



FY 2025

Comments and Recommendations

on the MWRA's Proposed
Capital Improvement Program & Current Expense Budget

MWRA Advisory Board

MAY 2025



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The MWRA Advisory Board...

was established by the State Legislature to represent 60 communities in the MWRA service area. Through annual comments and recommendations on the Authority's proposed capital and current expense budgets and rates, the Advisory Board provides a ratepayer perspective on the MWRA's plans and policies to improve the region's water and sewer systems.



Introduction

The Massachusetts Water Resources Authority (MWRA) recently unveiled its proposed Current Expense Budget for Fiscal Year 2025 (FY25) totaling \$899.9 million. While this translates to a 3.02% increase in the combined rate revenue requirement, it's important to acknowledge a crucial shift. Unlike recent years marked by significant inflationary pressures, 2023 witnessed a welcome decline in inflation without a corresponding nationwide spike in unemployment. This positive development has helped moderate anticipated cost increases for the MWRA.

However, the MWRA Advisory Board recognizes that challenges persist. The looming deadline of 2030 for fully funding the unfunded pension liability of \$91.1 million casts a long shadow. Each year closer to this deadline intensifies the pressure on this line item. Additionally, the water and sewer utility industry, like many others, grapples with widespread workforce shortages. On average, the MWRA was 100 FTEs below its targeted staffing level. This concern is further amplified by the anticipated retirement wave of employees who joined the MWRA at its inception in 1985. This potential talent drain could significantly impact operational efficiency.

While the MWRA has commendably kept combined assessment increases near 3% for the present, the Advisory Board remains committed to identifying further ways to provide rate relief for its communities and ratepayers. In this document, the Advisory Board presents its recommendations, aiming to reduce the proposed rate increase further, from 3.02% to a more manageable 2.53%. Notably, the Board notes that the water utility assessments face greater pressures than sewer not only in FY25, but also in the coming years.

Beyond immediate financial considerations, the MWRA faces a host of regulatory challenges on the horizon:

- **PFAS Regulations:** While fortunate to have pristine drinking water sources, emerging PFAS regulations may impact partially served communities and, more importantly, the fate of MWRA's biosolids. If biosolids are no longer deemed safe for beneficial reuse through land application, significant costs will be incurred for landfilling. However, landfilling is only a temporary and expensive solution, with limited capacity and potential resistance from other states to accept PFAS-contaminated materials. A long-term solution remains elusive.
- **CSOs (Combined Sewer Overflows):** The MWRA continues to address CSOs in collaboration with its communities. An updated Long-Term Control Program is being developed, but some outfalls may require prohibitively expensive improvements to achieve minimal incremental benefit. The Advisory Board will advocate for solutions that align with its longstanding mantra to be both environmentally sound and ratepayer equitable - both Green and Fair.
- **Deer Island NPDES Permit:** The finalization of this permit is highly anticipated and could carry significant repercussions for MWRA and its communities. Depending on the final language, the Advisory Board and MWRA may need to take additional actions to advocate for revisions that protect communities from unreasonable or overly burdensome requirements.
- **Lead and Copper Rule Revisions and Improvements (LCRR/LCRI):** These revisions will impose significant new burdens on MWRA member communities. The MWRA and the Advisory Board are committed to



assisting communities, as the LCRR/LCRI could have substantial treatment and financial implications for the entire system.

Through a comprehensive review and thoughtful recommendations, the Advisory Board strives to strike a balance between supporting the MWRA in its core mission to provide high-quality water and sewer services, mitigating the impact on ratepayers, and ensuring the MWRA's long-term financial and operational health in the face of these evolving regulatory challenge.



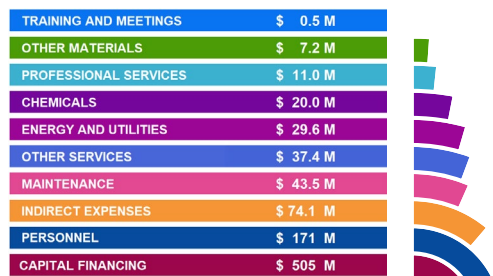
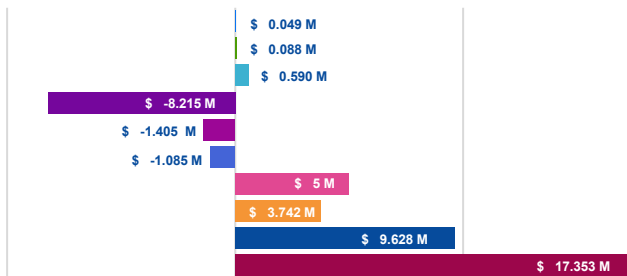
Proposed Fiscal Year 2025 CEB

Authority Level - Expenses

	Final FY24	Proposed FY25	Change (\$)	Change (%)
TOTAL DIRECT EXPENSES	\$ 316,003,024	\$ 320,657,176	\$ 4,654,152	1.5%
PERSONNEL	161,523,613	171,152,082	9,628,469	6.0%
CHEMICALS	28,269,124	20,054,280	-8,214,844	-29.1%
ENERGY AND UTILITIES	31,064,893	29,660,076	-1,404,818	-4.5%
MAINTENANCE	38,574,255	43,578,318	5,004,063	13.0%
TRAINING AND MEETINGS	498,597	547,346	48,749	9.8%
PROFESSIONAL SERVICES	10,410,484	11,000,628	590,144	5.7%
OTHER MATERIALS	7,167,398	7,255,219	87,821	1.2%
OTHER SERVICES	38,494,660	37,409,229	-1,085,432	-2.8%
TOTAL INDIRECT EXPENSES	\$ 70,386,507	\$ 74,128,494	\$ 3,741,986	5.3%
CAPITAL FINANCING	\$ 487,759,367	\$ 505,112,526	\$ 25,749,297	3.6%
TOTAL EXPENSES	\$ 874,148,898	\$ 899,898,196	\$ 25,749,297	2.9%

▲ from FFY24

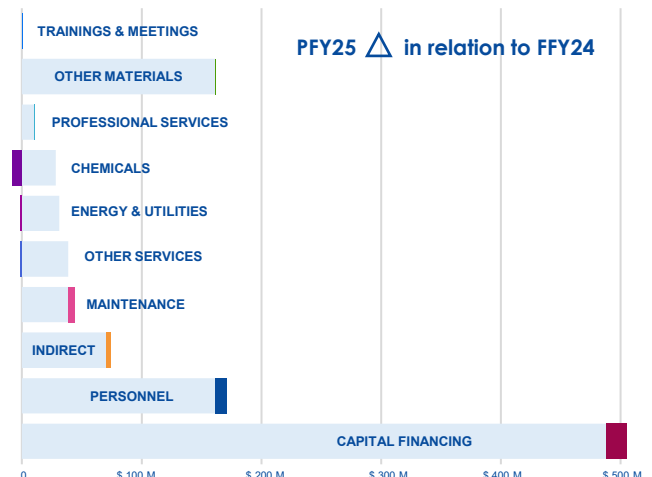
PFY25 ↑ \$ 900 M



PFY25 Proposed Budget Highlights

Chemicals	↓29.1% = favorable pricing, especially for Sodium Hypo & Ferric Chloride
Energy & Utilities	↓4.5% = favorable Electricity and Diesel pricing & ↓ anticipated volume @DI
Other Services	↓2.8% = lower Sludge Pelletization contract & grit and screenings contract
Maintenance	↑ 13% = CTG control system replacement & PICS HMI system upgrade
Indirect Expenses	Insurance ↑10%, Pension ↑48.5%, Additional \$5.8M toward 2030 full funding
Personnel	Wages ↑6.1%, Health Insurance ↑6%
Capital Financing	Debt prepayment \$7M, Defeasance \$15M, Var Interest =4.75%

PFY25 ▲ in relation to FFY24



FY 2025 CEB OVERVIEW

The proposed FY2025 Current Expense Budget (CEB) totals \$899.9 million, reflecting a \$25.7 million or 2.9% increase from the FY2024 budget. This overall rise is driven by several key expense categories:

Personnel costs are budgeted to increase by \$9.6 million or 6.0% to \$171.2 million in FY2025. This accounts for a 6.1% growth in wages and a 6% increase in health insurance costs.

