



W3C Project Update

Waccasassa Water & Wastewater Cooperative Board Meeting

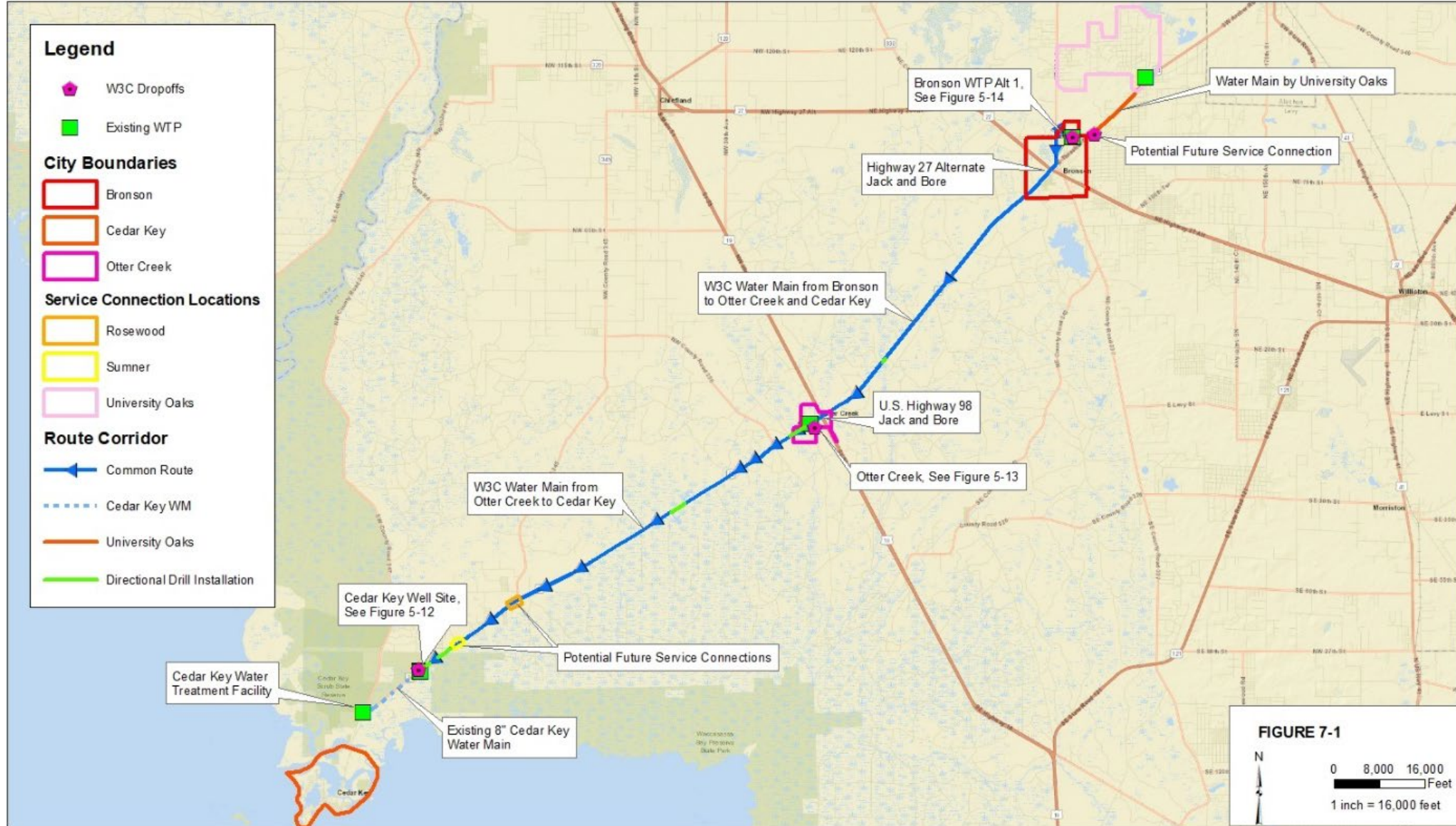
December 18, 2024 – Cedar Key, Florida

Feasibility Study Alternatives (Water)

- **Alternative 1**
 - Co-locate at Bronson WWTP
- **Alternative 2**
 - Co-locate at County/Court House WTP
- **Alternative 3**
 - W3C does not move forward



