

- L. S. BURLINGHAM, TROY, N. Y.
- 1 Roman Catholic Church.
  - 2 Congregational Church.
  - 3 Episcopal Church.
  - 4 Baptist Church.
  - 5 Town Hall.
  - 6 Public Schools.
  - 7 Union House.
  - 8 Taylor House.
  - 9 Ayer Furniture Manuf.
  - 10 Union Furniture Manuf.

# AYER, MASS.

- COPYRIGHTED 1884.
- 11 The William A. Hilday Co. Manf.
  - 12 Talcott.
  - 13 Iron Foundry, H. M. Hall, Prop.
  - 14 Briggs & Wadsworth, Cardage Manf.
  - 15 Office of S. S. Raymond, Insurance, Steam, Dynamite & Sewing Machine.
  - 16 C. W. Pease, Binding Material Manf.
  - 17 Wm. M. Gaynes, Steam Black Ink Manf.
  - 18 Water Dept.
  - 19 Floral Building, Patrick & Son.

FY 2025  
Water and Sewer Rate Hearing  
Town of Ayer Rate Review Committee  
March 19, 2024

DRAFT

# AGENDA

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- Committee members and rate review process
- Overview of infrastructure
  - Water
  - Wastewater
- Regulatory requirements
- Water and Sewer Rate Model
- Recommendation and impacts on typical bill



# Rate Review Committee Members

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- SB Member, Jannice Livingston, Chair
- Mr. Andy Loven, Citizen Representative
- Mr. Robert France, Finance Committee
- Mr. Dan Van Schalkwyk, P.E., DPW Director
- Ms. Kimberly Abraham, Water and Sewer Superintendent
- Ms. Barbara Tierney, Finance Manager
- Mr. Robert Pontbriand, Town Manager

# Meeting Goals

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- Set Water rates for FY25
- Set Sewer rates for FY25



# Ayer DPW Water and Wastewater

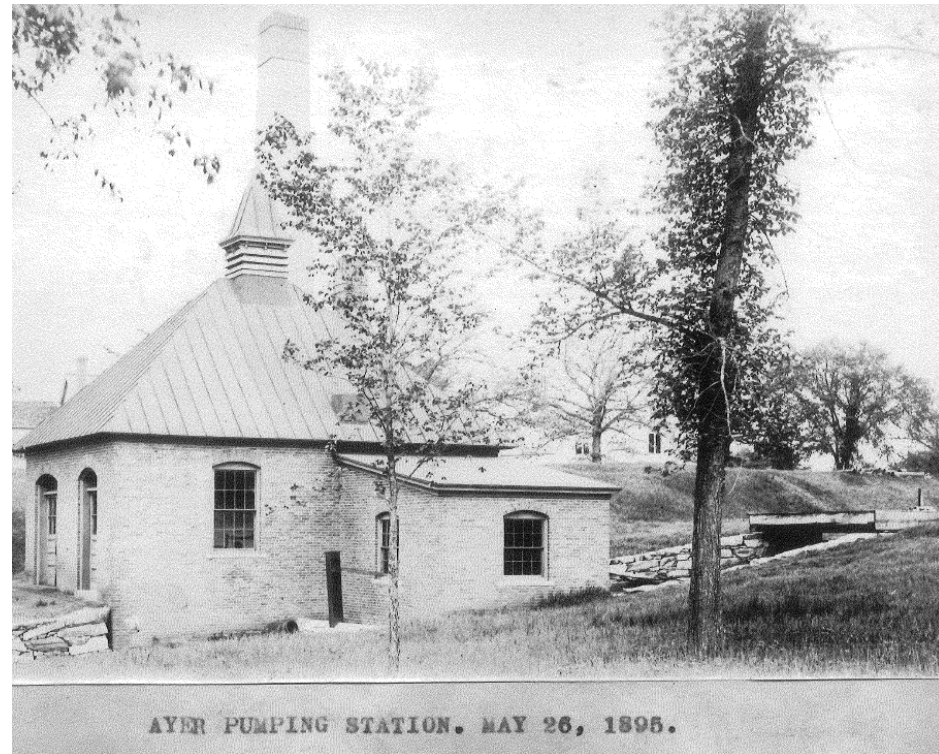
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- DPW provides drinking water and collects and treats wastewater for the citizens and businesses
- DPW focuses on water and wastewater 24 hours a day, 7 days a week
  - Maintain and protect our drinking water supply wells
  - Treat water to regulatory standards
  - Test water to meet quality standards
  - Deliver water to your home and business
  - Collect wastewater from throughout the Town
  - Treat the wastewater to remove contaminants and nutrients before discharging to Nashua River

# Ayer Water System

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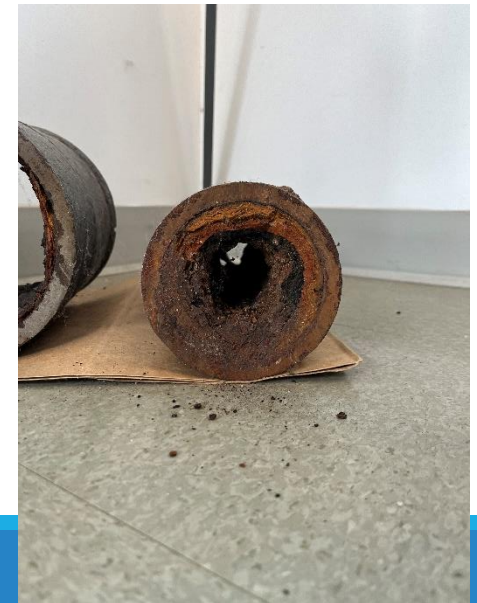
- Constructed in 1895
- Serves 3,370 customer accounts
- Provides water for domestic use, commercial use and fire protection
- 50 miles of pipe
- 5 wells and 2 treatment plants, PFAS treatment
- 2 water storage tanks



# Ayer Water Infrastructure Issues

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- Aging pipes resulting in numerous breaks and “dirty water” complaints
- Numerous dead-end pipes result in water quality problems
- PFAS Contamination in all Ayer wells – treatment construction complete, operational challenges with new process
- Drinking water is highly regulated, requiring special license, testing and reporting
- Water is tested for over 100 quality parameters



# PFAS Treatment Costs are Expensive

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- PFAS is a new regulated group of contaminants and is present in all Town wells
- So far total cost is **\$11.5M**
- Grove Pond PFAS Treatment Cost \$ 4.4M
  - Obtained grant from Army for construction
  - O&M costs are still being understood
- Spectacle Pond PFAS Treatment Cost \$ 6.2M
  - Obtained MADEP Grant of \$200,000 for engineering
  - Received State SRF Funding (Low Interest Loan) for construction
  - O&M costs are still being understood



# Grove Pond PFAS Treatment Plant



- Completed in October 2020
- Treats approximately 40% of Town water supply
- PFAS is removed to non-detect levels



