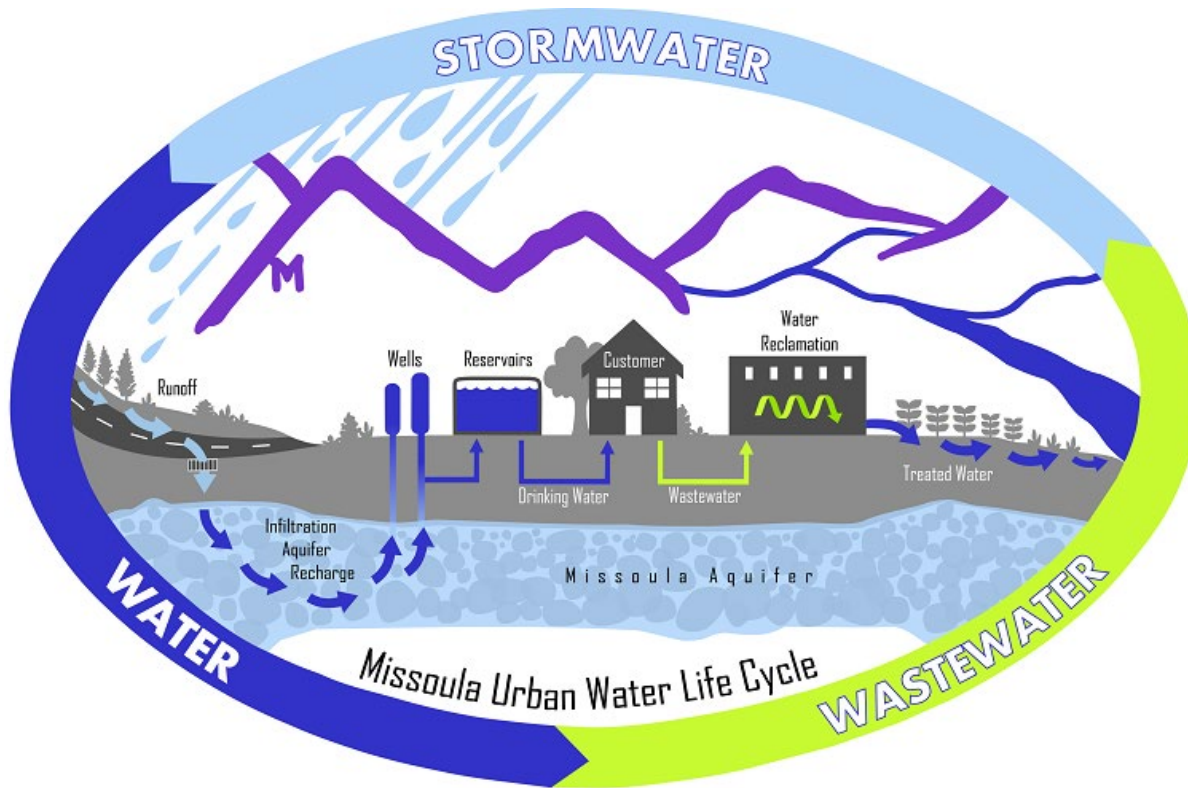


# Utility Rate Presentation

Public Works Committee

November 10, 2021



Your City of Missoula Utilities - Working Together to Serve You.

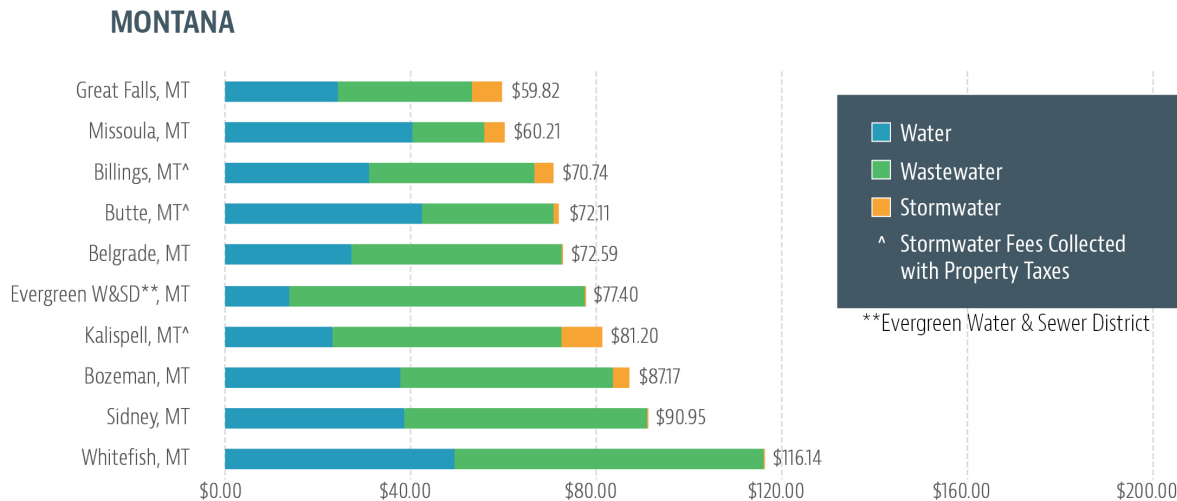
# Utility Rate Overview

**Utility fees provide Missoula residents with an abundant supply of high-quality drinking water as well as wastewater and stormwater services that protect the rivers and streams that make our community special.**

- Utility fees cover cost of providing utility services
- Average residential customer in Missoula pays about \$60/month for water, wastewater, and stormwater services.
- For comparison:
  - Cable TV: \$45/month
  - Cell Phone: \$50/month
  - Internet: \$75/month
  - Car Payment: \$563/month

# Background on Missoula Utility Rates

- Missoula’s combined utility rates nearly lowest in Montana (see below)
- Current water rates are lower than in 2011
- Wastewater rates have not increased since 2015
- Stormwater rates were established in FY20 after a rate study



# Why Raise Utility Rates?

- Address inflationary cost increases—energy, supplies, equipment & labor costs
- More full-time employees needed to address growth, further utility’s mission
- Invest in sustainable infrastructure to
  - Reduce water leakage
  - Improve wastewater treatment processes
  - Divert nutrients from the Clark Fork River
  - Remove pollutants from urban runoff
- Prioritize reduction of Greenhouse Gas (GHG) emissions from water and wastewater which generates 58% of the City’s emissions

