

# City of Prescott

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## Water and Wastewater Utility Rate Study Findings and Recommendations

May 14, 2024





# Agenda



**Study Objectives and Overview**



**Water Fund**



**Wastewater Fund**



**Customer Bill Impacts and Survey**



# Rate study objectives

## Sufficient Revenue

- Develop 10-year financial plans for water and wastewater utilities through Fiscal Year (FY) 2032-33
- Evaluate capital funding options and scenarios
- Project annual revenues, timing, and amount of necessary annual rate adjustments over 10-year period

## Cost-of-Service Analysis

- Evaluate the cost of providing water and wastewater services for a FY 2028-29 test-year
- Review and update the basis for the increased rates for outside-City customers

## Rates and Rate Structure

- Develop fixed and volume over a 5-year period of FY 2024-25 through FY 2028-29
- Maintain conservation pricing signal and class cost of service recovery



Study Milestone	Timeline
Publish Draft Rate Study	April 26, 2024
<b>Council Workshop Water and Wastewater Rates</b>	<b>May 14, 2024</b>
<b>Utility Rate Public Hearing</b>	<b>May 28, 2024</b>
Effective Date for Adopted Rates	July 1, 2024

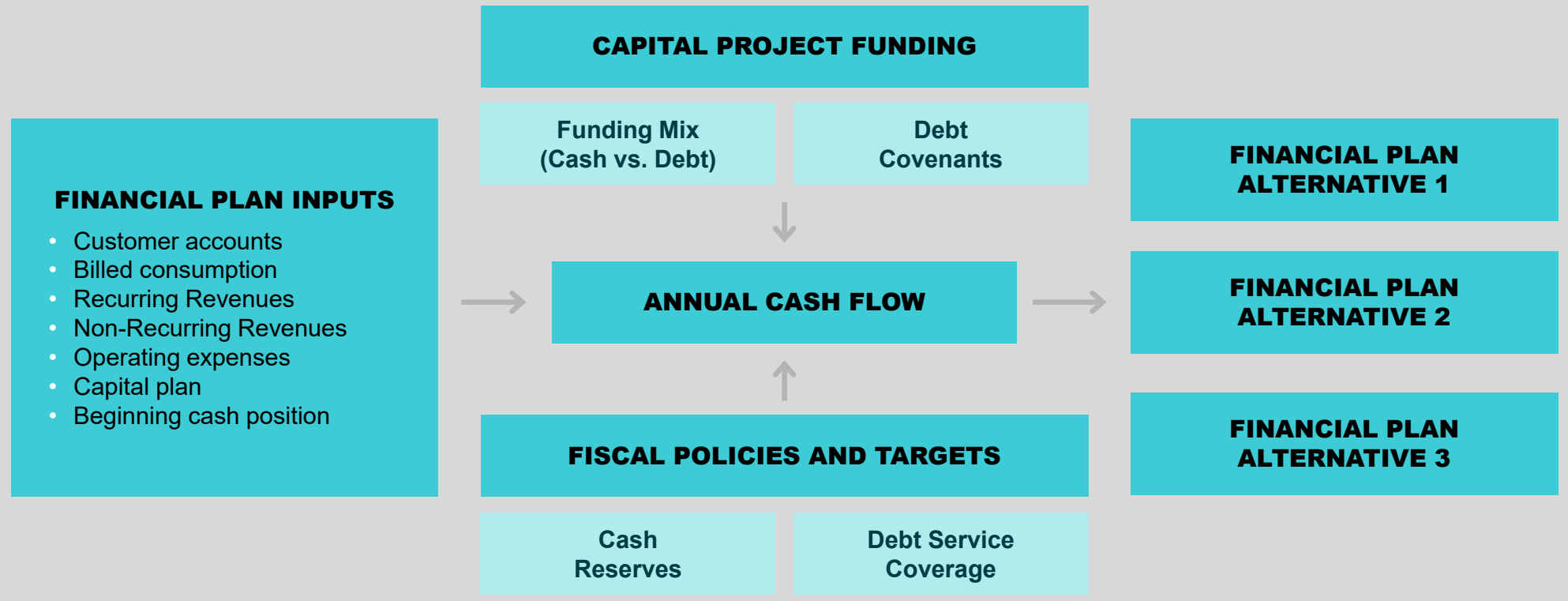


# Prudent Utility Financial Planning

<b>Fund Expenses</b>	<ul style="list-style-type: none"><li>• Fund annual operation and maintenance (O&amp;M), debt service, and cash-funded capital expenses</li></ul>
<b>Debt Service Coverage (DSC) Ratio</b>	<ul style="list-style-type: none"><li>• DSC is calculated as the ratio of utility revenues less O&amp;M divided by annual debt service</li><li>• Exceed annual DSC requirements targeting 150% of annual debt service for rate setting</li><li>• DSC ratio of 125% is a requirement of City loan agreements</li></ul>
<b>Cash Reserves</b>	<ul style="list-style-type: none"><li>• Exceed minimum cash reserves<ul style="list-style-type: none"><li>• Water Fund: 90 days (25%) of O&amp;M</li><li>• Wastewater Fund: 60 days (17%) of O&amp;M</li></ul></li></ul>