Maintenance expenses show a significant 13.0% jump, adding \$5.0 million to reach \$43.6 million for FY2025. Two major initiatives are driving this rise - the replacement of the Cottage Farm (CTG) control system and an upgrade to the PICS HMI system.

Indirect expenses are projected to grow by \$3.7 million or 5.3% to \$74.1 million. This increase is largely attributable to a 10% increase in insurance costs and an additional optional payment of \$5.8 million toward the pension contribution toward the goal of fully funding the pension liability by 2030. This additional contribution brings the year-over-year pension line item increase to \$7.7 million representing a 48.5% increase over FY24.

Offsetting some of these increases are decreases in several expense lines. Most notably, chemical costs are expected to decline by \$8.2 million or 29.1% due to favorable pricing, especially for sodium hypochlorite and ferric chloride. Utilities are projected to decrease by 4.5% or \$1.4 million based on lower anticipated electricity and diesel pricing and volume reductions at the Deer Island facility.

The budget also incorporates savings of \$1.1 million or 2.8% in other services, primarily driven by lower contracted costs for sludge pelletization and grit/screenings removal.

Capital financing expenses, which include debt service and defeasance, show an increase of \$25.7 million or 3.6% to \$505.1 million. This factors in a planned \$7.0 million debt prepayment and an additional \$15 million defeasance targeting expense reductions, offset partially by an assumed 4.75% variable interest rate.

Overall, the FY2025 CEB proposal aims to balance critical investment needs while utilizing strategic cost management initiatives like defeasances and favorable chemical/utility pricing to limit the overall rate of growth.

Recommendation: The Advisory Board recommends reducing the FY25 Rate Revenue Requirement by \$4,098,434 resulting in a combined wholesale assessment increase of 2.53%

“Spring Revisits”

The proposed Current Expense Budget process begins early in the fiscal year, and as such it relies upon many assumptions and “placeholder” estimate numbers. As the year progresses, better information becomes available such as final pricing for certain contracts and finalized fringe benefits costs for the health insurance plans provided to MWRA staff through the Group Insurance Commission.

As part of its budget review process, the Advisory Board attempts to incorporate these updated numbers – internally referred to as “spring revisits” – to better reflect the impacts of its recommendations on the final CEB. Below are the “spring revisits” as of May 1, 2024.

Comment: The Advisory Board anticipates spring revisit item totals of \$1,362,784 on the water utility and \$2,490,655 on the sewer utility.

Water		Sewer	
Wages & Salaries	\$ 283,261	Wages & Salaries	\$ (305,714)
Fringe Benefits	\$ 209,653	Fringe Benefits	\$ 358,706
Chemicals	\$ (281,071)	Chemicals	\$ (69,527)
Energy & Utilities	\$ 411,849	Energy & Utilities	\$ 1,981,193
Maintenance	\$ 457,754	Maintenance	\$ 2,527,127
Training and Meetings	\$ 8,859	Training and Meetings	\$ 12,141
Professional Services	\$ (21,601)	Professional Services	\$ 82,062
Other Materials	\$ 20,066	Other Materials	\$ (4,406)
Other Services	\$ (136,096)	Other Services	\$ (3,304,153)
Watershed/Pilot	\$ 398,250	Watershed	
Pension	\$ (893,692)	HEEC	\$ 1,082,338
OPEB	\$ 893,692	Pension	\$ (1,562,265)
Additions to Reserves	\$ 11,859	OPEB	\$ 1,562,265
Subtotal of Changes to Operating Costs	\$1,362,784	Additions to Reserves	\$ 130,888
		Subtotal of Changes to Operating Costs	\$ 2,490,655

