



Council Meeting

Rate Study Update

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September 5, 2023



Agenda

- **Overview of the rate setting process**
- **Background & today's focus**
- **Key assumptions**
- **Financial policies**
- **Revenue requirement**
 - » Water
 - » Sewer
- **Next steps**
- **Questions / discussion**



Overview of Rate Setting Process

Fiscal Policies – Set the Management Foundation

Step 1:
Revenue Requirement
(defining overall needs)

Revenue

Debt

Reserves

O&M

Capital

Step 2:
Design Rates
(collect target revenue)

Fixed Charge

Variable Charge



Background

- Previous study completed in 2018
- Revenue requirement findings – 2018 study summary

Utility	Adopted Annual Rate Strategy				
	2019	2020	2021	2022	2023
Water	5.65%	5.65%	5.65%	5.65%	5.65%
Sewer	3.30%	3.30%	3.30%	3.30%	3.30%
Stormwater	3.00%	3.00%	3.00%	3.00%	3.00%

Utility	Existing	Average Residential Monthly Bill				
		2019	2020	2021	2022	2023
Water	\$ 29.11	\$ 30.80	\$ 32.53	\$ 34.39	\$ 36.29	\$ 38.33
Sewer	47.35	48.89	50.51	52.16	53.90	55.67
Stormwater	11.69	12.04	12.40	12.77	13.16	13.55
Total	\$ 88.15	\$ 91.73	\$ 95.44	\$ 99.32	\$ 103.35	\$ 107.55
Total \$ Mo. Difference		\$ 3.58	\$ 3.71	\$ 3.88	\$ 4.03	\$ 4.20
Total % Difference		4.06%	4.04%	4.07%	4.06%	4.06%

Notes:

1. Water assumes 3/4" meter & 10ccf per month consumption.
2. Sewer assumes 6ccf per month consumption based on winter monthly average usage.

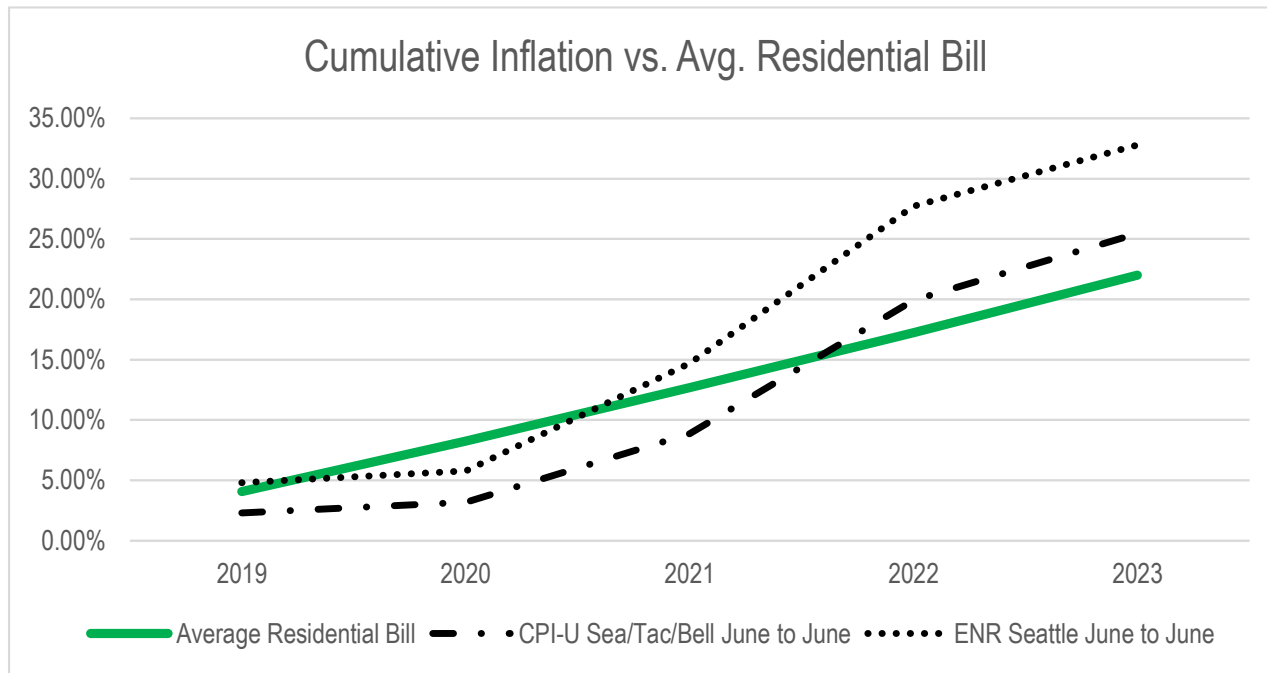


Background (continued)

- » Rate adjustments were needed to
 - Support the ongoing capital improvement program (CIP) and associated debt financing
 - Increases in operating & maintenance expenses
- **Updated System Development Charges (SDCs)**
 - » Eliminated class based SDCs
 - Independent study to be performed for any new industrial customers connecting to the City
 - » Consolidated area specific charges into “city-wide” charges

Today's Focus

- **Significant changes have occurred since the completion of the last study**
 - » Increased inflation due to the global pandemic and supply chain issues



- » Completion of water system plan (WSP) and general sewer plan (GSP) identified additional system improvements



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





Key Assumptions

- **Study period: 2023 – 2028**
 - » Projected through 2043
- **Revenue based on historical data, budget and forecast assumptions**
 - » 2022 billing statistics used as baseline for rate revenue forecasting
 - » 2023 and 2024 budgets used as baseline for non rate revenue
 - » Annual growth set at 1.50% per year
- **O&M expenses based on 2023 and 2024 budgets and escalated with**
 - » General cost inflation: 4.0% in 2025, 3.0% thereafter
 - » Construction cost inflation: 6.0% in 2024, 4.0% in 2025, 3.5% thereafter
 - » Labor cost inflation: 4.0% in 2025, 3.0% thereafter
 - » Benefits cost inflation: 6.0% per year



Key Assumptions (continued)

- **Taxes**

- » Water state excise tax: 5.029%
- » Sewer state excise tax: 3.852% on collection share of revenue (39.00%)
- » B&O tax rate: 1.75% on non rate revenue, SDC revenue and sewer treatment & transmission revenue (61.00%)
- » City taxes: 2.0% (assessed on top of the bill)