# Utility Financial Planning Process



# Water Fund



# Water Financial Plan Drivers

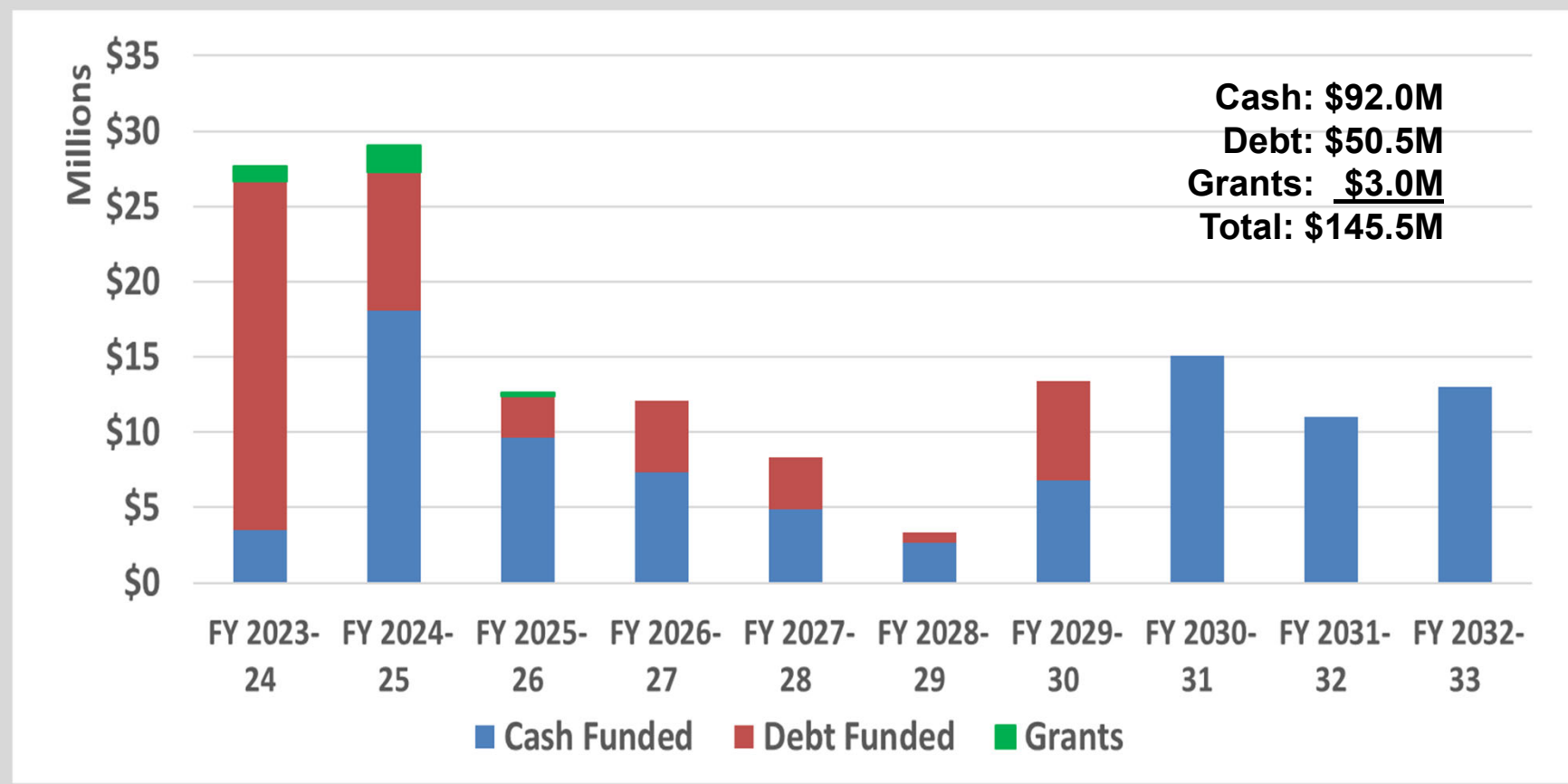
1. Increases in labor costs, materials, supplies, and borrowing costs driving higher near-term rate increases
2. Fund annual repair and replacement capital facilities
3. Use restricted fund balances (e.g., Alt. Water Fund) to mitigate rate revenue funding requirements.
4. PFAS mediation and accelerated meter replacement program funding requirements
5. Reductions in peak and outdoor water use
6. Managing varying annual capital funding requirements and development impact fee revenues inflows
7. Levelized annual rate revenue adjustments while funding annual requirements and exceeding DSC and cash reserves

# Major Water Fund Capital Projects FY 2023-24 through FY 2032-33

Line No.	Project Description	Total Cost	Timing	Funding
1	Water Main Replacements	\$18.91 M	Annual	Cash
2	Water Production and Intermediate Pump Station. Tanks and Pipeline	18.01 M	FY 2023-24 - FY 2024-25	Existing loan
3	Zone 41 Mingus Pump Station, Tank, and Pipeline	10.04 M	FY 2023-24 - FY 2024-25	Debt
4	Water Meter Replacement Program	12.78 M	FY 2023-24 - FY 2027-28	Cash and Grants
5	PFAS Remediation	10.05 M	FY 2023-24 - FY 2027-28	Debt
6	Zone 110 New Transmission Main	8.23 M	FY 2026-27, FY 2031-32 - FY 2032-33	Cash
7	Production Well No. 6 AP - New	4.92 M	FY 2028-29 - FY 2029-30	Debt
8	Production Well No. 2 - Replacement	4.90 M	FY 2029-30 - FY 2030-31	Cash
9	Production Well No. 1 - Rehabilitation	4.90 M	FY 2030-31 - FY 2031-32	Cash

