



Washougal Rate Study



CAC Meeting #3: Revenue Requirement Follow Up

May 23, 2023



Welcome & Introductions

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



Agenda

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



CAC Role & Schedule

- Role in public process
- Meet 5-6 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**
- **Key assumptions**
- **Revenue requirement**
 - » Key components
 - » Draft findings & discussion
- **Input / questions / discussion**
- **Next steps**



Background

- Rate study update commenced in 2022
- Public outreach workshop 11/5/2022
- CAC Meeting #1: Rate Setting Fundamentals 1/25/2023
- CAC Meeting #2: Revenue Requirement 5/3/2023
 - » Reviewed key assumptions
 - » Review key components
 - In detail for water, high level for sewer and stormwater due to time
 - » Reviewed preliminary scenarios for all utilities
 - Eliminated “Baseline” and rate decrease scenarios



Overview of Rate Setting Process

Fiscal Policies – Set the Management Foundation

Today's Focus

Step 1:
Revenue Requirement
(defining overall needs)

Revenue

Debt

O&M

Capital

Reserves

Step 2:
Cost of Service
(equity evaluation)

Define Customer Classes

Allocate Costs

Step 3:
Design Rates
(collect target revenue)

Fixed Charge

Variable Charge

Key Assumptions



FCS GROUP
Solutions-Oriented Consulting



Updates After Last Meeting

- **Reviewed finalized 2022 actual financial performance**
- **Incorporated the following major edits**
 - » Actual 2023 beginning balances for all utilities and funds
 - » Revised sewer rate revenue projections
 - 2022 rate revenues came in lower than anticipated
 - 2021 residential rate revenues were potentially inflated due to remote work and increased winter average consumption
 - 2022 actual of \$5.92MM vs. \$6.03MM projected
 - » Reduced 2023 projections from \$6.52MM to \$6.36MM; impacts future years proportionately
 - » Incorporated asset additions and depreciation estimates
 - Slight impact to RRF targets
 - » Recalibrated 5-year PWTF loan amortization schedule for WWTP design



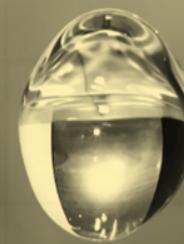
Key Assumptions – Forecasting

- **Focus period 2023-2028**
 - » Projection through 2042
- **Revenue based on historical data, budget and forecast assumptions**
 - » 2021 billing statistics and 2022 actual financials 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%

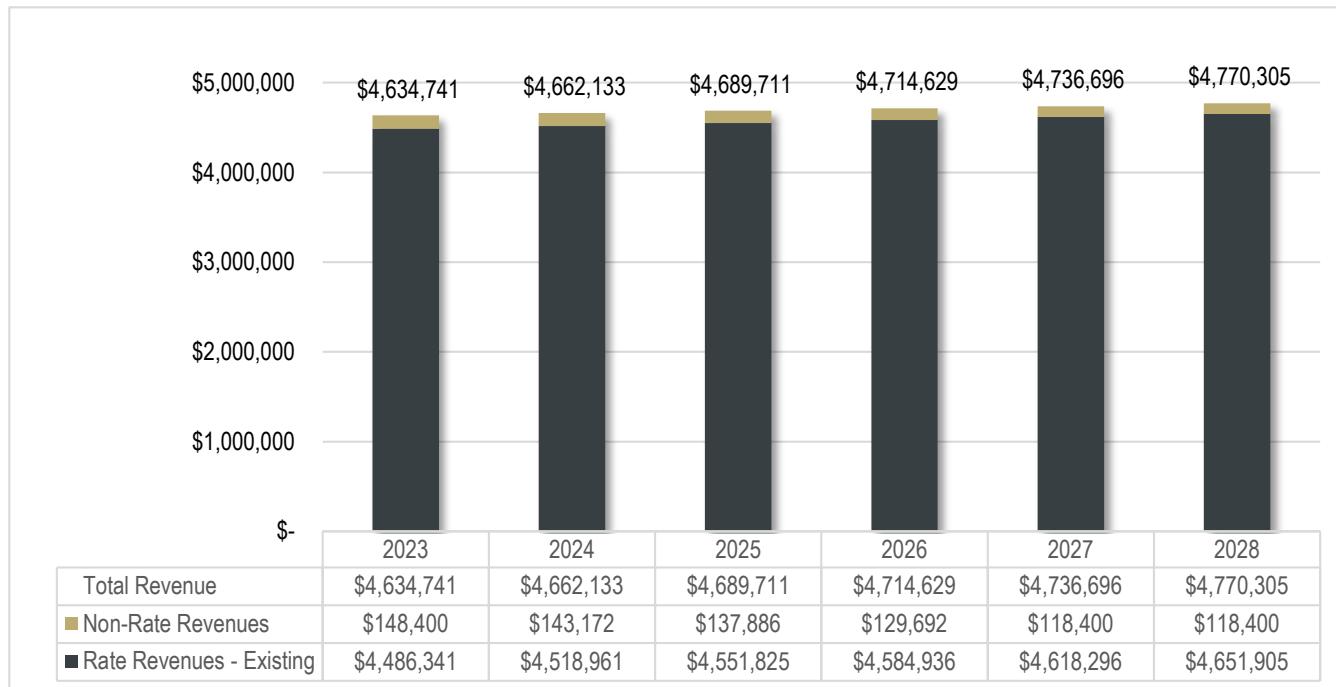


Water



Key Factors: Existing Revenue

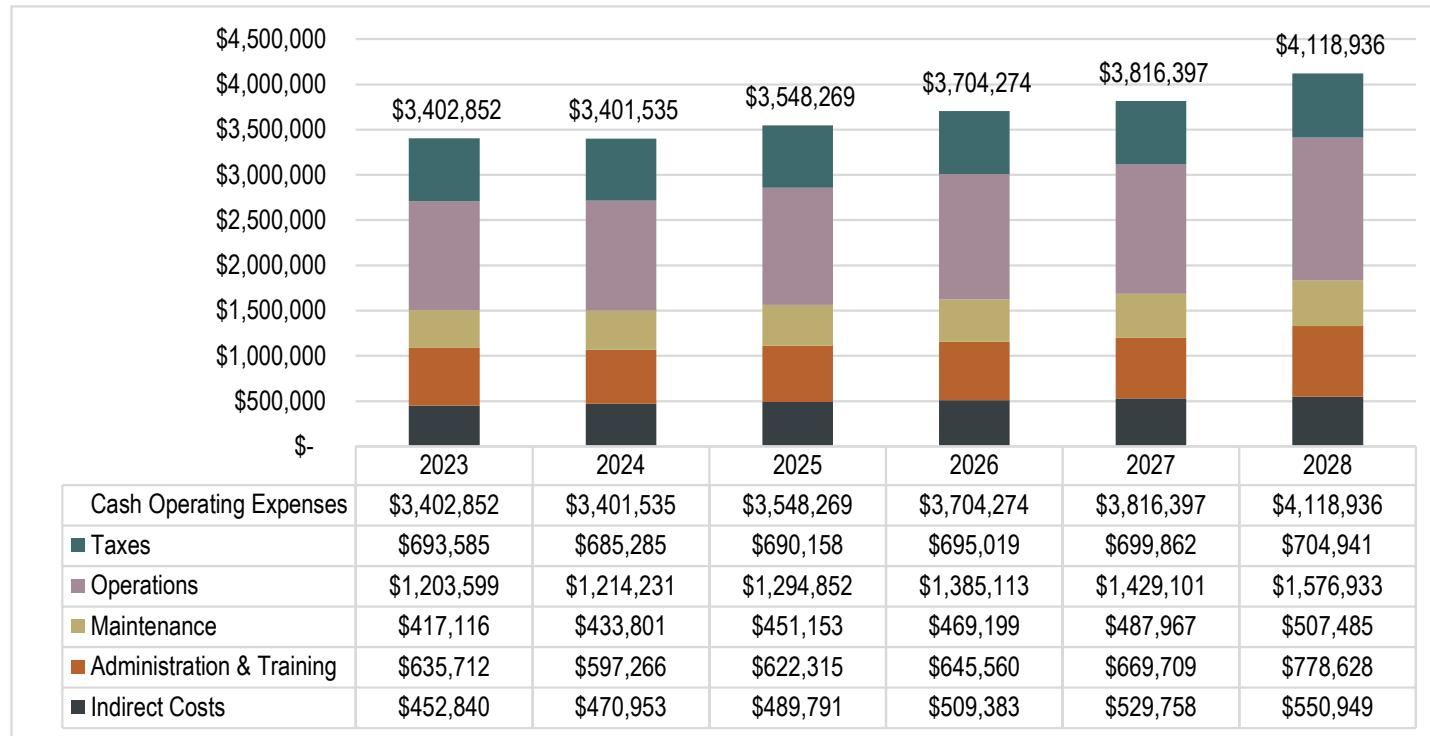
- **Focus period: 2023-2028**
 - » Rate revenue based on 2021 actual data plus 0.75% growth except large commercial
 - » Non rate revenue consists of meter sets, penalties, interest, other water service charges and miscellaneous revenues
- **Total existing operating revenue: \$4.6 million to \$4.8 million**





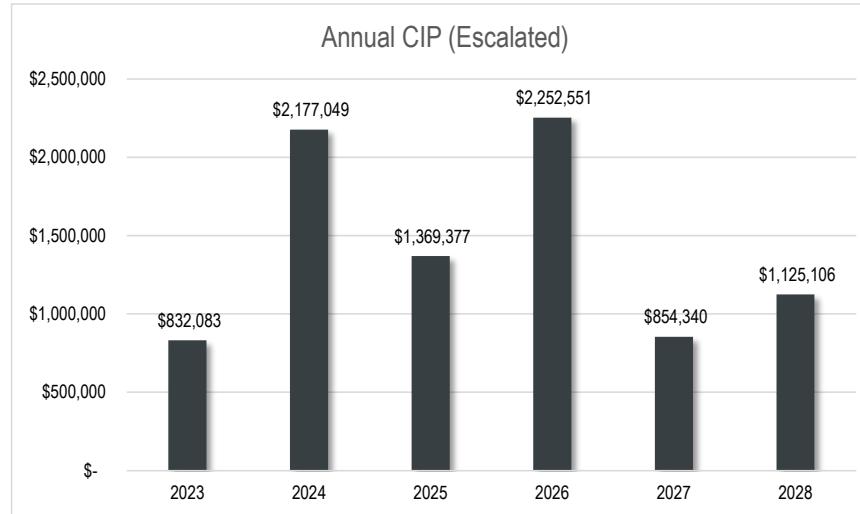
Key Factors: Operating Expenses

- 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	19,499,132
Total	\$22,285,855	\$28,109,638