- **Future debt: revenue bonds**

- » Term: 20-year
- » Interest: 5.00%
- » Issuance cost: 1.00%



Financial Policies

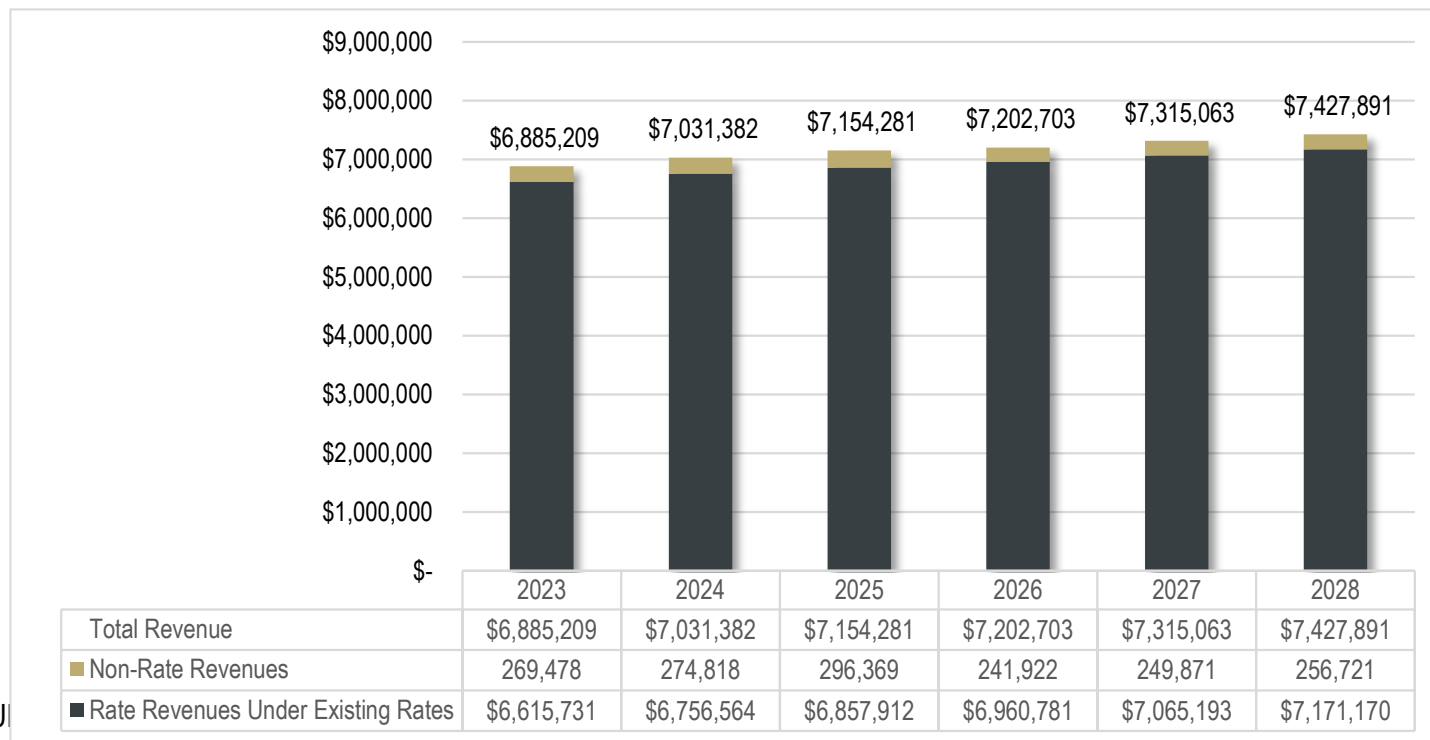
Policy	Purpose	Target
Operating Reserve	Liquidity cushion to accommodate cyclical cash flow fluctuations	All utilities: 18% or 66 day of O&M
Capital Contingency Reserve	To meet emergency repairs, unanticipated capital, and project cost overruns	Water: \$250k Sewer: \$750k Stormwater: \$100k
Debt Service Coverage (DSC)	Compliance with existing loan/debt covenants and maintain credit worthiness for future debt issuance	Internal Policy: 2.50 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

The background of the slide features a close-up photograph of a water droplet suspended in mid-air, just above a pool of water where it has just landed, creating concentric ripples. The entire image has a warm, golden-yellow color cast. In the upper portion, behind the droplet, is a faint line graph with a grid. The y-axis on the left is labeled with values 64, 72, 80, 88, and 96. The x-axis at the bottom has labels 60, 70, 80, 90, and 100. The graph shows a fluctuating line with several peaks and troughs. A dark grey arrow-shaped banner points from the left towards the center, containing the word 'Water' in white.

Water

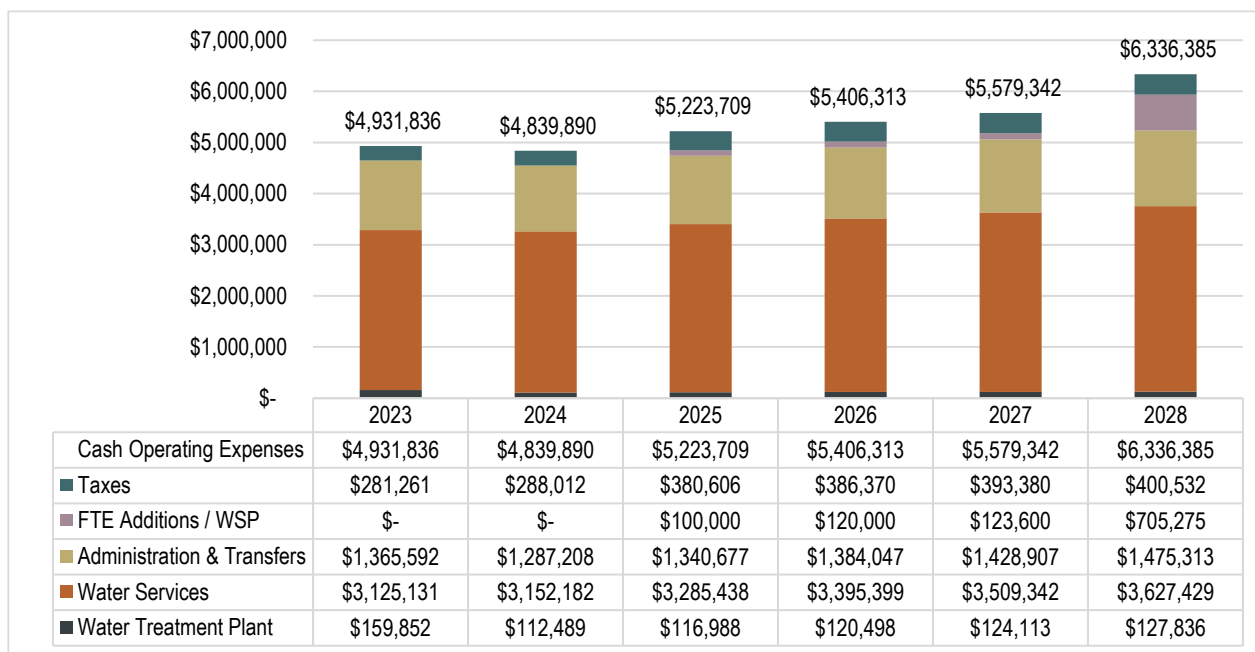
Key Factors: Existing Revenue

- **Focus period: 2023-2028**
 - » Rate revenue based on 2022 actual data plus 1.5% growth
 - » Non rate revenue consists of water hook-up fees, turn off fees, penalties, investment interest, leases, rents and charges and miscellaneous revenues
- **Total existing operating revenue: \$6.9 million to \$7.4 million**



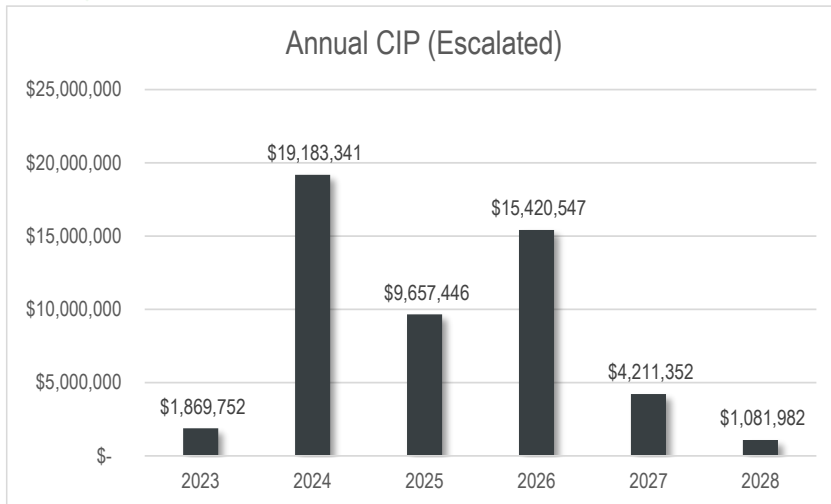
Key Factors: Operating Expenses

- **Forecast based on 2023 and 2024 budgets**
 - » Includes 1 additional FTE in 2026 for PFAS compliance
 - » Includes a WSP update in 2026,
 - » Additional equipment expenditures every three years starting in 2025
 - » Costs inflated between 6.0%-3.0% per year
 - Average inflation (net of taxes and additions) of 3.5% 2025-2028
- **Total O&M expenses: \$4.9 million to \$6.3 million**