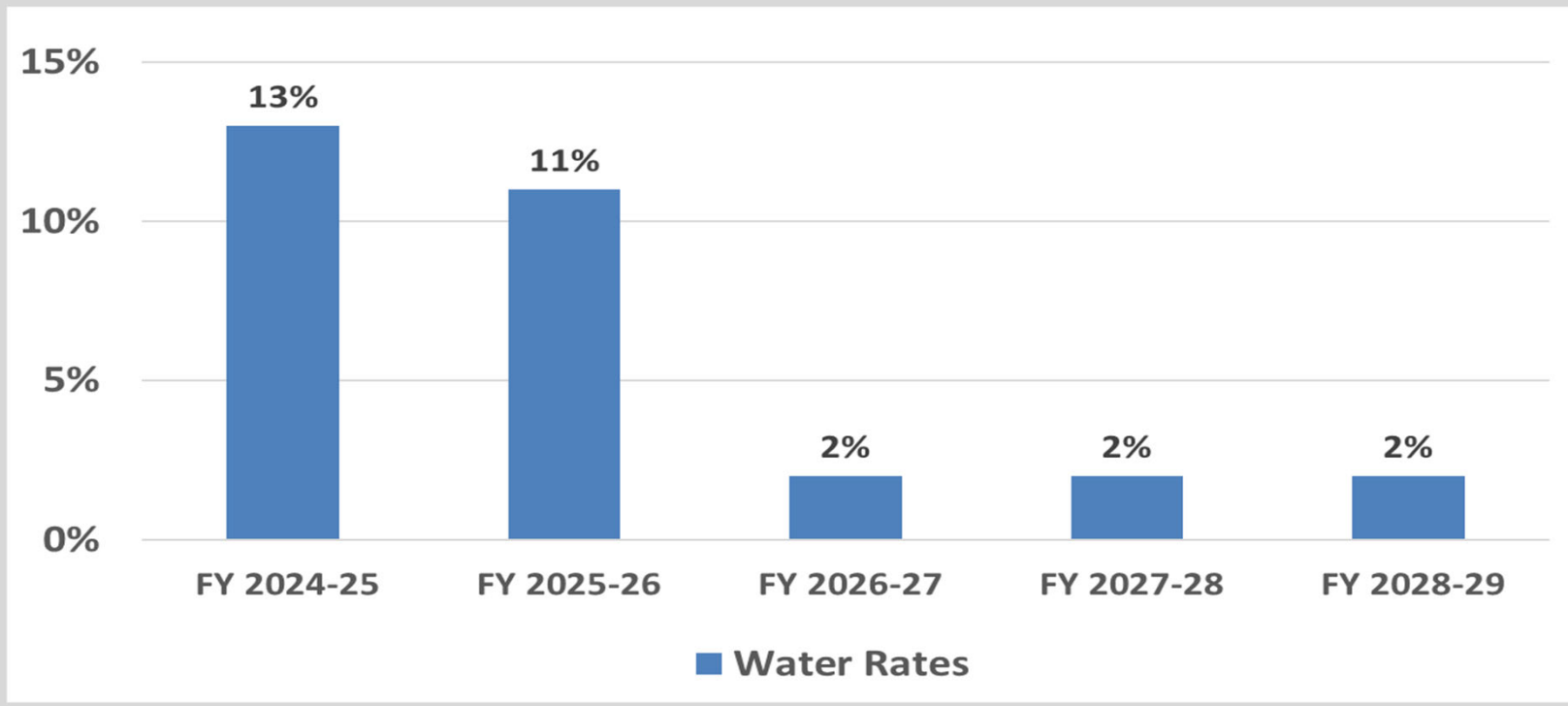


# Water System CIP through FY 2032-32



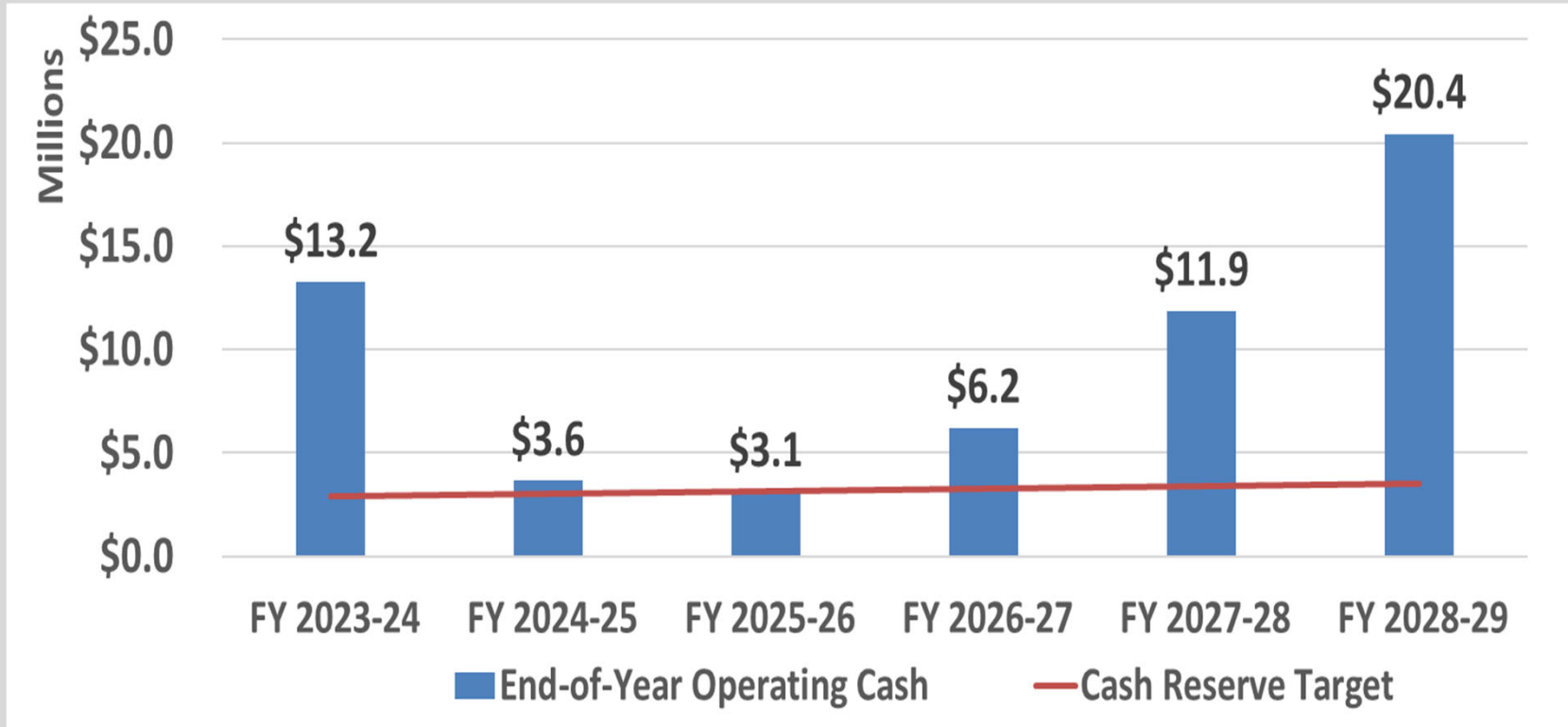


# Proposed Water Rate Revenue Increase FY 2024-25 through FY 2027-28



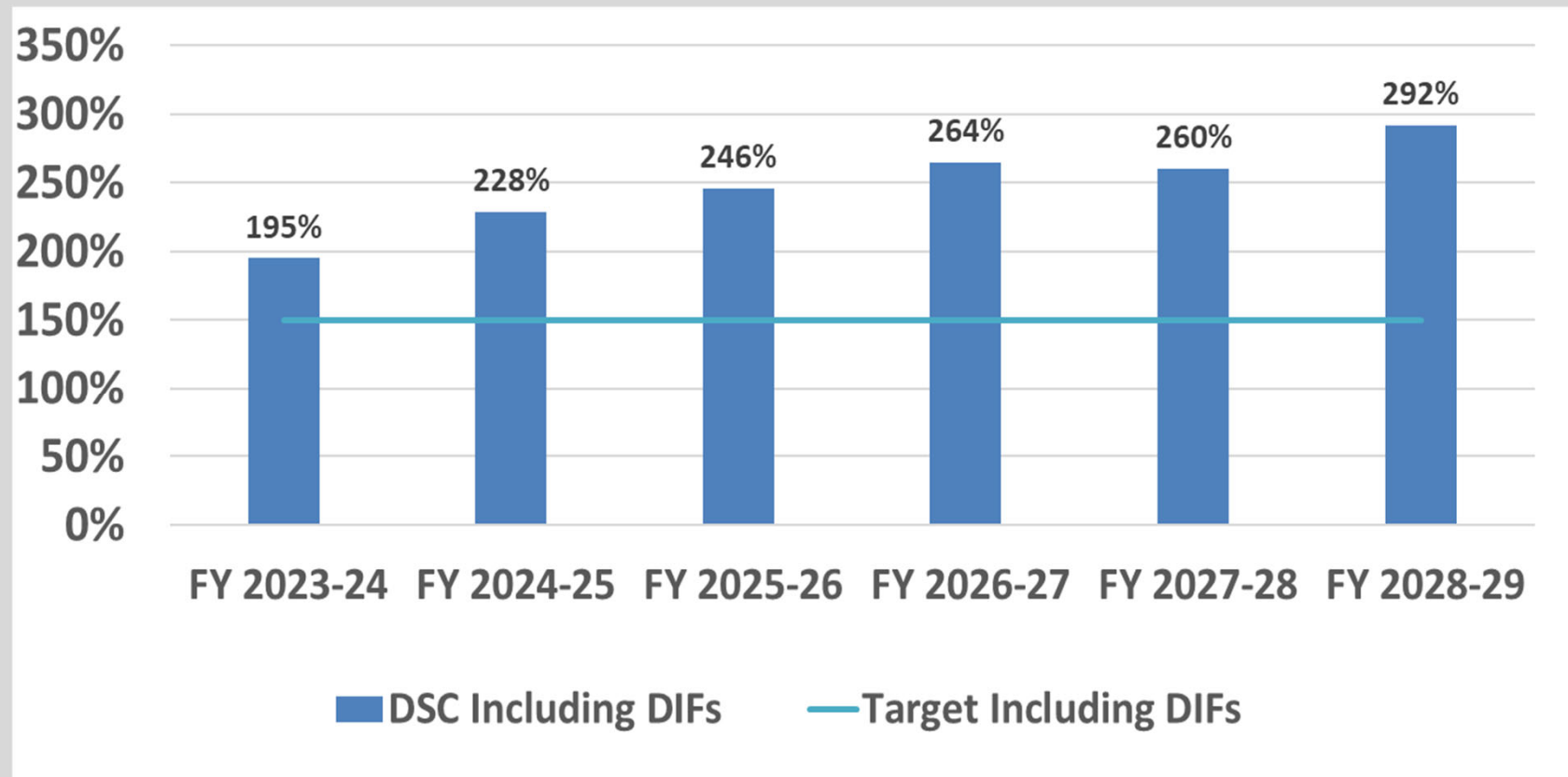


# Water Operating Fund Cash Balances





# Water Fund Annual DSC





# Water Rate and Fee Recommendations

1. Increase base charge by overall rate revenue requirements to maintain revenue stability
2. Maintain the Aquifer Protection Fee at current levels and evaluate fee based on updated funding requirements during next rate study
3. Maintain customer class cost of service recovery for volume rates
4. Maintain Outside-City multiplier of 1.30 Inside-City rates
5. Increase Bulk Water Station volume rate consistent with City developed rate recommendations
6. Tie Construction/Hydrant customer volume rate to Tier 2 Non-Residential
7. Maintain existing volume rate structure while increasing revenue and modifying volume rates in line with cost of service results



# Proposed Water Base Charges FY 2023-24 through FY 2028-29

Meter Size	Current	Proposed Water Base Charge (per bill)				
		7/1/2024	1/1/2026	1/1/2027	1/1/2028	1/1/2029
5/8"	\$15.56	\$17.58	\$19.52	\$19.91	\$20.30	\$20.71
3/4"	16.41	18.54	20.58	20.99	21.41	21.84
1"	18.58	20.99	23.30	23.77	24.25	24.73
1 1/2"	22.84	25.81	28.65	29.22	29.80	30.40
2"	30.16	34.08	37.83	38.59	39.36	40.15
3"	44.87	50.70	56.28	57.41	58.56	59.73
4"	65.87	74.43	82.62	84.28	85.96	87.68
6"	118.35	133.73	148.44	151.41	154.44	157.53
8"	181.46	205.05	227.61	232.16	236.80	241.54
Percent Change		13%	11%	2%	2%	2%



# Proposed Aquifer Protection Fee FY 2023-24 through FY 2028-29

Meter Size	Current	7/1/2024	1/1/2026	1/1/2027	1/1/2028	1/1/2029
