



# 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

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



# Key Assumptions



# 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

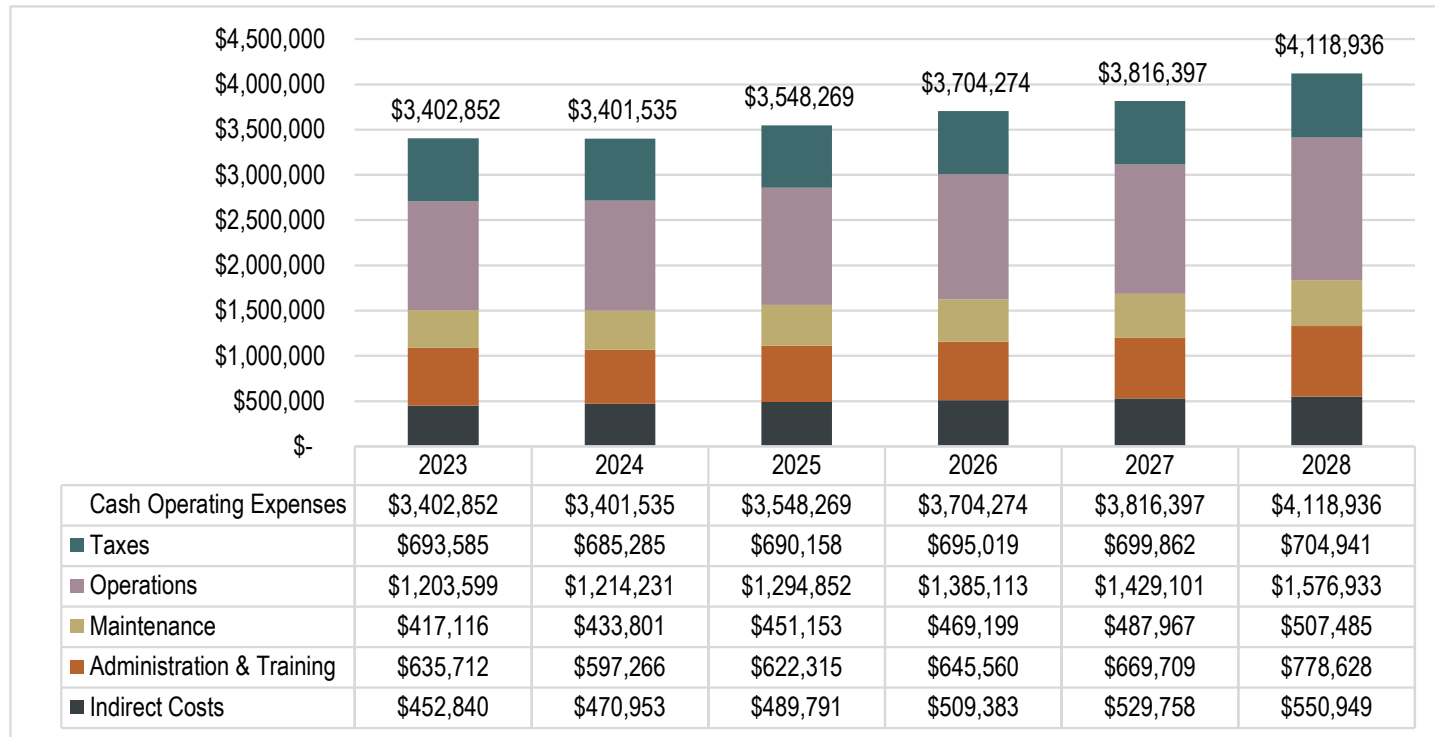
- **Total existing operating revenue: \$4.6 million to \$4.8 million**





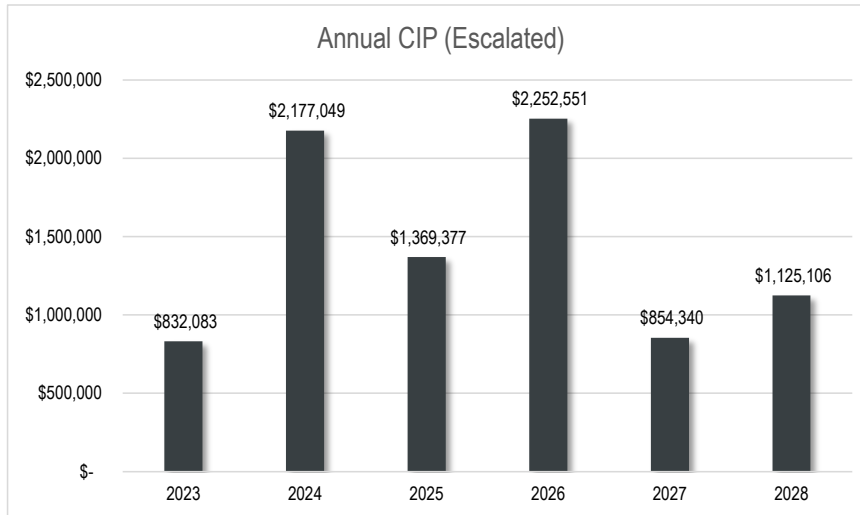
# Key Factors: Operating Expenses

- **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

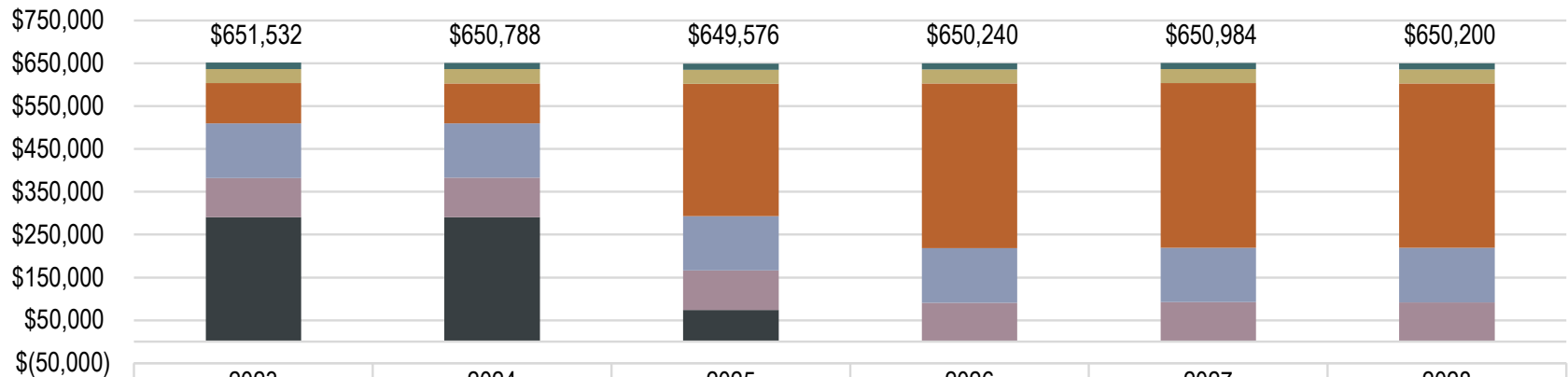


# Key Factors: Capital (continued)

Description	Rate Setting Period (Escalated)						Total	Future	Total
	2023	2024	2025	2026	2027	2028	2023-2028	2029-2033	
<b>Zone 7 Expansion</b>									
Reservoir 7 Siting Study and Property Purchase			\$ 39,768		\$ 716,886		\$ 756,654		\$ 756,654
Reservoir, BPS and Transmission Mains							-		-
<b>Source</b>									
Well 1R						372,781	372,781	2,326,153	2,698,934
<b>Fire Flow Improvements 2012 WSP</b>									
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
<b>Fire Flow Improvements 2020 WSP</b>									
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
<b>Miscellaneous</b>									
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
<b>Zone 4-2 Loop</b>									
P41 328th Ave Loop, V8							-	2,165,989	2,165,989
<b>2023 Budget - Water Main Installation 32/34/j st</b>	284,280						284,280		284,280
<b>ER&amp;R Projects</b>	85,375	-	29,192	71,562	65,765	161,840	413,735	802,421	1,216,156
<b>Zone 6 Conversion</b>									
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
<b>Total (Escalated)</b>	<b>\$ 832,083</b>	<b>\$ 2,177,049</b>	<b>\$ 1,369,377</b>	<b>\$ 2,252,551</b>	<b>\$ 854,340</b>	<b>\$ 1,125,106</b>	<b>\$ 8,610,506</b>	<b>\$ 19,499,132</b>	<b>\$ 28,109,638</b>
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