# Spectacle Pond PFAS Treatment

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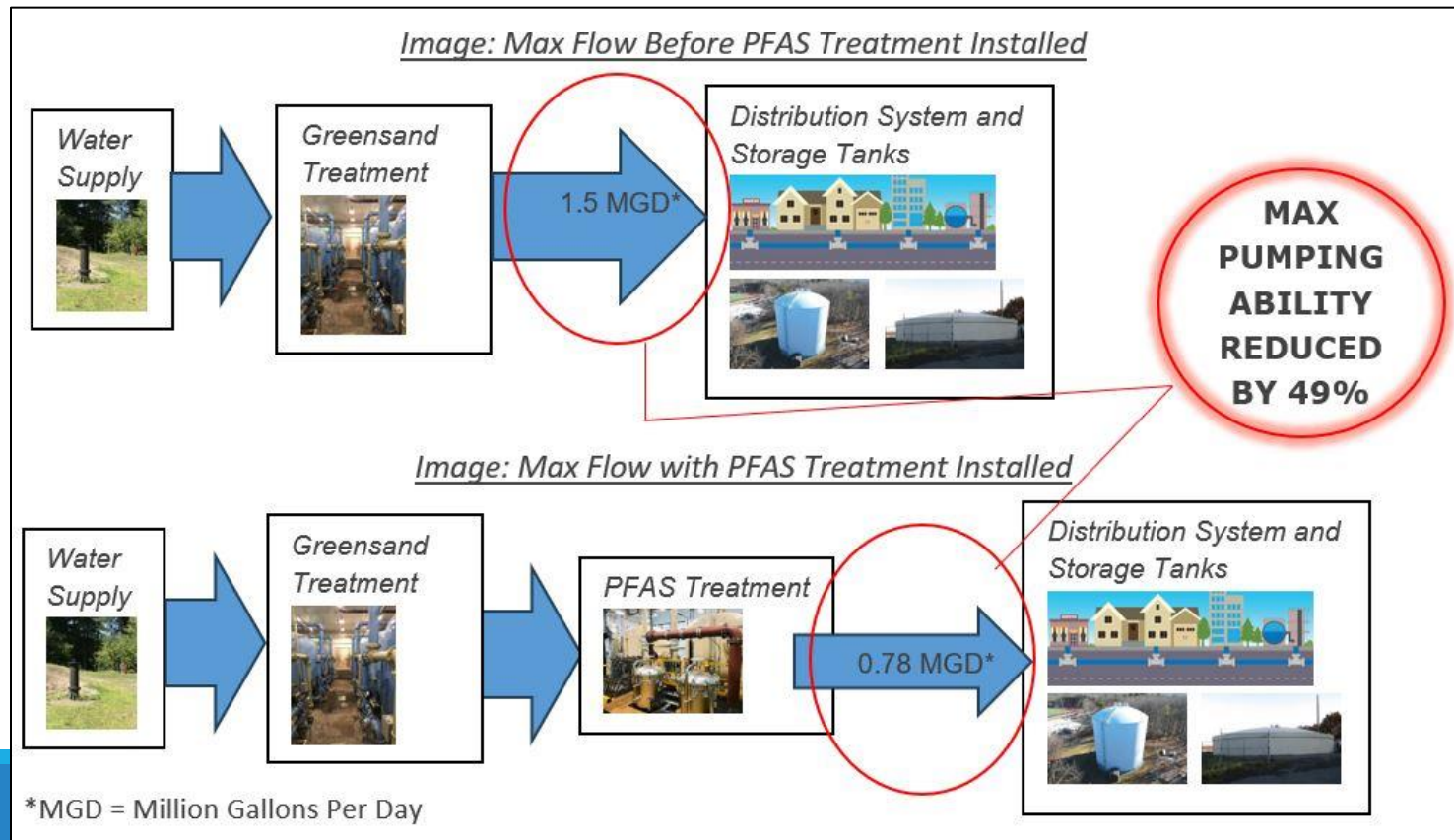
- Completed in July 2022
- Includes roofing and electrical upgrade to existing water treatment plant
- PFAS is removed to non-detect levels



# Water Supply Issues

## What's the Situation?

- The PFAS Treatment System at Grove Pond WTP has caused a restriction, reducing the amount of water the Town can pump through the Plant:



# Water Supply Issues

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- What's Being Done in the Short Term?
  - Increased pumping at the Spectacle Pond Water Treatment Plant
  - Worked with Industry to reduce industrial consumption
  - Recommended outdoor water restrictions
  - Ensured emergency water interconnections with Devens and Littleton are ready if needed
  - Began design of a long-term solution

# Water Supply Issues

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- What's Being Done in the Long Term?
  - Because the issue is related to the infrastructure of the water system, and not due to lack of water supply, there is an engineering solution – Clearwell Storage Tank
- The Clearwell Storage Tank will:
  - Improve pumping capacity to near pre-PFAS treatment volumes
  - Act as additional storage for the water system
- Goal is to have construction completed prior to Spring 2025



# Ayer Sewer System

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- Original system constructed in 1945
- System includes:
  - 34 miles of gravity sewer
  - 3.5 miles of force mains
  - 19 pump stations
  - Tertiary Wastewater Treatment Plant
- We have our sludge trucked to RI and is costly



# Ayer Sewer Infrastructure Issues

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- Wastewater treatment must meet strict water quality standards
- We are in the middle of a 10-year improvement program for the 44-year-old treatment plant
- Plant operation requires dozens of pumps, motors and mechanical equipment – costly to operate and maintain
- Continuing repairs to aging sewer pipe- estimated \$5M over a phased implementation - \$750K per year



# Wastewater Treatment Plant Upgrades Completed to Date

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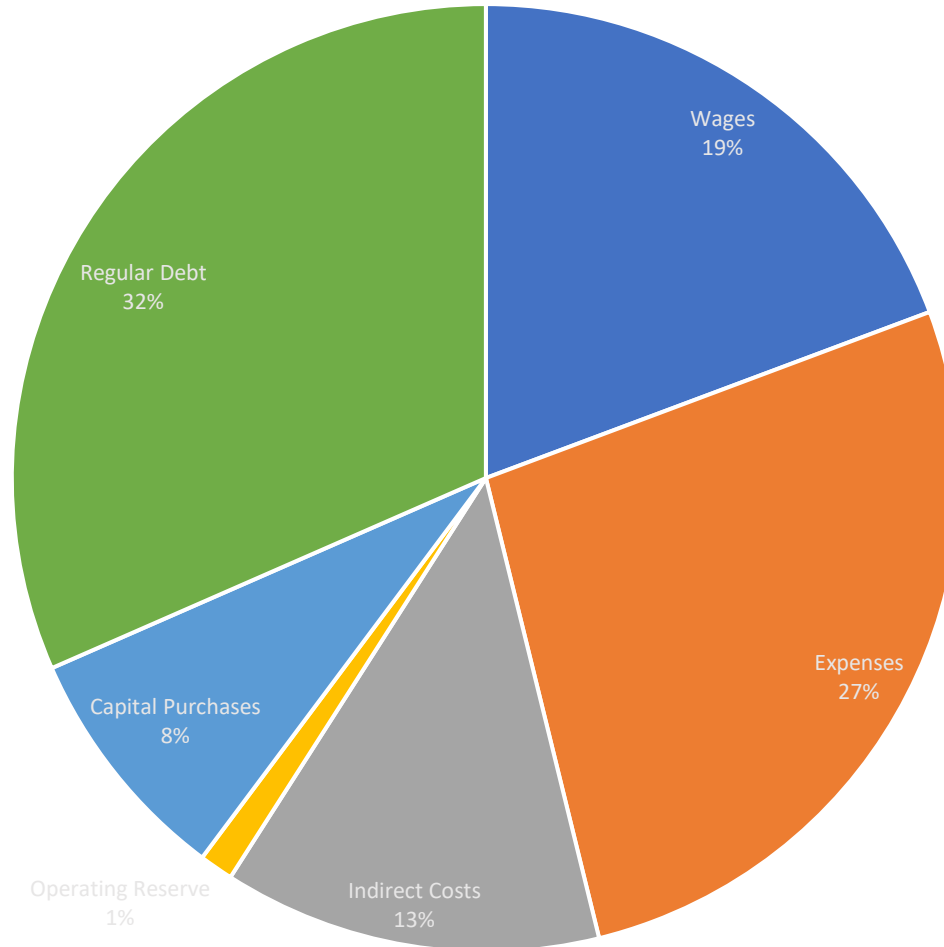
- Electrical system upgrades
- HVAC in WWTP / Motor Control / Electrical Building
- Plant- wide architectural and structural repairs
- Grit removal system improvements
- SCADA / control upgrade (including cybersecurity)
- Fire Protection System
- Construction of Alum Chemical Feed System
- Plant Water System replaced
- Process upgrades including pump replacements and installation of sludge dewatering system