5/8"	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72
3/4"	1.08	1.08	1.08	1.08	1.08	1.08
1"	1.20	1.20	1.20	1.20	1.20	1.20
1 1/2"	2.40	2.40	2.40	2.40	2.40	2.40
2"	3.84	3.84	3.84	3.84	3.84	3.84
3"	7.20	7.20	7.20	7.20	7.20	7.20
4"	12.00	12.00	12.00	12.00	12.00	12.00
6"	24.00	24.00	24.00	24.00	24.00	24.00
8"	38.40	38.40	38.40	38.40	38.40	38.40
Percent Change		0%	0%	0%	0%	0%



# Proposed Water Volume Rates FY 2023-24 through FY 2028-29

Customer Class	Tier Width (1) Start to End Gallons		Current	Proposed Volume Rate (per 1,000 gallons)				
				7/1/2024	1/1/2026	1/1/2027	1/1/2028	1/1/2029
<b>Inside City</b>								
<b>Single Family</b>								
Tier 1	0	3,000	\$4.44	\$5.10	\$5.73	\$5.86	\$5.99	\$6.12
Tier 2	3,001	10,000	6.66	7.65	8.60	8.79	8.98	9.18
Tier 3	10,001	20,000	9.99	11.47	12.89	13.18	13.47	13.77
Tier 4	Over	20,001	19.98	22.95	25.79	26.36	26.94	27.54
<b>Multi-Family</b>								
Tier 1	0	1,700	\$4.18	\$4.80	\$5.40	\$5.52	\$5.64	\$5.77
Tier 2	1,701	5,000	6.27	7.21	8.11	8.29	8.47	8.66
Tier 3	5,001	10,000	9.41	10.81	12.15	12.42	12.70	12.98
Tier 4	Over	10,001	18.81	21.62	24.31	24.85	25.41	25.97
<b>Non-Residential</b>								
Tier 1	0	6,000	\$4.76	\$5.36	\$5.93	\$6.04	\$6.16	\$6.28
Tier 2	6,001	28,000	7.14	8.04	8.89	9.06	9.24	9.42
Tier 3	28,001	60,000	10.71	12.05	13.34	13.60	13.86	14.13
Tier 4	Over	60,001	21.42	24.11	26.67	27.19	27.72	28.26
<b>Construction/Hydrant</b>								
<b>Water Dispensing Station</b>	<b>All Usage</b>		\$5.43	\$7.00	\$8.33	\$8.57	\$8.81	\$9.42
	<b>All Usage</b>		\$14.00	\$14.69	\$15.27	\$15.38	\$15.49	\$15.76

(1) Multi-Family tier allocations are provided per dwelling unit. Non-residential customer tier allocations increase by meter size. 5/8" x 3/4" (smallest meter size) are summarized in this table.

