

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY**  
**BOARD OF DIRECTORS MEETING**  
*April 3, 2024*

**REGULAR AGENDA**  
**ITEM 4**

**Draft 5-Year Capital Improvements Plan & 20-Year Capital Needs Assessment**

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**Presenter -** Mike Knowles, Senior Manager, Engineering & Projects

**Recommended Action -** **Status Report.** This item is presented for information and discussion.

The draft 5-Year CIP and 20-Year CNA document summarizes the number, type, and timing of water supply, regional transmission, and other capital projects planned over the 20 year planning period pursuant to the Integrated Regional Water Supply Plan 2020 Update. Capital planning drives the planning, design, and construction of significant infrastructure projects forecasted to serve the region’s needs. These projections must be coordinated with financial planning, selection of engineering consultants, and acquisition of internal resources to complete these projects by the time they are needed. There are two schedule horizons in the Authority’s capital planning efforts: the 5-Year Capital Improvements Plan (CIP), which includes projects that are relatively certain and well-defined, and the 20-Year Capital Needs Assessment (CNA), which includes the 5-Year CIP and also looks out beyond that period to years 6 – 20 years where projects are less certain and defined.

The 5-Year CIP beginning in FY 2025 through FY 2029 currently includes the following:

Regional Transmission Projects	\$ 73,279,606	11.8%
Water Supply Projects	\$ 502,164,665	81.0%
Other Projects	\$ 44,272,500	7.1%
<b>Total</b>	<b>\$ 619,716,771</b>	<b>100%</b>

And the 20-Year CNA, beginning in FY 2025 through FY 2044, includes the following:

Regional Transmission Projects	\$ 341,442,166	28.6%
Water Supply Projects	\$ 809,238,081	67.7%
Other Projects	\$ 44,272,500	3.7%
<b>Total</b>	<b>\$1,194,952,747</b>	<b>100%</b>

Capital planning has also identified \$126 million in offsetting cooperative grant funding opportunities for projects within the 5-year CIP projects based upon past generous participation by the Southwest Florida Water Management District.

**Budget Action:** None - Guidance received will be incorporated into the Final FY 2025 budget.

**Attachments:**

Tab A Presentation Materials

Tab B Draft 5-Year CIP and 20-Year CNA

**TAB A**  
**Presentation Materials**



# REGULAR ITEM 4 DRAFT 5-YEAR CAPITAL IMPROVEMENTS PLAN AND 20-YEAR CAPITAL NEEDS ASSESSMENT

April 3, 2024



- 01 Purpose, Development and Application**
- 02 Overview of 5-Year CIP and 20-Year CNA**
- 03 Highlight of Key 5-Year CIP Projects**
- 04 Next Steps and Schedule**



## 01 Purpose, Development and Application

## 02 Overview of 5-Year CIP and 20-Year CNA

## 03 Highlight of Key 5-Year CIP Projects

## 04 Next Steps and Schedule

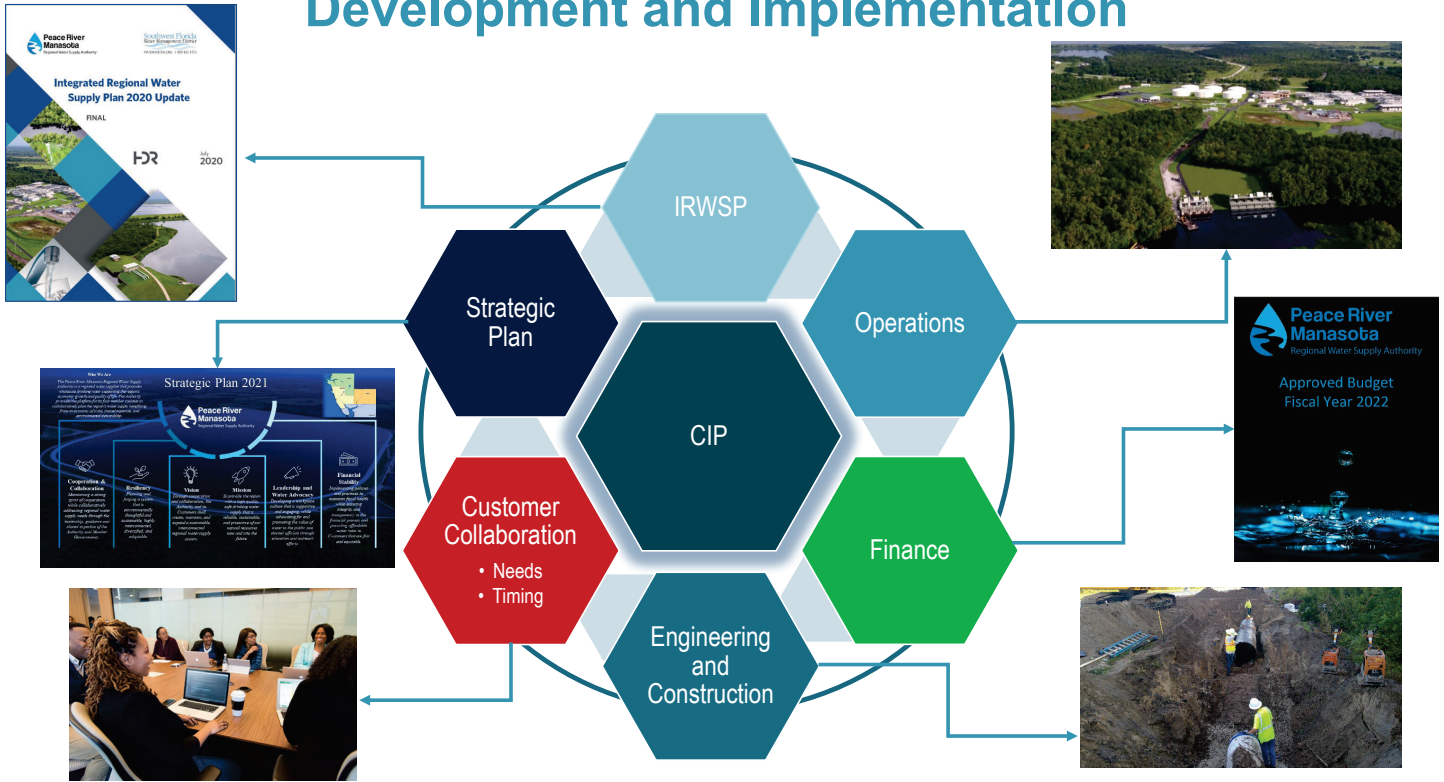
## PURPOSE OF A CAPITAL IMPROVEMENTS PLAN

The plan provides a working blueprint for sustaining and improving the Authority's infrastructure. It coordinates strategic planning, financial capacity, and physical development of projects. The CIP/CNA stands at the epicenter of our Planning, Operations, Engineering, and Finance departments.





# Development and Implementation



- 01 Purpose, Development and Application
- 02 Overview of 5-Year CIP and 20-Year CNA**
- 03 Highlight of Key 5-Year CIP Projects
- 04 Next Steps and Schedule

# Overview – By The Numbers

15 Projects Identified in next 20 years



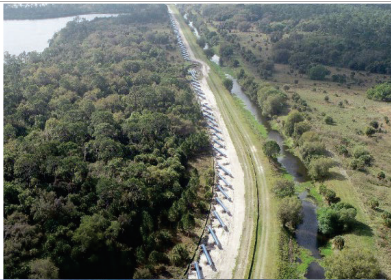
- 8 Regional Water Transmission Projects
  - 2 in 5-Year CIP



- 4 Water Supply Projects
  - 2 in 5-Year CIP



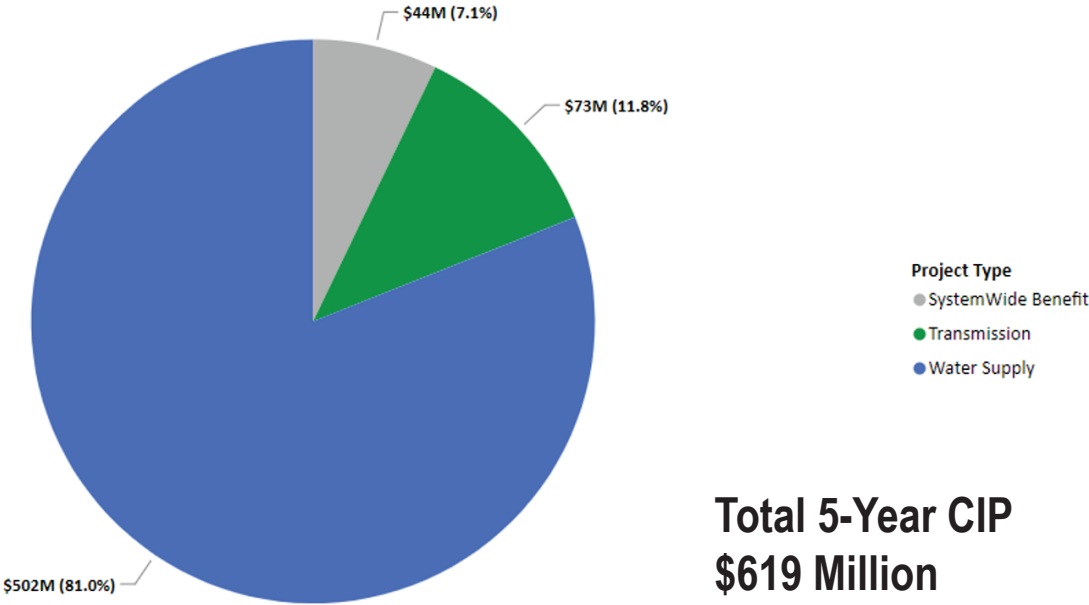
- 3 System-Wide Benefit Projects
  - 3 in 5-Year CIP



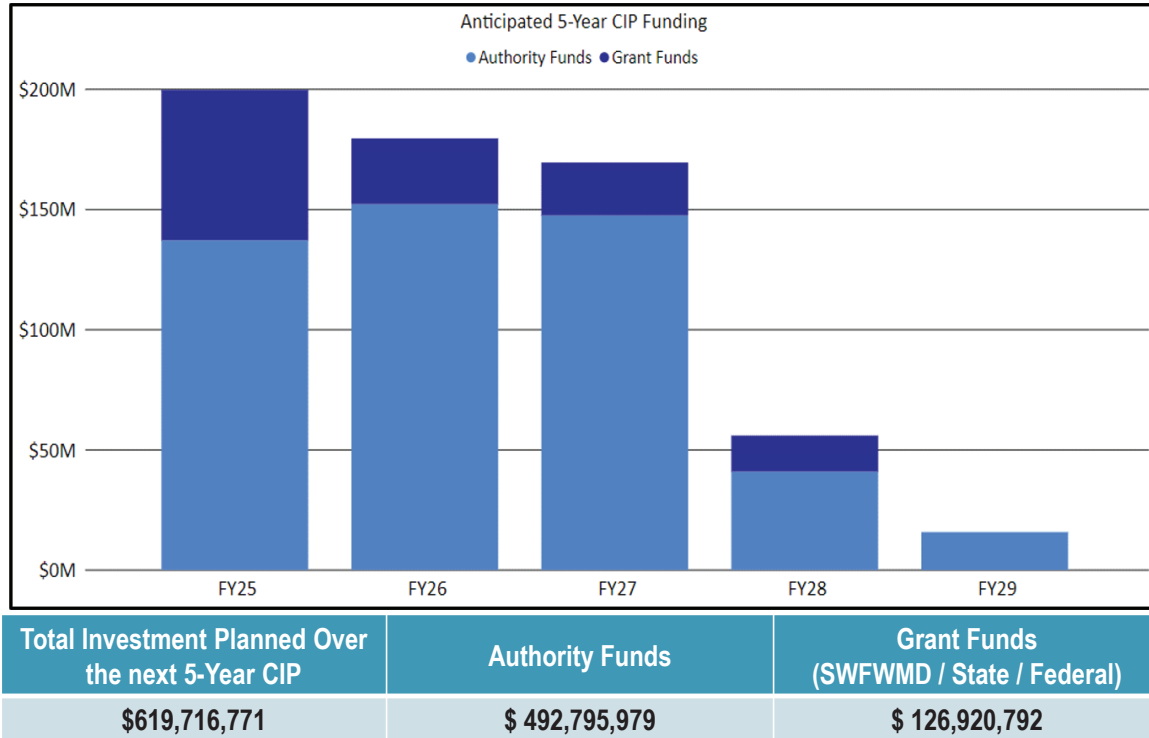
Costs and timing of the Capital Projects are coordinated with Member’s Professional Staff and the Southwest Florida Water Management District.

