

Georgetown Divide PUD

Water and ALT Zone Cost of Service and Rate Study

Board Meeting

October 3, 2024



**Water Resources
Economics**

PROMOTING THE VALUE AND PRICE OF
WATER SERVICE

Agenda

- Rate Study Process
- Rate Study Meetings
- Proposition 218 Requirements
- Water Financial Plan
- Treated and Raw Water Rates
- Zone Wastewater Financial Plan
- Zone Wastewater Rates

Rate Study Process

- 1. Policy framework:** Identify key policy objectives (revenue stability, customer affordability, conservation, etc.)
- 2. Financial plan:** Develop multi-year cash flow projections to determine annual rate revenue requirement
- 3. Cost-of-service analysis:** Allocate the rate revenue requirement to customers based on proportional use of the water and wastewater systems
- 4. Rate design:** Identify appropriate rate structure changes and calculate proposed rates
- 5. Documentation:** Develop a study report to provide transparency and defensibility

Rate Study Meetings

- **April 17, 2024** – Kickoff Meeting
- **May 2, 2024** – Board Meeting, Study Background and Introduction
- **July 10, 2024** – Board Meeting, Water and Zone Financial Plan
- **August 13, 2024** – Board Meeting, Water and Zone Rates
- **August 14 and 15, 2024** – Public Outreach, Water and Zone Rates
- **September 24, 2024** – ALT Town Hall
- **October 3, 2024 (today)** – Board Meeting

Proposition 218 Requirements

- Proposition 218 requirements for water and wastewater rates:
 - Rates must be proportional to and may not exceed the cost of providing service
 - One customer class (residential, commercial, etc.) may not subsidize another customer class
 - Retail agencies typically conduct a “cost-of-service analysis” at least once every 5 years to ensure a sufficient nexus between rates and costs

Treated and Raw Water

Water Financial Plan

- The currently adopted rates are insufficient due to:
 - Last rate increase occurred on 2019
 - Since 2019, inflation has increased by over 19%
 - Substantial 5-year planned capital expenditures
 - Significant reduction in prior year water demand

Rates will not cover operating cost by 2026

The District will be in technical default by 2026

The District will run out of money by 2029

Water Expenses and Inflation

- FY 2025 budget was inflated by expense escalation factors
 - General – average CPI increases of 3%
 - Salaries – 8% for two years based on negotiated union increases, 4% after
 - Benefits – tends to outpace salaries, estimated at 5% per year
 - Utilities – tends to outpace general inflation, estimated at 5% per year
 - Capital – average CCI increases of 4%

Expense Inflation	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
General	<i>Budgeted</i>	<i>Budgeted</i>	3%	3%	3%	3%
Salaries	<i>Budgeted</i>	<i>Budgeted</i>	8%	8%	4%	4%
Benefits	<i>Budgeted</i>	<i>Budgeted</i>	5%	5%	5%	5%
Utilities	<i>Budgeted</i>	<i>Budgeted</i>	5%	5%	5%	5%
Capital	<i>Budgeted</i>	<i>Budgeted</i>	4%	4%	4%	4%
Non-Inflated	<i>Budgeted</i>	<i>Budgeted</i>	0%	0%	0%	0%
Weighted Avg.			5.2%	6.2%	6.2%	3.9%

- On average, expenses increase by 4.3% per year

Water Reserve Policy

Beginning Fund Balances (\$1,000s)	FYE 2024	Reserve Policy
Unrestricted Reserves	\$4,666	Operating, capital, emergency
SWTP Supplemental Charge Fund (Fund 112)	\$811	Restricted
State Revolving Fund (Fund 120)	\$1,147	Restricted
Total - Beginning Funds	\$6,625	

Reserve Target (\$1,000s)	FYE 2024	Reserve Policy
Unrestricted Reserves		
Operating	\$1,765	33% of operating expenses
Capital Replacement	\$606	100% of 5-year average CIP
Emergency	\$2,000	\$2m for emergencies
Total - Unrestricted Target	\$4,371	

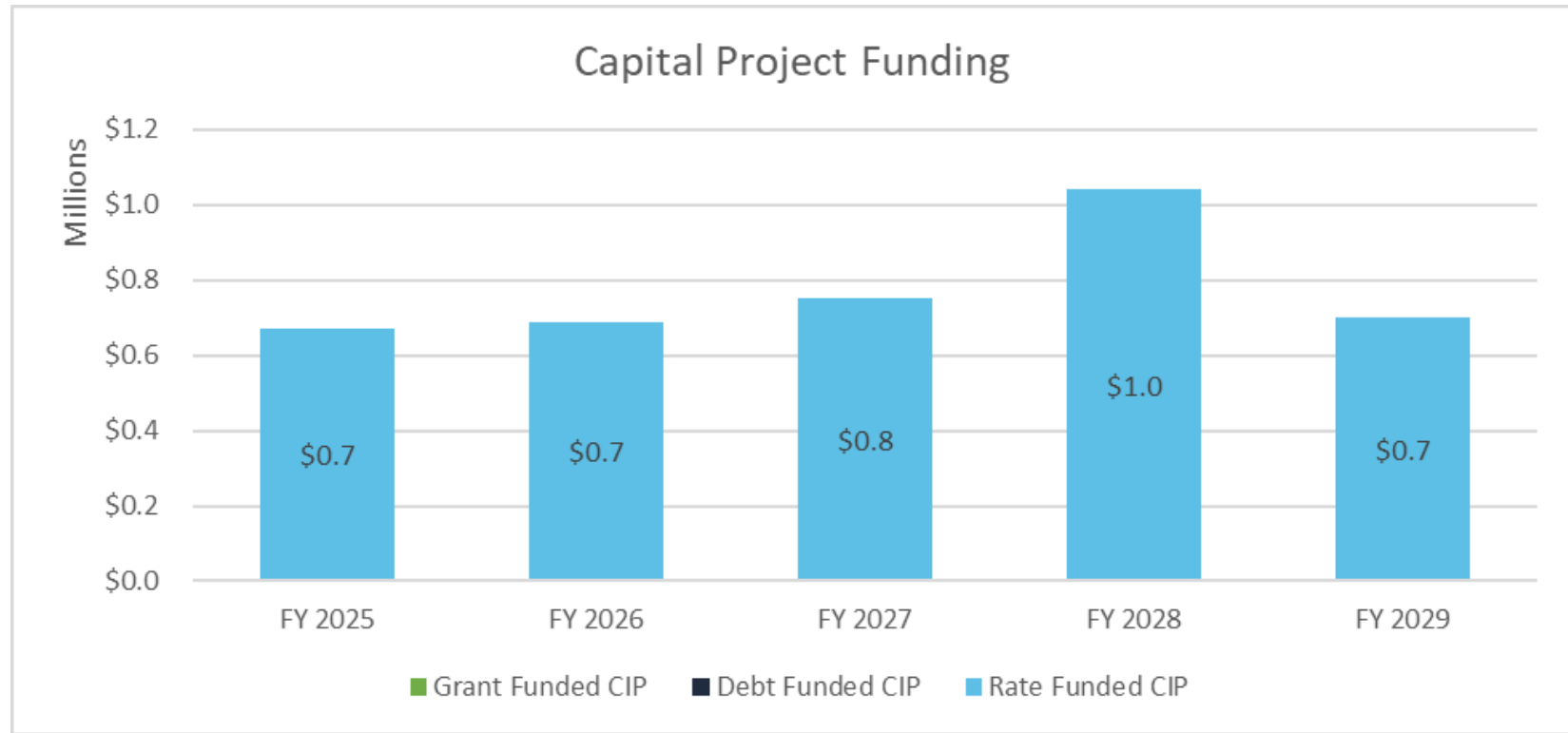
Reserve policy allows the District to:

- Fund unexpected operating expenses
- Award contracts to construct CIP
- Mitigate risks associated with emergencies and/or natural disasters

