

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

**REGULAR AGENDA**  
**ITEM 6**

**New Water Supply Needs and Regional Supply Project Selection**

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**Presenter -** Richard Anderson, Deputy Director

**Recommended Action -** **Motion** – Approve staff recommendation to proceed with design, bidding and construction of the Surface Water System Expansion Project to meet Customer Requested New Water Supply Demands by 2028.

Authority Customers have identified New Water Supply Demands for the Authority to meet beginning in 2028. The Authority has been carrying two regional water supply projects; (1) the Surface Water System Expansion Project, and (2) the Brackish Groundwater Reverse Osmosis Project, through design and permitting to ensure that regional water supply needs can be timely met.

The current schedule shows that either project can be completed and deliver water in 2028. However, other factors including current grant funding, the growth in Customer demands and project yield should be considered in project sequencing. The Surface Water System Expansion Project, with nearly \$133M in grant funding, and an 18 MGD average day yield will meet the current requested New Water Supply Demands of Sarasota, DeSoto and Charlotte Counties through 2036. Sarasota County Board of County Commissioners unanimously voted to commit to pay for a minimum of 12 MGD annual average water allocation and up to 17 MGD annual average water allocation for the Surface Water System Expansion Project to meet its future water demands.

The Surface Water System Expansion Project is recommended to proceed through design, bidding and construction to meet customer requested new water supply demands beginning in 2028. Long-term Customer projections indicate that the Brackish Groundwater Project, yielding 8 MGD average day, will be needed by 2036 to meet increasing regional needs from Manatee County.

**Budget Action:** No action needed.

**Attachments:**

Presentation Materials

# New Water Supply Needs and Regional Project Selection

Regular Agenda Item No. 6  
April 3, 2024



## Agenda



- **New Water Supply Overview/Background**
- **New Water Supply Quantities and Timing**
- **Regional Water Supply Project**
- **Supply Timeline**



# Agenda

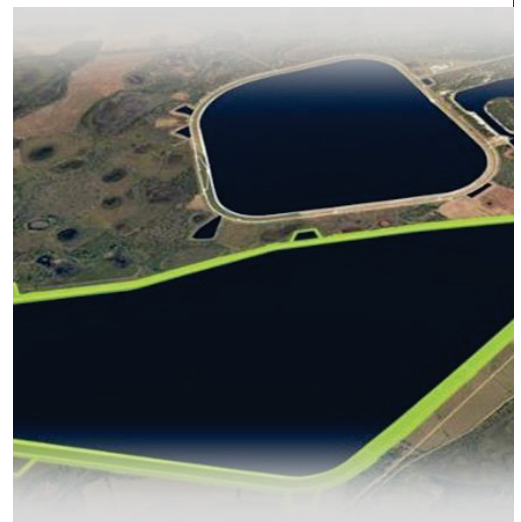


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## Overview of Regional Water Supply Planning & Preparation

- ❑ 2019 50 –Yr. 80 MGD Water Use Permit
- ❑ 2020 Master Plan Shows 2030 New Supply Need
- ❑ 2020 Feasibility & Siting Study for PR3 Project
- ❑ 2022 Preliminary Design for PR 3 Project
- ❑ 2022 Board Selection of SWSEP to meet Regional Needs
- ❑ 2023 Final Design for PR3 and Preliminary Design for WTP Expansion 2023



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## New Water Requests

New Water Requests Show 26 MGD Needed in 20 Year Horizon

Schedule for New Authority Supply Capacity (2024-2044)