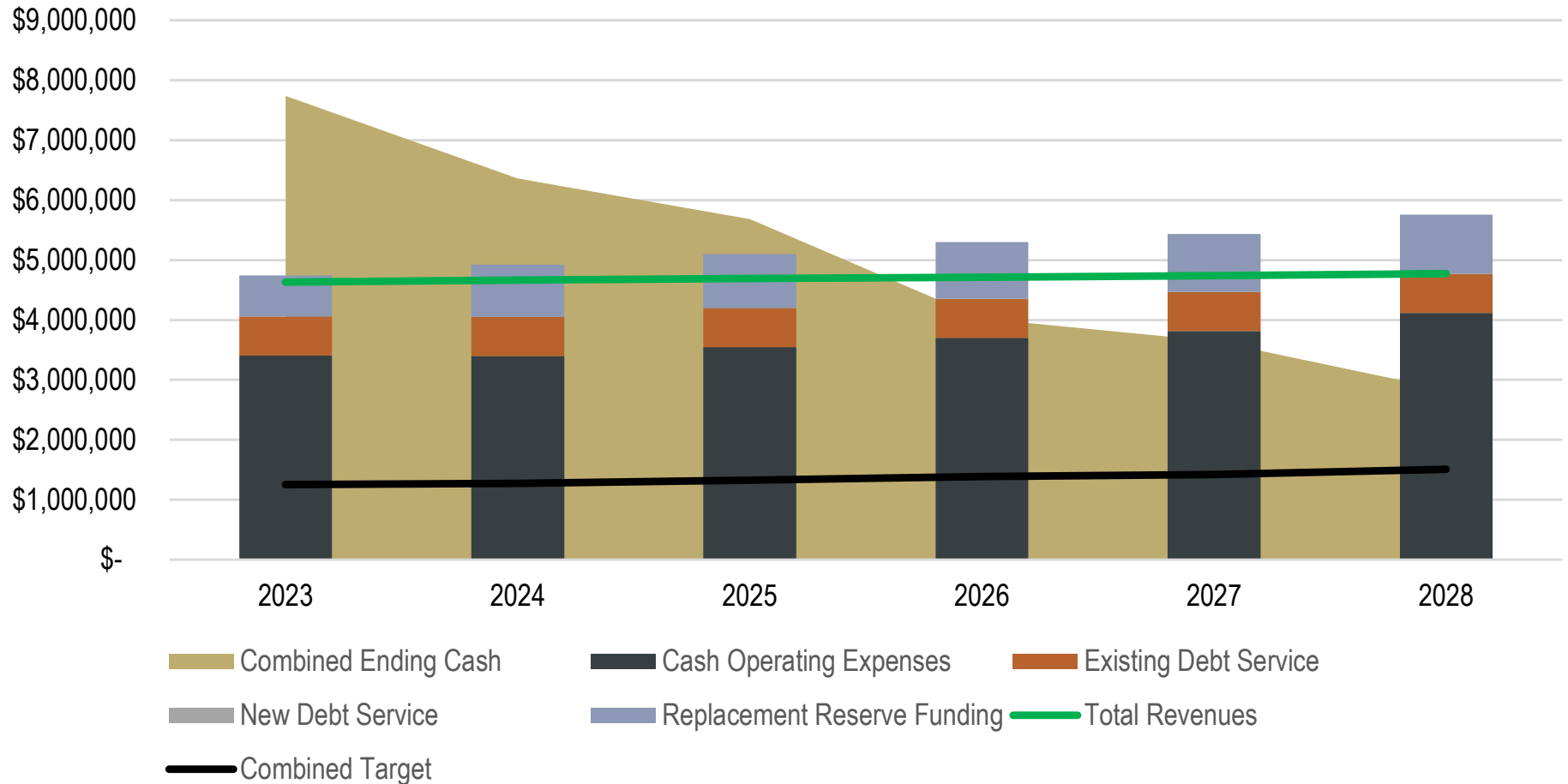
# Key Factors: Existing Debt



	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
<b>Revenues</b>						
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
<b>Total Revenues</b>	<b>\$ 4,634,741</b>	<b>\$ 4,662,133</b>	<b>\$ 4,689,711</b>	<b>\$ 4,714,629</b>	<b>\$ 4,736,696</b>	<b>\$ 4,770,305</b>
<b>Expenses</b>						
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
<b>Total Expenses</b>	<b>\$ 4,740,343</b>	<b>\$ 4,926,468</b>	<b>\$ 5,099,377</b>	<b>\$ 5,301,096</b>	<b>\$ 5,431,051</b>	<b>\$ 5,755,308</b>
<b>Net Surplus (Deficiency)</b>	<b>\$ (105,602)</b>	<b>\$ (264,334)</b>	<b>\$ (409,665)</b>	<b>\$ (586,467)</b>	<b>\$ (694,355)</b>	<b>\$ (985,002)</b>
<b>Operating Ending Balance</b>	<b>\$ 839,059</b>	<b>\$ 574,725</b>	<b>\$ 165,059</b>	<b>\$ (421,408)</b>	<b>\$ (1,115,763)</b>	<b>\$ (2,100,766)</b>
Target (90 Days)	839,059	838,735	874,916	913,383	941,029	1,015,628
<b>Capital Ending Balance</b>	<b>\$ 6,901,694</b>	<b>\$ 5,788,601</b>	<b>\$ 5,517,886</b>	<b>\$ 4,446,395</b>	<b>\$ 4,763,369</b>	<b>\$ 4,934,890</b>
Target (1% of Plant)	415,302	437,072	450,766	473,291	481,835	493,086
<b>Combined Ending Balance</b>	<b>\$ 7,740,753</b>	<b>\$ 6,363,326</b>	<b>\$ 5,682,945</b>	<b>\$ 4,024,987</b>	<b>\$ 3,647,605</b>	<b>\$ 2,834,125</b>
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



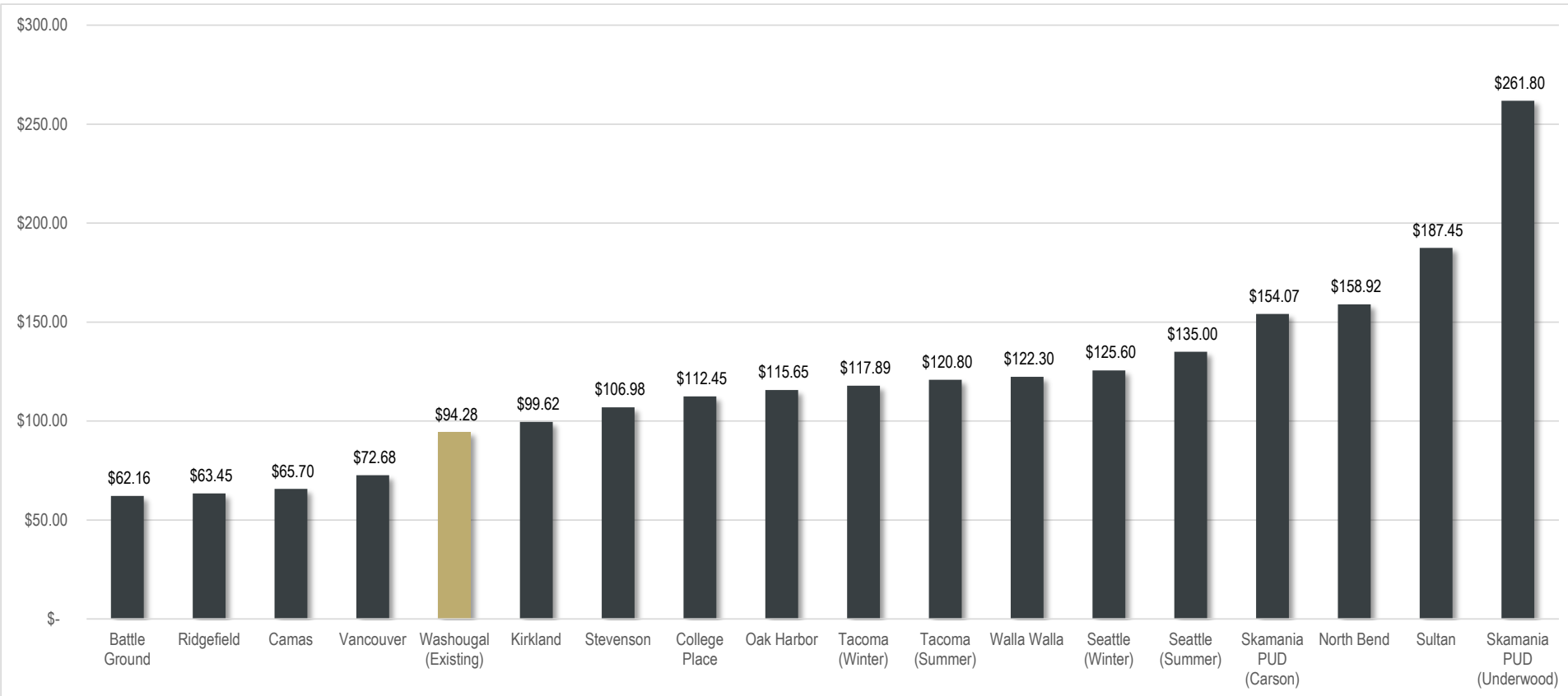
# Scenario Summary: S3

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.