- 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

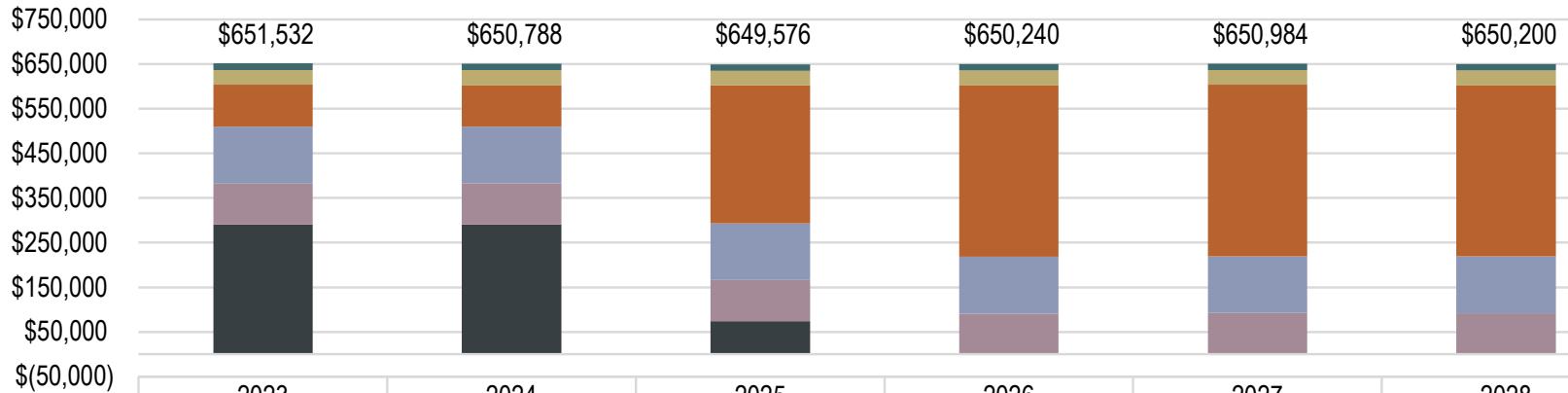


Key Factors: Capital (continued)

Description	2023	2024	Rate Setting Period (Escalated)				Total 2023-2028	Future 2029-2033	Total
			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. Shepheard 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	802,421	1,216,156
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	\$ 19,499,132	\$ 28,109,638
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

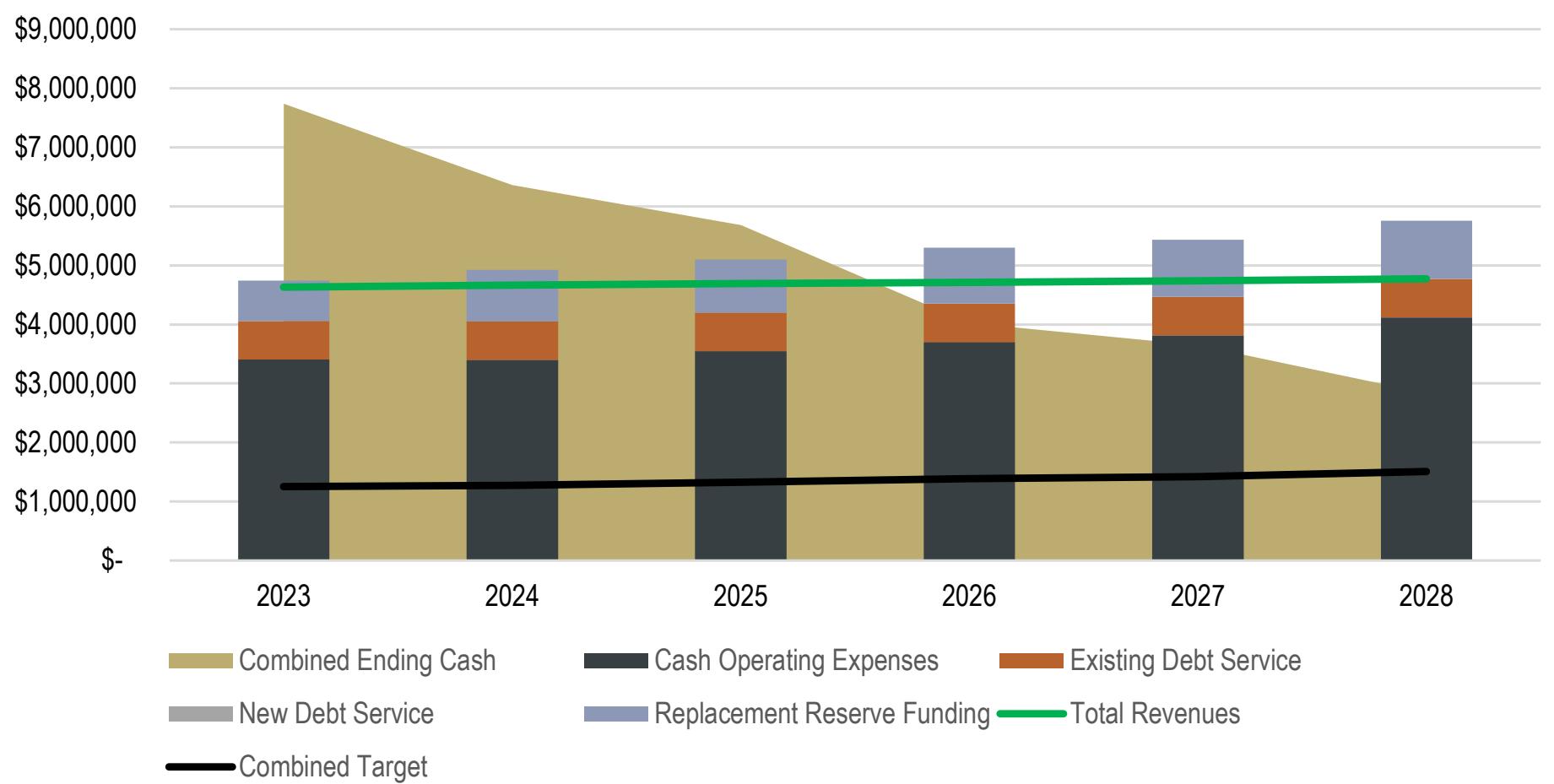


Key Factors: Existing Debt





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	143,172	137,886	129,692	118,400	118,400
Total Revenues	\$ 4,634,741	\$ 4,662,133	\$ 4,689,711	\$ 4,714,629	\$ 4,736,696	\$ 4,770,305
Expenses						
Cash Operating Expenses	\$ 3,402,852	\$ 3,401,535	\$ 3,548,269	\$ 3,704,274	\$ 3,816,397	\$ 4,118,936
Existing Debt Service	651,532	650,788	649,576	650,240	650,984	650,200
New Debt Service	-	-	-	-	-	-
Replacement Reserve Funding	685,959	874,144	901,532	946,583	963,670	986,172
Total Expenses	\$ 4,740,343	\$ 4,926,468	\$ 5,099,377	\$ 5,301,096	\$ 5,431,051	\$ 5,755,308
Net Surplus (Deficiency)	\$ (105,602)	\$ (264,334)	\$ (409,665)	\$ (586,467)	\$ (694,355)	\$ (985,002)
Operating Ending Balance						
Target (90 Days)	839,059	838,735	874,916	913,383	941,029	1,015,628
Capital Ending Balance	\$ 6,901,694	\$ 5,788,601	\$ 5,517,886	\$ 4,446,395	\$ 4,763,369	\$ 4,934,890
Target (1% of Plant)	415,302	437,072	450,766	473,291	481,835	493,086
Combined Ending Balance	\$ 7,740,753	\$ 6,363,326	\$ 5,682,945	\$ 4,024,987	\$ 3,647,605	\$ 2,834,125
Combined Target	1,254,361	1,275,807	1,325,682	1,386,674	1,422,864	1,508,714



Summary & Scenarios for Consideration

- **Existing rates are not sufficient to keep up with ongoing obligations**
 - » At existing rate levels, cannot support RRF
 - » Total reserves projected to go negative by 2030
- **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



