Peace River Manasota
Regional Water Supply Authority

5-Year Capital Improvements Program
and
20-Year Capital Needs Assessment

Fiscal Period: 2019 - 2038

[Approved: May 30, 2018]

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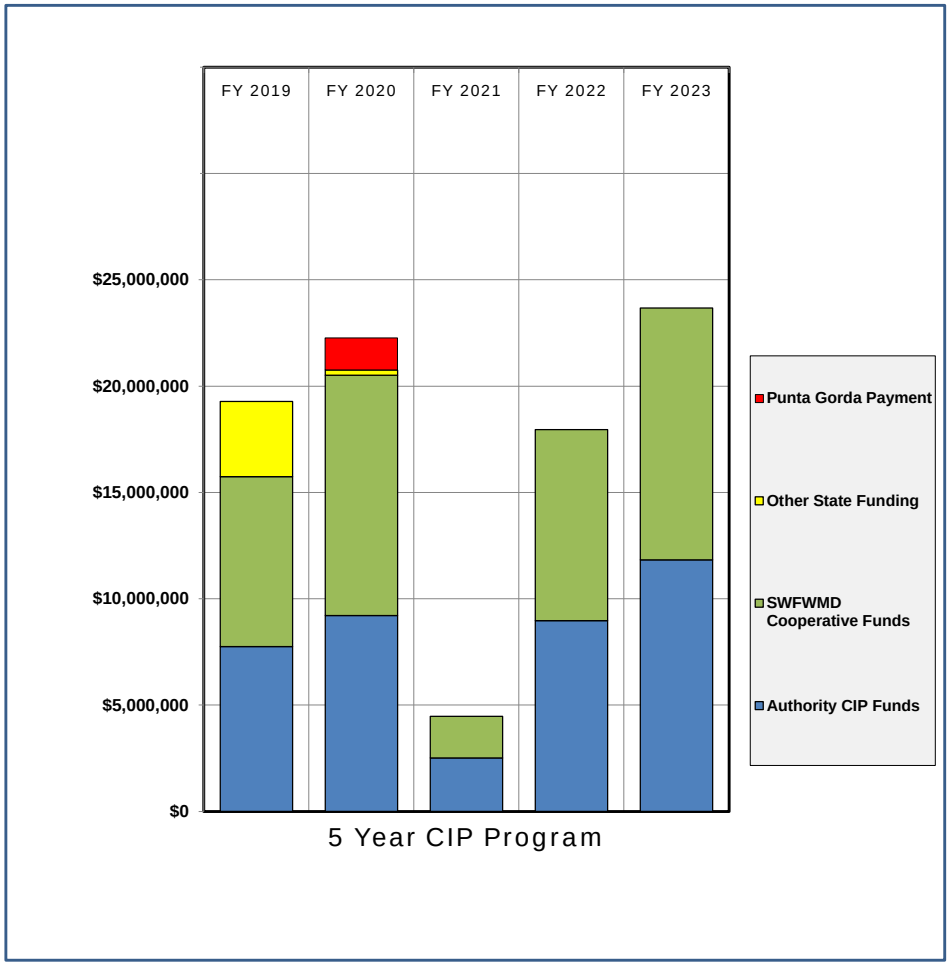
Peace River Manasota
Regional Water Supply Authority

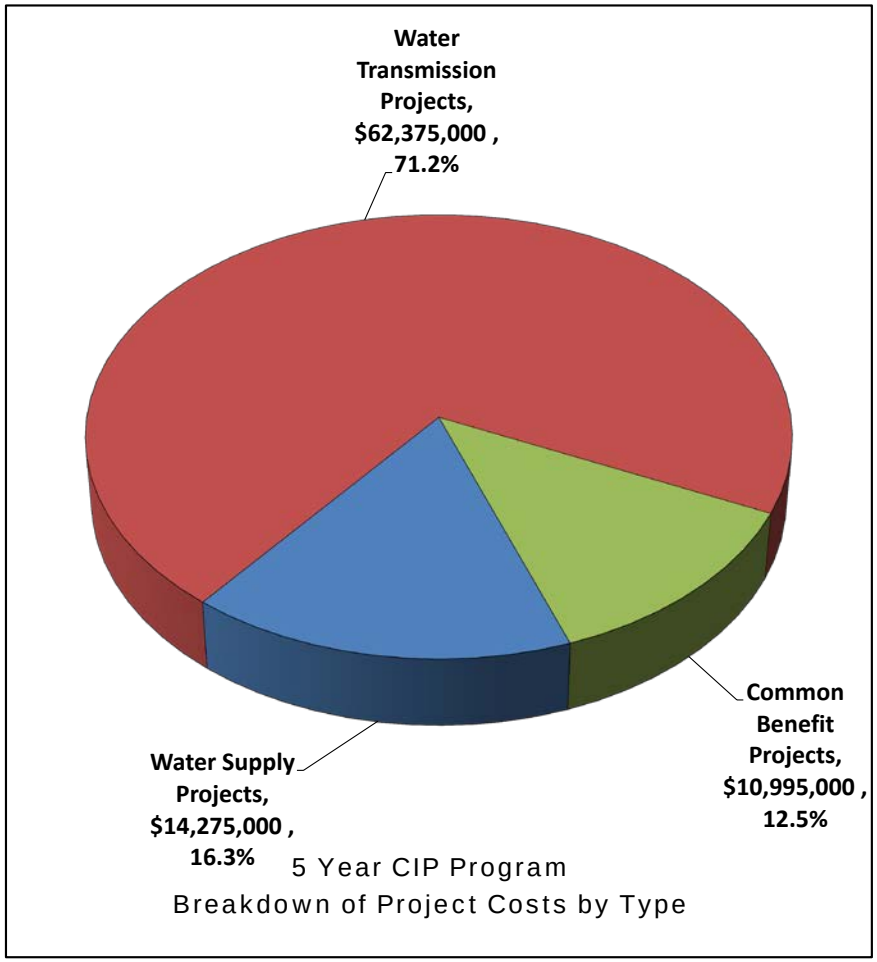
5-Year Capital Improvements Program

Fiscal Period: 2019 - FY 2023

[Approved: May 30, 2018]

5 Year Capital Improvements Program Summary by Year and Type of Project





Total Investment Planned Over the Period	**$**	**87,645,000**	***, excluding prior year costs***
Anticipated Offsetting Grant Funding	**$**	**45,838,000**	***, excluding prior year grant funding***

Capital Needs Assessment - Project Description Sheet

Project Name or Title: Regional Integrated Loop - Phase 1 [U.S. 17/Shell Creek]

Shorthand Identifier: *T1*

Project Location, Site or Route: US 17 from the DeSoto/Charlotte County Line to Shell Creek WTP

Reference and Description of Need

The Phase 1 Pipeline consists of approximately 7 miles of finished water pipe and will provide a looped, plant-to-plant interconnection between the Authority's Peace River Facility and the City of Punta Gorda's Shell Creek WTP. This pipeline will bring regional water supply to the Shell Creek WTP for improved operational blending of finished water, extend regional supply to new areas within DeSoto and Charlotte Counties and increased resiliency and sustainability for all parties interconnected to the regional loop system.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

- [ ] Raw Water Pumping, Storage or Conveyance
- [ ] Water Treatment
- [ ] Finished Water Storage and Pumping
- [x] Finished Water Pipelines
- [ ] Plant Power, Switchgear, Fuel & Generator Sets
- [ ] ASR Systems
- [ ] General Buildings, Structures & Security
- [ ] SCADA, ADAS or General IT Systems
- [ ] Roads and Sitework
- [ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

- [ ] Yes — If Yes, How Much? 0.00 **MGD on AADF basis**
- [x] No — If Yes, any Requisite Companion Projects? *none*

Collective Capital Cost of Associated Projects: $ 12,000,000

Participant Cost *(inclusive of expected grant funds)*: $2,000,000

Effective Net Unit Capital Cost: - cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	280,000
Final Design & Permitting	$	1,090,000
Land Acquisition	$	-
Construction Management	$	970,000
Construction	$	9,660,000
Total	**$**	**12,000,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Projected Sources of Funding

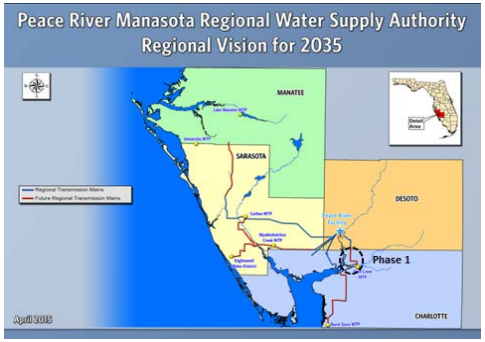
Projected Authority (Cooperator) Funding or TBD	$	2,000,000
Projected SWFWMD Grant Funding	$	6,000,000
Projected State and Other Grant Funding	$	4,000,000
Total	**$**	**12,000,000**

Projected Schedule

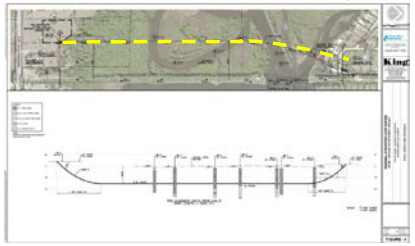
Design Commencement	2015
Construction Start	2019
Operational Date	2020