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

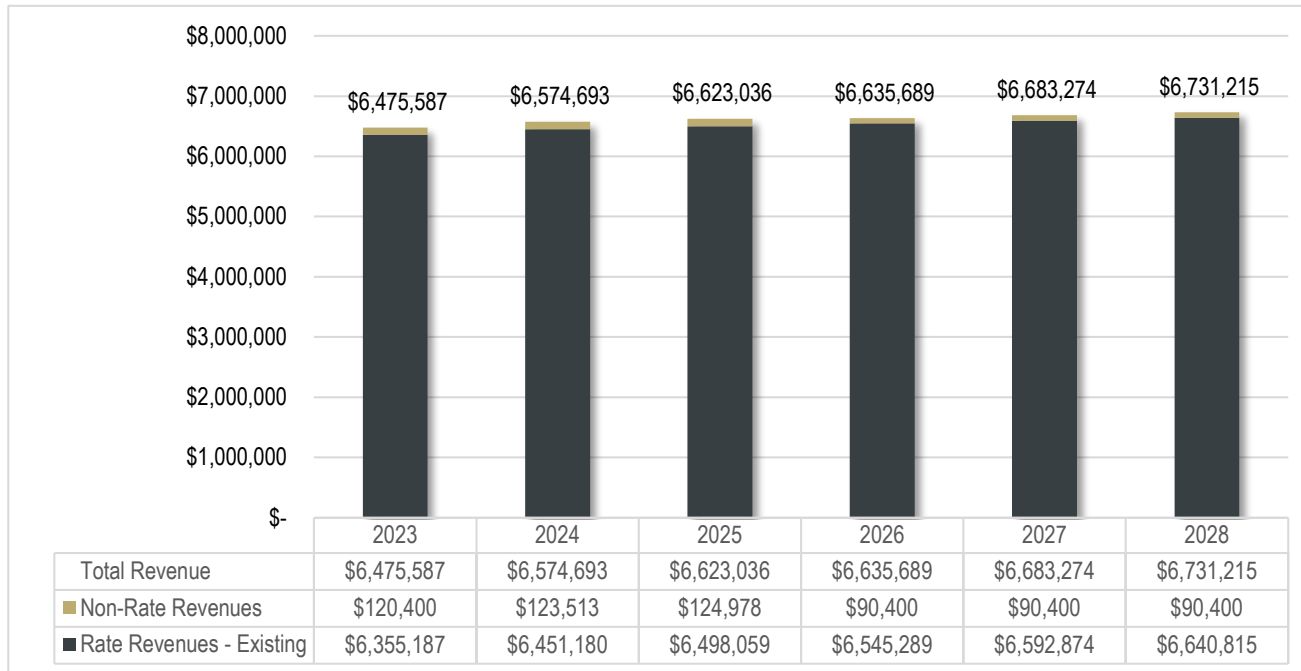


# Key Factors: Existing Revenue

- **Focus period: 2023-2028**

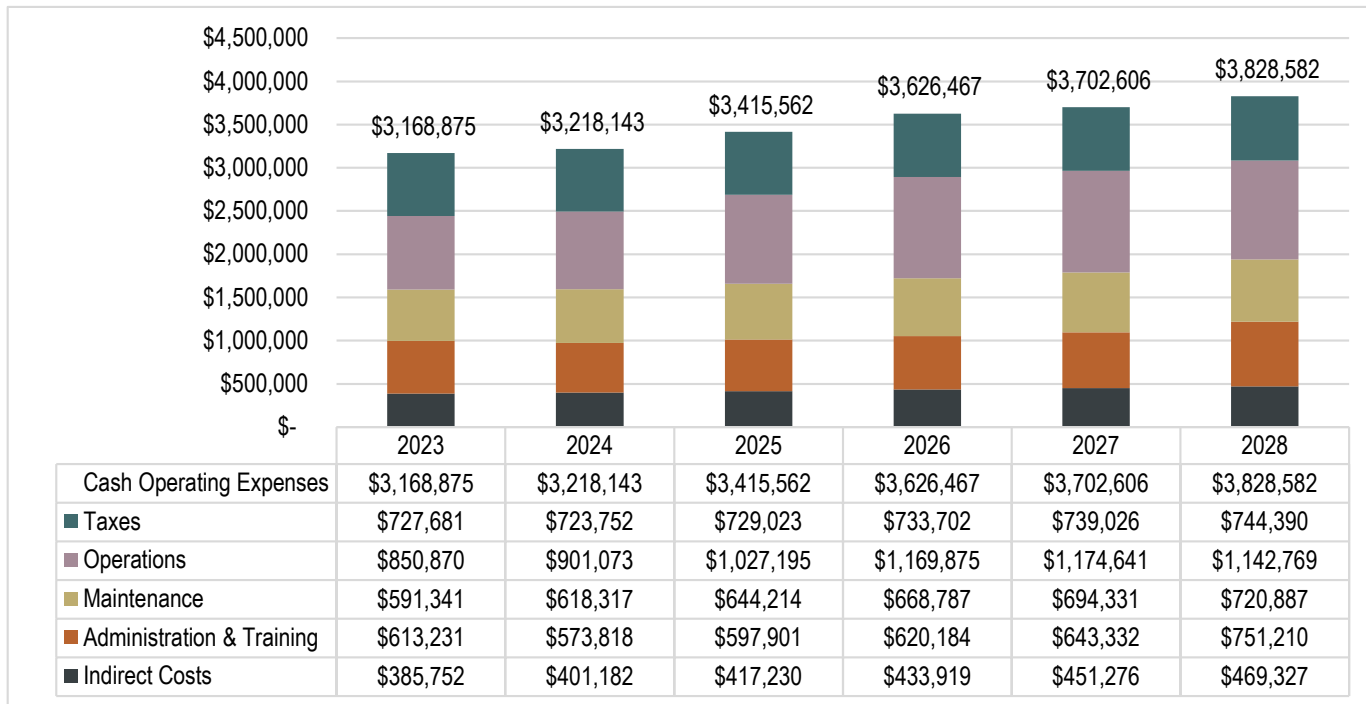
- » Rate revenue based on 2021 billing data, 2022 actual financial performance plus 0.75% growth except industrial
- » Non rate revenue consists of penalties, interest, other sewer service charges and miscellaneous revenues

- **Total existing operating revenue: \$6.5 million to \$6.7 million**



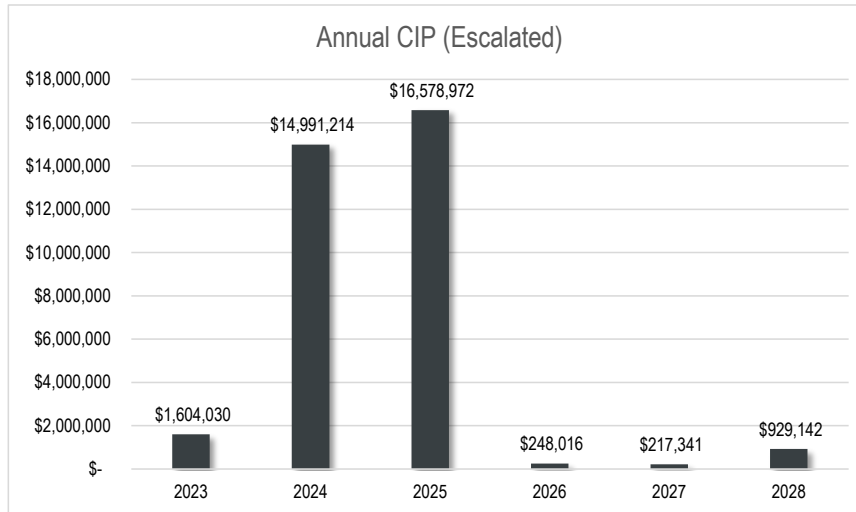
# Key Factors: Operating Expenses

- **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

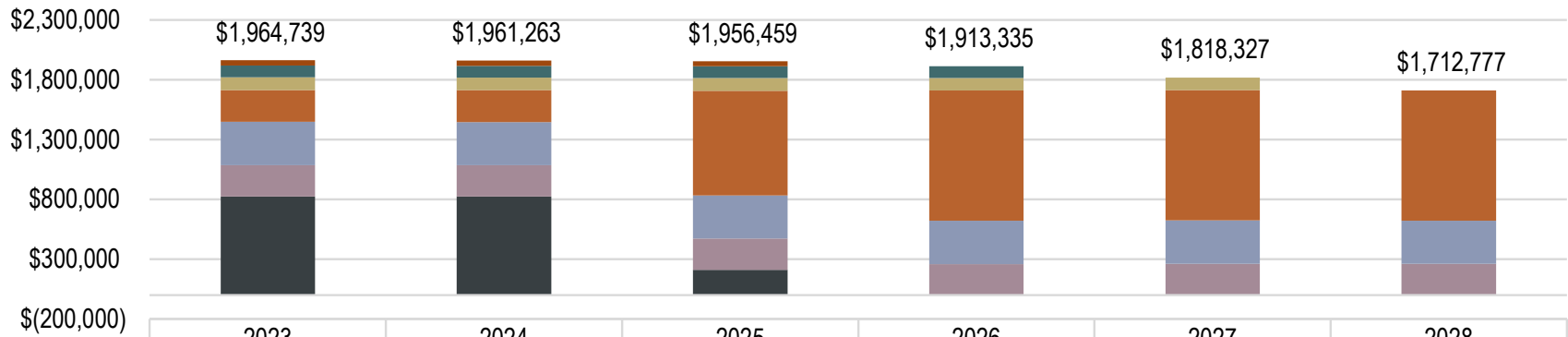


# Key Factors: Capital (continued)

Description	Rate Setting Period (Escalated)						Total	Future Periods		Total
	2023	2024	2025	2026	2027	2028	2023-2028	2029-2033	2034-2040	
<b>Collection System Maintenance Upgrades</b>										
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
<b>Treatment Plant Upgrades</b>							-			-
WWTP Upgrade Construction		14,840,000	16,536,000				31,376,000			31,376,000
Headworks Screen Upgrade						780,509	780,509			780,509
<b>ER&amp;R Projects</b>	71,000	58,464	29,192	133,366	98,106	24,628	414,756	204,647	774,941	1,394,345
<b>Total (Escalated)</b>	<b>\$ 1,604,030</b>	<b>\$ 14,991,214</b>	<b>\$ 16,578,972</b>	<b>\$ 248,016</b>	<b>\$ 217,341</b>	<b>\$ 929,142</b>	<b>\$ 34,568,716</b>	<b>\$ 903,164</b>	<b>\$ 37,684,667</b>	<b>\$ 73,156,547</b>
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