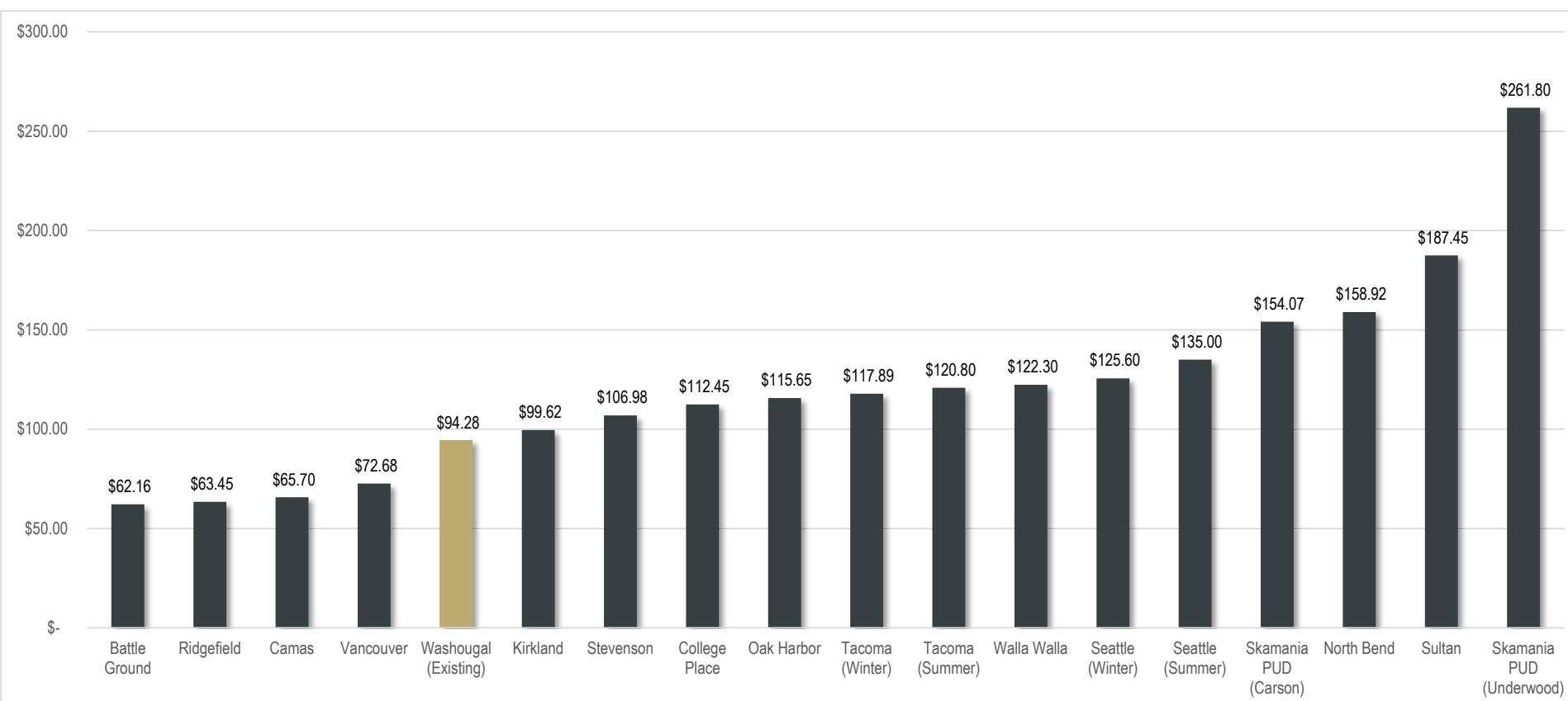
Scenario Summary: S3

S3: 10-Year CIP	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		4.30%	4.30%	4.30%	4.30%	4.30%	23.43%
Bi-Mo. Res. Rate 15ccf	\$ 94.28	\$ 98.33	\$ 102.56	\$ 106.97	\$ 111.57	\$ 116.37	
\$ Bi-Mo. Difference	\$ 4.05	\$ 4.23	\$ 4.41	\$ 4.60	\$ 4.80		
Mo. Res. Rate 7.5ccf	\$ 47.14	\$ 49.17	\$ 51.28	\$ 53.49	\$ 55.79	\$ 58.19	
\$ Mo. Difference	\$ 2.03	\$ 2.12	\$ 2.21	\$ 2.30	\$ 2.40		
RRF % of Depreciation	88.00%	88.00%	90.00%	90.00%	90.00%		

- **Assumes a \$13.00MM Revenue Bond in 2030 to support 10-year CIP**
 - » 30-year loan w. 1.50 coverage target to keep increases at 4.3% per year
 - Projected coverage stays above 1.77
 - » RRF funding gradually phased-in over time
 - Declines in 2030 to 35.00% to accommodate new debt
 - Rebuilds over 4-years thereafter
- **Scenario balances**
 - » Rate impacts by keeping increases below average assumed inflation
 - » Financial policies by phasing in towards 100% depreciation funding and softening coverage target to 1.50



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.

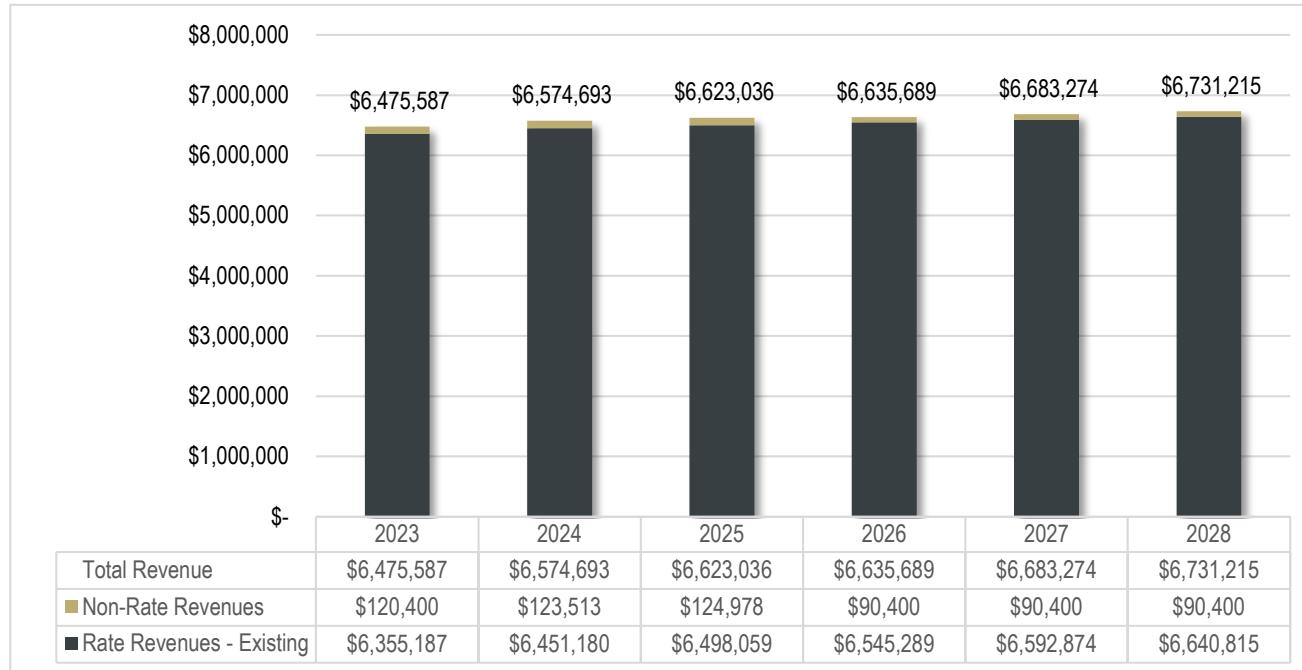


Sewer



Key Factors: Existing Revenue

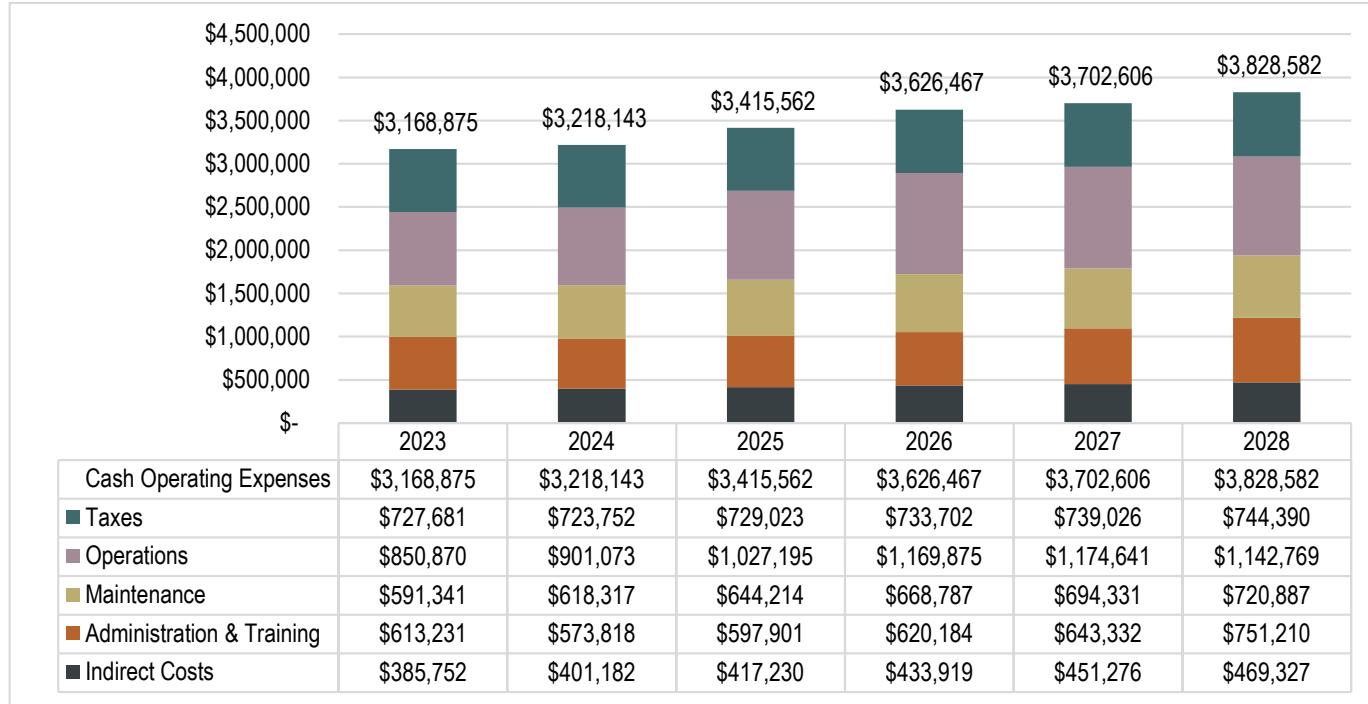
- **Focus period: 2023-2028**
 - » Rate revenue based on 2021 billing data, 2022 actual financial performance plus 0.75% growth except industrial
 - » Non rate revenue consists of penalties, interest, other sewer service charges and miscellaneous revenues
- **Total existing operating revenue: \$6.5 million to \$6.7 million**





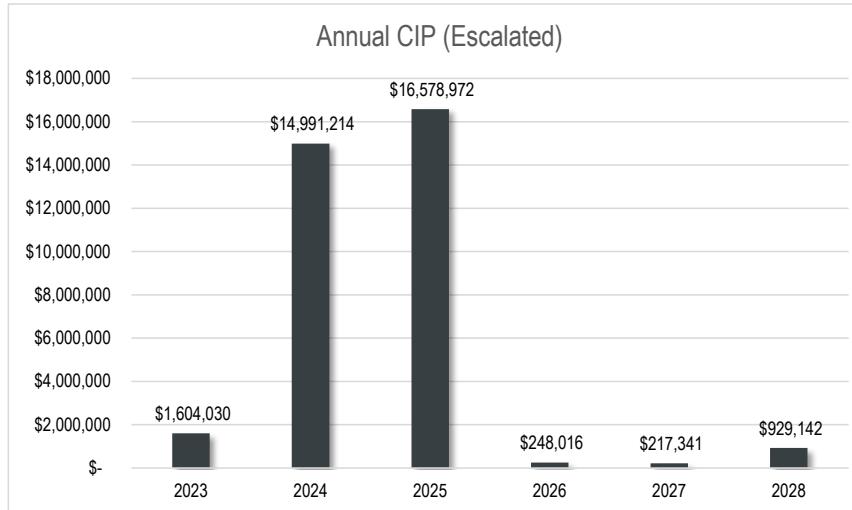
Key Factors: Operating Expenses

- 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: \$19.0 million revenue bond baseline
 - » 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