## Proposed Capital Improvements Plan 2025 - 2029

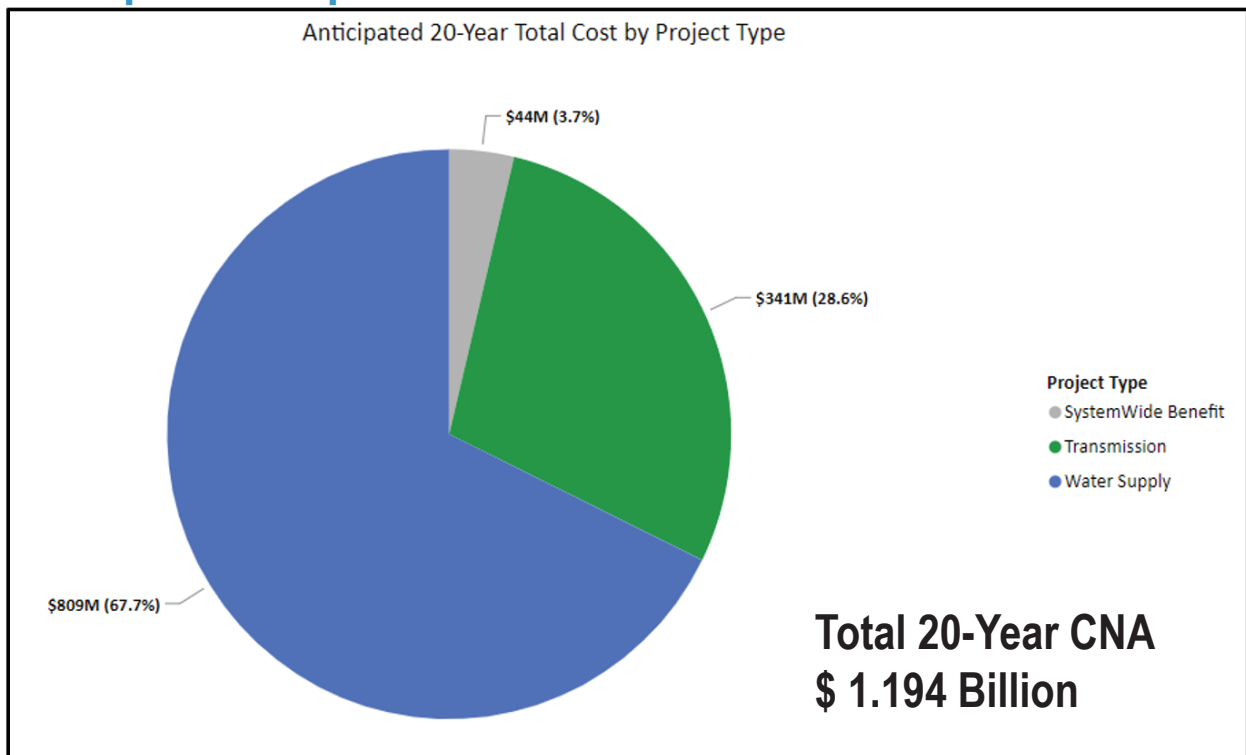
Anticipated 5-Year Total Cost by Project Type



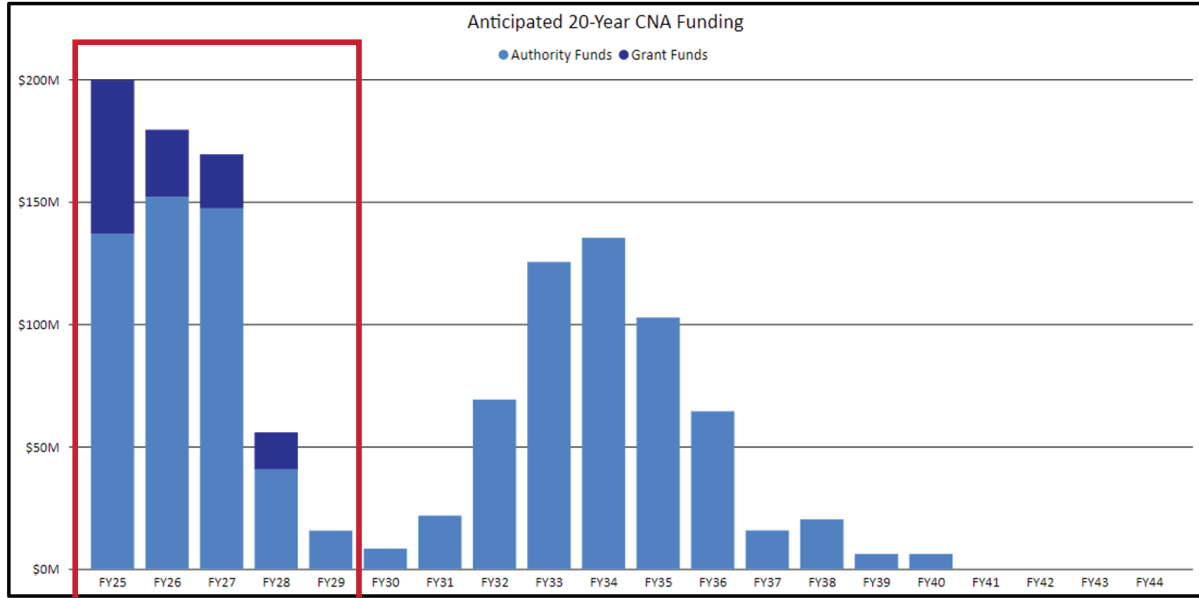
## Proposed Capital Improvements Plan 2025 - 2029



## Proposed Capital Needs Assessment 2025 - 2044



# Proposed Capital Needs Assessment 2025 - 2044



Total Investment Planned Over the next 20-Year CNA	Authority Funds	Grant Funds (SWFWMD / State / Federal)
\$1,194,952,746	\$1,068,031,954	\$126,920,792



- 01 Purpose, Development and Application
- 02 Overview of 5-Year CIP and 20-Year CNA
- 03 Highlight of Key 5-Year CIP Projects**
- 04 Next Steps and Schedule





## Water Supply Projects

### Surface Water Supply Expansion Project

- **PR3** – New 9 Billion Gallon Reservoir; Intake and Pump Station on the Peace River; Reservoir Pump Station and Conveyance System.
- **PRF Expansion** – Plant Capacity increase to support 18 MGD AAD Demands in conjunction with PR3



## 2 Transmission System Projects

**Phase 2B Pipeline**  
 13 miles of 42" diameter transmission main to serve growing demands in western Charlotte County.  
*Construction Started March '24*



**Phase 3C Pipeline**  
 8 miles of 42" diameter transmission main to serve growing demands in northeast Sarasota County.  
*Construction Started October '23*





## 2 System Wide Benefit Projects

**Water Resources/Construction Department Building** – Construction of a new 5,000 SF Administration/Laboratory building to replace the existing 60-year-old Water Resources Building.

**Partially Treated Surface Water ASR** – Design, permitting and construction of facilities to partially treat raw water from the reservoir system and inject it below ground in the ASR system.



- 01 Purpose, Development and Application
- 02 Overview of 5-Year CIP and 20-Year CNA
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- 04 Next Steps and Schedule**



## Next Steps and Schedule



Receive additional comments from Board/Professional Staff

Professional Staff were provided a copy of the Draft 5-Year CIP and 20-Year CNA.



Incorporate comments/edits from Professional Staff and Board for final review.

Any additional comments/edits received will be incorporated into the document by the next Professional Staff meeting held on May 1<sup>st</sup>, 2024.



Present Final 5-CIP and 20-Year CNA to Board for approval on June 5<sup>th</sup>, 2024, meeting

Board-approved 5-Year CIP and 20-Year CNA will be incorporated into the final FY2025 Budget.



**Board Input and Questions**

**TAB B**  
**Draft 5-Year Capital Improvements Plan And 20-Year Capital Needs Assessment**





# Peace River Manasota

Regional Water Supply Authority

## **5-Year Capital Improvement Plan and 20-Year Capital Needs Assessment**

**Fiscal Period: 2025 – 2044**

*“Through cooperation and collaboration, the Authority and its Customers shall create, maintain, and expand a sustainable, interconnected, regional water supply system”*

DRAFT: April 3, 2024

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# Overview

The Peace River Manasota Regional Water Supply Authority's 5-Year Capital Improvements Plan (CIP) and 20-Year Capital Needs Assessment (CNA) reflect comprehensive plans of proposed capital projects to meet the region's water supply needs. These plans are primarily a planning vehicle which is adjusted annually subject to the shifting needs and priorities of the region and also as projects grow closer to implementation and so become more refined in both scope and cost. The CIP and CNA documents reflect the collective input of many stakeholders and is useful to those parties in understanding and communicating both funding obligations as well as grant funding opportunities associated with future projects. The CIP and CNA are developed with oversight of the Water Supply Authority's Board of Directors and are consistent with Board Policy, our Vision, our Mission Statement and the Strategic Plan. Although there is no policy establishing a minimum value for a project to be considered a CIP/CNA project, they typically reflect projects expected to cost more than \$1 million. The Authority is continually in the process of updating and expanding its Water Supply Facilities to serve increasing demand, capacity requirements, and new regulatory requirements and improve and upgrade existing infrastructure, which will provide service to the members increasing demand.

Capital Improvement Projects are categorized into three primary categories: (1) New Water Supply Projects, (2) Regional Transmission System Projects, and (3) System Wide Benefit Projects:

## **New Water Supply Projects**

Includes projects that provide expansion of the Authority's Water Supply Facilities and appurtenances or associated installations owned, leased or otherwise controlled by the Authority and used for the provision of potable water supply. This category also includes any water conveyance projects needed for water supply. These projects are funded in accordance with the Master Water Supply Contract (MWSC). The 5-year CIP plan is anticipated to add an additional 18 MGD of average day safe yield.

## **Regional Transmission System Projects**

Includes transmission pipelines and, where needed, remote storage and booster pumping facilities to improve or extend delivery of water within the regional system. These projects generally interconnect members/customers based on need and bolster plant-to-plant connections to facilitate rotational supply capability for droughts and other emergencies. Also includes projects whereby elements of the regional transmission system must be relocated. The 5-year CIP plan is anticipated to add an additional 23 miles of transmission pipelines and the 20-year CNA is anticipated to add an additional 45 miles of transmission pipelines.

## **System Wide Benefit Projects**

Is defined as any capital project of shared benefit to Authority Members and Customers. System Wide Benefit CIP Projects exclude Renewal and Replacement and New Water Supply Projects and funding will be established on project-specific basis as approved by the Board. System Wide Benefit Projects will generally exceed \$500,000 but fall below \$5,000,000 in anticipated cost for implementation and may include the following general types of projects:

- New buildings, or expansion of an existing building, at Authority water supply facilities;
- Projects which improve the performance, enhance treatment capability or improve water quality in the Authority's water supply system;
- Projects which bolster resiliency and reliability of the Authority's water supply system;
- Projects which promote sustainability, safety and system security of the regional water system;
- Projects involving major facility control/communications system upgrades; and
- Any other project so designated by the Authority Board of Directors.