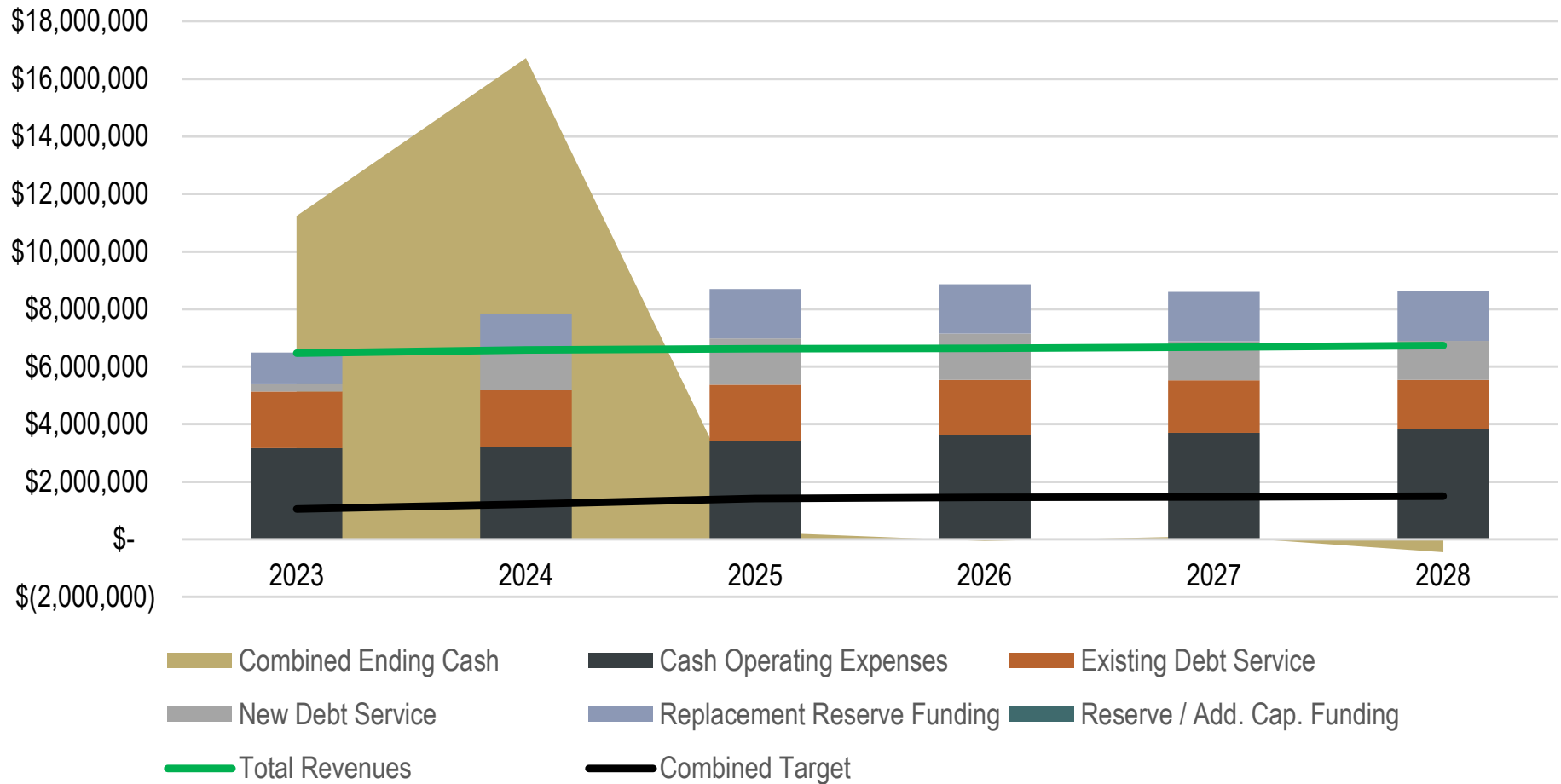
# Key Factors: Existing Debt



	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
<b>Revenues</b>						
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
<b>Total Revenues</b>	<b>\$ 6,475,587</b>	<b>\$ 6,574,693</b>	<b>\$ 6,623,036</b>	<b>\$ 6,635,689</b>	<b>\$ 6,683,274</b>	<b>\$ 6,731,215</b>
<b>Expenses</b>						
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
<b>Total Expenses</b>	<b>\$ 6,492,373</b>	<b>\$ 7,837,750</b>	<b>\$ 8,690,370</b>	<b>\$ 8,861,937</b>	<b>\$ 8,596,240</b>	<b>\$ 8,635,249</b>
<b>Net Surplus (Deficiency)</b>	<b>\$ (16,786)</b>	<b>\$ (1,263,057)</b>	<b>\$ (2,067,334)</b>	<b>\$ (2,226,248)</b>	<b>\$ (1,912,966)</b>	<b>\$ (1,904,034)</b>
Coverage After Increase	2.54	1.54	1.38	1.27	1.31	1.31
<b>Operating Ending Balance</b>	<b>\$ 520,911</b>	<b>\$ (742,146)</b>	<b>\$ (2,809,480)</b>	<b>\$ (5,035,728)</b>	<b>\$ (6,948,694)</b>	<b>\$ (8,852,728)</b>
Target (60 Days)	520,911	529,010	561,462	596,132	608,648	629,356
<b>Capital Ending Balance</b>	<b>\$ 10,716,109</b>	<b>\$ 17,467,487</b>	<b>\$ 3,069,134</b>	<b>\$ 4,985,733</b>	<b>\$ 7,061,470</b>	<b>\$ 8,414,851</b>
Target (1% of Plant)	538,955	688,867	854,657	857,137	859,311	868,602
<b>Combined Ending Balance</b>	<b>\$ 11,237,020</b>	<b>\$ 16,725,341</b>	<b>\$ 259,653</b>	<b>\$ (49,995)</b>	<b>\$ 112,776</b>	<b>\$ (437,877)</b>
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	
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	
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

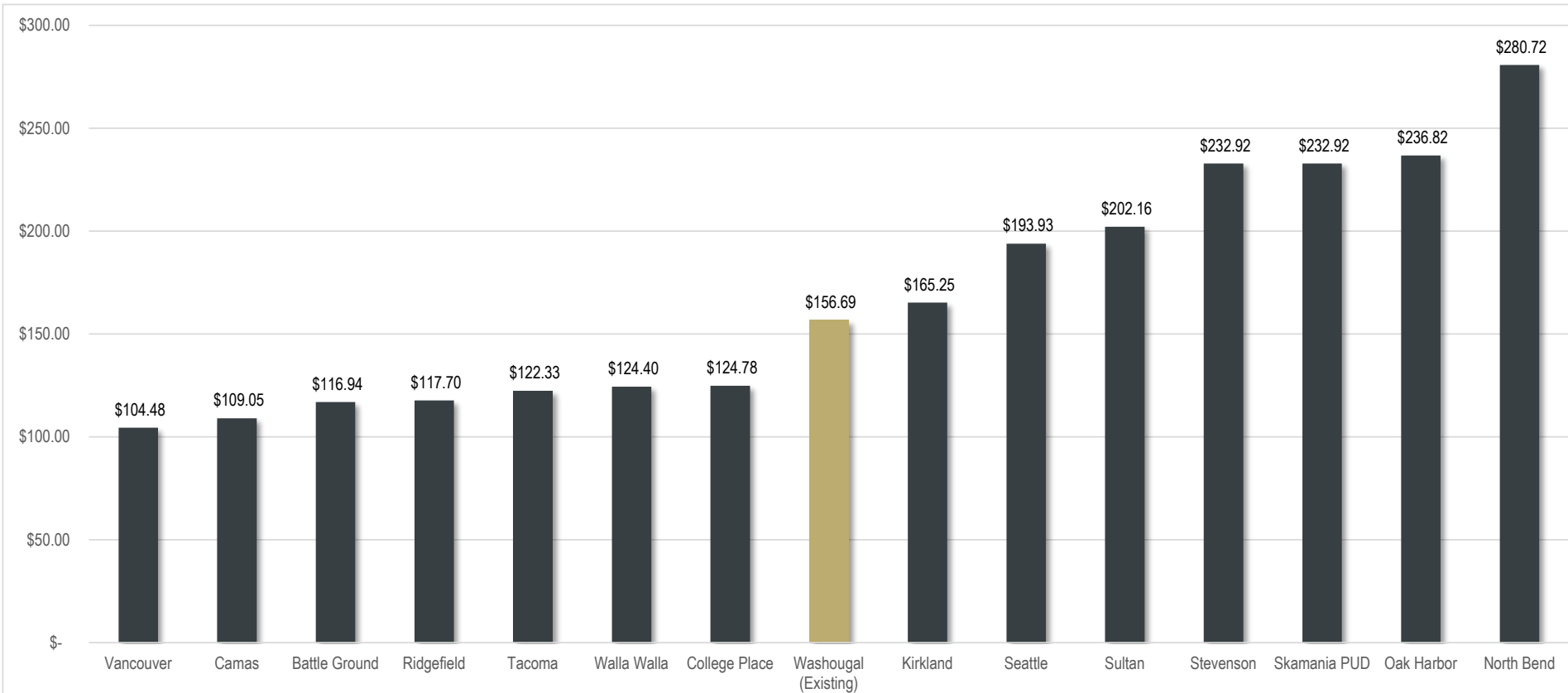
Annual Increase	2024	2025	2026	2027	2028	Cumulative
S3: Long-Term CIP	4.00%	4.00%	4.00%	2.00%	2.00%	17.03%
S4: Low Interest	2.00%	2.00%	2.00%	2.00%	2.00%	10.41%
S5: Low Interest, Grant	0.00%	2.00%	2.00%	2.00%	2.00%	8.24%

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 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.