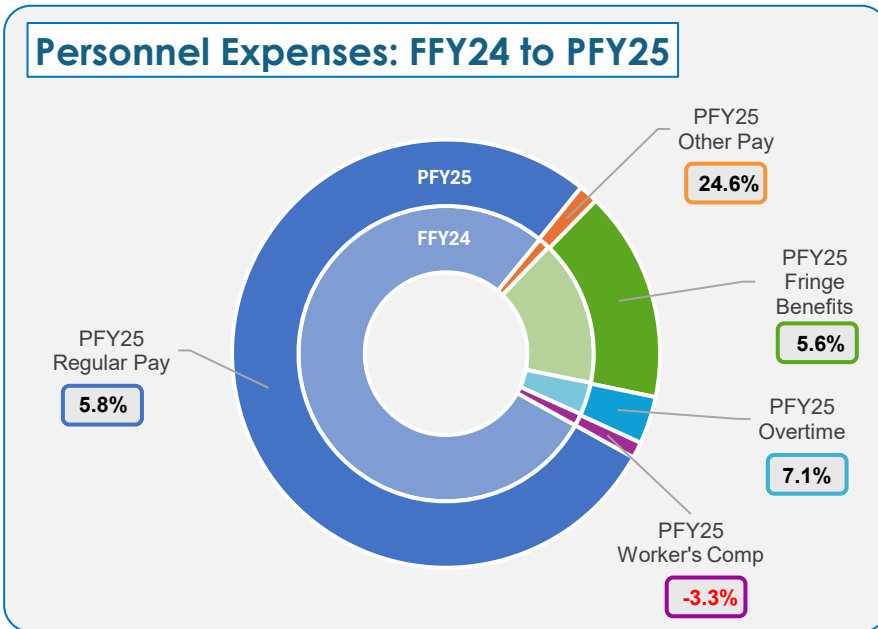


Proposed Fiscal Year 2025 CEB



Personnel

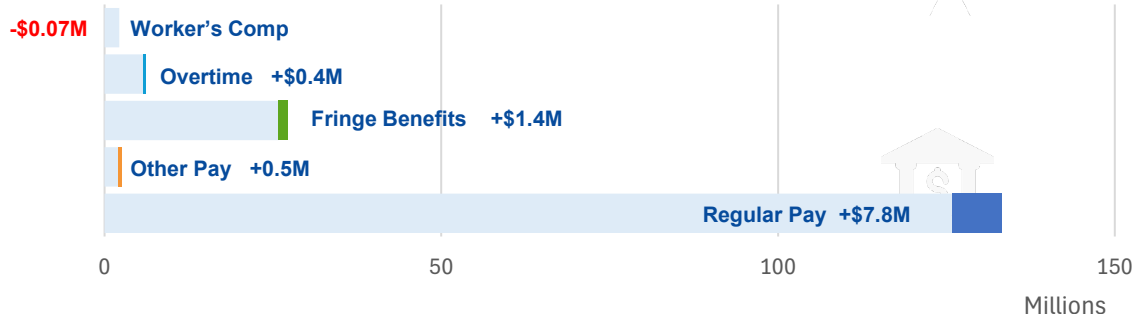
	Final FY24	Proposed FY25	Change (\$)	Change (%)
TOTAL WAGES & SALARIES	\$ 127,828,242	\$ 135,679,804	\$ 7,829,109	6.1%
REGULAR PAY	125,807,569	133,161,344	7,353,774	5.8%
OTHER PAY	2,020,673	2,518,460	497,786	24.6%
FRINGE BENEFITS	25,823,383	27,265,765	1,442,382	5.6%
OVERTIME	5,727,593	6,133,078	405,485	7.1%
WORKER'S COMPENSATION	2,144,395	2,073,434	- 70,691	- 3.3%
TOTAL PERSONNEL	\$ 161,523,613	\$ 171,697,987	\$ 9,606,015	5.95%



PFY25 Personnel Budget Highlights

<p>Wages & Salaries</p>	<p>Increased by \$7.9M (6.1%). Assumes 1,167 Full-time Equivalents (FTEs). Includes \$4.0M vacancy adjustment</p>
<p>Fringe Benefits</p>	<p>Increased by \$1.4M (5.6%) due to an anticipated increase in Health Insurance Premiums of 6%</p>

PFY25 Change in Relation to FFY24



Personnel

Overview

As the MWRA looks ahead to the upcoming fiscal year 2025, a significant increase in personnel expenses is being proposed. The total personnel budget for FY25 is projected to rise by nearly \$9.6 million, or 5.95%, compared to the current fiscal year 2024.

The largest contributor to this increase is in wages and salaries, which are slated to go up by \$7.8 million, or 6.1%. The budget assumes a workforce of 1,167 full-time equivalent employees (FTEs). The MWRA's proposed FY25 budget includes a vacancy rate of 35 FTEs - or a reduction of \$4.0 million from the full 1167 FTEs budgeted. As of March 2024, they are averaging just over 100 FTEs below their budgeted levels.

Fringe benefits are another major cost driver, with a proposed \$1.4 million (5.6%) increase for FY25. This rise is primarily attributed to an anticipated 6% hike in health insurance premiums for employees. The Advisory Board was recently informed that this line item is anticipated to increase in the final budget due to the final costs associated with the GIC's healthcare plans that were recently released.

Overtime expenses are also projected to climb by over \$405,000, a 7.1% increase compared to the current fiscal year's budget. Due to the understaffing noted above, additional overtime has been used for certain critical operational positions to cover vacancies.

However, the worker's compensation costs are forecasted to dip by nearly \$71,000 or 3.3%. Though this can be a highly volatile line item, the effects are mitigated due to the use of multi-year averaging.

Looking back at FY24 expenses through March, the year-to-date figures reveal some variances from the budgeted amounts. Wages and salaries expenditures ran \$9.9 million below budget, while overtime costs were \$262,000 over budget, consistent with the trends mentioned above. Fringe benefit expenses lagged by \$1.1 million, likely due to continued vacancies. Worker's compensation was \$249,000 under budget.



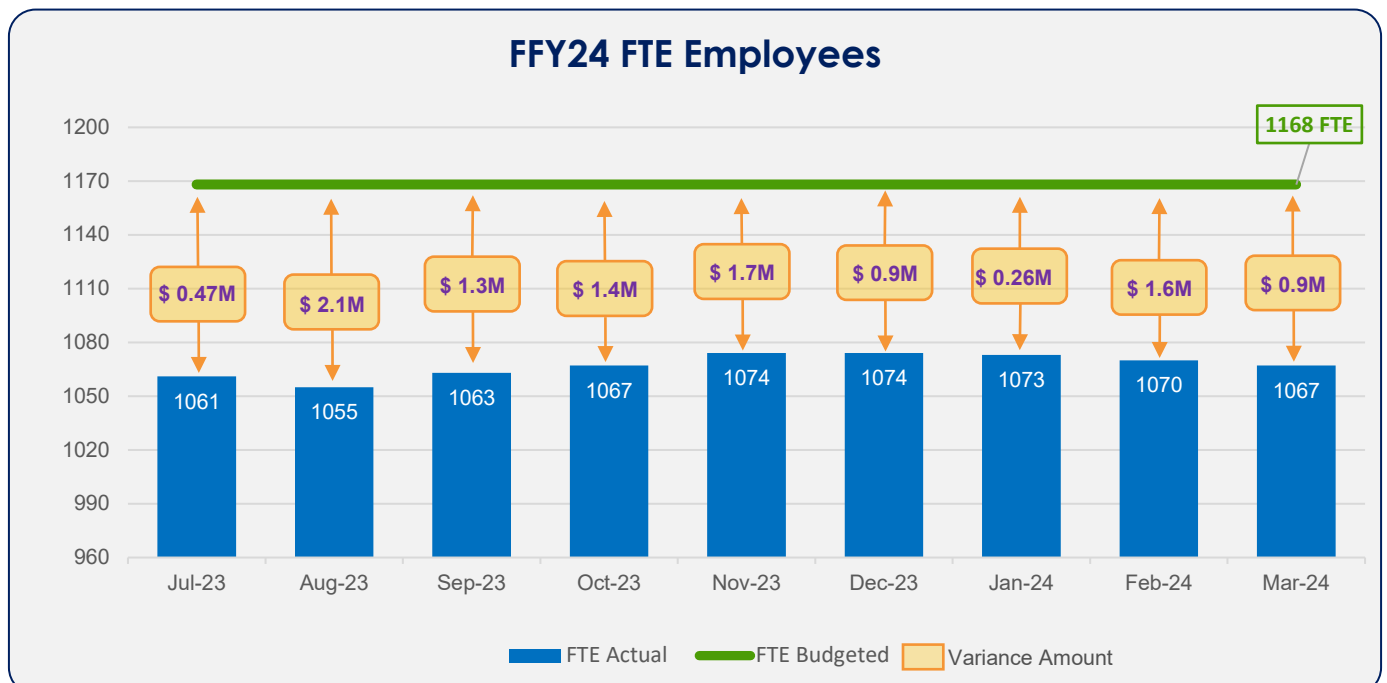
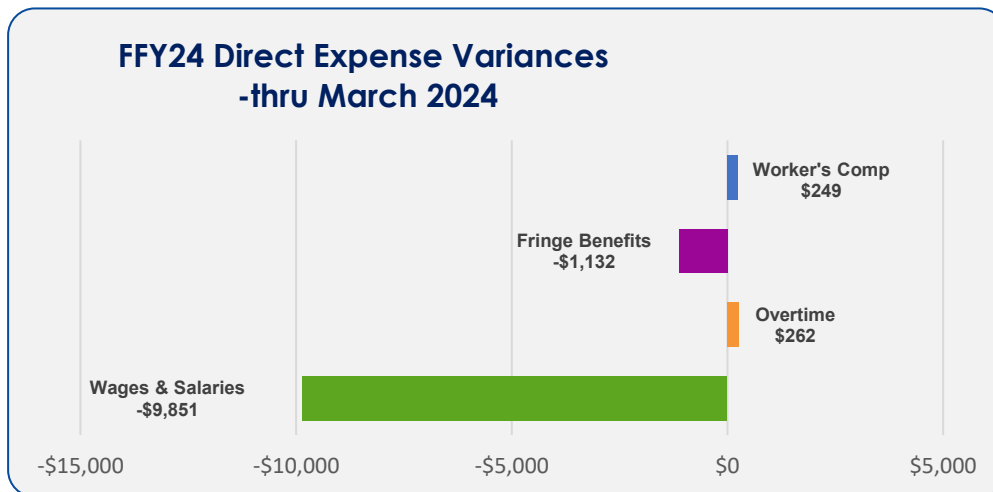
Proposed Fiscal Year 2025 CEB