# Peace River Manasota

Regional Water Supply Authority

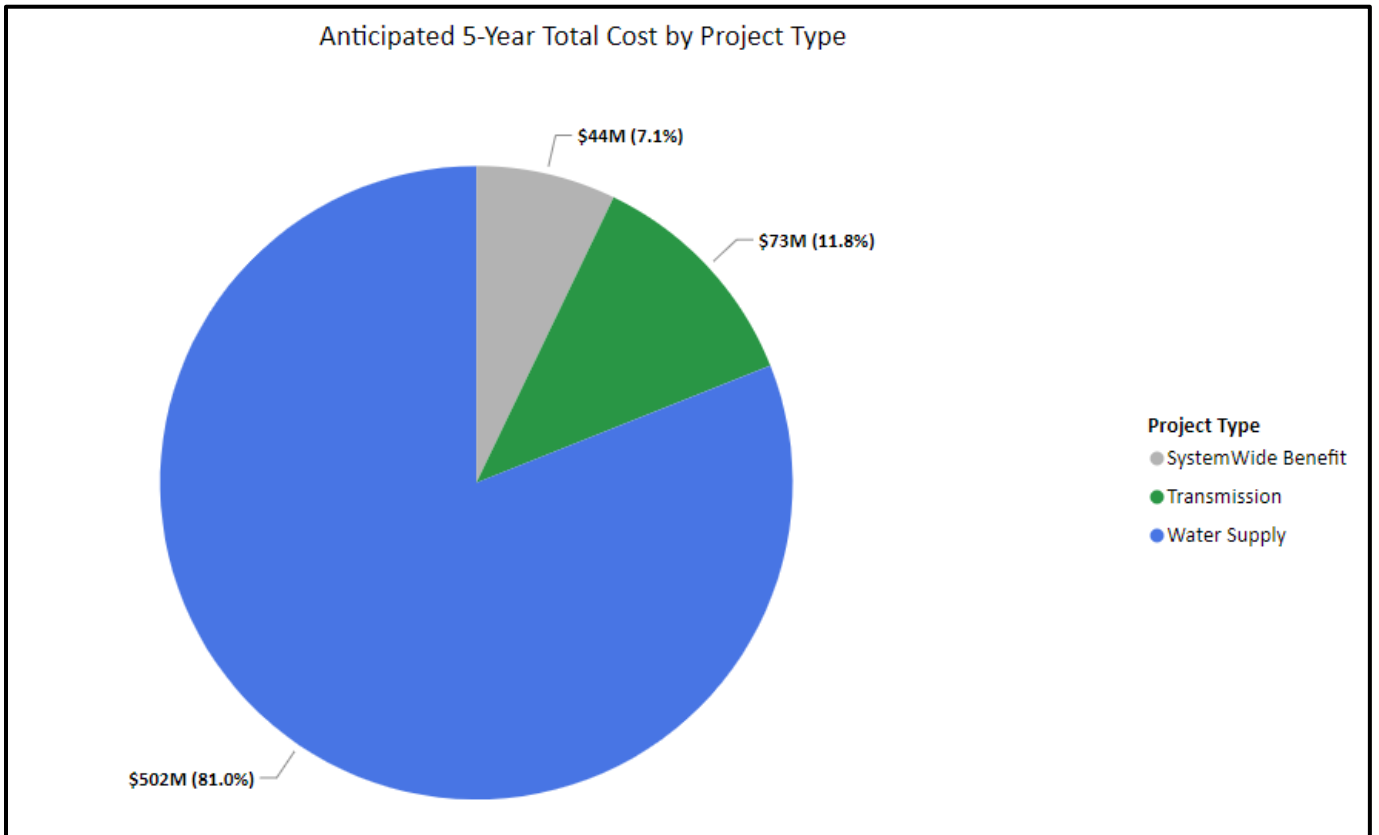
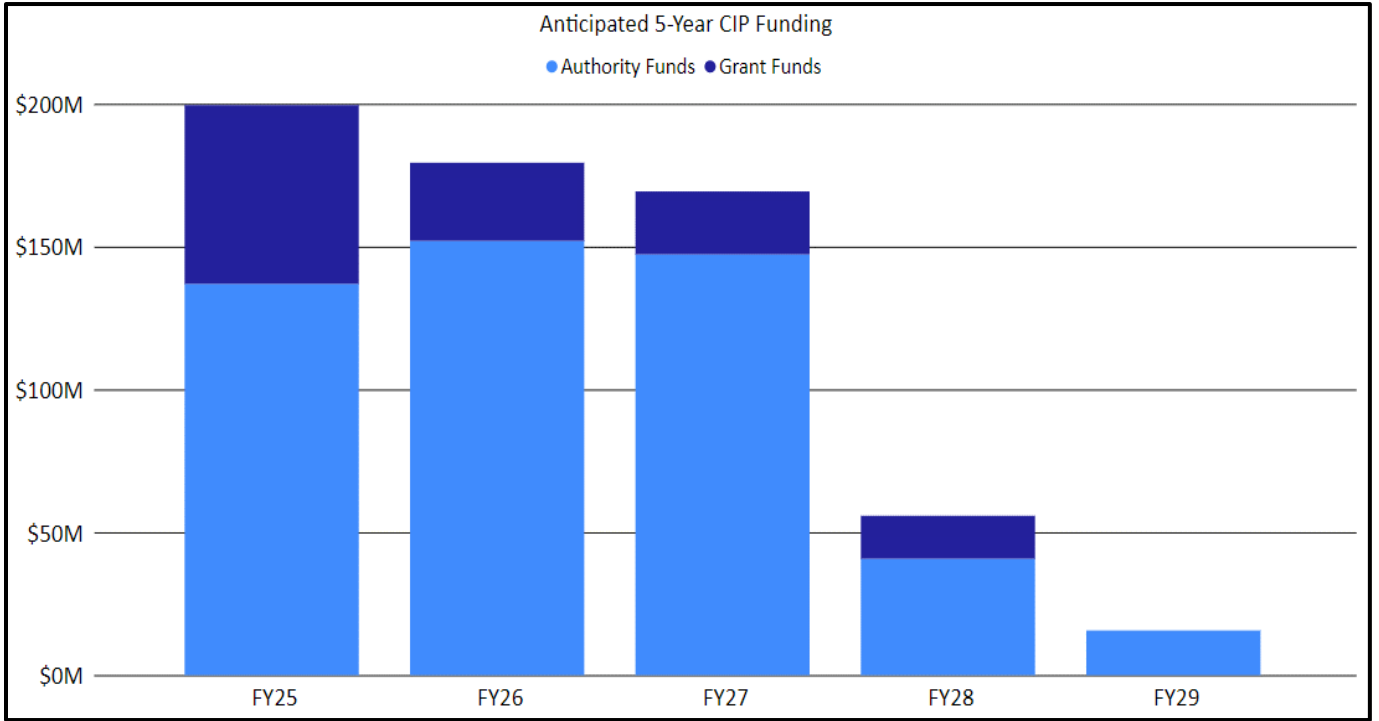
## **5-Year Capital Improvement Plan**

**Fiscal Period: 2025 – 2029**

*“Through cooperation and collaboration, the Authority and its Customers shall create, maintain, and expand a sustainable, interconnected, regional water supply system”*



# 5-Year Capital Improvement Plan Summary





## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

### Regional Integrated Loop - Phase 2B

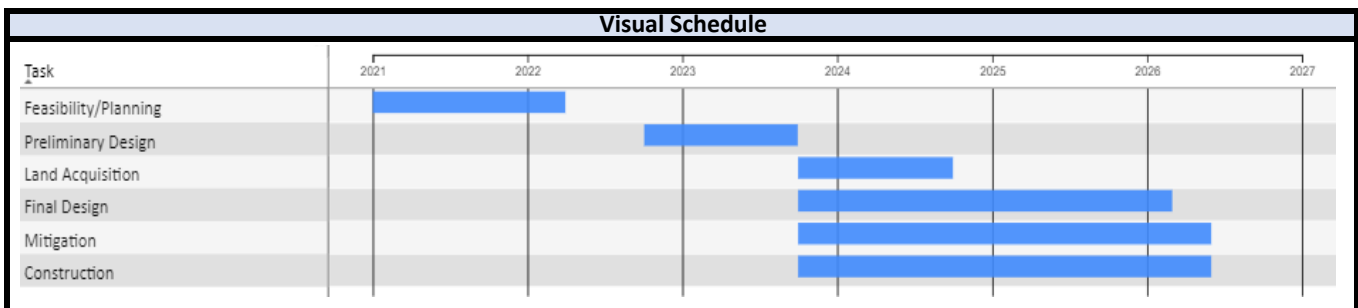
Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The project is comprised of 13 miles of 42" diameter pipeline running from the current terminus of the Phase 2A pipeline westward, crossing the Myakka River and terminating at the Charlotte County Gulf Cove Water Booster Pump Station. This segment of the regional integrated loop system will boost regional resiliency, bi-directional water transfer capability and lays the groundwork for the southern regional loop with future pipeline projects. This project is currently being delivered as a progressive design build project with a scheduled substantial completion date of March 1, 2026.</p>

#### Project Location or Concept Sketch

#### Project Schedule & Costs

Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Jan-21	Mar-22	\$ 200,000	\$ 100,000	\$ 100,000	\$ -
Preliminary Design	Oct-22	Sep-23	\$ 5,100,000	\$ 2,850,000	\$ 750,000	\$ 1,500,000
Land Acquisition	Oct-23	Sep-24	\$ 300,000	\$ 300,000	\$ -	\$ -
Final Design	Oct-23	Mar-26	\$ -	\$ -	\$ -	\$ -
Mitigation	Oct-23	Jun-26	\$ 200,000	\$ 200,000	\$ -	\$ -
Construction	Oct-23	Jun-26	\$ 82,595,000	\$ 47,595,000	\$ 35,000,000	\$ -
<b>Total Costs</b>			<b>\$ 88,395,000</b>	<b>\$ 51,045,000</b>	<b>\$ 35,850,000</b>	<b>\$ 1,500,000</b>

*Construction Costs include Design Build Team Final Design and Construction Phase Services*







## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

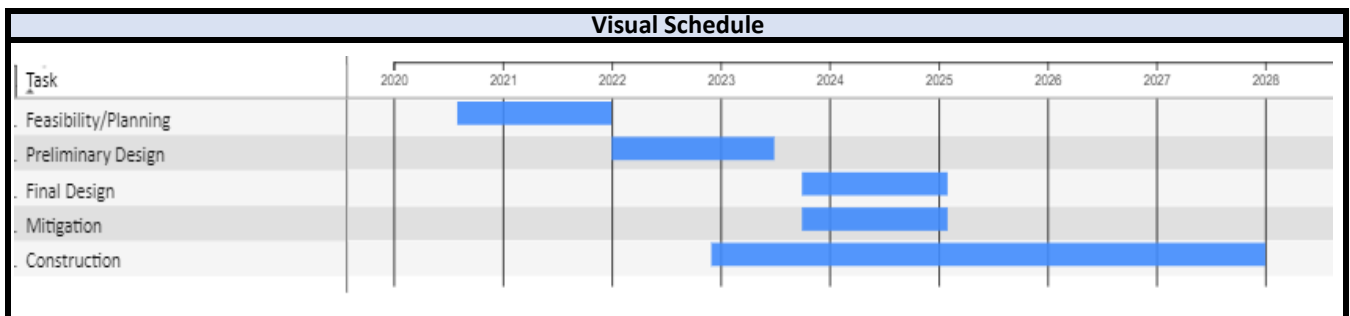
### Reservoir 3

Project Type	Project Description
<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	Reliability Modeling reflects that 9 BG additional raw water storage combined with recently permitted 258 MGD of river diversion pumping, increased raw water conveyance capacity and treatment plant capacity expansion can provide an additional annual average day safe yield of 18 MGD out of this system. The new river pumping facility, raw water pipelines, footprint, and location of the new reservoir and the manner in which it will connect to the existing storage reservoirs is being considered in the engineering phase that is currently underway.