Location Map or Concept Sketch

Phase 1 Selected Route



Shell Creek HDD Crossing



YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: Regional Integrated Loop - Phase 3B [S.R. 681 to Clark Rd]

Shorthand Identifier: *T2*

Project Location, Site or Route: From the Preymore Interconnect at 681 northward to Clark Road

Reference and Description of Need

The phase 3B pipeline includes approximately 5 miles of pipe to extend water service northward within Sarasota County from the current termination of the regional integrated loop system at the Preymore Interconnects (681) near the Sarasota County Central Solid Waste Management Complex northward to Clark Road (SR72). These improvements will enable the regional system to better serve central Sarasota County, an area which is rapidly developing and also move the system one step closer to being able to exchange water with Manatee County.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[x] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

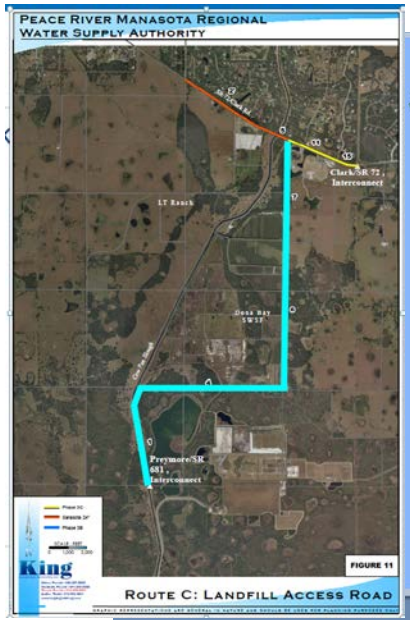
[ ] Yes	If Yes, How Much?	0.00 **MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*
	Collective Capital Cost of Associated Projects	$ 16,700,000
	Participant Cost *(inclusive of expected grant funds)*	$8,100,000
	Effective Net Unit Capital Cost	- cost per gallon of yield generated

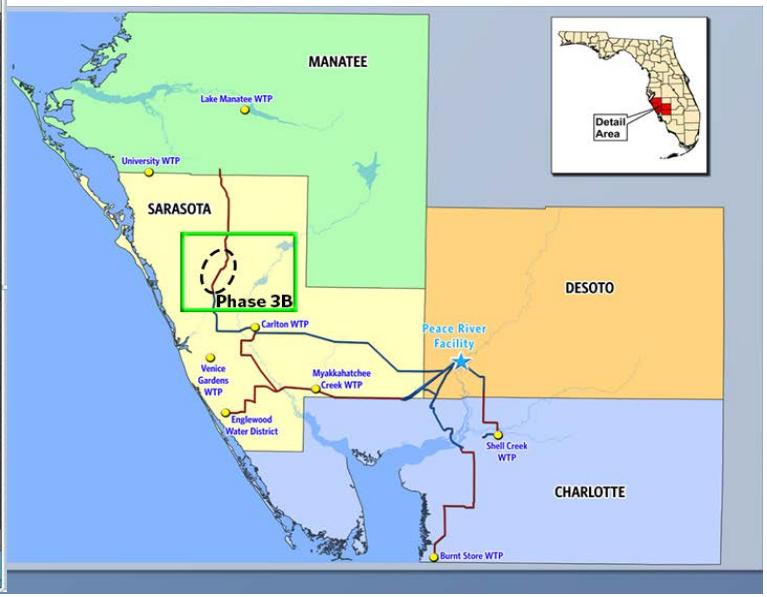
Estimated Project Cost

Preliminary Engineering *(see note)*	$	400,000
Final Design & Permitting	$	820,000
Land Acquisition	$	-
Construction Management	$	1,310,000
Construction	$	14,170,000
Total	**$**	**16,700,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch





Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	8,100,000
Projected SWFWMD Grant Funding	$	8,100,000
Projected State and Other Grant Funding	$	500,000
Total	**$**	**16,700,000**

Projected Schedule

Design Commencement	2015
Construction Start	2019
Operational Date	2021

YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Raw Water ASR - [Pilot Testing, Permitting, Implementation]**

Shorthand Identifier: ***A1***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

The raw water ASR project consists of pilot testing, permitting, design and construction of facilities to partially treat raw water from the reservoirs and inject it below ground in the ASR system. The expected benefits of this program would be significant operational cost savings because the water injected below ground would no longer have to go through potable water treatment first. This would leverage our injection capability, improve recovered water quality and free up treatment capacity at the water treatment plant providing additional operational flexibility.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

☐ Raw Water Pumping, Storage or Conveyance	☒ ASR Systems
☐ Water Treatment	☐ General Buildings, Structures & Security
☐ Finished Water Storage and Pumping	☐ SCADA, ADAS or General IT Systems
☐ Finished Water Pipelines	☐ Roads and Sitework
☐ Plant Power, Switchgear, Fuel & Generator Sets	☐ Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

☐ Yes	If Yes, How Much?	0.00 **MGD on AADF basis**
☒ No	If Yes, any Requisite Companion Projects?	*none*
	Collective Capital Cost of Associated Projects	$ 7,755,000
	Participant Cost *(inclusive of expected grant funds)*	$ 3,990,000
	Effective Net Unit Capital Cost	- cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	455,000
Final Design & Permitting	$	750,000
Land Acquisition	$	-
Construction Management	$	550,000
Construction	$	6,000,000
Total	**$**	**7,755,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch

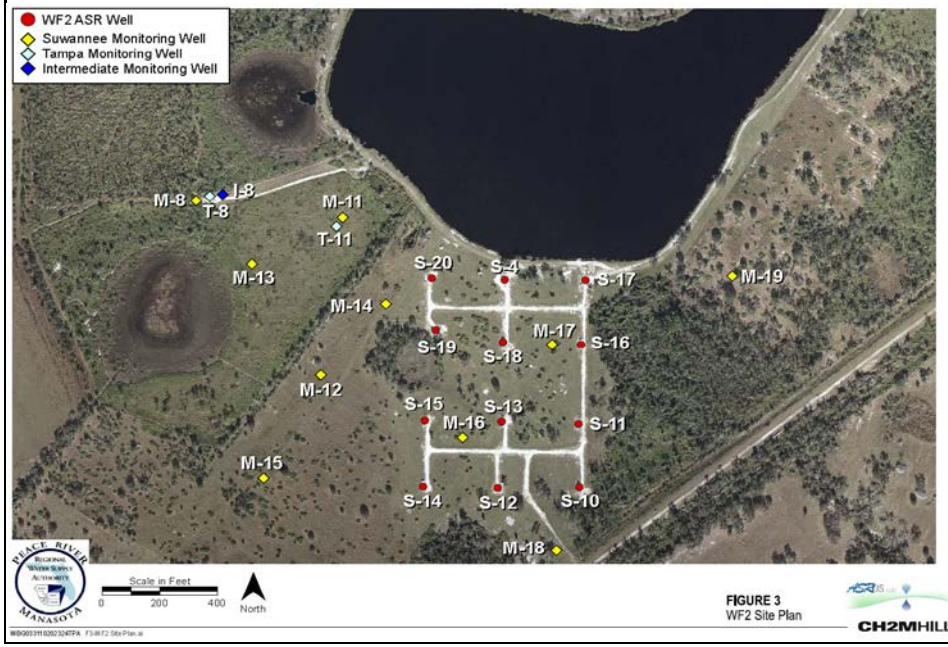
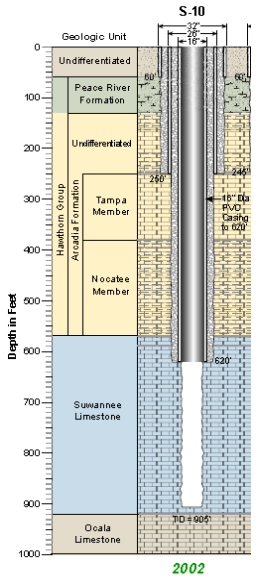


FIGURE 3
WF2 Site Plan



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	3,990,000
Projected SWFWMD Grant Funding	$	3,765,000
Projected State and Other Grant Funding	$	-
Total	**$**	**7,755,000**

Projected Schedule

Design Commencement	2016
Construction Start	2019
Operational Date	2020

YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Facility Improvements - Maintenance Warehouse**

Shorthand Identifier: ***B1***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

The Authority Maintenance Department has been housed in a temporary construction trailer for nearly 8 years after their planned new building was cut from the budget as a result of funding shortfalls that ocurred with the Regional Expansion Program in 2008-9. There is also no consolidated warehousing space, parts and inventory are scattered throughout several converted and repurposed outbuildings. A previous design has been resurrected, shifted onsite and updated to meet projected staffing needs and improve overall site integration andf traffic flow patterns.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[x] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 2,495,000	
	Participant Cost *(inclusive of expected grant funds)*	$2,495,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	50,000
Final Design & Permitting	$	150,000
Land Acquisition	$	-
Construction Management	$	195,000
Construction	$	2,100,000
Total	**$**	**2,495,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