Planning Year	Year	DeSoto	Sarasota	Manatee	Charlotte	No. Port	Total
Baseline	2024	0.087	0.000	0.000	0.000	0.000	0.09
1	2025	0.110	0.000	0.000	0.000	0.000	0.11
2	2026	0.141	0.000	0.000	0.000	0.000	0.14
3	2027	0.223	0.000	0.000	0.000	0.000	0.22
<b>4</b>	<b>2028</b>	<b>0.295</b>	<b>1.500</b>	0.000	0.000	0.000	<b>1.80</b>
<b>5</b>	<b>2029</b>	<b>0.343</b>	<b>4.000</b>	0.000	<b>1.000</b>	0.000	<b>5.34</b>
6	2030	<b>0.384</b>	4.000	0.000	1.000	0.000	5.38
<b>7</b>	<b>2031</b>	<b>0.405</b>	4.000	0.000	<b>2.000</b>	0.000	<b>6.41</b>
8	2032	<b>0.427</b>	4.000	0.000	2.000	0.000	6.43
<b>9</b>	<b>2033</b>	<b>0.438</b>	<b>8.000</b>	0.000	<b>3.000</b>	0.000	<b>11.44</b>
10	2034	<b>0.449</b>	8.000	0.000	3.000	0.000	11.45
11	2035	<b>0.460</b>	8.000	0.000	3.000	0.000	11.46
<b>12</b>	<b>2036</b>	<b>0.471</b>	8.000	<b>5.000</b>	3.000	0.000	<b>16.47</b>
13	2037	<b>0.483</b>	8.000	5.000	3.000	0.000	16.48
14	2038	<b>0.494</b>	8.000	5.000	3.000	0.000	16.49
<b>15</b>	<b>2039</b>	<b>0.506</b>	8.000	<b>8.000</b>	3.000	0.000	<b>19.51</b>
<b>16</b>	<b>2040</b>	<b>0.518</b>	<b>12.000</b>	8.000	3.000	0.000	<b>23.52</b>
<b>17</b>	<b>2041</b>	<b>0.530</b>	12.000	<b>10.000</b>	3.000	0.000	<b>25.53</b>
18	2042	<b>0.542</b>	12.000	10.000	3.000	0.000	25.54
19	2043	<b>0.554</b>	12.000	10.000	3.000	0.000	25.55
<b>20</b>	<b>2044</b>	<b>0.566</b>	<b>12.000</b>	<b>10.000</b>	<b>3.000</b>	<b>0.000</b>	<b>25.57</b>



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## Surface Water Supply Expansion Project (SWSEP)

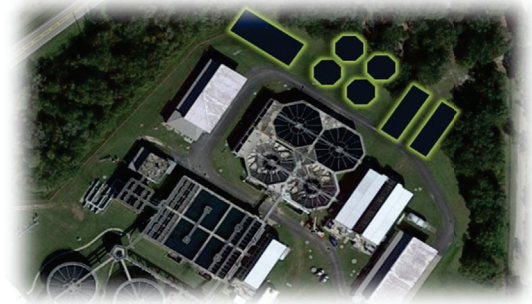
### PR3 Project



- New 9 BG Reservoir
- New River Pump Station & Pipeline
- New/Rehab. Reservoir 1 Pump Sta.



### PRF Expansion Project



- New 24 MGD Plant Expansion
- New Chemical Storage & Pumping
- New Belt Filter Press

**Up to 18 MGD Avg Day Yield**



# Construction COST ESTIMATE 30% VS CMAR

Description	Preliminary 30% Design 3/2023	CMAR Cost 3/2024
Reservoir No. 3	\$216,000,000	\$247,200,000
River Intake & Pump Station	\$28,000,000	\$46,745,000
Reservoir No. 1 Pump Station	\$18,000,000	\$36,637,000
Conveyance Piping	\$73,000,000	\$27,745,000
Peace River Facility Expansion	\$153,000,000	\$159,948,000
	<b>\$488,000,000</b>	<b>\$518,275,000</b>



# SWSEP Estimated Cost

Component	Construction Cost	Probable Related Costs*	Total Project Cost
PR3	\$358,327,000	\$28,600,000	\$386,927,000
Peace River Facility Expansion	\$159,948,000	\$3,174,000	\$163,122,000
	<b>\$518,275,000</b>	<b>\$31,774,000</b>	<b>\$550,049,000</b>

\*Mitigation; Services During Construction; Legal; Property Acquisition etc.