Project Location or Concept Sketch	
	

Project Schedule & Costs						
Project Stage	Start	End	Estimated Cost	Sources of Funding		
	Date	Date		Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Aug-20	Dec-21	\$ 1,500,000	\$ 875,000	\$ 625,000	\$ -
Preliminary Design	Jan-22	Jun-23	\$ 7,250,000	-	-	\$ 7,250,000
Land Acquisition	Oct-23	Dec-24	\$ 500,000	\$ 500,000	-	-
Final Design	Oct-23	Jan-25	\$ 9,500,000	\$ 1,000,000	\$ 1,000,000	\$ 7,500,000
Mitigation	Oct-23	Jan-27	\$ 15,700,000	\$ 15,700,000	-	-
Construction	Oct-23	Jan-28	\$ 358,327,000	\$ 246,252,000	\$ 114,075,000	\$ 10,000,000
<b>Total Costs</b>			<b>\$ 392,777,000</b>	<b>\$ 264,327,000</b>	<b>\$ 115,700,000</b>	<b>\$ 24,750,000</b>

Construction Costs include Consultant Engineers oversight







# Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

## Regional Integrated Loop - Phase 3C

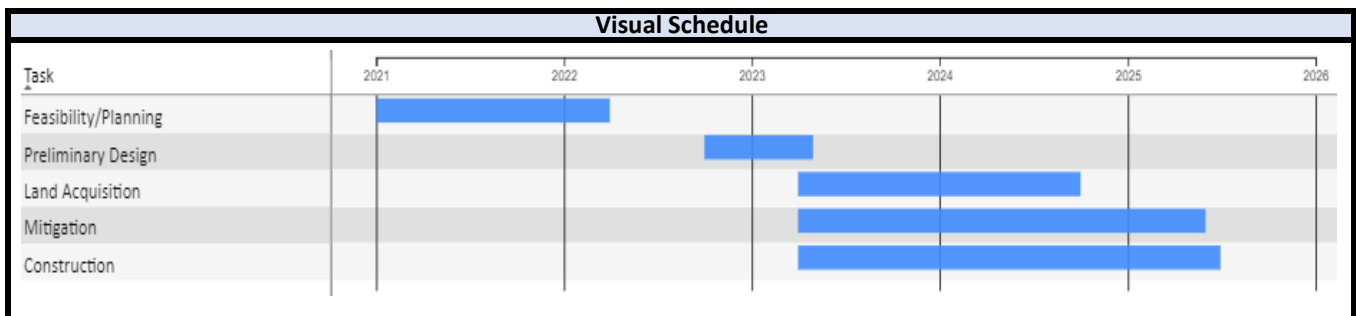
*Shorthand Identifier: T6*

Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The Phase 3C Regional Integrated Loop project will consist of approximately 8 miles of 42" diameter water main installed between Clark Rd (SR72) northward to the vicinity of Fruitville Rd and Lorraine Rd in northern Sarasota County and pumping/storage improvements at the Carlton facility. This project will extend the regional transmission main system northward towards Manatee County and serve the growing water needs in northeastern Sarasota County. This project is scheduled to be completed via Progressive Design Build delivery method.</p>

### Project Location or Concept Sketch

Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Jan-21	Mar-22	\$ 300,000	\$ 150,000	\$ 150,000	\$ -
Preliminary Design	Oct-22	Apr-23	\$ 4,694,450	\$ 3,444,450	\$ 1,250,000	\$ -
Land Acquisition	Apr-23	Oct-24	\$ 2,100,000	\$ 2,100,000	\$ -	\$ -
Final Design			\$ -	\$ -	\$ -	\$ -
Mitigation	Apr-23	Jun-25	\$ 50,000	\$ 100,000	\$ -	\$ -
Construction	Apr-23	Jun-25	\$ 57,005,550	\$ 30,455,550	\$ 24,050,000	\$ 2,500,000
<b>Total Costs</b>			<b>\$ 64,150,000</b>	<b>\$ 36,250,000</b>	<b>\$ 25,450,000</b>	<b>\$ 2,500,000</b>

*Construction Costs include Design Build Team Final Design and Construction Phase Services*









## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

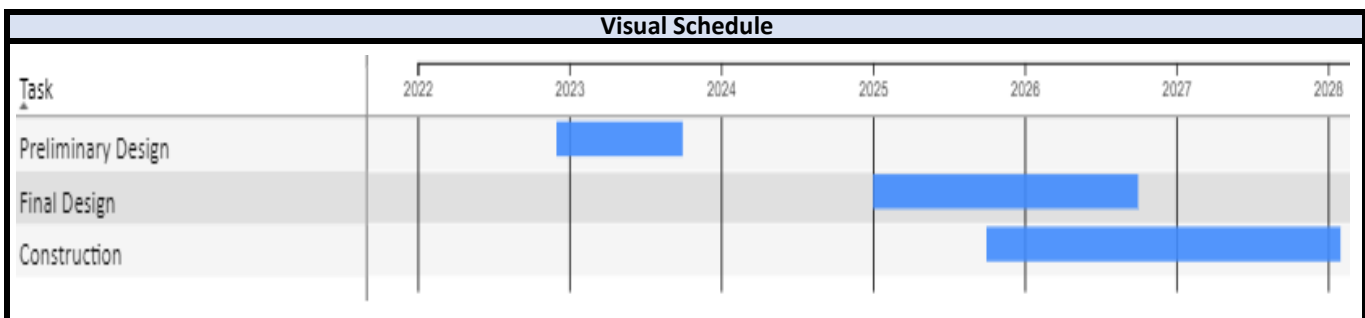
### PRF Expansion

Project Type	Project Description
<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The PRF Expansion reflects options to modify the Peace River Facility to increase the permitted capacity of existing treatment units at the facility or to construct new treatment units, which along with the new reservoir, will generate an additional 15 - 18 MGD AADF of annual safe yield. This work may include uprating all plants and adding additional coagulation and sedimentation capacity and constructing new filter basins on existing units or the construction of new enhanced coagulation units.</p>

Project Location or Concept Sketch	
	

Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Dec-22	Oct-23	\$ 1,884,335	\$ 1,884,335	\$ -	\$ -
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	Jan-25	Oct-26	\$ 10,000,000	\$ 10,000,000	\$ -	\$ -
Mitigation			\$ -	\$ -	\$ -	\$ -
Construction	Oct-25	Jan-28	\$ 151,237,665	\$ 151,237,665	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 163,122,000</b>	<b>\$ 163,122,000</b>	<b>\$ -</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight







## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

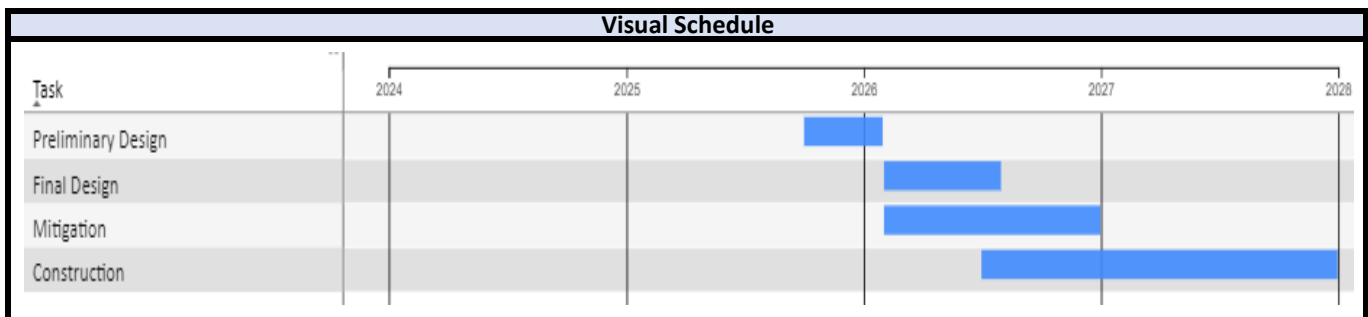
### RV Griffin Solar Array

Project Type	Project Description
<input type="checkbox"/> Water Supply <input type="checkbox"/> Transmission <input checked="" type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The RV Griffin Reserve Solar Array will allow the Authority to take an initial step towards a sustainable energy practice utilizing area at the RV Griffin Reserve for the solar panels.</p> <p>The Authority completed a 2023 update to the Peace River Renewable Energy Study that included a conceptual solar design which was presented to the Authority Board in June 2023.</p>

Project Location or Concept Sketch	
	

Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Oct-25	Jan-26	\$ 200,000	\$ 200,000	\$ -	\$ -
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	Feb-26	Jul-26	\$ 300,000	\$ 300,000	\$ -	\$ -
Mitigation	Feb-26	Dec-26	\$ 50,000	\$ 50,000	\$ -	\$ -
Construction	Jul-26	Dec-27	\$ 3,622,500	\$ 3,622,500	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 4,172,500</b>	<b>\$ 4,172,500</b>	<b>\$ -</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight

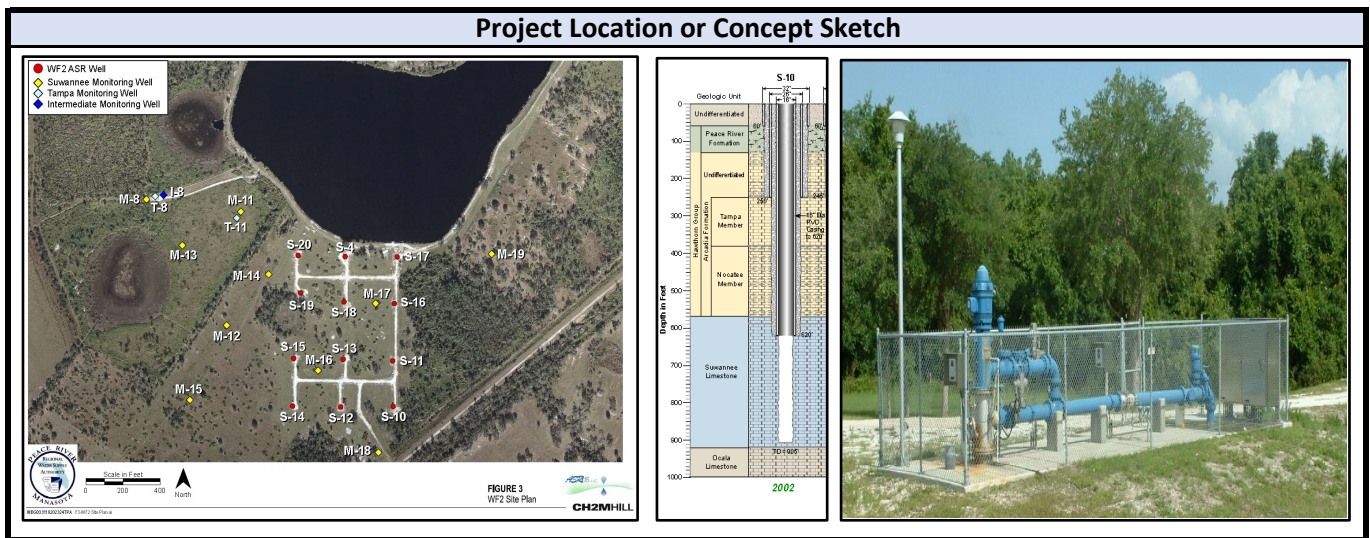




# Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

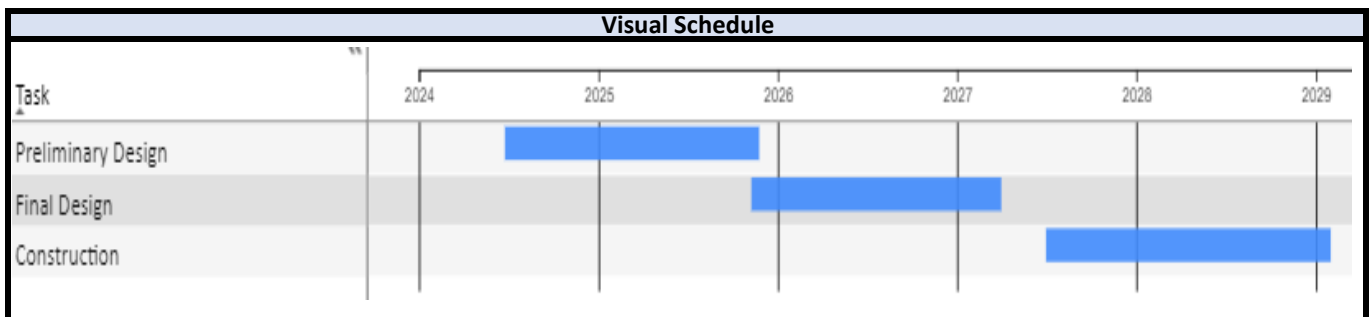
## Partially Treated Surface Water ASR

Project Type	Project Description
<input type="checkbox"/> Water Supply <input type="checkbox"/> Transmission <input checked="" type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The partially treated surface 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.</p>