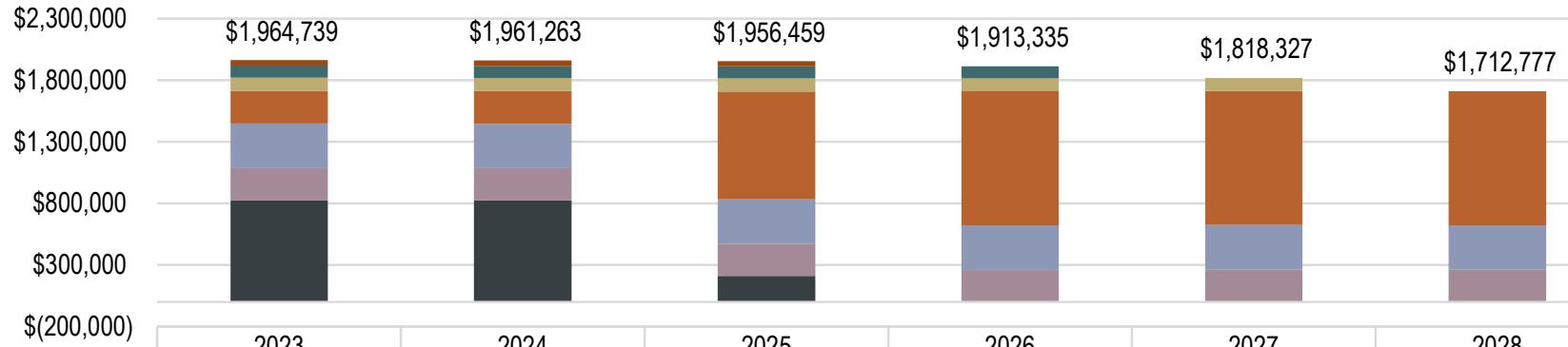


Key Factors: Capital (continued)

Description	2023	2024	Rate Setting Period (Escalated)				Total 2023-2028	Future Periods		Total
			2025	2026	2027	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



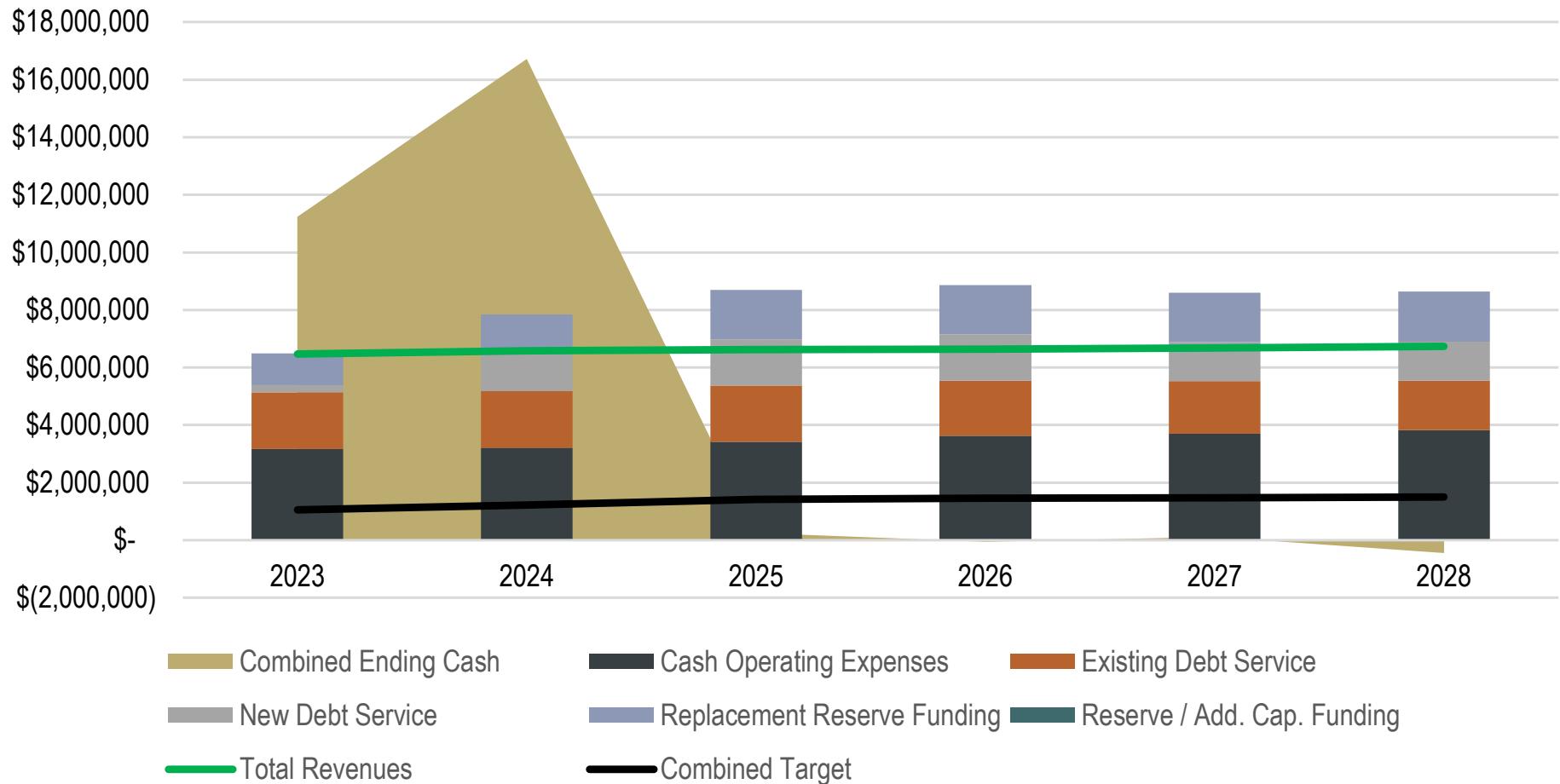
Key Factors: Existing Debt



	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 \$19.0 million in new debt in 2024



Baseline (continued)

Description	2023	2024	2025	2026	2027	2028
Revenues						
Rate Revenues - Existing	\$ 6,355,187	\$ 6,451,180	\$ 6,498,059	\$ 6,545,289	\$ 6,592,874	\$ 6,640,815
Non-Rate Revenues	120,400	123,513	124,978	90,400	90,400	90,400
Total Revenues	\$ 6,475,587	\$ 6,574,693	\$ 6,623,036	\$ 6,635,689	\$ 6,683,274	\$ 6,731,215
Expenses						
Cash Operating Expenses	\$ 3,168,875	\$ 3,218,143	\$ 3,415,562	\$ 3,626,467	\$ 3,702,606	\$ 3,828,582
Existing Debt Service	1,964,739	1,961,263	1,956,459	1,913,335	1,818,327	1,712,777
New Debt Service	254,700	1,280,609	1,609,036	1,607,861	1,356,686	1,356,686
Replacement Reserve Funding	1,104,059	1,377,734	1,709,314	1,714,274	1,718,621	1,737,204
Total Expenses	\$ 6,492,373	\$ 7,837,750	\$ 8,690,370	\$ 8,861,937	\$ 8,596,240	\$ 8,635,249
Net Surplus (Deficiency)	\$ (16,786)	\$ (1,263,057)	\$ (2,067,334)	\$ (2,226,248)	\$ (1,912,966)	\$ (1,904,034)
Coverage After Increase	2.54	1.54	1.38	1.27	1.31	1.31
Operating Ending Balance						
Target (60 Days)	520,911	\$ (742,146)	\$ (2,809,480)	\$ (5,035,728)	\$ (6,948,694)	\$ (8,852,728)
	520,911	529,010	561,462	596,132	608,648	629,356
Capital Ending Balance	\$ 10,716,109	\$ 17,467,487	\$ 3,069,134	\$ 4,985,733	\$ 7,061,470	\$ 8,414,851
Target (1% of Plant)	538,955	688,867	854,657	857,137	859,311	868,602
Combined Ending Balance	\$ 11,237,020	\$ 16,725,341	\$ 259,653	\$ (49,995)	\$ 112,776	\$ (437,877)
Combined Target	1,059,866	1,217,877	1,416,119	1,453,269	1,467,958	1,497,958



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 2026
 - » 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 (long-term) CIP**
 - Assumes Revenue Bonds with 30-year term and 1.50 coverage target
 - » S4: low interest loans
 - » S5: low interest loans & additional \$3.0 million in grant funding



Scenario Summary: S3

S3: Long-Term CIP	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		4.00%	4.00%	4.00%	2.00%	2.00%	17.03%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 162.96	\$ 169.48	\$ 176.26	\$ 179.79	\$ 183.39	
\$ Bi-Mo. Difference	\$ 6.27	\$ 6.52	\$ 6.78	\$ 3.53	\$ 3.60		
Mo. Res. Rate 5.5ccf	\$ 78.35	\$ 81.48	\$ 84.74	\$ 88.13	\$ 89.90	\$ 91.70	
\$ Mo. Difference	\$ 3.14	\$ 3.26	\$ 3.39	\$ 1.77	\$ 1.80		
RRF % of Depreciation	5.00%	5.00%	12.00%	41.00%	50.00%		

- **Assumes a \$19.00MM Revenue Bond in 2024**
 - » 30-year loan w. 1.50 coverage target and 1-year interest only payment to keep increases at 4.0% per year
 - Projected coverage stays above 1.51
 - » RRF funding gradually phased-in over time due to large debt issuance
 - Projected to be 100% funded by 2032
- **Additional debt projected in 2040 at \$5.00MM**
- **Scenarios balances**
 - » Rate impacts and financial targets by reducing RRF funding as the new debt is issued and rebuilds over time
 - » Coverage target is decreased to 1.50 to accommodate reduction of rate pressure



Low Interest Financing

- The City is anticipating the availability of low interest financing and potential additional \$3.00MM in grant funding towards WWTP
 - » Direction provided towards low interest financing in Fall of 2023
 - » Direction provided towards additional grant fundings in 2024

S4: Low Interest	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		2.00%	2.00%	2.00%	2.00%	2.00%	10.41%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 159.82	\$ 163.02	\$ 166.28	\$ 169.61	\$ 173.00	
\$ Bi-Mo. Difference	\$ 3.13	\$ 3.20	\$ 3.26	\$ 3.33	\$ 3.39		
Mo. Res. Rate 5.5ccf	\$ 78.35	\$ 79.91	\$ 81.51	\$ 83.14	\$ 84.81	\$ 86.50	
\$ Mo. Difference	\$ 1.57	\$ 1.60	\$ 1.63	\$ 1.67	\$ 1.69		
RRF % of Depreciation		19.00%	19.00%	19.00%	46.00%	54.00%	