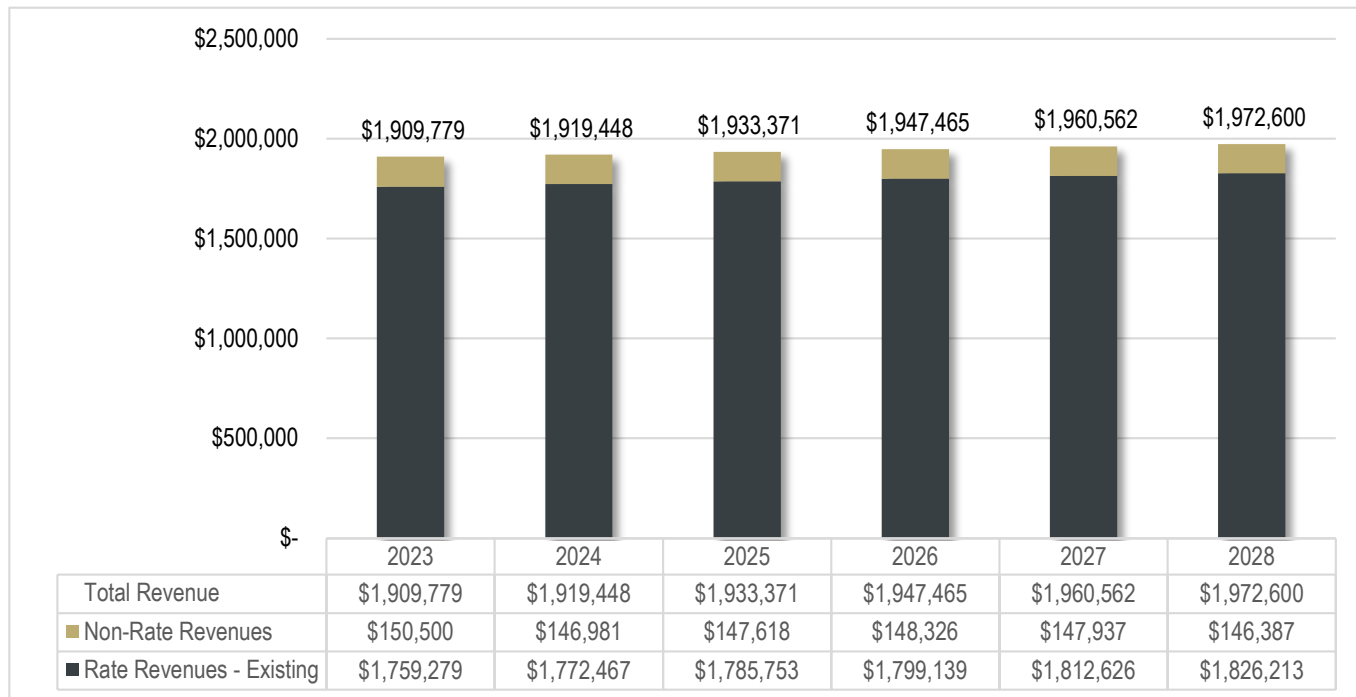


# Stormwater



# Key Factors: Existing Revenue

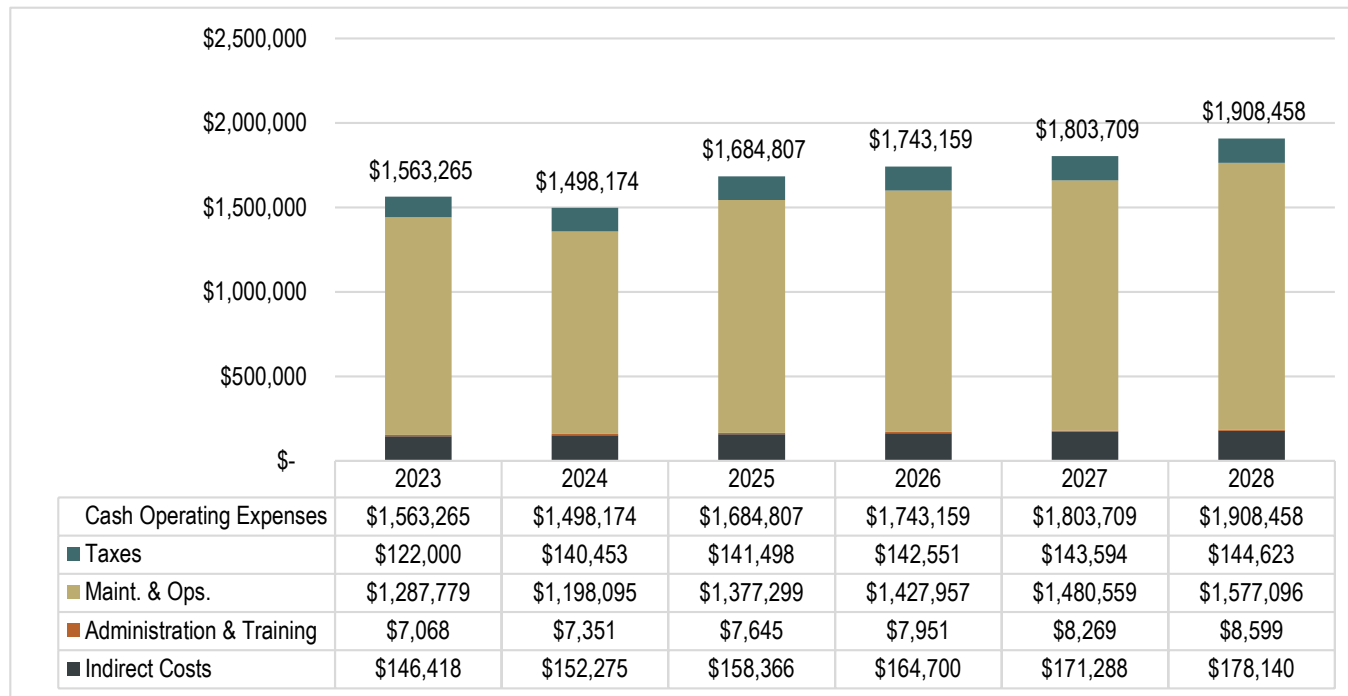
- **Forecast period: 2023-2028**
  - » Rate revenue based on 2021 actual data plus 0.75% growth
  - » Non rate revenue consists of penalties, interest, other stormwater service charges, transfers back from general fund and miscellaneous revenues
  - » Includes a DOE Grant of \$50k every other year
- **Total existing operating revenue: \$1.9 million to \$2.0 million**





