



King County

Department of
Natural Resources and Parks

Wastewater Treatment Division

Wastewater Treatment Division 2025 Sewer Rate Process Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC)

At-large Committee

February 28th, 2024

Agenda & Calendar

- 1 Goals, Background and Assumptions
- 2 Preliminary Changes to CIP
- 3 Preliminary Changes to O&M
- 4 Preliminary Rate Impacts
- 5 Questions & Next Steps

Important Upcoming Dates

2025 Sewer Rate Proposal

March 6 – RWQC

March 7 – MWPAAC R&F

March 27 – MWPAAC General

Goals for 2025 Sewer Rate Development

- Increase **reliability** at West Point and across the system
- Address the most critical **asset management** needs to reduce risk
- Reflect increasing **regulatory requirements** with new projects and staff
- Accommodate **growth-related demand** with capacity enhancements
- Reflect **King County priorities**: Clean Water Healthy Habitat, Strategic Climate Action Plan, Equity & Social Justice and others
- Propose a 2025 rate and ten-year rate forecast that realistically **reflects high priority system investments**
- **Meet key financial metrics** and only charge what we can spend

Background and Assumptions

- Where we are:
 - Preliminary 2025 Sewer Rate and Financial Forecast for review and input
 - Capital project forecast updates complete mid-February for use in finalizing sewer rate projection
 - Next round Staff-proposed 2025 Sewer Rate:
 - Will integrate input from review of preliminary forecast with MWPAAC
 - Include the second decade forecast
 - Capacity charge updated on three-year cycle. No change to the 2.5% increase to \$76.09 in 2025
- Key Assumptions:
 - No change to the 2025 Sewer Rate projected last year – 5.75% increase to \$58.28 monthly
- Capital:
 - Accomplishment rate reduced through 2030 to allow time to increase staff and consultant resources, returning to 85% thereafter
 - Depreciation-based cash funding target, 10-year rolling average utilized to allow annual adjustments for rate smoothing
 - Completion of Tier 1 Asset Management projects by 2033 (before application of accomplishment rate)
 - 2040 completion date for CSO projects maintained. MDCSO contingency moved forward to align with programmatic approach
- O&M:
 - Forecast includes higher inflation assumptions through 2025 to capture recent inflationary pressures (i.e. significant electric and chemical cost increases)
 - Anticipate additional growth in Operations over the 10-year financial forecast to accommodate new requirements (i.e. additional support for capital projects, new permit requirements, and new facilities)

Capital Program

Capital Improvement Program (CIP) Preliminary Changes

Does not yet include updated forecasts for most of the active projects, full update to be complete mid-February

Project Name	Driver	2024-2033 Preliminary Impact (Escalated)
Mouth of the Duwamish	Contingency Redistribution ¹	\$430M
Elliott West WWTS	Revised Assumptions ²	\$0
University CSO, Montlake CSO, Supplemental Compliance	No Change ³	\$0
Total Change CSO		\$430M
New Conceptual Projects	Newly identified conceptual scope ⁴	\$165M
Updated Conceptual Project Forecasts	Spending year revision escalation ⁵	\$110M
Updated Current Project Forecasts	Scope development, design refinements, risk events, material pricing, labor cost increases, etc.	\$110M/TBD
Total Change Non-CSO		\$385M
Total Changes before Accomplishment Rate		\$815M