S5: Low Interest; Grant	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		0.00%	2.00%	2.00%	2.00%	2.00%	8.24%
Bi-Mo. Residential Bill 11ccf	\$ 156.69	\$ 156.69	\$ 159.82	\$ 163.02	\$ 166.28	\$ 169.61	
\$ Bi-Mo. Difference	\$ -	\$ 3.13	\$ 3.20	\$ 3.26	\$ 3.33	\$ 3.39	
Mo. Res. Rate 5.5ccf	\$ 78.35	\$ 78.35	\$ 79.91	\$ 81.51	\$ 83.14	\$ 84.81	
\$ Mo. Difference	\$ -	\$ 1.57	\$ 1.60	\$ 1.63	\$ 1.67	\$ 1.69	
RRF % of Depreciation		19.00%	19.00%	19.00%	46.00%	54.00%	

- Long term debt assumes 30-year term and 2.0% interest rate

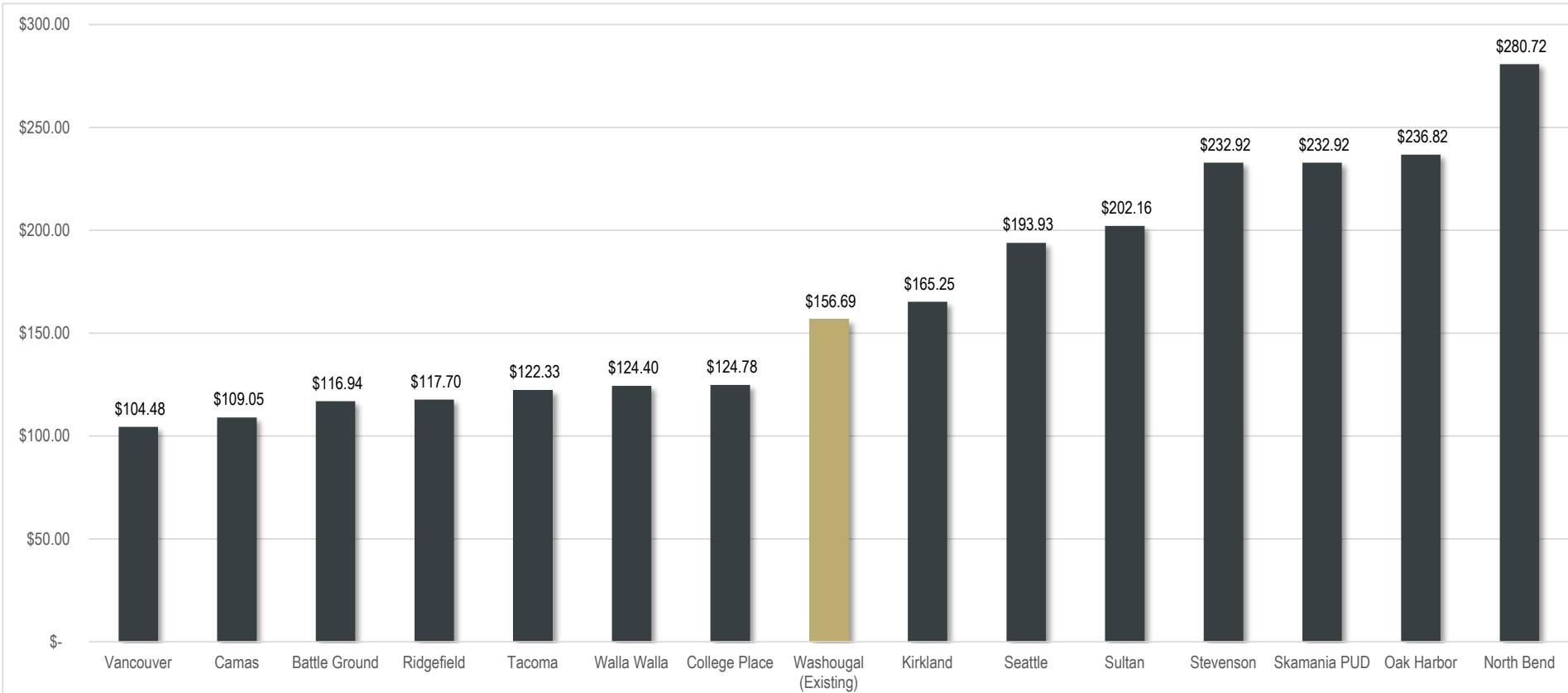


Scenario Summary: Combined

Annual Increase	2024	2025	2026	2027	2028	Cumulative
S3: Long-Term CIP	4.00%	4.00%	4.00%	2.00%	2.00%	17.03%
S4: Low Interest	2.00%	2.00%	2.00%	2.00%	2.00%	10.41%
S5: Low Interest, Grant	0.00%	2.00%	2.00%	2.00%	2.00%	8.24%
RRF % of Depreciation	2024	2025	2026	2027	2028	
S3: Long-Term CIP	5.00%	5.00%	12.00%	41.00%	50.00%	
S4: Low Interest	19.00%	19.00%	19.00%	46.00%	54.00%	
S5: Low Interest, Grant	19.00%	19.00%	19.00%	46.00%	54.00%	



Sewer Residential Rate Survey



Notes:

- Sample bi-monthly Residential bill assumes 11ccf consumption.
- Ridgefield rates are based off CRWWWD 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.

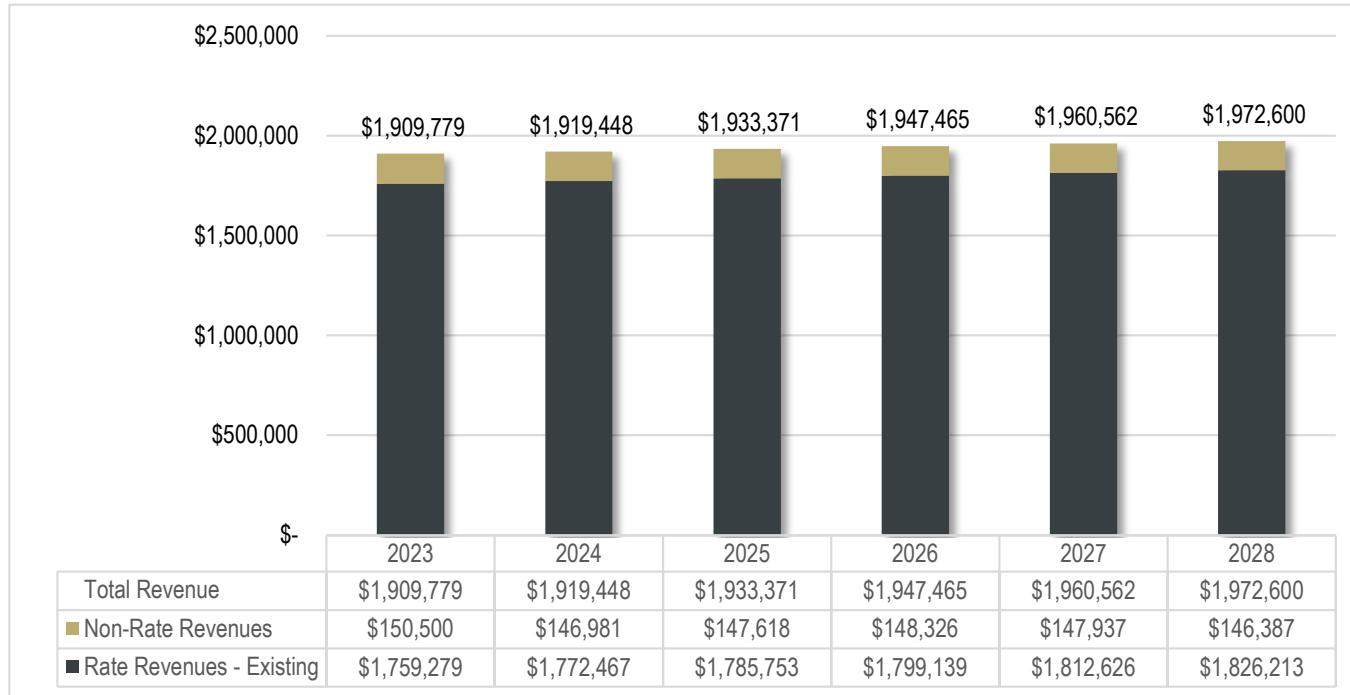


Stormwater



Key Factors: Existing Revenue

- **Forecast period: 2023-2028**
 - » 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**





