



Washougal Rate Study



CAC Meeting #2: Revenue Requirement

April 19, 2023



Welcome & Introductions

- **Welcome!**
- **Team Introductions**
- **CAC Introductions**



Agenda

- **Welcome & Introductions**
- **CAC Role & Schedule**
- **Revenue Requirement Analysis**
 - » Water
 - » Sewer
 - » Stormwater
- **Wrap-up & Next Steps**



CAC Role & Schedule

- **Role in public process**
- **Meet 5 times: January – September 2023**
- **Represent the Community**
- **Provide input, feedback, and recommendations**
- **Discussion/Questions**



Operating Principles

- 1. I will come to each meeting with an open mind**
- 2. I will focus on solutions**
- 3. I will listen to what others have to say and do my best to understand**
- 4. I will let others participate**
- 5. I will treat others with respect**
- 6. I will think before speaking**
- 7. It's ok to disagree, but I will do my best to find common ground**
- 8. I will stay on topic**
- 9. I will explore interests, not positions**
- 10. I will tackle the topic, not the person**
- 11. I will work to reach consensus on all decisions**



Revenue Requirement



Discussion Overview

- **Background**
- **Overview of the rate setting process**
- **Financial policies**
- **Key assumptions**
- **Revenue requirement**
 - » Key components
 - » Draft findings & discussion
- **Input / questions / discussion**
- **Next steps**

NOTE: Results may change as end of year financials are finalized.



Background

- **Rate study update commenced in 2022**
- **Public outreach workshop** **11/5/2022**
- **CAC Meeting #1: Rate Setting Fundamentals** **1/25/2023**
 - » Role of CAC
 - » Rate setting overview
 - » Summary of prior rate studies
 - » Goals and objectives



Overview of Rate Setting Process

Fiscal Policies – Set the Management Foundation

Today's
Focus

Step 1:
Revenue
Requirement
(defining overall needs)

Revenue

Debt

Reserves

O&M

Capital

Step 2:
Cost of Service
(equity evaluation)

Define Customer Classes

Allocate Costs

Step 3:
Design Rates
(collect target revenue)

Fixed Charge

Variable Charge



Revenue Requirement Objectives

- **Determine the amount of annual revenue necessary to fund all financial obligations on a standalone basis**
 - » Operating expenses
 - » Debt service (principal & interest)
 - » Capital costs and funding approach
- **Meet financial parameters and targets**
 - » Target debt service coverage ratios
 - » Maintain target reserve balances
- **Evaluate revenue sufficiency over a multi-year period**
- **Develop rate plan to balance financial needs and minimize customer impacts**



Revenue Requirement Elements

Fiscal Policy
Achievement



Forecast of
Revenue at
Existing Rates



Forecast of O&M

Planned Capital
Costs



Existing & New
Debt Service



**Annual Revenue
Requirement**



Financial Policies



Role of Financial Policies

Performance & Budgeting

How well are we financially performing compared to our standards and goals?

Contingency Planning

Are we financially prepared to respond to disruptions (e.g., natural disaster, economic downturn, equipment failure)?

Decision Framework

Do our financial and rate decisions align with our strategic goals, public priorities, and utility obligations?

Communication Tool

Do our financial policies provide documentation of our management philosophy to customers and stakeholders?

Documentation of Policies is Ideal

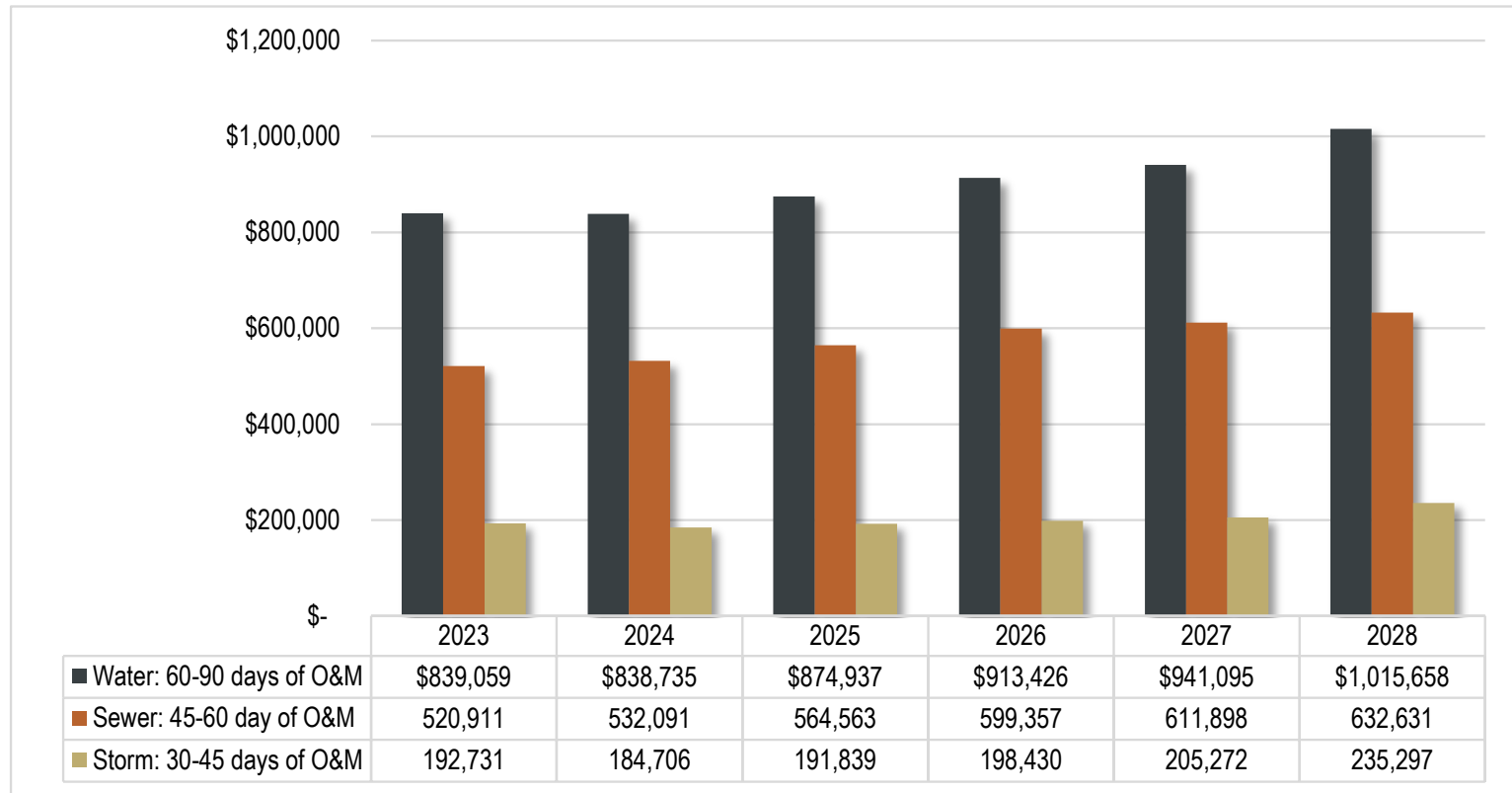


Financial Policies

Policy	Purpose	Target
Operating Reserve	Liquidity cushion to accommodate cyclical cash flow fluctuations	Water: 60-90 days O&M Sewer: 45-60 days of O&M Stormwater: 30-45 days of O&M
Capital Contingency Reserve	To meet emergency repairs, unanticipated capital, and project cost overruns	1% of assets value
Replacement Reserve Funding (RRF)	Promote ongoing system replacement through reinvestment in the system	Phase-in towards annual depreciation expense
Debt Service Coverage (DSC)	Compliance with existing loan/debt covenants and maintain credit worthiness for future debt issuance	Target 2.00; Minimum Requirement 1.25
Rate Setting	A multi-year financial plan	Five-year plan 2024-2028
Revenue Sufficiency	Set rates to meet the total annual financial obligations of each utility and be self supporting	Rates shall be set to cover O&M, debt service and fiscal policy achievement



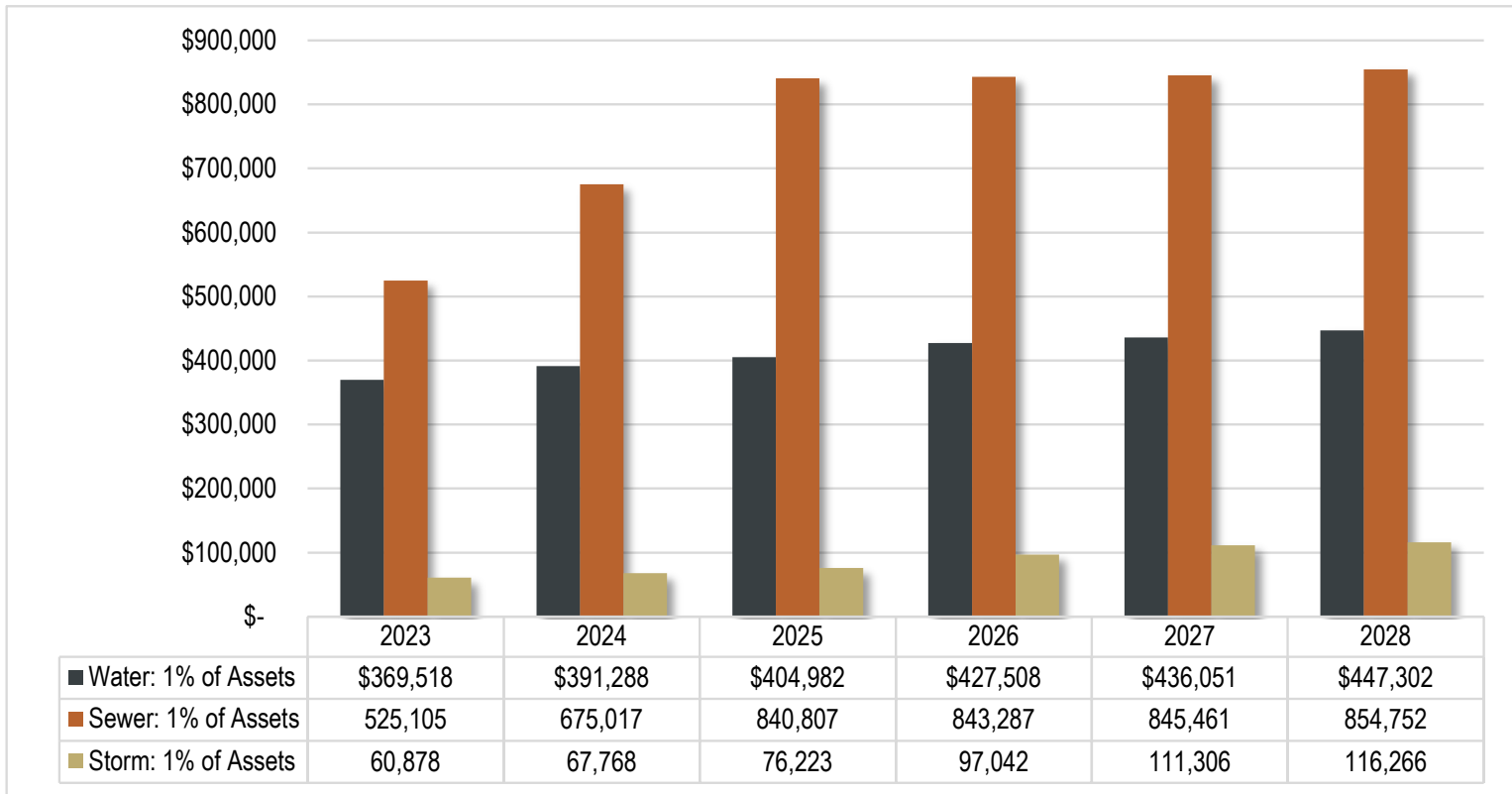
Operating Reserves Targets



- **Water utility reserves set higher due to volatility of revenue from impacts of weather**



Capital Reserves Targets



- **Sewer utility infrastructure is more expensive and requires higher reserves**

Replacement Reserve Funding

- **Utilities must build, maintain, and replace infrastructure**
- **Long lived assets require long-term management**
 - » Operational management: condition assessments & maintenance
 - » Financial management: saving money for repair and replacement





Decline in Federal Spending for Utilities

Figure 3

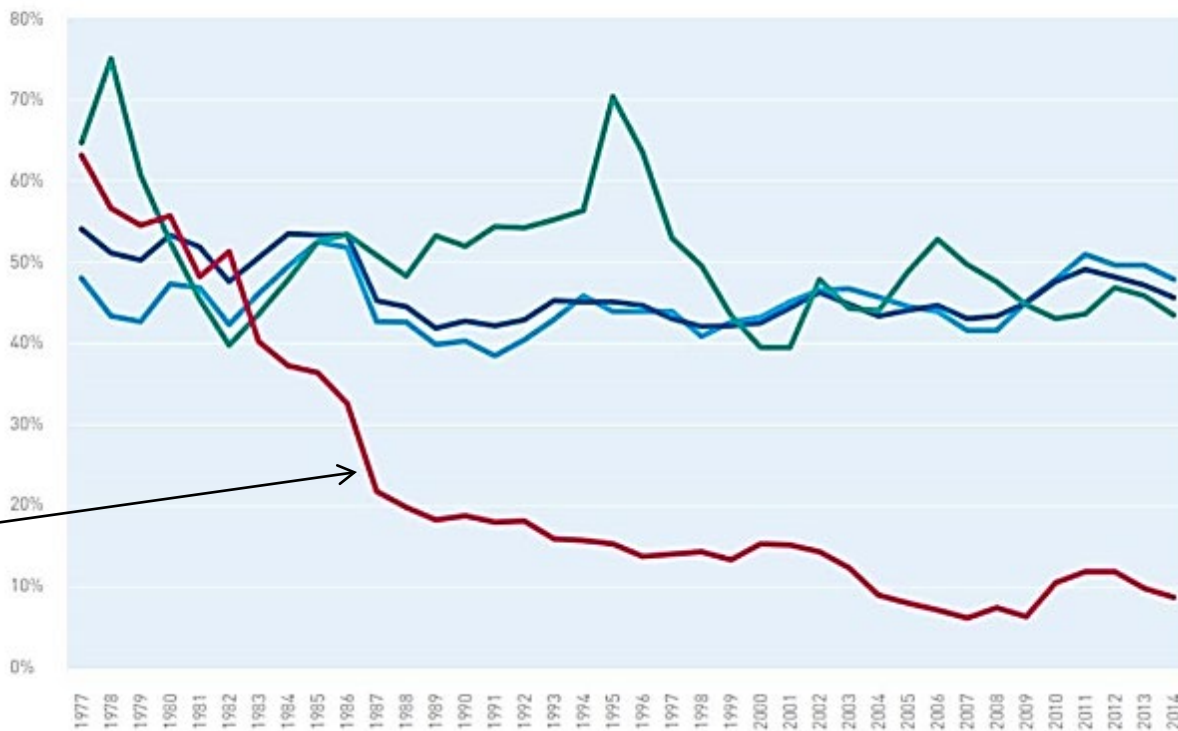
Federal Contribution to Total Infrastructure Spending

Water Utilities

Highways

Aviation

All Transportation Infrastructure



>60%

Water
Utilities

<10%

Source: CBO 2015.



Proactive RRF Plan Needed

- **Rate Funded RRF – what is it?**
 - » An annual cash contribution from current rate revenue
 - » Pays for same-year repair & replacement projects... or
 - » Saved for future capital projects
- **Policy Targets – how much do we need?**
 - » Original or replacement cost annual depreciation
 - » Average annual repair & replacement projects
 - » Asset management plan

Build 'Replacement Reserve Funding' into annual revenue needs



Replacement Reserve Funding

- **Target funding: annual depreciation**
- **Policy considerations – “Key Level”**
 - » Target 100% depreciation
 - » Phase-in over time
 - » Do not directly set a target
 - » Other?