Key Factors: Capital



Year	2023\$	Annual CIP (Escalated)
2023	\$ 1,869,752	\$ 1,869,752
2024	18,097,491	19,183,341
2025	8,760,382	9,657,446
2026	13,515,130	15,420,547
2027	3,566,166	4,211,352
2028	885,237	1,081,982
Total	\$ 46,694,158	\$ 51,424,418
Long Term	36,010,916	52,853,305
Total	\$ 82,705,074	\$ 104,277,722

- **Major projects include**

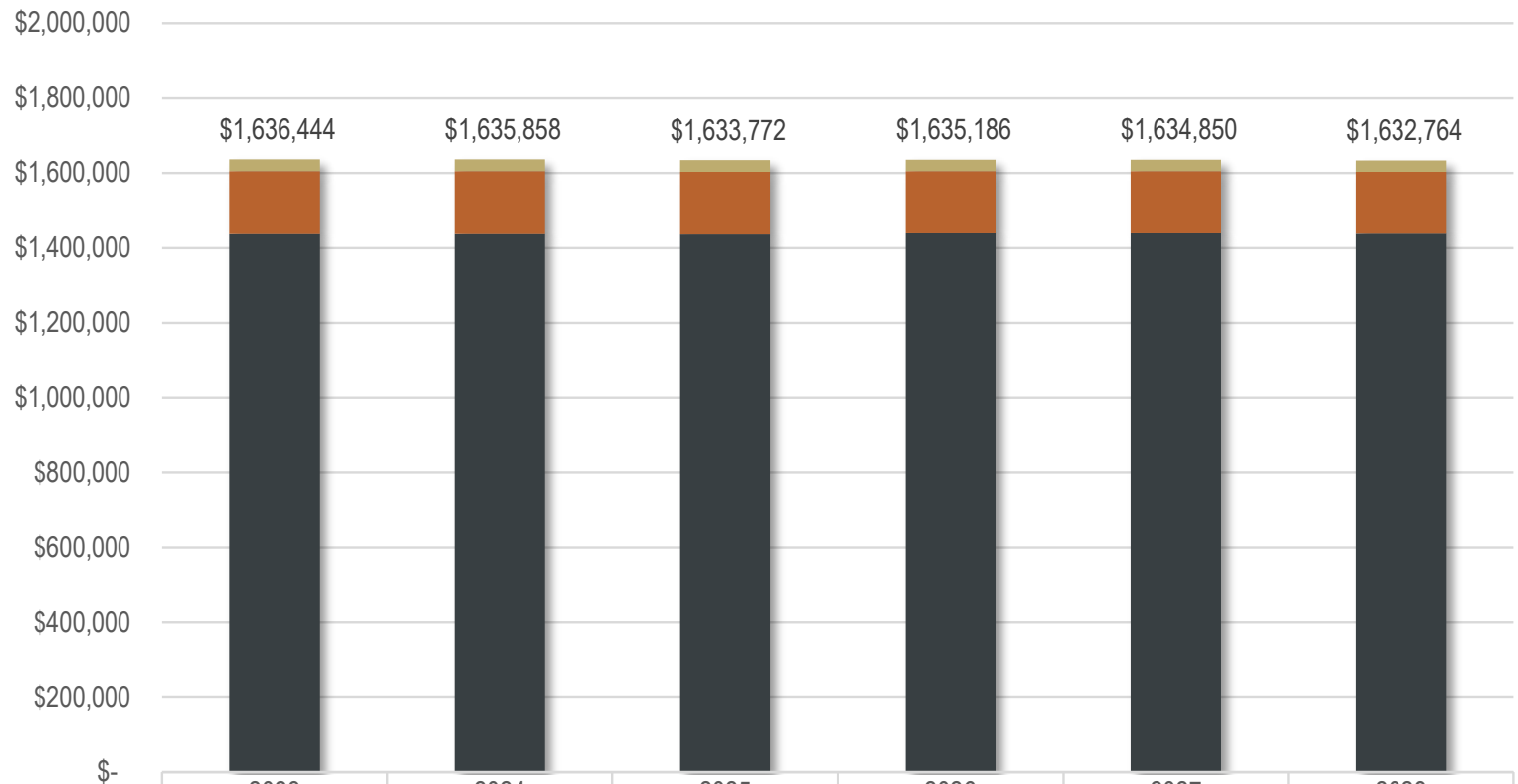
- » Washougal wellfield improvements, 343 zone transmission upsizing, new booster stations and capacity improvements, 343 zone reservoir, PFAS treatment and lower prune hill pump station and reservoir

- **Capital funded through existing reserves, cash financing, capital contributions, SDCs, timber harvest revenue and new debt**