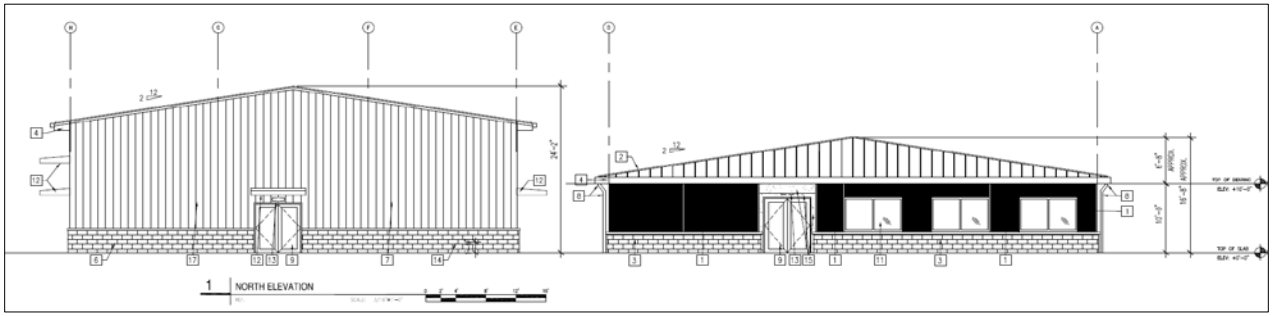
Projected Sources of Funding

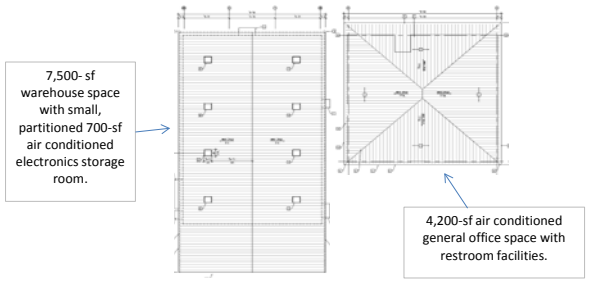
Projected Authority (Cooperator) Funding or TBD	$	2,495,000
Projected SWFWMD Grant Funding	$	-
Projected State and Other Grant Funding	$	-
Total	**$**	**2,495,000**

Projected Schedule

Design Commencement	2017
Construction Start	2019
Operational Date	2020

Location Map or Concept Sketch





YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Facility Improvements - Filter Covers**

Shorthand Identifier: ***B2***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

Per F.A.C. 62-550.817, the disinfection and filtration treatment technique requirements for Subpart H surface water systems require at least 3-log removal or inactivation of giardia lamblia and at least 4-log removal or inactivation of viruses between a point where the raw water is not subject to recontamination by surface water runoff or exposed during treatment to the open atmosphere. Current industry practice is to cover chlorine contact chambers and filters to avoid risk from airborne contamination. However, some of the PRF chlorine contact chambers and all of the filter facilities were not originally equipped with this feature; the Authority is working towards adding these improvements as time and budgets allow.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[x] Water Treatment	[x] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[ ] Yes	If Yes, How Much?	0.00 **MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*
	Collective Capital Cost of Associated Projects	$ 2,715,120
	Participant Cost *(inclusive of expected grant funds)*	$2,715,120
	Effective Net Unit Capital Cost	- cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	35,140
Final Design & Permitting	$	179,980
Land Acquisition	$	-
Construction Management	$	100,000
Construction	$	2,400,000
Total	**$**	**2,715,120**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	2,715,120
Projected SWFWMD Grant Funding	$	-
Projected State and Other Grant Funding	$	-
Total	**$**	**2,715,120**

Projected Schedule

Design Commencement	2017
Construction Start	2019
Operational Date	2020

Location Map or Concept Sketch

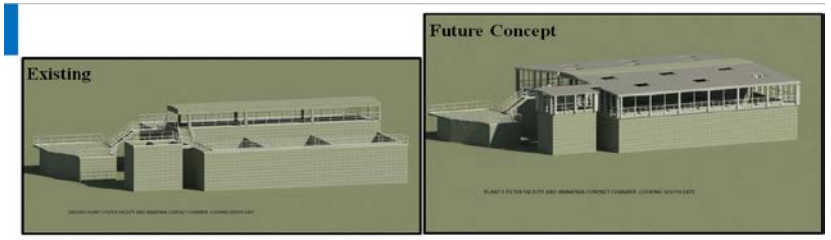


FIGURE 4 – Conceptual Filter Covers at the PRF – Plant 1

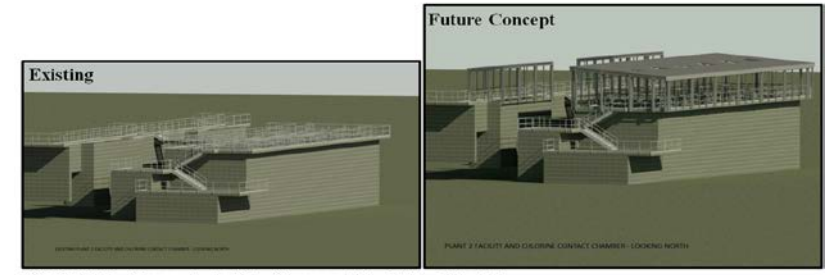


FIGURE 5 – Conceptual Filter Covers at the PRF – Plant 2

Note, these Before/After sketches were presented to the Board of Directors in Spring 2017 when funds for engineering were requested. The concept for Plants 1 & 2 are shown the concept for Plants 3/4 were similar but have not been included here for the sake of brevity. *The reader is cautioned that the design is expected to evolve through design and the final project may look somewhat different.*

YEAR																		
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Bachman Regional Pumping & Storage Facility**

Shorthand Identifier: *T5*

Project Location, Site or Route: **At the nexus of Bachman and Harbor Boulevards, just off Veterans Boulevard, Port Charlotte**

Reference and Description of Need

This storage and repump facility located near the current main connection to Charlotte County will provide a vital support linkage for the Regional Integrated Loop System supporting future pipeline segments to the west towards North Port, Englewood and Venice. The proposed facility may include elevated storage, ground storage, pumping and/or chemical feed facilities. The composition of assets will be determined during preliminary design.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[x] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

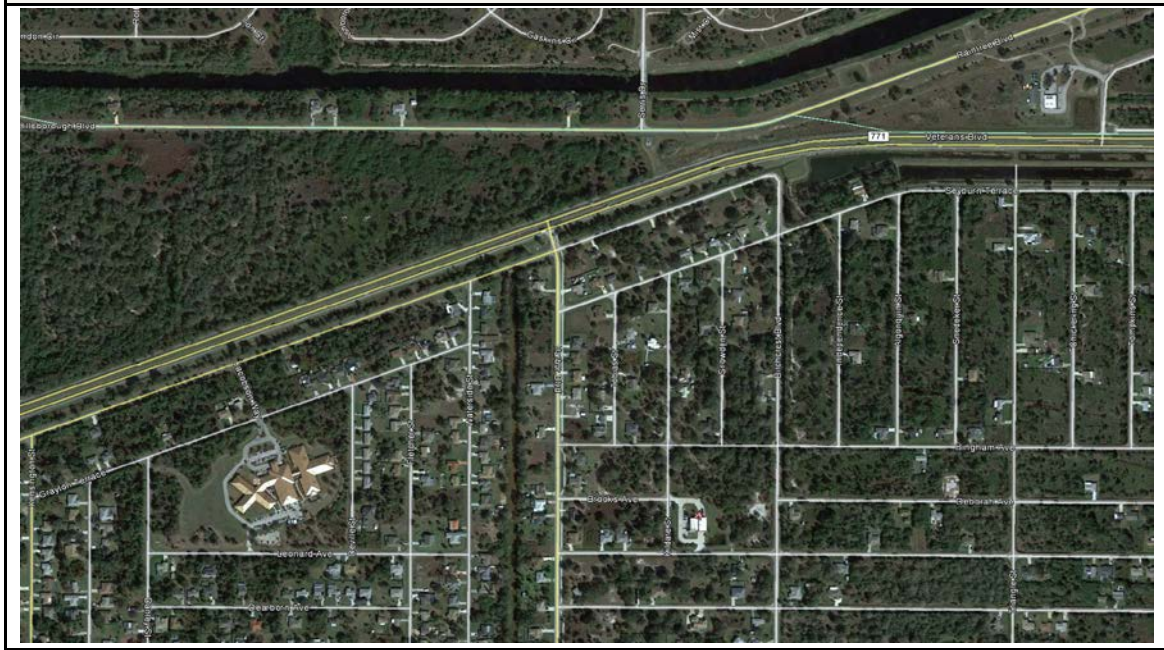
[ ] Yes	If Yes, How Much?	0.00 **MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*
	Collective Capital Cost of Associated Projects	$ 12,000,000
	Participant Cost *(inclusive of expected grant funds)*	$6,000,000
	Effective Net Unit Capital Cost	- cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	207,500
Final Design & Permitting	$	1,037,500
Land Acquisition	$	-
Construction Management	$	830,000
Construction	$	9,925,000
Total	**$**	**12,000,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	6,000,000
Projected SWFWMD Grant Funding	$	6,000,000
Projected State and Other Grant Funding	$	-
Total	**$**	**12,000,000**

Projected Schedule

Design Commencement	2020
Construction Start	2121
Operational Date	2023

YEAR

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: Regional Integrated Loop Phase 2B [Serris Blvd. to Myakkahatchee Creek WTP]

Shorthand Identifier: *T9*

Project Location, Site or Route: **Extension of the Regional Loop System from Phase 2A at Serris Westward to the Myakkahatchee Creek WTP**

Reference and Description of Need

This pipeline project is comprised of 10 miles of pipe tentatively sized as 36" to 42" diameter running from the current terminus of the Phase 2A regional loop pipeline near Veterans Blvd. and Serris Dr. westward to the City of North Port's Myakkahatchee WTP. This segment completes a plant-to-plant tie with North Port's facilities that will boost regional resiliency, bi-directional water transfer capability and lays the groundwork for the southern regional loop with future pipeline projects. The project will also bring improved delivery to the western Charlotte County peninsula.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[x] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