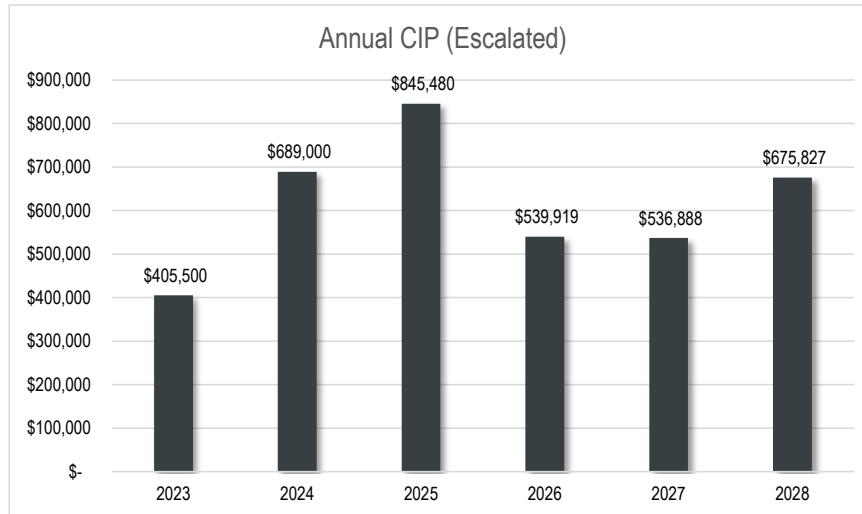
Key Factors: Operating Expenses

- 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



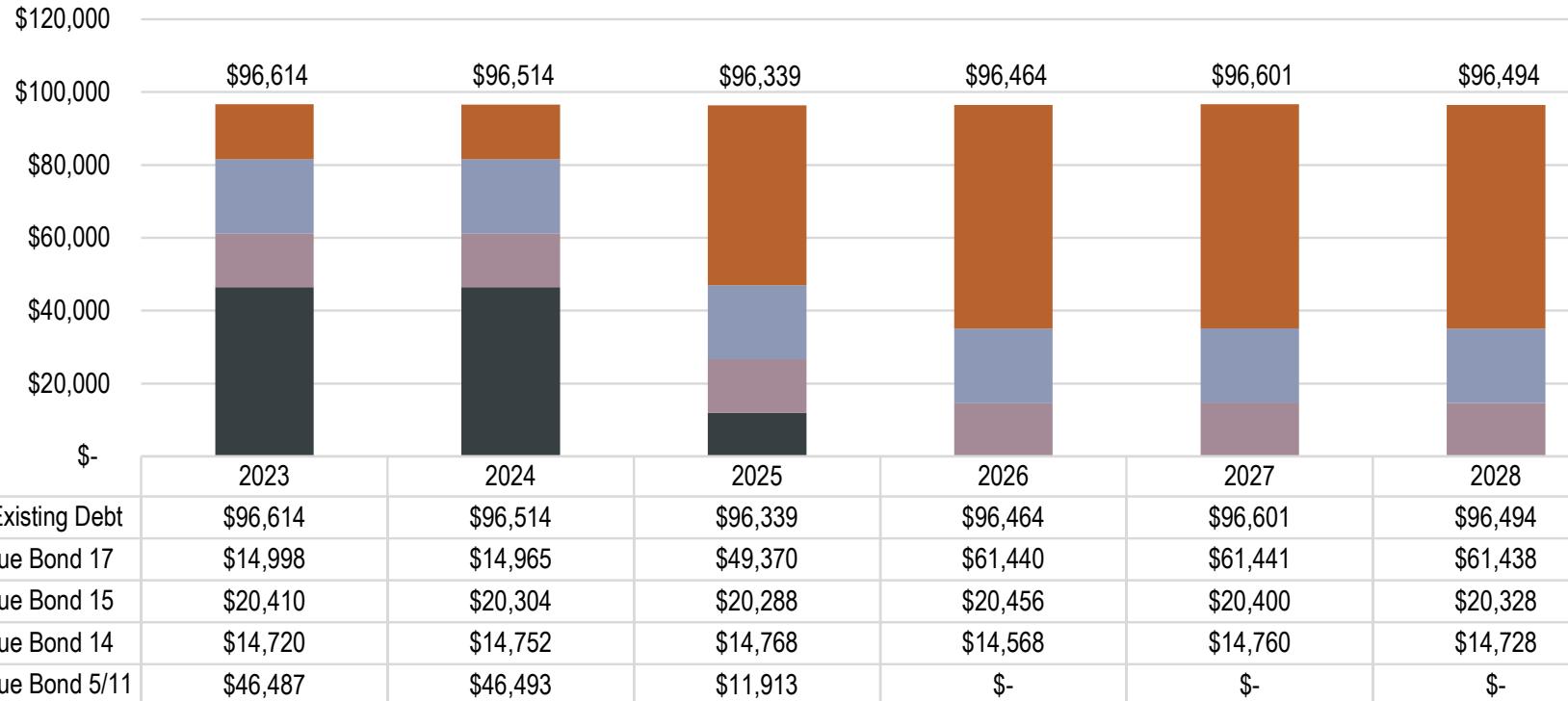
Key Factors: Capital (continued)

Description	2023	2024	Rate Setting Period (Escalated)				2027	2028	Total 2023-2028	Future Periods		Total
			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

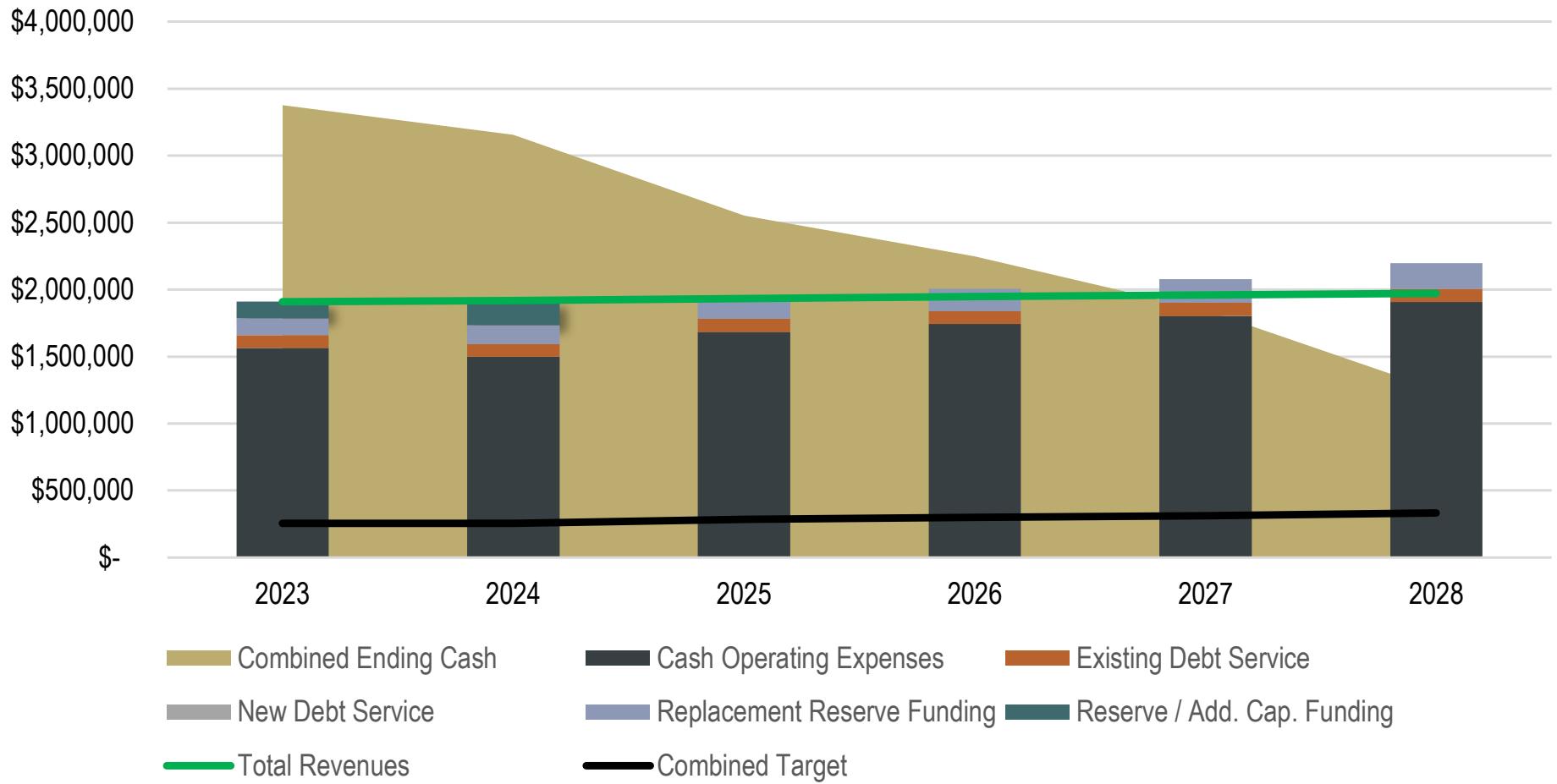


Key Factors: Existing Debt





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	146,981	147,618	148,326	147,937	146,387
Total Revenues	\$ 1,909,779	\$ 1,919,448	\$ 1,933,371	\$ 1,947,465	\$ 1,960,562	\$ 1,972,600
Expenses						
Cash Operating Expenses	\$ 1,563,265	\$ 1,498,174	\$ 1,684,807	\$ 1,743,159	\$ 1,803,709	\$ 1,908,458
Existing Debt Service	96,614	96,514	96,339	96,464	96,601	96,494
New Debt Service	-	-	-	-	-	-
Replacement Reserve Funding	126,288	140,068	156,977	167,776	178,513	192,030
Total Expenses	\$ 1,786,167	\$ 1,734,755	\$ 1,938,123	\$ 2,007,398	\$ 2,078,824	\$ 2,196,983
Net Surplus (Deficiency)	\$ 123,612	\$ 184,693	\$ (4,752)	\$ (59,933)	\$ (118,262)	\$ (224,383)
Operating Ending Balance						
Target (45 Days)	192,731	184,706	179,955	120,022	1,760	\$ (222,623)
Capital Ending Balance	\$ 3,185,355	\$ 2,972,246	\$ 2,372,808	\$ 2,127,961	\$ 1,842,211	\$ 1,475,548
Target (1% of Plant)	63,144	70,034	78,489	83,888	89,257	96,015
Combined Ending Balance	\$ 3,378,087	\$ 3,156,953	\$ 2,552,763	\$ 2,247,983	\$ 1,843,971	\$ 1,252,925
Combined Target	255,875	254,740	286,204	298,798	311,632	331,304