Utility	Plant Assets (Gross)	Estimated Annual Depreciation					
		2023	2024	2025	2026	2027	2028
Water	\$ 34,146,605	\$ 739,036	\$ 782,577	\$ 809,964	\$ 855,015	\$ 872,102	\$ 894,604
Sewer	48,858,574	1,050,210	1,350,035	1,681,614	1,686,574	1,690,921	1,709,504
Stormwater	5,431,029	121,755	135,535	152,445	194,084	222,612	232,532



Key Assumptions



Key Assumptions – Forecasting

- **Focus period 2023-2028**
 - » Projection through 2042
- **Revenue based on historical data, budget and forecast assumptions**
 - » 2021 billing statistics used as baseline for rate revenues
 - » 2023 budget used as baseline for non rate revenues
 - » Annual growth set at 0.75% per year for majority of classes
- **O&M expenses based on 2023 budget and escalated with**
 - » General cost inflation: 4.00% per year
 - » Construction cost inflation: 6.00% in 2024; 4.00% per year thereafter
 - » Labor cost inflation: 5.00% in 2024, 4.00% in 2025; 3.00% thereafter
 - » Benefits cost inflation: 5.00% per year



Key Assumptions – Forecasting (continued)

- **Taxes**

- » Water state excise tax rate: 5.029%
- » Sewer state excise tax rate: 3.852% on collection share of revenue (25.00%)
- » B&O tax rate: 1.75% on non rate revenue, SDC revenue, sewer treatment & transmission revenue (75.00%) and stormwater rate revenue
- » City tax:
 - Water: 10.00%
 - Sewer: 8.81%
 - Stormwater: 6.00%

- **Future debt: revenue bonds**

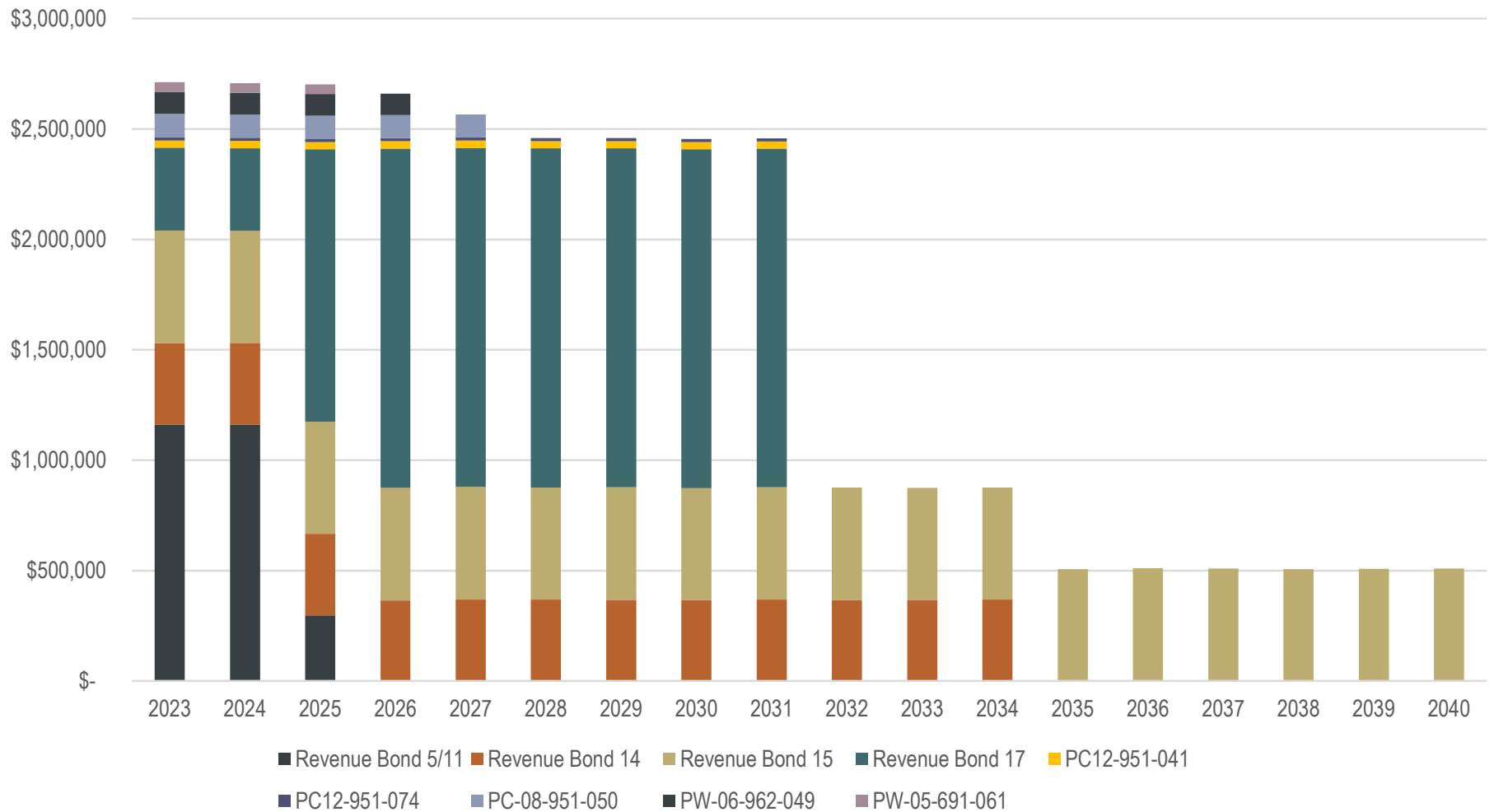
- » Term: 20-year (30-year scenarios)
- » Interest rate: 5.00%
- » Issuance cost: 1.00%

Low interest loans

- 30-year
- 2.00%
- 1.00%



Existing Debt





Existing Debt – Detail

Year	Revenue Bond 5/11	Revenue Bond 14	Revenue Bond 15	Revenue Bond 17	PC12-951-041	PC12-951-074	PC-08-951-050	PW-06-962-049	PW-05-691-061	Total Debt
2023	\$ 1,162,163	\$ 368,000	\$ 510,250	\$ 374,947	\$ 33,294	\$ 14,398	\$ 105,715	\$ 99,817	\$ 44,301	\$ 2,712,885
2024	1,162,325	368,800	507,600	374,125	33,212	14,363	105,199	98,857	44,083	2,708,565
2025	297,825	369,200	507,200	1,234,244	33,131	14,328	104,683	97,898	43,865	2,702,373
2026	-	364,200	511,400	1,535,990	33,049	14,293	104,168	96,938	-	2,660,038
2027	-	369,000	510,000	1,536,035	32,968	14,258	103,652	-	-	2,565,912
2028	-	368,200	508,200	1,535,962	32,887	14,222	-	-	-	2,459,471
2029	-	367,000	511,000	1,534,743	32,805	14,187	-	-	-	2,459,735
2030	-	365,400	508,200	1,535,377	32,724	14,152	-	-	-	2,455,853
2031	-	368,400	510,000	1,532,777	32,642	14,117	-	-	-	2,457,936
2032	-	365,800	511,200	-	-	-	-	-	-	877,000
2033	-	367,800	506,800	-	-	-	-	-	-	874,600
2034	-	369,200	507,000	-	-	-	-	-	-	876,200
2035	-	-	506,600	-	-	-	-	-	-	506,600
2036	-	-	510,600	-	-	-	-	-	-	510,600
2037	-	-	508,800	-	-	-	-	-	-	508,800
2038	-	-	506,400	-	-	-	-	-	-	506,400
2039	-	-	508,400	-	-	-	-	-	-	508,400
2040	-	-	509,600	-	-	-	-	-	-	509,600
Total	\$ 2,622,313	\$ 4,411,000	\$ 9,159,250	\$ 11,194,200	\$ 296,712	\$ 128,318	\$ 523,417	\$ 393,510	\$ 132,250	\$ 28,860,969
Water %	25.00%	25.00%	25.00%	25.00%	100.00%	100.00%				25.20%
Sewer %	71.00%	71.00%	71.00%	71.00%			100.00%	100.00%	100.00%	71.01%
Storm %	4.00%	4.00%	4.00%	4.00%						3.80%
Principal	\$ 2,440,000	\$ 3,450,000	\$ 6,445,000	\$ 9,488,000	\$ 293,049	\$ 126,734	\$ 515,682	\$ 383,912	\$ 130,940	\$ 23,273,317
Interest	182,313	961,000	2,714,250	1,706,200	3,663	1,584	7,735	9,598	1,309	5,587,652

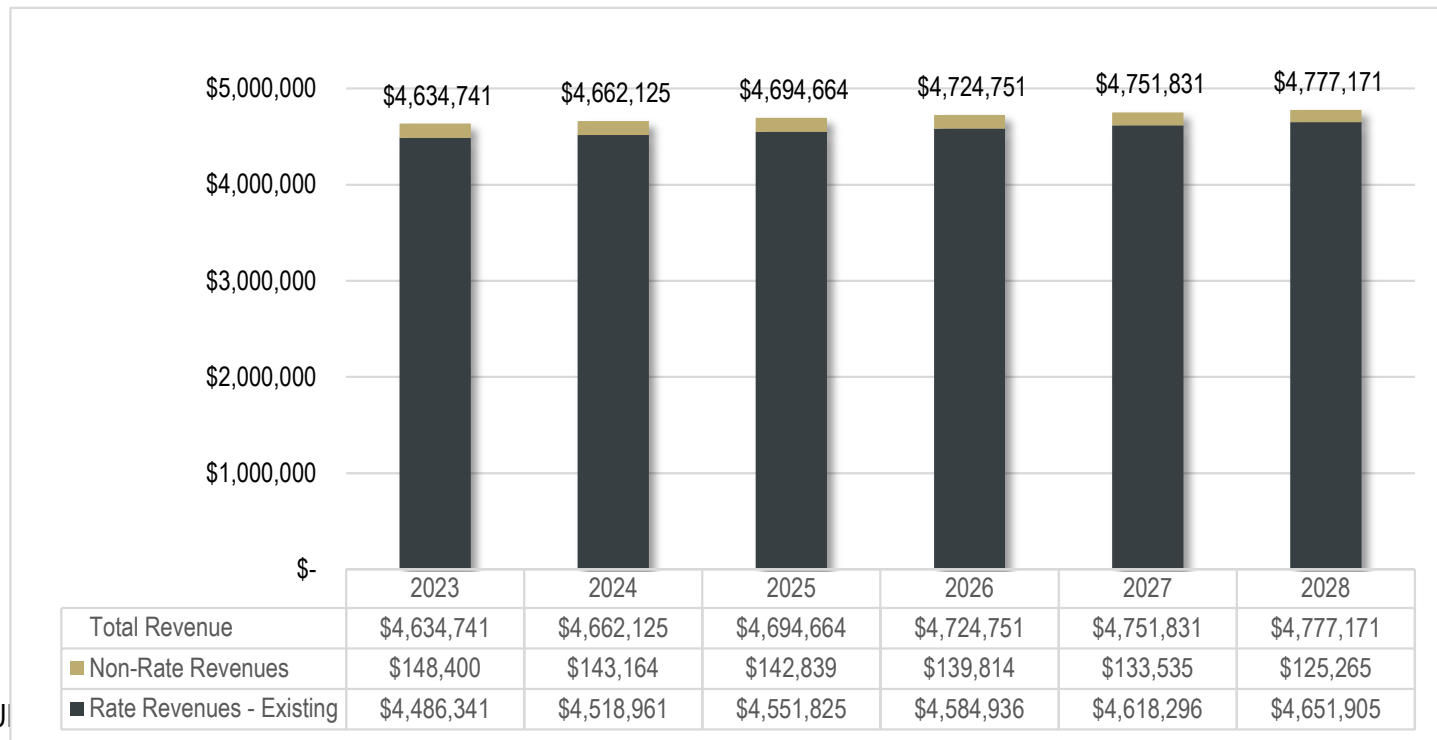


Water



Key Factors: Existing Revenue

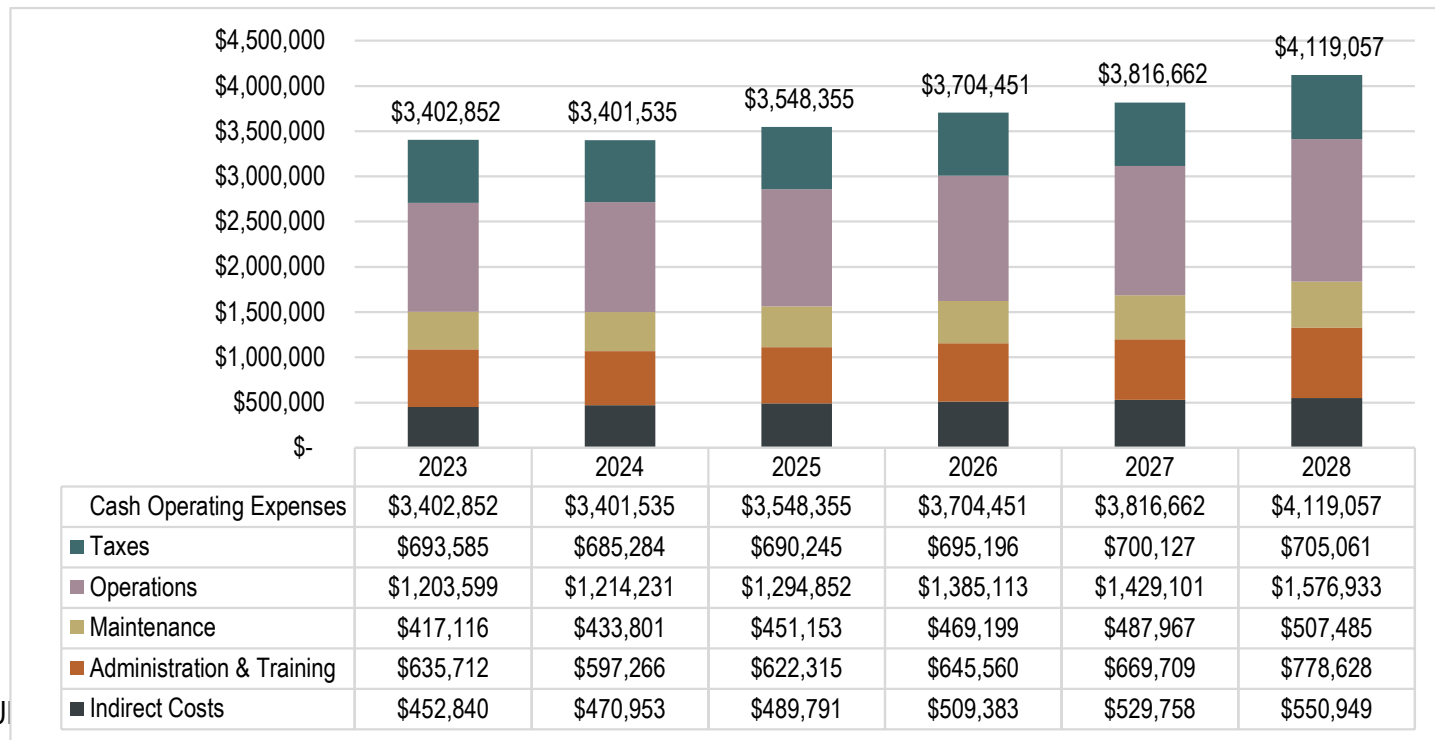
- **Focus period: 2023-2028**
 - » Rate revenue based on 2021 actual data plus 0.75% growth except large commercial
 - » Non rate revenue consists of meter sets, penalties, interest, other water service charges and miscellaneous revenues
- **Total existing operating revenue: \$4.6 million to \$4.8 million**





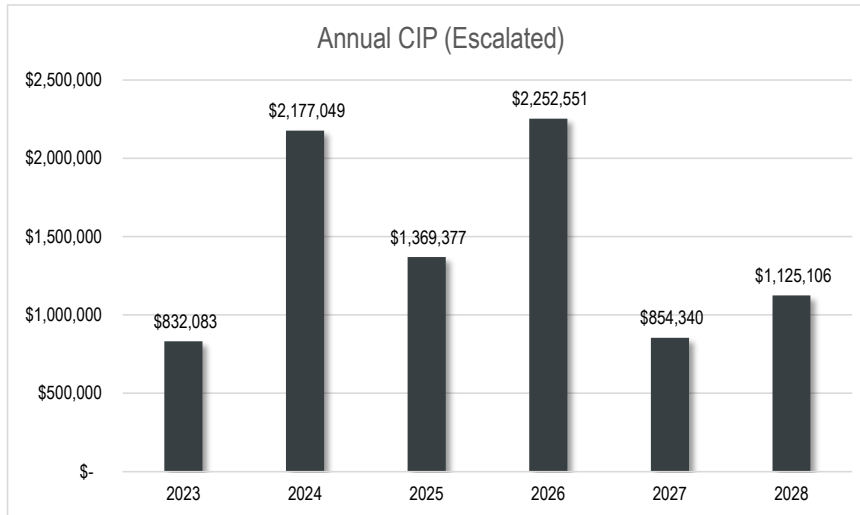
Key Factors: Operating Expenses

- **Forecast based on 2023 budget**
 - » Costs inflated between 6.0%-3.0% per year
 - Average inflation (net of taxes) of 4.8%
- **Total O&M expenses: \$3.4 million to \$4.1 million**





Key Factors: Capital



Year	2023\$	Annual CIP (Escalated)
2023	\$ 832,083	\$ 832,083
2024	2,053,820	2,177,049
2025	1,242,178	1,369,377
2026	1,964,727	2,252,551
2027	716,514	854,340
2028	907,307	1,125,106
Total	\$ 7,716,629	\$ 8,610,506
2029-2033	14,569,226	18,696,711
Total	\$ 22,285,855	\$ 27,307,217

- **Capital funded through existing reserves, cash financing, SDCs, replacement reserve funding**
 - » No new debt anticipated in 2024-2028 rate setting period
 - » Potential new debt may be necessary to finance future CIP
- **Assumes 75% of annual SDC revenues allocated towards Environmental Mitigation Agreements (EMA) to developers for construction of general benefit CIP**
 - » \$157k out of \$258k average annual water SDC revenue