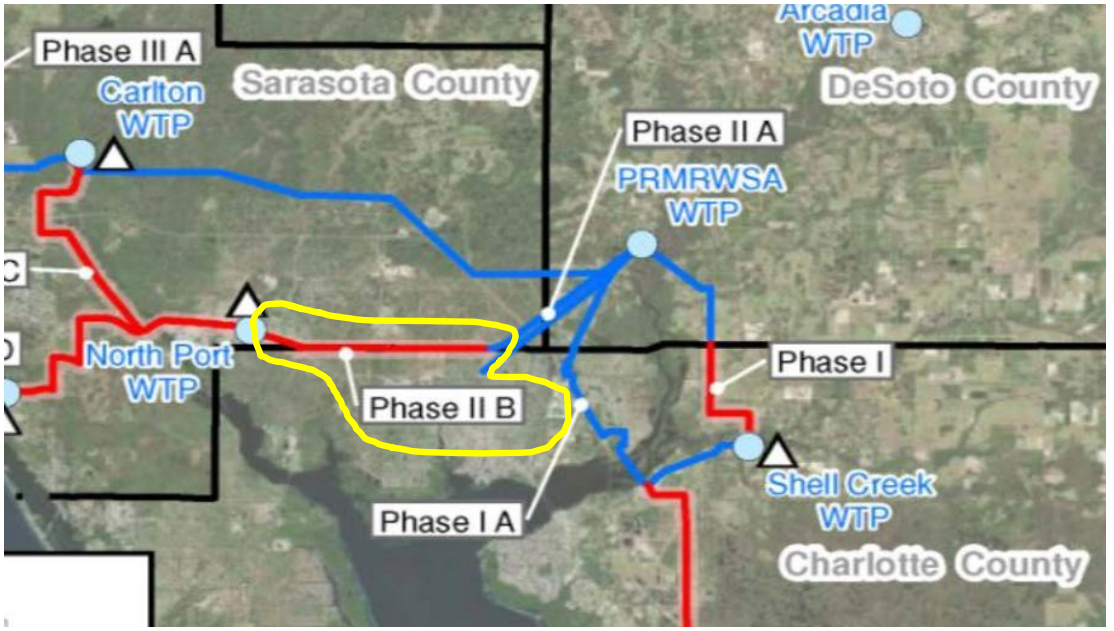
[ ] Yes	If Yes, How Much?	0.00 **MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*
	Collective Capital Cost of Associated Projects	$ 30,400,000
	Participant Cost *(inclusive of expected grant funds)*	$15,475,000
	Effective Net Unit Capital Cost	- cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	500,000
Final Design & Permitting	$	3,400,000
Land Acquisition	$	550,000
Construction Management	$	2,650,000
Construction	$	23,300,000
Total	**$**	**30,400,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	15,475,000
Projected SWFWMD Grant Funding	$	14,925,000
Projected State and Other Grant Funding	$	-
Total	**$**	**30,400,000**

Projected Schedule

Design Commencement	2020
Construction Start	2022
Operational Date	2024

YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: Regional Integrated Loop - Phase 4 - Segment 1 [Burnt Store Interconnect]

Shorthand Identifier: *T3*

Project Location, Site or Route: Along Burnt Store Road from the area near Tern Bay Golf and Country Club northeast to Tucker's Grade and I-75

Reference and Description of Need

The Phase 4D, Segment 1 Regional Integrated Loop project is comprised of an approximately 4 miles of developer-installed 16 inch water line which commences nearly 4 miles north of the Burnt Store RO WTP and extends northeast towards I75 at Tucker's Grade. This signifies the important first link in the Phase 4 pipeline segment which will intertie the Burnt Store area of southern Charlotte County in with the remainder of the regional loop system. This pipeline segment will be developer-installed.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ]	Raw Water Pumping, Storage or Conveyance	[ ]	ASR Systems
[ ]	Water Treatment	[ ]	General Buildings, Structures & Security
[ ]	Finished Water Storage and Pumping	[ ]	SCADA, ADAS or General IT Systems
[x]	Finished Water Pipelines	[ ]	Roads and Sitework
[ ]	Plant Power, Switchgear, Fuel & Generator Sets	[ ]	Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 4,925,000	
	Participant Cost *(inclusive of expected grant funds)*	$2,462,500	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	-
Final Design & Permitting	$	-
Land Acquisition	$	-
Construction Management	$	-
Construction	$	4,925,000
Total	**$**	**4,925,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

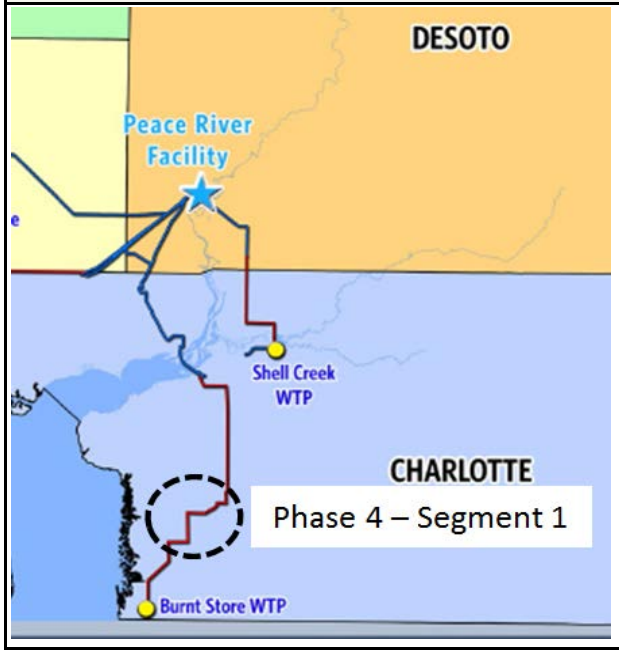
Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	2,462,500
Projected SWFWMD Grant Funding	$	2,462,500
Projected State and Other Grant Funding	$	-
Total	**$**	**4,925,000**

Projected Schedule

Design Commencement	-
Construction Start	-
Operational Date	2020

Location Map or Concept Sketch



YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Peace River Facility Phase 2 Capacity Increase**

Shorthand Identifier: ***S1***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

The Phase 2 Capacity Expansion reflects modifications to the PRF to increase the permitted capacity of the facilities and generate an estimated 3.5 MGD of annual yield. Those improvements include adding additional alum storage capacity, upgrading the river pump station, adding an additional high service pump and adding a third sludge press. Other minor improvements may also be necessary and will be evaluated by a study conducted at the initiation to this project. This project as a companion project to other projects will generate an estimated additional safe yield of 3.5 MGD (also see project A2).

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[x] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[x] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[x] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[x] Yes	If Yes, How Much?	3.50 **MGD on AADF basis**
[ ] No	If Yes, any Requisite Companion Projects?	*A2*
	Collective Capital Cost of Associated Projects	$ 28,800,000
	Participant Cost *(inclusive of expected grant funds)*	$ 14,400,000
	Effective Net Unit Capital Cost	$ 4.11 cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	200,000
Final Design & Permitting	$	1,200,000
Land Acquisition	$	-
Construction Management	$	1,000,000
Construction	$	11,400,000
Total	**$**	**13,800,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch

Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	6,900,000
Projected SWFWMD Grant Funding	$	6,900,000
Projected State and Other Grant Funding	$	-
Total	**$**	**13,800,000**

Projected Schedule

Design Commencement	2021
Construction Start	2023
Operational Date	2023

YEAR																		
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **ASR Wellfield Expansion (12 New Wells)**

Shorthand Identifier: ***A2***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

The ASR Wellfield Expansion would be comprised of an additional 12 ASR wells that would be extended from the existing ASR Wellfield No. 2 footprint, located south of Reservoir 1. At this time it is envisioned that the wells would be developed into the Suwannee Formation, however, spacing, location and depth are to be determined. Benefits include increased yield, ability to store and recover water faster from ASR, improved water quality in recovered water and improved system reliability/resilience. This project as a companion project to other projects will generate an estimated additional safe yield of 3.5 MGD (also see project S1).