Project Schedule & Costs						
Project Stage	Start	End	Estimated Cost	Sources of Funding		
	Date	Date		Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Jun-24	Nov-25	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	Nov-25	Apr-27	\$ 2,500,000	\$ 2,500,000	\$ -	\$ -
Mitigation			\$ -	\$ -	\$ -	\$ -
Construction	Jul-27	Jan-29	\$ 32,600,000	\$ 32,600,000	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 36,100,000</b>	<b>\$ 35,100,000</b>	<b>\$ -</b>	<b>\$ 1,000,000</b>

Construction Costs include Consultant Engineers oversight



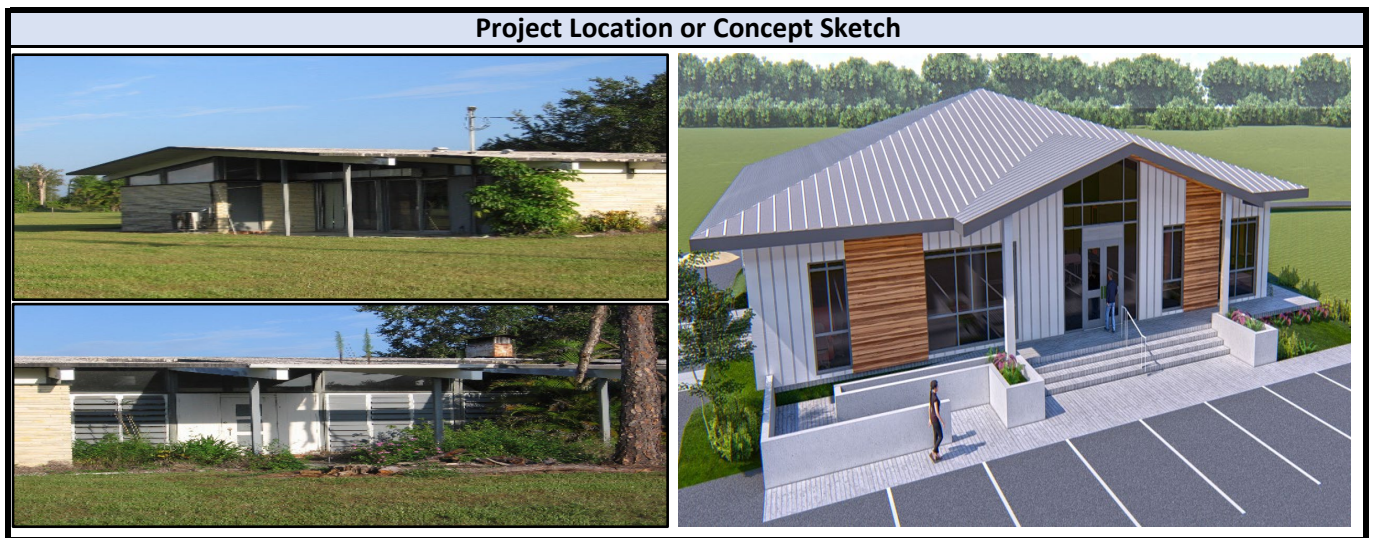




## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

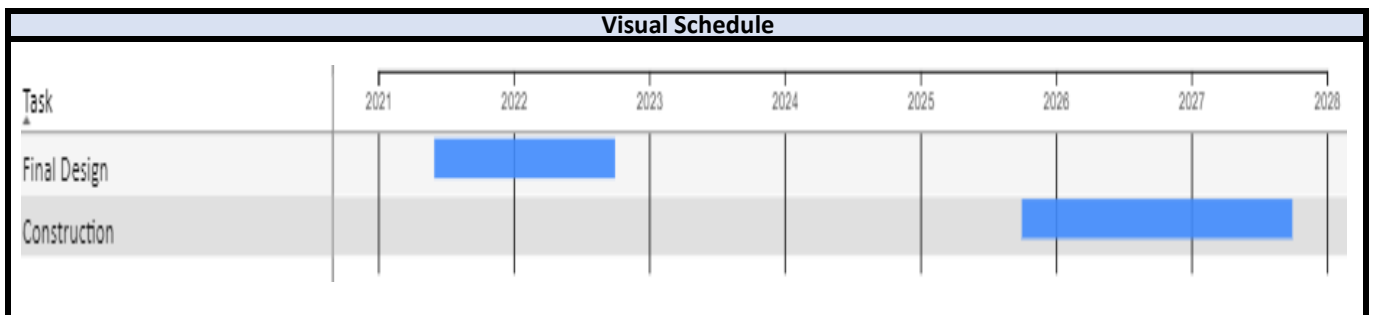
### Water Resources/Construction Dept. Building

Project Type	Project Description
<input type="checkbox"/> Water Supply <input type="checkbox"/> Transmission <input checked="" type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The Water Resources/Construction departments have been housed in a converted ranch-style caretaker/hunting lodge built in the 1960's by a developer. The building, now 60 years old, needs major refurbishment. Considering extensive building code issues involved with updating this building, it is more prudent and cost effective to construct a new building instead. The new office building is planned to be approximately 5,550 ft<sup>2</sup> and located adjacent to the existing ranch house office.</p>



Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design			\$ -	\$ -	\$ -	\$ -
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	Jun-21	Oct-22	\$ 172,500	\$ 172,500	\$ -	\$ -
Mitigation			\$ -	\$ -	\$ -	\$ -
Construction	Oct-25	Sep-27	\$ 4,500,000	\$ 4,500,000	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 4,672,500</b>	<b>\$ 4,672,500</b>	<b>\$ -</b>	<b>\$ -</b>

*Construction Costs include Consultant Engineers oversight*





# Peace River Manasota

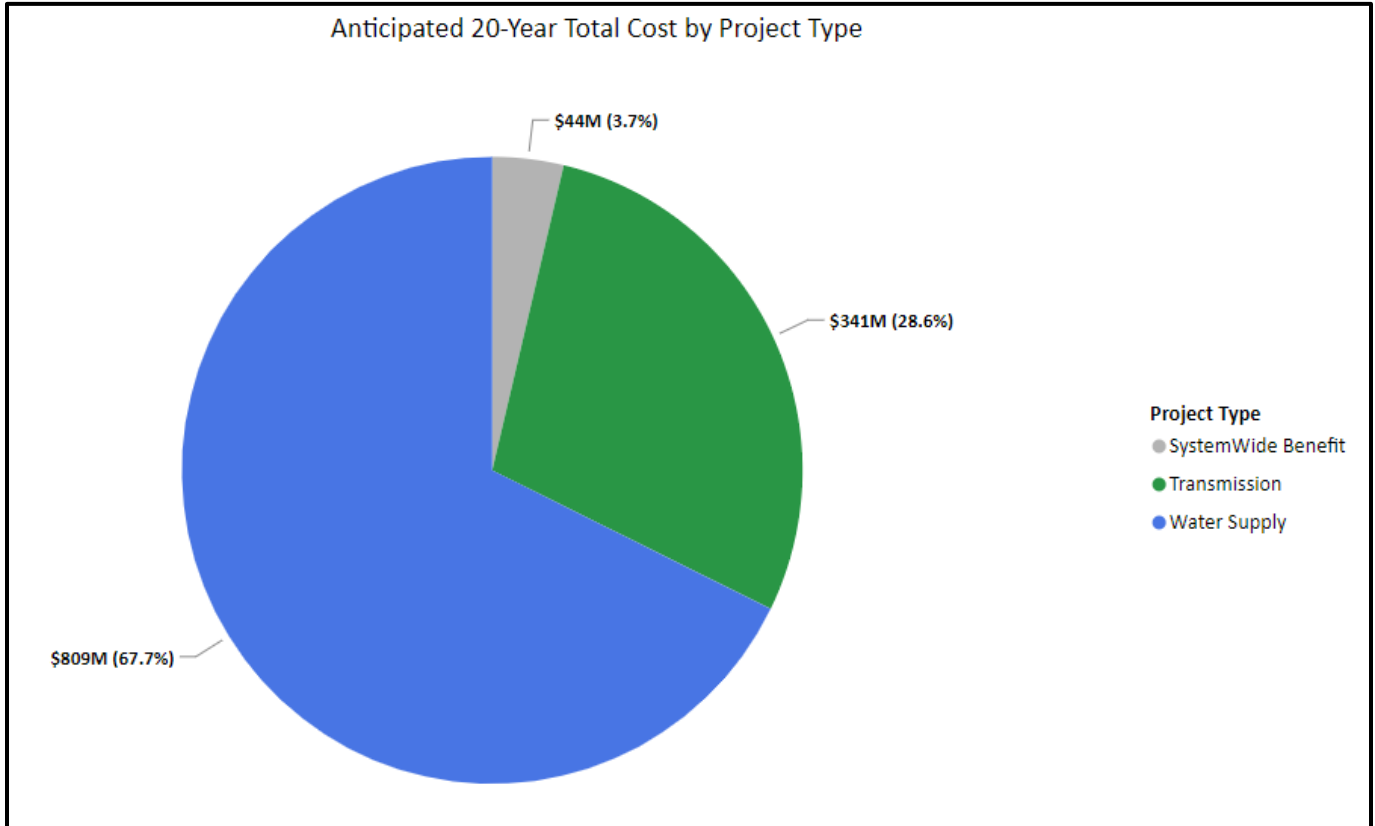
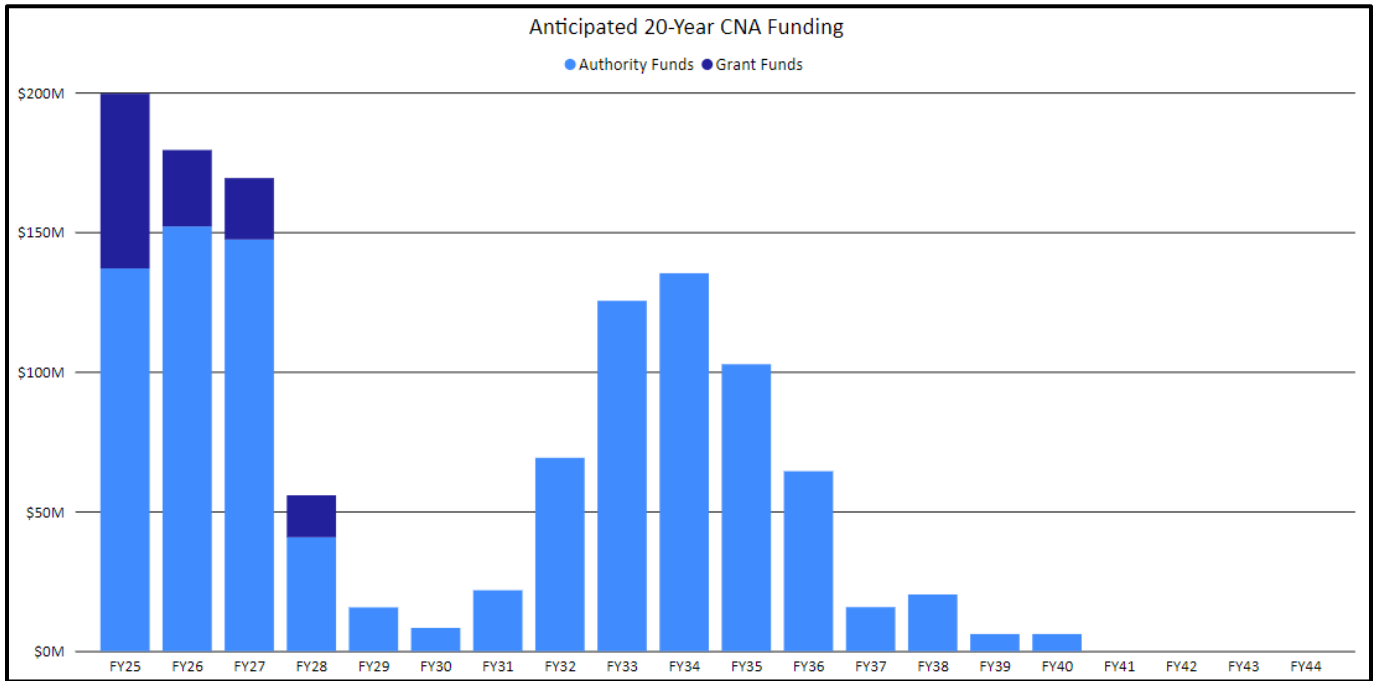
Regional Water Supply Authority