# Water Division Budget

	FY2023 Actual	FY2024 Budget	FY2025 Budget
Wages	459,862	500,501	538,753
Expenses	828,948	696,500	791,500
Regular debt	510,036	818,666	846,986
Capital purchases	414,850	213,000	50,000
Indirect costs	311,705	334,600	334,600
Operating reserve	-	30,000	30,000
Totals	\$2,525,401	\$2,593,267	2,606,839

# Water Division Budget

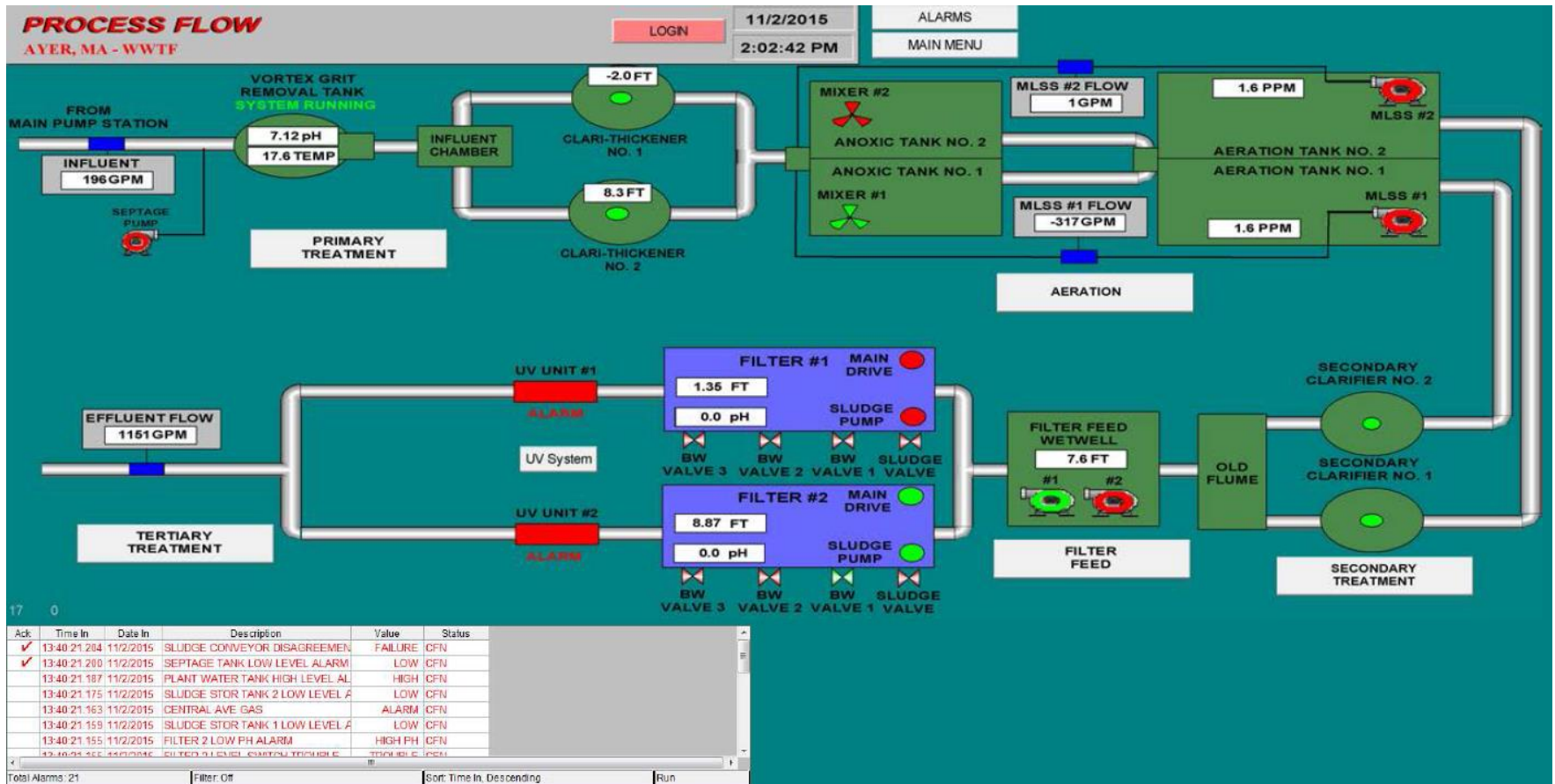


# Water Division Capital Plan

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	<b>Item Requested</b>	<b>FY25</b>	<b>FY26</b>	<b>FY27</b>	<b>FY28</b>	<b>FY29</b>
<b>1</b>	Annual Water Main Rehabilitation/Replacement	\$300,000	\$350,000	\$350,000	\$350,000	\$350,000
<b>2</b>	Spec Pond Well 3 Pumping Station and Transmission Main	\$350,000	\$2,100,000			
<b>3</b>	Spec Pond GAC Upgrade for Well 3			\$650,000		
<b>4</b>	Grove Pond AIX Media Replacement	Army Grant	\$200,000	\$200,000	\$200,000	\$200,000
<b>5</b>	Spec Pond GAC Media Replacement	\$100,000		\$100,000		\$100,000
<b>6</b>	Grove Pond Greensand Valve Replacement	\$50,000	\$50,000			
<b>7</b>	6-Wheel Dump Truck	\$95,000				
<b>8</b>	Spec Pond Chlorine Chemical Skid	\$75,000				
<b>Yearly Totals</b>		<b>\$970,000</b>	<b>\$2,700,000</b>	<b>\$1,300,000</b>	<b>\$550,000</b>	<b>\$650,000</b>