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[x] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[x] Yes	If Yes, How Much?	3.50 **MGD on AADF basis**
[ ] No	If Yes, any Requisite Companion Projects?	*S1*
	Collective Capital Cost of Associated Projects	$ 28,800,000
	Participant Cost *(inclusive of expected grant funds)*	$ 14,400,000
	Effective Net Unit Capital Cost	$ 4.11 cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	225,000
Final Design & Permitting	$	1,500,000
Land Acquisition	$	-
Construction Management	$	1,000,000
Construction	$	12,275,000
Total	**$**	**15,000,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	7,500,000
Projected SWFWMD Grant Funding	$	7,500,000
Projected State and Other Grant Funding	$	-
Total	**$**	**15,000,000**

Projected Schedule

Design Commencement	2023
Construction Start	2024
Operational Date	2026

Location Map or Concept Sketch

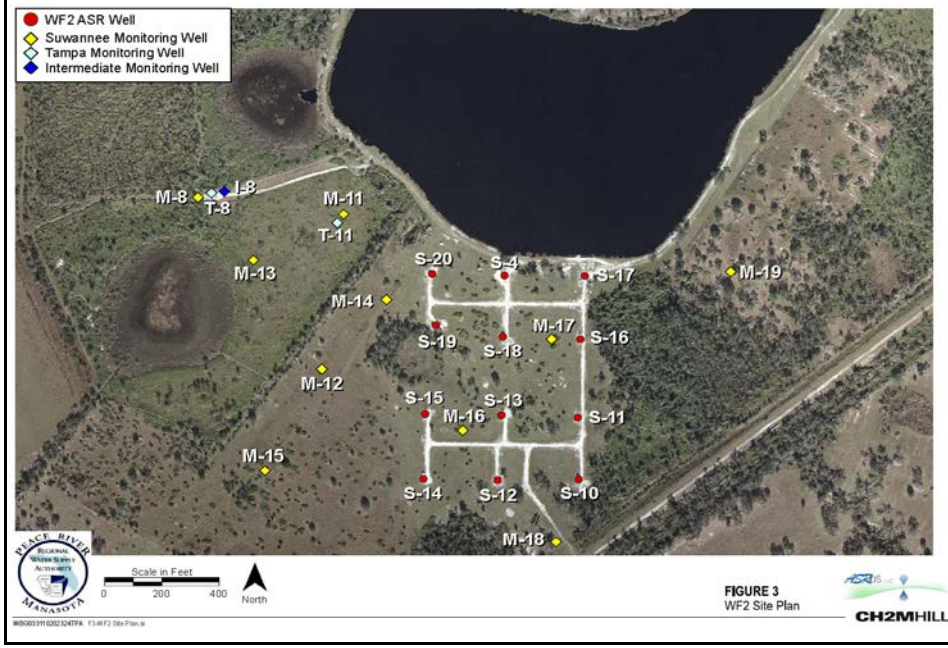
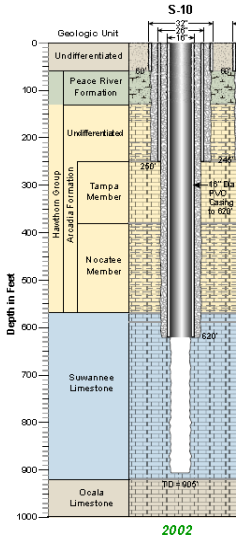


FIGURE 3
WF2 Site Plan

CH2MHILL



YEAR

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Peace River Manasota
Regional Water Supply Authority

20-Year Capital Needs Assessment

FY 2024 - FY 2038

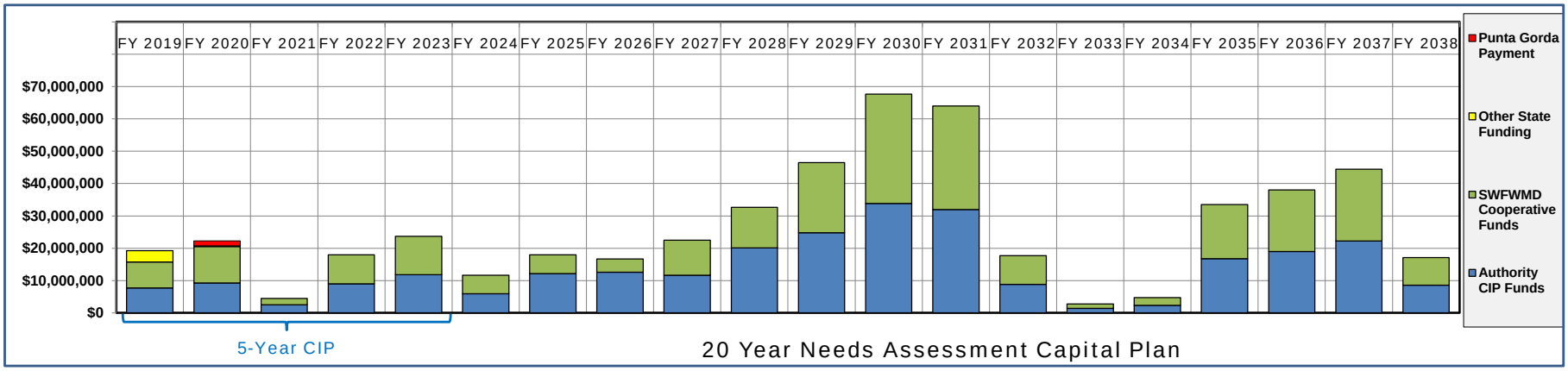
Editor's Note: The 20-Year Capital Needs Assessment includes the 5 Year CIP but those first 5 Years are not repeated in this section to avoid redundancy.

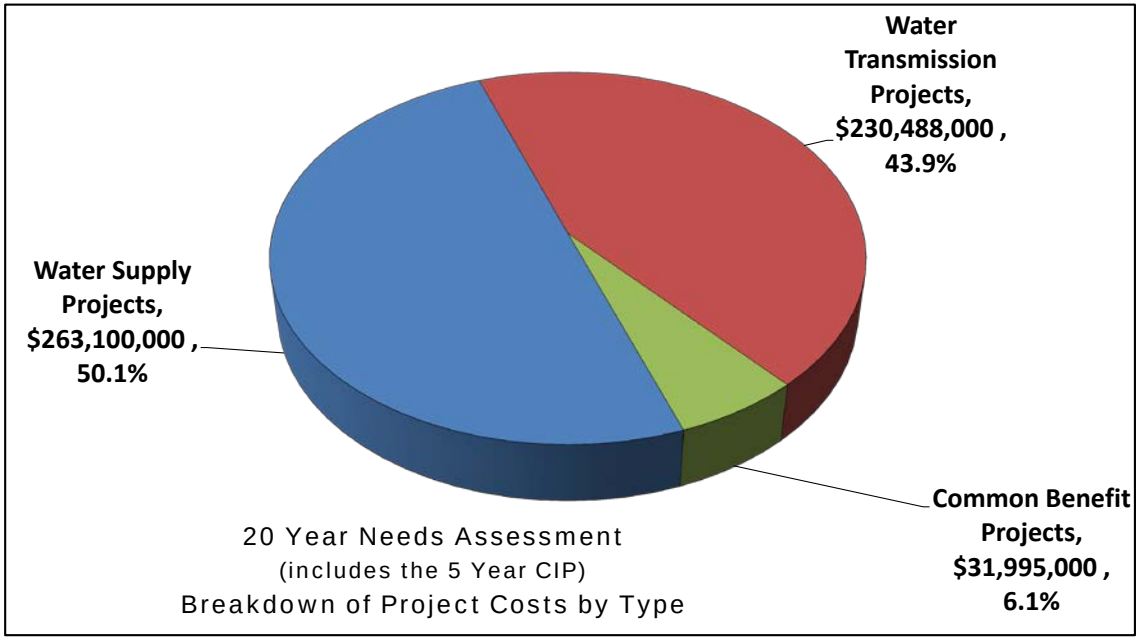
[Approved: May 30, 2018]

Peace River Manasota Regional Water Supply Authority

20 Year Capital Needs Assessment Summary by Year and Type of Project

(includes the 5-Year CIP)





Total Investment Planned Over the Period	**$**	**525,583,000 , excludes prior year costs**	**$0**	**identified beyond the 20-year horizon**
Anticipated Offsetting Grant Funding	**$**	**251,552,000 , excludes prior year grant funding**	**$0**	**identified beyond the 20-year horizon**

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Replace Kings Highway 24" Due to Road Widening**

Shorthand Identifier: ***T4***

Project Location, Site or Route: **Kings Highway from the Peace River Facility to the County Line**

Reference and Description of Need

The Kings Highway 24" Regional Transmission Main provides water to Charlotte and DeSoto Counties and was installed within the roadway right-of-way. The FDOT is planning to widen Kings Highway since it represents a significant arterial connector between Arcadia and Port Charlotte, is an area of growing commerce and land development and can serve as a major hurricane evacuation route to the inland. This pipeline will be replaced with the same size line offset in the new, wider right-of-way and the old pipeline removed.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[x] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 12,000,000	
	Participant Cost *(inclusive of expected grant funds)*	$12,000,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	180,000
Final Design & Permitting	$	1,100,000
Land Acquisition	$	-
Construction Management	$	1,000,000
Construction	$	9,720,000
Total	**$**	**12,000,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch

Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	12,000,000
Projected SWFWMD Grant Funding	$	-
Projected State and Other Grant Funding	$	-
Total	**$**	**12,000,000**

Projected Schedule

Design Commencement	2024
Construction Start	2025
Operational Date	2026

YEAR																		
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: Regional Integrated Loop - Phase 3C [Clark Rd. to Fruitville Rd.]