Water Financial Plan – Status Quo

- Need to fund \$3.9M in CIP over 5-year period

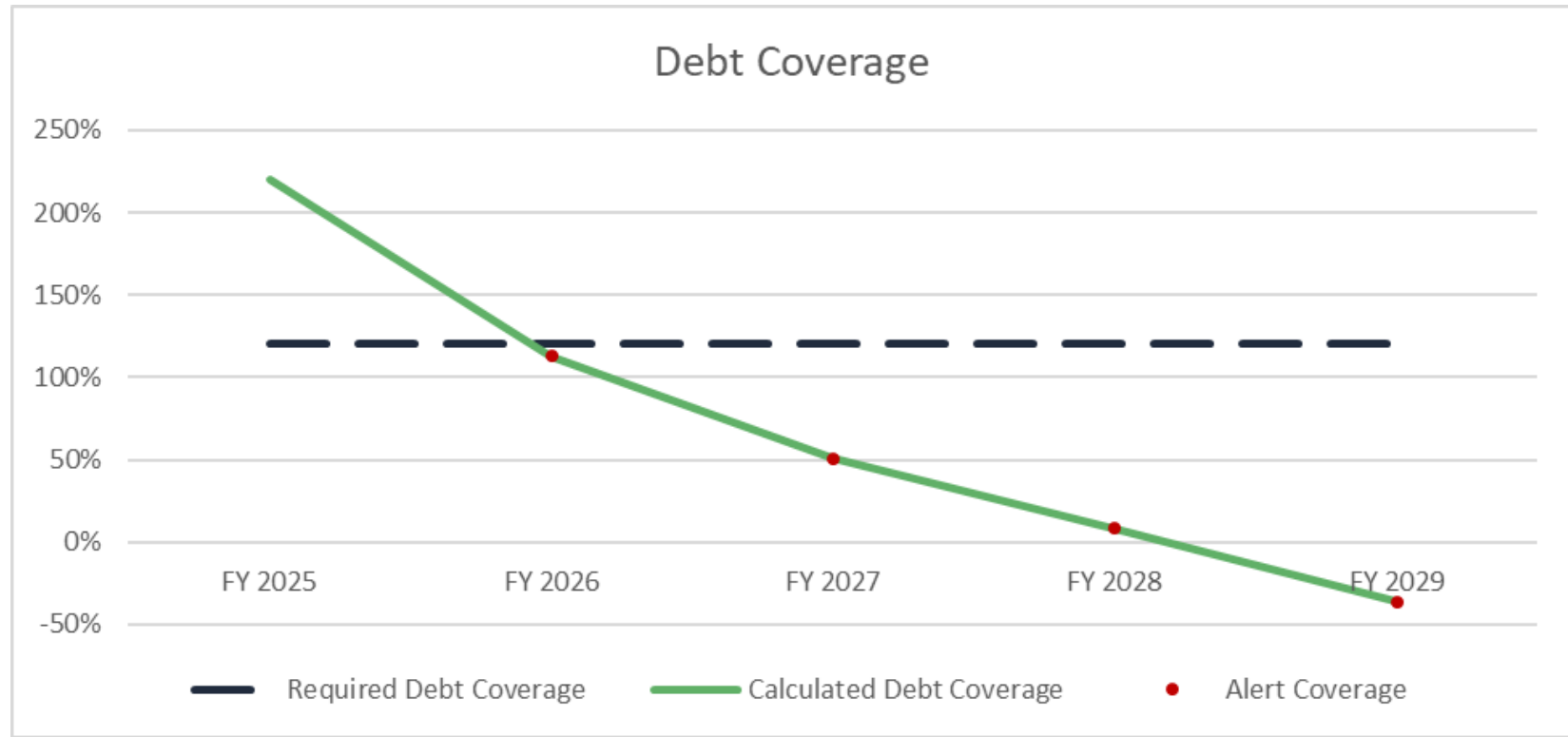
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Water Financial Plan – Status Quo

- District in technical default by FY 2026

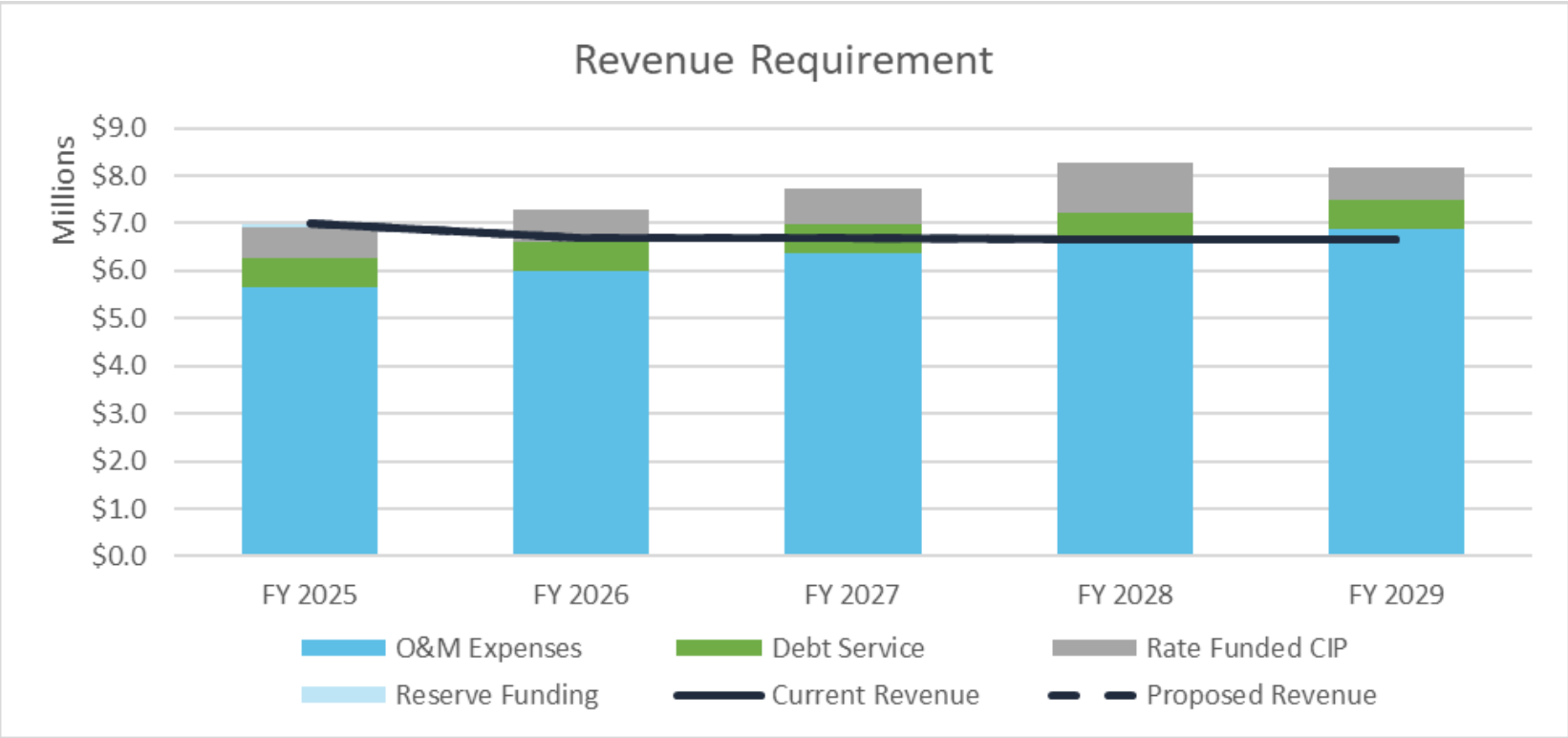
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Water Financial Plan – Status Quo