- » New debt: varies by scenario



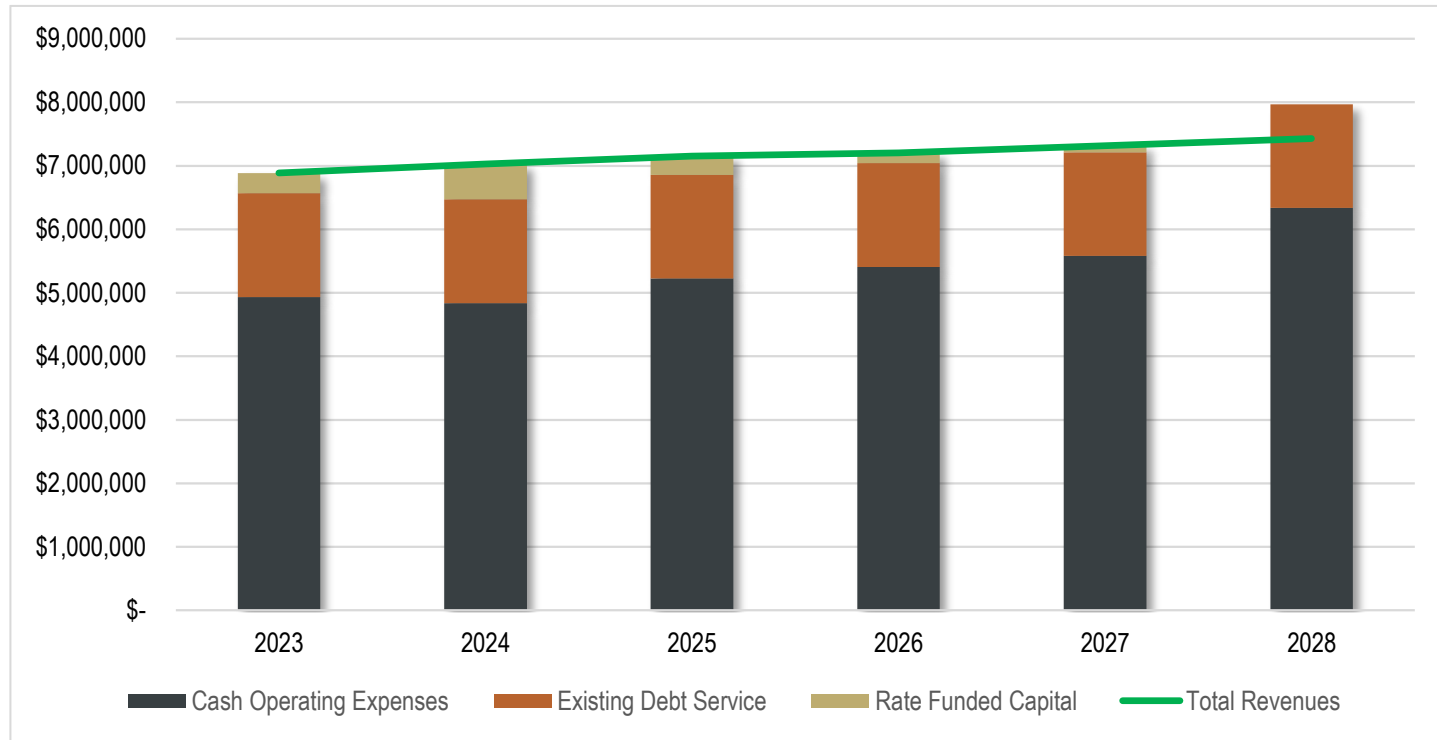
Key Factors: Existing Debt



	2023	2024	2025	2026	2027	2028
Total Existing Debt	\$1,636,444	\$1,635,858	\$1,633,772	\$1,635,186	\$1,634,850	\$1,632,764
2009 DWSRF Rec. Camas Well #14	\$31,478	\$31,192	\$30,905	\$30,619	\$30,333	\$30,047
2012 PWTF	\$167,967	\$167,167	\$166,367	\$165,567	\$164,767	\$163,967
2019 Water Revenue Bonds	\$1,437,000	\$1,437,500	\$1,436,500	\$1,439,000	\$1,439,750	\$1,438,750



Revenue Requirement: Baseline

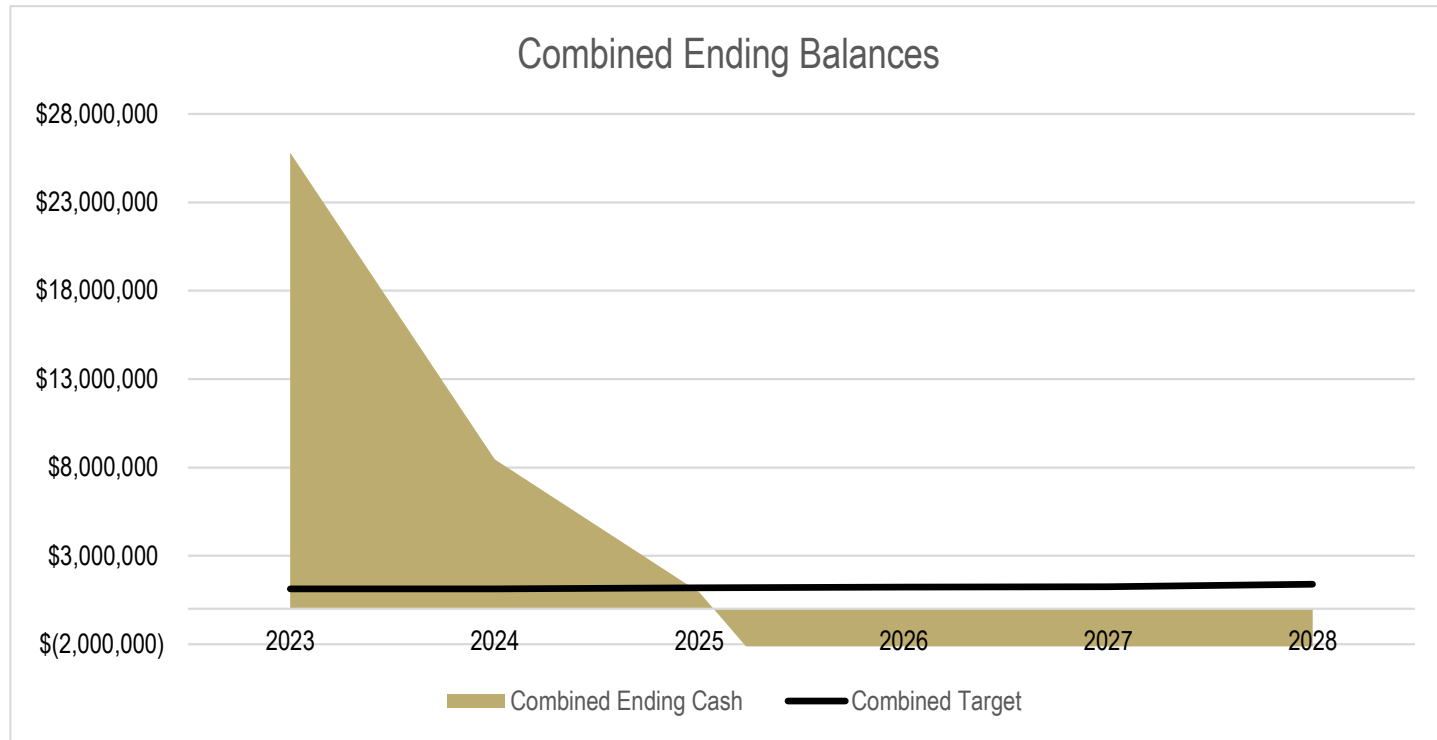


- **Revenues at existing rates**

- » Sufficient to cover O&M and existing debt through 2027
 - Cannot cover existing debt starting 2028
- » Very limited capacity for capital funding (rate or new debt service)



Revenue Requirement: Baseline



- **With revenues at current rates**
 - » Existing reserves would be depleted by 2026



Scenarios for Consideration

- **Scenario for consideration**

- » S1: fully fund ongoing obligations and policies
- » S2: increased debt financing and reduced coverage

Scenarios	2023	2024	2025	2026	2027	2028	Total
Annual Rate Increases							
S1: Full Funding		7.50%	7.50%	7.50%	3.00%	3.00%	
S2: Reduced Policies		4.75%	4.75%	4.75%	4.75%	4.75%	
Avg. Residential Monthly Bill (3/4" Meter 10ccf)							
S1: Full Funding	\$ 38.33	\$ 41.20	\$ 44.30	\$ 47.62	\$ 49.05	\$ 50.52	
S2: Reduced Policies	38.33	40.15	42.06	44.06	46.15	48.34	
Avg. Residential Monthly Bill Difference							
S1: Full Funding	\$ 2.87	\$ 3.09	\$ 3.32	\$ 1.43	\$ 1.47		
S2: Reduced Policies	1.82	1.91	2.00	2.09	2.19		
New Debt (Revenue Bonds)							
S1: Full Funding	\$ -	\$ -	\$ -	\$ 13,200,000	\$ -	\$ -	\$ 13,200,000
S2: Reduced Policies	-	-	-	15,300,000	-	-	15,300,000
Annual Coverage (2.50 Policy Target 1.25 Min. Covenant Target)							
S1: Full Funding	2.86	3.64	4.53	2.51	2.70	2.59	
S2: Reduced Policies	2.86	3.48	4.17	2.05	2.28	2.22	