Shorthand Identifier: *T6*

Project Location, Site or Route: Between Clark Road (SR 72) and Fruitville Road

Reference and Description of Need

The Phase 3C Regional Integrated Loop project will consists of a segment of approximately 6.5 miles of 36" diameter water main installed between the Phase 3B terminus at Clark Road (SR72) northward to the vicinity of Fruitville Road (780). This segment of pipe will interconnect Phase 3D and Phase 3B creating a nearly 66 mile long continuous, dedicated regional pipeline backbone between Manatee County in the north through the Carlton WTP in the middle and Peace River Facility all the way to the Shell Creek WTP to the south. The project will include pump station and storage elements. This project is under review following development of a 2 county hydraulic water system model.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ]	Raw Water Pumping, Storage or Conveyance	[ ]	ASR Systems
[ ]	Water Treatment	[ ]	General Buildings, Structures & Security
[x]	Finished Water Storage and Pumping	[ ]	SCADA, ADAS or General IT Systems
[x]	Finished Water Pipelines	[ ]	Roads and Sitework
[ ]	Plant Power, Switchgear, Fuel & Generator Sets	[ ]	Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

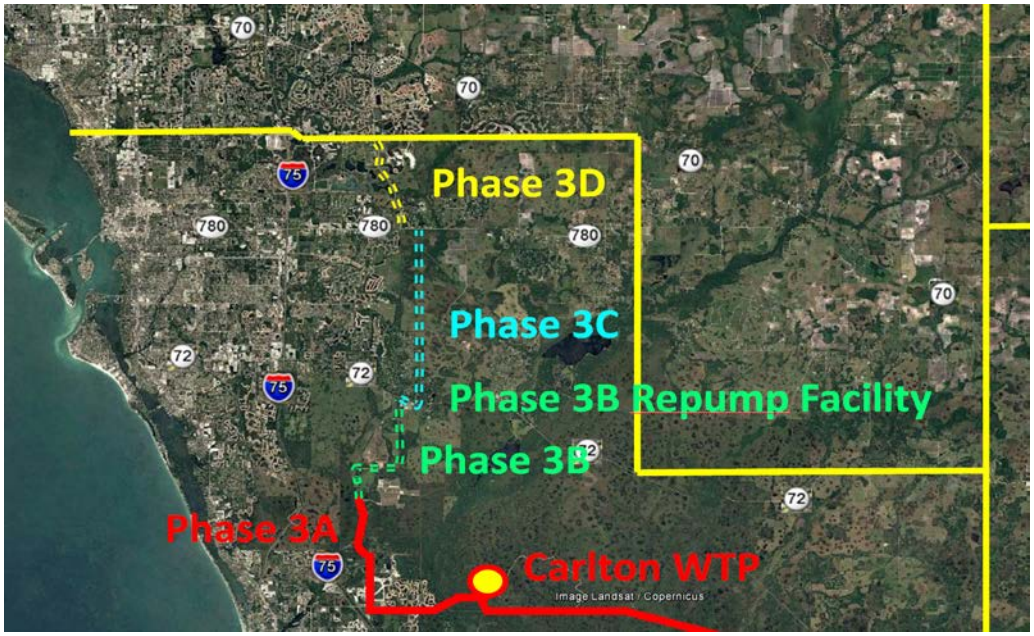
[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 36,000,000	
	Participant Cost *(inclusive of expected grant funds)*	$19,550,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	540,000
Final Design & Permitting	$	3,240,000
Land Acquisition	$	3,100,000
Construction Management	$	2,880,000
Construction	$	26,240,000
Total	**$**	**36,000,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	19,550,000
Projected SWFWMD Grant Funding	$	16,450,000
Projected State and Other Grant Funding	$	-
Total	**$**	**36,000,000**

Projected Schedule

Design Commencement	2024
Construction Start	2026
Operational Date	2028

YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Regional Integrated Loop Phase 3D [Fruitville Road to Manatee]**

Shorthand Identifier: *T7*

Project Location, Site or Route: **Between Fruitville Road and University Parkway**

Reference and Description of Need

The Phase 3D Regional Integrated Loop project is comprised of an approximately 3.6 mile long run of developer-installed 24 inch water line which commences just north of University Parkway at the Lorraine Road alignment and then runs southward along Lorraine Road south to Fruitville Road. This pipeline segment comprises the northern leg of the regional integrated loop system envisioned to facilitate water exchange with Manatee County east of I-75. The project will consist of pump station and storage elements as well as chemical trim facilities.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ]	Raw Water Pumping, Storage or Conveyance	[ ]	ASR Systems
[ ]	Water Treatment	[ ]	General Buildings, Structures & Security
[x]	Finished Water Storage and Pumping	[ ]	SCADA, ADAS or General IT Systems
[x]	Finished Water Pipelines	[ ]	Roads and Sitework
[ ]	Plant Power, Switchgear, Fuel & Generator Sets	[ ]	Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 15,383,000	
	Participant Cost *(inclusive of expected grant funds)*	$8,896,500	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	350,000
Final Design & Permitting	$	1,198,000
Land Acquisition	$	2,410,000
Construction Management	$	1,375,000
Construction	$	10,050,000
Total	**$**	**15,383,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	8,896,500
Projected SWFWMD Grant Funding	$	6,486,500
Projected State and Other Grant Funding	$	-
Total	**$**	**15,383,000**

Projected Schedule

Design Commencement	2026
Construction Start	2028
Operational Date	2030

Location Map or Concept Sketch

YEAR																		
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **New Reservoir and Expanded Treatment at PRF**

Shorthand Identifier: ***S2***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

Reliability Modeling reflects that a combination of 6 BG additional raw water storage combined with at least 200 MGD of river diversion pumping and raw water conveyance capacity and a treatment plant capacity expansion of 24 MGD will produce an additional yield of 13.5 MGD out of this system. Resultant reliability ratings would be > 99.5% for quantity and > 95% for quality *(based on total dissolved solids)* .

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[x] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[x] Water Treatment	[ ] General Buildings, Structures & Security
[x] Finished Water Storage and Pumping	[x] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[x] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

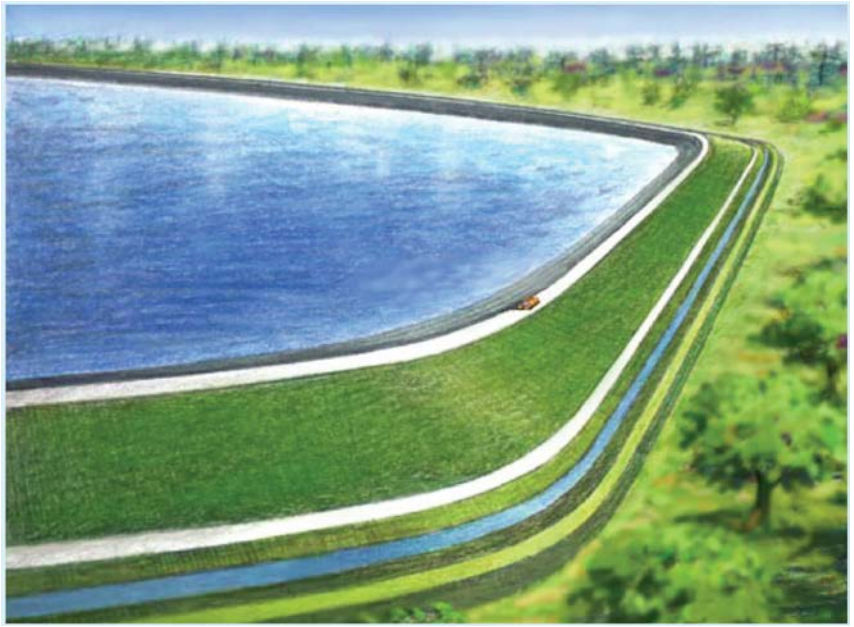
[x] Yes	If Yes, How Much?	13.50	**MGD on AADF basis**
[ ] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 200,000,000	
	Participant Cost *(inclusive of expected grant funds)*	$100,000,000	
	Effective Net Unit Capital Cost	$ 7.41	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	3,000,000
Final Design & Permitting	$	18,000,000
Land Acquisition	$	-
Construction Management	$	16,000,000
Construction	$	163,000,000
Total	**$**	**200,000,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	100,000,000
Projected SWFWMD Grant Funding	$	100,000,000
Projected State and Other Grant Funding	$	-
Total	**$**	**200,000,000**

Projected Schedule

Design Commencement	2026
Construction Start	2030
Operational Date	2032

YEAR

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Replace and Upsize 12" PVC to 24" DIP**

Shorthand Identifier: ***T8***

Project Location, Site or Route: **This Pipeline runs near the DeSoto/Charlotte County Lines and connects Two Major Transmission Mains**

Reference and Description of Need

This pipeline interconnects the 24" Kings Highway Transmission Main to the 36" Southern Regional Transmission Main. It serves as a valuable intertie which can provide a backup water feed to Lake Suzy and Charlotte County in the event of a main break on the larger lines. It also helps to equalize system flow and provides operational flexibility during major pipeline construction projects. The current pipeline was installed by GDU and does not have adequate cover depth, it will be replaced with a larger diameter, ductile iron pipe which is more deeply buried.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[x] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