Selected Alternative – W3C Water Plant at Bronson WWTP

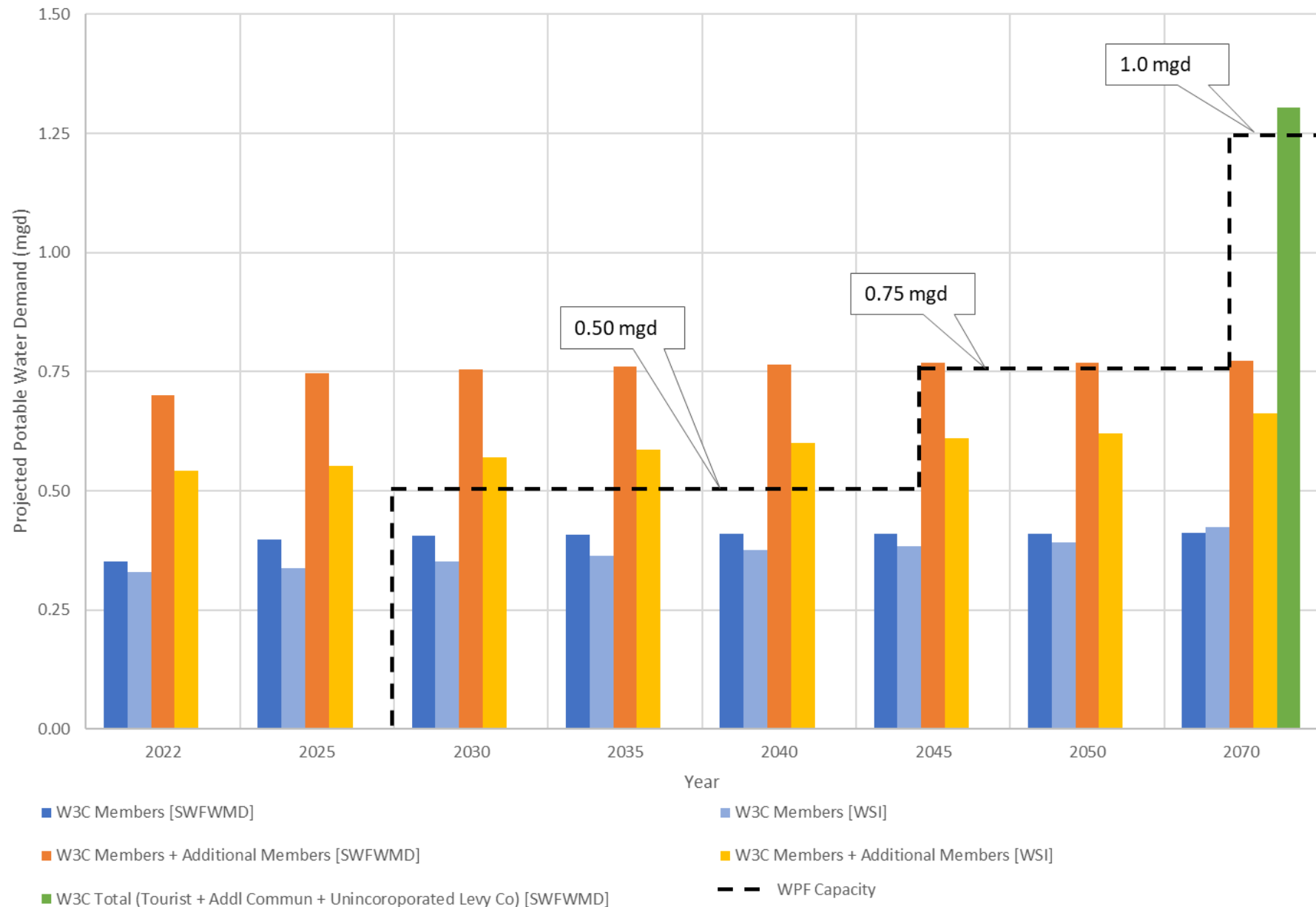


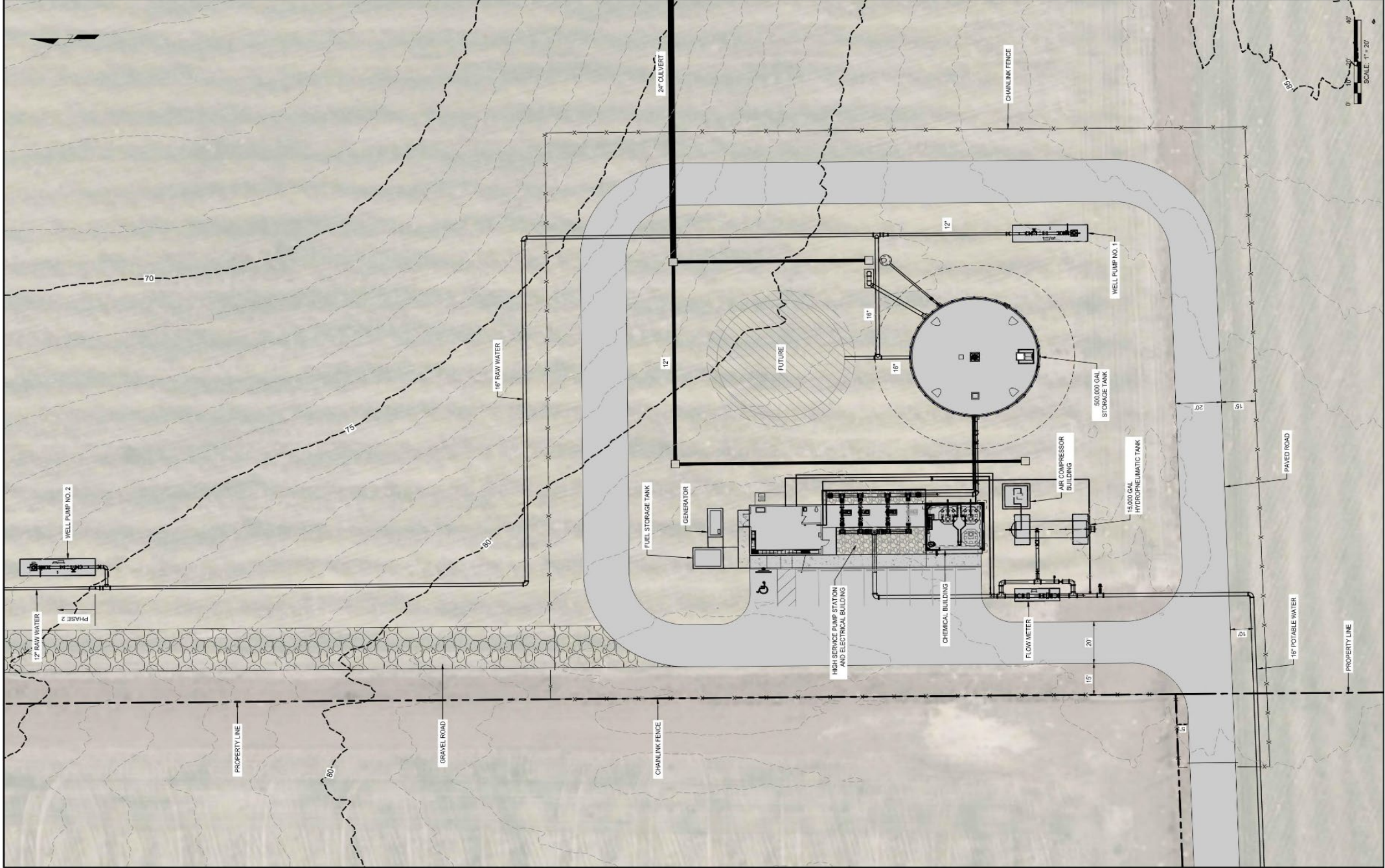
Water Projections

Phase 1 (2027-2045)

- Construct one 0.5-MG ground storage tank
- Construct a new HSP station for (3) 800-gpm HSPs
- Emergency generator & Control room
- (2) Upper Floridan Wells