Personnel

Staffing and Personnel Expense Variances by Period

Wages & Salaries	Period Ending 7-22-23	Period Ending 8-26-23	Period Ending 9-23-23	Period Ending 10-21-23	Period Ending 11-25-23	Period Ending 12-23-23	Period Ending 1-20-24	Period Ending 2-24-24	Period Ending 3-23-24
Budget Amount	\$ 9,667,969	\$ 14,408,926	\$ 12,358,916	\$ 12,484,505	\$ 15,188,210	\$ 12,456,675	\$ 12,585,078	\$ 15,540,469	\$ 9,826,084
Actual Amount	9,195,369	12,307,858	11,043,784	11,090,916	13,466,566	11,558,454	12,324,984	13,847,556	8,878,249
Variance	-\$ 472,599	-\$ 2,101,068	-\$ 1,315,132	-\$ 1,393,589	-\$ 1,721,644	-\$ 898,221	-\$ 260,094	-\$ 1,692,913	-\$ 947,835



Vacancy Rate Adjustments

The wages and salaries monthly variance chart for FY24 highlights the fluctuations throughout the year, with the largest negative variance of \$2.1 million occurring in the period ending August 26th, 2023. The smallest variance was just over \$260,000 under budget for the period ending January 20th, 2024.

As noted, the MWRA has included \$4.0 million in a vacancy rate commensurate with 35 FTEs. The current dollar value MWRA assumes for each FTE is \$113 thousand per year. Until now, the Advisory Board had been using a value of \$100 thousand which included benefits. Based on updated information from the MWRA, the Advisory Board has updated its vacancy rate to \$133 thousand per FTE for wages and salaries.

The Advisory Board recommends reducing the budget by an additional 35 FTEs through the vacancy rate, on top of the MWRA's proposed 35 FTE vacancies. This new total of 70 FTEs would still be 30 FTEs below the FY24 average vacancy level of 100 FTEs per month.

Put another way, MWRA assumed a vacancy rate of 3.0% total FTEs with a dollar value of 2.9% of wages and salaries. The Advisory Board recommends increasing this to 70 FTEs representing 6.0% of total FTEs or 5.8% of the total wages & salaries budget (\$135,679,804).

However, the MWRA indicated that they are not reducing fringe benefits in tandem with the vacancy rate. Using the standard of approximately 20% of wages and salaries, the Advisory Board has calculated the fringe benefits for the MWRA's assumed 35 FTEs at \$791 thousand, and added an additional \$791 thousand for the 35 FTEs it is recommending for an additional vacancy rate.

Recommendation: Reduce Wages & Salaries by \$3,930,000 by increasing the vacancy rate assumption by 35 FTEs.

Recommendation: Reduce Fringe Benefits by \$1,572,000 to account for the fringe benefits expense that will not be incurred for both the MWRA's 35 FTEs vacancy rate adjustment and the Advisory Board's recommended additional 35 FTE vacancy rate adjustment.



Proposed Fiscal Year 2025 CEB



Chemicals

	FFY24 (\$ M)	PFY25 (\$ M)	Change (\$ M)	Change %
SODA ASH	\$ 3.306	\$ 3.548	\$ 0.242	7.32%
SODIUM HYPOCHLORITE	12.103	7.008	-5.095	-42.10%
HYDROFLUOSILIC ACID	0.699	0.518	-0.181	-25.94%
SODIUM HYDROXIDE	0.202	0.204	0.002	1.04%
OTHER	0.073	0.068	-0.005	-6.17%
POLYMER	0.903	0.572	-0.331	-36.64%
SODIUM BISULFITE	0.920	0.740	-0.180	-19.56%
ACTIVATED CARBON	0.378	0.378	0.000	0.12%
SULFURIC ACID	0.000	0.000	0.000	0.00%
LIQUID OXYGEN	0.901	0.914	0.014	1.53%
NITROGEN	0.003	0.003	0.000	0.00%
CARBON DIOXIDE	1.164	0.805	-0.359	-30.82%
FERRIC CHLORIDE	5.764	4.003	-1.761	-30.56%
HYDROGEN PEROXIDE	0.872	0.728	-0.143	-16.45%
AQUA AMMONIA	0.703	0.314	-0.390	-55.42%
OTHER OXIDIZERS	0.278	0.250	-0.028	-10.19%
TOTAL CHEMICALS	\$ 28.269	\$ 20.054	-\$ 8.215	-29.06%

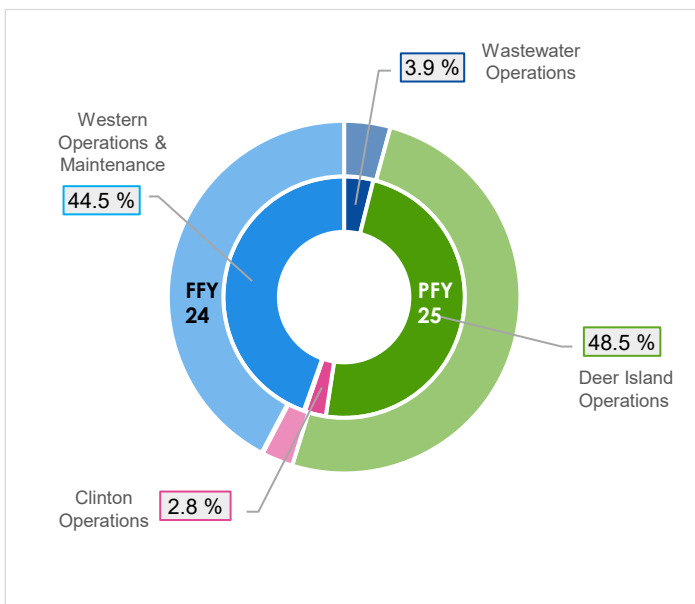
PFY25
↓
\$ 8.125 M

DITP
↓
\$ 4.55 M

Western Operations
↓
\$ 3.00 M



Chemicals by Division: FFY24 & PFY25



	FFY24 (\$M)	PFY25 (\$M)	Change (\$ M)	Change (%)
Wastewater Operations	\$ 1.2005	\$ 0.7858	-\$ 0.4148	-34.55%
Deer Island Operations	14.2809	9.7310	-4.5499	-31.86%
Clinton	0.8150	0.5689	-0.2461	-30.20%
Metropolitan Operations	0.0318	0.0318	0.0000	0%
Western Operations & Maintenance	1.1941	0.8937	-3.0040	-25.16%
TOTAL	\$ 28.269	\$ 20.054	-\$ 8.215	-29.06%