- Revenues not sufficient to fund O&M or debt service

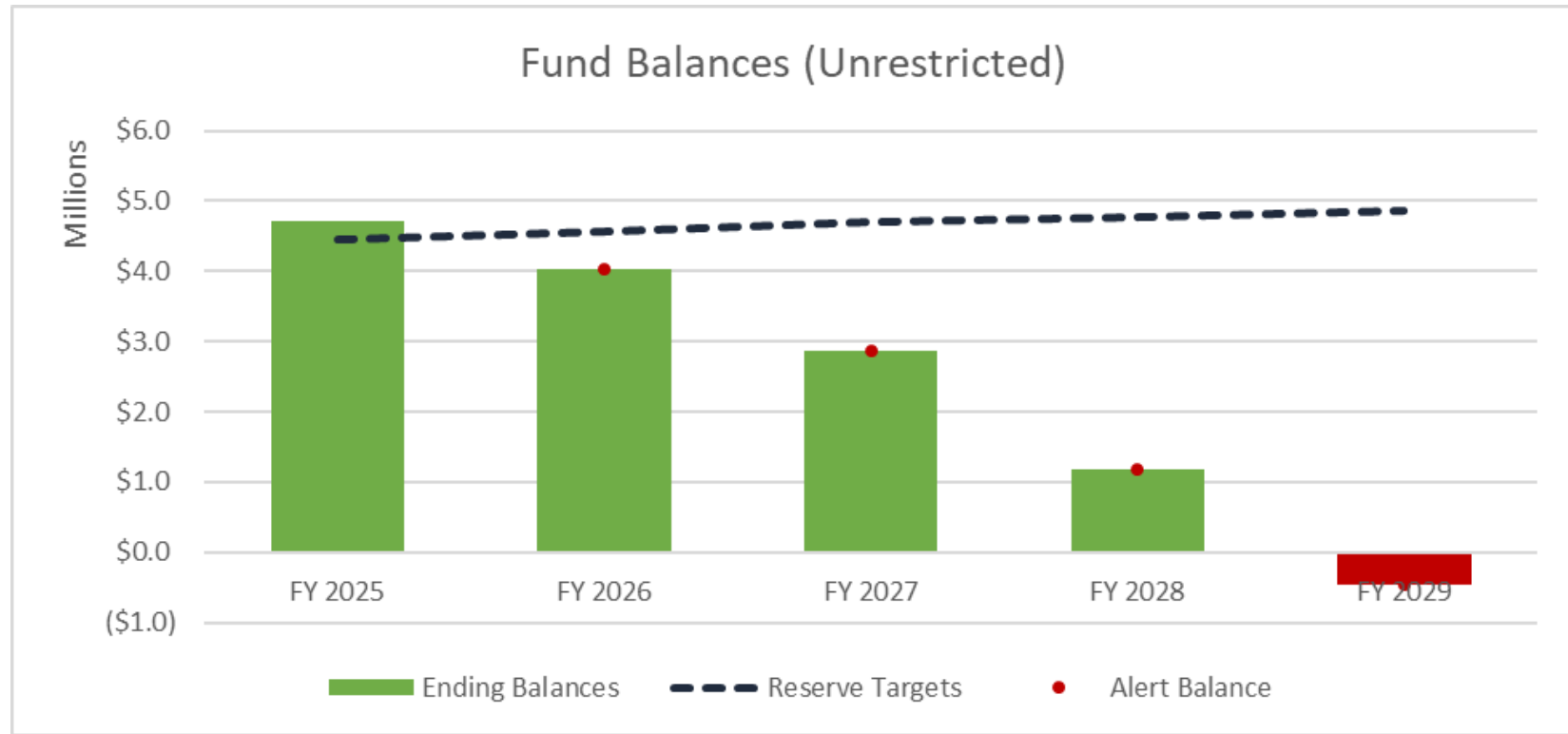
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Water Financial Plan – Status Quo

- Fund balances go negative in FY 2029

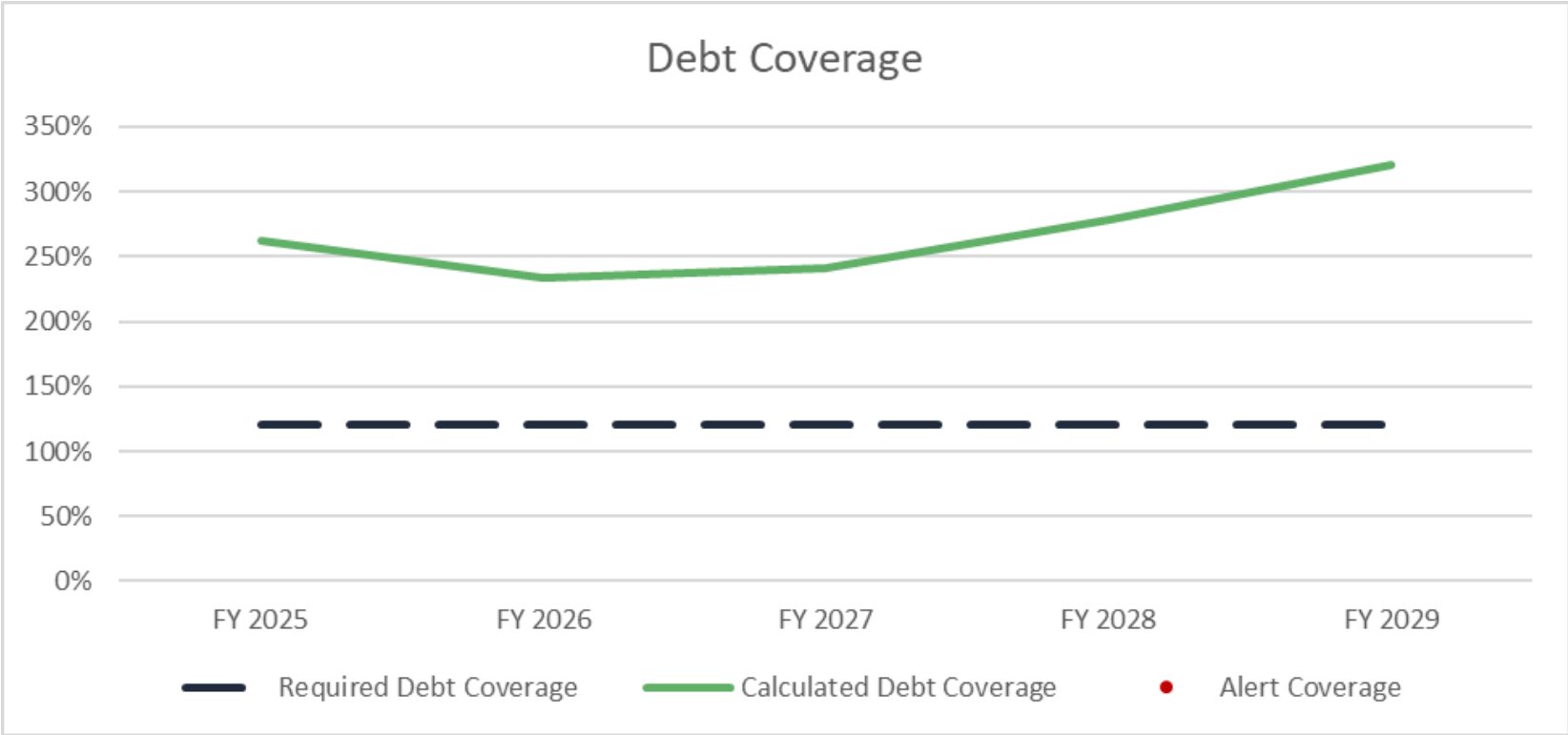
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Water Financial Plan – Proposed Scenario