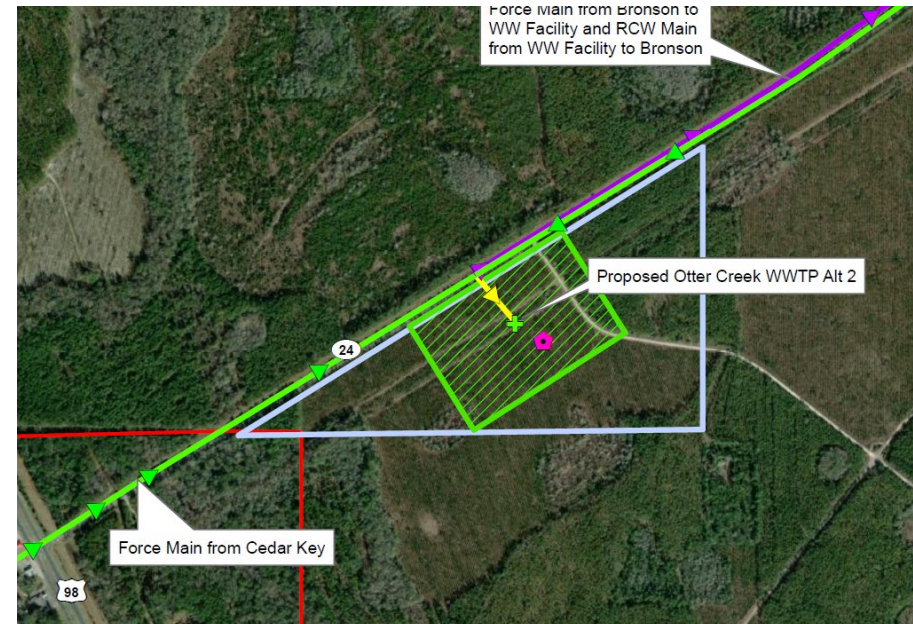
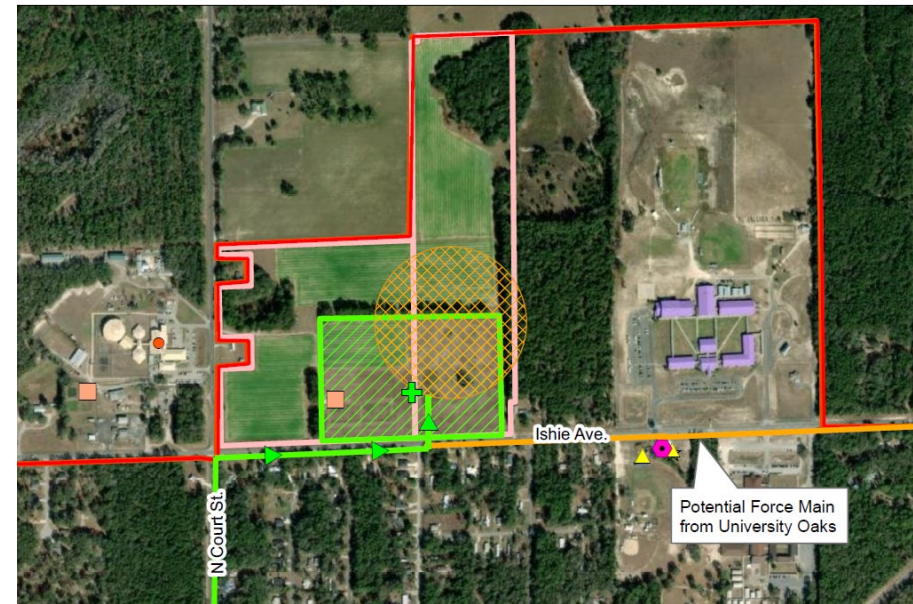
W3C Potable Water Demand Projections





Feasibility Study Alternatives (Wastewater)

- **Alternative 1**
 - Co-locate at Bronson WWTP
- **Alternative 2**
 - New WWTP at Otter Creek
- **Alternative 3**
 - W3C does not move forward