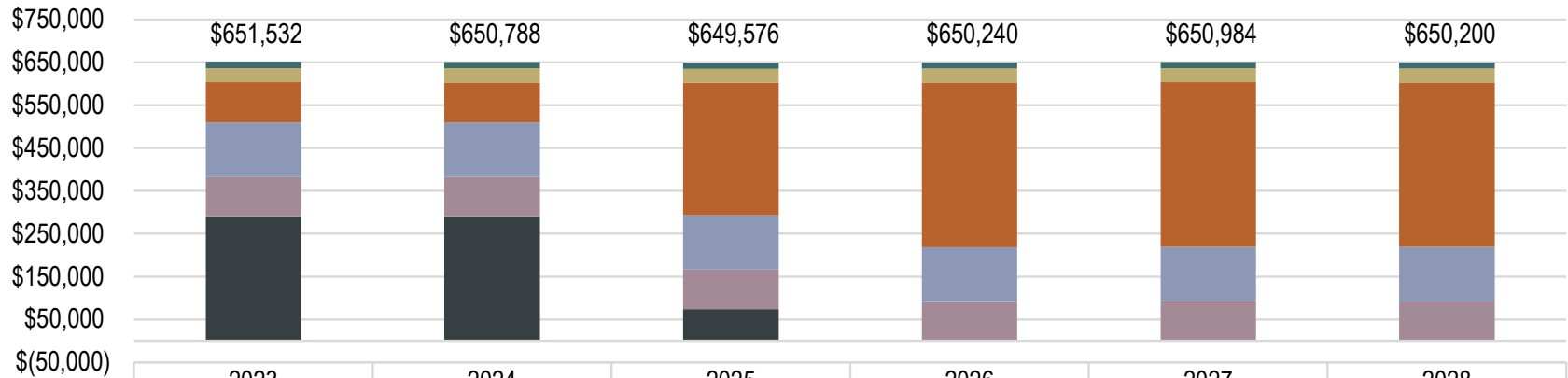


Key Factors: Capital (continued)

Description	Rate Setting Period (Escalated)						Total 2023-2028	Future 2029-2033	Total
	2023	2024	2025	2026	2027	2028			
Zone 7 Expansion									
Reservoir 7 Siting Study and Property Purchase			\$ 39,768		\$ 716,886		\$ 756,654		\$ 756,654
Reservoir, BPS and Transmission Mains							-		-
Source									
Well 1R						372,781	372,781	2,326,153	2,698,934
Fire Flow Improvements 2012 WSP									
P9 J Street - 32nd Street to 34th Street		446,117				-	446,117		446,117
B Street 9th to Washougal River Road - 20 Services						515,929	515,929		515,929
P10 I Street - 32nd Street to 34th Street			481,194	-			481,194		481,194
P11 G Street - 32nd Street to 34th Street				477,005			477,005		477,005
P12 32nd Street - G Street to K Street - 20 Service Transfers ONLY		441,018		-			441,018		441,018
P21 South A Street - 8th Street to 12th Street				1,083,601			1,083,601		1,083,601
Fire Flow Improvements 2020 WSP									
P62 1st Street			156,421				156,421		156,421
P65 3rd Avenue - 4 Street to N. Shephard Road		643,682					643,682		643,682
P69 S Street from 32nd Street		72,653					72,653		72,653
Miscellaneous									
Major Repairs / Misc. Pipe Improvements	53,045	63,731	66,280	68,931	71,689	74,556	398,232	419,973	818,205
AMI Implementation	409,383	509,847	530,241	551,451			2,000,923		2,000,923
System Capacity / CIP Update			66,280				66,280		66,280
Zone 4-2 Loop									
P41 328th Ave Loop, V8							-	2,165,989	2,165,989
2023 Budget - Water Main Installation 32/34/j st	284,280						284,280		284,280
ER&R Projects	85,375	-	29,192	71,562	65,765	161,840	413,735		413,735
Zone 6 Conversion									
Zone 6 Reservoir							-	6,564,093	6,564,093
New BPS 3 and BPS 6							-	5,128,702	5,128,702
P28, P58, P59, P60, P61, P66, V1							-	2,091,801	2,091,801
Total (Escalated)	\$ 832,083	\$ 2,177,049	\$ 1,369,377	\$ 2,252,551	\$ 854,340	\$ 1,125,106	\$ 8,610,506	\$ 18,696,711	\$ 27,307,217
2023\$	\$ 832,083	\$ 2,053,820	\$ 1,242,178	\$ 1,964,727	\$ 716,514	\$ 907,307	\$ 7,716,629	\$ 14,569,226	\$ 22,285,855



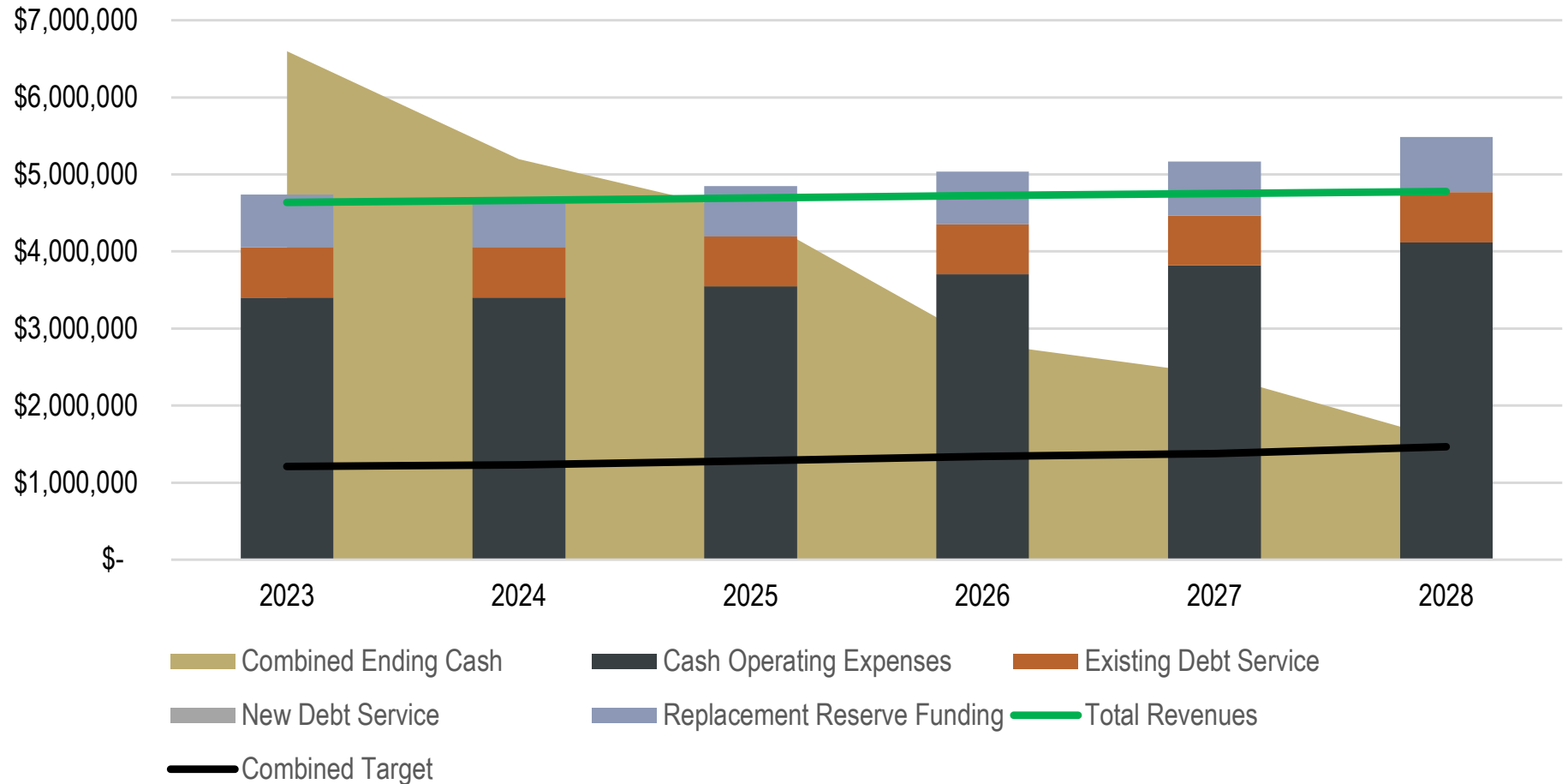
Key Factors: Existing Debt



	2023	2024	2025	2026	2027	2028
Total Existing Debt	\$651,532	\$650,788	\$649,576	\$650,240	\$650,984	\$650,200
PC12-951-074	\$14,398	\$14,363	\$14,328	\$14,293	\$14,258	\$14,222
PC12-951-041	\$33,294	\$33,212	\$33,131	\$33,049	\$32,968	\$32,887
Revenue Bond 17	\$93,737	\$93,531	\$308,561	\$383,998	\$384,009	\$383,991
Revenue Bond 15	\$127,563	\$126,900	\$126,800	\$127,850	\$127,500	\$127,050
Revenue Bond 14	\$92,000	\$92,200	\$92,300	\$91,050	\$92,250	\$92,050
Revenue Bond 5/11	\$290,541	\$290,581	\$74,456	\$-	\$-	\$-



Revenue Requirement: Baseline





Baseline (continued)

Description	2023	2024	2025	2026	2027	2028
Revenues						
Rate Revenues - Existing	\$ 4,486,341	\$ 4,518,961	\$ 4,551,825	\$ 4,584,936	\$ 4,618,296	\$ 4,651,905
Non-Rate Revenues	148,400	143,164	142,839	139,814	133,535	125,265
Total Revenues	\$ 4,634,741	\$ 4,662,125	\$ 4,694,664	\$ 4,724,751	\$ 4,751,831	\$ 4,777,171
Expenses						
Cash Operating Expenses	\$ 3,402,852	\$ 3,401,535	\$ 3,548,355	\$ 3,704,451	\$ 3,816,662	\$ 4,119,057
Existing Debt Service	651,532	650,788	649,576	650,240	650,984	650,200
New Debt Service	-	-	-	-	-	-
Replacement Reserve Funding	685,959	626,061	647,971	684,012	697,682	715,683
Total Expenses	\$ 4,740,343	\$ 4,678,385	\$ 4,845,903	\$ 5,038,703	\$ 5,165,328	\$ 5,484,939
Net Surplus (Deficiency)	\$ (105,602)	\$ (16,259)	\$ (151,238)	\$ (313,952)	\$ (413,497)	\$ (707,769)
Operating Ending Balance	\$ 839,059	\$ 822,800	\$ 671,562	\$ 357,610	\$ (55,887)	\$ (763,656)
Target (90 Days)	839,059	838,735	874,937	913,426	941,095	1,015,658
Capital Ending Balance	\$ 5,759,478	\$ 4,375,458	\$ 3,822,919	\$ 2,454,958	\$ 2,466,115	\$ 2,321,204
Target (1% of Plant)	369,518	391,288	404,982	427,508	436,051	447,302
Combined Ending Balance	\$ 6,598,537	\$ 5,198,258	\$ 4,494,481	\$ 2,812,568	\$ 2,410,228	\$ 1,557,548
Combined Target	1,208,577	1,230,023	1,279,919	1,340,934	1,377,146	1,462,960



Summary & Scenarios for Consideration

- **Existing rates are not sufficient to keep up with ongoing obligations**
 - » At existing rate levels, reserves would be depleted and go negative starting 2029
- **Scenario for consideration**
 - » Baseline: maintain existing rates the 5-year period
 - » S1: decrease rates over a 5-year period by 10%
 - » S2: consider increases taking into account inflation and conservative (5-year) CIP
 - » S3: consider increases taking into account inflation and programmed (10-year) CIP
 - » S4: conservative (5-year) CIP with minimized rate increases
 - Reduced RRF funding



Scenario Summary: Baseline & S1

Baseline: No Increases	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bi-Mo. Res. Rate 15ccf	\$ 94.28	\$ 94.28	\$ 94.28	\$ 94.28	\$ 94.28	\$ 94.28	
\$ Bi-Mo. Difference		\$ -	\$ -	\$ -	\$ -	\$ -	
RRF % of Depreciation		75.00%	55.00%	35.00%	30.00%	0.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (50,000)	

- **11.0%-15.0% rate increase needed to keep up with operations in 2029**
- **48.0% rate increase with \$16.5 million in debt (30-year | 1.5 coverage) needed in 2029**
 - » 76.0% rate increase with \$14.5 million in debt (20-year | 2.0 coverage) needed in 2029

S1: 10% Decrease	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
Bi-Mo. Res. Rate 15ccf	\$ 94.28	\$ 92.31	\$ 90.39	\$ 88.50	\$ 86.66	\$ 84.85	
\$ Bi-Mo. Difference		\$ (1.97)	\$ (1.92)	\$ (1.88)	\$ (1.85)	\$ (1.81)	
RRF % of Depreciation		60.00%	30.00%	5.00%	0.00%	0.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ (50,000)	\$ (900,000)	

- **24.0%-35.0% rate increase needed to keep up with operations in 2029**
- **65.0% rate increase with \$16.5 million in debt (30-year | 1.5 coverage) needed in 2029**
 - » 98.0% rate increase with \$14.5 million in debt (20-year | 2.0 coverage) needed in 2029
- **Both scenarios would require future rate increase to keep up with inflation**



Scenario Summary: S2 & S3

S2: 5-Year CIP Only	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		4.25%	4.25%	4.25%	4.25%	4.25%	23.13%
Bi-Mo. Res. Rate 15ccf	\$ 94.28	\$ 98.29	\$ 102.46	\$ 106.82	\$ 111.36	\$ 116.09	
\$ Bi-Mo. Difference		\$ 4.01	\$ 4.18	\$ 4.35	\$ 4.54	\$ 4.73	
RRF % of Depreciation		92.00%	94.00%	96.00%	98.00%	100.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **8.0% rate increase with \$14.0 million in debt (30-year term | 1.5 coverage) in 2030**
 - » 25.0% rate increases with \$14.0 million in debt (20-year term | 2.0 coverage) in 2030

S3: 10-Year CIP	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		4.75%	4.75%	4.75%	4.75%	4.75%	26.12%
Bi-Mo. Res. Rate 15ccf	\$ 94.28	\$ 98.76	\$ 103.45	\$ 108.36	\$ 113.51	\$ 118.90	
\$ Bi-Mo. Difference		\$ 4.48	\$ 4.69	\$ 4.91	\$ 5.15	\$ 5.39	
RRF % of Depreciation		92.00%	94.00%	96.00%	98.00%	100.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **4.75% increases are projected through 2030 with \$14.0 million in debt (30-year term | 1.50 coverage) in 2030**
 - » 6.0% annual rate increases 2024-2030 with \$12.0 million in debt (20-year term | 2.0 coverage) in 2030
- **Both scenarios would require future increases to keep up with inflation**



Scenario Summary: S4

S4: 5-Year CIP; Min. Increase	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		2.00%	2.00%	2.00%	2.00%	2.00%	10.41%
Bi-Mo. Res. Rate 15ccf	\$ 94.28	\$ 96.17	\$ 98.09	\$ 100.05	\$ 102.05	\$ 104.09	
\$ Bi-Mo. Difference		\$ 1.89	\$ 1.92	\$ 1.96	\$ 2.00	\$ 2.04	
RRF % of Depreciation		85.00%	75.00%	65.00%	65.00%	40.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **13.25% increase in 2029 followed by 7.25% in 2030 and 2031 with \$16.0 million in debt (30-year term | 1.5 coverage)**
 - » 24.0% increases in 2029 and 2030 with \$16.0 million in debt (20-year term | 2.0 coverage)
- **Future increases required to keep up with inflation**



Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
Baseline: No Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S1: 10% Decrease	-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
S2: 5-Year CIP Only	4.25%	4.25%	4.25%	4.25%	4.25%	23.13%
S3: 10-Year CIP	4.75%	4.75%	4.75%	4.75%	4.75%	26.12%
S4: 5-Year CIP; Min. Increase	2.00%	2.00%	2.00%	2.00%	2.00%	10.41%

RRF % of Depreciation	2024	2025	2026	2027	2028
Baseline: No Increases	75.00%	55.00%	35.00%	30.00%	0.00%
S1: 10% Decrease	60.00%	30.00%	5.00%	0.00%	0.00%
S2: 5-Year CIP Only	92.00%	94.00%	96.00%	98.00%	100.00%
S3: 10-Year CIP	92.00%	94.00%	96.00%	98.00%	100.00%
S4: 5-Year CIP; Min. Increase	85.00%	75.00%	65.00%	65.00%	40.00%

O&M Reduction	2024	2025	2026	2027	2028
Baseline: No Increases	\$ -	\$ -	\$ -	\$ -	\$ (50,000)
S1: 10% Decrease	-	-	-	(50,000)	(900,000)
S2: 5-Year CIP Only	-	-	-	-	-
S3: 10-Year CIP	-	-	-	-	-
S4: 5-Year CIP; Min. Increase	-	-	-	-	-