Change Driver and Impact Notes

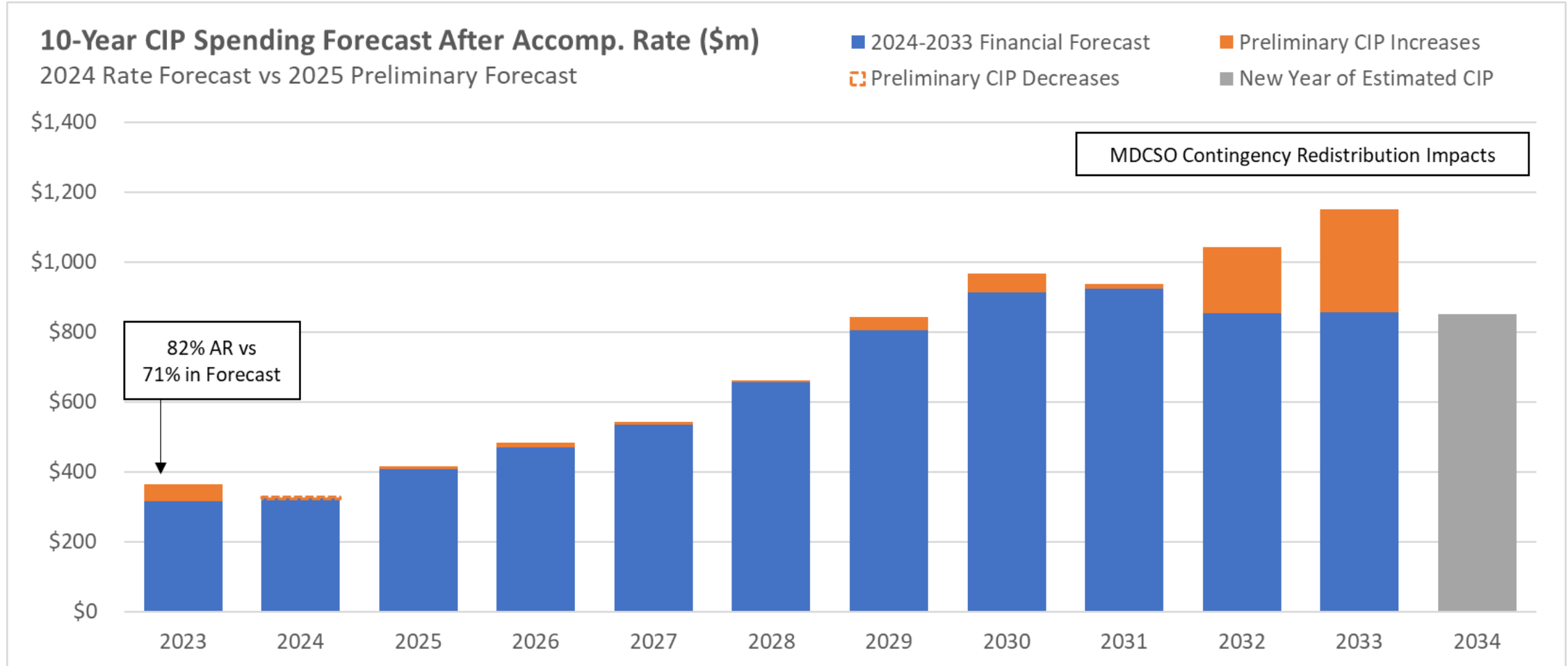
1. Mouth of the Duwamish Combined Sewer Overflow (MDCSO) contingency reallocated from 2034 to 2029-2034 to reflect likely programmatic delivery
2. Still pending West Point (WP) NPDES permit finalization
3. No revisions, final Consent Decree (CD) may warrant revisions to timing
4. North Creek West Force Main, Generator Fuel Storage Gauging, SP Aeration Tank Rehab, SP Mixed Sludge Line Replacement, Soos Creek Cascade Relief Interceptor
5. Anticipated to be offset by reductions in placeholders

Sensitivity Analysis Exclusions

- WTD share costs for Lower Duwamish Waterway CD pending CD finalization and insurance recovery
- Nutrient investments beyond first permit cycle – likely near term (2030) side-stream removal investments \$200-\$300M are not included. Potential rate impact of \$1.70 (1.4%) by 2034
- Contaminants of Emerging Concern investments
- CSO Consent decree schedule updates
- Additional investments/scope related to WP NPDES permit
- Potential climate adaptation costs