Selected Alternative – W3C WWTF at Bronson WWTP

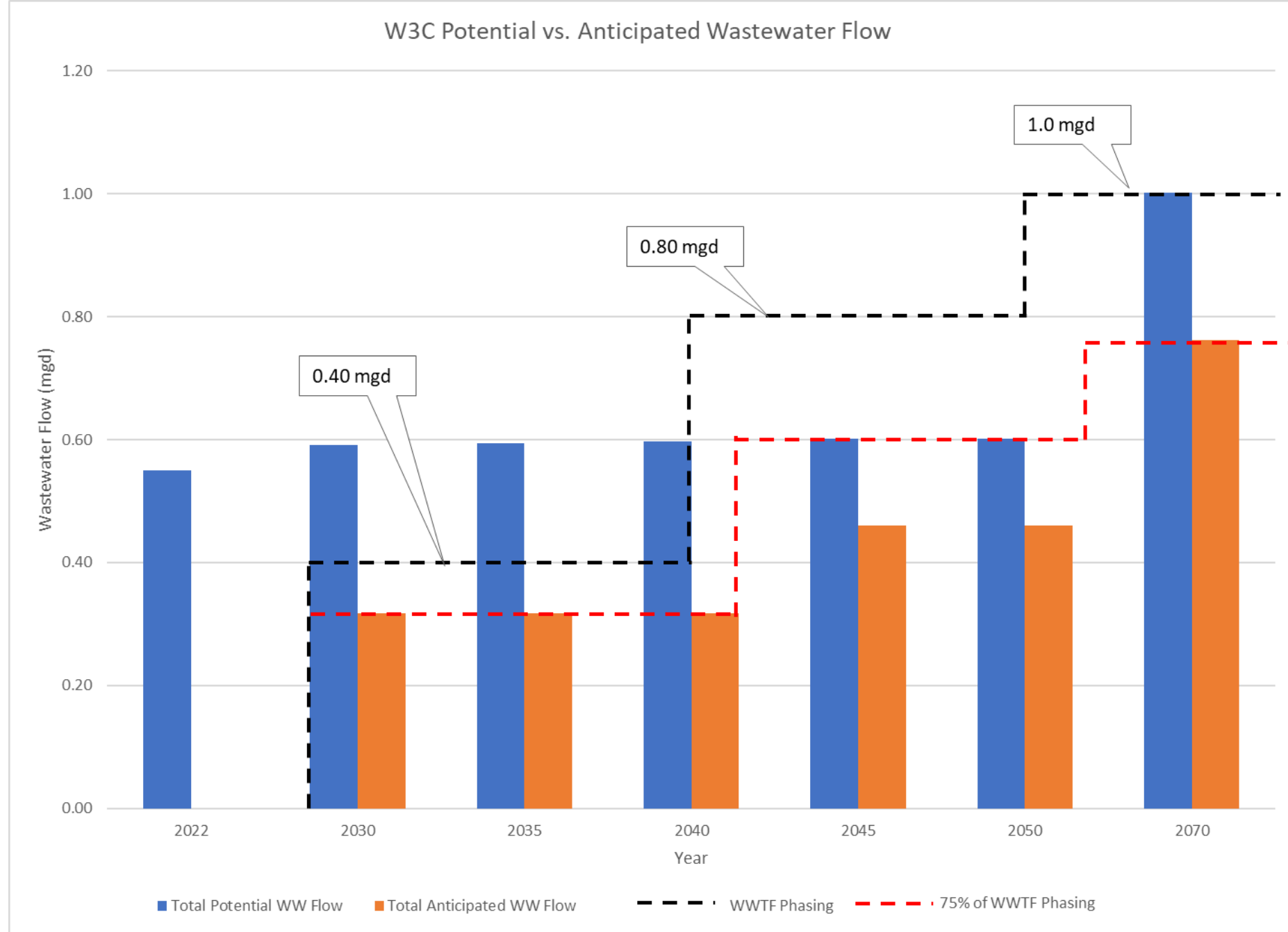
Wastewater Treatment Facility

- Construction of a new 5-Stage Bardenpho BNR advanced wastewater treatment facility (AWWTF)
- Capacity of 0.4 MGD AADF, and peak capacity of 1.4 MGD PHF (Peak Hourly Flow)

Wastewater Transmission System

- Two lift stations and a force main that interconnects the two lift stations with the proposed AWWTF

Wastewater Projections





Legend:

- 10 - Headworks Structure
- 12 - Odor Control
- 14 - Ox Ditch Flow Splitter Box
- 20 - Carrousel Oxidation Ditches
- 21 - Ox Ditch Electrical Building
- 22 - Ox Ditch Reaeration Blowers Station
- 30 - Secondary Clarifiers
- 31 - Secondary Clarifiers Flow Splitter Box
- 32 - RAS/WAS Pump Station
- 50 - Chlorine Contact Tanks
- 51 - Sodium Hypochlorite Storage & Feed Building
- 52 - Effluent Transfer Pump Station
- 54 - Plant Service Water Pump Station
- 80 - Sludge Holding Tank
- 82 - Sludge Holding Tank Blowers Station
- 99 - Generator

PHASE 1
(0.8 MGD)

PHASE 2
(0.8 MGD to 1.2 MGD)

Drinking Water System Estimates

Initial Water Plant Costs	
Item	Cost
Water Plant	\$6,129,000
Engineering Services	\$1,348,380
Contractor Mobilization	\$612,900
Contingency	\$1,225,800
Total	\$9,316,080