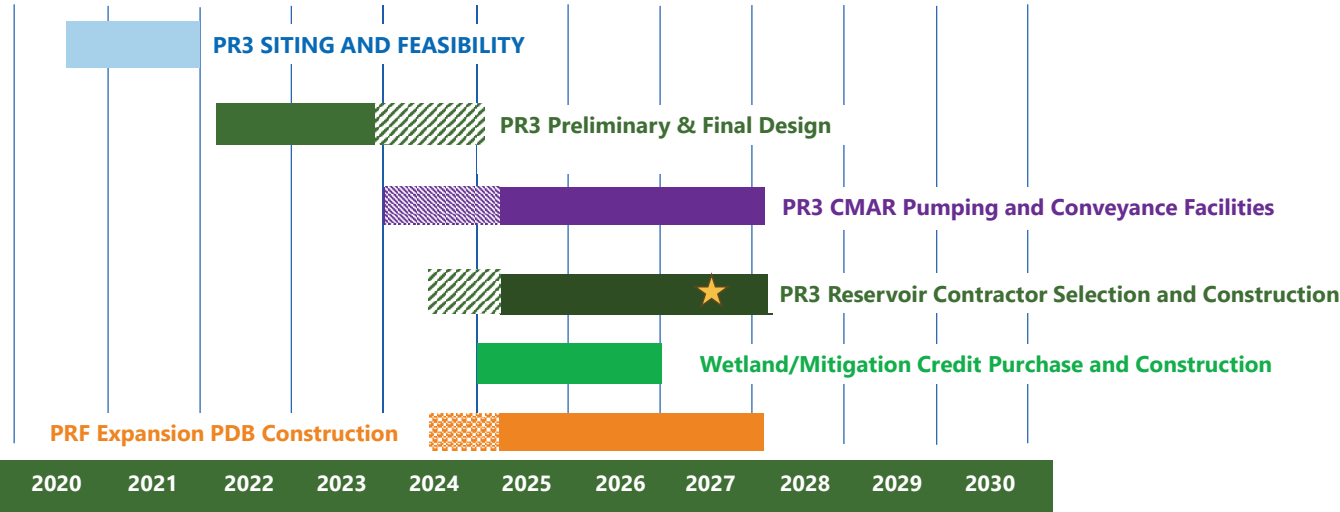
# SWSEP Cost to Customers

Component	Total Project Cost	Current Grant Funding	Customer Cost
PR3	\$386,927,000	\$122,000,000	\$264,927,000
Peace River Facility Expansion	\$163,122,000		\$163,122,000
	<b>\$550,049,000</b>		<b>\$428,049,000</b>
			<b>\$23.8/Gallon</b>

\* Includes \$54M in Project Contingencies equaling \$3.00/Gallon



# SWSEP Project Schedule



- PR3 Pumping and Conveyance Piping – GMP and Construction April 2025
- PR3 Reservoir – Contractor Bid and Construction Begin April 2025. Filling by summer 2027
- PRF Expansion – PDB Selection in June and GMP and Construction April 2025

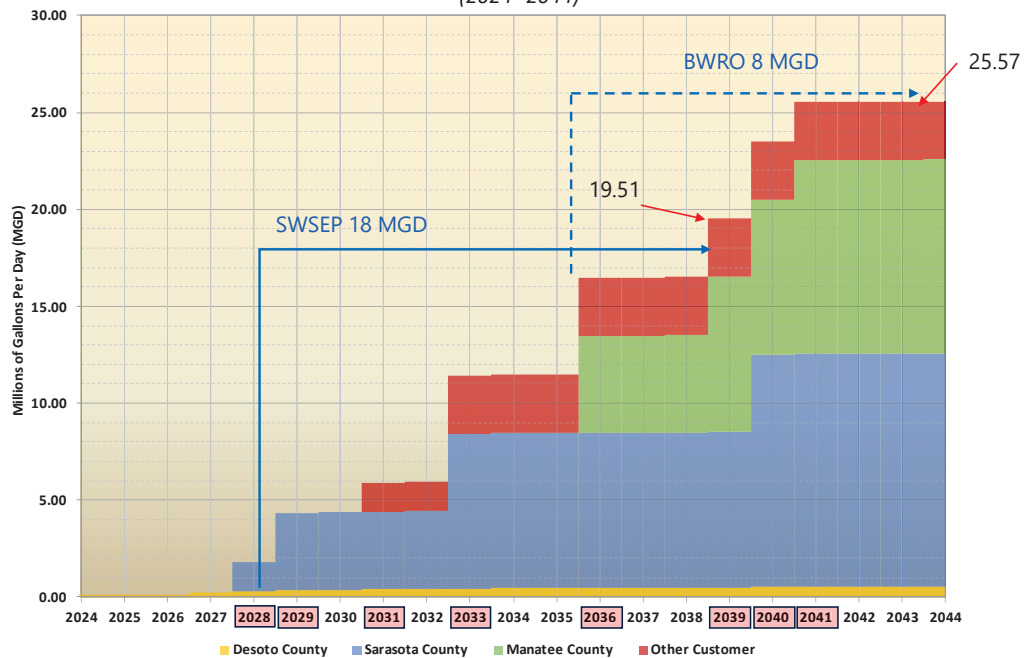


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**Peace River Manasota Regional Water Supply Authority**  
 Schedule for New Authority Supply + 3.0 MGD for Another Customer (25.57 MGD Increase)  
 (2024 - 2044)





Questions

Discussion



## Motion

Approve staff recommendation to proceed with design, bidding and construction of the Surface Water System Expansion Project to meet Customer Requested New Water Supply Demands by 2028.