# Wastewater Division Budget

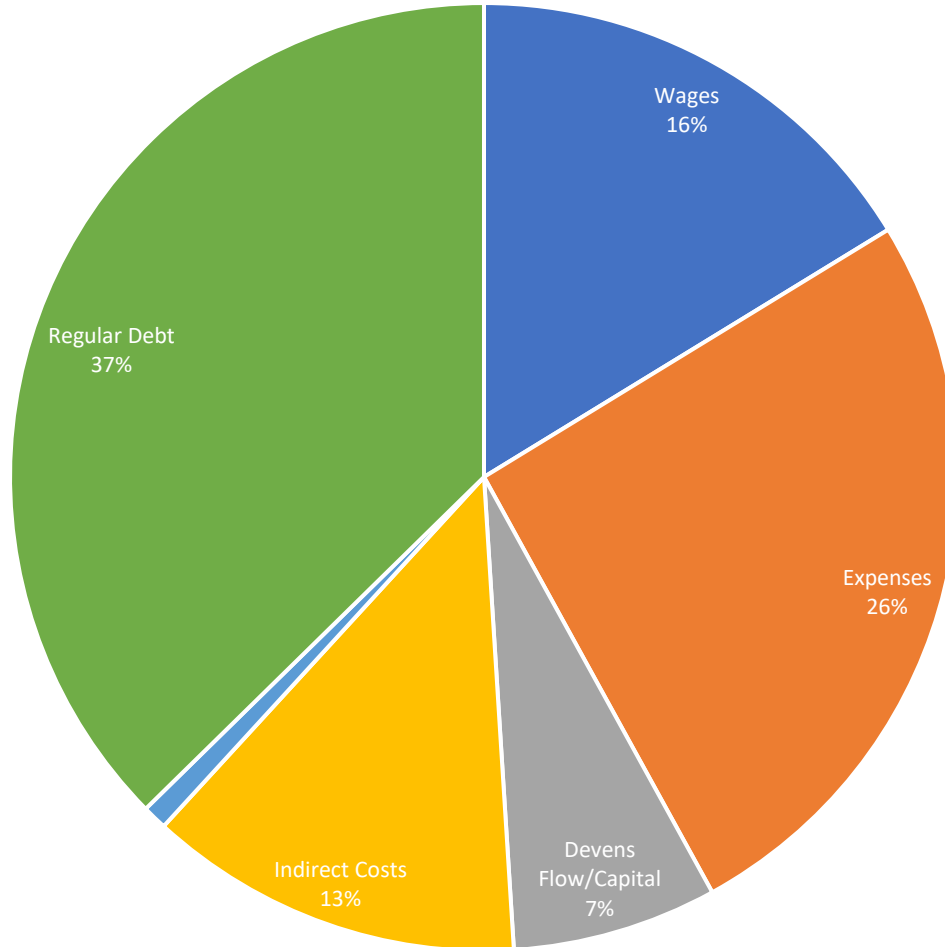


# Wastewater Division Budget

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	<b>FY23 Actuals</b>	<b>FY24 Budget</b>	<b>FY25 Budget</b>
Wages	478,218	580,188	623,589
Expenses	999,898	918,400	863,400
Devens flow/capital	156,443	249,583	250,000
Regular debt	1,134,161	1,332,501	1,131,095
Indirect costs	431,717	457,400	480,270
Operating reserve	-	30,000	30,000
Totals	\$ 3,200,437	\$3,568,071	\$3,348,354

# Wastewater Division Budget



# Wastewater Capital Plan

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	<b>Item Requested</b>	<b>FY25</b>	<b>FY26</b>	<b>FY27</b>	<b>FY28</b>	<b>FY29</b>
<b>1</b>	Inflow/ Infiltration Repairs	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
<b>2</b>	WWTP Upgrades	\$4,000,000		\$3,300,000		
<b>3</b>	Pump Impeller/Volute Replacement at Main and Central	\$33,000	\$33,000	\$33,000		
<b>4</b>	Pickup Truck Replacement	\$45,000				
<b>5</b>	Pump Station Upgrades	\$500,000				
<b>6</b>	Pump Station Generator Connections	\$80,000				
<b>7</b>	Garage/Storage Facility		\$350,000			
<b>Yearly Totals</b>		<b>\$5,408,000</b>	<b>\$1,133,000</b>	<b>\$4,083,000</b>	<b>\$750,000</b>	<b>\$750,000</b>