## **20-Year Capital Needs Assessment**

**Fiscal Period: 2025 – 2044**

*“Through cooperation and collaboration, the Authority and its Customers shall create, maintain, and expand a sustainable, interconnected, regional water supply system”*

## 20- Year Capital Needs Assessment Summary







# Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

## Regional Integrated Loop - Phase 3C Extension

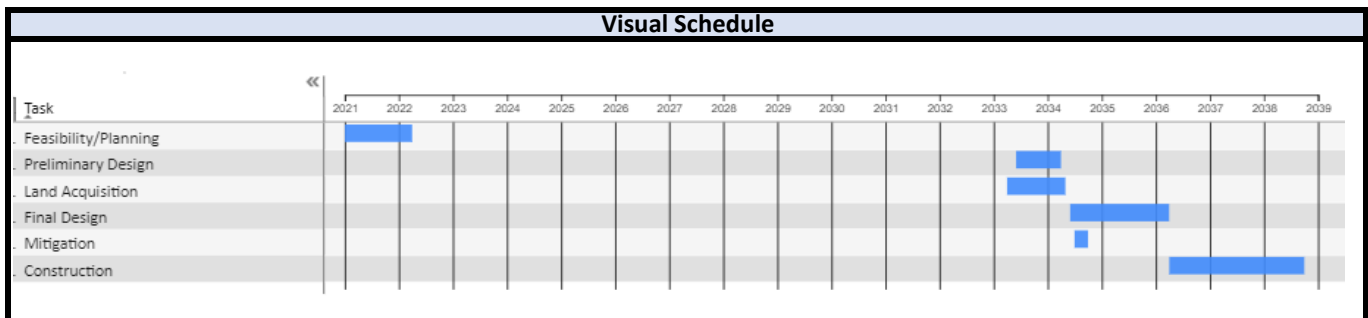
Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The Phase 3C Extension Regional Integrated Loop project will consist of approximately 10.8 miles of 36" or 42" diameter water main installed between Phase 3C in the vicinity of Fruitville Road (780) westward under I-75, south of Benderson/UTC Mall area and then northwest to an existing facility at Lockwood Ridge Rd &amp; University Pkwy. A new storage and pumping facility near Fruitville Rd and Lorainne Rd. will be capable of sending flows both north and south with chemical trim facilities. Some minor modifications to this facility located at the western terminal end of the regional loop pipeline are envisioned.</p>

### Project Location or Concept Sketch

### Project Schedule & Costs

Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Jan-21	Mar-22	\$ 300,000	\$ 150,000	\$ 150,000	\$ -
Preliminary Design	Jun-33	Mar-34	\$ 857,770	\$ 857,770	\$ -	\$ -
Land Acquisition	Apr-33	Apr-34	\$ 4,366,967	\$ 4,366,967	\$ -	\$ -
Final Design	Jun-34	Mar-36	\$ 5,434,771	\$ 5,434,771	\$ -	\$ -
Mitigation	Jul-34	Sep-34	\$ 204,000	\$ 204,000	\$ -	\$ -
Construction	Apr-36	Sep-38	\$ 59,240,046	\$ 59,240,046	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 70,403,553</b>	<b>\$ 70,253,553</b>	<b>\$ 150,000</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight





# Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

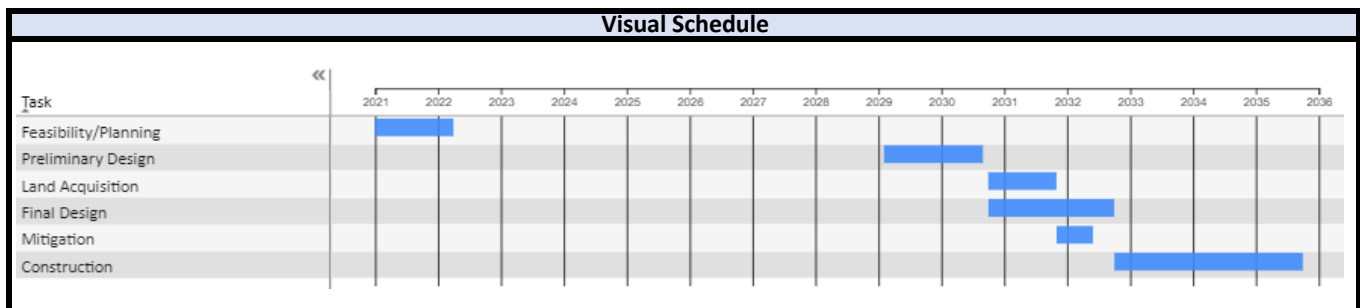
## Regional Integrated Loop - Phase 2C

Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The Regional Integrated Loop Phase 2C Interconnect is comprised of about 19-miles of 36" - to 42" diameter pipeline beginning at the terminus of the Phase 2B Pipeline and extending generally west and north through Sarasota County and terminating at the Sarasota County Carlton Water Treatment Plant. The project includes a ground storage tank and booster pumping station and crossings of I-75 and the Myakka River in the northern end of the pipeline. The Phase 2C pipeline completes a plant-to-plant connection which will improve regional reliability, resiliency, provides bi-directional water transfer capability, completes the southern regional loop, and provides additional pipeline capacity for Manatee County in the future.</p>

### Project Location or Concept Sketch

Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Jan-21	Mar-22	\$ 200,000	\$ 100,000	\$ 100,000	\$ -
Preliminary Design	Feb-29	Aug-30	\$ 1,621,800	\$ 1,621,800	\$ -	\$ -
Land Acquisition	Sep-30	Oct-31	\$ 1,583,958	\$ 1,583,958	\$ -	\$ -
Final Design	Oct-30	Sep-32	\$ 22,276,879	\$ 22,276,879	\$ -	\$ -
Mitigation	Nov-31	May-32	\$ -	\$ -	\$ -	\$ -
Construction	Oct-32	Sep-35	\$ 142,207,069	\$ 142,207,069	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 167,889,707</b>	<b>\$ 167,789,707</b>	<b>\$ 100,000</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight





## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

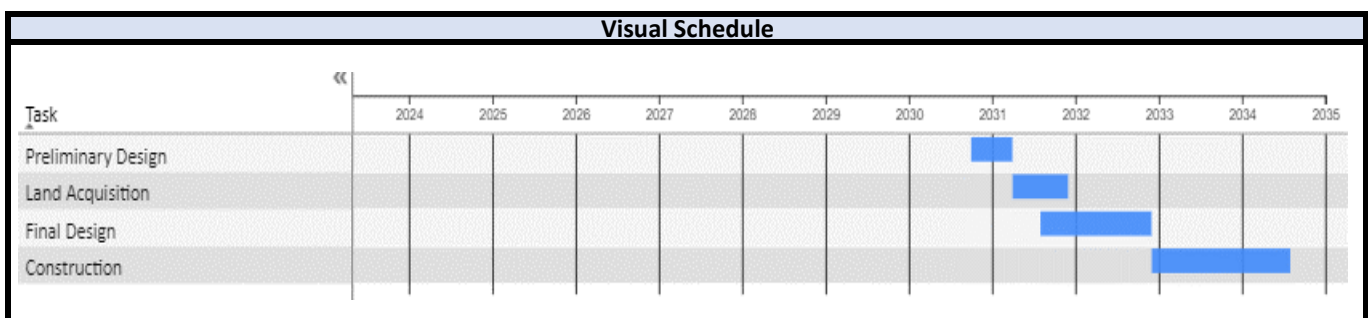
### Replace 12" PVC Line

Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>This approximately 1.5 mile long pipeline interconnects the 24" Kings Highway Transmission Main, the 36" Southern Regional Transmission Main and the 42" Phase 2a Regional Loop Interconnect. 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. The current pipeline was installed by GDU and it will be replaced with a larger diameter pipeline.</p>

Project Location or Concept Sketch	

Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Oct-30	Mar-31	\$ 150,000	\$ 150,000	\$ -	\$ -
Land Acquisition	Apr-31	Nov-31	\$ 250,000	\$ 250,000	\$ -	\$ -
Final Design	Aug-31	Nov-32	\$ 350,000	\$ 350,000	\$ -	\$ -
Mitigation			\$ -	\$ -	\$ -	\$ -
Construction	Dec-32	Jul-34	\$ 5,000,000	\$ 5,000,000	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 5,750,000</b>	<b>\$ 5,750,000</b>	<b>\$ -</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight







## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

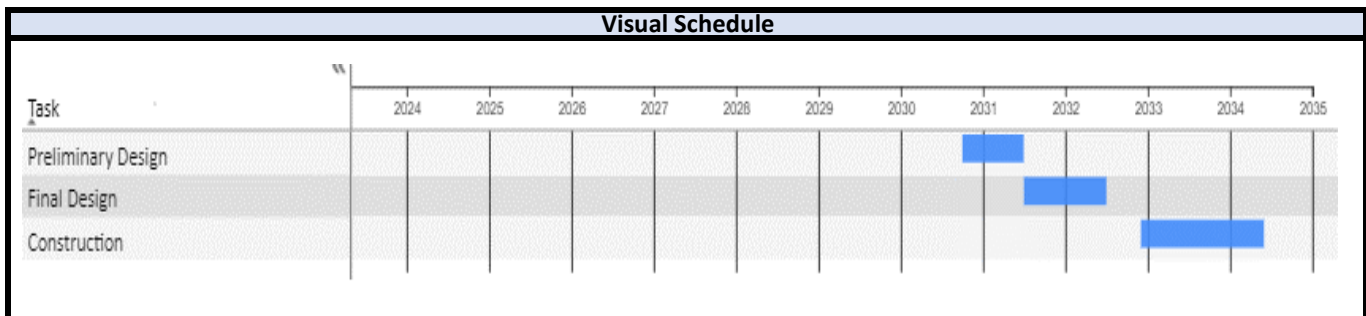
### Kings Highway Pipeline Replacement (DeSoto County)

Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The Kings Highway 24" Regional Transmission Main provides water to Charlotte and DeSoto Counties and was installed within the roadway right-of-way. DeSoto County is planning to widen a portion of Kings Highway from the County line to Peace Street. The Authority will coordinate with DeSoto County and relocate multiple appurtenances from the county line to Peace River St., approximately 2 miles.</p>