- Able to meet debt coverage requirements in all years

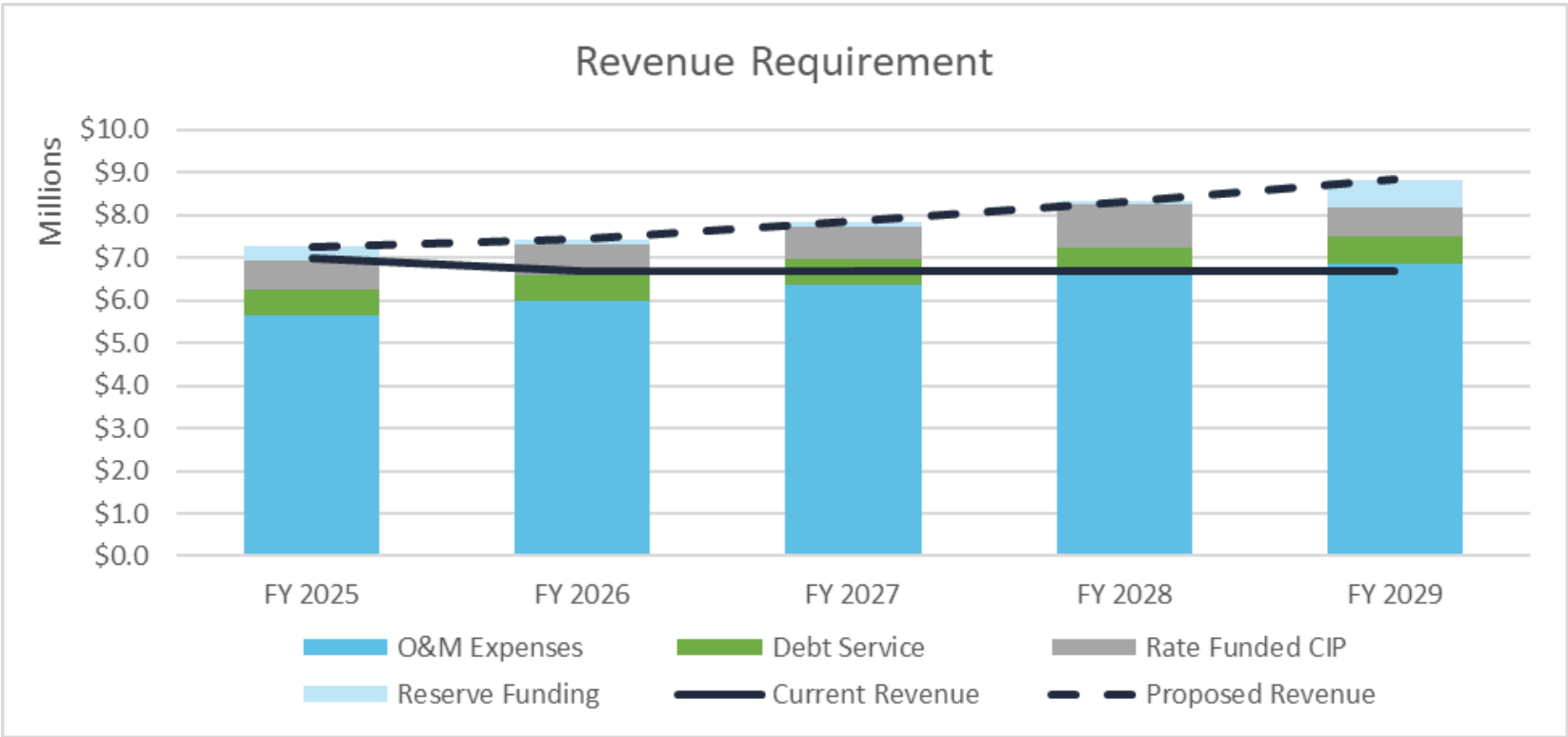
Fiscal Year	Rev. Adj.
2025	15%
2026	10%
2027	10%
2028	10%
2029	10%



Water Financial Plan – Proposed Scenario

- Revenues are sufficient to meet expenses and build reserves

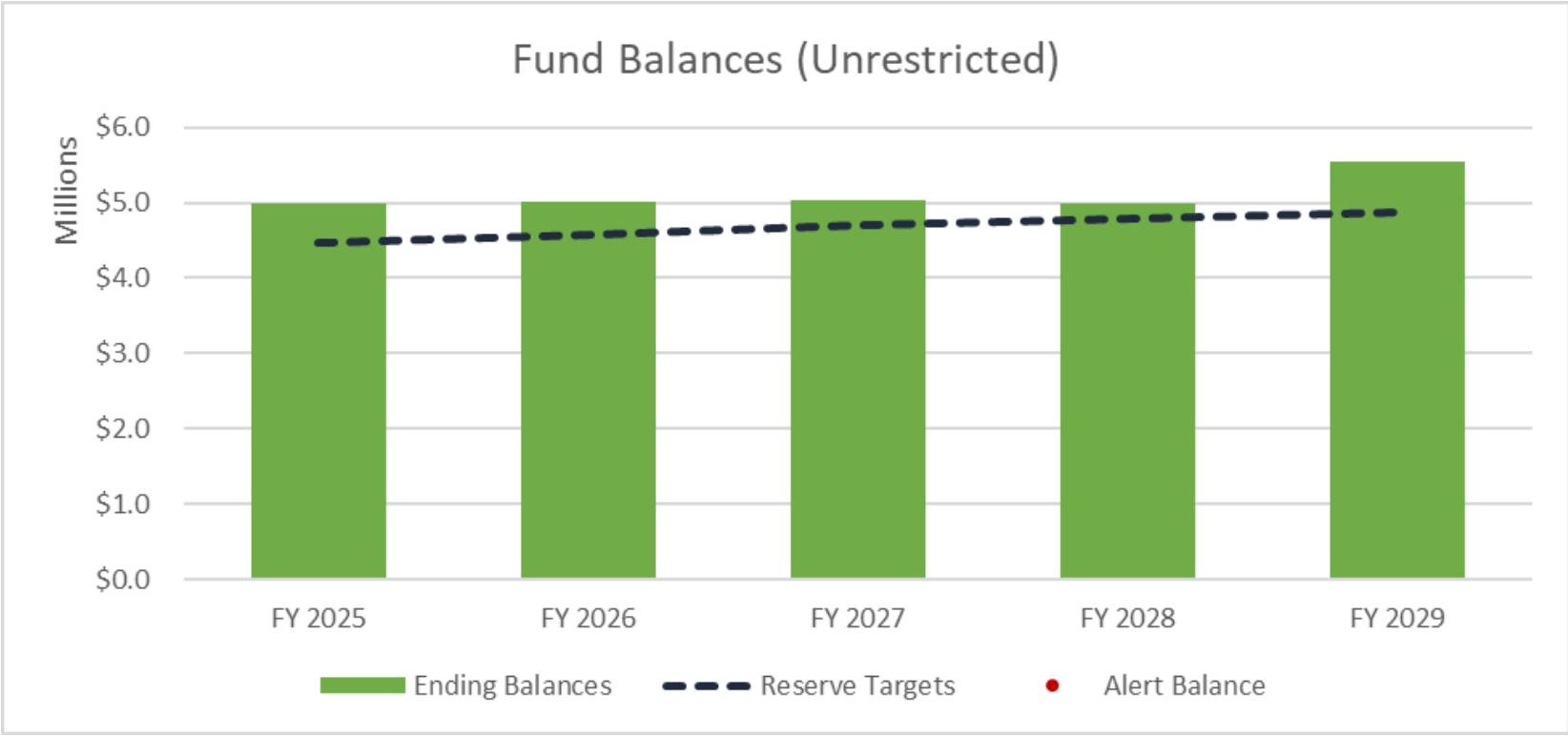
Fiscal Year	Rev. Adj.
2025	15%
2026	10%
2027	10%
2028	10%
2029	10%



Water Financial Plan – Proposed Scenario

- Meets reserve targets in all years

Fiscal Year	Rev. Adj.
2025	15%
2026	10%
2027	10%
2028	10%
2029	10%



Water Cost Allocation

Revenue Requirement	FYE 2024
Revenue Requirements	
Operating Requirement	\$5,367,275
Operating Revenue Offset	(\$564,181)
Capital Requirement	\$741,851
Walton Debt Service Requirement	\$25,058
SWTP Debt Service Requirement	\$587,357
Hydro Revenue Offset	(\$55,000)
Property Tax Revenue Offset	(\$2,000,000)
Total - Revenue Requirement	\$4,102,359