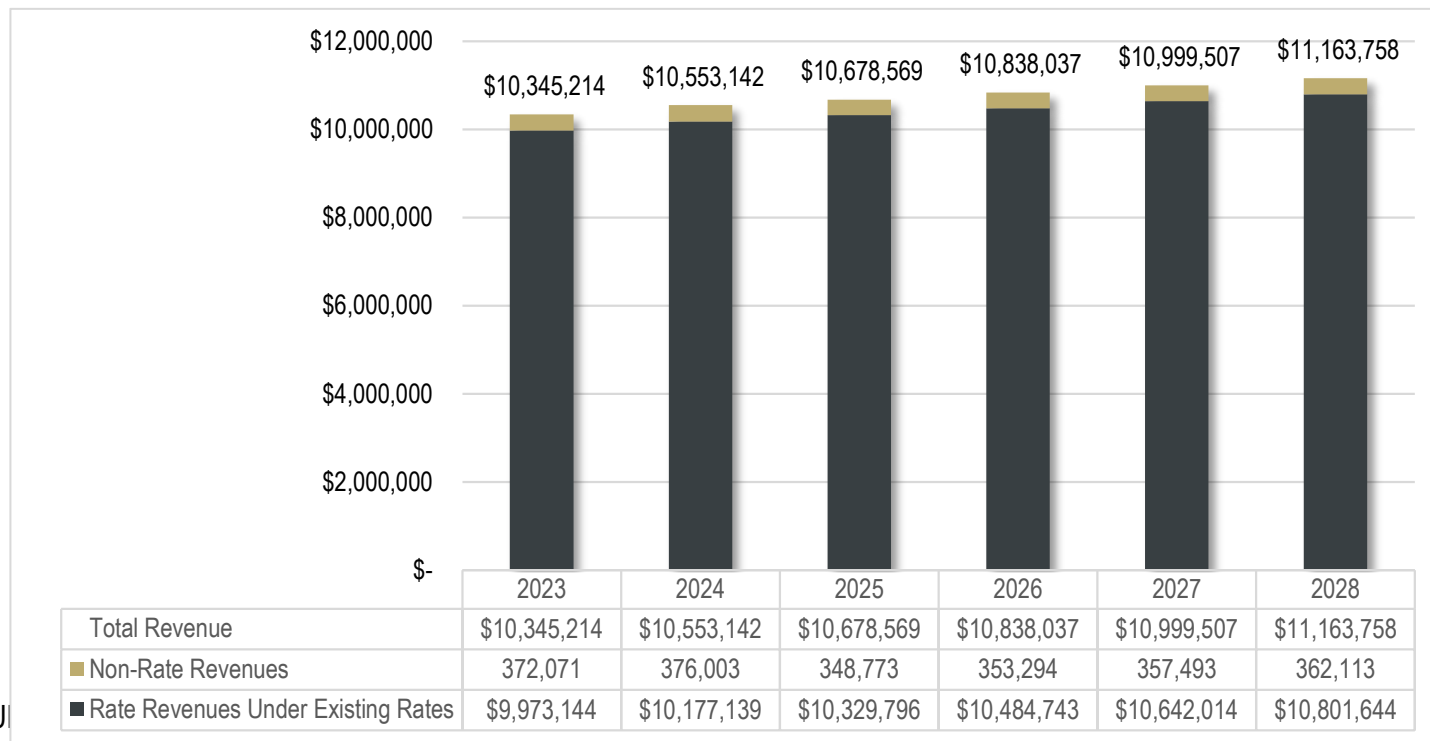
- S1 projects an additional \$5.5MM in revenue bonds in 2029
- S2 projects an additional \$8.1MM in revenue bonds between 2029 and 2031



Sewer

Key Factors: Existing Revenue

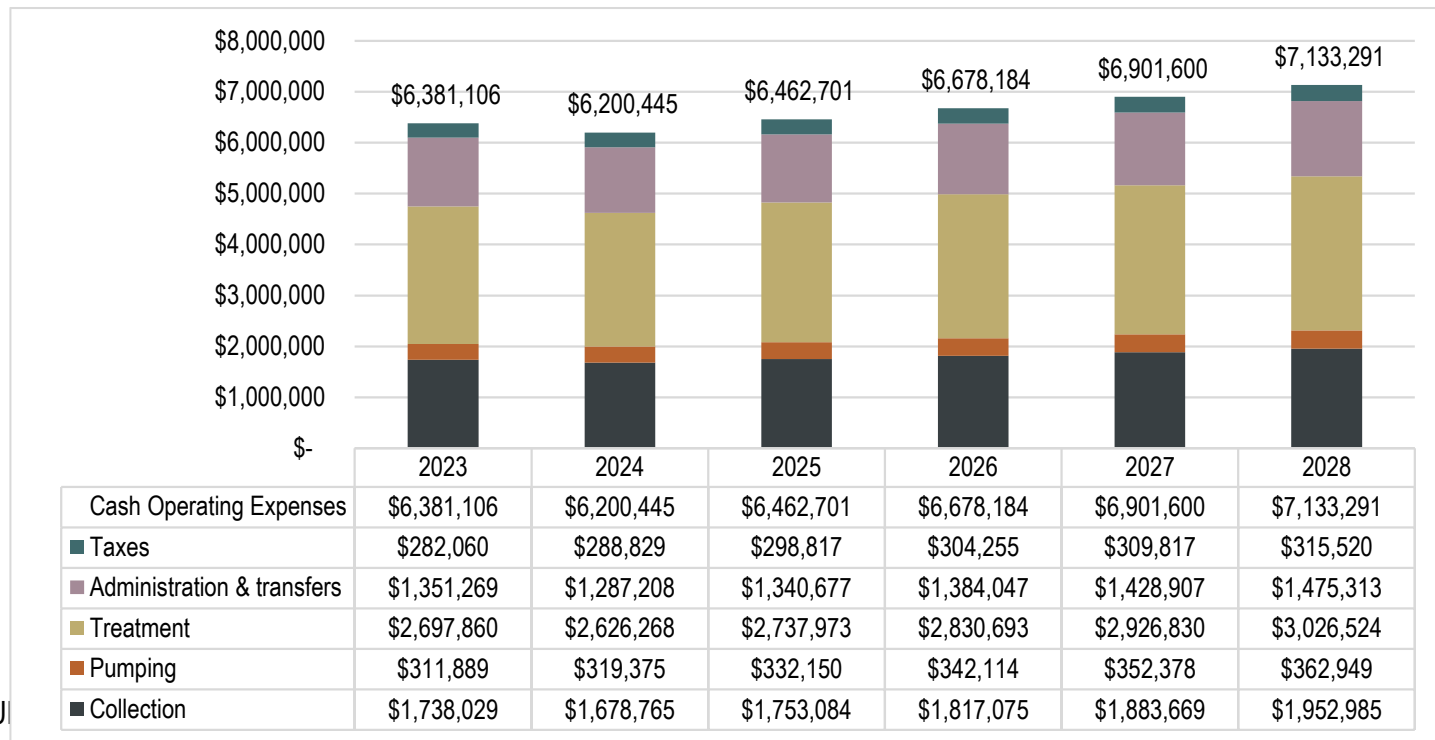
- **Focus period: 2023-2028**
 - » Rate revenue based on 2022 actual data plus 1.5% growth
 - » Non rate revenue consists of penalties, inspections, investment interest, leases, rents and charges and miscellaneous revenues
- **Total existing operating revenue: \$10.3 million to \$11.2 million**