#### Project Location or Concept Sketch

Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Oct-30	Jun-31	\$ 150,000	\$ 150,000	\$ -	\$ -
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	Jul-31	Jul-32	\$ 150,000	\$ 150,000	\$ -	\$ -
Mitigation			\$ -	\$ -	\$ -	\$ -
Construction	Dec-32	May-34	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 2,300,000</b>	<b>\$ 2,300,000</b>	<b>\$ -</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight







# Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

## Regional Integrated Loop - Phase 4

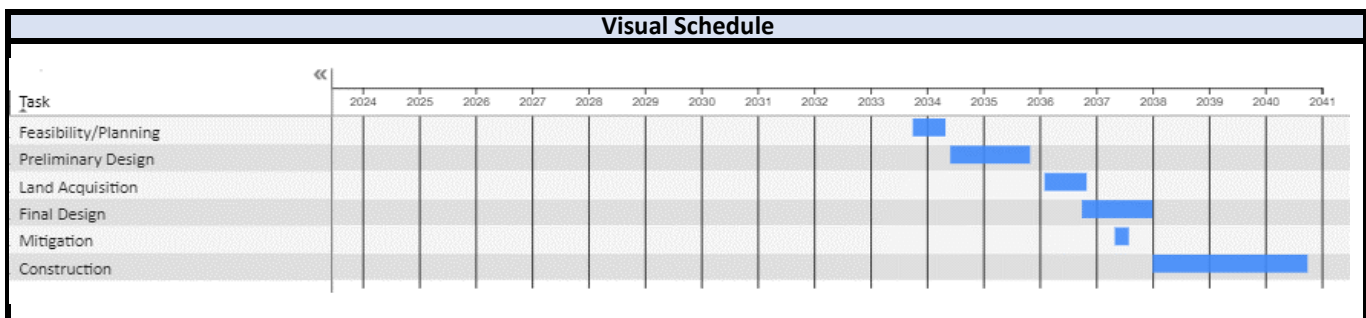
Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>The Phase 4 Regional Integrated Loop project comprises approximately 10 miles of 16" diameter water line generally beginning at the Authority's Phase 1A Disston Ave. Pump Station Facility, located south of the Peace River in the town of Cleveland, and extends east and south connecting to the existing South Charlotte County 16" diameter water main. The South County water main originates at the County's Burnt Store Water Treatment Plant providing a plant-to-plant connection, in the future..</p>

### Project Location or Concept Sketch

### Project Schedule & Costs

Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Oct-33	May-34	\$ -	\$ -	\$ -	\$ -
Preliminary Design	Jun-34	Oct-35	\$ 612,000	\$ 612,000	\$ -	\$ -
Land Acquisition	Feb-36	Oct-36	\$ 2,040,000	\$ 2,040,000	\$ -	\$ -
Final Design	Oct-36	Dec-37	\$ 1,938,000	\$ 1,938,000	\$ -	\$ -
Mitigation	May-37	Jul-37	\$ -	\$ -	\$ -	\$ -
Construction	Jan-38	Sep-40	\$ 18,360,000	\$ 18,360,000	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 22,950,000</b>	<b>\$ 22,950,000</b>	<b>\$ -</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight

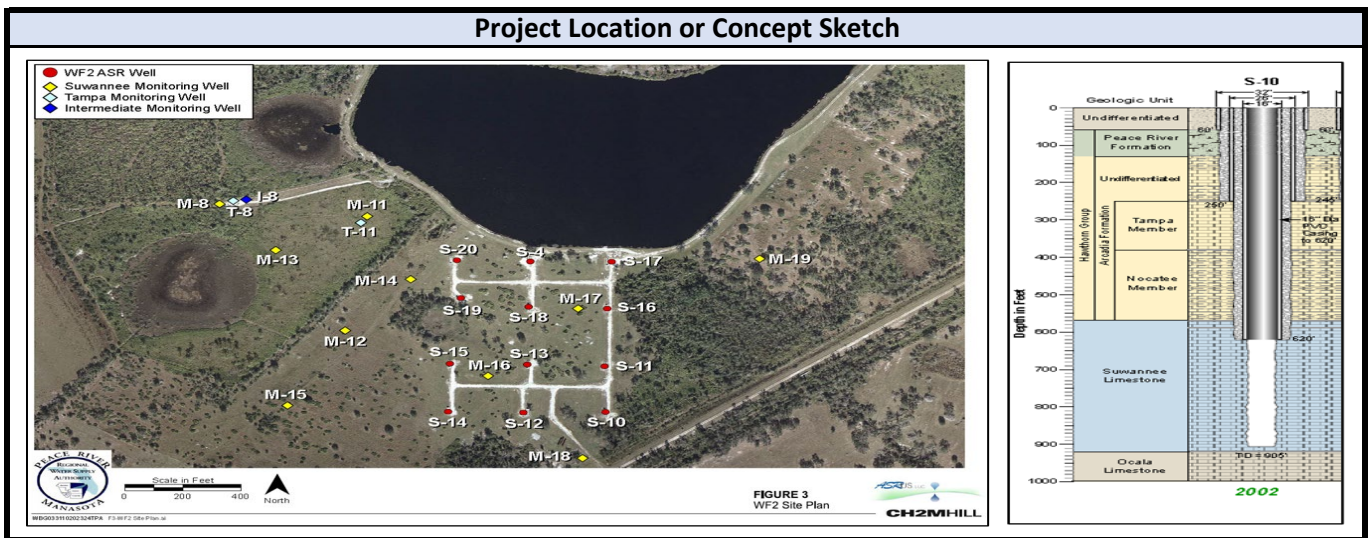




# Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

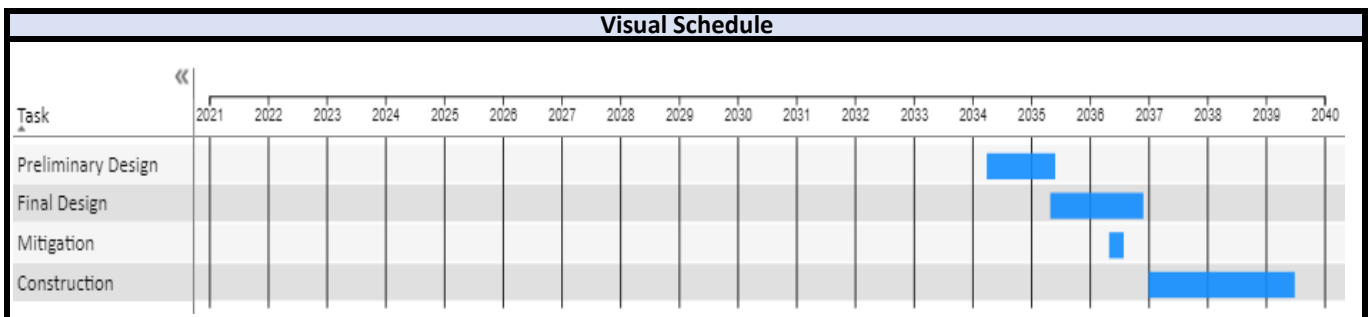
## ASR Wellfield Expansion

Project Type	Project Description
<input checked="" type="checkbox"/> Water Supply	Success for the Peace River Facility is based upon capitalizing on seasonal storage and can either be accomplished with raw water off-stream reservoirs, or currently, as potable water ASR wells. This project will bring another 12 ASR wells online.
<input type="checkbox"/> Transmission	
<input type="checkbox"/> SystemWide Benefit	
<input type="checkbox"/> Other	



Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Apr-34	May-35	\$ 715,354	\$ 715,354	\$ -	\$ -
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	May-35	Nov-36	\$ 1,451,821	\$ 1,451,821	\$ -	\$ -
Mitigation	May-36	Jul-36	\$ 108,120	\$ 108,120	\$ -	\$ -
Construction	Jan-37	Jun-39	\$ 27,906,241	\$ 27,906,241	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 30,181,536</b>	<b>\$ 30,181,536</b>	<b>\$ -</b>	<b>\$ -</b>

Construction Costs include Consultant Engineers oversight

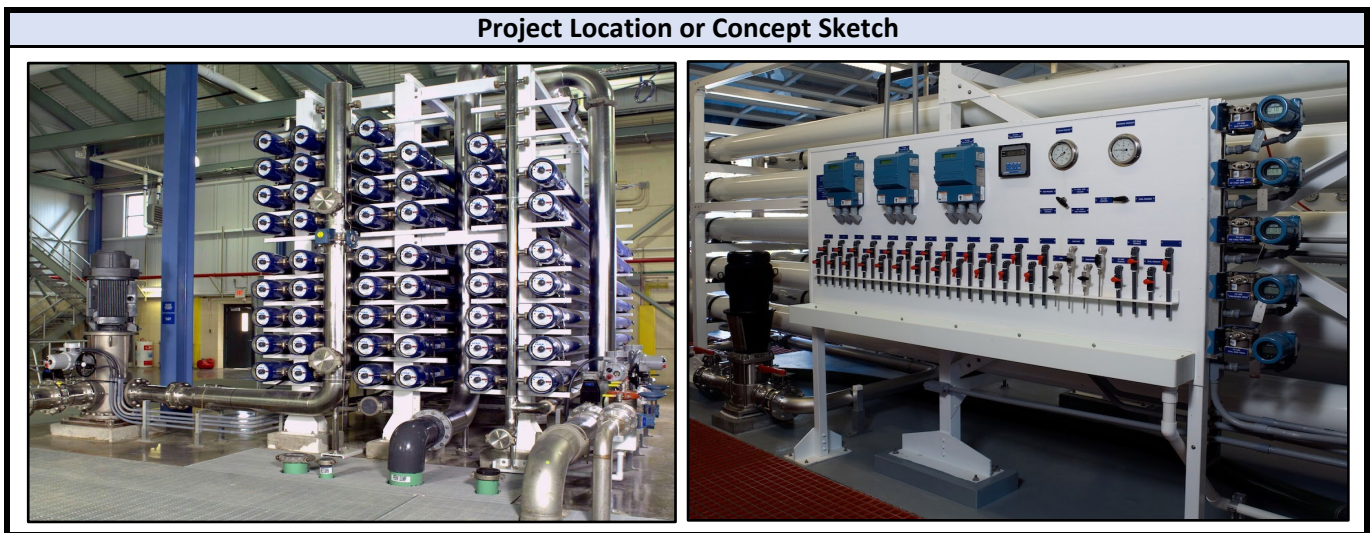




## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

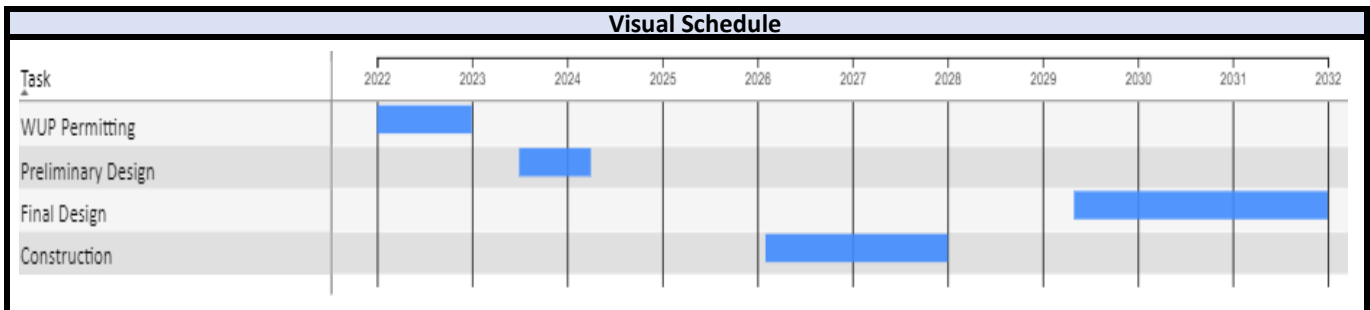
### Brackish Water RO Facility

Project Type	Project Description
<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Transmission <input type="checkbox"/> Systemwide Benefit <input type="checkbox"/> Other	<p>This alternative water supply project would add 8 MGD AADD of safe 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 Intermediate Aquifer and the Avon Park formation in the Floridan Aquifer. Reverse osmosis treatment membranes operating at an overall efficiency of 80% would be employed. Reject concentrate would be injected to a permeable zone well below the Avon Park zone. This project also included two 2 MG finished water tanks for blending control.</p>