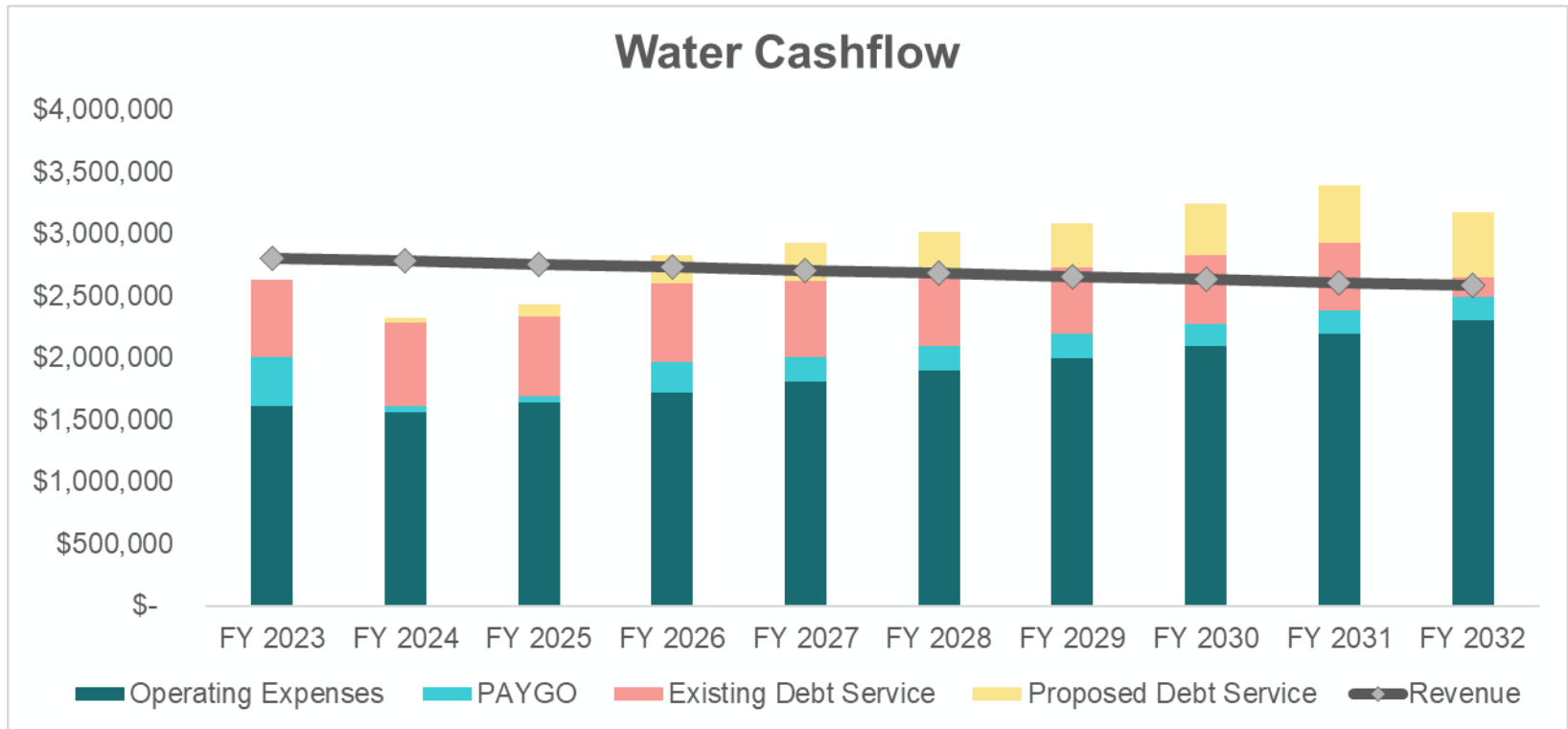
# Rate Model

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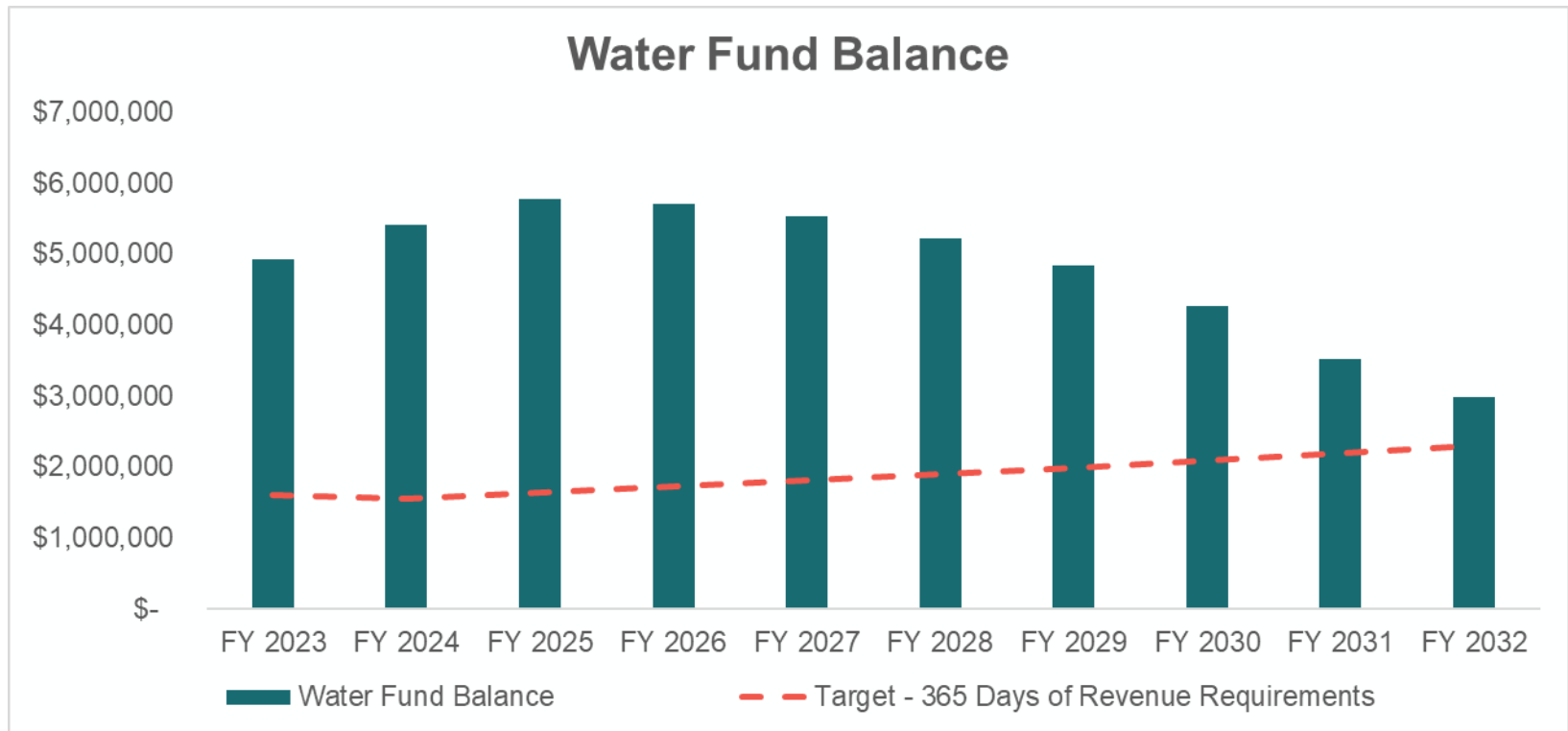
- The Town updated its water and sewer rate model for FY2024 with Raftelis (consultant)
- Town staff updated the model for FY2025, with assistance from Raftelis where needed
- A summary of the model results and Committee recommendation will be discussed next



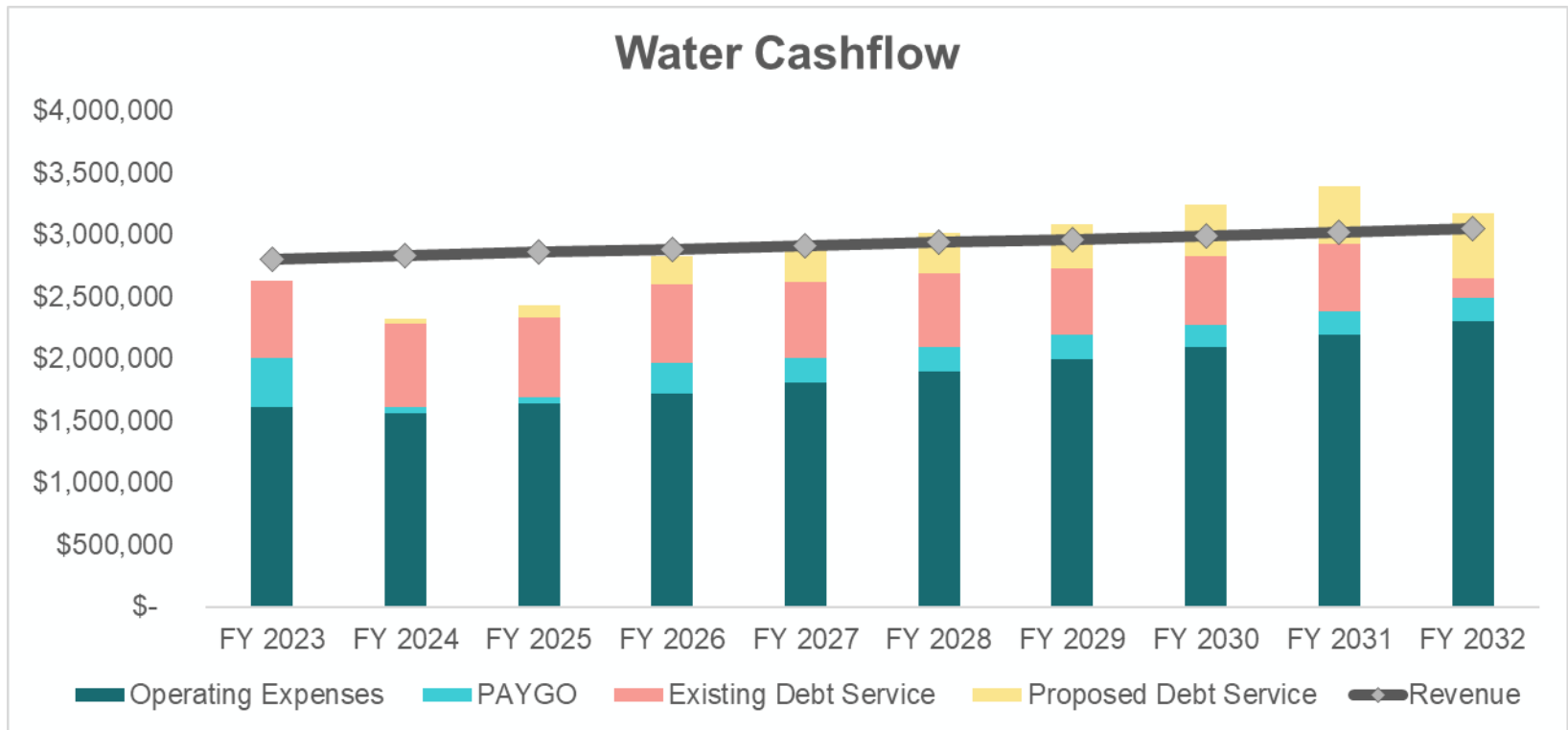
# Projected Water Cash Flows with No Rate Increases