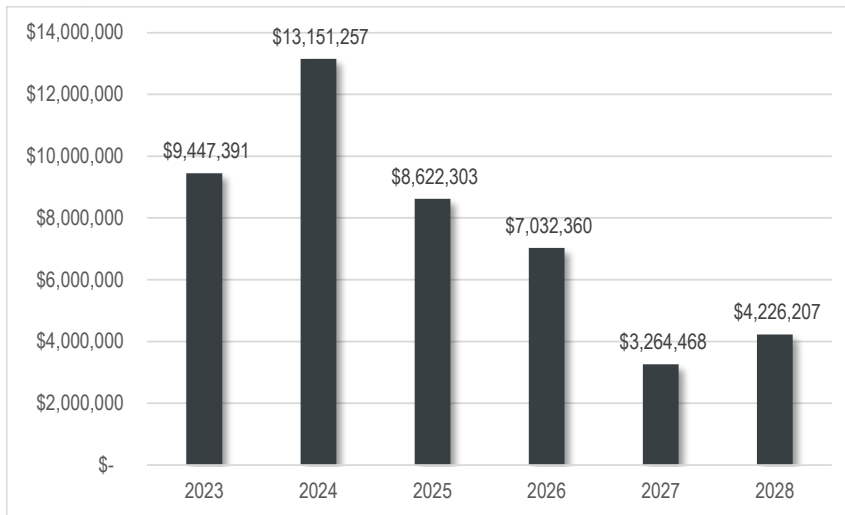
Key Factors: Operating Expenses

- **Forecast based on 2023 and 2024 budgets**
 - » Costs inflated between 6.0%-3.0% per year
 - Average inflation (net of taxes and additions) of 3.6% 2025-2028
- **Total O&M expenses: \$6.4 million to \$7.1 million**





Key Factors: Capital

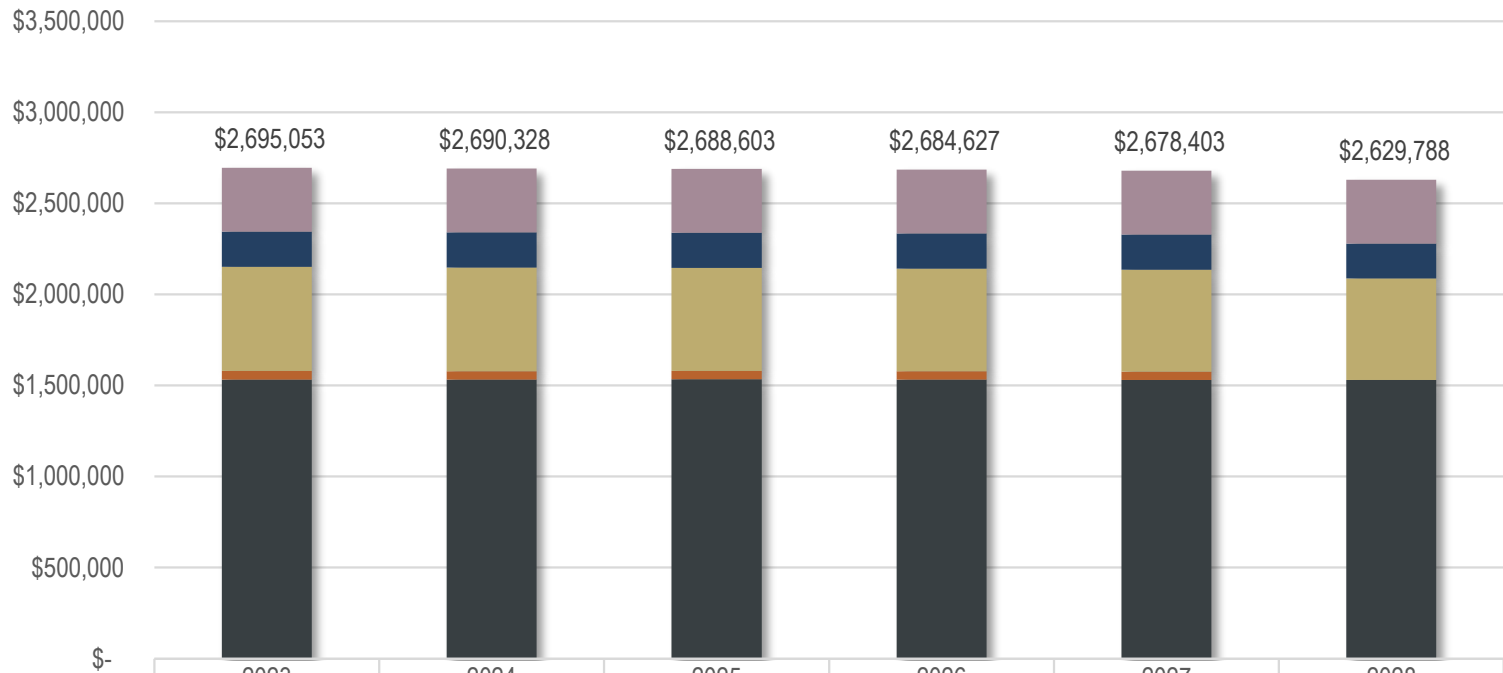


Year	2023\$	Annual CIP (Escalated)
2023	\$ 9,447,391	\$ 9,447,391
2024	12,406,847	13,151,257
2025	7,821,392	8,622,303
2026	6,163,417	7,032,360
2027	2,764,346	3,264,468
2028	3,457,725	4,226,207
Total	\$ 42,061,119	\$ 45,743,986
Long Term	42,250,546	62,584,991
Total	\$ 84,311,665	\$ 108,328,977

- **Major projects include**
 - » Pump station improvements
 - » WWTP maintenance
 - » WWTP upgrades
- **Capital funded through existing reserves, cash financing, SDCs and new debt**