# Wastewater Fund



# Wastewater Financial Plan Drivers

1. Increases in labor costs, materials, supplies, and borrowing costs driving Study period rate increases
2. Fund increased capital requirements including finalizing WWTP centralization project and expanding Airport WRF solids and volume capacity
3. Pursue grant and low-interest opportunities to reduce debt requirements and mitigate future rate increases
4. Managing varying annual capital funding requirements and development impact fee revenues inflows
5. Levelized annual rate revenue adjustments while funding annual requirements and exceeding DSC and cash reserves

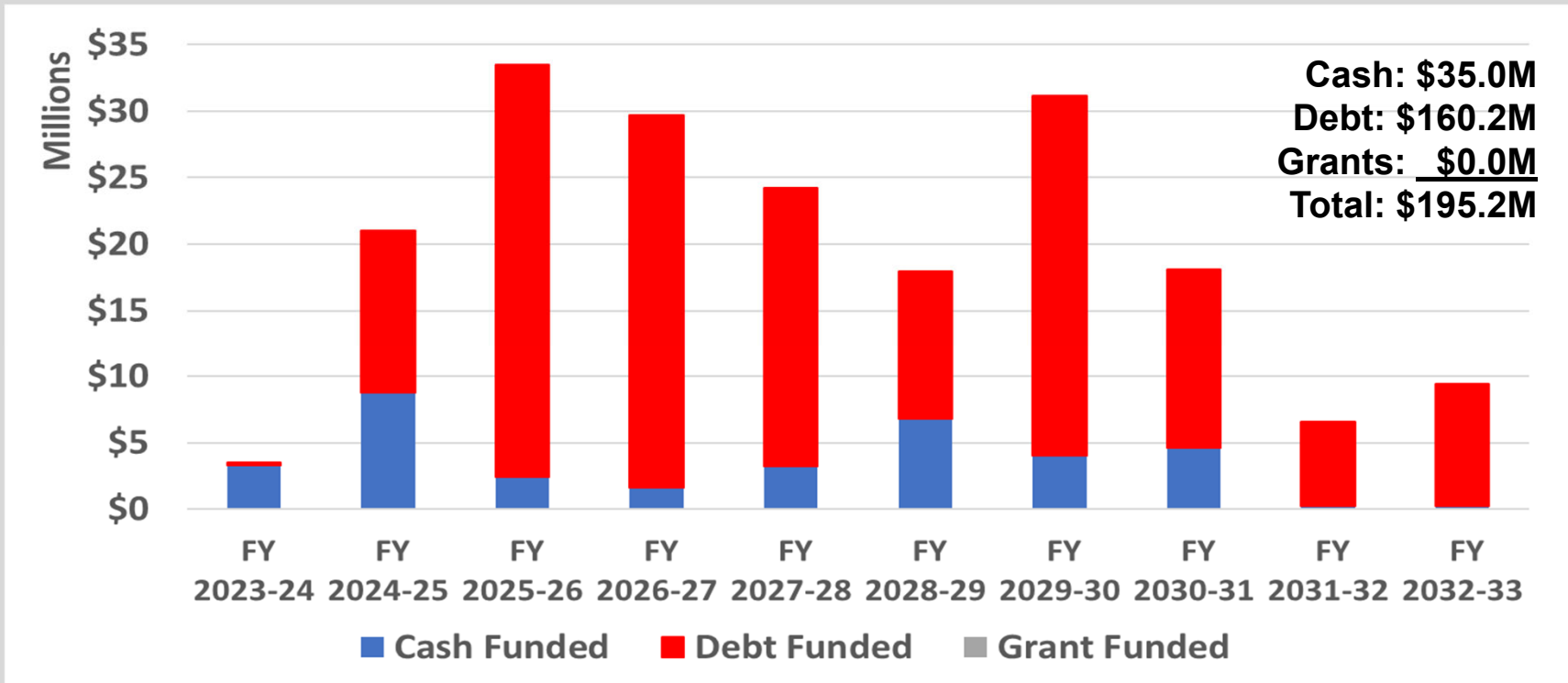


# Major Wastewater Fund Capital Projects FY 2023-24 through FY 2032-33

Line No.	Project Description	Total Cost	Timing	Funding
1	Sundog Trunk Main Phase C – Existing Loan	\$3.17 M	FY 2023-24 - FY 2024-25	Existing Loan
2	Sundog Trunk Main Phase C – Future Loan	34.25 M	FY 2025-26 – FY 2028-29	Debt
3	Centralization - Effluent Tank. Pipeline	18.45 M	FY 2023-24 – FY 2027-28	Debt
4	Willow Creek Gravity Sewer	18.29 M	FY 2023-24 – FY 2027-28	Debt
5	Centralization - Airport WRF Solids Handling Facility	13.30 M	FY 2024-25 – FY 2026-27	Debt
6	Willow Creek Trunk Main Upsize	8.00 M	FY 2026-27 – FY 2028-29	Debt
7	Yavapai Hills Lift Station Force Main	6.62 M	FY 2030-31 – FY 2032-32	Debt
8	Deep Well Ranch Wastewater DA	8.31 M	FY 2028-29 – FY 2029-30	Debt
9	Centralization - WRF Expansion Phase 2	25.00 M	FY 2028-29 - FY 2031-32	Debt