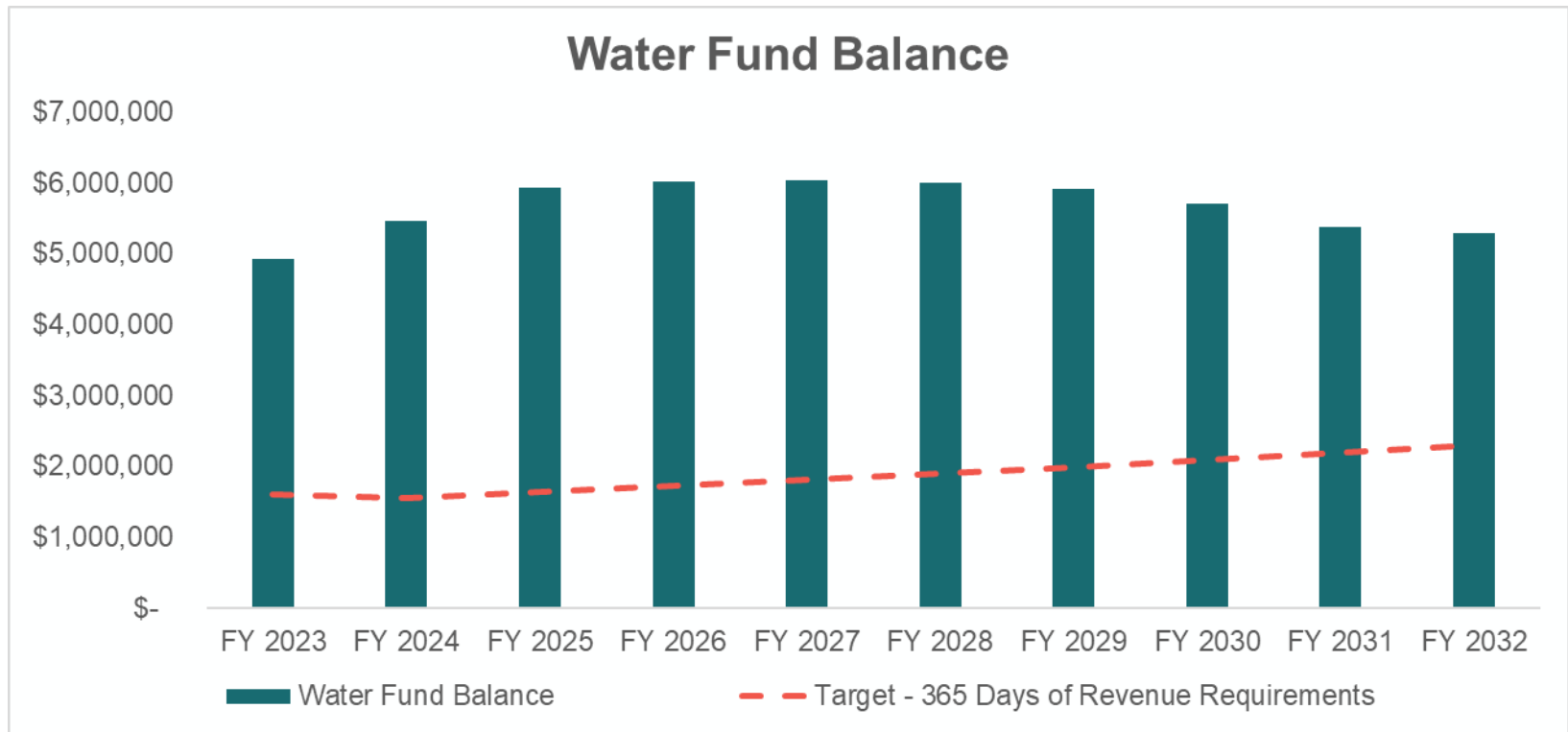
# Projected Water Reserve Fund Balance with No Rate Increases



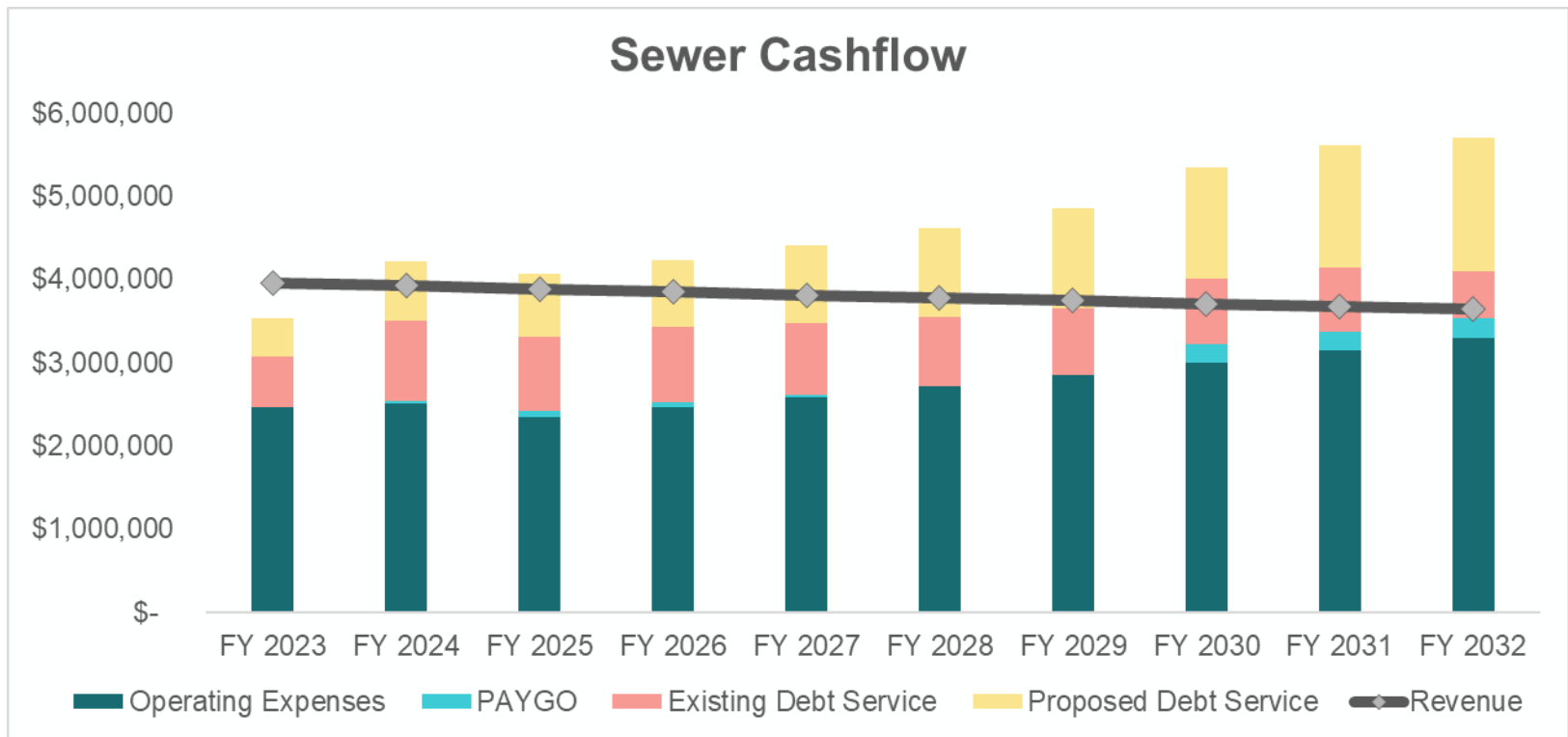
# Projected Water Cash Flows with Recommended Rate Increase