● Future consideration

- » Baseline would need 11.0%-15.0% for operations in 2029 and 48.0%-76.0% with \$16.5 million in new debt for capital based on policy
- » S1 would need 23.0%-35.0% for operations in 2029 and 65.0%-98.0% with \$16.5 million in new debt based on policy
- » S2 would need 8.0%-25.0% and \$14.0 million in new debt in 2030 based on policy
- » S3 would need 4.75%-6.0% through 2030 and \$14.0 million in new debt in 2030 based on policy
- » S4 would need 13.25%-7.25% through 2031 or 24.0% in 2029-2030 and \$16.0 million in new debt in 2030
- » All scenarios would require future increases to keep up with inflation



Scenario Summary: High Level

Rate Structure Example	Short Term Affordability	Financial Sustainability	Policy Compliance	5-Year Rate Impacts
Baseline: No Increases	++	XX	X	++
S1: 10% Decrease	+++	XXX	XX	+++
S2: 5-Year CIP Only	X	+	+	X
S3: 10-Year CIP	X	++	++	XX
S4: 5-Year CIP Min. Increases	+	—	—	+

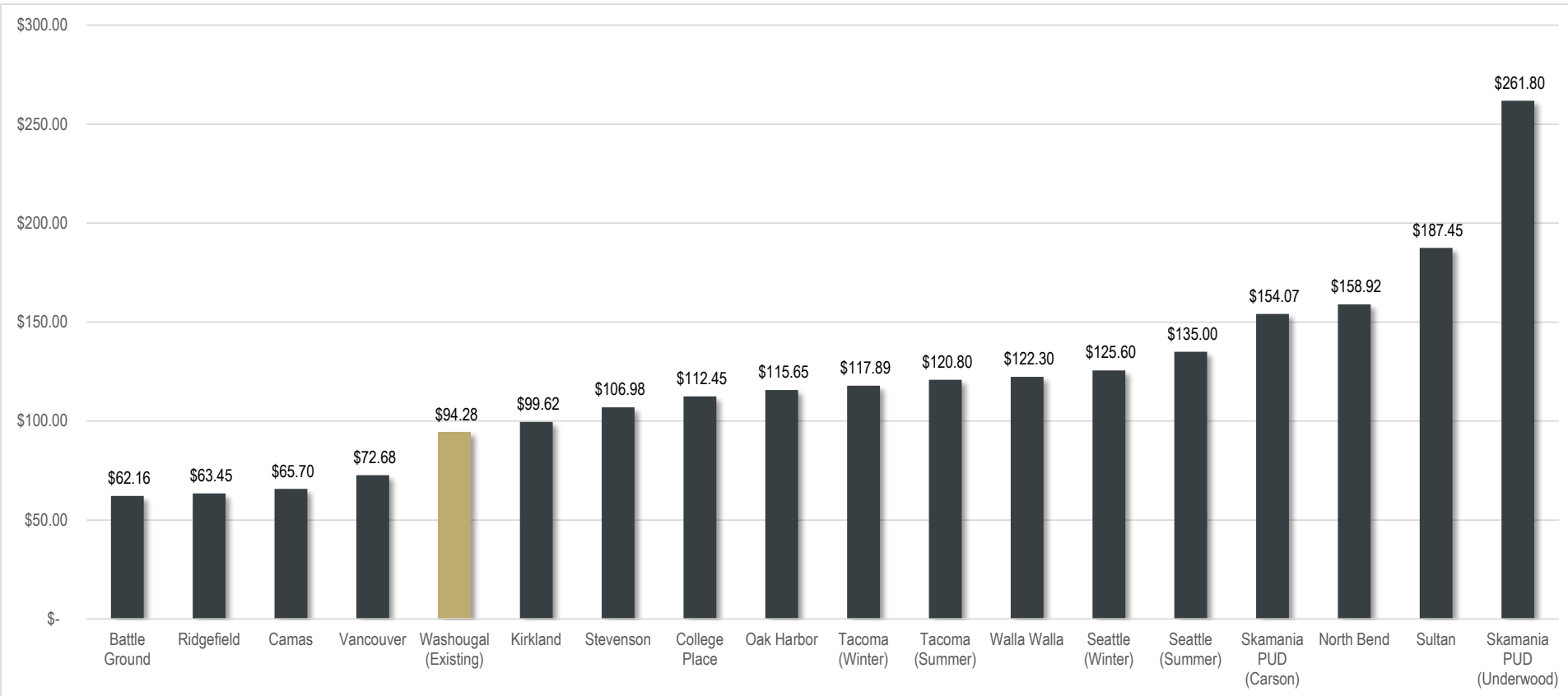
++ : Meets or improves achievement of objective

X : Does not meet or hinders achievement of objective

— : Does not impact the achievement of objective



Water Residential Rate Survey



Notes:

- Sample bi-monthly Residential bill assumes a $\frac{3}{4}$ " meter and 15ccf consumption.
- Bills include utility taxes where applicable.

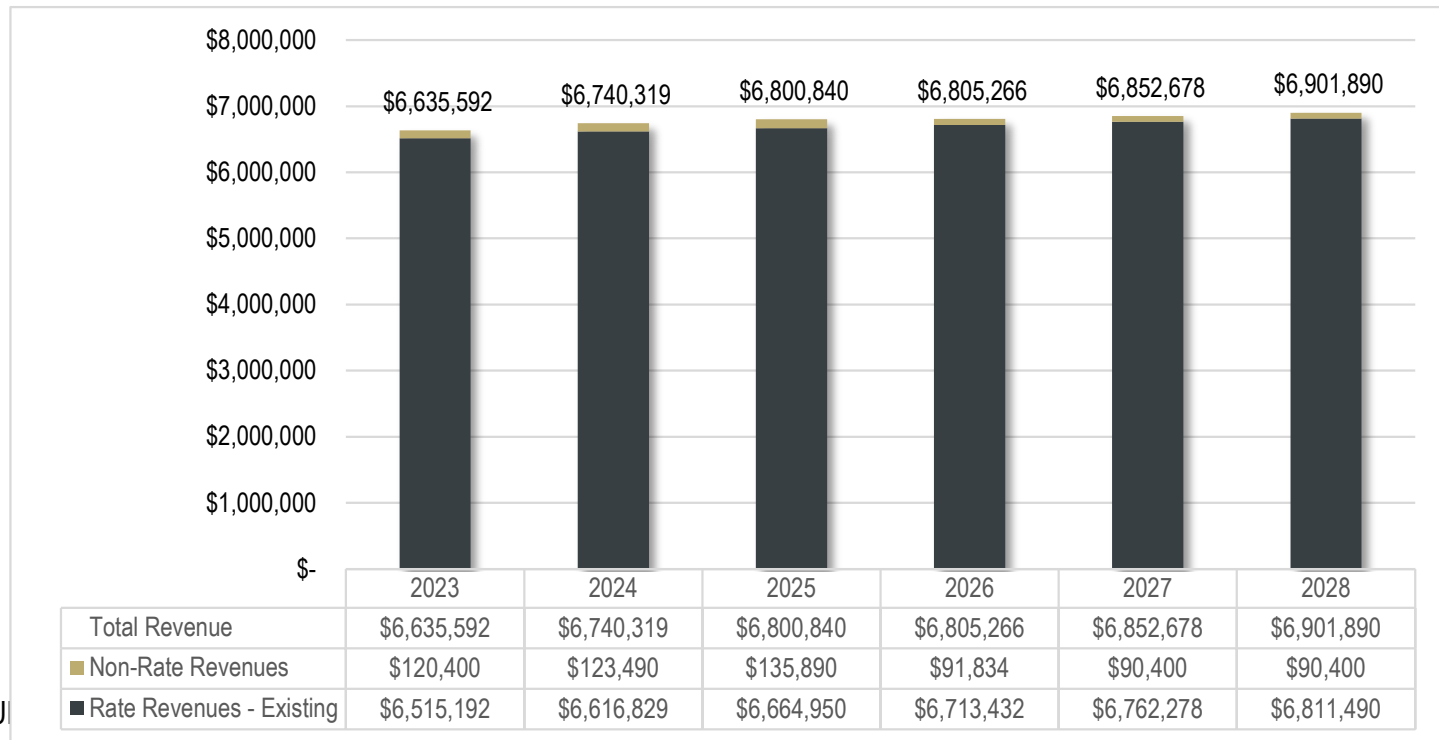
A close-up, high-angle photograph of a circular sewer manhole cover. The cover has a textured, diamond-patterned surface. A dark, semi-transparent arrow points from the left towards the right, partially obscuring the cover. The word "Sewer" is written in white, bold, sans-serif font on the arrow.

Sewer



Key Factors: Existing Revenue

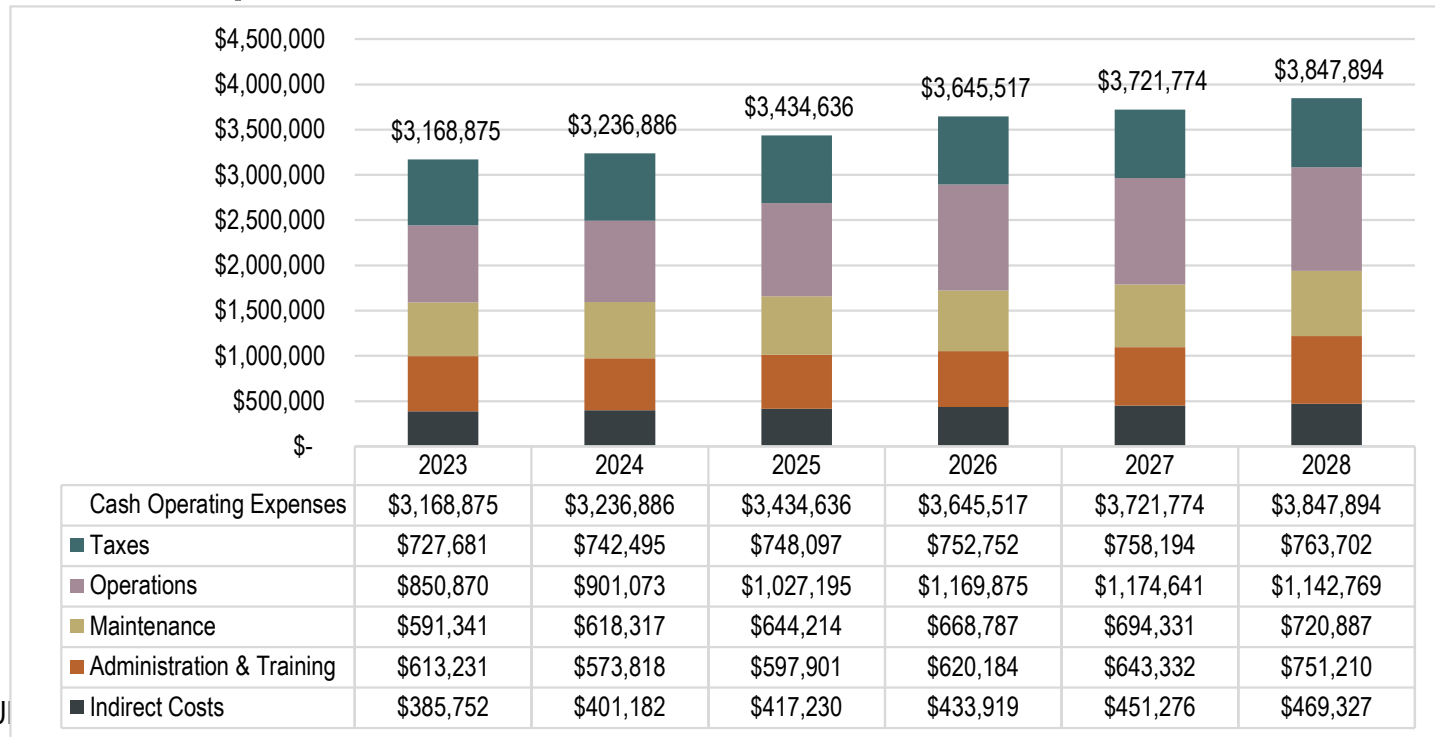
- **Rate setting period: 2024-2028**
 - » Rate revenue based on 2021 actual data plus 0.75% growth except industrial
 - » Non rate revenue consists of penalties, interest, other sewer service charges and miscellaneous revenues
- **Total existing operating revenue: \$6.6 million to \$6.9 million**



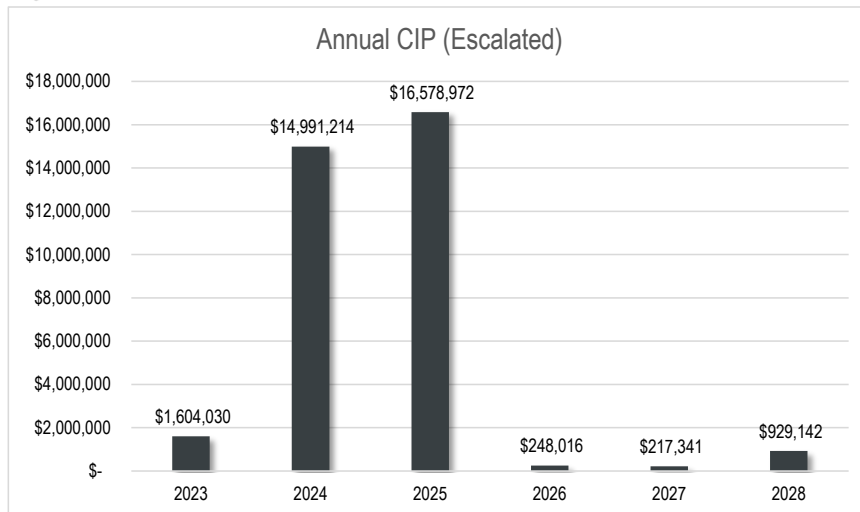


Key Factors: Operating Expenses

- **Forecast based on 2023 budget**
 - » Costs inflated between 6.0%-3.0% per year
 - Average inflation (net of taxes) of 4.8%
 - » Includes 1 additional FTE in 2025 for WWTP
- **Total O&M expenses: \$3.2 million to \$3.8 million**



Key Factors: Capital



Year	2023\$	Annual CIP (Escalated)
2023	\$ 1,604,030	\$ 1,604,030
2024	14,142,655	14,991,214
2025	15,038,981	16,578,972
2026	216,325	248,016
2027	182,279	217,341
2028	749,278	929,142
Total	\$ 31,933,548	\$ 34,568,716
2029-2033	638,568	903,164
2034-2040	20,265,785	37,684,667
Total	\$ 52,837,901	\$ 73,156,547

- Capital funded through existing reserves, cash financing, SDCs, replacement reserve funding, grants and new debt**
 - » 2023 PWTF loan: \$1.0 million; 5-year; 0.47% interest
 - » 2024 grant: \$1.0 million
 - » 5-year new debt: \$16.6 million revenue bond baseline (varies by scenario)
 - » Potential new debt may be necessary to finance future CIP beyond 2028
- Assumes 75% of annual SDC revenues allocated towards EMA to developers for construction of general benefit CIP**
 - » \$235k out of \$470k annual sewer SDC revenue 2023-2026

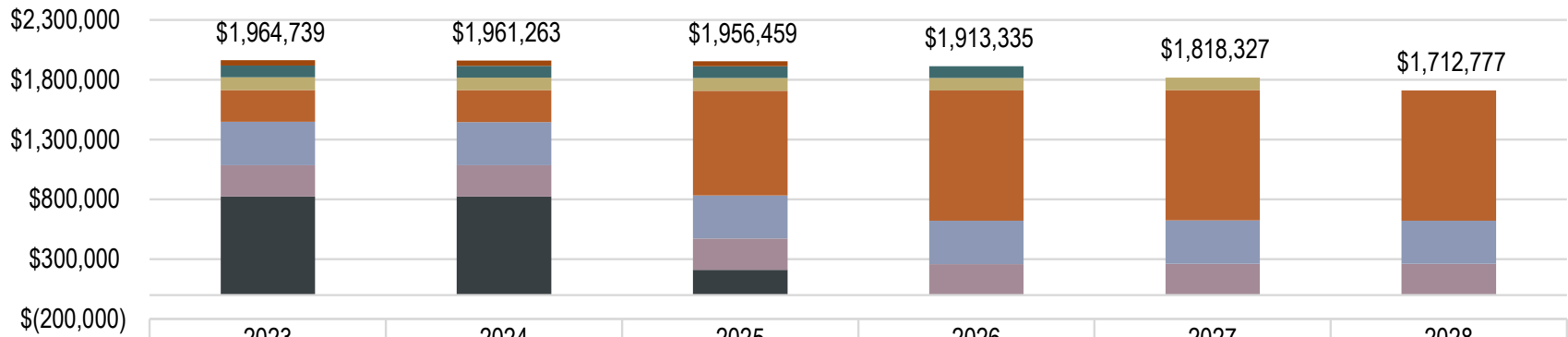


Key Factors: Capital (continued)