# Water Utility Overview

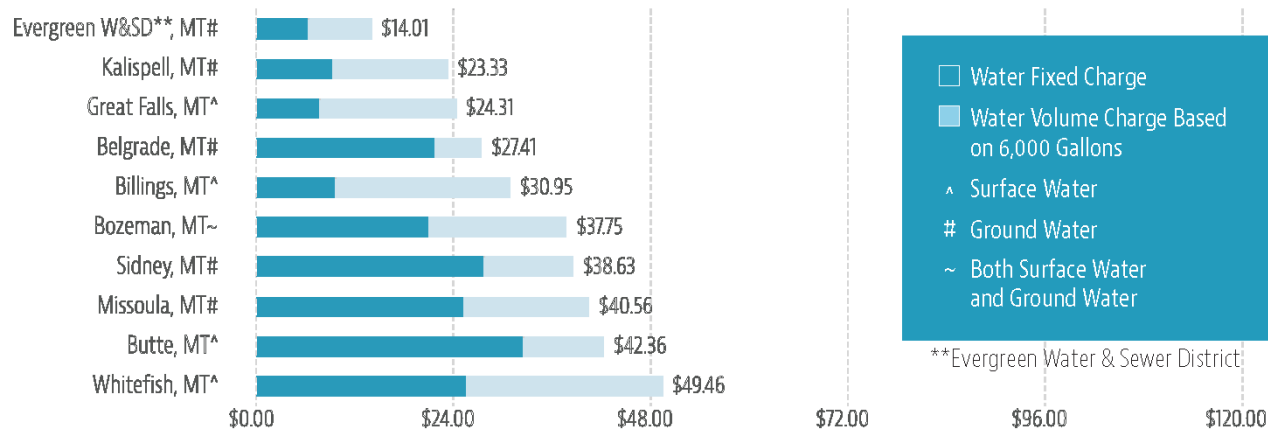
- Missoula Water provides excellent customer service, produces some of the highest quality drinking water in the State of Montana
- Department of Environmental Quality views it as one of the best operated systems in Montana
- Facilities can meet community's needs for domestic and fire protection water into foreseeable future—24 hours per day, 365 days per year
- Customers know water from tap is healthy, rigorously tested by Missoula Water



# Water Utility Rate Background

- Acquired water utility from Liberty Utilities in 2017, still charging rates lower than in 2011.
- Liberty Utilities planned to raise rates about 5% per year
- City has increased investment in maintenance staff and capital spending
- Missoula Water customers pay \$0.004 per gallon of water compared to \$1.15 per gallon of bottled water = 287 times less expensive per gallon

## MONTANA



TYPICAL MONTHLY RESIDENTIAL WATER UTILITY BILL (\$)

# What will increased water rates be used for?

- Work toward goal of replacing 1% of water mains each year
  - 0.3% in replacements per year over last four years
  - Increase to 0.6% in FY22
- Complete implementation of Advanced Metering Infrastructure (AMI) system by 2024
  - Provides customer real-time information about water usage
  - Reduces vehicle miles needed to gather meter reads,
- Invest in new storage tanks, transmission mains, and water supply wells
- Invest in new technology to find water leaks



# Wastewater Utility Overview

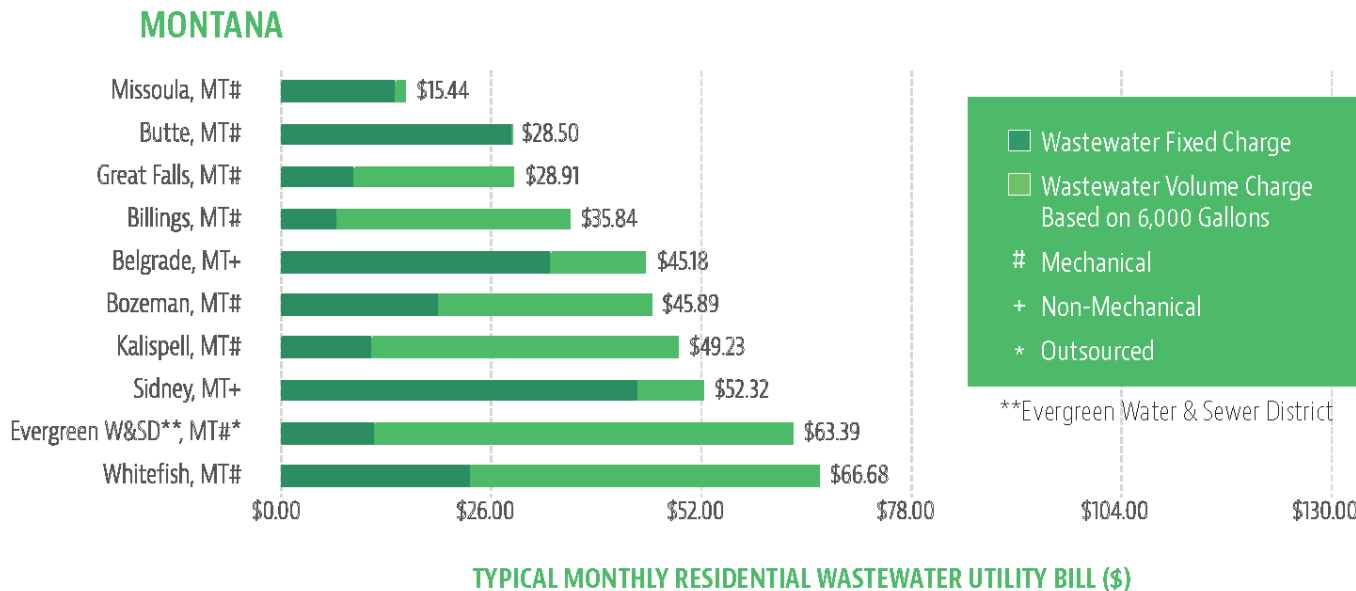
- Wastewater Utility provides customers with high value for about \$16 per month
- System protects Clark Fork River by removing pollutants:
  - > 98% of suspended solids and biochemical oxygen demand
  - > 93% of phosphorus
  - > 80% of nitrogen
- Converts organic material in sewage to methane and compost, reduces energy bill, provides compost product
- Poplar plantation diverts more than 1,000 pounds of phosphorus and 10,000 pounds of nitrogen from the river, reducing algae blooms





# Wastewater Utility Rate Background

- Current wastewater rates are same as in 2015, Consumer Price Index has risen 14% in same time period
- Missoula’s wastewater rates are nearly 50% lower than next lowest city in Montana
- New flow-based wastewater rate structure implemented in FY21 was intended to be rate neutral but revenue decreased by \$500,000



# What will increased wastewater rates be used for?

- Rehabilitate or replace three lift stations, develop plans for two more lift station rehab projects in 2022
- Improve UV disinfection system, other systems at Resource Recovery Facility
- Upgrade, expand compost facility (Garden City Compost) to meet stricter DEQ requirements
- Decrease Public Works & Mobility greenhouse gas emissions by 10% over next five years
- Complete third-party financing package for 500 KW solar farm at Resource Recovery Facility
- Study land application alternatives to continue to divert unwanted nutrients from the Clark Fork River



# Stormwater Utility Overview

Missoula's Stormwater Utility strives to protect Missoula's water quality and comply with state and federal water quality regulations:

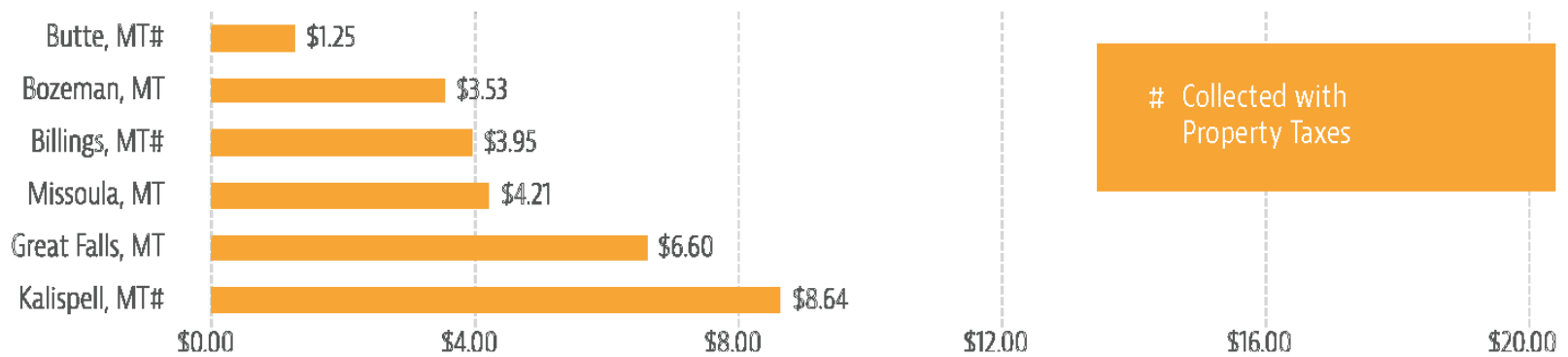
- Identifying and mapping all stormwater infrastructure
- Inspecting construction sites to reduce erosion
- Completing projects to improve quality of storm water discharged to Clark Fork and Bitterroot Rivers and the Missoula aquifer
- Improving compliance with the city's Municipal Separate Storm Sewer System (MS4) Permit
- Working to maintain and re-certify four accredited levees and one high hazard dam
- Training contractors to improve construction site stormwater runoff
- Educating community on importance of eliminating pollution from urban runoff



# Stormwater Utility Rate Background

The Stormwater Utility is a new utility that began with a low initial rate in 2018, then the current rate structure was set in FY20 with an average residential rate of \$4.21/month.

## MONTANA



TYPICAL MONTHLY RESIDENTIAL STORMWATER UTILITY BILL (\$)

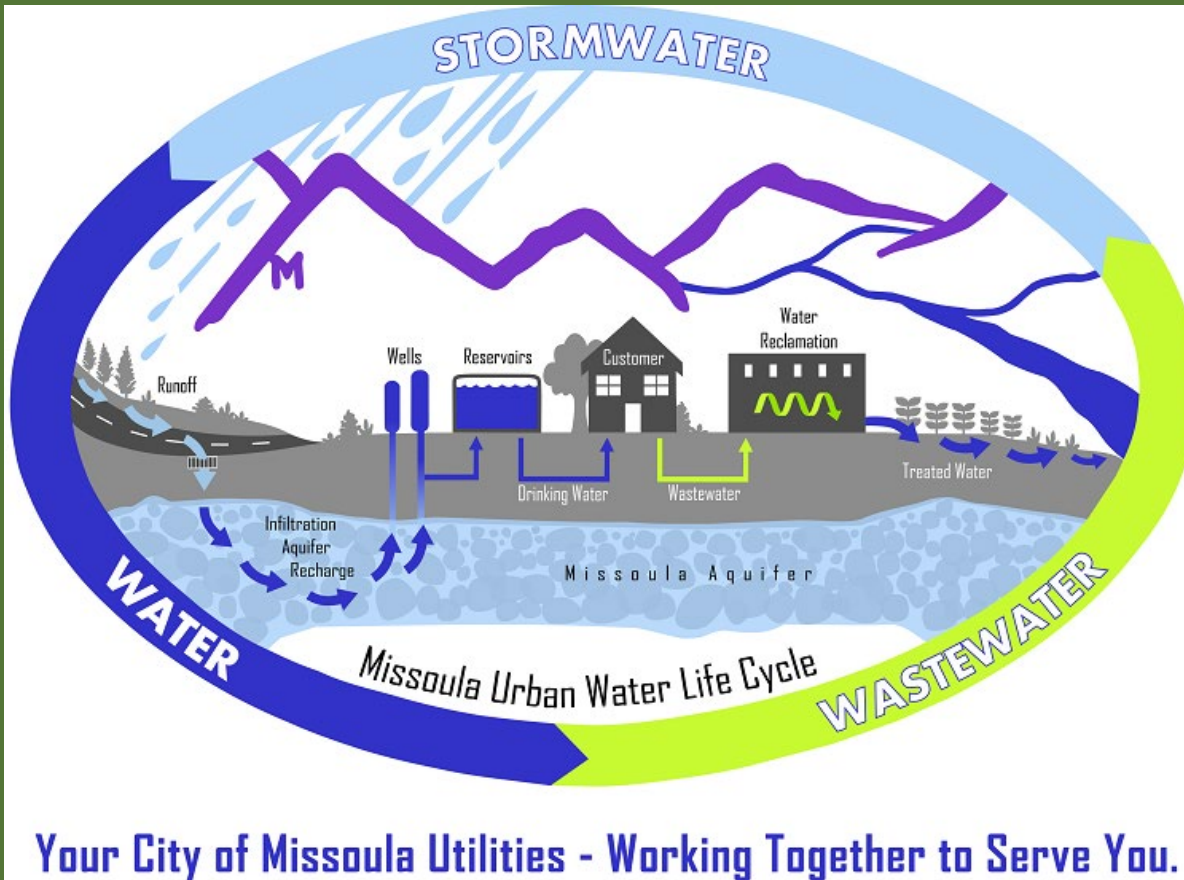


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# What will increased stormwater rates be used for?

- Construct capital projects—Caras Park and South Hills Storm Drainage projects
- Expand maintenance of stormwater infrastructure:
  - Cleaning dry wells, inlets, and basins
  - Jetting storm mains
- Install infrastructure to remove stormwater pollutants before they enter local waterbodies
- Expand maintenance on the four Federal Emergency Management Agency (FEMA)-accredited levee systems
  - Protect property from flooding
  - Reduce flood insurance rates





# Questions



# Public Works Committee Meeting

## Utility Rate Recommendations

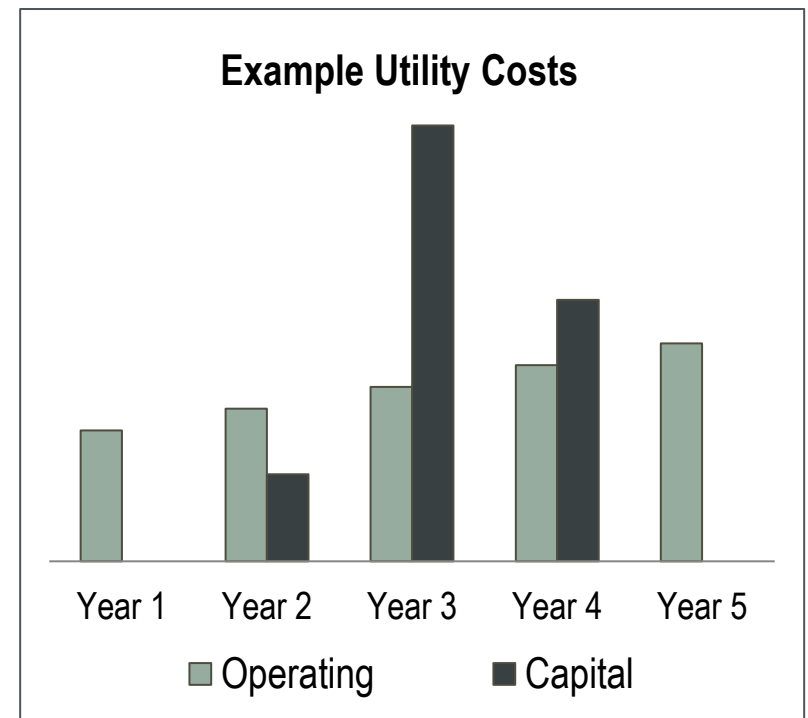
November 10, 2021

Melanie Hobart, Project Manager  
Angie Sanchez, Principal & Vice President



# Introduction to Utility Ratemaking

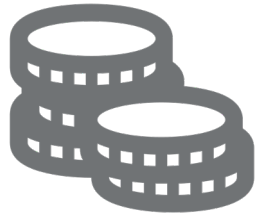
- **Utility rates are set to recover the cost of providing service**
- **Utilities incur two primary types of costs:**
  - » **Operating costs (regular / ongoing)**
    - Employee salaries and benefits
    - Routine inspections
    - Regulatory compliance
    - Asset repair and maintenance
  - » **Capital costs (irregular / periodic)**
    - Infrastructure replacement
    - Facility expansions and upgrades