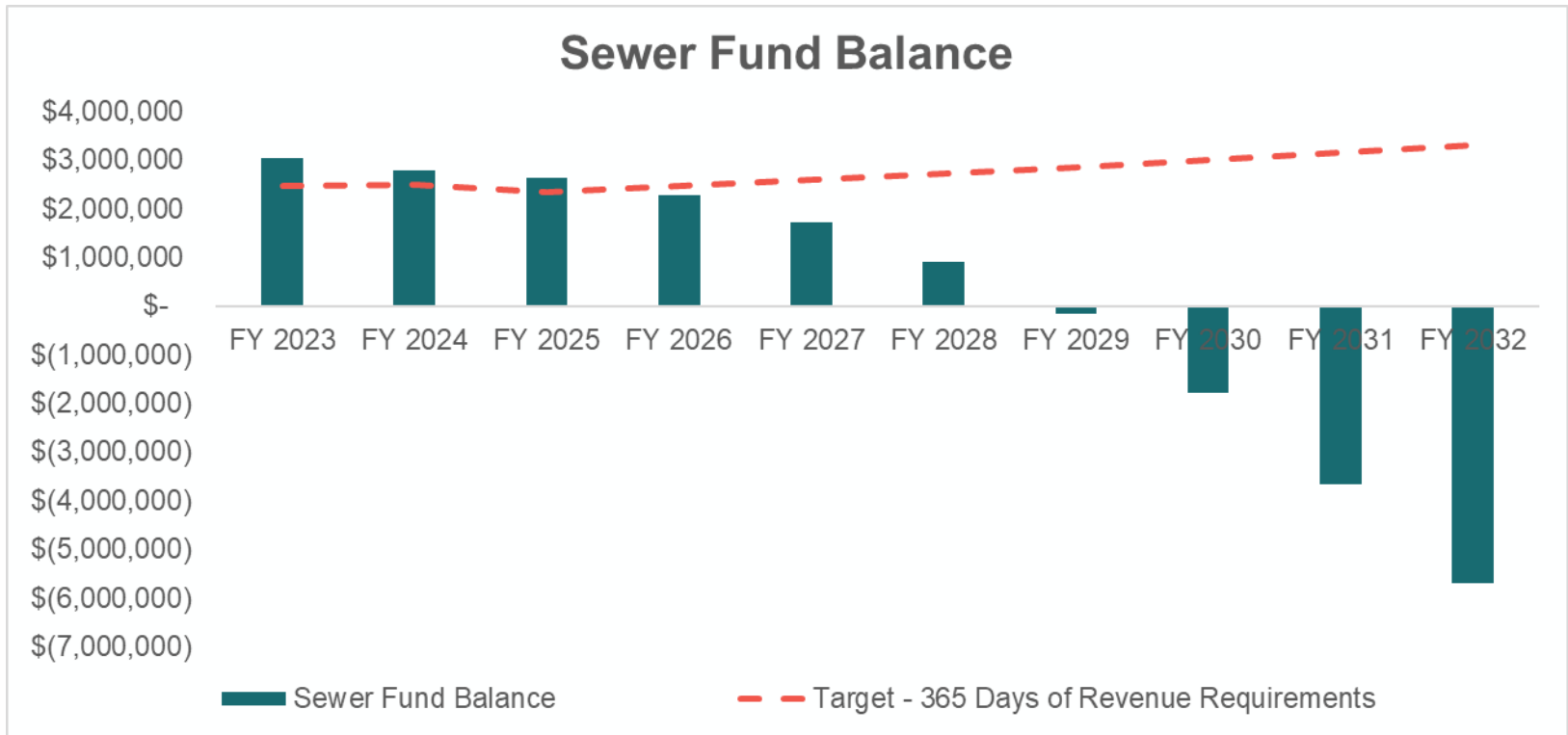
# Projected Water Reserve Fund Balance with Recommended Rate Increase



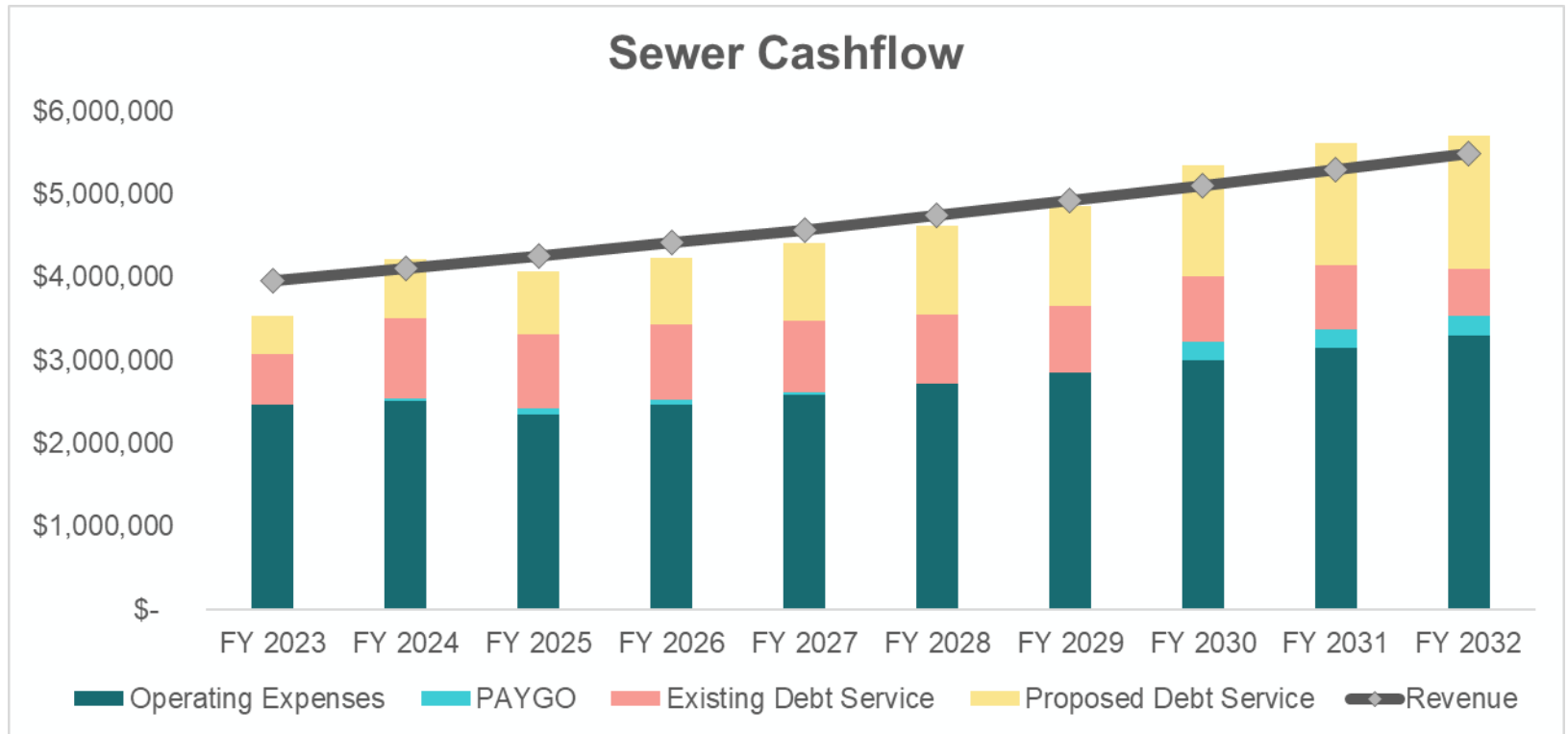
# Projected Sewer Cash Flows with No Rate Increases