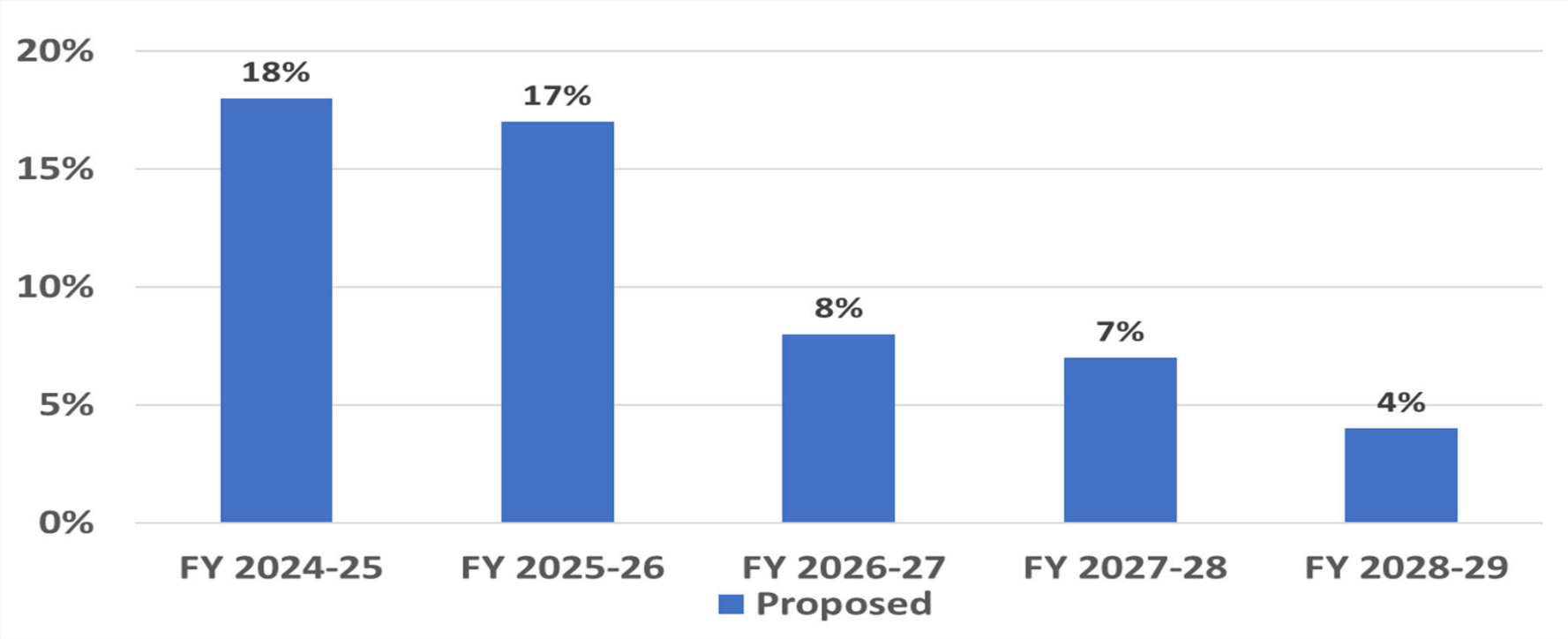


# Wastewater System CIP through FY 2032-33



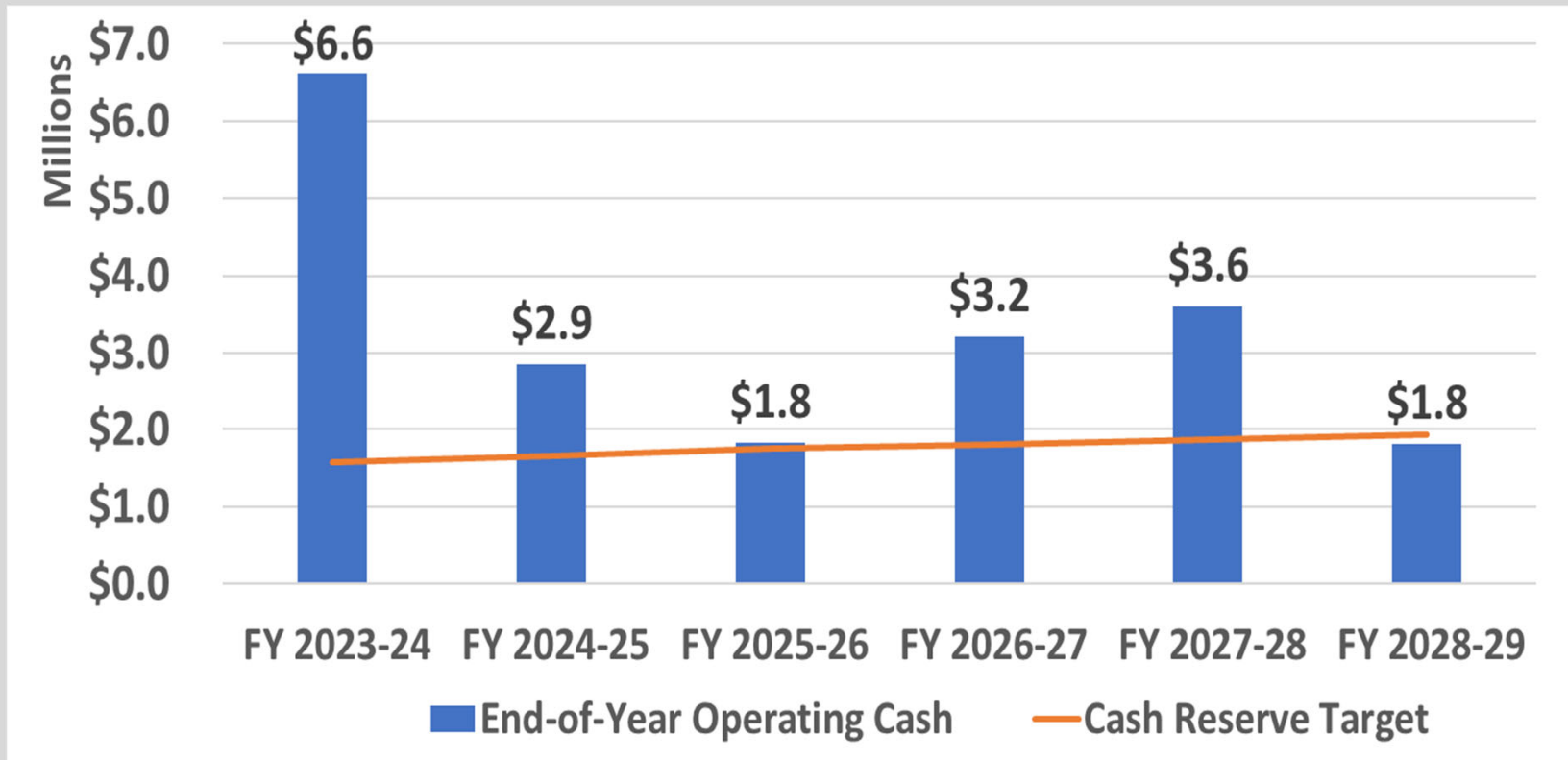


# Proposed Wastewater Rate Revenue Increases FY 2024-25 through FY 2027-28



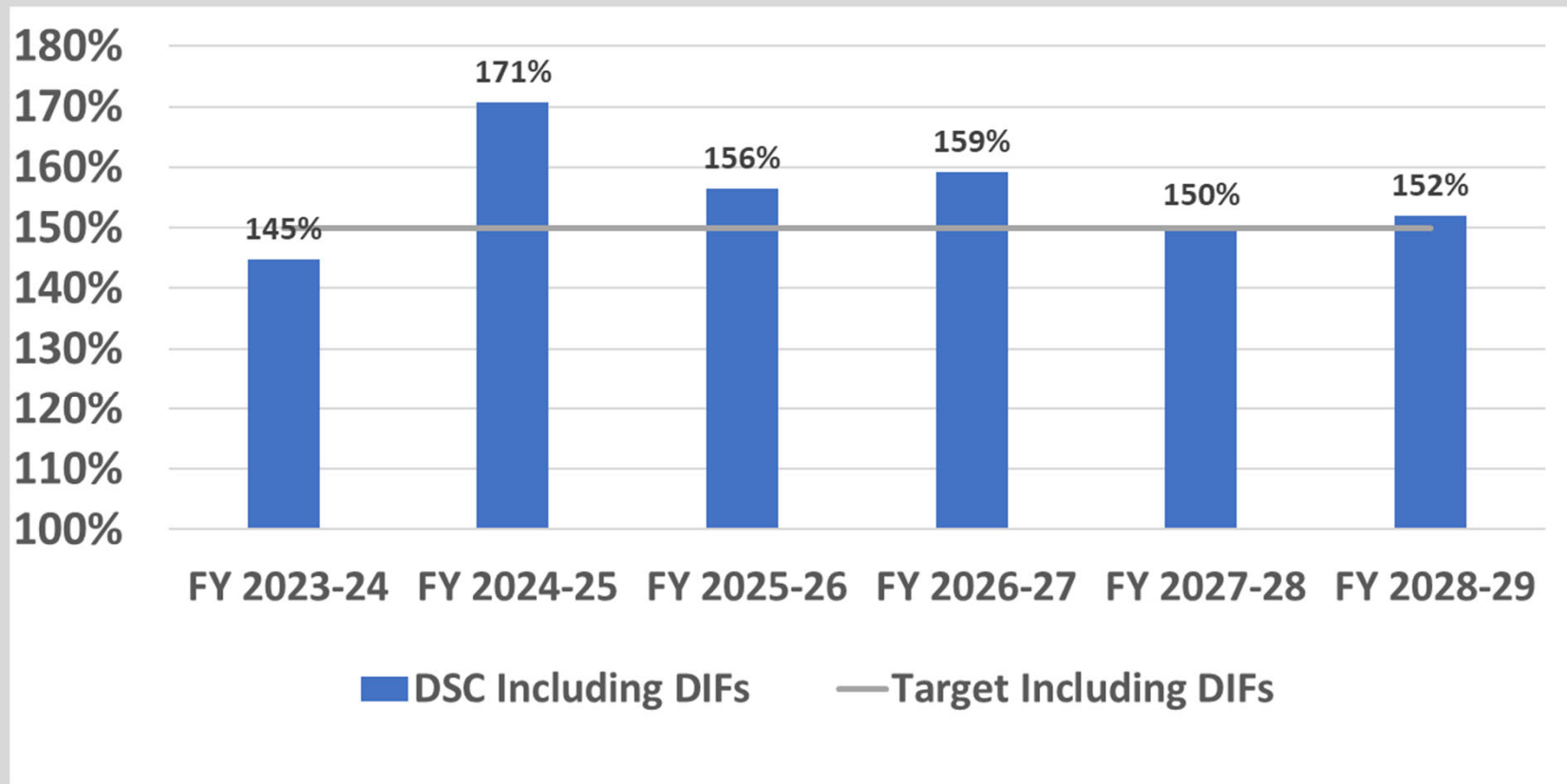


# Wastewater Operating Fund Cash Balances





# Wastewater Fund Annual DSC





# Wastewater Rate and Fee Recommendations

1. Increase base charge by overall rate revenue requirements to maintain revenue stability
2. Maintain customer class cost of service recovery for volume rates
3. Increase Septage Hauler rates to maximize revenue from this source and mitigate wastewater rate increases
4. Transition to single volume rate for both residential and commercial customers



# Proposed Wastewater Base Charges and Volume Rates FY 2023-24 through FY 2028-29

Description	Current	7/1/2024	1/1/2026	1/1/2027	1/1/2028	1/1/2029
<b>Annual % Increase in Revenue-Rates</b>		<b>18%</b>	<b>17%</b>	<b>8%</b>	<b>7%</b>	<b>6%</b>
<b>Monthly Service Charge</b>						
Residential	\$21.47	\$25.33	\$29.64	\$32.01	\$34.25	\$36.31
Nonresidential (General)	21.47	25.33	29.64	32.01	34.25	36.31
<b>Volume Charge per 1,000 gallons</b>						