Description	Rate Setting Period (Escalated)						Total	Future Periods		Total
	2023	2024	2025	2026	2027	2028	2023-2028	2029-2033	2034-2040	
Collection System Maintenance Upgrades										
Pump Station #4 Upgrade		\$ 79,500					\$ 79,500			\$ 79,500
Pump Station #13 Upgrade		5,830	6,063				11,893			11,893
Pump Station #14 Upgrade		7,420	7,717				15,137			15,137
Pump Station 1 Relocation	1,254,552						1,254,552			1,254,552
SCADA System Upgrades	228,478						228,478			228,478
Northside Lift Station No. 8 Completion	50,000						50,000			50,000
Pump Station 10 Abandonment							-		1,482,502	1,482,502
Pump Station #7 Abandonment (800' of 8" gravity sewer)							-		905,066	905,066
Pump Station #11 Abandonment (1,000' of 8" gravity sewer)							-		1,110,485	1,110,485
U' Street Bypass (1,400' of 8" sewer)							-		1,372,687	1,372,687
Pump Station #16 (100 gpm capacity)							-		1,551,319	1,551,319
Force Main #16 (4,600' of 6-inch)							-		2,215,150	2,215,150
Trunk Sewer T26 (4,300' of 12-inch)							-		5,085,805	5,085,805
Interceptor Sewer I8 (4,000' of 36-inch)							-		8,606,746	8,606,746
Pump Station #17 (100 gpm capacity)							-		1,613,372	1,613,372
Force Main #17 (2,000' of 4-inch)							-		1,002,171	1,002,171
Interceptor I9 (Stiles Road) (4,500' of 8-inch)							-		6,235,732	6,235,732
Interceptor I10 (2,300' of 8-inch)							-		3,130,238	3,130,238
Pump Station #9 Upgrade (330 gpm capacity)							-		1,286,805	1,286,805
Force Main #9 Upgrade (300' of 4-inch)							-		72,358	72,358
Annual R&R				114,650	119,236	124,005	357,890	698,517	1,239,289	2,295,696
Treatment Plant Upgrades							-			-
WWTP Upgrade Construction		14,840,000	16,536,000				31,376,000			31,376,000
Headworks Screen Upgrade						780,509	780,509			780,509
ER&R Projects	71,000	58,464	29,192	133,366	98,106	24,628	414,756	204,647	774,941	1,394,345
Total (Escalated)	\$ 1,604,030	\$ 14,991,214	\$ 16,578,972	\$ 248,016	\$ 217,341	\$ 929,142	\$ 34,568,716	\$ 903,164	\$ 37,684,667	\$ 73,156,547
2023\$	\$ 1,604,030	\$ 14,142,655	\$ 15,038,981	\$ 216,325	\$ 182,279	\$ 749,278	\$ 31,933,548	\$ 638,568	\$ 20,265,785	\$ 52,837,901



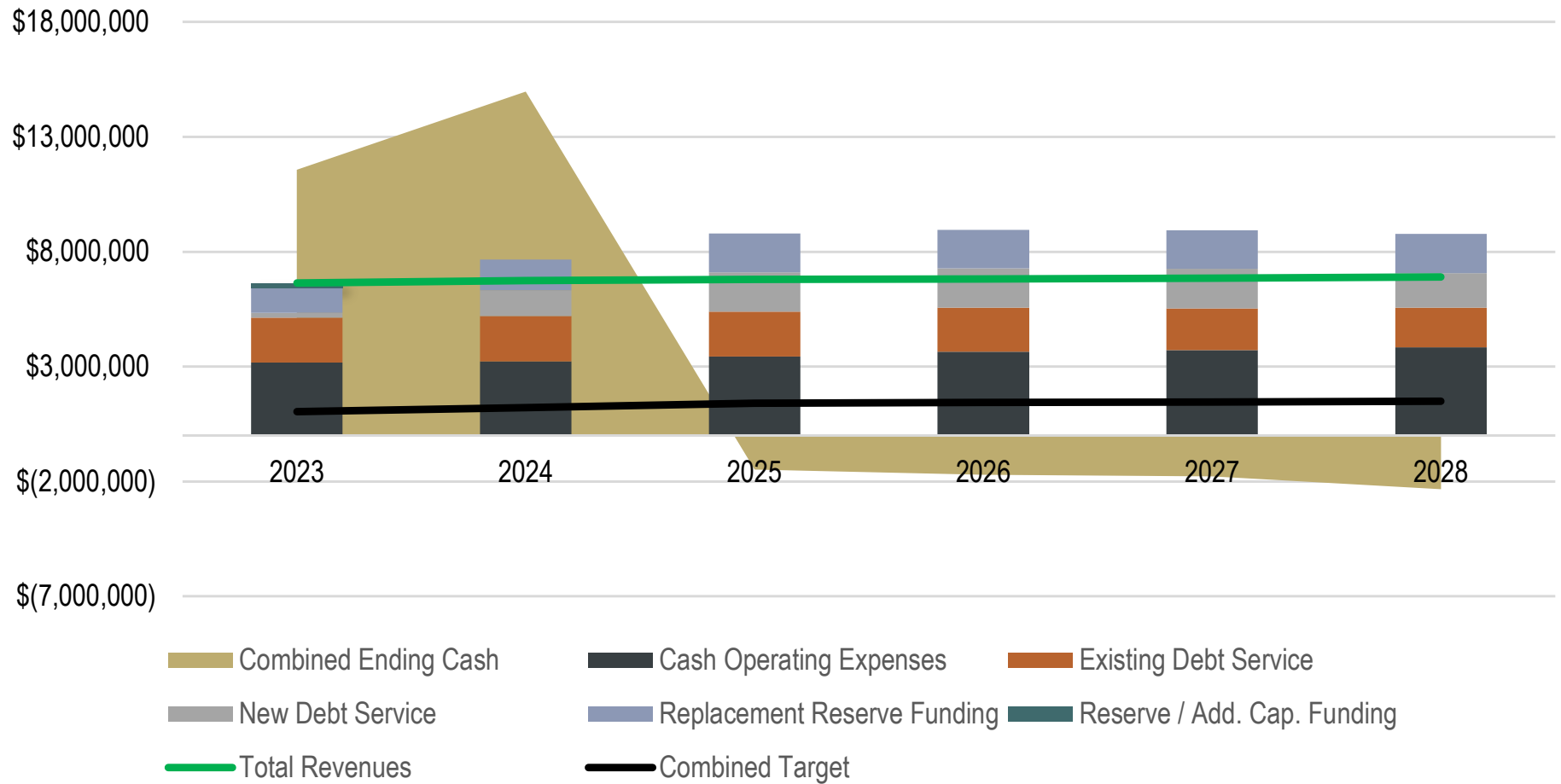
Key Factors: Existing Debt



	2023	2024	2025	2026	2027	2028
Total Existing Debt	\$1,964,739	\$1,961,263	\$1,956,459	\$1,913,335	\$1,818,327	\$1,712,777
PW-05-691-061	\$44,301	\$44,083	\$43,865	\$-	\$-	\$-
PW-06-962-049	\$99,817	\$98,857	\$97,898	\$96,938	\$-	\$-
PC-08-951-050	\$105,715	\$105,199	\$104,683	\$104,168	\$103,652	\$-
Revenue Bond 17	\$266,213	\$265,629	\$876,313	\$1,090,553	\$1,090,585	\$1,090,533
Revenue Bond 15	\$362,278	\$360,396	\$360,112	\$363,094	\$362,100	\$360,822
Revenue Bond 14	\$261,280	\$261,848	\$262,132	\$258,582	\$261,990	\$261,422
Revenue Bond 5/11	\$825,135	\$825,251	\$211,456	\$-	\$-	\$-



Revenue Requirement: Baseline



Note: combined reserves include \$19 million in new debt in 2024



Baseline (continued)

Description	2023	2024	2025	2026	2027	2028
Revenues						
Rate Revenues - Existing	\$ 6,515,192	\$ 6,616,829	\$ 6,664,950	\$ 6,713,432	\$ 6,762,278	\$ 6,811,490
Non-Rate Revenues	120,400	123,490	134,294	94,573	90,400	90,400
Total Revenues	\$ 6,635,592	\$ 6,740,319	\$ 6,799,244	\$ 6,808,005	\$ 6,852,678	\$ 6,901,890
Expenses						
Cash Operating Expenses	\$ 3,168,875	\$ 3,236,886	\$ 3,434,608	\$ 3,645,565	\$ 3,721,774	\$ 3,847,894
Existing Debt Service	1,964,739	1,961,263	1,956,459	1,913,335	1,818,327	1,712,777
New Debt Service	204,700	1,116,091	1,712,637	1,711,697	1,710,757	1,509,817
Replacement Reserve Funding	1,104,059	1,350,035	1,681,614	1,686,574	1,690,921	1,709,504
Total Expenses	\$ 6,442,373	\$ 7,664,275	\$ 8,785,318	\$ 8,957,171	\$ 8,941,779	\$ 8,779,992
Net Surplus (Deficiency)	\$ 193,219	\$ (923,956)	\$ (1,986,074)	\$ (2,149,166)	\$ (2,089,101)	\$ (1,878,102)
<i>Coverage After Increase</i>	<i>2.62</i>	<i>1.68</i>	<i>1.35</i>	<i>1.27</i>	<i>1.30</i>	<i>1.29</i>
Operating Ending Balance	\$ 520,911	\$ (403,045)	\$ (2,389,119)	\$ (4,538,285)	\$ (6,627,386)	\$ (8,505,488)
<i>Target (60 Days)</i>	<i>520,911</i>	<i>532,091</i>	<i>564,593</i>	<i>599,271</i>	<i>611,798</i>	<i>632,530</i>
Capital Ending Balance	\$ 11,038,107	\$ 15,373,654	\$ 911,193	\$ 2,831,323	\$ 4,858,479	\$ 6,162,472
<i>Target (1% of Plant)</i>	<i>525,105</i>	<i>675,017</i>	<i>840,807</i>	<i>843,287</i>	<i>845,461</i>	<i>854,752</i>
Combined Ending Balance	\$ 11,559,018	\$ 14,970,609	\$ (1,477,926)	\$ (1,706,962)	\$ (1,768,907)	\$ (2,343,016)
<i>Combined Target</i>	<i>1,046,016</i>	<i>1,207,108</i>	<i>1,405,400</i>	<i>1,442,558</i>	<i>1,457,259</i>	<i>1,487,283</i>



Summary & Scenarios for Consideration

- **Existing rates are not sufficient to keep up with ongoing obligations**
 - » At existing rate levels, reserves would be depleted and go negative starting 2025
 - » Internal coverage target of 2.00 would be broken in 2024
- **Scenario for consideration**
 - » Baseline: maintain existing rates the 5-year period
 - » S1: decrease rates over a 5-year period by 10%
 - » S2: consider increases taking into account inflation and conservative (5-year) CIP
 - » S3: consider increases taking into account inflation and programmed (10-year) CIP
 - » S4: low interest loans
 - » S5: low interest loans & additional \$3.0 million in grant funding

Note: revenue bond scenarios assume 1-year interest only payment for timing and shaping purposes for the 2024 bonds.



Scenario Summary: Baseline & S1

Baseline: No Increases	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 156.69	\$ 156.69	\$ 156.69	\$ 156.69	\$ 156.69	
\$ Bi-Mo. Difference		\$ -	\$ -	\$ -	\$ -	\$ -	
RRF % of Depreciation		100.00%	100.00%	100.00%	100.00%	100.00%	
O&M		\$ (850,000)	\$ (2,100,000)	\$ (2,300,000)	\$ (2,300,000)	\$ (2,300,000)	

- **12.0%-41.5% rate increase to meet 1.5-2.0 coverage in 2029**
 - » Scenarios vary based on coverage policy and loan term duration (20/30-year term)
- **\$18.5 million (1.5 coverage | 30-year term) to \$16.6 million (2.0 coverage | 20-year term) in revenue bonds**
 - » Additional debt may be required in 2040 based on scenario

S1: 10% Decrease	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 153.42	\$ 150.22	\$ 147.09	\$ 144.02	\$ 141.02	
\$ Bi-Mo. Difference		\$ (3.27)	\$ (3.20)	\$ (3.13)	\$ (3.07)	\$ (3.00)	
RRF % of Depreciation		90.00%	100.00%	100.00%	100.00%	100.00%	
O&M		\$ (1,000,000)	\$ (2,350,000)	\$ (2,700,000)	\$ (2,700,000)	\$ (2,850,000)	

- **25.0%-57.5% rate increase needed to meet 1.5-2.0 coverage in 2029**
 - » Scenarios vary based on coverage policy and loan term duration (20/30-year term)
- **\$18.5 million (1.5 coverage | 30-year term) to \$16.6 million (2.0 coverage | 20-year term) in revenue bonds assumed in 2024 based on policy direction**
 - » Additional debt may be required in 2040 based on scenario
- **Future inflationary increase may be required based on scenario**



Scenario Summary: S2 & S3

S2: 5-Year CIP Only	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		16.50%	16.50%	2.25%	0.00%	0.00%	38.78%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 186.07	\$ 220.96	\$ 225.93	\$ 225.93	\$ 225.93	
\$ Bi-Mo. Difference		\$ 29.38	\$ 34.89	\$ 4.97	\$ -	\$ -	
RRF % of Depreciation		100.00%	100.00%	100.00%	100.00%	100.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **2.0 coverage is driving upfront increases on \$16.5 million in debt in 2024**
 - » Reducing coverage to 1.5 and increasing the debt term to 30-years lowers increases to 2.25% per year
 - Reduced coverage scenario would increase the borrowing to \$18.5 million in 2024
 - Reduced coverage scenario would phase-down RRF funding from 5%-40% 2024-2028

S3: 10-Year CIP	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		16.50%	16.50%	2.25%	0.00%	0.00%	38.78%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 166.48	\$ 176.89	\$ 183.52	\$ 187.65	\$ 191.87	
\$ Bi-Mo. Difference		\$ 9.79	\$ 10.41	\$ 6.63	\$ 4.13	\$ 4.22	
RRF % of Depreciation		100.00%	100.00%	100.00%	100.00%	100.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **Similar to S2, 2.0 coverage is driving upfront increases on \$16.5 million in debt in 2024**
 - » Reducing coverage to 1.5 and increasing the debt term to 30-years lowers increases to 2.25% per year
 - Reduced coverage scenario would increase borrowing to \$18.5 million in 2024
 - Reduced coverage scenario would phase-down RRF funding from 5%-40% 2024-2028
- **Both scenarios would require future increases to keep up with inflation**



Scenario Summary: S4 & S5

S4: Low Interest Loans	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 156.69	\$ 156.69	\$ 156.69	\$ 156.69	\$ 156.69	
\$ Bi-Mo. Difference		\$ -	\$ -	\$ -	\$ -	\$ -	
RRF % of Depreciation		10.00%	10.00%	10.00%	10.00%	25.00%	
O&M		\$ -	\$ -	\$ -	\$ -	\$ -	

- **\$19 million in low interest loans assumed in 2024**
 - » \$7 million in revenue bonds assumed in 2040

S5: Additional Grants	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-4.90%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 155.12	\$ 153.57	\$ 152.04	\$ 150.52	\$ 149.01	
\$ Bi-Mo. Difference		\$ (1.57)	\$ (1.55)	\$ (1.54)	\$ (1.52)	\$ (1.51)	
RRF % of Depreciation		5.00%	5.00%	5.00%	10.00%	15.00%	
O&M		\$ -	\$ -	\$ -	\$ -	\$ -	

- **\$3 million in additional Federal grants assumed in 2024**
- **\$16 million in low interest loans assumed in 2024**
 - » \$8 million in revenue bonds assumed in 2040
- **Both scenarios would require future increases to keep up with inflation**



Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
Baseline: No Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S1: 10% Decrease	-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
S2: 5-Year CIP Only	16.50%	16.50%	2.25%	0.00%	0.00%	38.78%
S3: 10-Year CIP	16.50%	16.50%	2.25%	0.00%	0.00%	38.78%
S4: Low Interest Loans	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S5: Additional Grants	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-4.90%

RRF % of Depreciation	2024	2025	2026	2027	2028
Baseline: No Increases	100.00%	100.00%	100.00%	100.00%	100.00%
S1: 10% Decrease	90.00%	100.00%	100.00%	100.00%	100.00%
S2: 5-Year CIP Only	100.00%	100.00%	100.00%	100.00%	100.00%
S3: 10-Year CIP	100.00%	100.00%	100.00%	100.00%	100.00%
S4: Low Interest Loans	10.00%	10.00%	10.00%	10.00%	25.00%
S5: Additional Grants	5.00%	5.00%	5.00%	10.00%	15.00%

O&M Reduction	2024	2025	2026	2027	2028
Baseline: No Increases	\$ (850,000)	\$ (2,100,000)	\$ (2,300,000)	\$ (2,300,000)	\$ (2,300,000)
S1: 10% Decrease	(1,000,000)	(2,350,000)	(2,700,000)	(2,700,000)	(2,850,000)
S2: 5-Year CIP Only	-	-	-	-	-
S3: 10-Year CIP	-	-	-	-	-
S4: Low Interest Loans	-	-	-	-	-
S5: Additional Grants	-	-	-	-	-

● Future consideration

- » Baseline would need 12.0%-41.5% for coverage in 2029 based on policy
- » S1 would need 25.0%-57.5% for coverage in 2029 based on policy
- » S2 & S3 upfront increases are due to 2.0 coverage; reduced policy can decrease to 2.25% annually
- » S4 assumes low interest loans and additional debt in 2040
- » S5 assumes low interest loans, additional grants and would need additional debt in 2040
- » All scenarios would require future increases to keep up with inflation



Scenario Summary: High Level

Rate Structure Example	Short Term Affordability	Financial Sustainability	Policy Compliance	5-Year Rate Impacts
Baseline: No Increases	++	XXX	X	++
S1: 10% Decrease	+++	XXX	XX	+++
S2: 5-Year CIP Only	+ to XXX	++	++	X
S3: 10-Year CIP	+ to XXX	++	++	XX
S4: Low Interest Loans	+	—	X	+
S5: Low Interest Loans w. Grant	+++	—	X	+++

Notes: scenario may vary based on coverage and debt term policy.