# Revenue Requirement



## What?

Annual revenue to meet all utility financial obligations

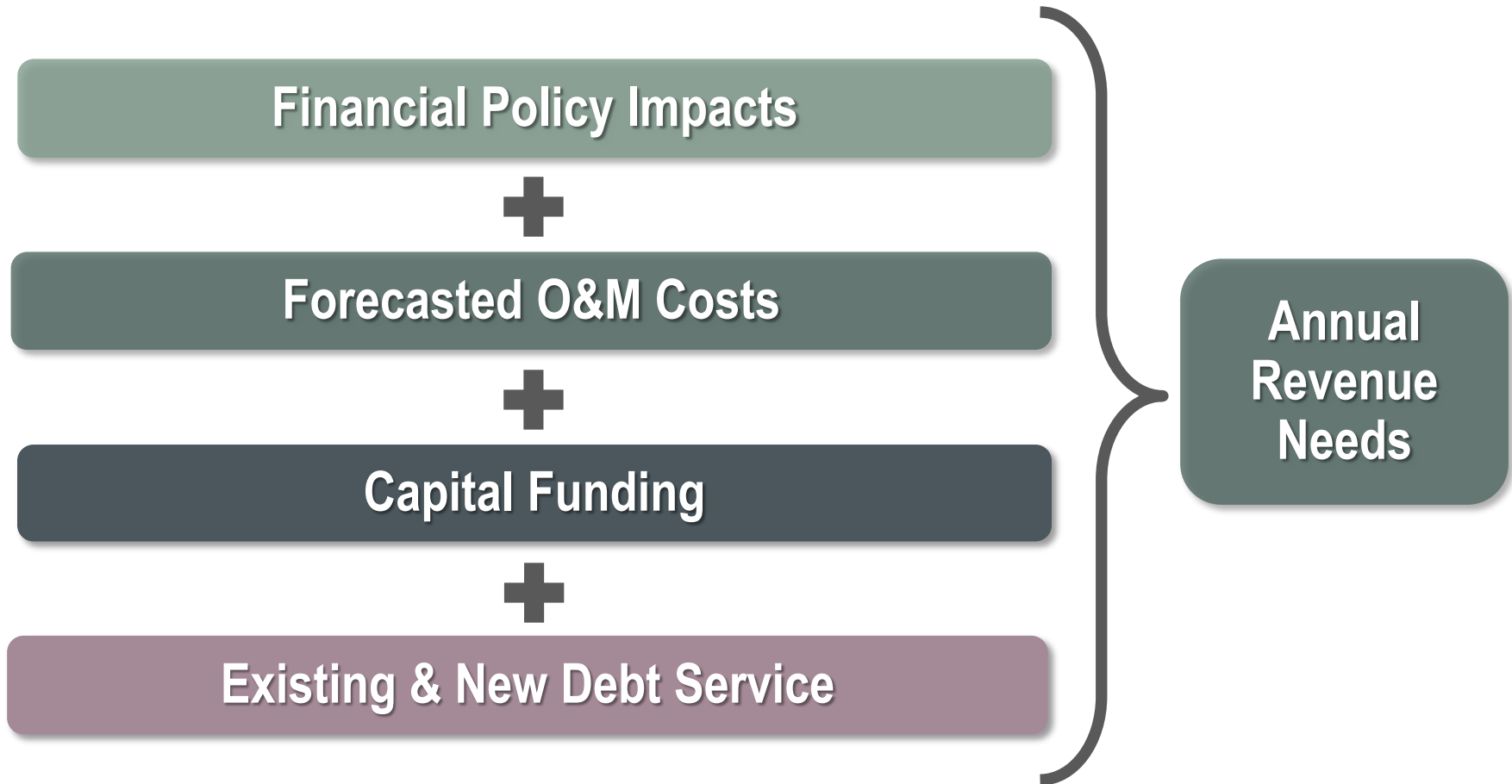


## Why?

Results in rate adjustment strategy; part of a multi-year plan



# How Much Revenue is Needed?

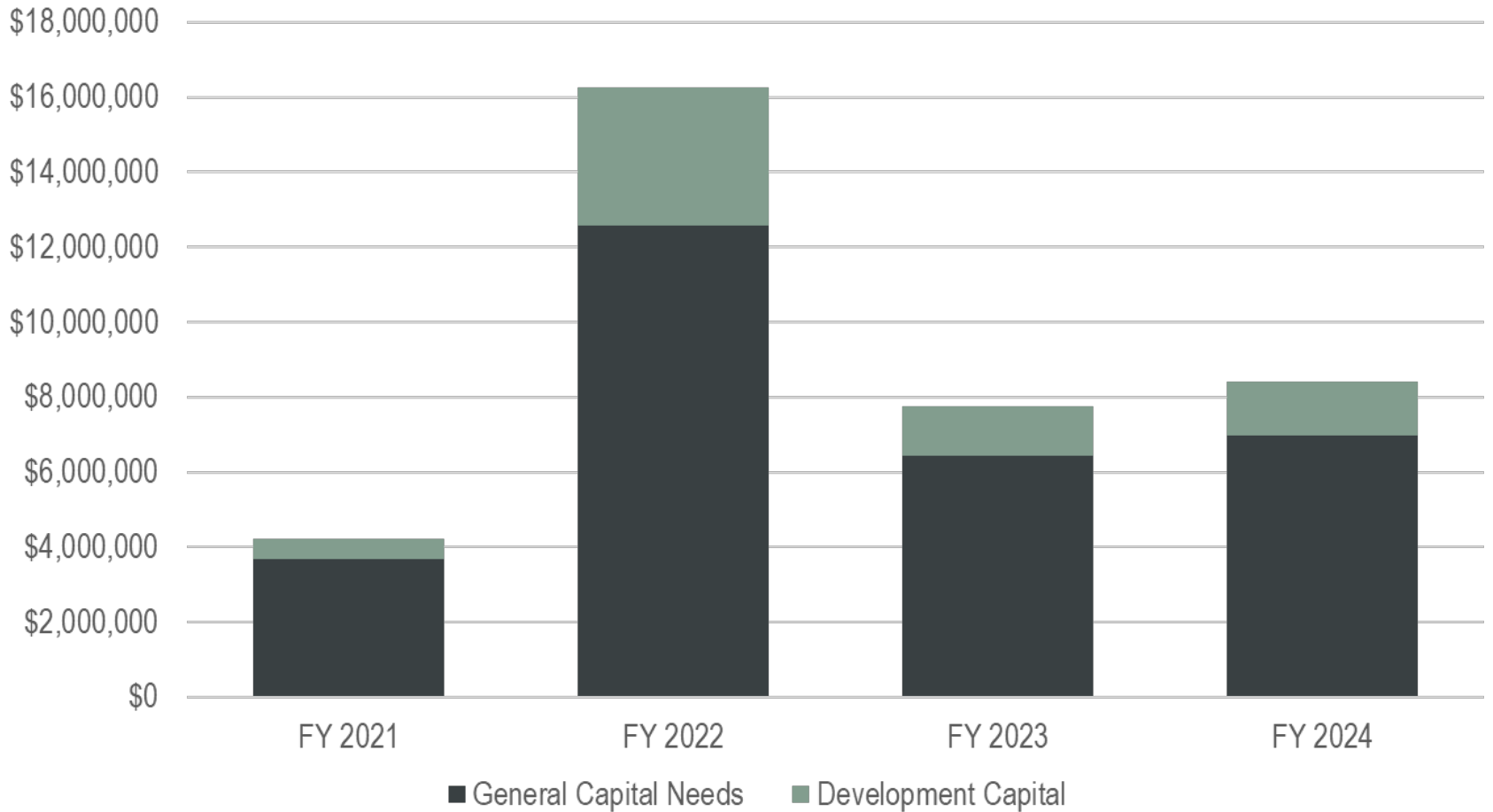