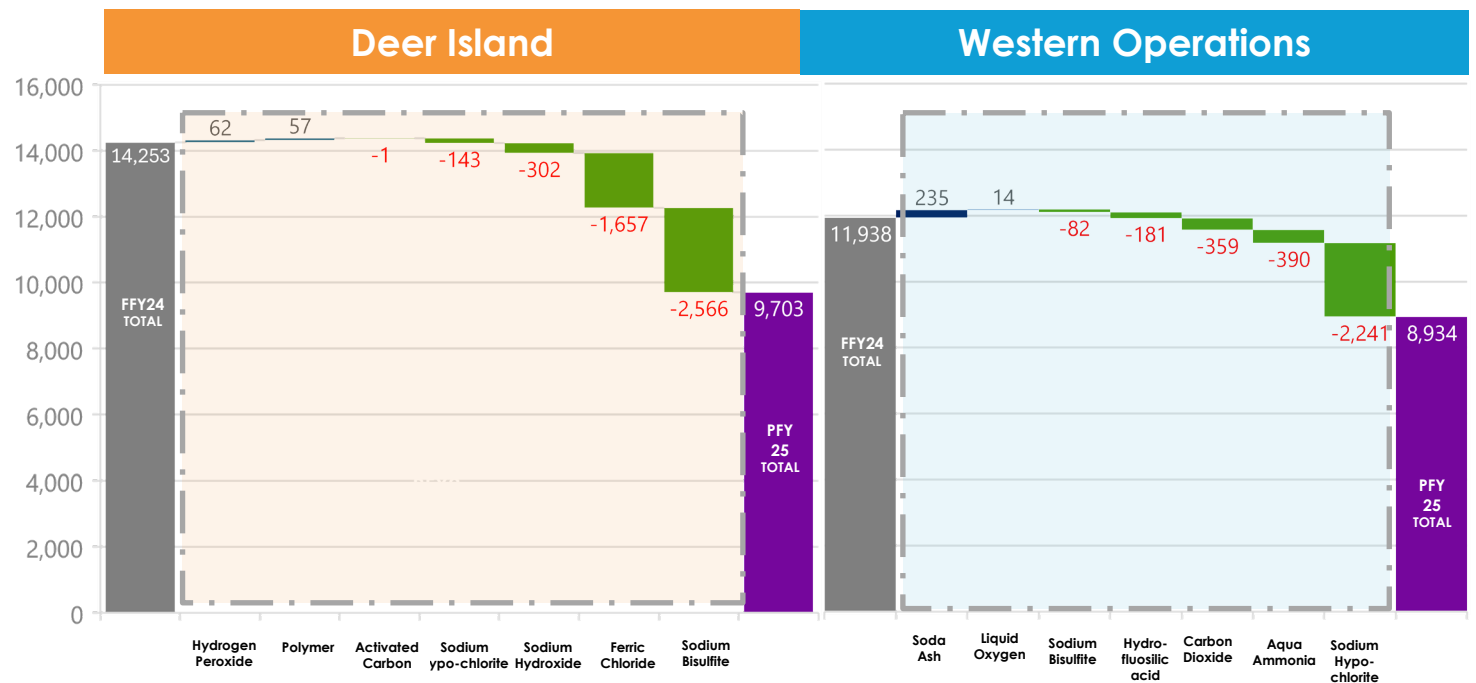
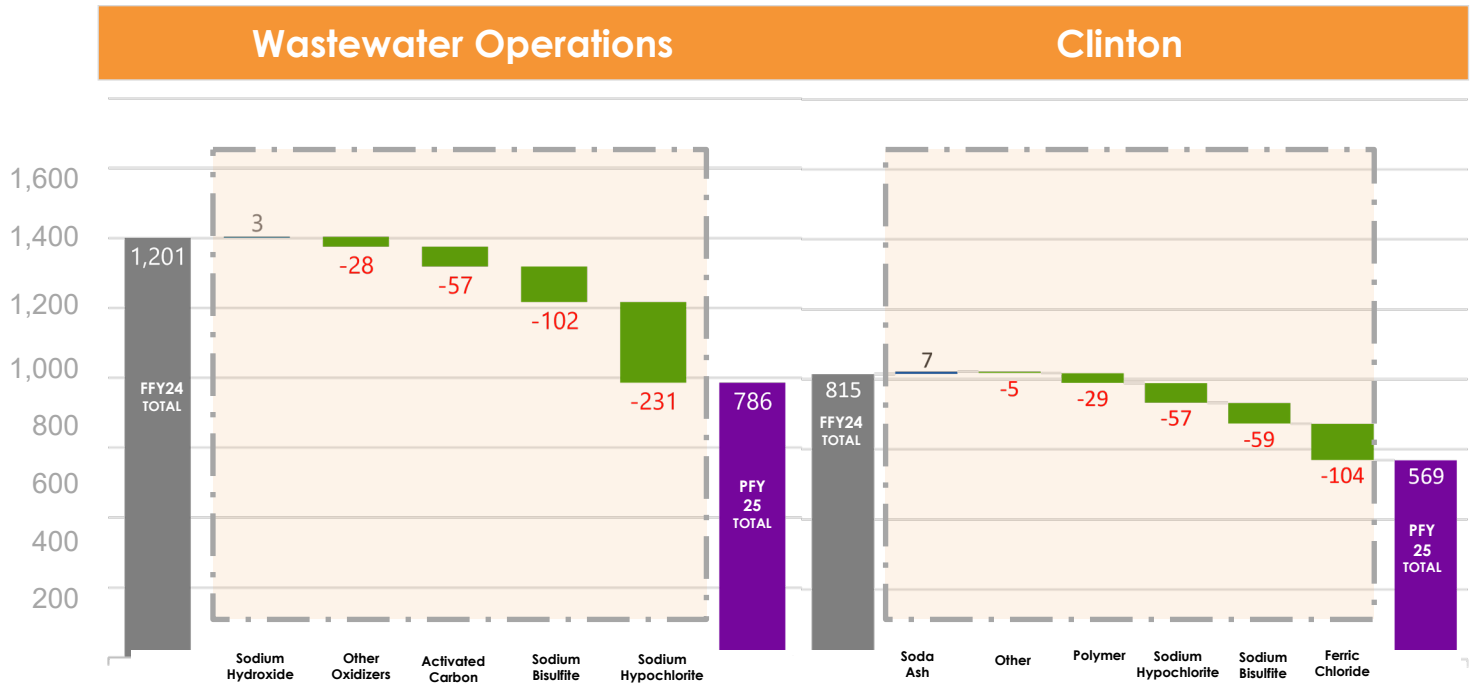