- Total revenue requirement is for treated and raw water combined
- Revenue requirement will be allocated between treated and raw water systems
- COS is “revenue neutral”

Water Cost Allocation

Allocation Basis	Treated	Raw	Total
Number of Connections	88%	12%	100%
Annual Water Usage (AF)	27%	73%	100%
Reliable Usage (AF)	72%	28%	100%

- Percentages used to allocate various costs between treated and raw water
- Reliable usage assumes a factor of 7 for treated water
- Treated water service is reliable and is available for 7 more months in a year compared to raw water

Revenue Requirement Allocation

Revenue Requirement	FYE 2024	Alloc. Basis	Treated	Raw	Total
Revenue Requirements					
Operating Requirement	\$5,367,275	<i>Operating</i>	88%	12%	100%
Operating Revenue Offset	(\$564,181)	<i>Operating</i>	88%	12%	100%
Capital Requirement	\$741,851	<i>Capital</i>	83%	17%	100%
Walton Debt Service Requirement	\$25,058	<i>All Treated</i>	100%	0%	100%
SWTP Debt Service Requirement	\$587,357	<i>All Treated</i>	100%	0%	100%
Hydro Revenue Offset	(\$55,000)	<i>Water Usage</i>	27%	73%	100%
Property Tax Revenue Offset	(\$2,000,000)	<i>Connections</i>	88%	12%	100%
Total - Revenue Requirement	\$4,102,359		90%	10%	100%

Revenue Requirement Allocation

Revenue Requirement	Treated	Raw	Total
Revenue Requirements			
Operating Requirement	\$4,737,366	\$629,909	\$5,367,275
Operating Revenue Offset	(\$497,968)	(\$66,213)	(\$564,181)
Capital Requirement	\$617,185	\$124,666	\$741,851
Walton Debt Service Requirement	\$25,058	\$0	\$25,058
SWTP Debt Service Requirement	\$587,357	\$0	\$587,357
Hydro Revenue Offset	(\$14,692)	(\$40,308)	(\$55,000)
Property Tax Revenue Offset	(\$1,750,636)	(\$249,364)	(\$2,000,000)
Total - Revenue Requirement	\$3,703,670	\$398,689	\$4,102,359
<i>Current Rate Revenues</i>	<i>\$3,723,830</i>	<i>\$378,529</i>	<i>\$4,102,359</i>
<i>Difference (%)</i>	<i>-0.5%</i>	<i>5.3%</i>	<i>0.0%</i>

- This scenario:
 - Is “Revenue neutral”
 - Has a reliability factor of 7
 - Splits property taxes by number of connections
 - Splits hydro revenues by water usage
- First year of rates are effective January 2025
 - Customers will first see the impact in their March 2025 bills

Treated Water Rate Structure and Costs

- Recommended changes:
 - Maintain uniform usage rate
 - Bi-monthly base charge for 3/4" and smaller
 - Treated supplemental charge based on meter size
 - Increase low income discount to 50%
- Draft water rates in following slides include results of Cost of Service and financial plan:
 - Year 1: 15% increase for both Treated and Raw
 - Years 2-5: 10% increase each year for both Treated and Raw

Treated Bi-Monthly Base Charges

Treated Water Bi-Monthly Rates	Current	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Base Charge						
5/8 inch	\$61.76	\$72.42	\$79.68	\$87.66	\$96.44	\$106.10
3/4 inch	\$61.76	\$72.42	\$79.68	\$87.66	\$96.44	\$106.10
1 inch	\$61.76	\$113.00	\$124.30	\$136.74	\$150.42	\$165.48
1.5 inch	\$205.84	\$214.50	\$235.96	\$259.56	\$285.52	\$314.08
2 inch	\$329.34	\$336.32	\$369.96	\$406.96	\$447.66	\$492.44
3 inch	\$658.68	\$722.04	\$794.26	\$873.70	\$961.08	\$1,057.20
4 inch	\$1,029.20	\$1,290.50	\$1,419.56	\$1,561.52	\$1,717.68	\$1,889.46
Low Income Base Charge						
5/8 inch	\$46.32	\$36.22	\$39.84	\$43.84	\$48.22	\$53.06
3/4 inch	\$46.32	\$36.22	\$39.84	\$43.84	\$48.22	\$53.06
1 inch	\$46.32	\$56.50	\$62.16	\$68.38	\$75.22	\$82.74

- 1" meter sizes are charged differently than 5/8" and 3/4" meter sizes
- 50% low income discount

Treated Supplemental Charge/Usage Rate

Treated Water Bi-Monthly Rates	Current	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Supplemental Charge						
5/8 inch	\$30.16	\$23.64	\$23.64	\$23.64	\$23.64	\$23.64
3/4 inch	\$30.16	\$23.64	\$23.64	\$23.64	\$23.64	\$23.64
1 inch	\$30.16	\$39.38	\$39.38	\$39.38	\$39.38	\$39.38
1.5 inch	\$30.16	\$78.76	\$78.76	\$78.76	\$78.76	\$78.76
2 inch	\$30.16	\$126.00	\$126.00	\$126.00	\$126.00	\$126.00
3 inch	\$30.16	\$275.64	\$275.64	\$275.64	\$275.64	\$275.64
4 inch	\$30.16	\$496.12	\$496.12	\$496.12	\$496.12	\$496.12
Usage Rate (per CF)						
All Customers	\$0.0268	\$0.0311	\$0.0343	\$0.0378	\$0.0416	\$0.0458

- 1" meter sizes are charged differently than 5/8" and 3/4" meter sizes
- Supplemental charge based on meter size
- Maintaining uniform usage rate

Treated Customer Bi-Monthly Impacts

5/8" meter

Usage Level	CF per bill	Current Bill	Proposed Bill	Difference (\$)	Difference (%)
Very Low Usage (10th Percentile)	238	\$98.30	\$103.46	\$5.16	5.3%
Low Usage (25th Percentile)	670	\$109.88	\$116.90	\$7.02	6.4%
Median Usage	1,320	\$127.30	\$137.11	\$9.82	7.7%
Average Usage	2,600	\$161.60	\$176.92	\$15.32	9.5%
High Usage (75th Percentile)	2,640	\$162.67	\$178.16	\$15.49	9.5%
Very High Usage (90th Percentile)	5,266	\$233.05	\$259.83	\$26.78	11.5%

1" meter

Usage Level	CF per bill	Current Bill	Proposed Bill	Difference (\$)	Difference (%)
Very Low Usage (10th Percentile)	238	\$98.30	\$159.78	\$61.48	62.5%
Low Usage (25th Percentile)	670	\$109.88	\$173.22	\$63.34	57.6%
Median Usage	1,320	\$127.30	\$193.43	\$66.14	52.0%
Average Usage	2,600	\$161.60	\$233.24	\$71.64	44.3%
High Usage (75th Percentile)	2,640	\$162.67	\$234.48	\$71.81	44.1%
Very High Usage (90th Percentile)	5,266	\$233.05	\$316.15	\$83.10	35.7%

Raw Water Rate Structure and Costs

- Recommended changes:
 - Maintain billing by miner's inches
 - 8 outside District customers do not pay property taxes, so they will not receive the benefit of the property tax revenue offset
- Draft water rates in following slides include results of COS and financial plan:
 - Year 1: 15% increase
 - Years 2-5: 10% increase each year

Raw Water Rates and Impacts

Raw Water Rates	Current	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Inside District						
1/2 Miner's Inch (per bill)	\$77.00	\$92.48	\$101.73	\$111.91	\$123.11	\$135.43
Per 1 Miner's Inch (per MI/bill)	\$154.20	\$184.96	\$203.46	\$223.81	\$246.20	\$270.82
Outside District						
1/2 Miner's Inch (per bill)	\$77.00	\$151.79	\$166.97	\$183.67	\$202.04	\$222.25
Per 1 Miner's Inch (per MI/bill)	\$154.20	\$303.58	\$333.94	\$367.34	\$404.08	\$444.49