Initial Water Transmission System Costs	
Item	Cost
Transmission System	\$25,445,475
Engineering Services	\$5,598,005
Contractor Mobilization	\$2,544,548
Contingency	\$5,089,095
Total	\$38,677,122

Initial Water Estimate:
\$47,993,202

Current Water Plant Costs		
Item		Cost
Water Treatment Plant Capital Cost (No Contingency)		\$7,014,000
Pipelines Capital Cost (No Contingency)		\$26,000,000
Metering Stations Capital Cost (No Contingency)		\$255,000
Total Capital Cost		\$33,269,000
Contingency*	30%	\$9,981,000
Engineering*	10%	\$3,327,000
Contract Administration*	7%	\$2,329,000
Construction Administration*	7%	\$2,329,000
Estimated Land Cost		\$753,760

*percent of Item 1 (to nearest \$1000)

Current Water Estimate:
\$51,988,760.00

Wastewater System Preliminary Estimates

Initial Wastewater Plant Costs	
Item	Cost
Wastewater Plant	\$34,561,350
Engineering Services	\$7,603,497
Contractor Mobilization	\$3,456,135
Contingency	\$6,912,270
Total	\$52,533,252

Initial WW Collection System Costs	
Item	Cost
Collection System	\$24,635,475
Engineering Services	\$5,419,805
Contractor Mobilization	\$2,463,548
Contingency	\$4,927,095
Total	\$37,445,922

Initial Wastewater Estimate:
\$89,979,174

Current Wastewater Plant Costs		
Item		Cost
Wastewater Treatment Plant Capital Cost (No Contingency)		\$30,258,000
Force Main Capital Cost (No Contingency)		\$21,902,000
Lift Stations (2) Capital Cost (No Contingency)		\$3,632,000
Total Capital Cost (No Contingency)		\$55,792,000
Contingency	30%	\$16,737,600
Engineering	10%	\$5,579,200
Contract Administration	7%	\$3,905,440
Construction Administration	7%	\$3,905,440
Estimated Land Cost		\$1,770,000

Current Wastewater Estimate:
\$87,689,680

Wastewater Main to Cedar Key- Preliminary Estimate

- Initial estimate provided in the August 2024 Board Meeting for 5.8 miles of Pipeline was \$8 million