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 (long-term) CIP**



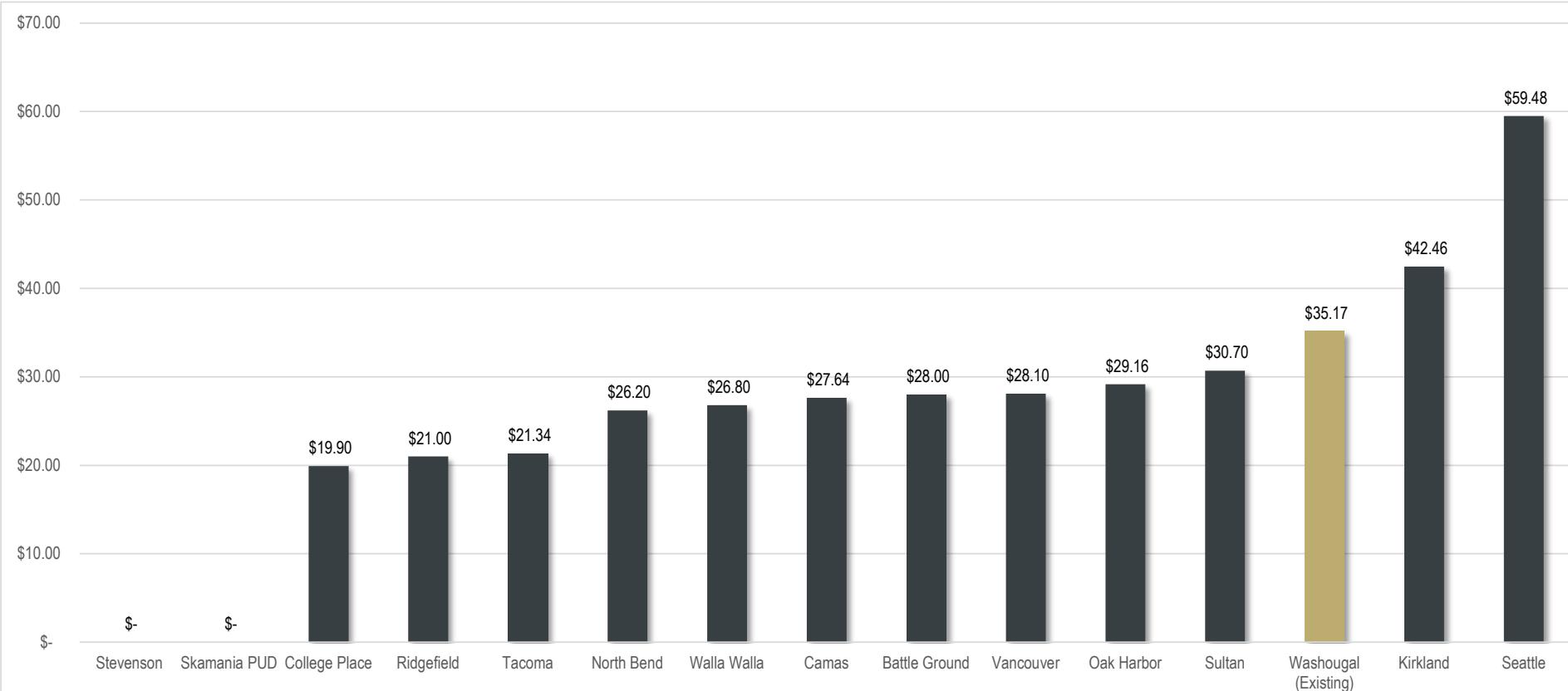
Scenario Summary: S3

S3: Long-Term CIP	Existing	2024	2025	2026	2027	2028	Cumulative
Annual Increase		4.25%	4.25%	4.25%	4.25%	4.25%	23.13%
<i>Bi-Mo. Residential Bill</i>	\$ 35.17	\$ 36.66	\$ 38.22	\$ 39.84	\$ 41.53	\$ 43.30	
<i>\$ Bi-Mo. Difference</i>	\$ 1.49	\$ 1.56	\$ 1.62	\$ 1.69	\$ 1.77		
<i>Mo. Res. Rate 5.5ccf</i>	\$ 17.59	\$ 18.33	\$ 19.11	\$ 19.92	\$ 20.77	\$ 21.65	
<i>\$ Mo. Difference</i>	\$ 0.74	\$ 0.78	\$ 0.81	\$ 0.84	\$ 0.88		
RRF % of Depreciation		100.00%	100.00%	100.00%	100.00%	100.00%	

- Assumes no new debt in 5-year rate setting period
- Additional debt projected starting in 2033
- Scenario balances
 - » Rate impacts by keeping increases at or below average assumed inflation
 - » Meets financial policies including RRF funding of 100% of annual depreciation



Stormwater Residential Rate Survey



Notes:

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



Combined Average Residential Bill

Bi-Monthly

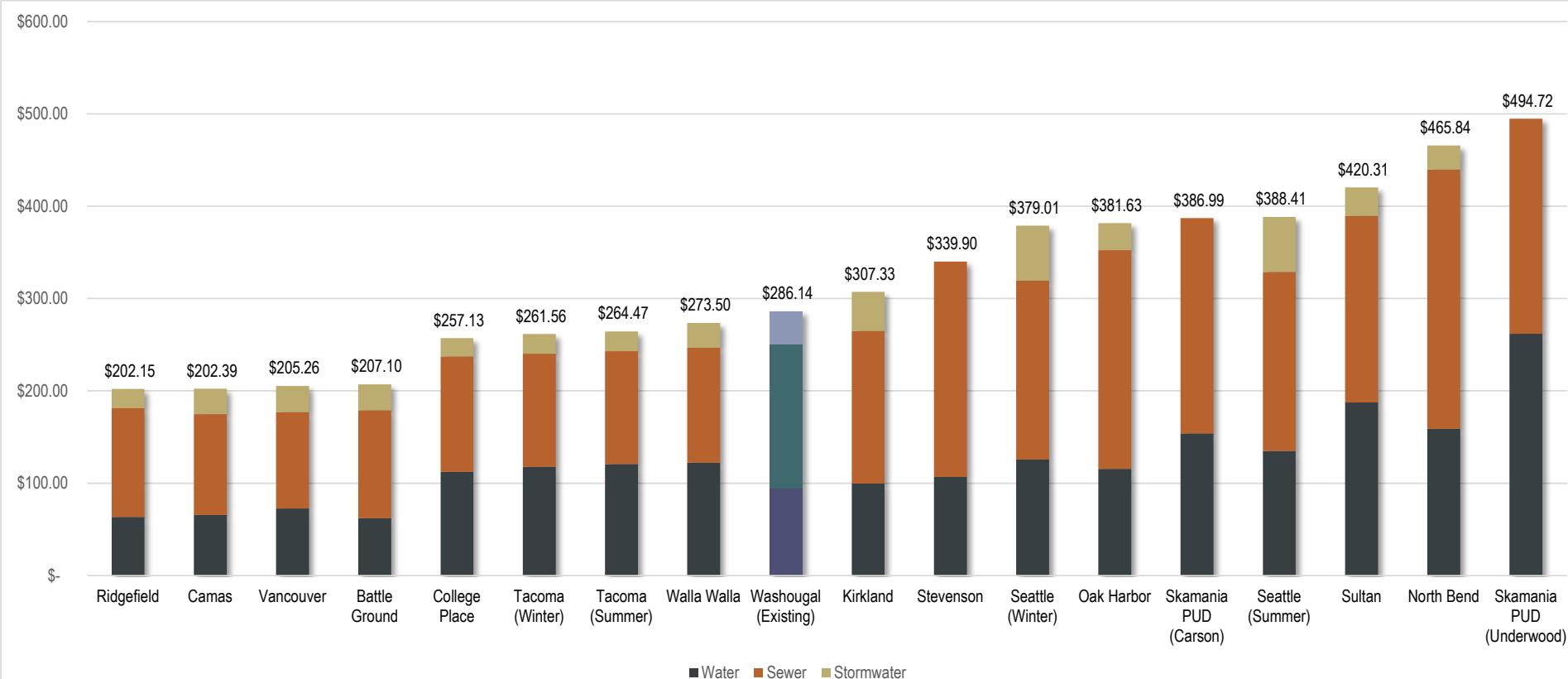
Utility	Existing	2024	2025	2026	2027	2028
Water: 3/4" Meter 15ccf Bi-Mo.	\$ 94.28	\$ 98.33	\$ 102.56	\$ 106.97	\$ 111.57	\$ 116.37
Sewer: 11ccf Bi-Monthly	156.69	162.96	169.48	176.26	179.79	183.39
Stormwater	35.17	36.66	38.22	39.84	41.53	43.30
Total Bi-Monthly Res. Bill	\$ 286.14	\$ 297.95	\$ 310.26	\$ 323.07	\$ 332.89	\$ 343.06
\$ Difference		\$ 11.81	\$ 12.31	\$ 12.81	\$ 9.82	\$ 10.17
% Difference		4.13%	4.13%	4.13%	3.04%	3.06%

Monthly

Utility	Existing	2024	2025	2026	2027	2028
Water: 3/4" Meter 7.5ccf Mo.	\$ 47.14	\$ 49.17	\$ 51.28	\$ 53.49	\$ 55.79	\$ 58.19
Sewer: 5.5ccf Monthly	78.35	81.48	84.74	88.13	89.90	91.70
Stormwater	17.59	18.33	19.11	19.92	20.77	21.65
Total Monthly Res. Bill	\$ 143.07	\$ 148.98	\$ 155.13	\$ 161.54	\$ 166.45	\$ 171.53
\$ Difference		\$ 5.91	\$ 6.15	\$ 6.41	\$ 4.91	\$ 5.09
% Difference		4.13%	4.13%	4.13%	3.04%	3.06%



Combined Residential Rate Survey



NOTES:

- Sample bi-monthly Residential bill assumes 15ccf of water and 11ccf of sewer consumption. Water bills assume a 3/4" 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.



Future Topics: Monthly Billing

- Future meetings will revisit the evaluation of switching to monthly billing
 - » Analysis developed during the prior study is being updated for
 - Ongoing impacts
 - Meter reading
 - Turn on / off expenditures
 - Billing & reception
 - One-time impacts
 - Initial bill printing setup
 - Software consulting
 - Public outreach

CAC 4: Cost of Service

(Methodology Refresh)



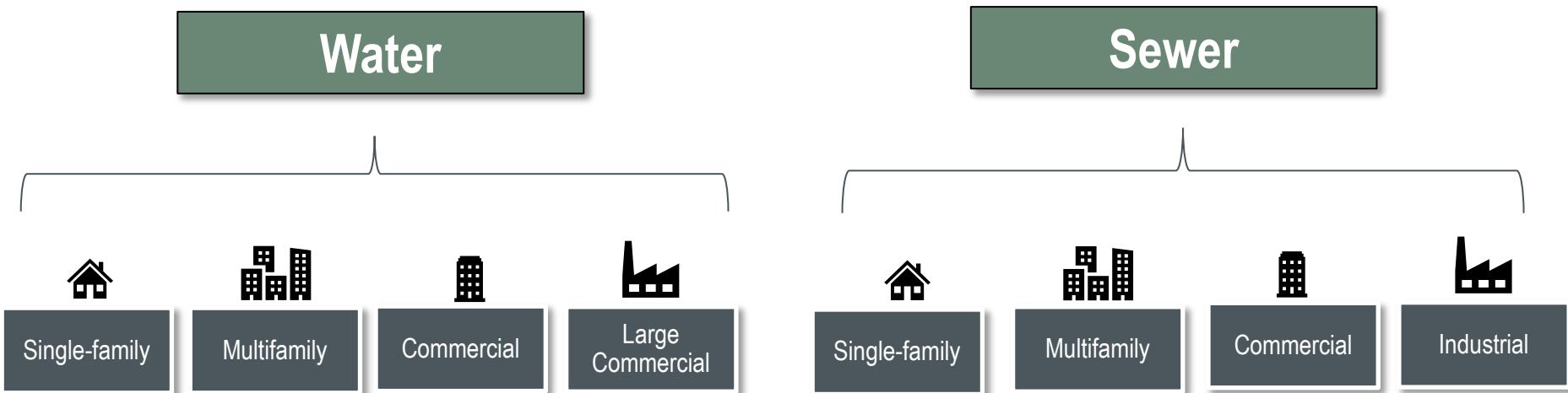
What is Cost of Service?