- Outside District customers do not receive property tax revenue offsets

Raw Water Customer	MI per month	Current Bill	Proposed Bill	Difference (\$)	Difference (%)
Inside District	1	\$154.20	\$184.96	\$30.76	19.9%
Outside District	1	\$154.20	\$303.58	\$149.38	96.9%

Zone Wastewater

Zone Wastewater Financial Plan

- Staff and WRE reviewed the Zone Wastewater financial plan and made the following updates:
 - Revised operating expenses to exclude non-cash pension expenses
 - Reduced expenses results in lower revenue adjustments needed to maintain financial sufficiency
 - Revenue adjustment in first year (FY 2025) is reduced from 155% to 90%

Zone Wastewater Financial Plan

- The currently adopted rates are insufficient due to:
 - Last rate increase occurred on 2018
 - Since 2018, inflation has increased by over 21%
 - Credit provided has been over-extended

Expense are two times higher than revenue

The wastewater fund will run out of money by 2027

Zone Wastewater Reserve Policy

Beginning Fund Balances (\$1,000s)	FYE 2024	Reserve Policy
Unrestricted Reserves	\$940	Operating, capital, emergency
Total - Beginning Funds	\$940	

Reserve Target (\$1,000s)	FYE 2024	Reserve Policy
Unrestricted Reserves		
Operating	\$141	33% of operating expenses
Capital Replacement	\$13	100% of 5-year average CIP
Emergency	\$50	\$50k for emergencies
Total - Unrestricted Target	\$204	

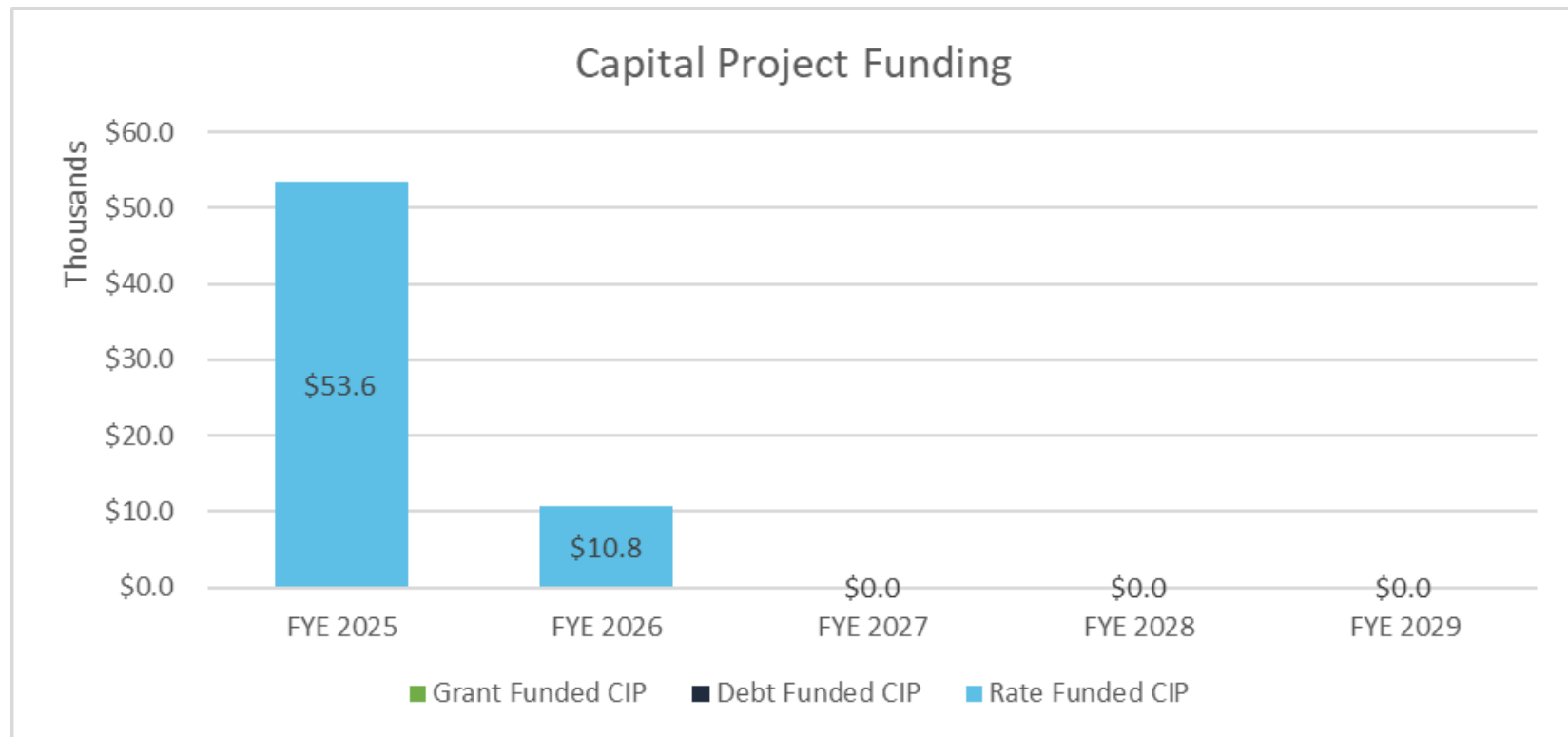
Reserve policy allows the District to:

- Fund unexpected operating expenses
- Award contracts to construct CIP
- Mitigate risks associated with emergencies and/or natural disasters

Zone Wastewater Financial Plan – Status Quo

- Cannot fund \$65K in CIP over 5-year period

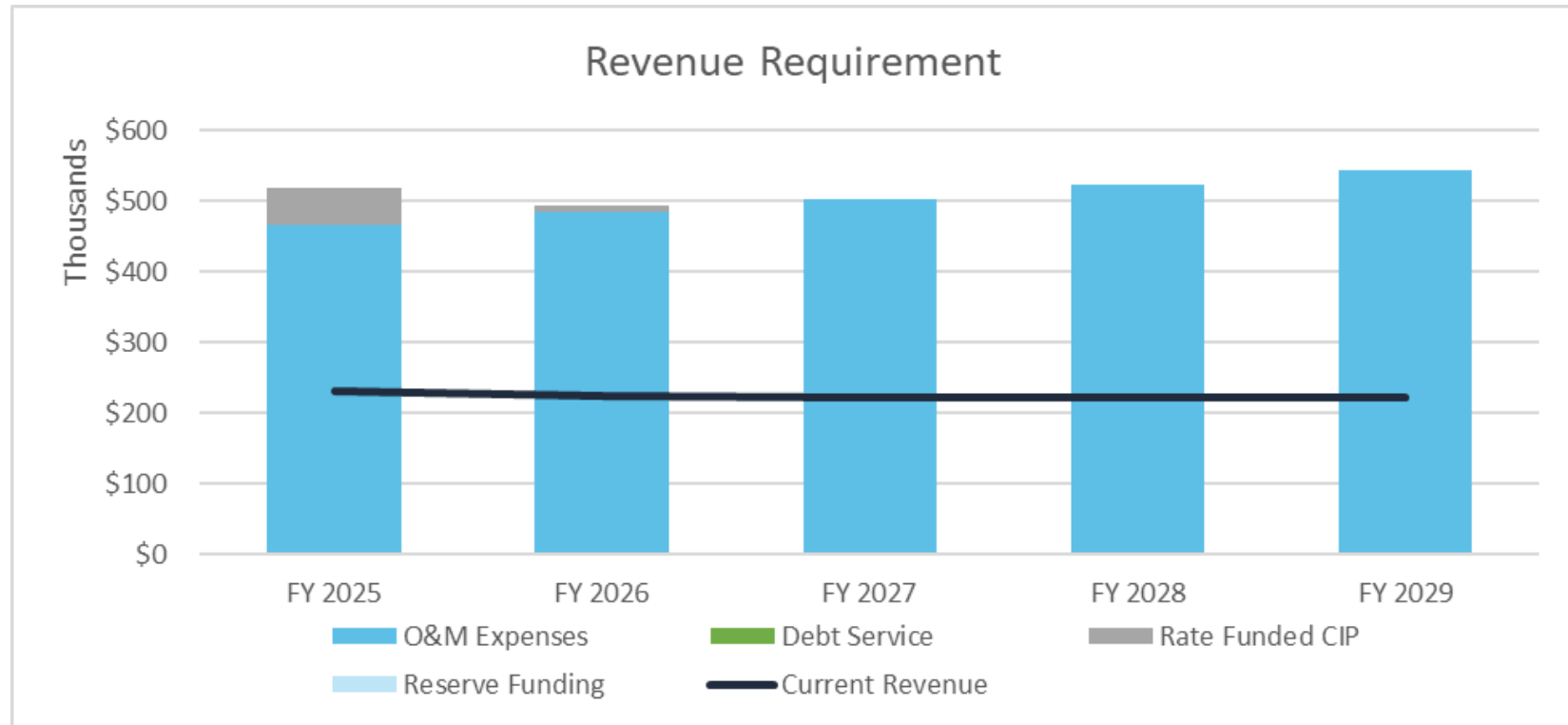
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Zone Wastewater Financial Plan – Status Quo