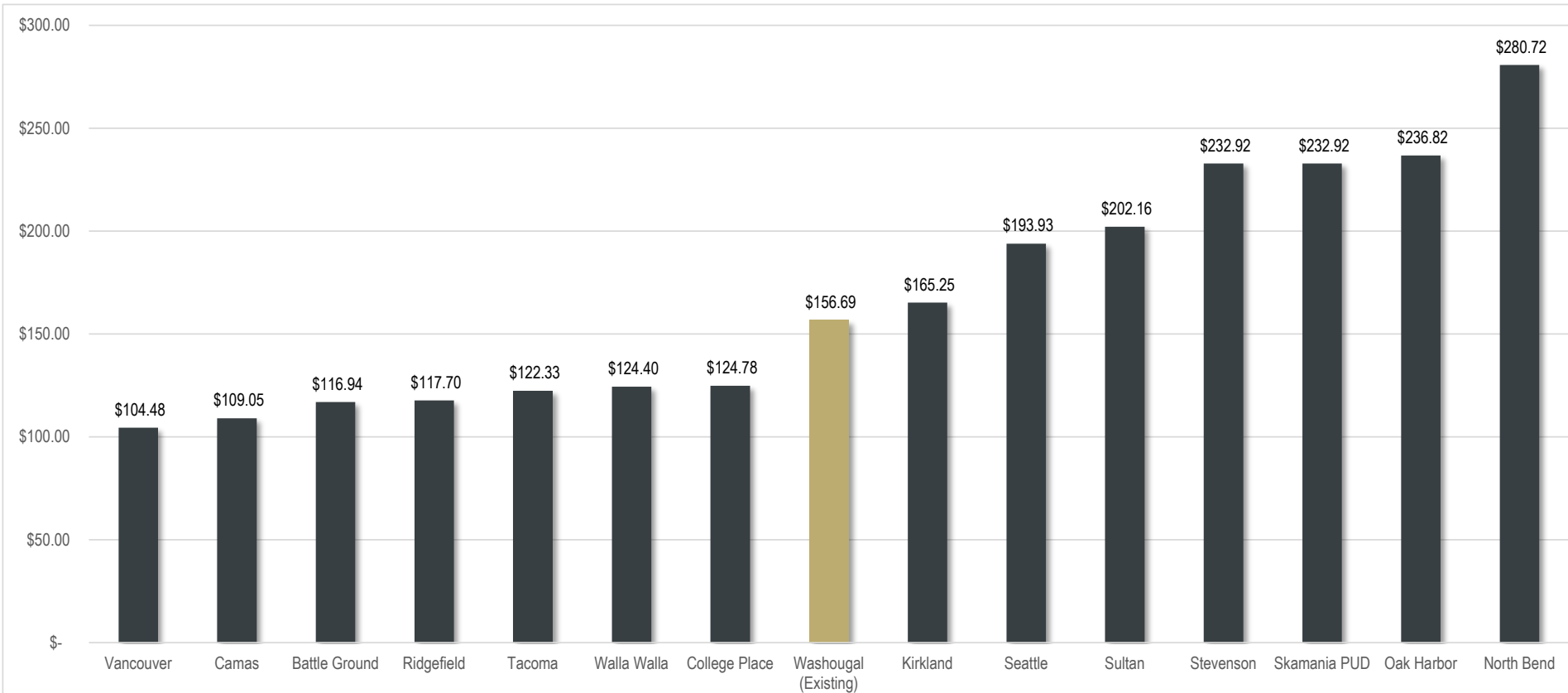
+ : Meets or improves achievement of objective

X : Does not meet or hinders achievement of objective

— : Does not impact the achievement of objective



Sewer Residential Rate Survey



Notes:

- Sample bi-monthly Residential bill assumes 11ccf consumption.
- Ridgefield rates are based off CRWWD Ridgefield Service Area charges and include system integration charge and City operation fees.
- Skamania PUD rates are based off City of Stevenson charges.
- City of Kirkland includes King County Treatment and City of Kirkland Distribution fees.
- Bills include utility taxes where applicable.



Stormwater

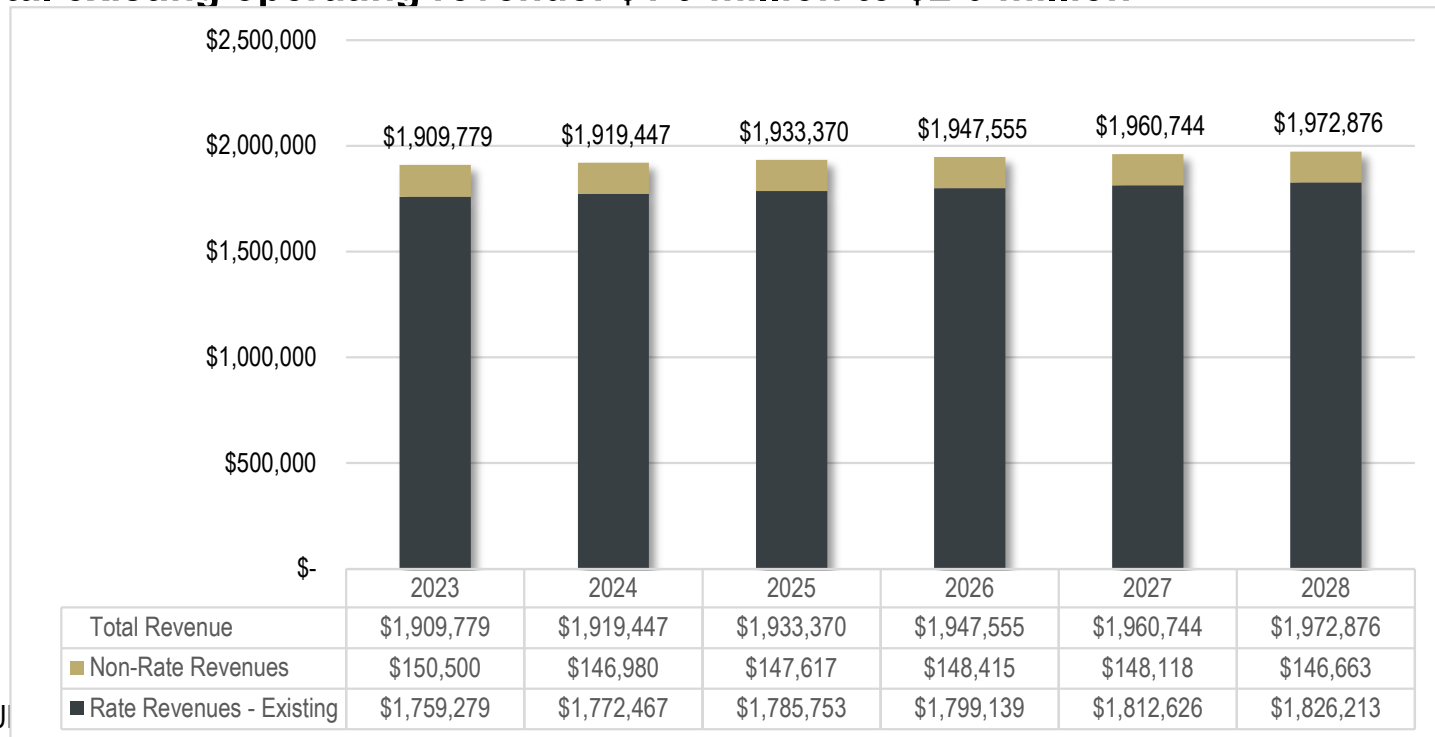


Key Factors: Existing Revenue

- **Rate setting period: 2024-2028**

- » Rate revenue based on 2021 actual data plus 0.75% growth
- » Non rate revenue consists of penalties, interest, other stormwater service charges, transfers back from general fund and miscellaneous revenues
- » Includes a DOE Grant of \$50k every other year

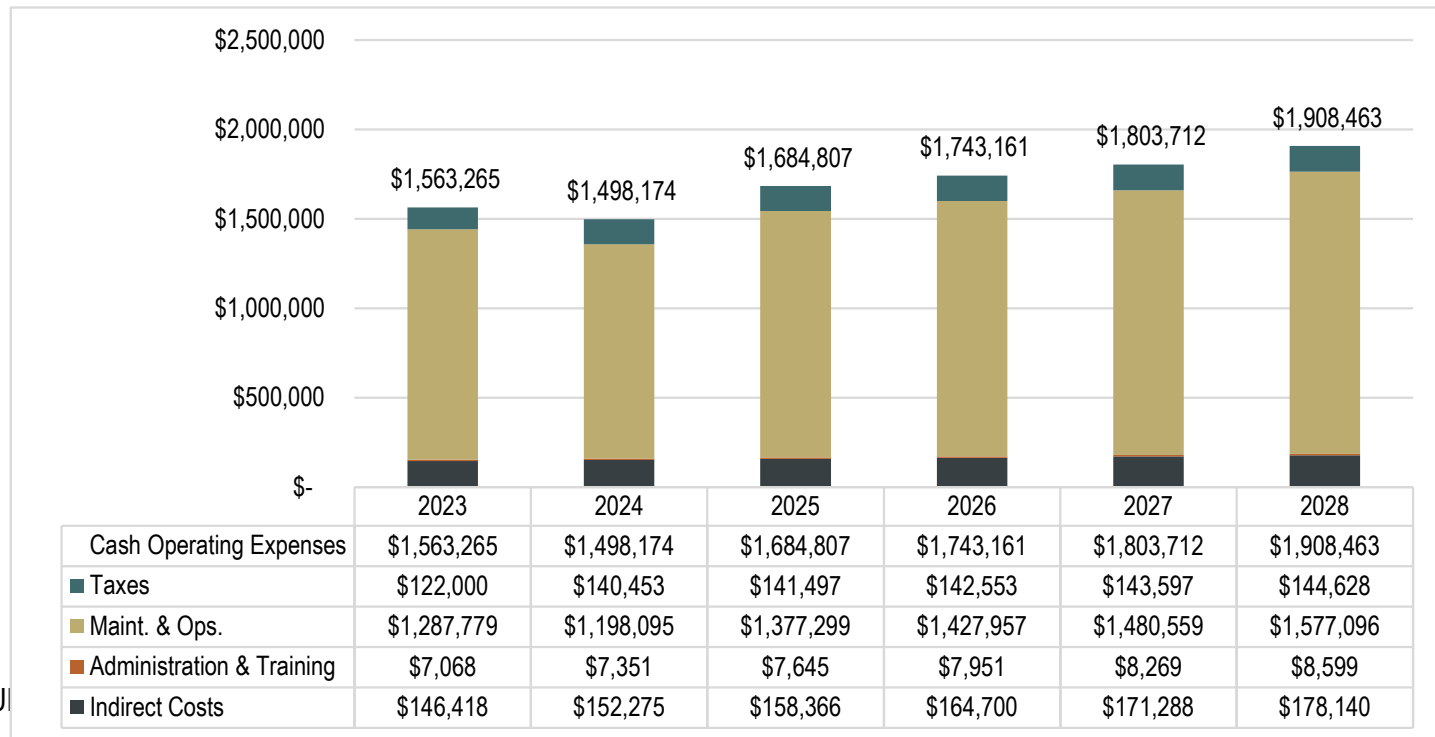
- **Total existing operating revenue: \$1.9 million to \$2.0 million**





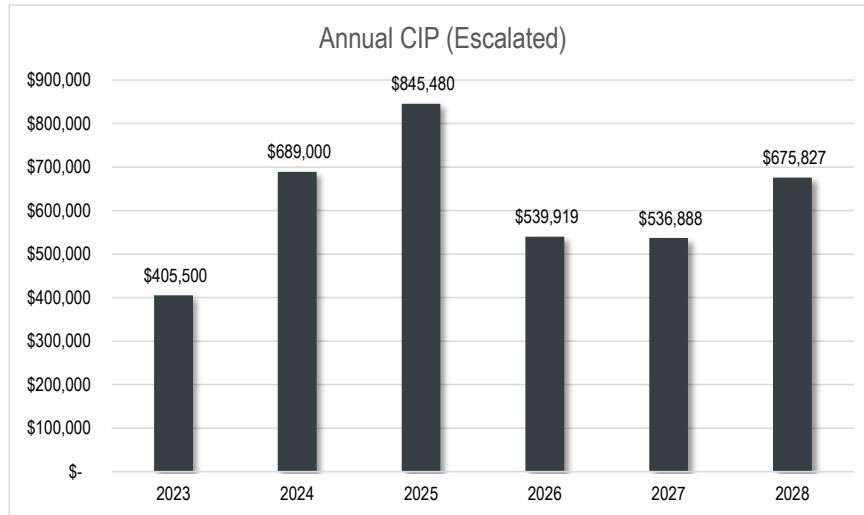
Key Factors: Operating Expenses

- **Forecast based on 2023 budget**
 - » Costs inflated between 6.0%-3.0% per year
 - Average inflation (net of taxes) of 4.3%
 - » Includes 1 additional FTE in 2025
- **Total O&M expenses: \$1.6 million to \$1.9 million**





Key Factors: Capital



Year	2023\$	Annual CIP (Escalated)
2023	\$ 405,500	\$ 405,500
2024	650,000	689,000
2025	766,944	845,480
2026	470,930	539,919
2027	450,275	536,888
2028	545,000	675,827
Total	\$ 3,288,650	\$ 3,692,614
2029-2033	4,758,270	6,729,676
2034-2042	5,151,562	9,504,650
Total	\$ 13,198,482	\$ 19,926,940

- **Capital funded through existing reserves, cash financing, SDCs, replacement reserve funding**
 - » No new debt anticipated in 2024-2028 rate setting period
 - » Potential new debt may be necessary to finance future CIP
- **Master planning is currently underway**
 - » 2029-2042 CIP based on 6-year average not including Campen Creek Stormwater Improvement Project and ER&R expenses



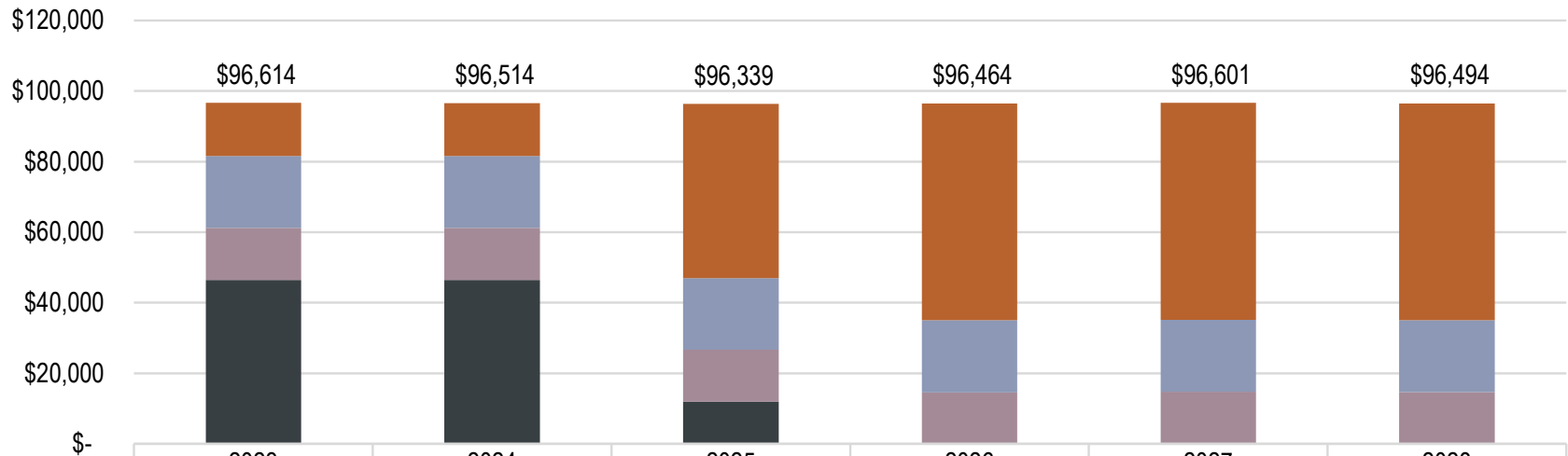
Key Factors: Capital (continued)