# Water

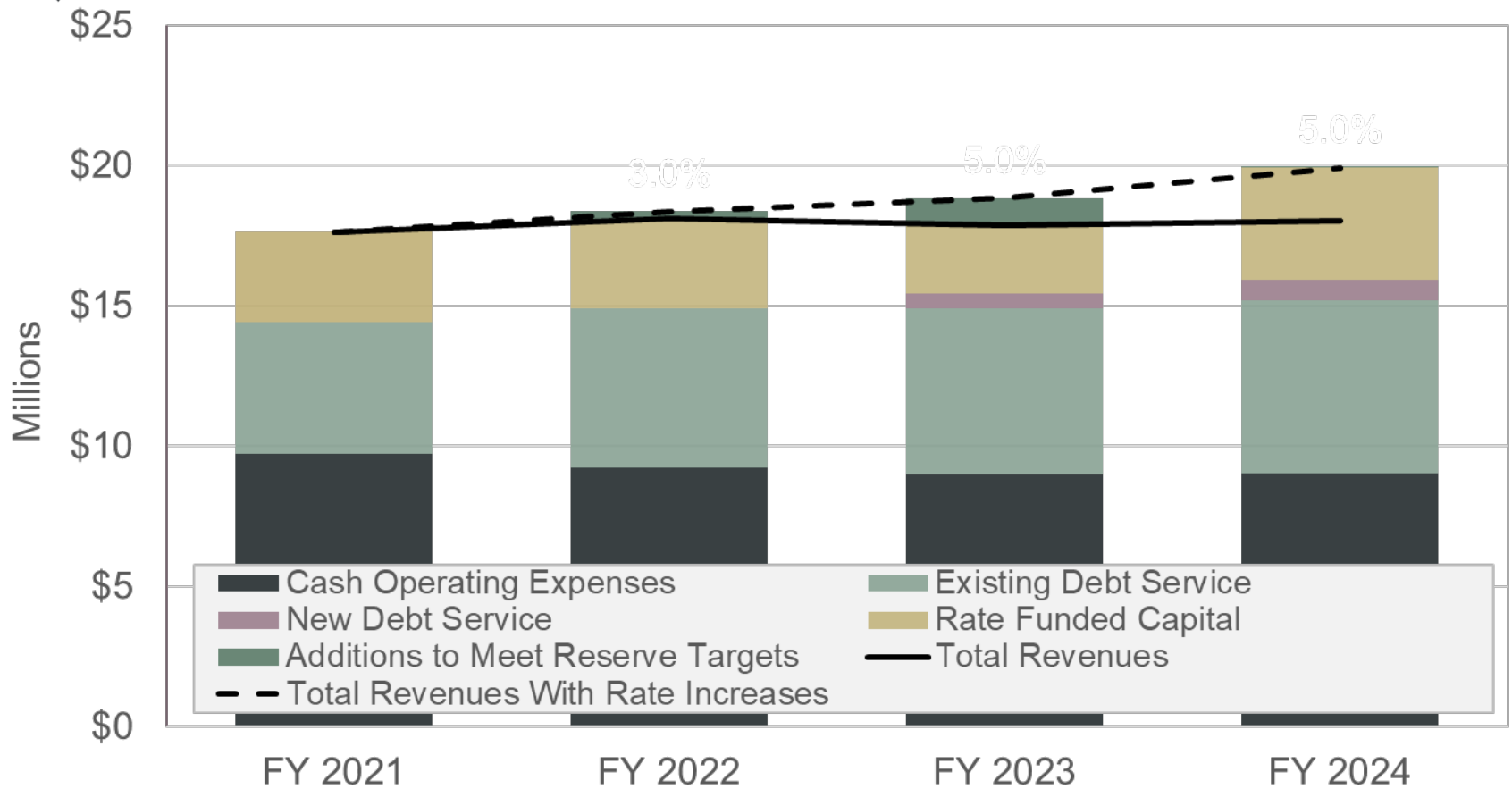


# Water Capital Needs: \$36.7M from 2021-2024





# Water Revenue Requirement



	2021	2022	2023	2024
Av. Monthly SF Bill	\$42.10	\$43.36	\$45.53	\$47.81
\$ Change		\$1.26	\$2.17	\$2.28