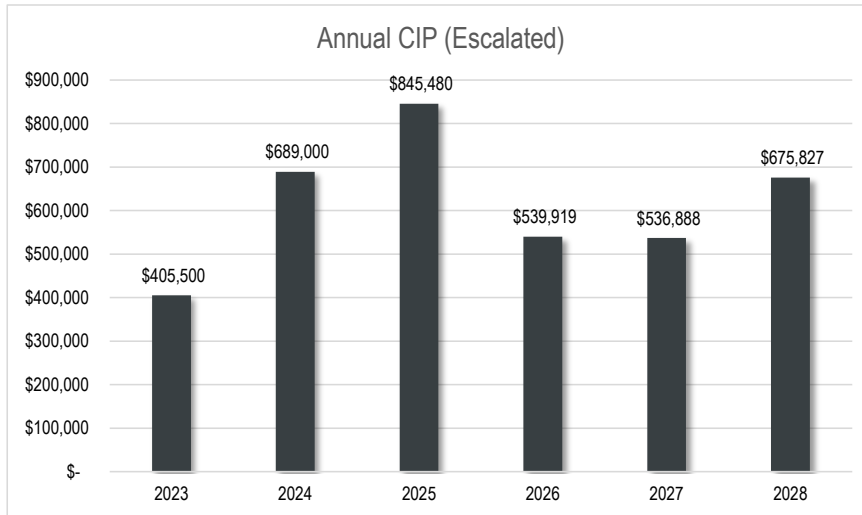
# Key Factors: Operating Expenses

- **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



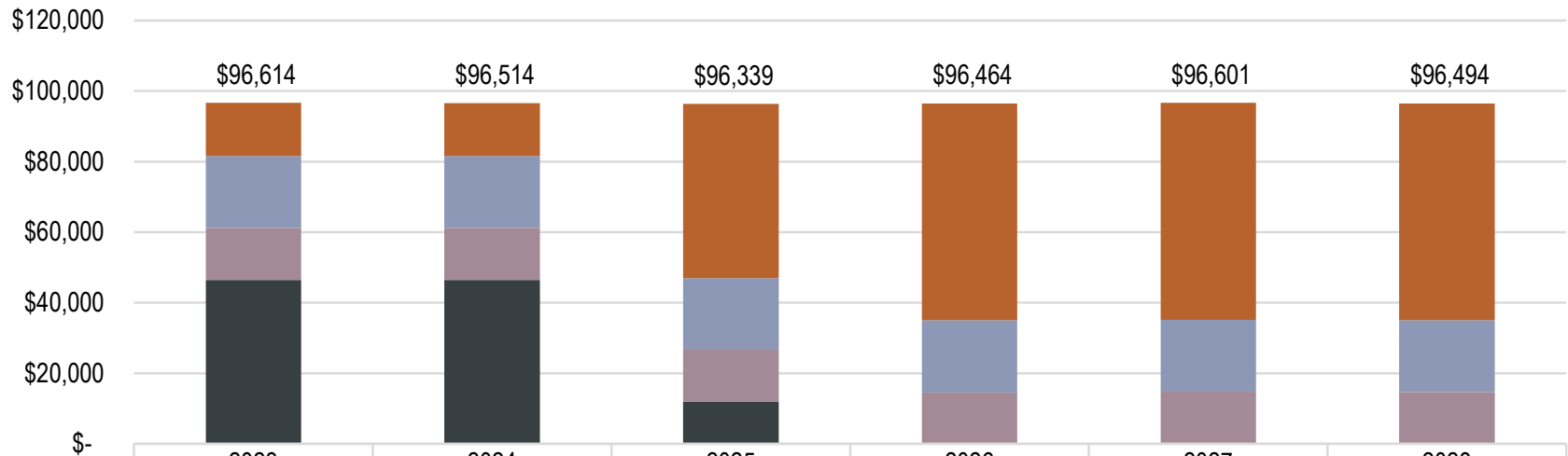
# Key Factors: Capital (continued)

Description	Rate Setting Period (Escalated)						Total 2023-2028	Future Periods		Total
	2023	2024	2025	2026	2027	2028		2029-2033	2034-2042	
<b>Masterplan</b>										
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
							-			-
<b>Budget</b>							-			-
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
							-			-
<b>ER&amp;R Projects</b>	36,500	-	404,520	81,321	59,946	-	582,286	739,307	1,855,266	3,176,860
<b>Total (Escalated)</b>	<b>\$ 405,500</b>	<b>\$ 689,000</b>	<b>\$ 845,480</b>	<b>\$ 539,919</b>	<b>\$ 536,888</b>	<b>\$ 675,827</b>	<b>\$ 3,692,614</b>	<b>\$ 6,729,676</b>	<b>\$ 9,504,650</b>	<b>\$ 19,926,940</b>
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



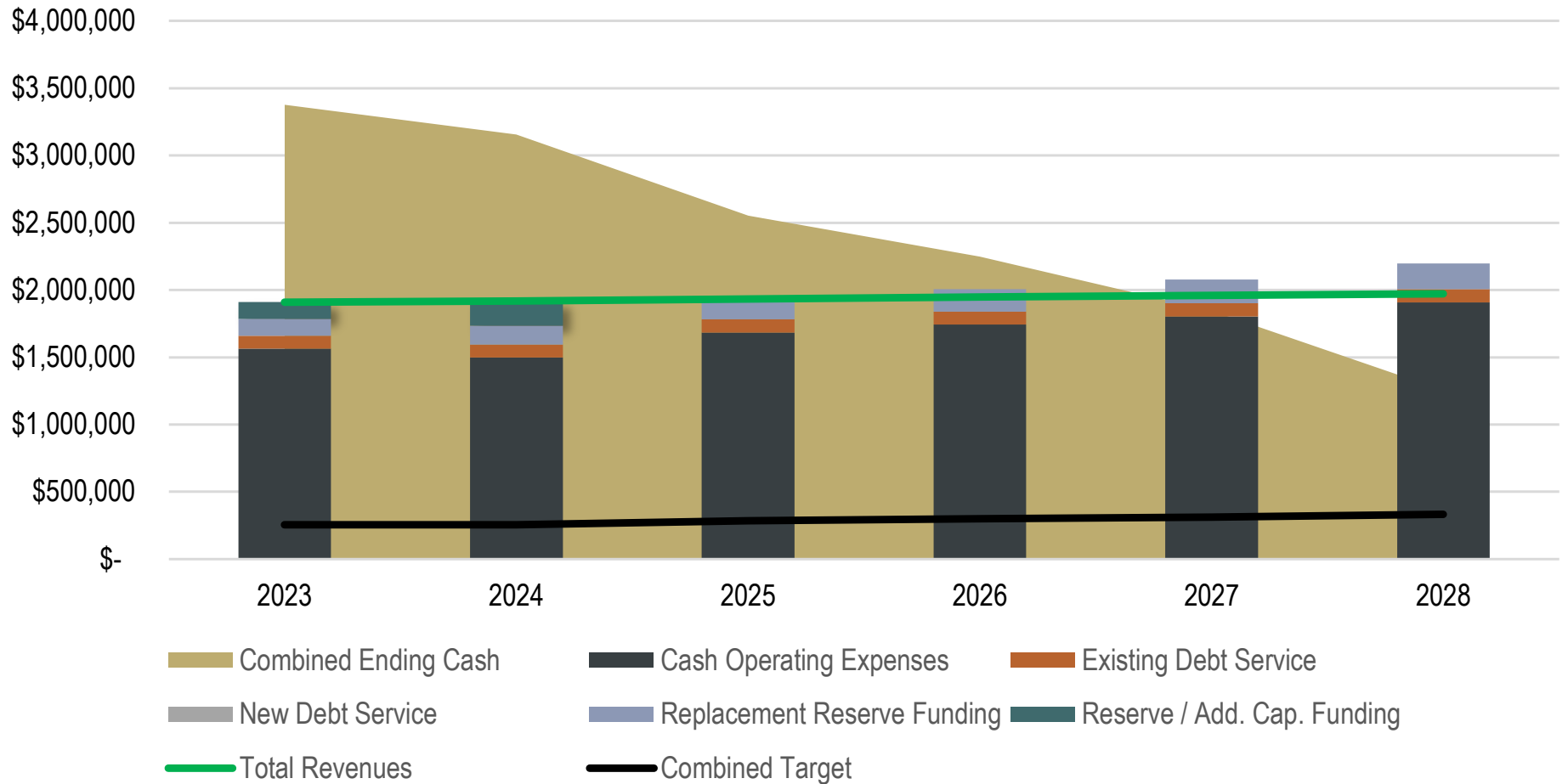
# Key Factors: Existing Debt



	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
<b>Revenues</b>						
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
<b>Total Revenues</b>	<b>\$ 1,909,779</b>	<b>\$ 1,919,448</b>	<b>\$ 1,933,371</b>	<b>\$ 1,947,465</b>	<b>\$ 1,960,562</b>	<b>\$ 1,972,600</b>
<b>Expenses</b>						
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
<b>Total Expenses</b>	<b>\$ 1,786,167</b>	<b>\$ 1,734,755</b>	<b>\$ 1,938,123</b>	<b>\$ 2,007,398</b>	<b>\$ 2,078,824</b>	<b>\$ 2,196,983</b>
<b>Net Surplus (Deficiency)</b>	<b>\$ 123,612</b>	<b>\$ 184,693</b>	<b>\$ (4,752)</b>	<b>\$ (59,933)</b>	<b>\$ (118,262)</b>	<b>\$ (224,383)</b>
<b>Operating Ending Balance</b>	<b>\$ 192,731</b>	<b>\$ 184,706</b>	<b>\$ 179,955</b>	<b>\$ 120,022</b>	<b>\$ 1,760</b>	<b>\$ (222,623)</b>
Target (45 Days)	192,731	184,706	207,716	214,910	222,375	235,289
<b>Capital Ending Balance</b>	<b>\$ 3,185,355</b>	<b>\$ 2,972,246</b>	<b>\$ 2,372,808</b>	<b>\$ 2,127,961</b>	<b>\$ 1,842,211</b>	<b>\$ 1,475,548</b>
Target (1% of Plant)	63,144	70,034	78,489	83,888	89,257	96,015
<b>Combined Ending Balance</b>	<b>\$ 3,378,087</b>	<b>\$ 3,156,953</b>	<b>\$ 2,552,763</b>	<b>\$ 2,247,983</b>	<b>\$ 1,843,971</b>	<b>\$ 1,252,925</b>
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**