Residential	\$7.72	\$8.97	\$10.36	\$11.13	\$11.86	\$12.52
Nonresidential (General)	7.38	8.72	10.21	11.03	11.81	12.52
Septage Hauler	101.25	200.00	206.00	212.18	218.55	225.11

# Customer Bill Impacts



# Non-Residential Customer Bill Impacts at Different Meter Sizes and Volume Use

Non-Residential		Current	7/1/2024	1/1/2026	1/1/2027	1/1/2028	1/1/2029
1"	<i>Usage</i>						
Water	24,000	\$155.44	\$174.96	\$193.47	\$197.12	\$201.02	\$204.93
Wastewater	20,000	169.07	199.73	233.84	252.61	270.45	286.71
<b>Total</b>		<b>\$324.51</b>	<b>\$374.69</b>	<b>\$427.31</b>	<b>\$449.73</b>	<b>\$471.47</b>	<b>\$491.64</b>
	<i>\$ Increase</i>		<b>\$50.18</b>	<b>\$52.62</b>	<b>\$22.42</b>	<b>\$21.74</b>	<b>\$20.17</b>
	<i>% Increase</i>		15.5%	14.0%	5.2%	4.8%	4.3%
2"							
Water	65,000	\$383.86	\$431.88	\$477.44	\$486.37	\$495.96	\$505.57
Wastewater	60,000	464.27	548.53	642.24	693.81	742.85	787.51
<b>Total</b>		<b>\$848.13</b>	<b>\$980.41</b>	<b>\$1,119.68</b>	<b>\$1,180.18</b>	<b>\$1,238.81</b>	<b>\$1,293.08</b>
	<i>\$ Increase</i>		<b>\$132.28</b>	<b>\$139.27</b>	<b>\$60.50</b>	<b>\$58.63</b>	<b>\$54.27</b>
	<i>% Increase</i>		15.6%	14.2%	5.4%	5.0%	4.4%