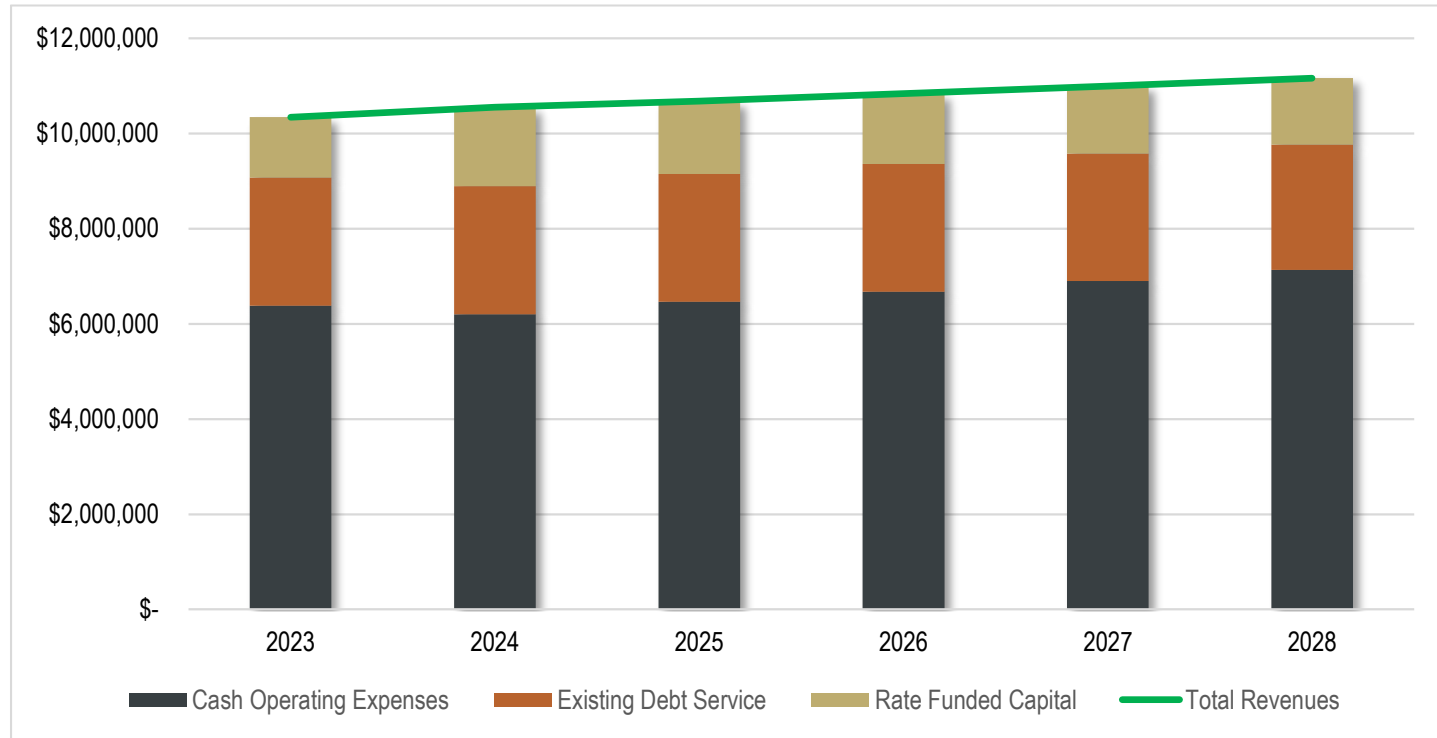
Key Factors: Existing Debt



	2023	2024	2025	2026	2027	2028
Total Existing Debt	\$2,695,053	\$2,690,328	\$2,688,603	\$2,684,627	\$2,678,403	\$2,629,788
2011 DOE Loan WWTP Imp.	\$349,847	\$349,847	\$349,847	\$349,847	\$349,847	\$349,847
2012 PWTL Sewer Main	\$193,993	\$193,520	\$193,046	\$192,573	\$192,100	\$191,627
WWTP Phase II	\$571,921	\$569,145	\$566,368	\$563,592	\$560,816	\$558,039
WWTP Improvements II	\$46,267	\$46,042	\$45,816	\$45,590	\$45,365	
2015 Ref. Rev. Bond N. Shore	\$1,533,025	\$1,531,775	\$1,533,525	\$1,533,025	\$1,530,275	\$1,530,275



Revenue Requirement: Baseline

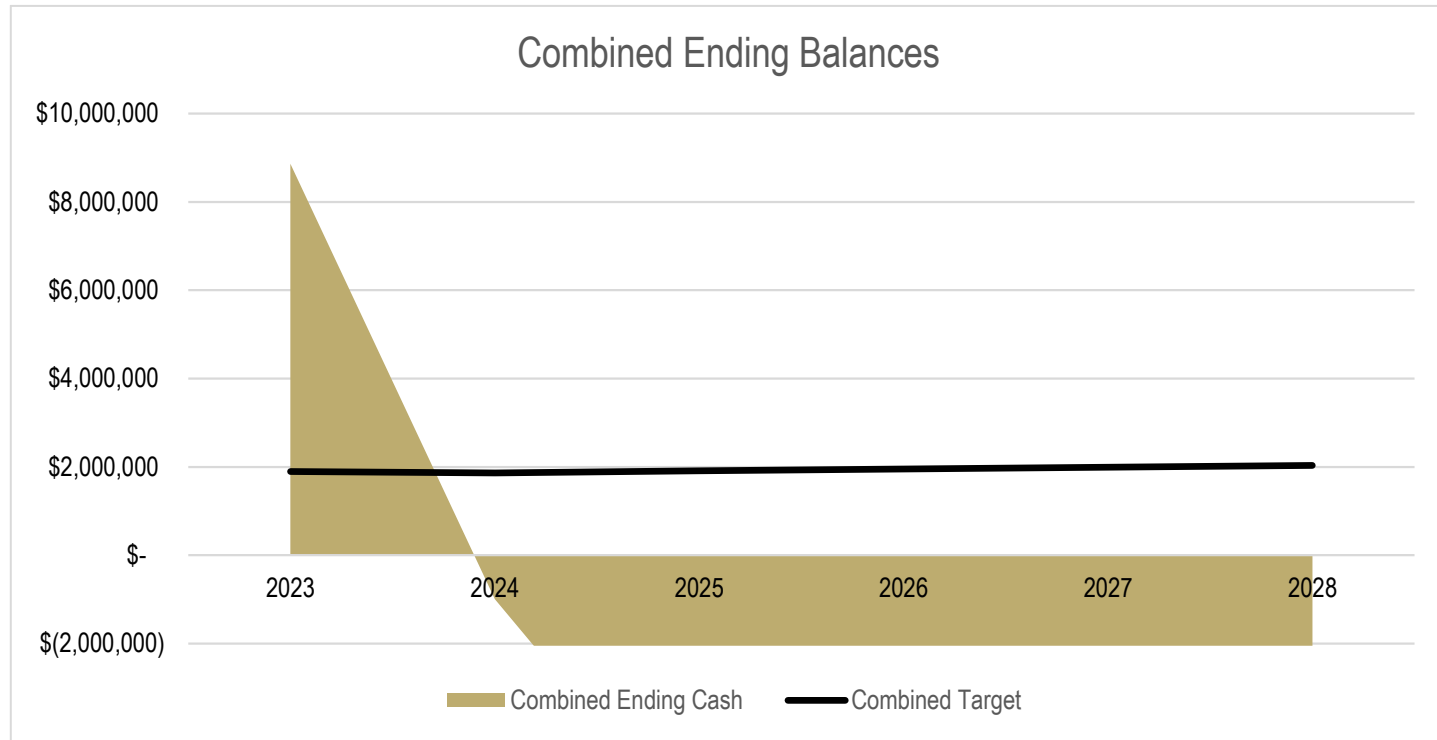


- **Revenues at existing rates**

- » Sufficient to cover O&M and existing debt through rate setting period
- » Provides capacity for some rate funded capital



Revenue Requirement: Baseline



- **With revenues at current rates**
 - » Existing reserves would be depleted by 2024



Scenario for Consideration

- Fully fund ongoing obligations and policies

Scenarios	2023	2024	2025	2026	2027	2028	Total
Annual Rate Increase		3.25%	3.25%	3.25%	3.25%	3.25%	
Avg. Res. Mo. Bill (6ccf)	\$ 55.67	\$ 57.48	\$ 59.35	\$ 61.28	\$ 63.27	\$ 65.33	
Avg. Res. Mo. Bill Difference	\$ 1.81	\$ 1.87	\$ 1.93	\$ 1.99	\$ 2.06		
New Debt (Rev. Bonds)	\$ -	\$ 9,000,000	\$ -	\$ 4,500,000	\$ -	\$ -	\$ 13,500,000
Annual Coverage After Increase	3.54	3.58	3.84	3.58	3.90	4.25	

» An additional \$14.50MM revenue bond is anticipated in 2029

A background image showing a business meeting. Two people in business attire are seated at a table. One person is holding a pen and pointing at a tablet displaying a bar chart. The other person is also pointing at the tablet. A laptop is open on the table. A glass of water is visible. The image is overlaid with a network of glowing lines and dots, suggesting a digital or data-driven environment.