Proposed Fiscal Year 2025 CEB



Chemicals

Change in Chemical Costs by Division: FFY24 & PFY25



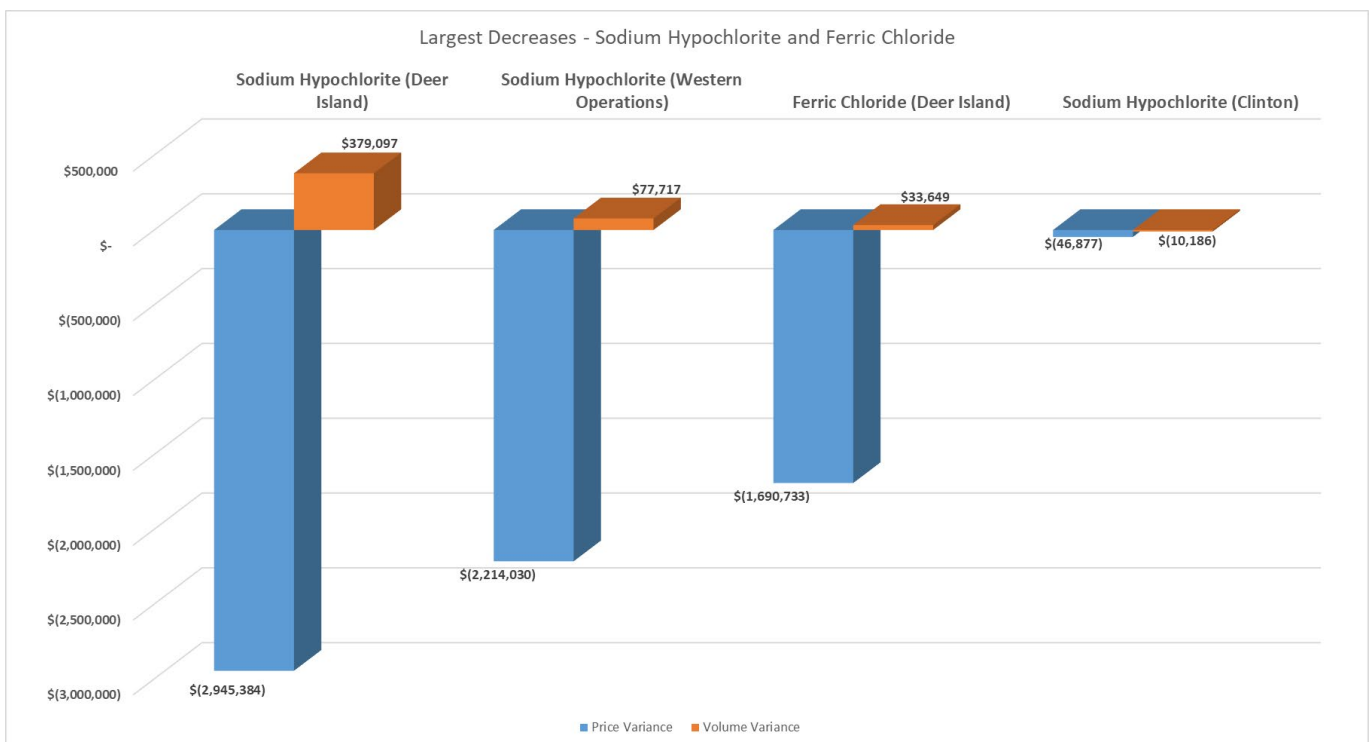
Chemicals

Overview

Chemicals saw an overall decrease of \$8,214,844, or 29.1%, from the 2024 budget largely due to subsiding inflationary pressures. This translates into a \$414,764, or 35.55% decrease in Wastewater Operations, a \$4,549,948, or 31.86%, decrease in Deer Island Operations, a \$3,004,004, or 25.16% decrease in Western Operations & Maintenance, and a \$246,130, or 30.2% decrease in Clinton Wastewater Treatment. Of these areas, the majority of chemical costs are reflected in Deer Island Operations, at 48.52%, and Western Operations & Maintenance, at 44.56%.

Sodium hypochlorite, or chlorine, is mixed with effluent to kill bacteria and disinfect. It is used in Wastewater Operations, Deer Island Operations, Western Operations, Deer Island Operations, and Clinton Wastewater Treatment plant. There is an overall decrease of \$5,094,832, or 42.1%, with most of the decreases seen at Deer Island and Western Operations. At Deer Island, the price decrease was \$2,945,384, with an increase in volume of \$379,097. Included in this is an increase of \$361,000 for anticipated NPDES related costs. Among Western Operations, prices decreased by \$2,214,030 with an increase in volume of \$77,717.

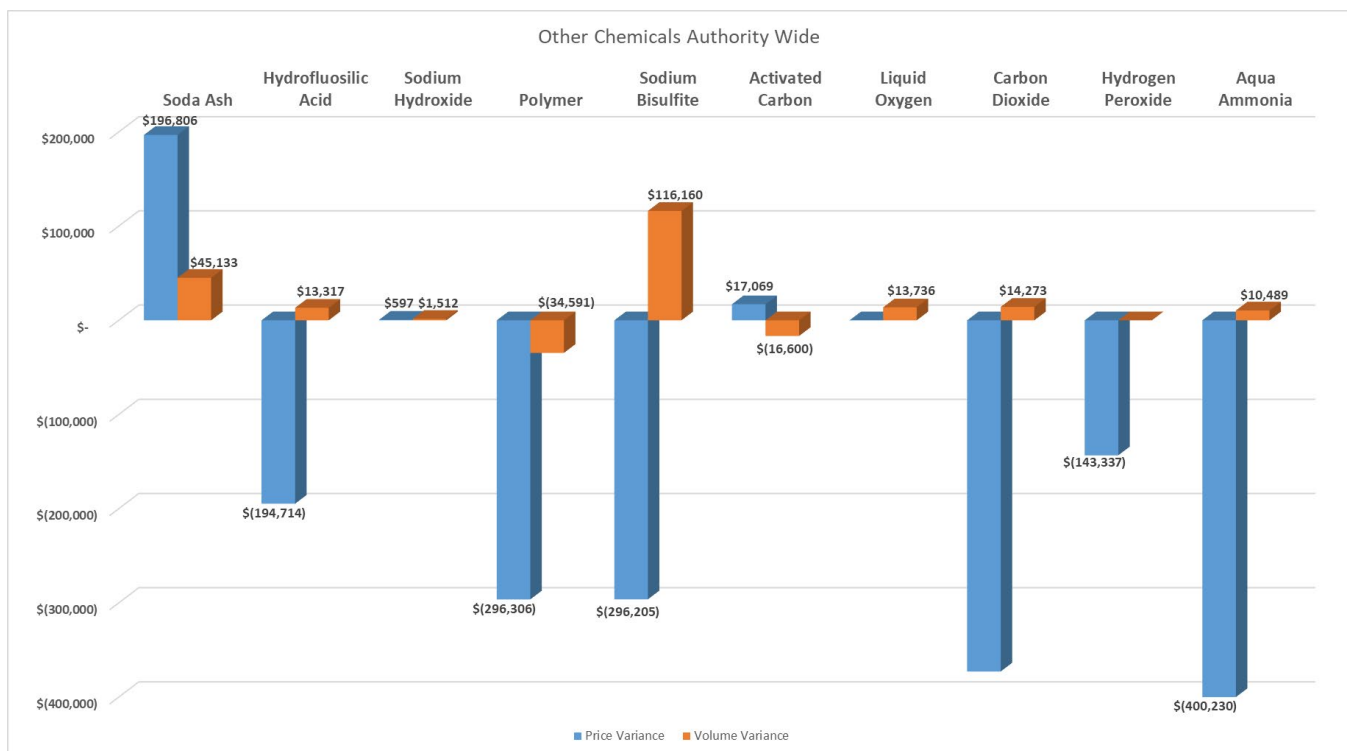
Ferric chloride is added to coagulation polymers to precipitate phosphates into a filterable solid and is used at Deer Island and Clinton Wastewater Treatment Plant. There is an overall decrease of \$1,761,458, or 30.6%, of which the decrease is seen largest at Deer Island with a price decrease of \$1,690,733 and a volume increase of \$33,649.