Capital Improvement Program (CIP) Forecast 2023 – 2034 Comparison

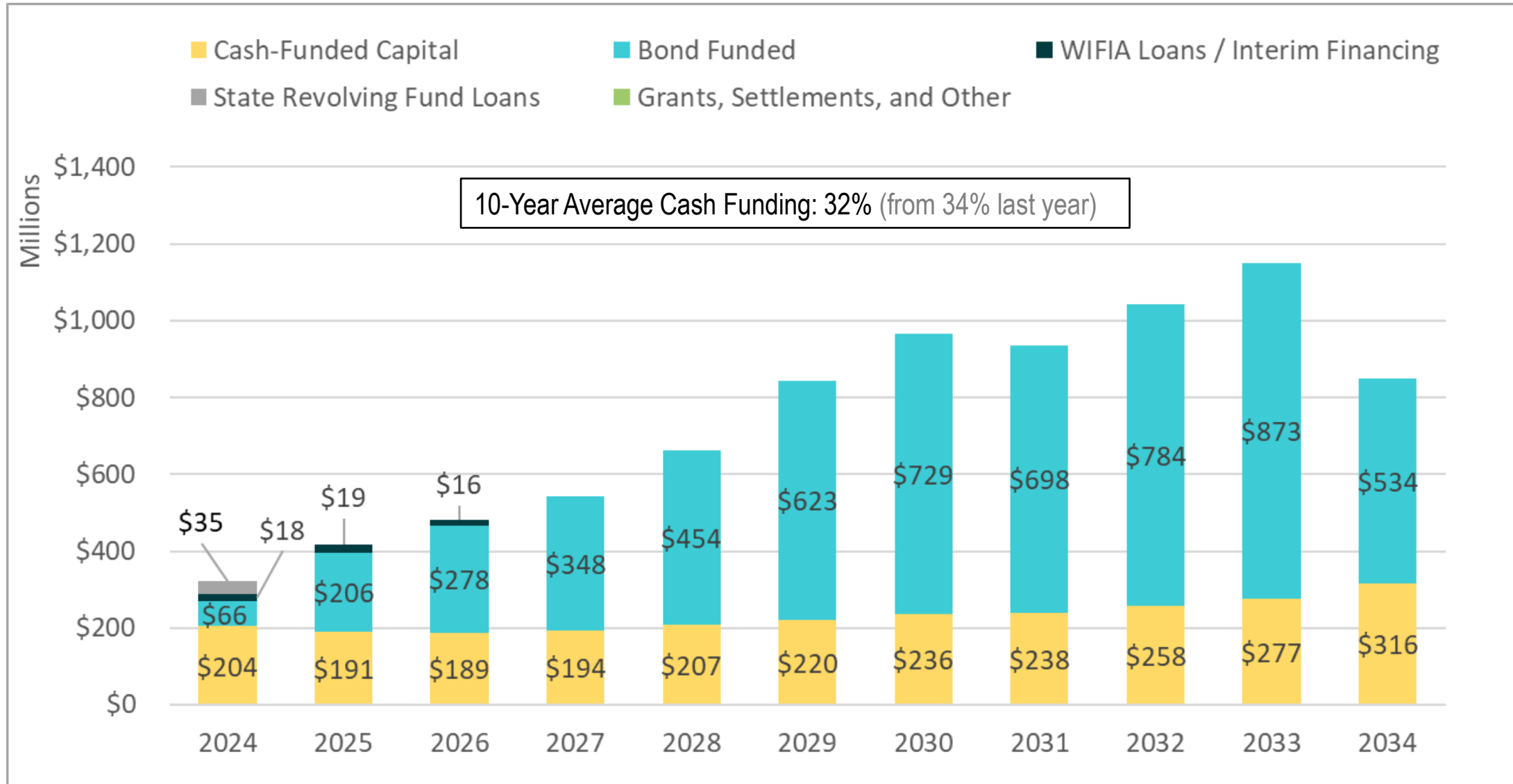
After accomplishment rate (averages 80% over this forecast period)



2025 Preliminary Rate Sensitivities	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2024-2033
Aggregated CIP Project Forecasts	\$447	\$555	\$713	\$809	\$802	\$1,076	\$1,176	\$1,102	\$1,226	\$1,353	\$1,000	\$10,259
Accomplishment Rate (AR)	72%	75%	68%	67%	82%	78%	82%	85%	85%	85%	85%	80%
Capital Spending after AR	\$323	\$416	\$482	\$543	\$661	\$843	\$966	\$942	\$1,047	\$1,156	\$850	\$8,229

Capital Funding Forecast 2024-2034

After accomplishment rate



Operating Costs

Operating (O&M) Preliminary Forecast Changes

- Base year (2025) adjustments for significant known increases such as electricity and chemicals, in addition to re-baselining where recent inflation has exceeded previous forecast assumptions.
- The growth in operating costs (O&M) assumption reflects new and expanding requirements such as enhanced cybersecurity, CEC/nutrient work, capital project participation, and added facilities such as Georgetown.
- Forecast assumptions for inflation and growth in O&M are as follows:

O&M Assumptions	2025 Forecast								
	2026	2027	2028	2029	2030	2031	2032	2033	2034
O&M Inflation	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
Growth in O&M	3.5%	3.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%