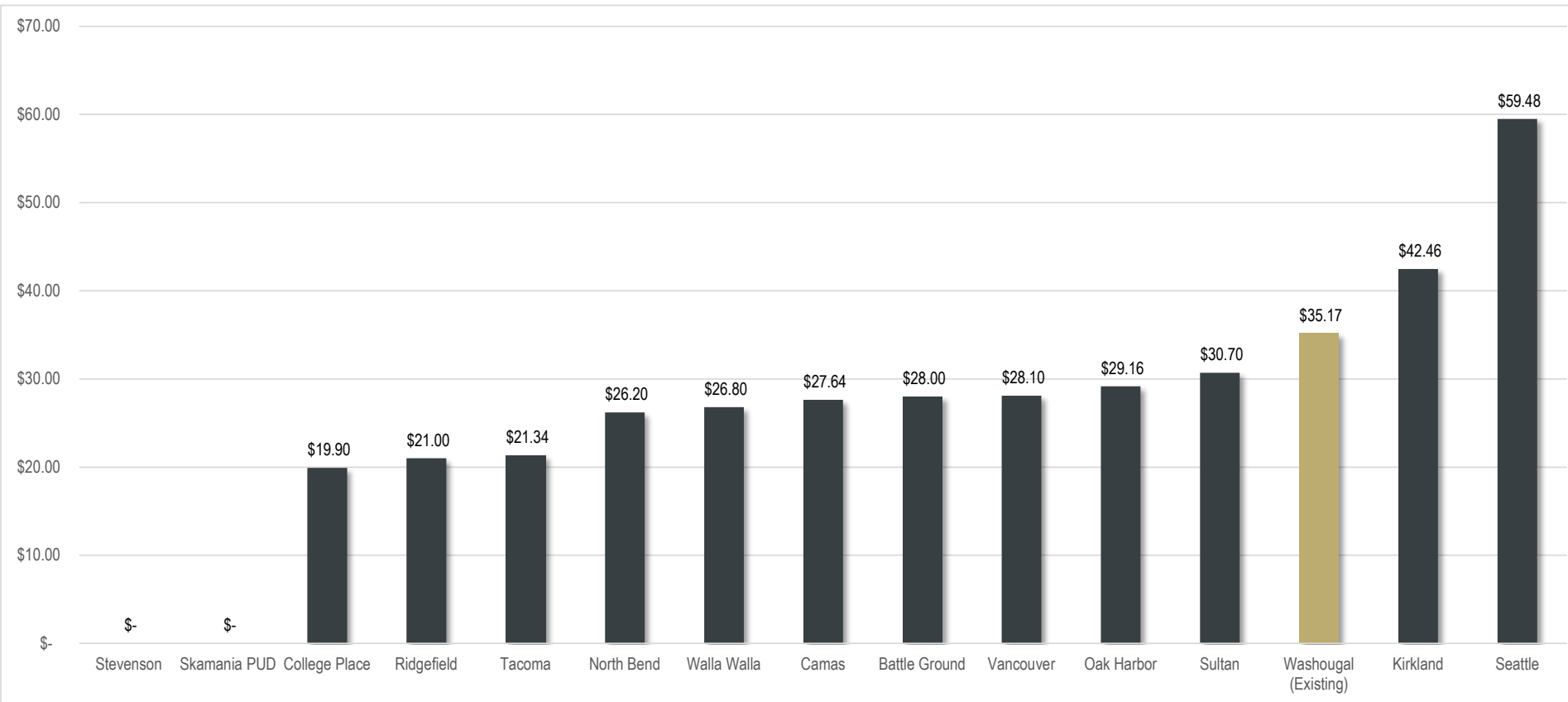
# Scenario Summary: S3

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%
Bi-Mo. Residential Bill	\$ 35.17	\$ 36.66	\$ 38.22	\$ 39.84	\$ 41.53	\$ 43.30	
\$ Bi-Mo. Difference		\$ 1.49	\$ 1.56	\$ 1.62	\$ 1.69	\$ 1.77	
Mo. Res. Rate 5.5ccf	\$ 17.59	\$ 18.33	\$ 19.11	\$ 19.92	\$ 20.77	\$ 21.65	
\$ Mo. Difference		\$ 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

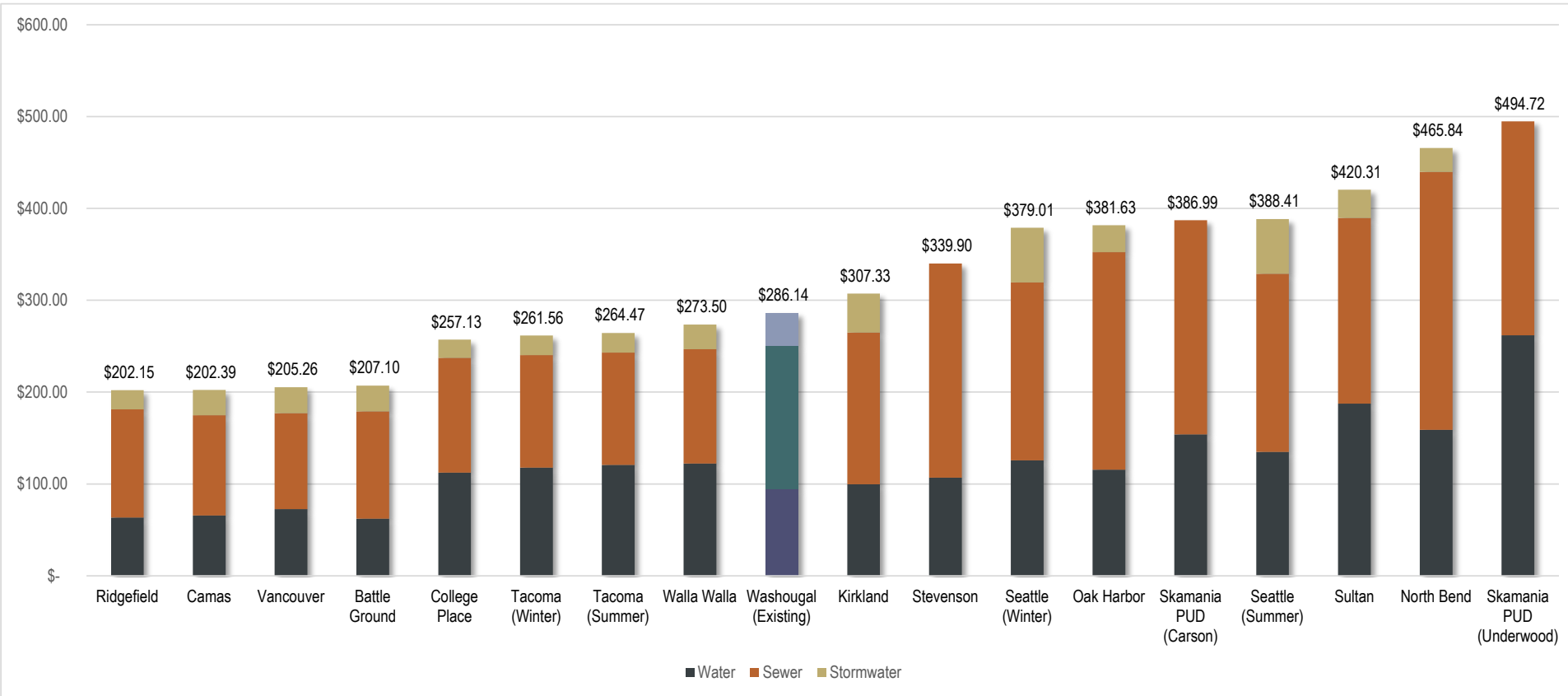
Utility	Existing	2024	2025	2026	2027	2028
Water: 3/4" Meter 15ccf Bi-Mo.	\$ 94.28	\$ 98.33	\$ 102.56	\$ 106.97	\$ 111.57	\$ 116.37
Sewer: 11ccf Bi-Monthly	156.69	162.96	169.48	176.26	179.79	183.39
Stormwater	35.17	36.66	38.22	39.84	41.53	43.30
<b>Total Bi-Monthly Res. Bill</b>	<b>\$ 286.14</b>	<b>\$ 297.95</b>	<b>\$ 310.26</b>	<b>\$ 323.07</b>	<b>\$ 332.89</b>	<b>\$ 343.06</b>
\$ 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
<b>Total Monthly Res. Bill</b>	<b>\$ 143.07</b>	<b>\$ 148.98</b>	<b>\$ 155.13</b>	<b>\$ 161.54</b>	<b>\$ 166.45</b>	<b>\$ 171.53</b>
\$ 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 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.



# 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)

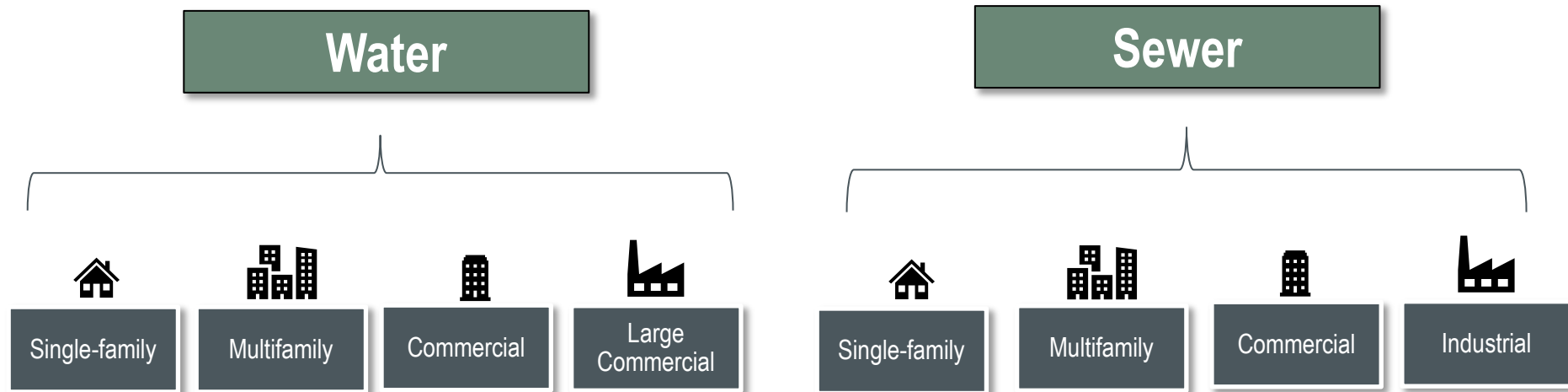
# What is Cost of Service?