# Water Rate Impact

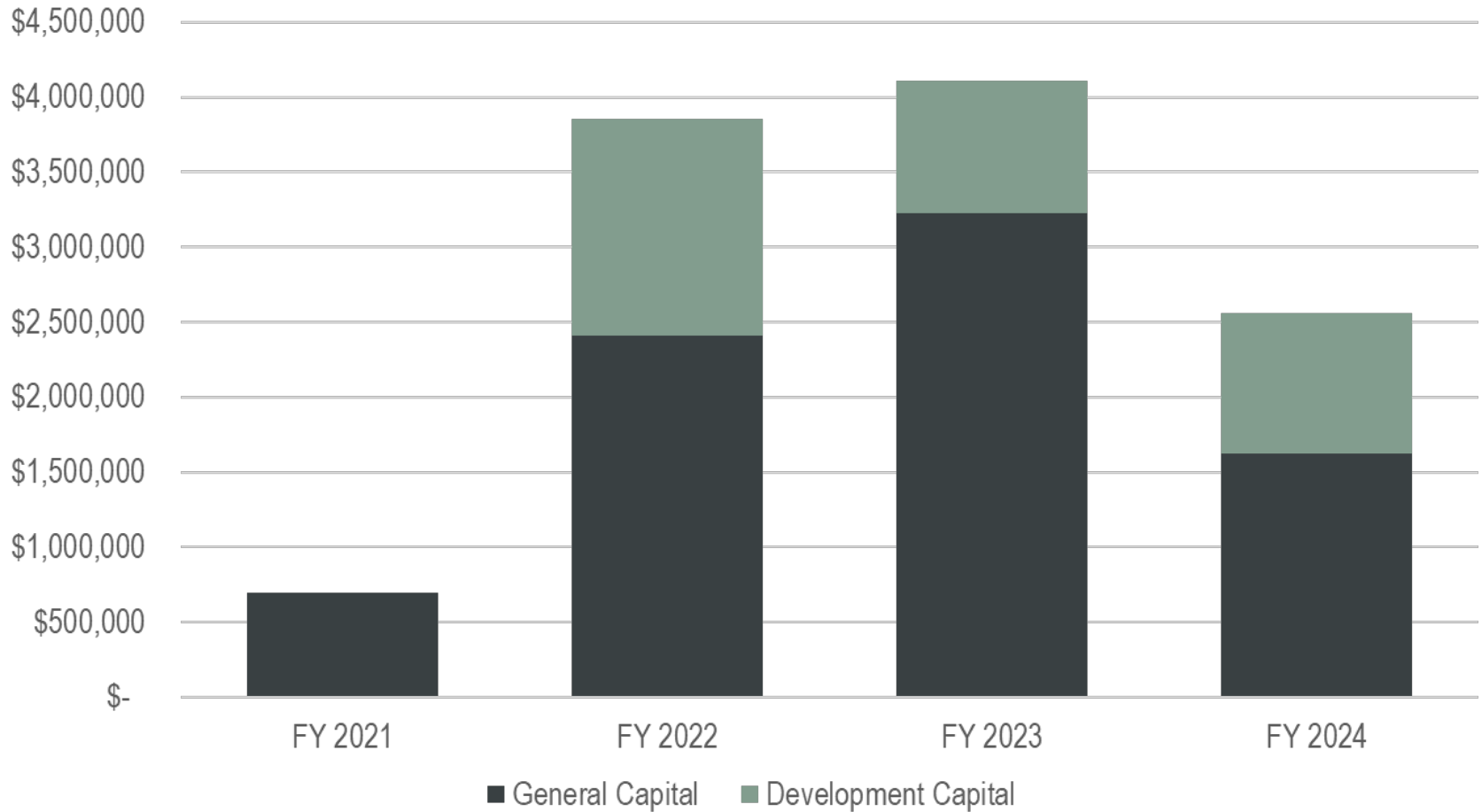
Recommended Rate Schedule	Existing 2021	ATB 2022	ATB 2023	ATB 2024
<b>Annual System-Wide Rate Increase</b>		<b>3.0%</b>	<b>5.0%</b>	<b>5.0%</b>
<b>Metered Customers</b>				
5/8 x 3/4-inch meters	\$ 17.30	\$ 17.82	\$ 18.71	\$ 19.65
3/4-inch meter	24.63	25.37	26.64	27.97
1-inch meter	39.29	40.47	42.49	44.62
1-1/2 inch meter	75.93	78.21	82.12	86.22
2-inch meter	119.91	123.51	129.68	136.17
3-inch meter	222.52	229.20	240.66	252.69
4-inch meter	369.10	380.17	399.18	419.14
6-inch meter	735.55	757.62	795.50	835.27
8-inch meter	1,175.30	1,210.56	1,271.09	1,334.64
10-inch meter	1,688.34	1,738.99	1,825.94	1,917.24
Usage rate (per 100 cu. Ft.)	\$ 2.00	\$ 2.06	\$ 2.16	\$ 2.27



# Sewer



# Sewer Capital Needs: \$11.2M in 2021-2024

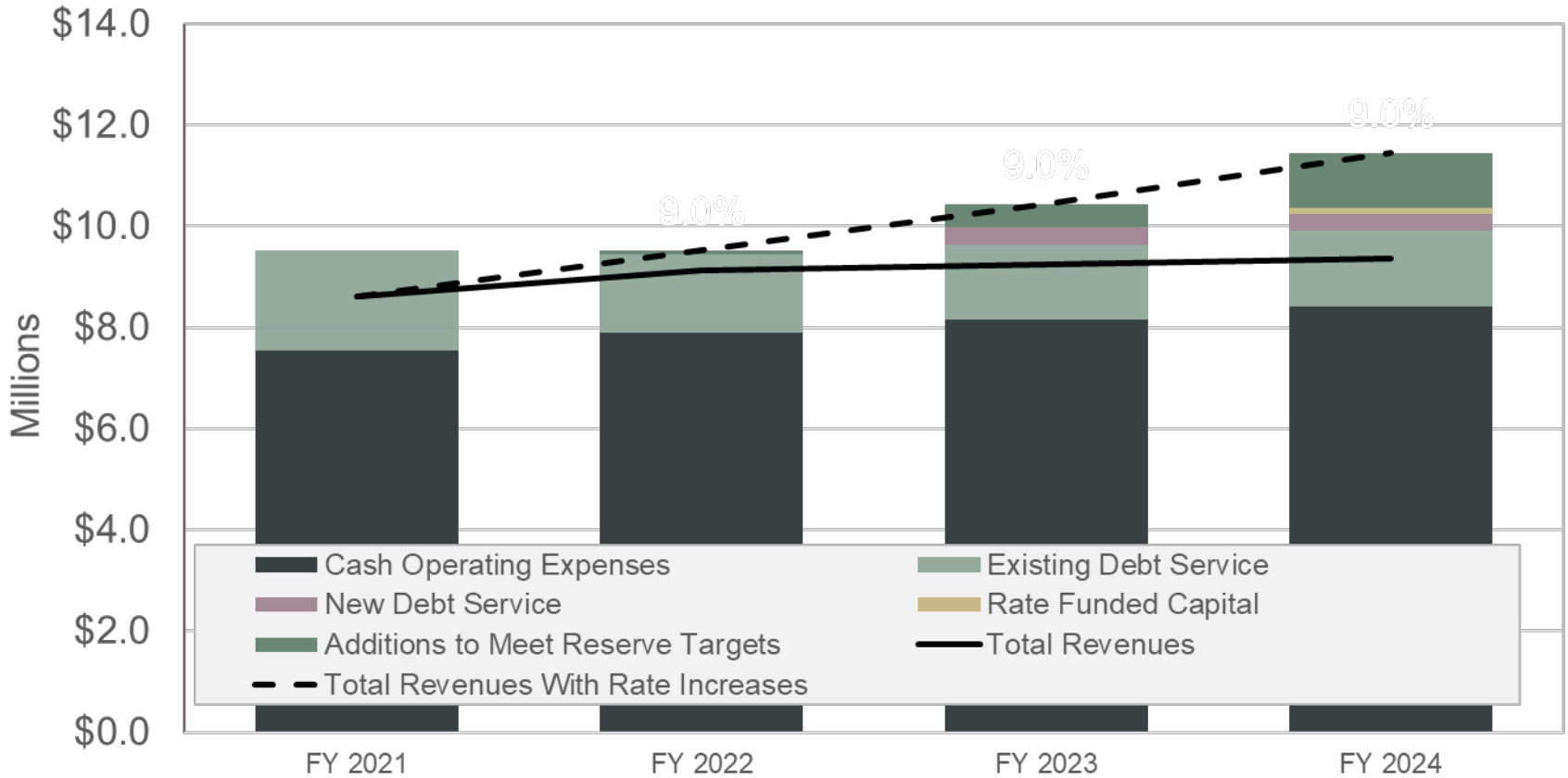


Note: Development capital occurs only when there is development fee revenue to fund the projects.





