacon Jones		\$	2,500,000.00
	6	Prepare PDR for upsizing to 8-inch along selected		1	2,500,000.00
	•	roadways		\$	35,000.00
	7			+	33,000100
	•	Establish Water distribution R/R program to replace			
		water mains less than 6-inches an substandard materials	ļ		
		(Asbestos Cement/Galvanized/Unlined Cast Iron)		\$	500,000.00
	Q	Conduct Impact Fee and Rate Study to establish impact		 	300,000.00
	٥	fees for new development and a tiered rate structure for			
		high water users		\$	25,000.00
	٥	Regrade road around wells to ensure access for fuel		+	23,000.00
	3	delivery to wells during flood conditions.		\$	325,000.00
	10	Additional Perimeter Hardening and Electronic Security of	+	12	323,000.00
	10	WTP and Wells		ا م	750,000,00
		vvii and vvens		\$	750,000.00
				\$	12,623,000.00
		Construction Contingency @ 10%	ļ	\$	1,262,300.00
		Technical Services during construction and after bid		1.	
		opening	 	\$	500,000.00
		Asset Management Plan	1	\$	180,000.00
To	tal F	Project Costs		\$	14,565,300.00