- **An equitable distribution of cost share that considers utility specific data**
 - » Measures of usage and demand
 - » Planning, engineering and design criteria
 - » Facility requirements
- **Cost of Service analysis determines:**
 - » Total cost by class (equity)
 - » Unit costs (\$/usage; \$/customer)
- **Fundamental question: Do cost differences exist to serve different customer classes of service?**



Customer Class Designations

- Rate study evaluates the existing classes of service for each utility





Cost of Service

- Defines equitable shares of cost responsibility by customer class
- Allocates total utility cost by function

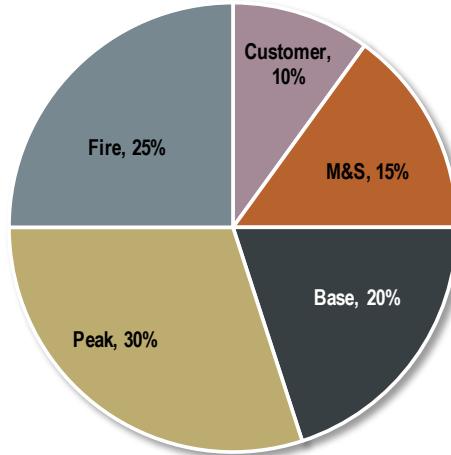
Water Utility Functions*	Sewer Utility Functions*
• Customer	• Customer
• Meters & Services	• Flow
• Base Demand (avg. use)	• Strength
• Peak Demand (peak use)	
• Fire Protection	

- Develops allocation factors using customer facility requirements and usage characteristics
- Allocates costs to customer classes

* Industry Standard Methodologies; AWWA Principles of Water Rates, Fees and Charges, M1 Manual and the Water Environment Federation Financing and Charges for Wastewater Systems Manual 27



Classification of Cost Shares (Water)



Base

Costs relate to average service provided on demand and are essentially correlated with year-round water consumption.

Peak

Costs relate to peak demand service; associated with the ability of the system to provide capacity to customers with higher than average volume.

Fire

Costs associated with providing adequate capacity and water flow corresponding to min. fire safety standards. Incremental costs for storage, T&D, and hydrants for fire protection.

Customer

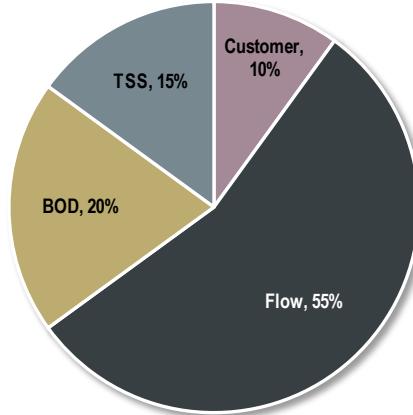
These are the costs associated with establishing, maintaining, and serving water customers and tend to include administrative, billing, and customer service costs.

M&S

Costs associated with installation, maintenance, and repairs of meters and services.



Classification of Cost Shares (Sewer)



Flow

Costs related to sewer volume processed within the system in a year.

BOD

Costs related to strength of sewage processed related to biochemical oxygen demand (BOD).

TSS

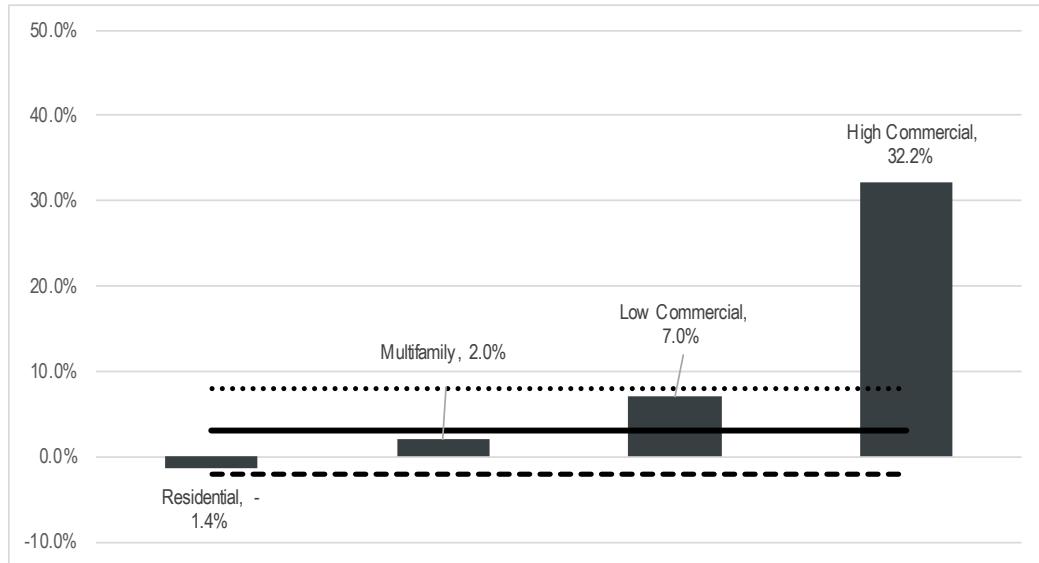
Costs related to strength of sewage processed related to total suspended solids (TSS).

Customer

These are the costs associated with establishing, maintaining, and serving sewer customers and tend to include administrative, billing, and customer service costs.



Cost of Service Results: Equity (Sewer)



- Class results of $\pm 5.0\%$ of average are considered to be within COSA

Class of Service	Existing		COSA		Difference	
	\$	% Share	\$	% Share	\$	% Change
Residential	2,266,112	73.8%	2,234,333	70.7%	(31,779)	-1.4%
Multifamily	260,097	8.5%	265,299	8.4%	5,202	2.0%
Low Commercial	222,879	7.3%	238,480	7.5%	15,602	7.0%
High Commercial	319,512	10.4%	422,546	13.4%	103,033	32.2%
Total	\$ 3,068,600	100.0%	\$ 3,160,658	100.0%	\$ 92,058	3.00%

EXAMPLE ONLY



Cost of Service Results: Phase-In (Sewer)

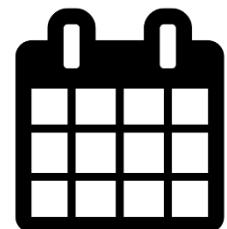
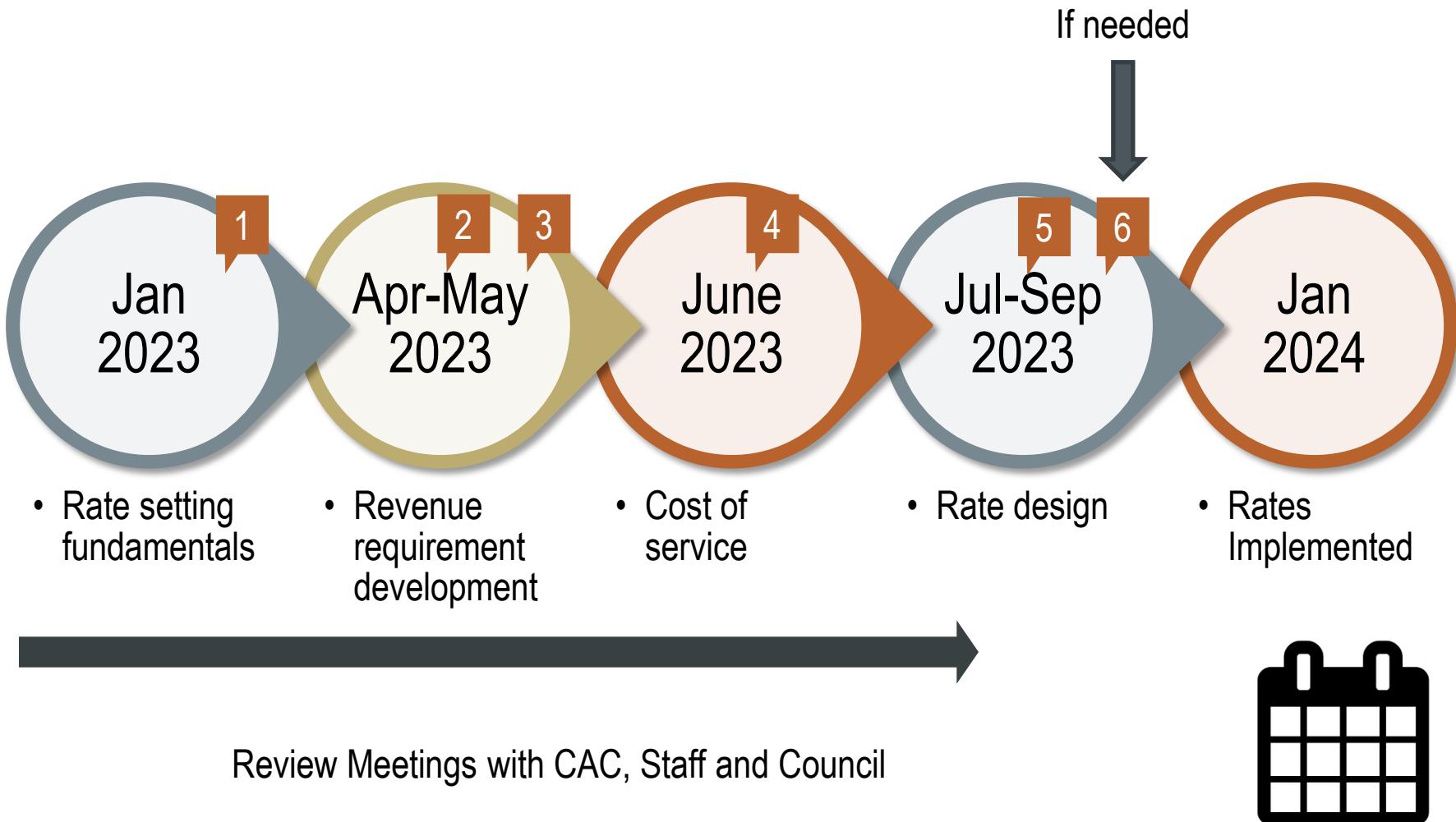
- Results may be phased-in to allow customers to adjust to changes and the City to keep tracking changes

Class	Full COSA	Phase-In			
		2021	2022	2023	2024
Residential	-1.4%	2.0%	1.9%	1.9%	1.8%
Multifamily	2.0%	2.75%	2.75%	2.75%	2.75%
Low Commercial	7.0%	4.00%	4.00%	4.00%	4.00%
High Commercial	32.2%	9.50%	9.50%	9.50%	9.50%
Total	3.00%	3.00%	3.00%	3.00%	3.00%

EXAMPLE ONLY



Wrap-up & Next Steps



Thank you!

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Appendix



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