- Emerging treatment plant staffing deficiencies figure into the near-term increased rate of operating cost growth.
 - FTEs planned to support capital projects at the plants. *Capital FTEs impact operating costs minimally as they charge time primarily to capital projects*
 - FTEs to reduce growing overtime pressure of plant operations staff and meet the growing needs related to new regulations and new facilities

Over Next Several Years, WTD is proposing additional Operations staffing

- Additional Operations staff proposed to address current needs and anticipated growth over the forecast period.
- In last 10+ years, WTD has brought new facilities online with a minimal increase in Operations staffing. This has helped to keep rates lower but has required excessive overtime which is unsustainable.
- Our facilities are aging, requiring attention to address hundreds of minor repairs and adjustments each month.
- With a large capital portfolio, Operations staff are needed to participate in the systems planning, design, construction, start-up, and commissioning processes.
- Permit conditions are more complex, requiring more monitoring and adjustment to meet water and air quality requirements.
- Contracts and policy goals require that we reliably recover and put to beneficial use biosolids, biogas, recycled water, and sewer heat - all requiring Operations staff.
- Jobs in Operations are opportunities to recruit, hire and train a next generation of WTD staff, to better reflect the communities we serve.

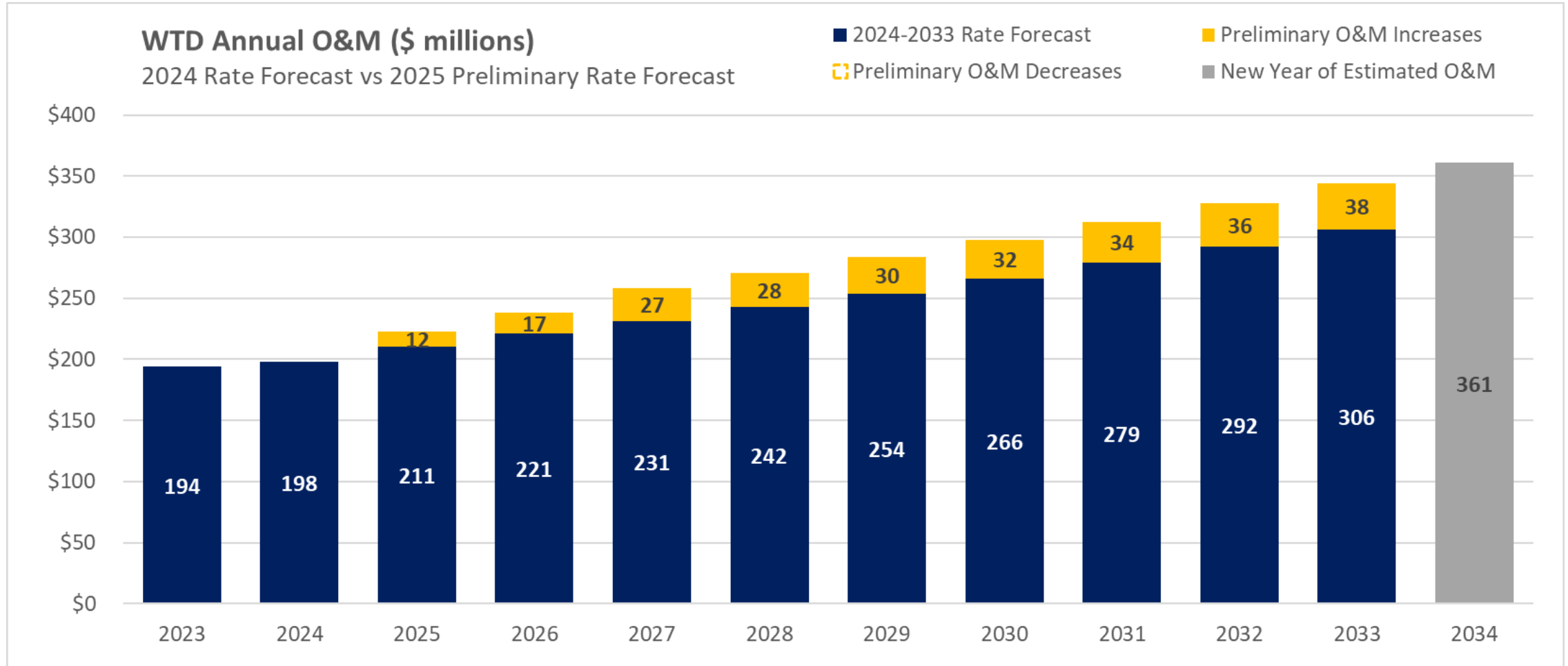
WTD Adopted FTEs 2013 - 2024

FTE Adds	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Director's Office		2	2	-	1	-	(0)	-	0	-	5	-	10
Environmental & Community Svcs		1	1	-	4	-	2	-	6	-	20	17	50
Finance & Administration		1	-	-	4	-	-	-	1	-	6	-	12
Operations		(2)	2	-	-	-	15	5	-	-	15	4	39
Resource Recovery		(1)	1	-	2	1	-	-	4	-	9	5	20
Project Planning & Delivery		(1)	8	2	7	-	7	-	4	31	42	47	147
Total New FTEs		-	14	2	18	1	24	5	14	31	96	73	278

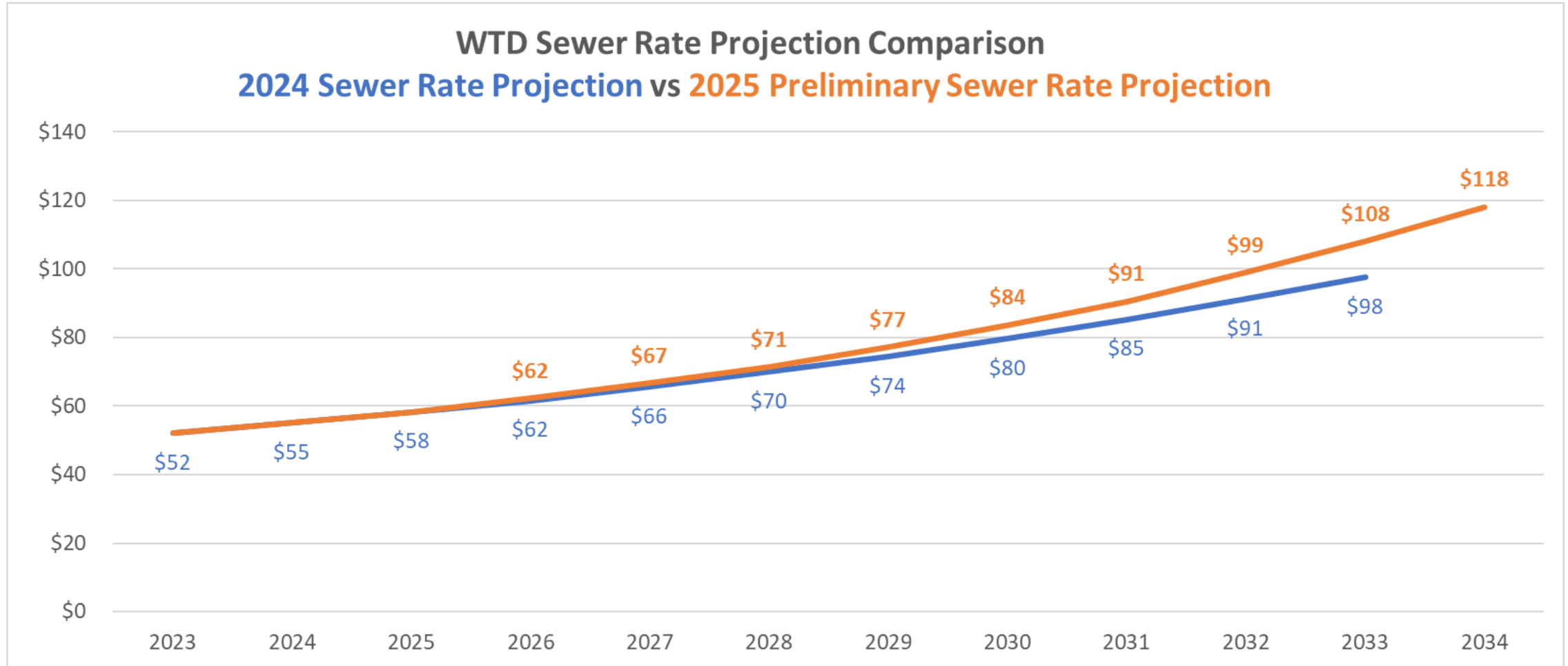
Total Adopted FTEs	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Change
Director's Office	22	24	26	26	27	27	27	27	27	27	32	32	10
Environmental & Community Svcs	50	51	52	52	56	56	58	58	64	64	83	100	50
Finance & Administration	27	28	28	28	32	32	32	32	33	33	39	39	12
Operations	304	302	304	304	304	304	319	324	324	324	339	343	39
Resource Recovery	16	15	16	16	18	19	19	19	23	23	31	36	20
Project Planning & Delivery	171	170	178	180	187	187	194	194	198	229	271	318	147
Total Adopted FTEs	590	590	604	606	624	625	649	654	668	699	795	868	278