Description	Rate Setting Period (Escalated)						Total 2023-2028	Future Periods		Total
	2023	2024	2025	2026	2027	2028		2029-2033	2034-2042	
Masterplan										
Annual Stormwater Repair & Replacement Projects		\$ 424,000	\$ 440,960	\$ 458,598	\$ 476,942	\$ 496,020	\$ 2,296,521			\$ 2,296,521
Jemtegaard Trail Drainage Repairs		265,000					265,000			265,000
Q Street Infiltration Pond Retrofit						179,807	179,807	962,080		1,141,888
WHS Campen Creek Stormwater Improvement Project							-	1,810,453		1,810,453
Annual Placeholder							-	3,217,836	7,649,384	10,867,219
							-			-
Budget							-			-
Point Repairs	30,000						30,000			30,000
Z Street Drainage	42,000						42,000			42,000
Dogwood Drainage	42,000						42,000			42,000
Catch Basins & Drainage	255,000						255,000			255,000
							-			-
ER&R Projects	36,500	-	404,520	81,321	59,946	-	582,286	739,307	1,855,266	3,176,860
Total (Escalated)	\$ 405,500	\$ 689,000	\$ 845,480	\$ 539,919	\$ 536,888	\$ 675,827	\$ 3,692,614	\$ 6,729,676	\$ 9,504,650	\$ 19,926,940
2023\$	\$ 405,500	\$ 650,000	\$ 766,944	\$ 470,930	\$ 450,275	\$ 545,000	\$ 3,288,650	\$ 4,758,270	\$ 5,151,562	\$ 13,198,482

- **Master planning is currently underway**
 - » 2029-2042 CIP based on 6-year average not including Campen Creek Stormwater Improvement Project and ER&R expenses



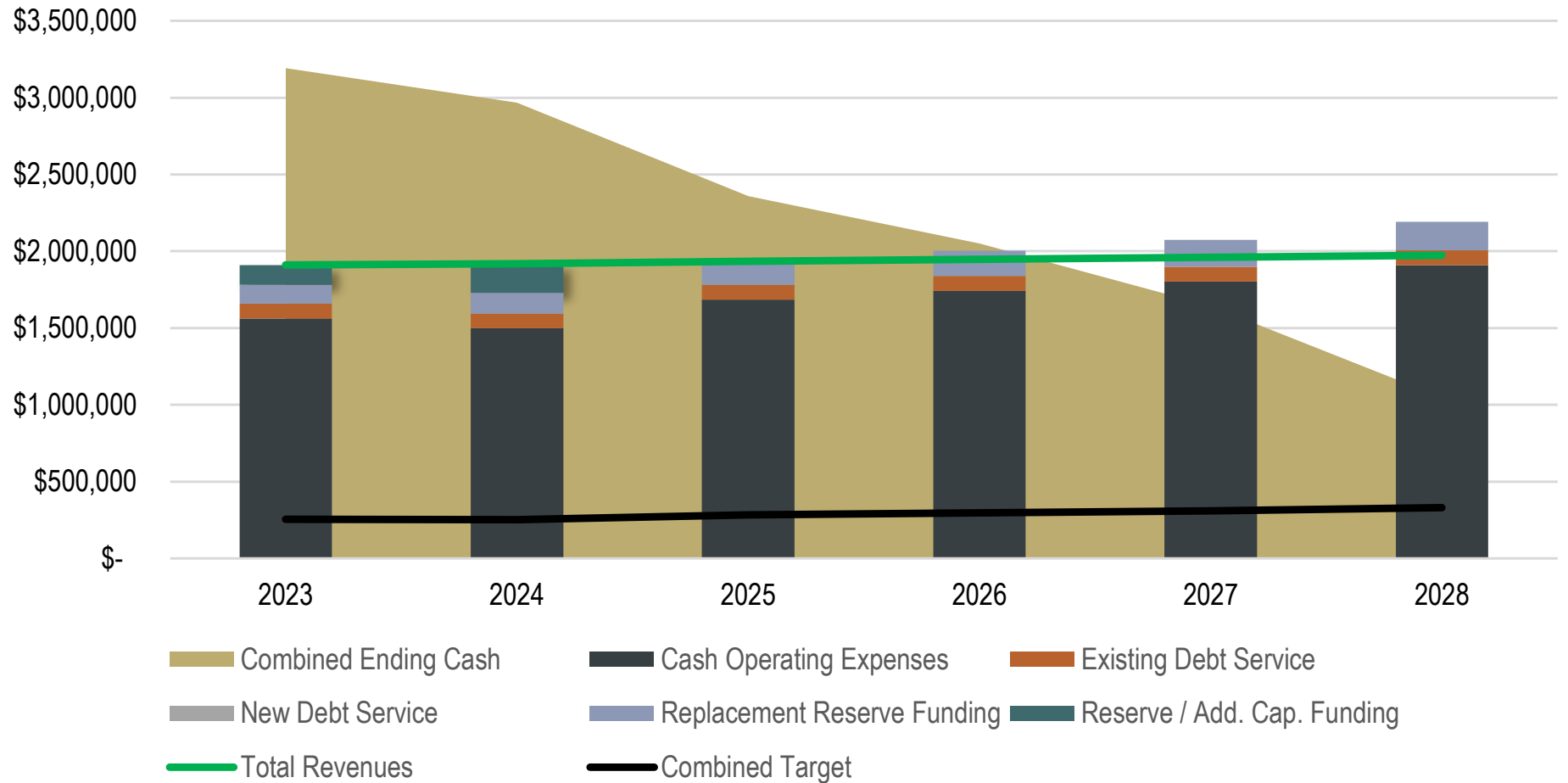
Key Factors: Existing Debt



	2023	2024	2025	2026	2027	2028
Total Existing Debt	\$96,614	\$96,514	\$96,339	\$96,464	\$96,601	\$96,494
Revenue Bond 17	\$14,998	\$14,965	\$49,370	\$61,440	\$61,441	\$61,438
Revenue Bond 15	\$20,410	\$20,304	\$20,288	\$20,456	\$20,400	\$20,328
Revenue Bond 14	\$14,720	\$14,752	\$14,768	\$14,568	\$14,760	\$14,728
Revenue Bond 5/11	\$46,487	\$46,493	\$11,913	\$-	\$-	\$-



Revenue Requirement: Baseline





Baseline (continued)

Description	2023	2024	2025	2026	2027	2028
Revenues						
Rate Revenues - Existing	\$ 1,759,279	\$ 1,772,467	\$ 1,785,753	\$ 1,799,139	\$ 1,812,626	\$ 1,826,213
Non-Rate Revenues	150,500	146,980	147,617	148,415	148,118	146,663
Total Revenues	\$ 1,909,779	\$ 1,919,447	\$ 1,933,370	\$ 1,947,555	\$ 1,960,744	\$ 1,972,876
Expenses						
Cash Operating Expenses	\$ 1,563,265	\$ 1,498,174	\$ 1,684,807	\$ 1,743,161	\$ 1,803,712	\$ 1,908,463
Existing Debt Service	96,614	96,514	96,339	96,464	96,601	96,494
New Debt Service	-	-	-	-	-	-
Replacement Reserve Funding	121,755	135,535	152,445	163,243	173,981	187,498
Total Expenses	\$ 1,781,635	\$ 1,730,223	\$ 1,933,590	\$ 2,002,868	\$ 2,074,295	\$ 2,192,456
Net Surplus (Deficiency)	\$ 128,144	\$ 189,224	\$ (221)	\$ (55,313)	\$ (113,551)	\$ (219,580)
Operating Ending Balance	\$ 192,731	\$ 184,706	\$ 184,486	\$ 129,173	\$ 15,621	\$ (203,958)
Target (45 Days)	192,731	184,706	207,716	214,910	222,376	235,290
Capital Ending Balance	\$ 2,998,902	\$ 2,782,063	\$ 2,174,288	\$ 1,920,939	\$ 1,626,516	\$ 1,251,007
Target (1% of Plant)	60,878	67,768	76,223	81,622	86,991	93,749
Combined Ending Balance	\$ 3,191,633	\$ 2,966,769	\$ 2,358,774	\$ 2,050,112	\$ 1,642,138	\$ 1,047,049
Combined Target	253,609	252,474	283,938	296,532	309,366	329,039



Summary & Scenarios for Consideration

- **Existing rates are not sufficient to keep up with ongoing obligations**
 - » Cannot support partial RRF funding starting 2025 and any RRF funding in 2028
 - » Existing reserves are sufficient to cover 6-year CIP
- **Scenario for consideration**
 - » Baseline: maintain existing rates the 5-year period
 - » S1: decrease rates over a 5-year period by 10%
 - » S2: consider increases taking into account inflation and conservative (5-year) CIP
 - » S3: consider increases taking into account inflation and programmed (10-year) CIP



Scenario Summary: Baseline & S1

Baseline: No Increases	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bi-Mo. Residential Bill	\$ 35.17	\$ 35.17	\$ 35.17	\$ 35.17	\$ 35.17	\$ 35.17	
\$ Bi-Mo. Difference		\$ -	\$ -	\$ -	\$ -	\$ -	
RRF % of Depreciation		100.00%	80.00%	60.00%	30.00%	0.00%	
O&M		\$ -	\$ -	\$ -	\$ -	\$ (40,000)	

- **2.5% annual rate increases 2029 and thereafter to meet existing debt coverage and operations needs**
- **14.0% followed by 10.5% through 2033 is needed to support ongoing debt needs (2.0 coverage | 20-year term)**
 - » 10.0% followed by 8.5% through 2033 is needed to support ongoing debt needs (1.5 coverage | 30-year term)

S1: 10% Decrease	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
Bi-Mo. Residential Bill	\$ 35.17	\$ 34.44	\$ 33.72	\$ 33.02	\$ 32.33	\$ 31.65	
\$ Bi-Mo. Difference		\$ (0.73)	\$ (0.72)	\$ (0.70)	\$ (0.69)	\$ (0.67)	
RRF % of Depreciation		100.00%	40.00%	0.00%	0.00%	0.00%	
O&M		\$ -	\$ -	\$ -	\$ (80,000)	\$ (200,000)	

- **13.5% rate increase in 2029 followed by 4.5% annually through 2033 to meet existing debt coverage and operations needs**
- **27.0% followed by 10.3% through 2033 is needed to support ongoing debt needs (2.0 coverage | 20-year term)**
 - » 21.0% followed by 9.25% through 2033 is needed to support ongoing debt needs (1.5 coverage | 30-year term)
- **Future inflationary increase may be required based on scenario**



Scenario Summary: S2 & S3

S2: 5-Year CIP Only	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		2.75%	2.75%	2.75%	2.75%	2.75%	14.53%
Bi-Mo. Residential Bill	\$ 35.17	\$ 36.14	\$ 37.13	\$ 38.15	\$ 39.20	\$ 40.28	
\$ Bi-Mo. Difference		\$ 0.97	\$ 0.99	\$ 1.02	\$ 1.05	\$ 1.08	
RRF % of Depreciation		100.00%	100.00%	100.00%	100.00%	100.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **2.75% future increases needed to keep up with operations and RRF funding**
- **6.5% annual rate increases needed through 2033 to support ongoing debt needs (2.0 coverage | 20-year term)**
 - » 5.5% annual rate increases needed through 2033 to support ongoing debt needs (1.5 coverage | 30-year term)

S3: 10-Year CIP	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		4.25%	4.25%	4.25%	4.25%	4.25%	23.13%
Bi-Mo. Residential Bill	\$ 35.17	\$ 36.66	\$ 38.22	\$ 39.85	\$ 41.54	\$ 43.31	
\$ Bi-Mo. Difference		\$ 1.49	\$ 1.56	\$ 1.62	\$ 1.69	\$ 1.77	
RRF % of Depreciation		100.00%	100.00%	100.00%	100.00%	100.00%	
O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

- **4.25% annual rate increases needed through 2033 to support ongoing debt needs (2.0 coverage | 20-year term)**
 - » Can decrease to 4.0% per year with reduce policy (1.5 coverage | 30-year term)
- **Future inflationary increase may be required based on scenario**



Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
Baseline: No Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S1: 10% Decrease	-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
S2: 5-Year CIP Only	2.75%	2.75%	2.75%	2.75%	2.75%	14.53%
S3: 10-Year CIP	4.25%	4.25%	4.25%	4.25%	4.25%	23.13%

RRF % of Depreciation	2024	2025	2026	2027	2028
Baseline: No Increases	100.00%	80.00%	60.00%	30.00%	0.00%
S1: 10% Decrease	100.00%	40.00%	0.00%	0.00%	0.00%
S2: 5-Year CIP Only	100.00%	100.00%	100.00%	100.00%	100.00%
S3: 10-Year CIP	100.00%	100.00%	100.00%	100.00%	100.00%

O&M Reduction	2024	2025	2026	2027	2028
Baseline: No Increases	\$ -	\$ -	\$ -	\$ -	\$ (40,000)
S1: 10% Decrease	-	-	-	(80,000)	(200,000)
S2: 5-Year CIP Only	-	-	-	-	-
S3: 10-Year CIP	-	-	-	-	-

● Future consideration


- » Baseline requires 8.5% to 14.0% rate increases in 2029-2033 based on policy
- » S1 requires 9.25% to 27% rate increases in 2029-2033 based on policy
- » S2 requires 5.5% to 6.5% rate increases in 2029-2033 based on policy
- » S3 future increases range from 4.0%-4.25% based on policy




Scenario Summary: High Level

Rate Structure Example	Short Term Affordability	Financial Sustainability	Policy Compliance	5-Year Rate Impacts
Baseline: No Increases	++	XX	X	++
S1: 10% Decrease	+++	XXX	XX	+++
S2: 5-Year CIP Only	+	X	++	+
S3: 10-Year CIP	X	++	++	X

Notes: scenario may vary based on coverage and debt term policy.

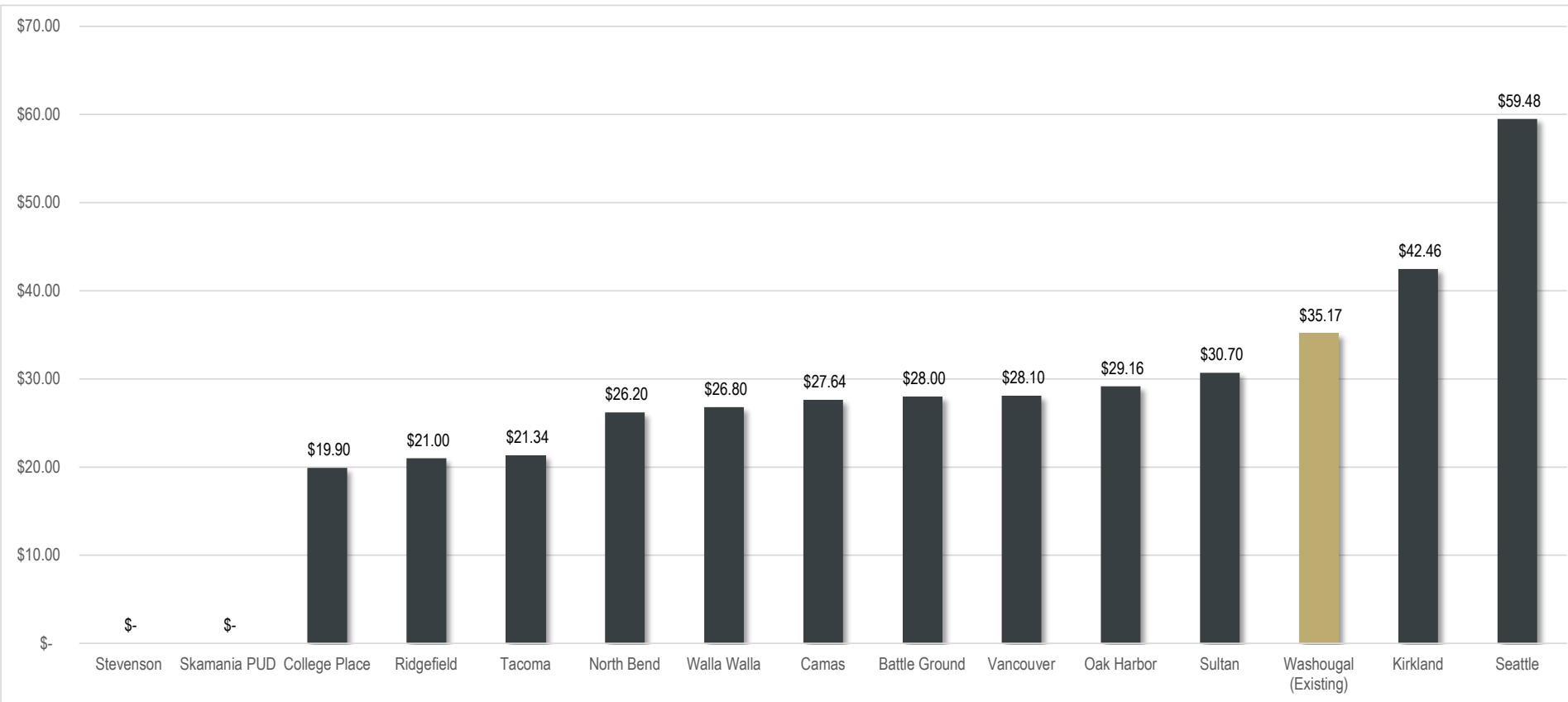
 : Meets or improves achievement of objective