Sodium bisulfite is used in water and wastewater to remove ozone in water as well as dechlorinate wastewater prior to discharge. It is used in Wastewater Operations, Deer Island Operations, Western Operations & Maintenance, and Clinton Wastewater Treatment Plant. There is an overall decrease of \$180,047, or 19.6%, which is largely due to price. However, at Deer Island the price decrease of \$70,068 was coupled with a volume increase of \$132,182, which includes a \$263,000 increase for NPDES related costs.

Polymers are added in the secondary thickening process of sludge and scum to increase efficiency and are used at Deer Island and the Clinton Wastewater Treatment Plant. There is an overall decrease of \$330,897, or 36.6%. The largest of this decrease is at Deer Island where there is a decrease in price of \$286,273 with a volume decrease of \$15,859. Soda ash is used to adjust pH level and alkalinity and is used in Western Operations & Maintenance and at the Clinton Wastewater Treatment Plant. There is an overall increase of \$241,940, or 7.3%, mostly due to price increase. The majority of the increase is in Western Operations & Maintenance where price increased \$190,688 and increased in volume by \$43,862.

Carbon dioxide is used to adjust pH to its final level and is used primarily in Western Operations & Maintenance. There is an overall decrease of \$358,565, or 30.8%, which is due to a price decrease of \$372,838 and a volume increase of \$14,273. Hydrofluosilic acid, or fluoride, is used for dental health and added at the John J. Carroll Water Treatment Plant. It has an overall decrease of \$181,397 due to a price decrease of \$194,714 and a volume increase of \$13,317. Aqua ammonia is combined with chlorine to form monochloramine for residual disinfection and is used solely in Western Operations & Maintenance. It saw a decrease of \$389,741, or 55.4%, which is due to a price decrease of \$400,230 and a volume increase of \$10,489. Hydrogen peroxide is used in odor control solely at Deer Island and saw a decrease of \$143,330, or 16.4% entirely due to price and not volume.



One important point to note is that the anticipated additional costs for Sodium Hypochlorite and Sodium Bisulfite related to the Deer Island NPDES permit are far less than had been anticipated in previous years. It was originally believed that year-round treatment would be required, which would result in a significant increase in these chemicals. However, the MWRA now anticipates that EPA’s requirement for the plant will be seasonal, rather than year-round leading to a much lower cost for these added chemicals than originally anticipated.



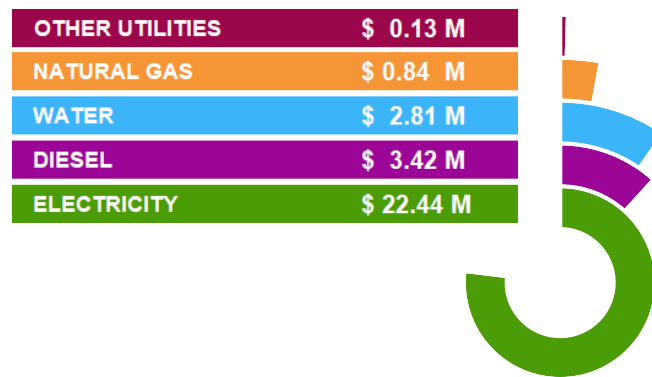
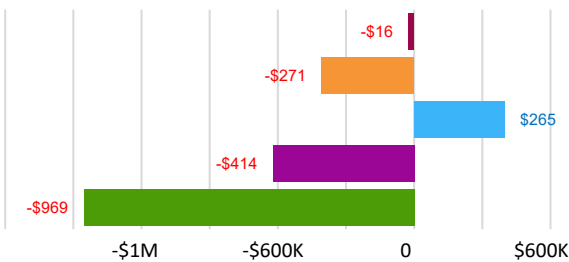
Proposed Fiscal Year 2025 CEB

Energy & Utilities

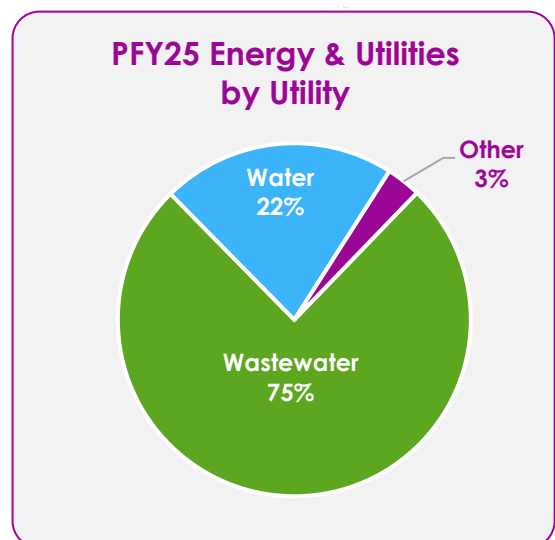
	FFY24 (\$ M)	PFY25 (\$ M)	Change (\$ M)	Change (%)
ELECTRICITY	\$ 23.41	\$ 22.44	-\$ 0.97	-4.1%
DIESEL	3.84	3.42	-0.41	- 10.8%
WATER	2.55	2.81	0.26	10.4%
NATURAL GAS	1.12	0.84	-0.27	-24.3%
ALL OTHER UTILITIES	0.15	0.13	-0.015	- 10.5%
TOTAL ENERGY & UTILITIES	\$ 31.06	\$ 29.66	-\$ 1.40	- 4.5%

▲ from FFY24

PFY25 ↑ \$ 29.66 M



PFY25 Energy & Utilities Highlights	
Electricity	↓ 4.1% (\$ 969K) due to favorable pricing
Diesel	↓ 10.8% (\$ 414K) due to favorable pricing & anticipated lower use at DITP
Natural Gas	↓ 24.3 % (\$ 274K) due to favorable pricing despite conversion of Clinton and Pump Stations from Diesel
Water	↑ 10.4% (\$ 264K) due to pricing
Other Utilities	↓ 10.5% (\$ 15K) due to favorable pricing