# Sewer Revenue Requirement



	2021	2022	2023	2024
Av. Monthly SF Bill	\$15.69	\$17.10	\$18.64	\$20.32
\$ Change		\$1.41	\$1.54	\$1.68



# Sewer Rate Impact

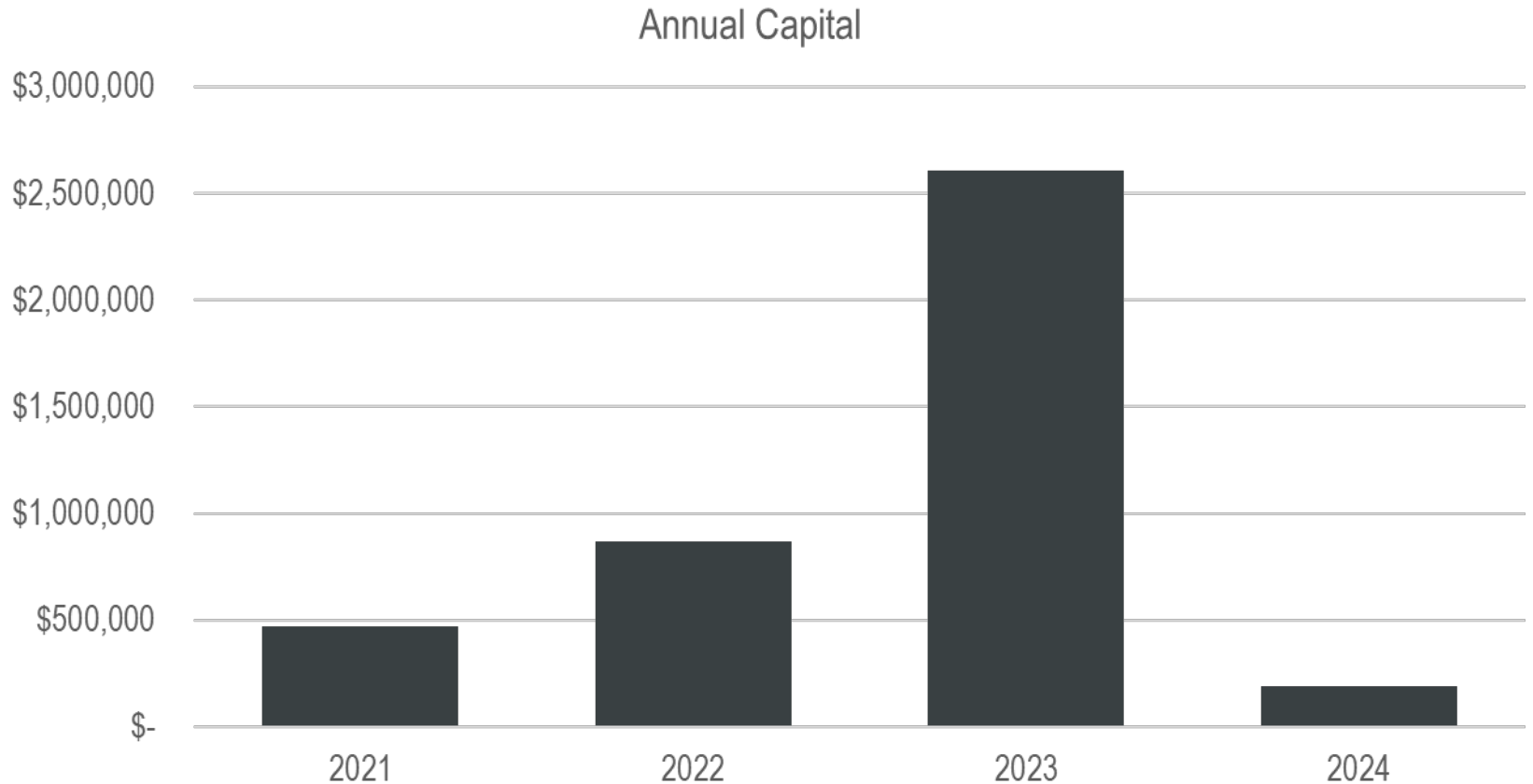
Recommended Rate Schedule	Existing 2021	ATB 2022	ATB 2023	ATB 2024
<b>Annual System-Wide Rate Increase</b>	<b>0.0%</b>	<b>9.0%</b>	<b>9.0%</b>	<b>9.0%</b>
<b><u>Single Family Residential</u></b>				
Base Rate	\$ 14.00	\$ 15.26	\$ 16.63	\$ 18.13
Volume Rate	0.18	0.20	0.21	0.23
<b><u>Multi-Family Residential</u></b>				
Base Rate	\$ 11.00	\$ 11.99	\$ 13.07	\$ 14.25
Volume Rate	0.16	0.17	0.19	0.21
<b><u>Commercial</u></b>				
Base Rate	\$ 5.00	\$ 5.45	\$ 5.94	\$ 6.48
General Commercial Volume Rate	1.55	1.69	1.84	2.01
Food Service Volume Rate	3.36	3.66	3.99	4.35
Hospitals Volume Rate	1.62	1.77	1.92	2.10
Schools Volume Rate	1.41	1.54	1.68	1.83
<b><u>Large Volume and Industrial</u></b>				
Base Rate	\$ 6.89	\$ 7.51	\$ 8.19	\$ 8.92
per cubic foot	1.23	1.34	1.46	1.59
per lb BOD	0.23	0.25	0.27	0.30
per lb SS	0.17	0.19	0.20	0.22
per lb Phosphorus	4.05	4.41	4.81	5.24
per lb Nitrogen	0.48	0.52	0.57	0.62