Adopted FTE % Change	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total %
Director's Office		9%	8%	0%	4%	0%	-1%	0%	1%	0%	19%	0%	45%
Environmental & Community Svcs		2%	2%	0%	8%	0%	4%	0%	9%	0%	31%	20%	100%
Finance & Administration		4%	0%	0%	14%	0%	0%	0%	3%	0%	18%	0%	44%
Operations		-1%	1%	0%	0%	0%	5%	2%	0%	0%	5%	1%	13%
Resource Recovery		-6%	7%	0%	13%	6%	0%	0%	18%	0%	38%	16%	125%
Project Planning & Delivery		-1%	5%	1%	4%	0%	4%	0%	2%	16%	18%	17%	86%
Total		0%	2%	0%	3%	0%	4%	1%	2%	5%	14%	9%	47%

O&M Expenditure Forecast 2023 – 2034 Comparison



Rate Impacts – 2024 Rate Projection vs 2025 Preliminary Rate Projection



Rate Impacts – 2024 Financial Forecast vs 2025 Preliminary Financial Forecast

2024-2033 Sewer Rate Projection	Adopted										
2024 Sewer Rate Projection	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Rate Increase %	5.75%	5.75%	5.75%	6.50%	6.50%	6.50%	7.00%	7.00%	7.00%	7.00%	
Monthly Sewer Rate	\$55.11	\$58.28	\$61.64	\$65.65	\$69.92	\$74.47	\$79.69	\$85.27	\$91.24	\$97.63	
All-In Debt Service Coverage	1.73x	1.73x	1.67x	1.68x	1.65x	1.61x	1.53x	1.50x	1.47x	1.51x	
Projected O&M (\$m)	\$198	\$211	\$221	\$231	\$242	\$254	\$266	\$279	\$292	\$306	
Projected CIP Spend (\$m)	\$328	\$406	\$469	\$534	\$656	\$805	\$912	\$924	\$854	\$856	
Annual Cash Funding	58%	49%	43%	41%	35%	29%	25%	26%	30%	34%	
Average Cash Funding				6-Year Average			39.8%	10-Year Average			33.9%
Total Debt Balance (\$m)	\$3,512	\$3,593	\$3,721	\$3,915	\$4,198	\$4,615	\$5,114	\$5,615	\$6,018	\$6,386	
Debt to Asset (Capitalization Ratio)	84%	81%	79%	77%	76%	75%	75%	75%	74%	74%	

2025-2034 Sewer Rate Projection	Adopted	Proposed										
2025 Preliminary Sewer Rate	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Rate Increase %	5.75%	5.75%	7.00%	7.00%	7.00%	8.25%	8.25%	8.25%	9.25%	9.25%	9.25%	
Monthly Sewer Rate	\$55.11	\$58.28	\$62.36	\$66.73	\$71.41	\$77.31	\$83.69	\$90.60	\$98.99	\$108.15	\$118.16	
All-In Debt Service Coverage	1.72x	1.69x	1.64x	1.64x	1.62x	1.59x	1.52x	1.52x	1.49x	1.52x	1.64x	
Projected O&M (\$m)	\$198	\$223	\$238	\$258	\$271	\$284	\$298	\$313	\$328	\$344	\$361	
Projected CIP Spend (\$m)	\$323	\$416	\$482	\$543	\$661	\$843	\$966	\$937	\$1,042	\$1,150	\$850	
Annual Cash Funding	59%	45%	40%	38%	33%	28%	25%	28%	27%	28%	47%	
Average Cash Funding					6-Year Average			32.9%	10-Year Average			32.1%
Total Debt Balance (\$m)	\$3,551	\$3,643	\$3,792	\$4,001	\$4,300	\$4,763	\$5,315	\$5,822	\$6,390	\$7,029	\$7,334	
Debt to Asset (Capitalization Ratio)	84%	81%	79%	78%	77%	76%	76%	76%	76%	76%	75%	



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Questions and Next Steps

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Information**

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