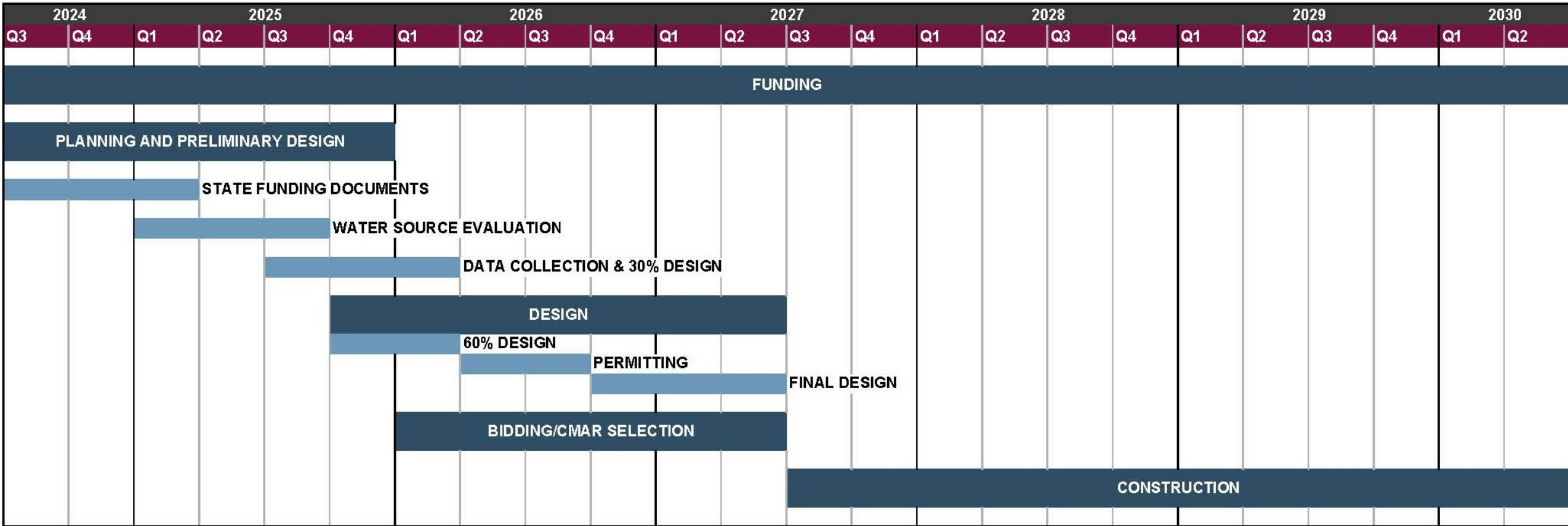
- Preliminary Estimate

Item	Unit	Quantity	Item Cost
Capital Cost			\$6,346,000
Contingency	Percent	30%	\$1,904,000
Engineering	Percent	10%	\$635,000
Contract Administration	Percent	7%	\$444,000
Construction Administration	Percent	7%	\$444,000
Total Construction Cost			\$9,773,000

Requested Funding

Funding Source	Eligible Use	Application Amount	Status
Department of Commerce Rural Infrastructure Fund (2023)	SRF Facilities Plan	\$300,000	Awarded
Department of Commerce Rural Infrastructure Fund (2024)	Business Plan, Water Resource Evaluation	\$200,000	Under Review
Dept. of Environmental Protection Springs Funding	Land Acquisition, Water and Wastewater	\$2,500,000	Under Review
Dept. of Environmental Protection Water Quality Funding	WWTF Relocations	\$876,949	Under Review
Dept. of Environmental Protection Alternative Water Supply Funding	Water Project Costs	\$2,745,749	Under Review
Suwannee River WMD Conceptual Projects Funding	Drinking Water Well Construction	\$432,747	Under Review
Dept. of Environmental Protection Resilience Funding	Mitigation	TBD	Upcoming
State of Florida Appropriations	Overall Water Project Costs	\$5.3 Million over 6 Years	Upcoming February 28, 2025

Project Schedule



Legislative Advocacy

- Drinking water funding sources limited from State & Federal Grant Programs
- Rural Disadvantaged Economic Community
- W3C has funded infrastructure planning through existing grant programs.
- Drinking water supply affected by three hurricanes, in the last two years.

WACCASASSA WATER AND WASTEWATER COOPERATIVE



Who is the Waccasassa Water and Wastewater Cooperative (W3C)?

The W3C is a regional water and wastewater cooperative within Levy County formed to serve the needs of its members through the implementation of infrastructure program comprised of a water treatment plant, a wastewater treatment plant, and approximately 35 miles of water and wastewater pipeline.

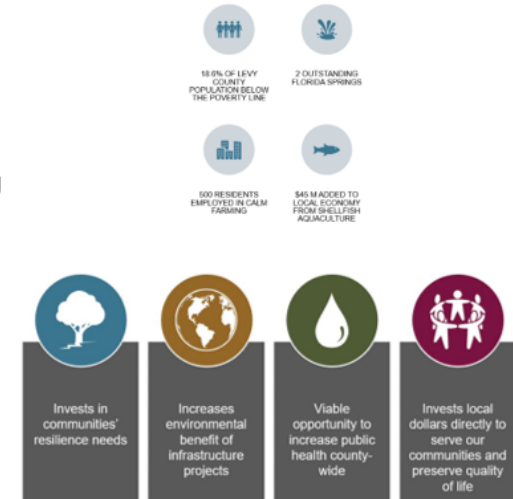
Why is this funding necessary?

Public health needs coupled with water quantity and quality are issues affecting Levy County's rural communities. Residents want access to clean drinking water. Multiple consecutive hurricanes over the last two years have left this community with compromised drinking water quality for multiple weeks at a time and the implementation of the water infrastructure program will provide a safe reliable, drinking water supply.

Through grants, W3C completed the feasibility planning and the conceptual engineering for the SRF drinking water facilities plan. This funding request is because the Florida Department of Environmental Protection springs, alternative water supply, and water quality grants are not to fund drinking water systems and this disadvantaged rural area cannot fund the development of this drinking water through higher utility rates because of interest generated through loans. This \$32 million 5-year program appropriation funding request will complete engineering design and construction for a regional drinking water system.



Project Area by the Numbers



Looking Ahead

January



- Inquire with FDEO for comments on the W3C Request for Inclusion form and Facilities Plan to SRF
- Meet with local delegation regarding funding requests needs
- Legislative appropriation forms submission

February



- SRF Priority List Meeting (Feb. 5)
- Legislative advocacy in Tallahassee (Feb. 11 and 12)