- Revenues not sufficient to fund O&M

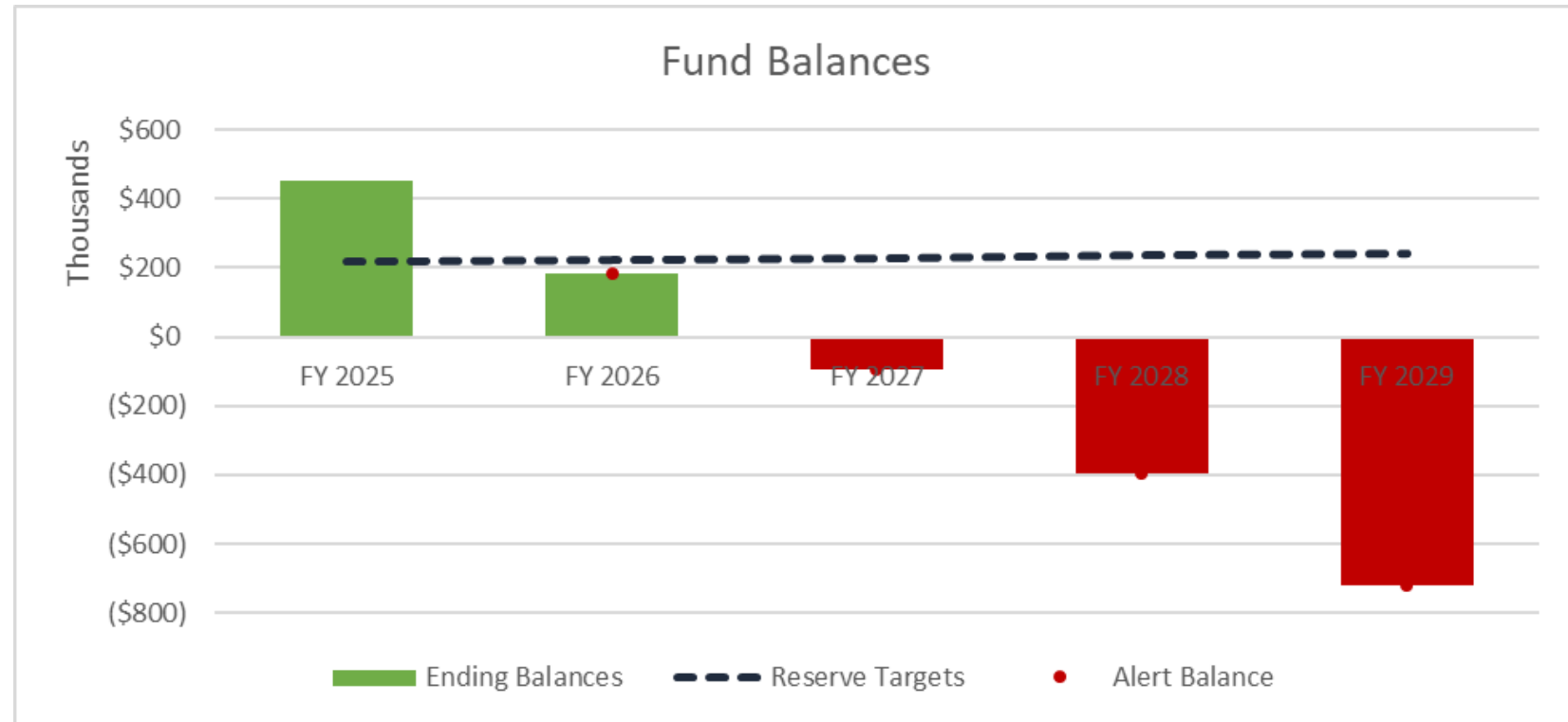
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Zone Wastewater Financial Plan – Status Quo

- Fund balances go negative in FY 2027

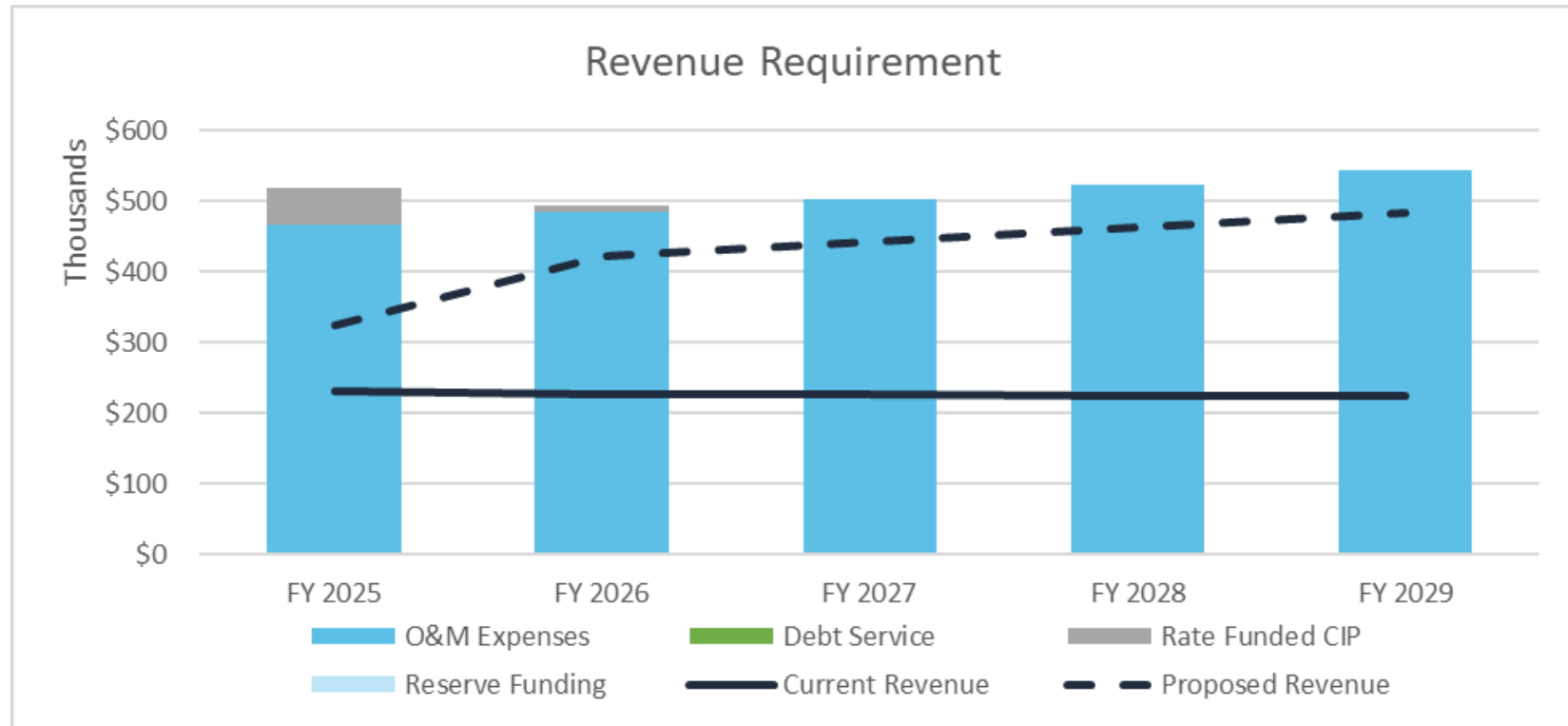
Fiscal Year	Rev. Adj.
2025	0%
2026	0%
2027	0%
2028	0%
2029	0%