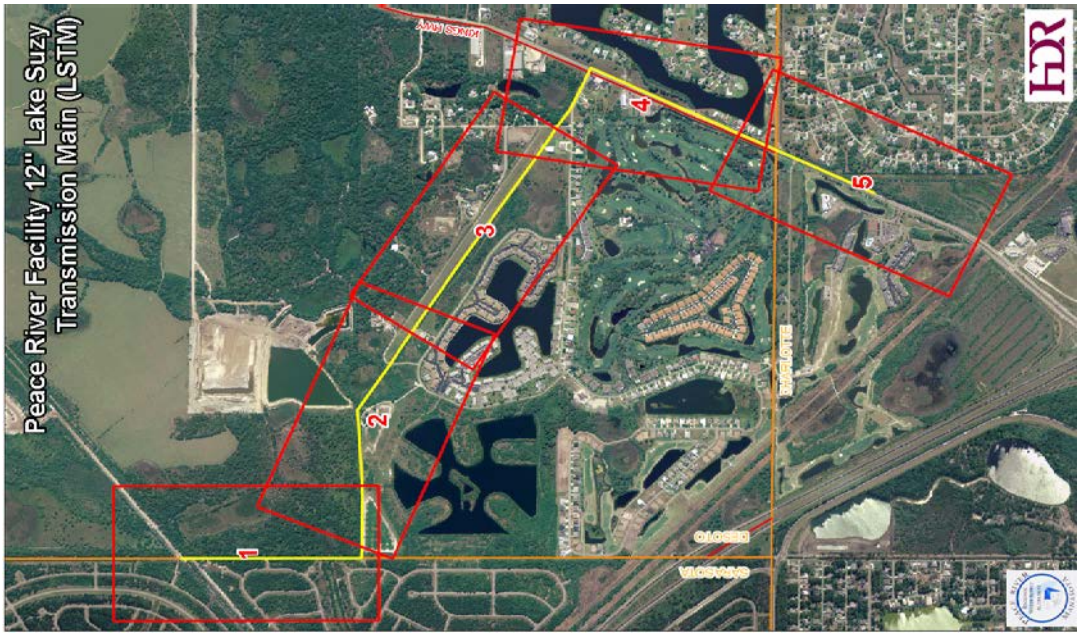
[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 2,500,000	
	Participant Cost *(inclusive of expected grant funds)*	$2,500,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	40,000
Final Design & Permitting	$	200,000
Land Acquisition	$	-
Construction Management	$	225,000
Construction	$	2,035,000
Total	**$**	**2,500,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	2,500,000
Projected SWFWMD Grant Funding	$	-
Projected State and Other Grant Funding	$	-
Total	**$**	**2,500,000**

Projected Schedule

Design Commencement	2027
Construction Start	2028
Operational Date	2028

YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **PRF Combined Clearwell and Chemical Trim Facilities**

Shorthand Identifier: *S3*

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

This project will consolidate the filter effluent from each treatment train to a central in-ground collection well where the waters will blend, chemicals can be adjusted to fine tune pH and disinfectant residual and several large VFD transfer pumps will lift the water to ground storage. This will eliminate less efficient transfer pumping from each train, improve consistency of water quality and provide a common, consolidated feed for the future should any further treatment be required. The design will be redundant so that it can operate at full capacity with either half out-of-service. This project is a companion project to other projects will generate an estimated additional safe yield of 5.5 MGD (also see project S4).

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[x] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[x] Yes	If Yes, How Much?	5.50 **MGD on AADF basis**
[ ] No	If Yes, any Requisite Companion Projects?	*S4*
	Collective Capital Cost of Associated Projects	$ 40,800,000
	Participant Cost *(inclusive of expected grant funds)*	$ 20,400,000
	Effective Net Unit Capital Cost	$ 3.71 cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	90,000
Final Design & Permitting	$	470,000
Land Acquisition	$	-
Construction Management	$	540,000
Construction	$	5,400,000
Total	**$**	**6,500,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch

Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	3,250,000
Projected SWFWMD Grant Funding	$	3,250,000
Projected State and Other Grant Funding	$	-
Total	**$**	**6,500,000**

Projected Schedule

Design Commencement	2027
Construction Start	2028
Operational Date	2029

YEAR

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title:	**Regional Integrated Loop Phase 2C [Myakkahatchee Creek WTP to Carlton WTP]**
Shorthand Identifier:	***T10***
Project Location, Site or Route:	**Extension of the Regional Loop System from Phase 2B at the Myakkahatchee Creek WTP to the Carlton WTP**

Reference and Description of Need

This pipeline project is comprised of 14 miles of pipe tentatively sized as 36" diameter running from the planned terminus of the Phase 2B regional loop pipeline at the City of North Port's Myakkahatchee WTP to the Carlton WTP. This segment completes a plant-to-plant connection that will boost regional resiliency, bi-directional water transfer capability and, along with Phase 2B, completes the southern regional loop. The project will consist of pump station and storage elements as well as chemical trim facilities.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ]	Raw Water Pumping, Storage or Conveyance	[ ]	ASR Systems
[ ]	Water Treatment	[ ]	General Buildings, Structures & Security
[x]	Finished Water Storage and Pumping	[ ]	SCADA, ADAS or General IT Systems
[x]	Finished Water Pipelines	[ ]	Roads and Sitework
[ ]	Plant Power, Switchgear, Fuel & Generator Sets	[ ]	Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 49,700,000	
	Participant Cost *(inclusive of expected grant funds)*	$24,850,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	740,000
Final Design & Permitting	$	4,560,000
Land Acquisition	$	-
Construction Management	$	3,900,000
Construction	$	40,500,000
Total	**$**	**49,700,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

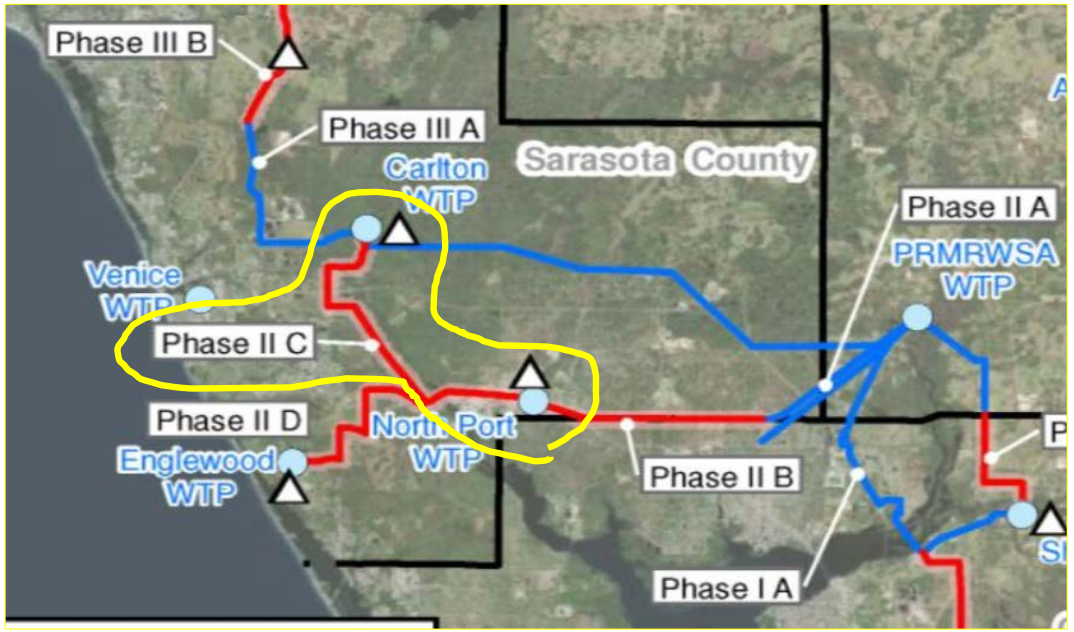
Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	24,850,000
Projected SWFWMD Grant Funding	$	24,850,000
Projected State and Other Grant Funding	$	-
Total	**$**	**49,700,000**

Projected Schedule

Design Commencement	2032
Construction Start	2034
Operational Date	2036

Location Map or Concept Sketch



YEAR																		
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **New 5 MGD (finished) RO Facility at PRF**

Shorthand Identifier: ***S4***

Project Location, Site or Route: **At the Peace River Facility** *(and associated property holdings either fee simple or via permanent easements)*

Reference and Description of Need

This alternative water supply project would add 5 MGD of yield to the regional system and also add a measure of drought resiliency to the regional water supply network. Brackish groundwater would be withdrawn from the Avon Park formation, far below the zone used for ASR storage. Reverse osmosis treatment membranes operating at an overall efficiency of 80% would be employed. Reject concentrate would be injected to a permeable boulder zone well below the Avon Park zone. This project is a companion project to other projects will generate an estimated additional safe yield of 5.5 MGD (also see project S3).

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[x] Water Treatment	[ ] General Buildings, Structures & Security
[ ] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[ ] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

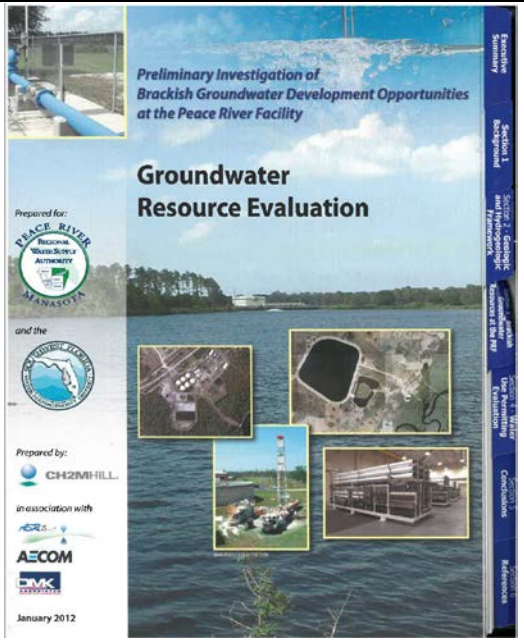
[x] Yes	If Yes, How Much?	5.50 **MGD on AADF basis**
[ ] No	If Yes, any Requisite Companion Projects?	*S3*
	Collective Capital Cost of Associated Projects	$ 40,800,000
	Participant Cost *(inclusive of expected grant funds)*	$ 20,400,000
	Effective Net Unit Capital Cost	$ 3.71 cost per gallon of yield generated