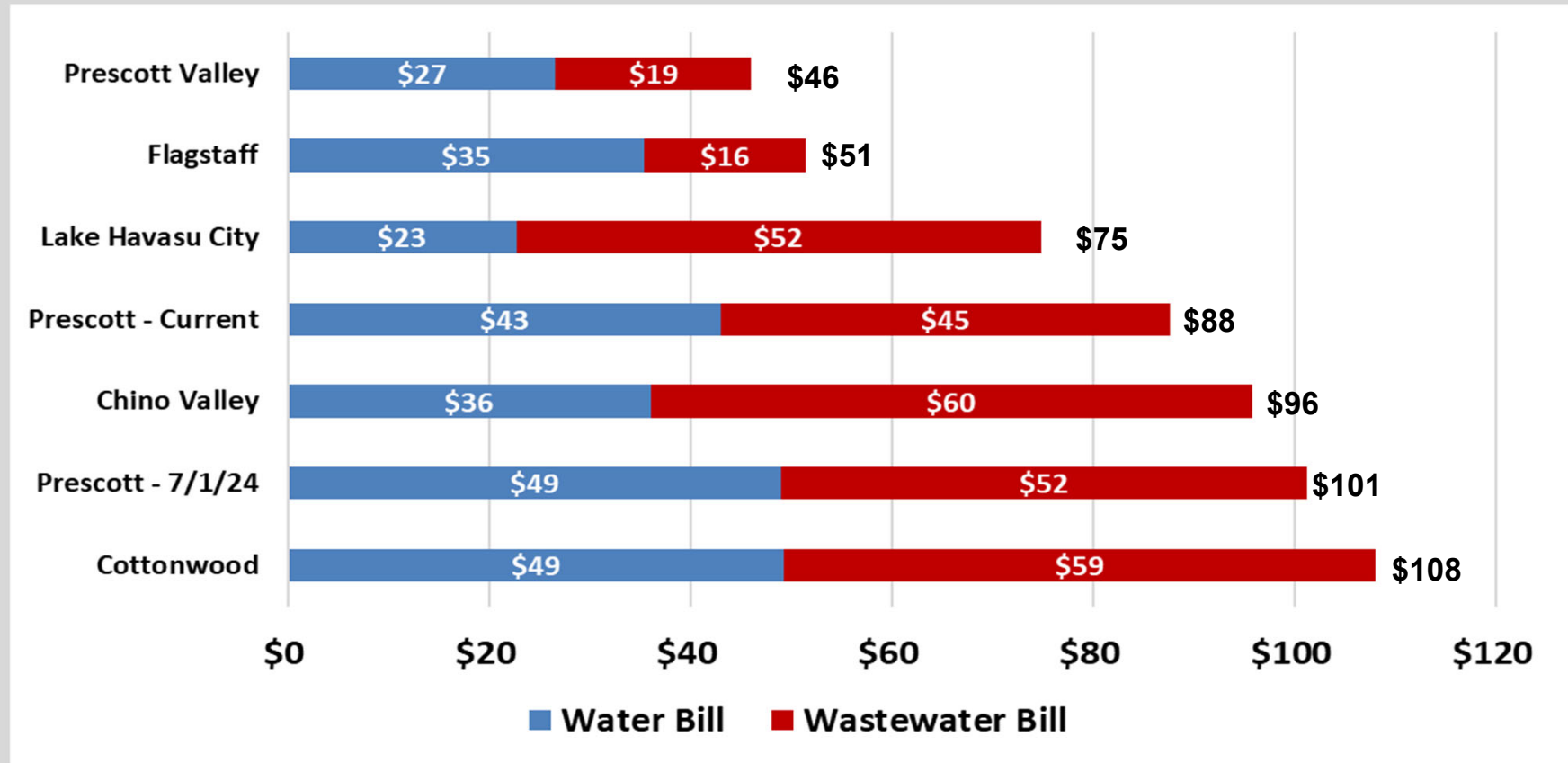
# Residential Customer Bill Impacts at Different Volume Use

Residential		Current	7/1/2024	1/1/2026	1/1/2027	1/1/2028	1/1/2029
5/8"	<i>Usage</i>						
Water	5,000	\$42.92	\$48.90	\$54.62	\$55.78	\$56.95	\$58.15
Wastewater	3,000	44.63	52.24	60.72	65.40	69.83	73.87
<b>Total</b>		<b>\$87.55</b>	<b>\$101.14</b>	<b>\$115.34</b>	<b>\$121.18</b>	<b>\$126.78</b>	<b>\$132.02</b>
	<i>\$ Increase</i>		<b>\$13.59</b>	<b>\$14.20</b>	<b>\$5.84</b>	<b>\$5.60</b>	<b>\$5.24</b>
	<i>% Increase</i>		15.5%	14.0%	5.1%	4.6%	4.1%
5/8"	<i>Usage</i>						
Water	10,000	\$76.22	\$87.15	\$97.62	\$99.73	\$101.85	\$104.05
Wastewater	3,000	44.63	52.24	60.72	65.40	69.83	73.87
<b>Total</b>		<b>\$120.85</b>	<b>\$139.39</b>	<b>\$158.34</b>	<b>\$165.13</b>	<b>\$171.68</b>	<b>\$177.92</b>
	<i>\$ Increase</i>		<b>\$18.54</b>	<b>\$18.95</b>	<b>\$6.79</b>	<b>\$6.55</b>	<b>\$6.24</b>
	<i>% Increase</i>		15.3%	13.6%	4.3%	4.0%	3.6%
5/8"							
Water	25,000	\$276.02	\$316.60	\$355.47	\$363.33	\$371.25	\$379.45
Wastewater	3,000	\$44.63	\$52.24	\$60.72	\$65.40	\$69.83	\$73.87
<b>Total</b>		<b>\$320.65</b>	<b>\$368.84</b>	<b>\$416.19</b>	<b>\$428.73</b>	<b>\$441.08</b>	<b>\$453.32</b>
	<i>\$ Increase</i>		<b>\$48.19</b>	<b>\$47.35</b>	<b>\$12.54</b>	<b>\$12.35</b>	<b>\$12.24</b>
	<i>% Increase</i>		15.0%	12.8%	3.0%	2.9%	2.8%



# Residential Monthly Bill Comparison

## 5,000 Gallon Water Use, 3,000 Gallon Sewer Volume





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