Zone Wastewater Financial Plan – Proposed Scenario

- Revenues are sufficient to meet expenses and build reserves

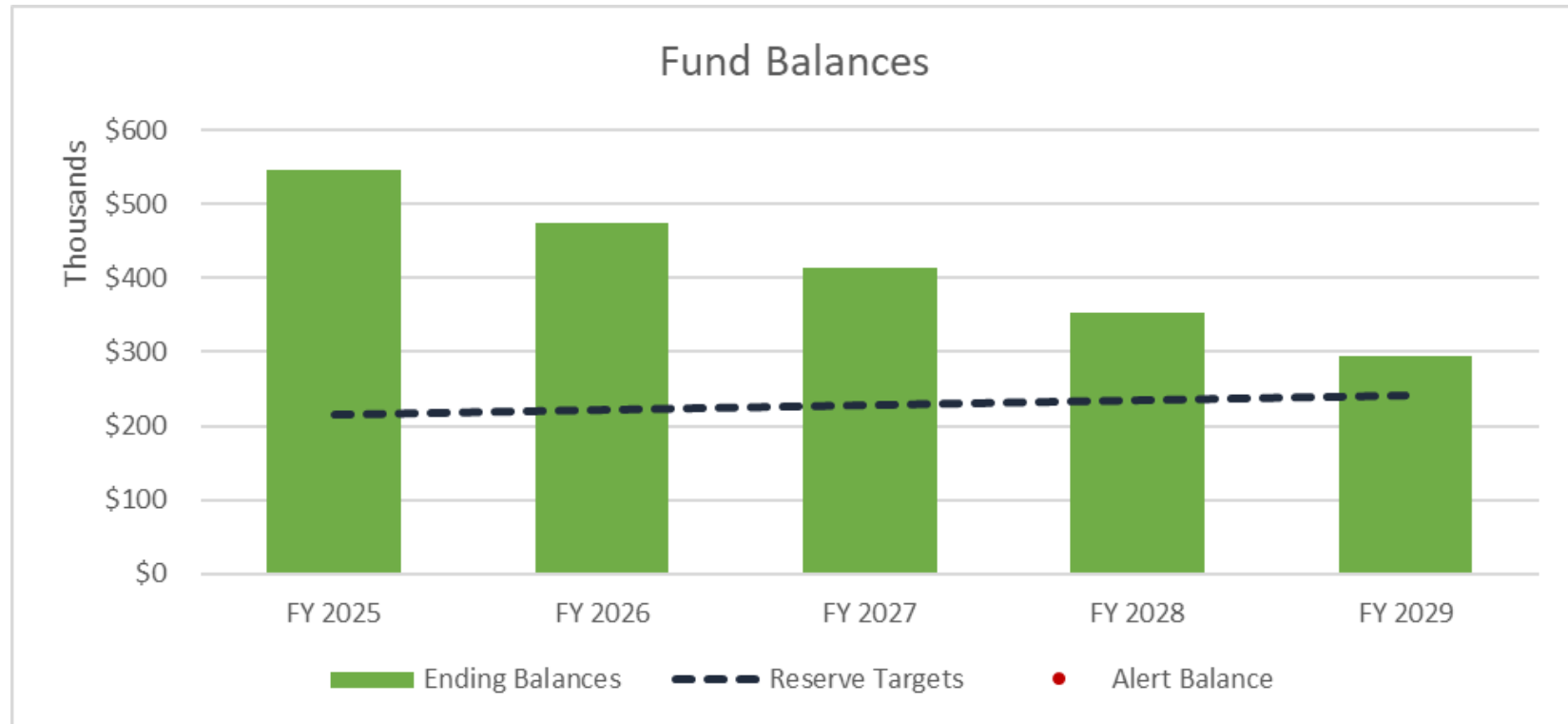
Fiscal Year	Rev. Adj.
2025	90%
2026	5%
2027	5%
2028	5%
2029	5%



Zone Wastewater Financial Plan – Proposed Scenario

- Meets fund balance targets for all years

Fiscal Year	Rev. Adj.
2025	90%
2026	5%
2027	5%
2028	5%
2029	5%



Zone Wastewater Cost Allocation

- No proposed changes to the Zone wastewater rate structure
- Allocation methodology stays the same and is as follows:

Rate Calculation	CDS O&M	Non-CDS O&M	Permit Mgmt.	CIP
Bi-Monthly Fees (CDS Customer)				
Developed Lot	X		X	X
Undeveloped Lot			X	
Bi-Monthly Fees (Non-CDS Customer)				
Developed Lot		X	X	
Undeveloped Lot			X	

Zone Wastewater Revenue Neutral Rate

Rate Calculation	CDS O&M	Non-CDS O&M	Permit Mgmt.	CIP	COS Charge
Bi-Monthly Fees (CDS Customer)					
Developed Lot	\$60.92	\$0.00	\$9.76	\$6.36	\$77.03
Undeveloped Lot	\$0.00	\$0.00	\$9.76	\$0.00	\$9.76
Bi-Monthly Fees (Non-CDS Customer)					
Developed Lot	\$0.00	\$16.64	\$9.76	\$0.00	\$26.40
Undeveloped Lot	\$0.00	\$0.00	\$9.76	\$0.00	\$9.76

Zone Wastewater Rates (w/ Rev. Adj.)

Revenue Adjustment		90%	5%	5%	5%	5%
ALT Wastewater Rates	Current	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Bi-Monthly Fees (CDS Customer)						
Developed Lot	\$99.77	\$146.38	\$153.70	\$161.39	\$169.46	\$177.94
Undeveloped Lot	\$35.20	\$18.55	\$19.48	\$20.46	\$21.49	\$22.57
Bi-Monthly Fees (Non-CDS Customer)						
Developed Lot	\$22.19	\$50.18	\$52.69	\$55.33	\$58.10	\$61.01
Undeveloped Lot	\$19.35	\$18.55	\$19.48	\$20.46	\$21.49	\$22.57

Zone Wastewater Bi-Monthly Impacts

Zone Wastewater Impacts	Current Zone Bill	Proposed Zone Bill	Difference (\$)	Difference (%)	w/ Current Water Bill	w/ Proposed Water Bill	Difference (\$)	Difference (%)
CDS Customer								
Developed Lot	\$99.77	\$146.38	\$46.61	47%	\$261.37	\$323.30	\$61.93	24%
Undeveloped Lot	\$35.20	\$18.55	(\$16.65)	-47%	\$196.80	\$195.47	(\$1.33)	-1%
Non-CDS Customer								
Developed Lot	\$22.19	\$50.18	\$27.99	126%	\$183.79	\$227.10	\$43.31	24%
Undeveloped Lot	\$19.35	\$18.55	(\$0.80)	-4%	\$180.95	\$195.47	\$14.52	8%



Water Resources Economics

PROMOTING THE VALUE AND PRICE OF
WATER SERVICE

Contact Information

Sanjay Gaur
Founder / President
sgaur@water-economics.com

Nancy Phan
Principal Consultant
nphan@water-economics.com