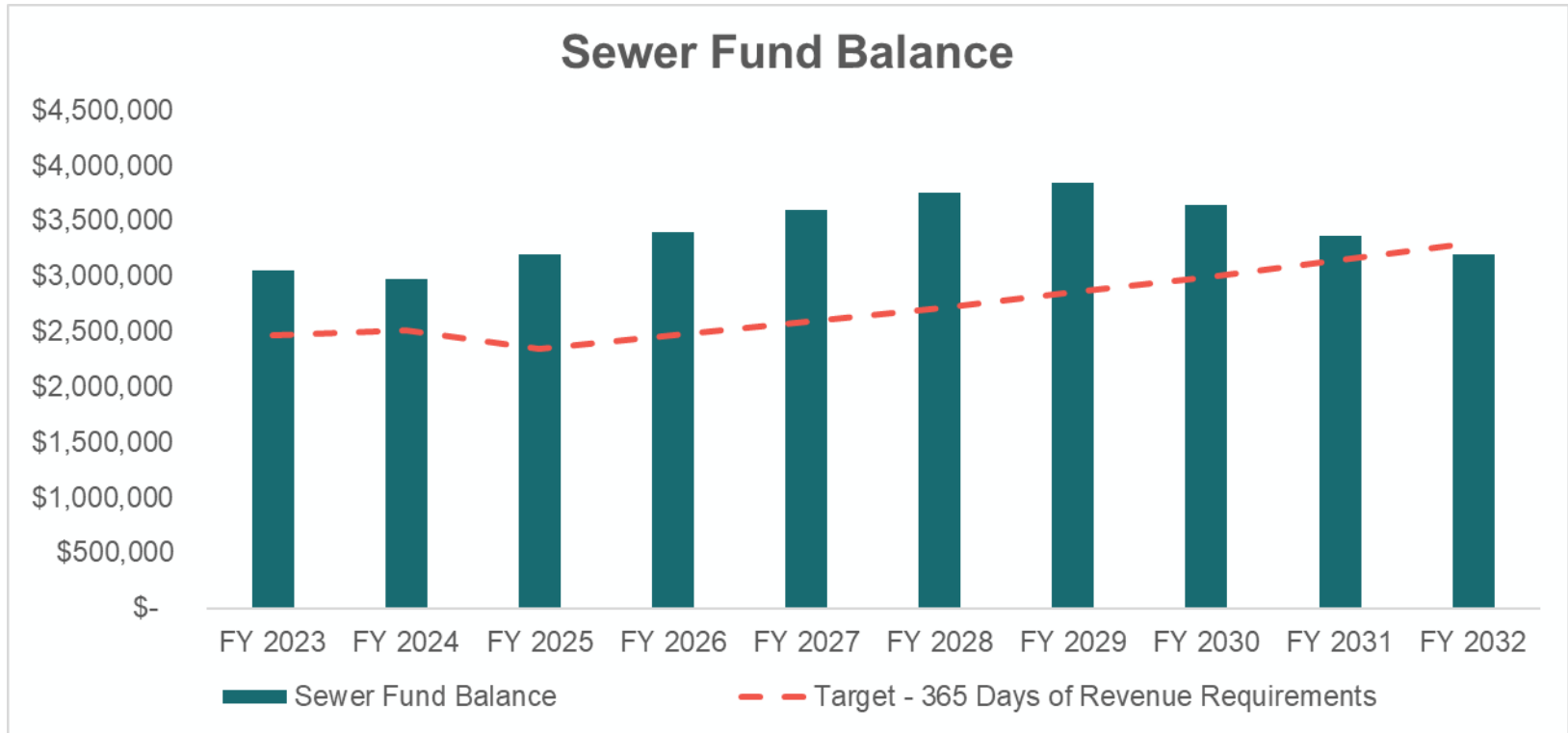
# Projected Sewer Reserve Fund Balance with No Rate Increases



# Projected Sewer Cash Flows with Recommended Rate Increases



# Projected Sewer Reserve Fund Balance with Recommended Rate Increase

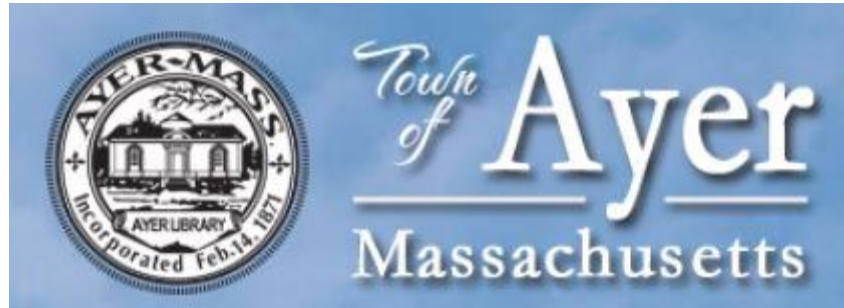




# Proposed Water and Sewer Rates

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- The following slides contain the FY24 water and sewer rates as recommended by the Rate Review Committee



Rate Review Committee

# Quarterly Minimum Proposed Rates

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Utility	Class Type	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025 (\$0.20 increase)
Water	Residential	\$10.00	\$10.00	\$10.00	\$10.20	\$10.40
Water	Irrigation	\$10.00	\$10.00	\$10.00	\$10.20	\$10.40
Water	Commercial	\$10.00	\$10.00	\$10.00	\$10.20	\$10.40
Utility	Class Type	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025 (\$0.53 increase)
Sewer	Residential	\$10.00	\$10.00	\$10.00	\$10.50	\$11.03
Sewer	Commercial	\$10.00	\$10.00	\$10.00	\$10.50	\$11.03

# PROPOSED WATER RATES (Residential) Per Hundred Cubic Feet (750 gallons)

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	<b>Current</b>	<b>Proposed</b>	<b>\$ Increase</b>
Step 1	\$3.07	\$3.13	\$0.06
Step 2	\$3.79	\$3.87	\$0.08
Step 3	\$4.51	\$4.60	\$0.09
Conservation Rate	\$4.51	\$4.60	\$0.09

\*Current and proposed rate steps increase at 3,000 cubic feet.

# PROPOSED SEWER RATES (Residential) Per Hundred Cubic Feet (750 gallons)

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	<b>Current</b>	<b>Proposed</b>	<b>\$ Increase</b>
Step 1	\$9.22	\$9.68	\$0.46
Step 2	\$10.56	\$11.09	\$0.53
Step 3	\$12.01	\$12.61	\$0.60

\*Current and proposed rate steps increase at 3,000 cubic feet.

# Impact on Average Ayer Resident

	Proposed Quarterly FY24	Quarterly FY24	Quarterly Increase	Annual Increase
Water	\$ 31.30	\$ 30.70	\$ 0.60	\$ 2.40
Sewer	\$ 96.80	\$ 92.20	\$ 4.60	\$ 18.40
Total	\$ 128.10	\$ 122.90	\$ 5.20	\$ 20.80

\*Impact on single family residential quarterly bill based on average quarterly usage of 1,000 cubic feet

# Rate Review Committee Recommends

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- Select Board vote to increase water & sewer rates as proposed by the Rate Committee effective July 1, 2024
- Summary of Recommendations:
  - **Increase the Water Rates by 2% effective July 1, 2024**
  - **Increase the Sewer Rates by 5% effective July 1, 2024**