Rate Design



Overview of Rate Design

- **Development of fixed and variable charges assessed to customers**



Aligns fixed and variable costs with fixed and variable revenue sources



Generates sufficient revenue to meet utility requirements



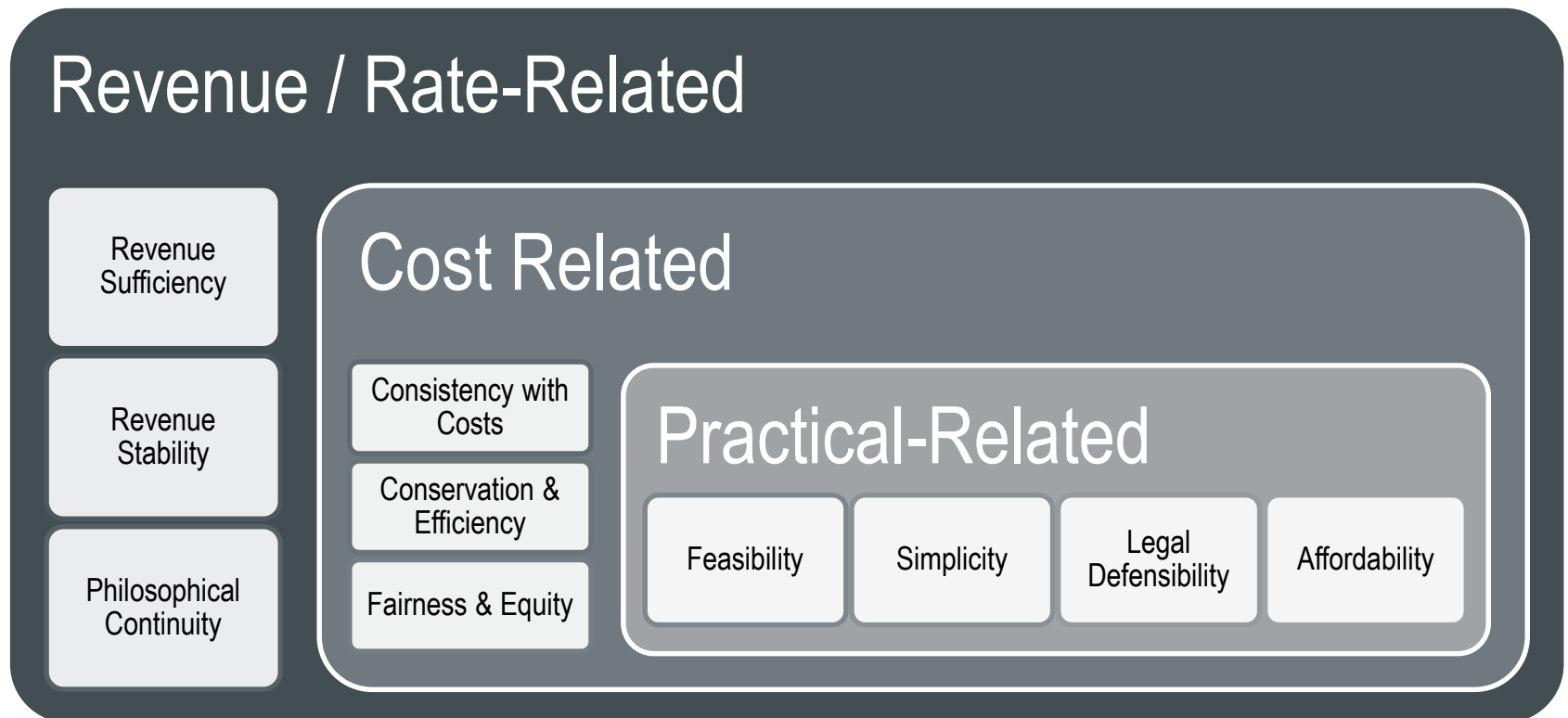
Meet goals and objectives of the utility (e.g., conservation)



Evaluate monthly rate impact for different levels of use

Rate Design Goals

- No structure can completely achieve all the objectives – it's a balancing act



Source: *Principles of Public Utility Rates*, Bonbright, Danielson and Kamerschen

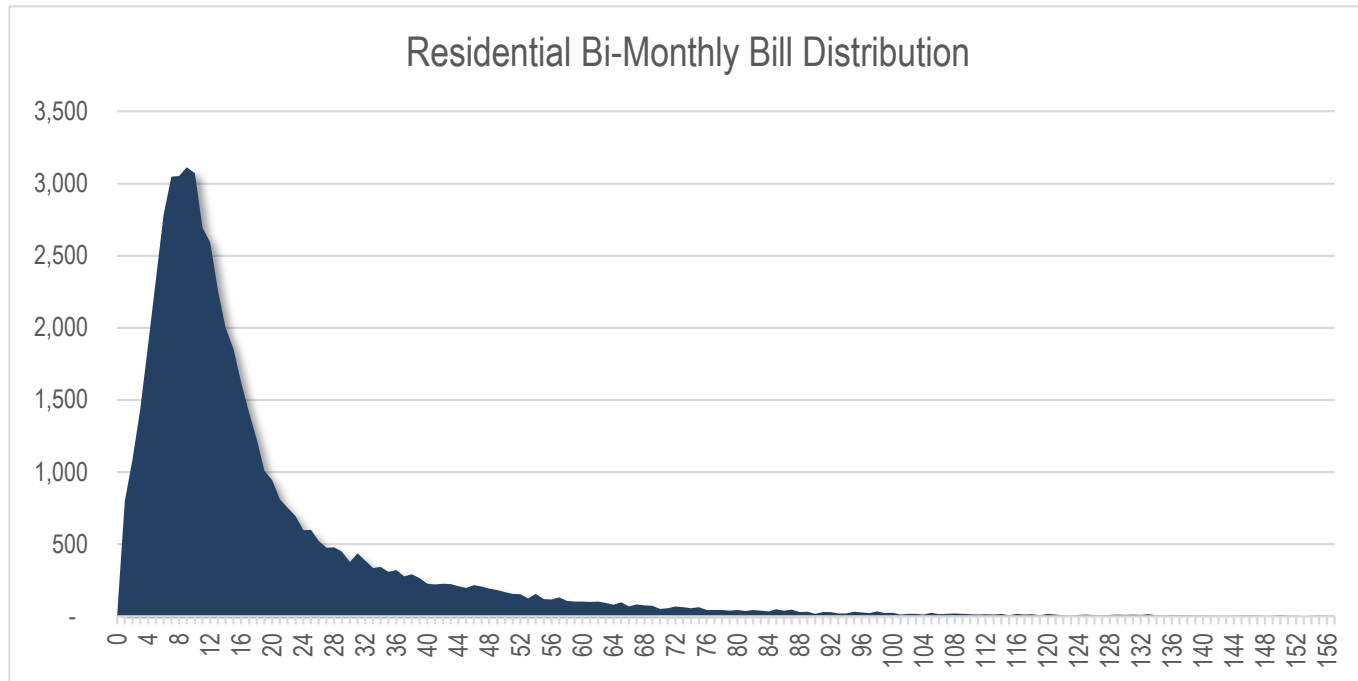


Considerations for Discussion

- **No structural changes**
 - » Apply increases on an across-the-board basis – equally to fixed and variable charges
- **Review level of fixed versus variable charges**
 - » Enhance revenue stability or conservation messaging
- **Tiered water rates for residential customers**
 - » Encourage conservation
 - Pros
 - Discourages wasteful use of resources
 - May defer additional capacity investments in the long term
 - Addresses DOH water use efficiency rules in WSP planning process
 - Cons
 - Initial transition will impact customers differently (higher users pay proportionally more)
 - Reduction of billable volume may impact the overall revenue stability unless elasticity is considered



2022 Residential Water Use Data



2022 Data	Jan	Mar	May	Jul	Sep	Nov	Annual Average
Bi-Monthly Average Usage							
Bi-Mo. Average	13	12	14	13	37	30	20
25% Percentile	7	6	8	7	14	12	8
50% Percentile	10	10	11	10	28	23	12
75% Percentile	15	14	16	15	48	38	22
Monthly Average Usage							
Mo. Average	7	6	7	6	18	15	10
25% Percentile	4	3	4	4	7	6	4
50% Percentile	5	5	6	5	14	12	6
75% Percentile	8	7	8	8	24	19	11



Next Steps

- **Incorporate feedback**
 - » Water:
 - S1: Full Obligations 7.50% - 3.00% per year
 - S2: Reduced Policies 4.75% per year
 - » Sewer: 3.25% per year
 - » Rate design considerations
- **Present stormwater and solid waste on September 18th**
- **Rates go into effect January 1st, 2024**



Questions/Discussion



Thank you!

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