# Stormwater



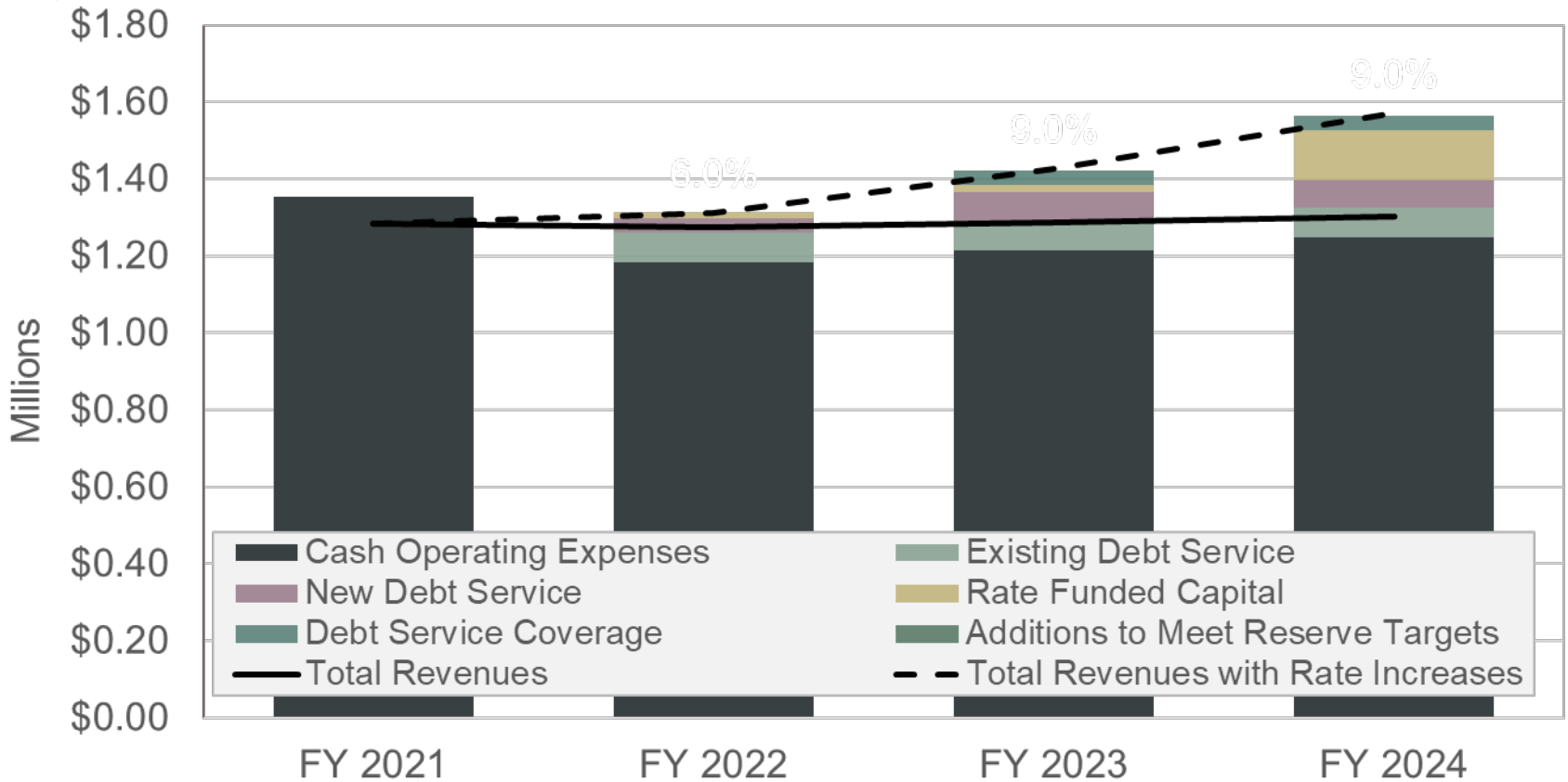
# Stormwater Capital Needs: \$4.1M in 2021-2024



Note: The \$2.2 million project in 2023 is funded by \$2.0 of ARPA funding.



# Stormwater Revenue Requirement



	2021	2022	2023	2024
Monthly SF Bill	\$4.21	\$4.46	\$4.86	\$5.30
\$ Change		\$0.25	\$0.40	\$0.44

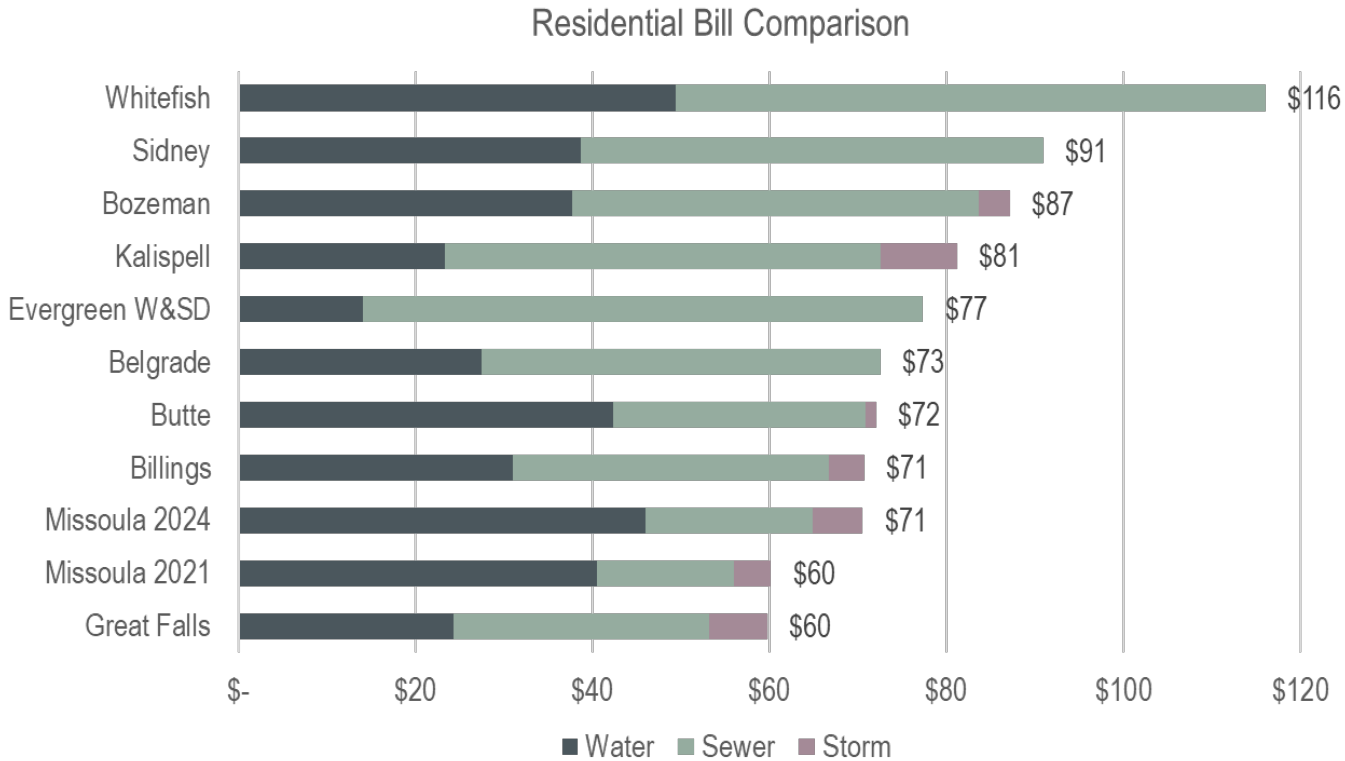


# Stormwater Rate Impact

	Existing 2021	ATB 2022	ATB 2023	ATB 2024
<b>Annual System-Wide Rate Increase</b>	<b>0.0%</b>	<b>6.0%</b>	<b>9.00%</b>	<b>9.00%</b>
<b>Proposed Rates</b>				
Administrative Charge	\$20.03	\$ 21.23	\$ 23.14	\$ 25.23
Compliance Charge	\$27.97	\$ 29.65	\$ 32.32	\$ 35.23
Trip Charge	\$0.27	\$ 0.29	\$ 0.31	\$ 0.34



# Combined Monthly Residential Bill Impact



Note: Assumes 6,000 gals of monthly usage for water and sewer bills, and full CIP stormwater plan.

Increase in average combined monthly residential utility bill:

CY 2022	CY 2023	CY2024
\$2.92	\$4.11	\$4.40

## Questions / Comments





# Thank you!

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