Project Schedule & Costs						
Project Stage	Start Date	End Date	Estimated Cost	Sources of Funding		
				Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning			\$ -	\$ -	\$ -	\$ -
Preliminary Design	Jul-23	Apr-24	\$ 5,488,750	\$ 5,488,750	\$ -	\$ -
Land Acquisition			\$ -	\$ -	\$ -	\$ -
Final Design	May-29	Dec-31	\$ 18,000,000	\$ 18,000,000	\$ -	\$ -
Mitigation	Jan-30	Dec-31	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -
Construction	Feb-26	Jan-28	\$ 260,000,000	\$ 260,000,000	\$ -	\$ -
<b>Total Costs</b>			<b>\$ 285,488,750</b>	<b>\$ 285,488,750</b>	<b>\$ -</b>	<b>\$ -</b>

*Construction Costs include Consultant Engineers oversight*







## Capital Improvement Plan/Capital Needs Assessment Project Description Sheet

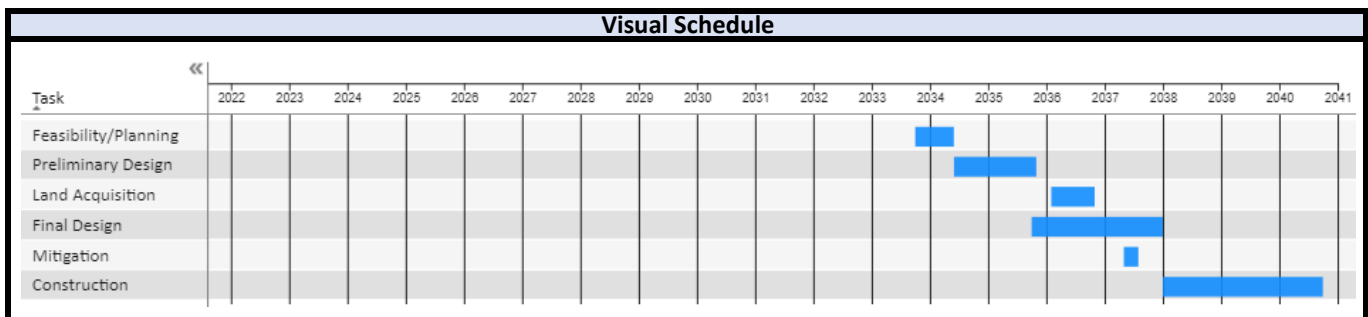
### Regional Integrated Loop - Phase 2D

Project Type	Project Description
<input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Transmission <input type="checkbox"/> SystemWide Benefit <input type="checkbox"/> Other	<p>This pipeline project is comprised of 12.5 miles of pipe tentatively sized as 24" diameter running from the Phase 2B regional loop pipeline near River Road and US 41 to the Englewood Water District. This segment completes a plant-to-plant connection that will boost local and regional resiliency and facilitate transfer of water in either direction. The project includes a pump station and storage elements as well as chemical trim facilities.</p>

#### Project Location or Concept Sketch

Project Schedule & Costs						
Project Stage	Start	End	Estimated Cost	Sources of Funding		
	Date	Date		Authority Funds	SWFWMD Grant	State/Other
Feasibility/Planning	Oct-33	May-34	\$ 300,000	\$ 300,000	\$ -	\$ -
Preliminary Design	Jun-34	Oct-35	\$ 1,046,400	\$ 523,200	\$ 523,200	\$ -
Land Acquisition	Feb-36	Oct-36	\$ 1,123,000	\$ 1,123,000	\$ -	\$ -
Final Design	Oct-35	Dec-37	\$ 2,112,059	\$ 1,056,030	\$ 1,056,030	\$ -
Mitigation	May-37	Jul-37	\$ 200,000	\$ 200,000	\$ -	\$ -
Construction	Jan-38	Sep-40	\$ 31,025,535	\$ 15,512,767	\$ 15,512,767	\$ -
<b>Total Costs</b>			<b>\$ 35,806,994</b>	<b>\$ 18,714,997</b>	<b>\$ 17,091,997</b>	<b>\$ -</b>

*Construction Costs include Consultant Engineers oversight*







## Capital Improvement Plan/Capital Needs Assessment Appendix A - Assumptions

Cost Sources and Assumptions			
Project Name	Cost Source	Index Rate (ENR CCI)	
		FY24	FY25
Regional Integrated Loop - Phase 2B	Guaranteed Maximum Price	0.00%	0.00%
Regional Integrated Loop - Phase 2C	Feasibility & Routing Study	6.00%	2.00%
Reservoir 3	Construction Manager at Risk Cost Estimate March 2024	0.00%	0.00%
Regional Integrated Loop - Phase 3C	Guaranteed Maximum Price	0.00%	0.00%
Regional Integrated Loop - Phase 3C Extension	Feasibility & Routing Study	6.00%	2.00%
Kings Highway Pipeline Replacement	Staff Developed	0.00%	0.00%
PRF Expansion	Construction Manager at Risk Cost Estimate March 2024	0.00%	0.00%
Water Resources/Construction Dept. Building	Preliminary Design Report	0.00%	0.00%
Partially Treated Surface Water ASR	Disinfection Study for the Partially Treated Surface Water ASR	0.00%	0.00%
RV Griffin Solar Array	Peace River Renewable Energy Study	0.00%	0.00%
Replace 12" PVC Line	Staff Developed	0.00%	0.00%
Brackish Water RO Facility	Construction Manager at Risk Cost Estimate March 2024	0.00%	0.00%
Regional Integrated Loop - Phase 4	Staff Developed	0.00%	2.00%
ASR Wellfield Expansion	Integrated Regional Water Supply Plan 2020	6.00%	2.00%

**Other Assumptions:**

- \* All costs except for land acquisition and mitigation are indexed annually from the time of the last engineering report and/or study.
- \* Grant funding from the Southwest Florida Water Management District or State is only reflected on projects that have a funding commitment
- \* Fees associated with individual project stages are estimated utilizing project managers' best estimate at the time of project development
- \* Index Rate is calculated using the Engineering News-Record Construction Cost Index from August of the prior year to August of the current year

Engineering News-Record Construction Cost Index History (ENR CCI)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	13175	13176	13176	13230	13288	13345	13425	13473	13486	13498	13511	13515
2022	12556	12684	12791	12899	13004	13111	13168	13171	13173	13175	13175	13175
2021	11627	11698	11749	11849	11989	12112	12237	12463	12464	12464	12467	12481
2020	11392	11396	11397	11412	11418	11436	11439	11455	11499	11539	11579	11626
2019	11206	11213	11228	11228	11230	11268	11293	11311	11311	11326	11381	11381
2018	10878	10889	10959	10971	11013	11069	11116	11124	11170	11183	11184	11186
2017	10542	10559	10667	10678	10692	10703	10789	10826	10823	10817	10870	10873
2016	10132	10181	10242	10279	10315	10337	10379	10385	10403	10434	10442	10530
2015	9972	9962	9972	9992	9975	10039	10037	10039	10065	10128	10092	10152
2014	9664	9681	9702	9750	9796	9800	9835	9846	9870	9886	9912	9936
2013	9437	9453	9456	9484	9516	9542	9552	9545	9552	9689	9666	9668
2012	9176	9198	9268	9273	9290	9291	9324	9351	9341	9376	9398	9412
2011	8938	8998	9011	9027	9035	9053	9080	9088	9116	9147	9173	9172
2010	8660	8672	8671	8677	8761	8805	8844	8837	8836	8921	8951	8952
2009	8549	8533	8534	8528	8574	8578	8566	8564	8586	8596	8592	8641
2008	8090	8094	8109	8112	8141	8185	8293	8362	8557	8623	8602	8551
2007	7880	7880	7856	7865	7942	7939	7959	8007	8050	8045	8092	8089
2006	7660	7689	7692	7695	7691	7700	7721	7722	7763	7883	7911	7888
2005	7297	7298	7309	7355	7398	7415	7422	7479	7540	7563	7630	7647
2004	6825	6862	6957	7017	7065	7109	7126	7188	7298	7314	7312	7308
2003	6581	6640	6627	6635	6642	6694	6695	6733	6741	6771	6794	6782
2002	6462	6462	6502	6480	6512	6532	6605	6592	6589	6579	6578	6563
2001	6281	6272	6279	6286	6288	6318	6404	6389	6391	6397	6410	6390
2000	6130	6160	6202	6201	6233	6238	6225	6233	6224	6259	6266	6283



**Capital Improvement Plan/Capital Needs Assessment**  
**Appendix B - Project Summary Table by Project Stage**

<b>Capital Projects</b>	<b>Feasibility/Planning</b>	<b>Preliminary Design</b>	<b>Final Design</b>	<b>Land Acquisition</b>	<b>Mitigation</b>	<b>Construction</b>	<b>Grand Total</b>
ASR Wellfield Expansion	\$ -	\$ 715,354	\$ 1,451,821	\$ -	\$ 108,120	\$ 27,906,241	\$ 30,181,536
Kings Highway Pipeline Replacement (DeSoto County)	\$ -	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ 2,000,000	\$ 2,300,000
Partially Treated Surface Water ASR	\$ -	\$ 1,000,000	\$ 2,500,000	\$ -	\$ -	\$ 32,600,000	\$ 36,100,000
PRF Expansion	\$ -	\$ 1,884,335	\$ 10,000,000	\$ -	\$ -	\$ 151,237,665	\$ 163,122,000
Regional Integrated Loop - Phase 2B	\$ 200,000	\$ 5,100,000	\$ -	\$ 300,000	\$ 200,000	\$ 82,595,000	\$ 88,395,000
Regional Integrated Loop - Phase 2C	\$ 200,000	\$ 1,621,800	\$ 22,276,879	\$ 1,583,958	\$ -	\$ 142,207,069	\$ 167,889,707
Regional Integrated Loop - Phase 3C	\$ 300,000	\$ 4,694,450	\$ -	\$ 2,100,000	\$ 50,000	\$ 57,005,550	\$ 64,150,000
Regional Integrated Loop - Phase 3C Extension	\$ 300,000	\$ 857,770	\$ 5,434,771	\$ 4,366,967	\$ 204,000	\$ 59,240,046	\$ 70,403,553
Regional Integrated Loop - Phase 4	\$ -	\$ 612,000	\$ 1,938,000	\$ 2,040,000	\$ -	\$ 18,360,000	\$ 22,950,000
Replace 12" PVC Line	\$ -	\$ 150,000	\$ 350,000	\$ 250,000	\$ -	\$ 5,000,000	\$ 5,750,000
Reservoir 3	\$ 1,500,000	\$ 7,250,000	\$ 9,500,000	\$ 500,000	\$ 15,700,000	\$ 371,734,000	\$ 406,184,000
Water Resources/Construction Dept. Building	\$ -	\$ -	\$ 172,500	\$ -	\$ -	\$ 4,500,000	\$ 4,672,500
RV Griffin Solar Array	\$ -	\$ 200,000	\$ 300,000	\$ -	\$ 50,000	\$ 3,622,500	\$ 4,172,500
Brackish Water RO Facility	\$ -	\$ 5,488,750	\$ 18,000,000	\$ -	\$ 2,000,000	\$ 260,000,000	\$ 285,488,750
<b>Grand Total</b>	<b>\$ 2,500,000</b>	<b>\$ 29,724,459</b>	<b>\$ 72,073,971</b>	<b>\$ 11,140,925</b>	<b>\$ 18,312,120</b>	<b>\$ 1,218,008,071</b>	<b>\$ 1,351,759,545</b>