- **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**

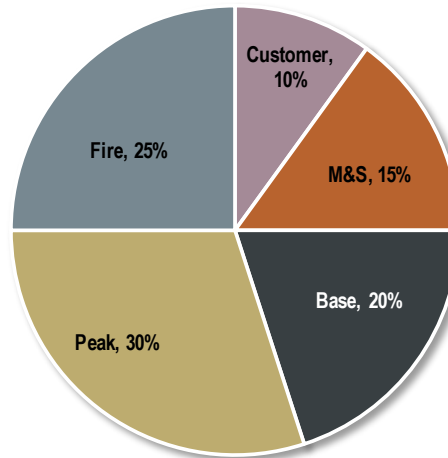
Water Utility Functions*	Sewer Utility Functions*
• Customer	• Customer
• Meters & Services	• Flow
• Base Demand (avg. use)	• Strength
• Peak Demand (peak use)	
• Fire Protection	

- **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**

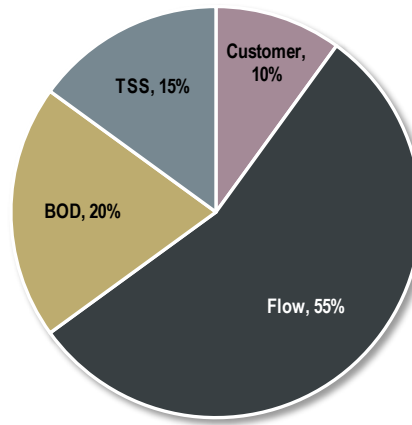
These are the costs associated with establishing, maintaining, and serving water customers and tend to include administrative, billing, and customer service costs.

**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

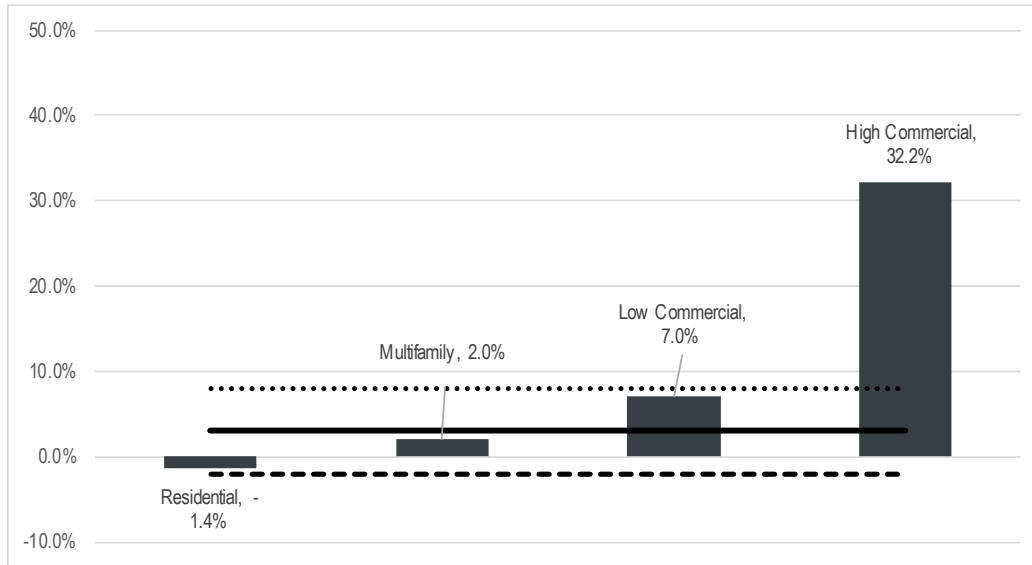
Costs related to strength of sewage processed related to total suspended solids (TSS).

## 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%
<b>Total</b>	<b>\$ 3,068,600</b>	<b>100.0%</b>	<b>\$ 3,160,658</b>	<b>100.0%</b>	<b>\$ 92,058</b>	<b>3.00%</b>

**EXAMPLE ONLY**



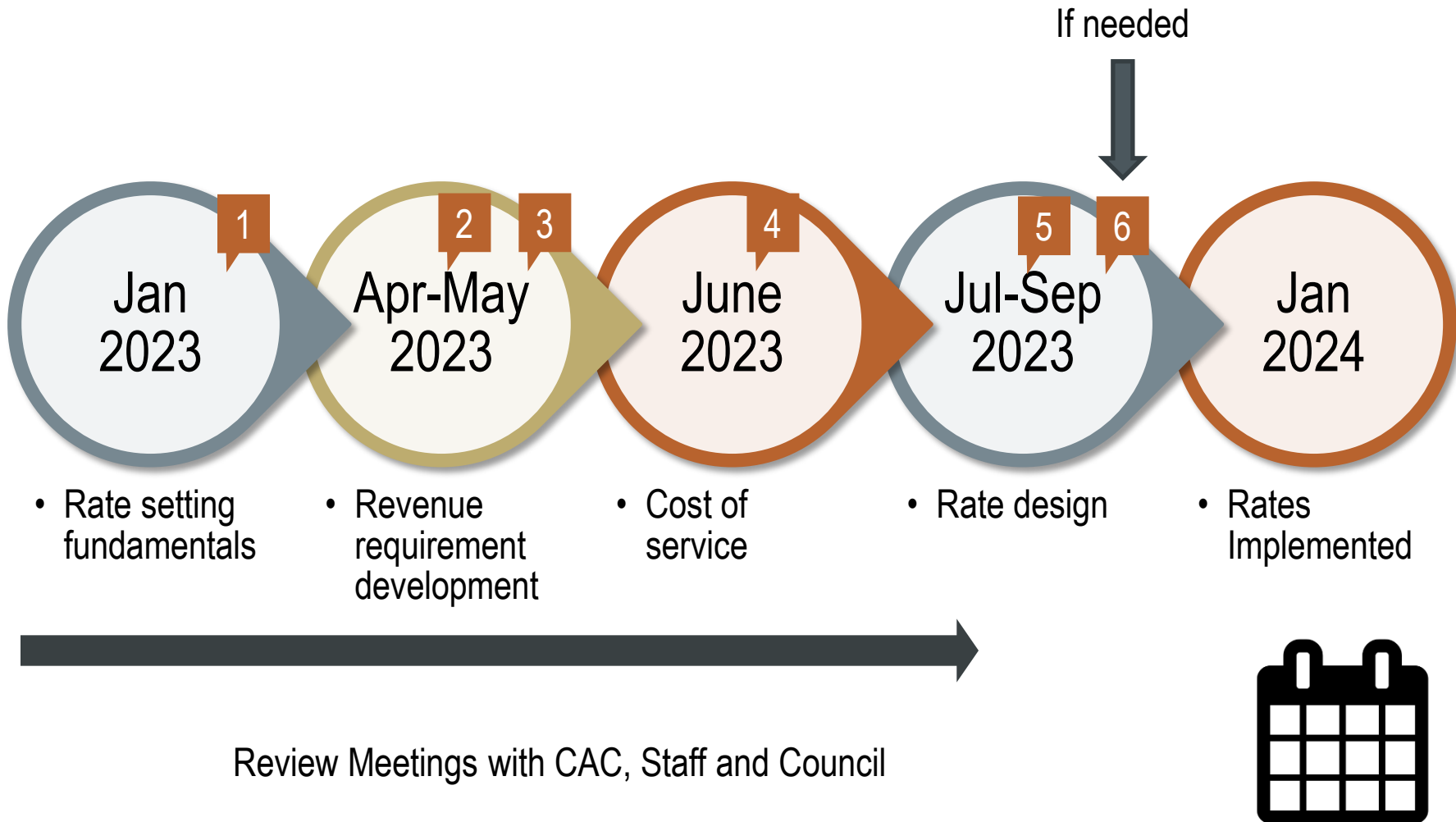
## Cost of Service Results: Phase-In (Sewer)

- 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%
<b>Total</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>

**EXAMPLE ONLY**

# Wrap-up & Next Steps



# Thank you!

[www.fcsgroup.com](http://www.fcsgroup.com)



# Appendix



# Financial Policies

Policy	Purpose	Target
<b>Operating Reserve</b>	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
<b>Capital Contingency Reserve</b>	To meet emergency repairs, unanticipated capital, and project cost overruns	1% of assets value
<b>Replacement Reserve Funding (RRF)</b>	Promote ongoing system replacement through reinvestment in the system	Phase-in towards annual depreciation expense
<b>Debt Service Coverage (DSC)</b>	Compliance with existing loan/debt covenants and maintain credit worthiness for future debt issuance	Target 2.00; Minimum Requirement 1.25
<b>Rate Setting</b>	A multi-year financial plan	Five-year plan 2024-2028
<b>Revenue Sufficiency</b>	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