 : Does not meet or hinders achievement of objective

 : Does not impact the achievement of objective



Stormwater Residential Rate Survey

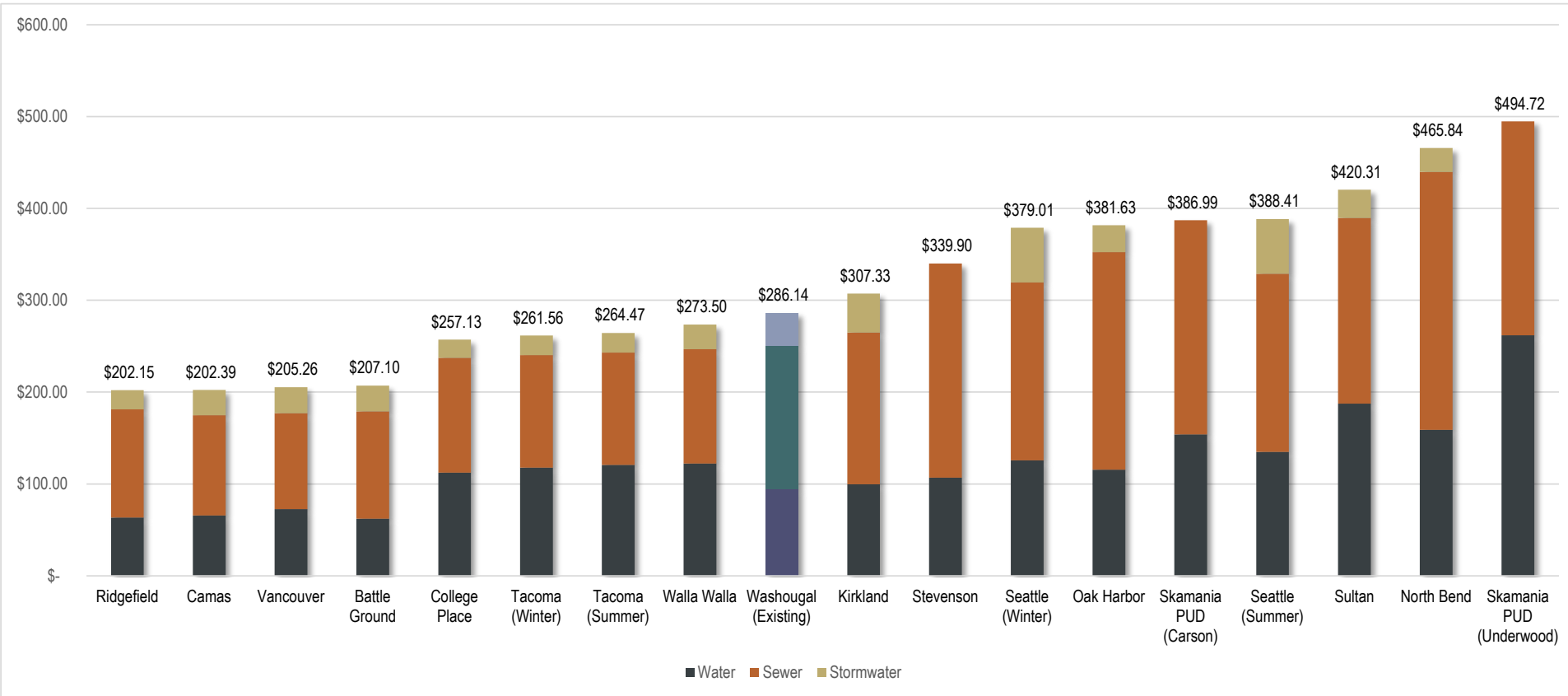


Notes:

- City of Nort Bend includes flood management charge.
- Bills include utility taxes where applicable.



Combined Residential Rate Survey



NOTES:

- Sample bi-monthly Residential bill assumes 15ccf of water and 11ccf of sewer consumption. Water bills assume a ¾" meter.
- Ridgefield sewer rates are based off CRWWD Ridgefield Service Area charges and include system integration charge and City operation fees.
- Skamania PUD rates are based off City of Stevenson charges.
- City of Kirkland includes King County Treatment and City of Kirkland Distribution fees.
- Bills include utility taxes where applicable.
- City of North Bend stormwater bill includes flood management charge.



Discussion/Questions



Water Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
Baseline: No Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S1: 10% Decrease	-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
S2: 5-Year CIP Only	4.25%	4.25%	4.25%	4.25%	4.25%	23.13%
S3: 10-Year CIP	4.75%	4.75%	4.75%	4.75%	4.75%	26.12%
S4: 5-Year CIP; Min. Increase	2.00%	2.00%	2.00%	2.00%	2.00%	10.41%

RRF % of Depreciation	2024	2025	2026	2027	2028
Baseline: No Increases	75.00%	55.00%	35.00%	30.00%	0.00%
S1: 10% Decrease	60.00%	30.00%	5.00%	0.00%	0.00%
S2: 5-Year CIP Only	92.00%	94.00%	96.00%	98.00%	100.00%
S3: 10-Year CIP	92.00%	94.00%	96.00%	98.00%	100.00%
S4: 5-Year CIP; Min. Increase	85.00%	75.00%	65.00%	65.00%	40.00%

O&M Reduction	2024	2025	2026	2027	2028
Baseline: No Increases	\$ -	\$ -	\$ -	\$ -	\$ (50,000)
S1: 10% Decrease	-	-	-	(50,000)	(900,000)
S2: 5-Year CIP Only	-	-	-	-	-
S3: 10-Year CIP	-	-	-	-	-
S4: 5-Year CIP; Min. Increase	-	-	-	-	-

● Future consideration

- » Baseline would need 11.0%-15.0% for operations in 2029 and 48.0%-76.0% with \$16.5 million in new debt for capital based on policy
- » S1 would need 23.0%-35.0% for operations in 2029 and 65.0%-98.0% with \$16.5 million in new debt based on policy
- » S2 would need 8.0%-25.0% and \$14.0 million in new debt in 2030 based on policy
- » S3 would need 4.75%-6.0% through 2030 and \$14.0 million in new debt in 2030 based on policy
- » S4 would need 13.25%-7.25% through 2031 or 24.0% in 2029-2030 and \$16.0 million in new debt in 2030
- » All scenarios would require future increases to keep up with inflation



Water Scenario Summary: High Level

Rate Structure Example	Short Term Affordability	Financial Sustainability	Policy Compliance	5-Year Rate Impacts
Baseline: No Increases	++	XX	X	++
S1: 10% Decrease	+++	XXX	XX	+++
S2: 5-Year CIP Only	X	+	+	X
S3: 10-Year CIP	X	++	++	XX
S4: 5-Year CIP Min. Increases	+	—	—	+

++ : Meets or improves achievement of objective

X : Does not meet or hinders achievement of objective

— : Does not impact the achievement of objective



Sewer Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
Baseline: No Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S1: 10% Decrease	-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
S2: 5-Year CIP Only	16.50%	16.50%	2.25%	0.00%	0.00%	38.78%
S3: 10-Year CIP	16.50%	16.50%	2.25%	0.00%	0.00%	38.78%
S4: Low Interest Loans	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S5: Additional Grants	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-4.90%

RRF % of Depreciation	2024	2025	2026	2027	2028
Baseline: No Increases	100.00%	100.00%	100.00%	100.00%	100.00%
S1: 10% Decrease	90.00%	100.00%	100.00%	100.00%	100.00%
S2: 5-Year CIP Only	100.00%	100.00%	100.00%	100.00%	100.00%
S3: 10-Year CIP	100.00%	100.00%	100.00%	100.00%	100.00%
S4: Low Interest Loans	10.00%	10.00%	10.00%	10.00%	25.00%
S5: Additional Grants	5.00%	5.00%	5.00%	10.00%	15.00%

O&M Reduction	2024	2025	2026	2027	2028
Baseline: No Increases	\$ (850,000)	\$ (2,100,000)	\$ (2,300,000)	\$ (2,300,000)	\$ (2,300,000)
S1: 10% Decrease	(1,000,000)	(2,350,000)	(2,700,000)	(2,700,000)	(2,850,000)
S2: 5-Year CIP Only	-	-	-	-	-
S3: 10-Year CIP	-	-	-	-	-
S4: Low Interest Loans	-	-	-	-	-
S5: Additional Grants	-	-	-	-	-

● Future consideration

- » Baseline would need 12.0%-41.5% for coverage in 2029 based on policy
- » S1 would need 25.0%-57.5% for coverage in 2029 based on policy
- » S2 & S3 upfront increases are due to 2.0 coverage; reduced policy can decrease to 2.25% annually
- » S4 assumes low interest loans and additional debt in 2040
- » S5 assumes low interest loans, additional grants and would need additional debt in 2040
- » All scenarios would require future increases to keep up with inflation



Sewer Scenario Summary: High Level

Rate Structure Example	Short Term Affordability	Financial Sustainability	Policy Compliance	5-Year Rate Impacts
Baseline: No Increases	++	XXX	X	++
S1: 10% Decrease	+++	XXX	XX	+++
S2: 5-Year CIP Only	+ to XXX	++	++	X
S3: 10-Year CIP	+ to XXX	++	++	XX
S4: Low Interest Loans	+	—	X	+
S5: Low Interest Loans w. Grant	+++	—	X	+++

Notes: scenario may vary based on coverage and debt term policy.

+ : Meets or improves achievement of objective

X : Does not meet or hinders achievement of objective

— : Does not impact the achievement of objective



Storm Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
Baseline: No Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
S1: 10% Decrease	-2.09%	-2.09%	-2.09%	-2.09%	-2.09%	-10.00%
S2: 5-Year CIP Only	2.75%	2.75%	2.75%	2.75%	2.75%	14.53%
S3: 10-Year CIP	4.25%	4.25%	4.25%	4.25%	4.25%	23.13%

RRF % of Depreciation	2024	2025	2026	2027	2028
Baseline: No Increases	100.00%	80.00%	60.00%	30.00%	0.00%
S1: 10% Decrease	100.00%	40.00%	0.00%	0.00%	0.00%
S2: 5-Year CIP Only	100.00%	100.00%	100.00%	100.00%	100.00%
S3: 10-Year CIP	100.00%	100.00%	100.00%	100.00%	100.00%

O&M Reduction	2024	2025	2026	2027	2028
Baseline: No Increases	\$ -	\$ -	\$ -	\$ -	\$ (40,000)
S1: 10% Decrease	-	-	-	(80,000)	(200,000)
S2: 5-Year CIP Only	-	-	-	-	-
S3: 10-Year CIP	-	-	-	-	-

● Future consideration


- » Baseline requires 8.5% to 14.0% rate increases in 2029-2033 based on policy
- » S1 requires 9.25% to 27% rate increases in 2029-2033 based on policy
- » S2 requires 5.5% to 6.5% rate increases in 2029-2033 based on policy
- » S3 future increases range from 4.0%-4.25% based on policy




Storm Scenario Summary: High Level

Rate Structure Example	Short Term Affordability	Financial Sustainability	Policy Compliance	5-Year Rate Impacts
Baseline: No Increases	++	XX	X	++
S1: 10% Decrease	+++	XXX	XX	+++
S2: 5-Year CIP Only	+	X	++	+
S3: 10-Year CIP	X	++	++	X

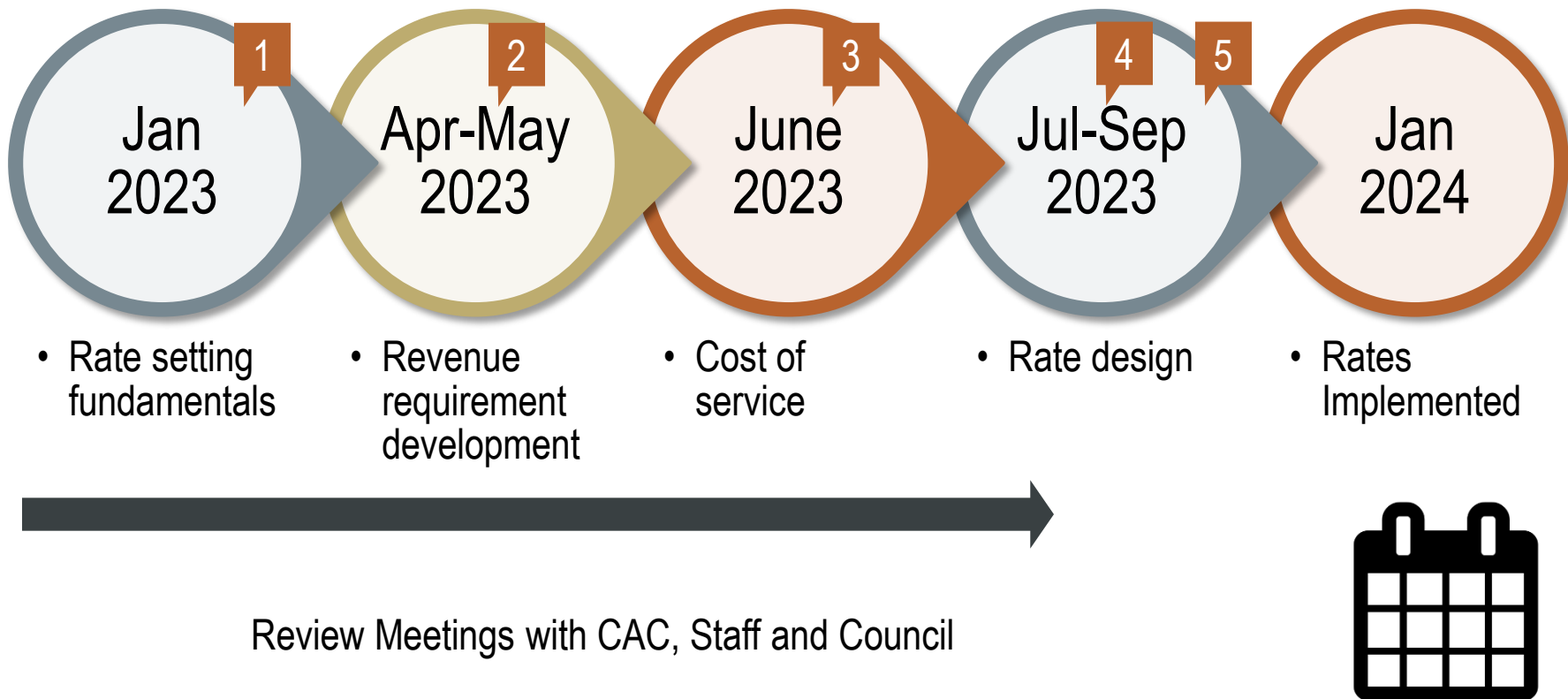
Notes: scenario may vary based on coverage and debt term policy.

 : Meets or improves achievement of objective

 : Does not meet or hinders achievement of objective

 : Does not impact the achievement of objective

Wrap-up & Next Steps



Thank you!

www.fcsgroup.com



Appendix



Climate Zones





Weather Trends

Year	Cooling Degree Days												Total	Diff. to Avg.	Rank
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
2016	-	-	-	12	8	58	69	155	3	-	-	-	305	55	5
2017	-	-	-	-	26	45	68	165	86	-	-	-	390	31	3
2018	-	-	-	-	17	42	155	127	14	-	-	-	355	4	2
2019	-	-	-	-	10	37	75	114	32	-	-	-	268	91	6
2020	-	-	-	-	24	37	93	110	58	3	-	-	325	34	4
2021	-	-	-	-	1	123	80	124	31	-	-	-	359	0	1
2022	-	-	-	-	-	37	157	237	67	16	-	-	514	155	7
Average	-	-	-	2	12	54	100	147	42	3	-	-	359		

Year	Precipitation (inches)												Total	(Jun-Aug)	Diff. to Avg.	Rank
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
2016	6.7	5.9	5.9	3.1	1.4	1.8	0.6	0.8	2.6	8.9	8.0	6.6	52.3	3.1	0.3	4
2017	3.6	8.1	8.6	5.8	2.4	1.4	0.1	0.2	2.6	6.5	8.2	6.1	53.4	1.6	1.2	6
2018	7.0	4.6	3.3	5.0	0.1	1.1	0.0	0.9	2.2	3.8	4.1	6.4	38.6	2.0	0.8	5
2019	2.9	5.8	2.0	3.9	1.8	1.1	0.8	0.7	3.6	3.7	2.1	7.3	35.8	2.7	0.1	2
2020	11.4	6.1	2.8	1.6	3.2	3.8	0.3	0.4	3.8	3.7	7.4	7.2	51.7	4.4	1.6	7
2021	7.0	8.0	3.0	1.4	1.7	2.7	0.0	0.2	3.0	5.0	9.5	8.4	49.8	2.8	0.0	1
2022	7.2	3.0	3.5	6.1	5.1	3.0	0.1	-	0.4	3.1	7.9	6.6	46.0	3.1	0.3	3
Average	6.5	5.9	4.2	3.9	2.2	2.1	0.3	0.4	2.6	5.0	6.7	6.9	46.8	2.8		

- **Data based on weather station in Longview WA, and Climate data from NOAA climate zone 4**
 - » Based on recent trends 2021 calendar year represents the closest year to average for cooling degree days and precipitation during summer months