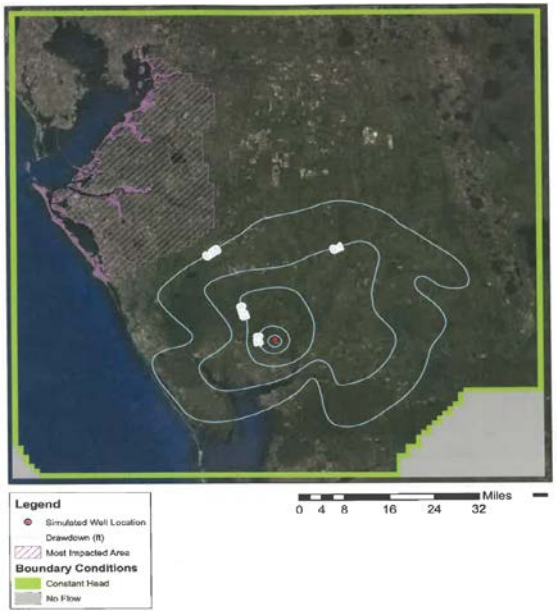
Estimated Project Cost

Preliminary Engineering *(see note)*	$	520,000
Final Design & Permitting	$	3,120,000
Land Acquisition	$	-
Construction Management	$	2,760,000
Construction	$	27,900,000
Total	**$**	**34,300,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch





Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	17,150,000
Projected SWFWMD Grant Funding	$	17,150,000
Projected State and Other Grant Funding	$	-
Total	**$**	**34,300,000**

Projected Schedule

Design Commencement	2033
Construction Start	2036
Operational Date	2037

YEAR

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: Regional Integrated Loop Phase 2D [Myakkahatchee Creek to EWD.]

Shorthand Identifier: *T11*

Project Location, Site or Route: Extension of the Regional Loop System from the Myakkahatchee Creek WTP to the Englewood Water District

Reference and Description of Need

This pipeline project is comprised of 12.5 miles of pipe tentatively sized as 24" diameter running from the planned terminus of the Phase 2B regional loop pipeline at the City of North Port's Myakkahatchee WTP to the Englewood Water District. This segment completes a plant-to-plant connection that will boost regional resiliency and sustainability with the ability to transfer water in either direction. The project will consist of pump station and storage elements as well as chemical trim facilities.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[x] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[x] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

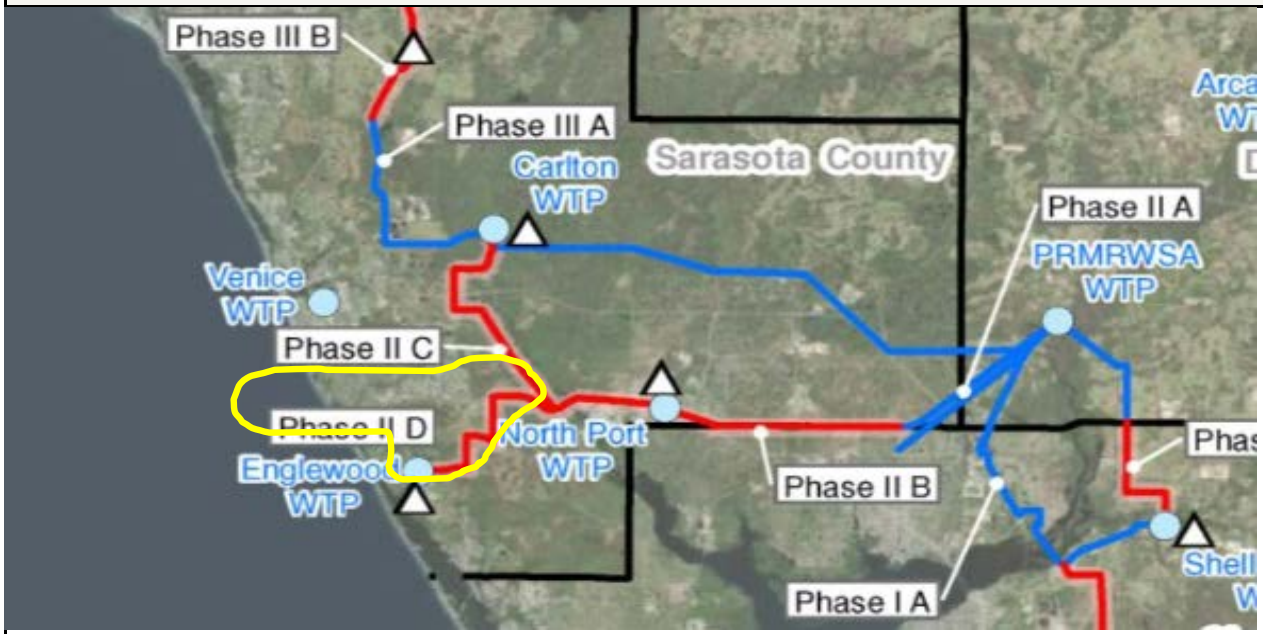
[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?		
	Collective Capital Cost of Associated Projects	$ 34,600,000	
	Participant Cost *(inclusive of expected grant funds)*	$17,300,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	520,000
Final Design & Permitting	$	3,120,000
Land Acquisition	$	-
Construction Management	$	2,760,000
Construction	$	28,200,000
Total	**$**	**34,600,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	17,300,000
Projected SWFWMD Grant Funding	$	17,300,000
Projected State and Other Grant Funding	$	-
Total	**$**	**34,600,000**

Projected Schedule

Design Commencement	2034
Construction Start	2037
Operational Date	2038

YEAR																			
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038

Capital Needs Assessment - Project Description Sheet

Project Name or Title: **Phase 4 [Segments 2 & 3]**

Shorthand Identifier: ***T12***

Project Location, Site or Route: **Along Burnt Store Road from the area near Tern Bay Golf and Country Club northeast to Tucker's Grade and I-75**

Reference and Description of Need

Phase 4D, Segments 2 & 3 Regional Integrated Loop projects comprised approximately 11 miles of 24 inch water line commencing at I75 and Tucker's Grade and extending north to the Authority's Phase 1A crossing on the south side of the Peace River in the town of Cleveland on the outskirts of Punta Gorda. This completes a plant-to-plant link between the Burnt Store WTP and the remainder of the regional loop system allowing water to flow in either direction boosting system resiliency and sustainability. This project also includes storage and pumping elements.

Type of Project - Related to Major Purpose

(check multiple boxes if applicable)

[ ] Raw Water Pumping, Storage or Conveyance	[ ] ASR Systems
[ ] Water Treatment	[ ] General Buildings, Structures & Security
[x] Finished Water Storage and Pumping	[ ] SCADA, ADAS or General IT Systems
[x] Finished Water Pipelines	[ ] Roads and Sitework
[ ] Plant Power, Switchgear, Fuel & Generator Sets	[ ] Solid Residuals Management

Does the Project Generate Additional Water Supply/Yield?

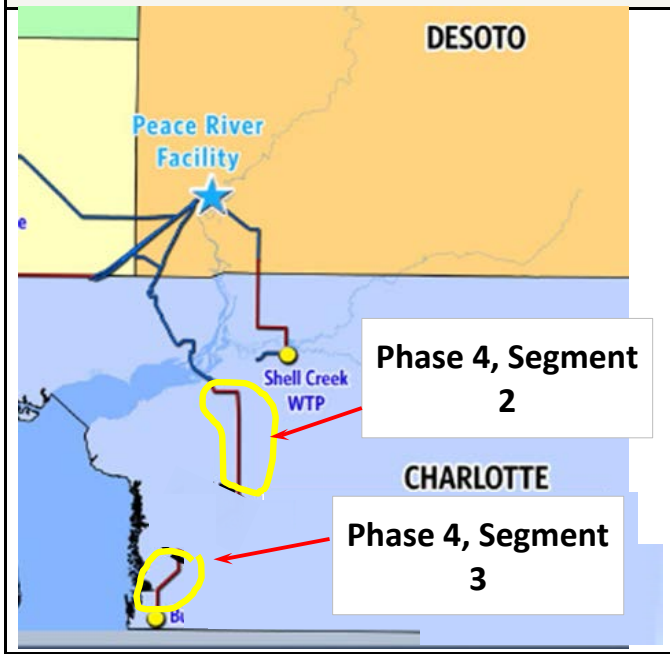
[ ] Yes	If Yes, How Much?	0.00	**MGD on AADF basis**
[x] No	If Yes, any Requisite Companion Projects?	*none*	
	Collective Capital Cost of Associated Projects	$ 22,780,000	
	Participant Cost *(inclusive of expected grant funds)*	$11,390,000	
	Effective Net Unit Capital Cost	-	cost per gallon of yield generated

Estimated Project Cost

Preliminary Engineering *(see note)*	$	340,000
Final Design & Permitting	$	2,040,000
Land Acquisition	$	-
Construction Management	$	1,800,000
Construction	$	18,600,000
Total	**$**	**22,780,000**

Note: Preliminary Engineering may include Conceptual Design, Feasibility Studies, Pilot Testing and other necessary work to lay a foundation for a large CIP project.

Location Map or Concept Sketch



Projected Sources of Funding

Projected Authority (Cooperator) Funding or TBD	$	11,390,000
Projected SWFWMD Grant Funding	$	11,390,000
Projected State and Other Grant Funding	$	-
Total	**$**	**22,780,000**

Projected Schedule

Design Commencement	2034
Construction Start	2037
Operational Date	2038

YEAR

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038