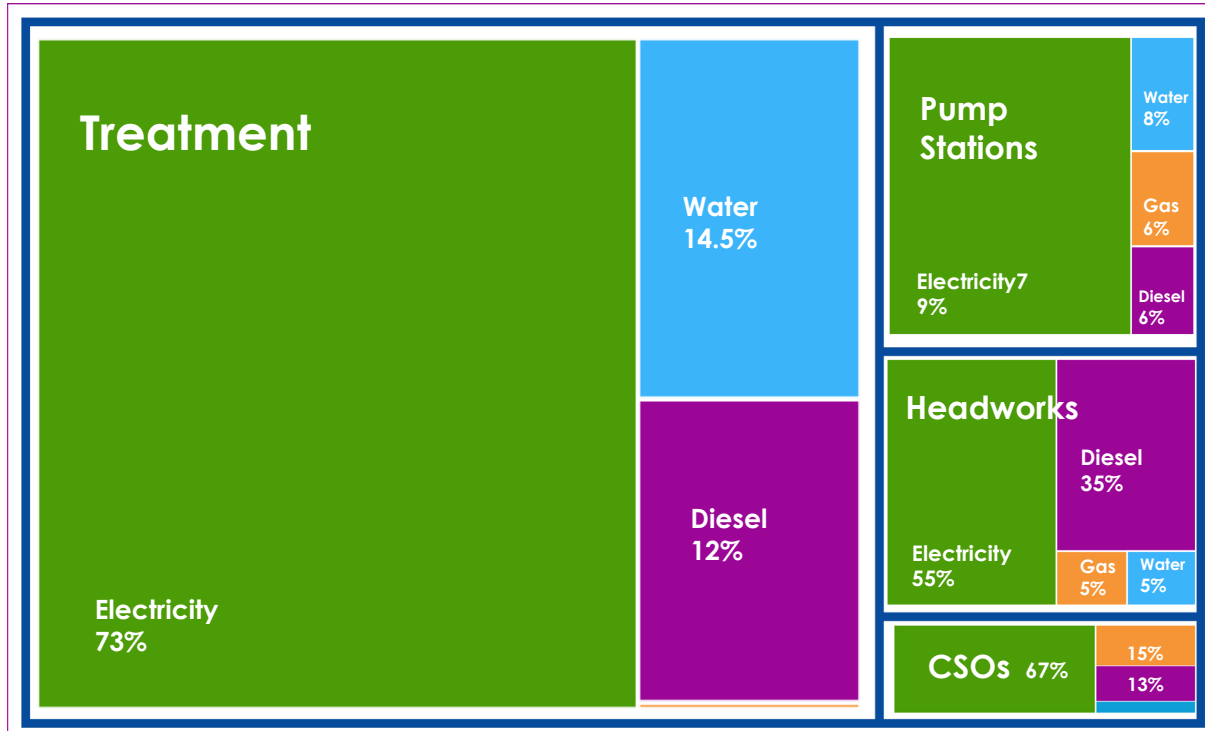




Proposed Fiscal Year 2025 CEB

Energy & Utilities

Energy & Utilities by Wastewater Facility Type



	Electricity	Natural Gas	Diesel	Water
Total Treatment	11,894,722	45,491	1,978,365	2,357,140
DITP	11,633,785		1,978,365	2,355,140
Clinton	260,937	45,491		2,000
Total Pump Stations	1,839,539	151,731	142,494	183,429
Braintree Weymouth IPS	477,506	64,783	16,500	43,896
New Neponset	108,666		46,200	
DeLauri	235,703		15,180	45,976
Hayes	113,445		11,807	33,387
Hingham	26,769		6,600	5,200
Caruso PS	237,183	15,229	6,600	19,891
Quincy	159,468	11,671	4,950	2,584
Framingham PS	94,682	6,314	3,960	14,863
Alewife Brook PS	147,607	10,144	3,300	10,470
Houghs Neck PS	16,459	2,063		450
Squantum	35,467	7,156		5,942
Braintree Weymouth RPS	136,555		27,397	132
Chelsea Screen House	50,029	34,371		638
Total Headworks	1,583,268	143,794	1,013,598	141,665
Nut Island	646,900		401,247	14,576
Columbus Park HW	210,771		323,512	60,879
Ward St HW	215,038		282,239	62,684
Chelsea Creek Headworks	510,559	143,794	6,600	3,526
Total CSO	623,316	142,372	125,311	41,582
Prison Point CSO Treat	117,792		70,092	8,483
Cottage Farm CSO	57,038		55,219	500
South Boston CSO	188,639	12,514		5,006
Somerville Marginal CSO Treat	80,064	80,064		250
Union Park CSO Facility	179,783	49,794		27,343
Total Wastewater Utilities	\$ 15,940,845	\$ 483,388	\$ 3,259,768	\$ 2,723,816

Energy & Utilities

Energy & Utilities expenses saw decreases in all sub-categories in 2025 with the exception of water. Overall, this component of the budget decreased by \$1,404,818 or 4.5% from 2024 levels. Pricing was the most significant driver of this change, lowering Electricity by \$969,115 or 4.1%, Natural Gas by \$271,316 or 24.3%, Diesel Fuel by \$413,682 or 10.8% and all other Utilities by \$15,682 or 10.5%. Only Water saw an increase, again due primarily to pricing, of \$264,980 or 10.4%.

Deer Island is the most energy intensive MWRA operation and electricity is the greatest energy source demanded, comprised 73% of the plant's total energy & utilities budget. Electricity was budgeted on actual contract and demand pricing using a 4-year average of kWh and KW demand for a total of \$11,633,785, a 3.0% decrease. A new supplier contract that contains a slight decrease was not included in the budgeted figure. \$20,000 is included for the Power Purchase Agreement on the 455kW photovoltaic array installed at the facility. A small portion of the increase was due to a projected increase in demand, \$72,767. Renewable Energy Credits (RECs) expense was eliminated from Deer Island's 2025 budget. Historically, MWRA has voluntarily been purchasing the RECs above state requirements as part of its sustainability efforts. Updated guidance from the Commonwealth prefers that resources be utilized toward onsite fossil fuel reductions over the voluntary purchase of offsets. The Authority has a positive balance of these credits so the purchase of credits from the Regional Greenhouse Gas Initiative (RGGI) was zeroed out.

Water and Diesel comprise the meaningful remainder of the Deer Island Energy & Utilities budget at 14.5% or \$2,357,140 and 12%, or \$1,978,365 respectively. Water expense increased 12.6% or \$262,637 year over year due to a budgeted 3.4% increase in the wholesale water rate (\$219,180) and slight increase in volume (\$43,455). Diesel Fuel decreased \$315,770 (2.5%) due to both price decreases valuing \$185,469 and projected volume decreases valuing \$130,301. The majority of the Diesel Fuel budget is due to the Combustion Turbine Generators that supplied the required secondary power source to ensure continued plant operations during storms and wet weather events and during maintenance of the HEEC (Harbor Electric Energy Company - Eversource), electrical transmission lines to Deer Island.

Electricity for Clinton similarly decreased but at a greater percentage (-20%) or \$65,163 due to a pricing decrease valued at \$41,000 and a demand decrease valued at \$24,000. The price of Natural Gas for Clinton decreased from \$1.60/therm in 2024 to \$1.25/therm but the budget amount increased year over year by 19.9% or \$7,550, due to a projected 53% increase in volume demanded. Building heat at Clinton was converted to Natural Gas in 2018, #2 Fuel Oil is used for the landfill operation and to support equipment and decreased 8.3% or \$300 due to pricing. Water expenses for Clinton remained constant year-over-year.

Similar to the trends in wastewater treatment, Field Operations sees a decrease in all energy expenses, down \$974,905 and an increase in water expenses, up \$1,343. Both are a result in changes in pricing. Electricity demand also dominates the energy budget for Field Operations at \$10,519,140 comprising 79% of this budget sub-category. Diesel at \$1,444,364 comprises 10% with the remainder of the budget coming from Natural Gas \$799,875 (6%), Water \$456,255 (3.4%) and Propane \$62,769 (1.6%). Propane, Water and Natural Gas all saw slight decreases in budgeted volumes based on three-year averages. Only Diesel saw a slight increase in volume.

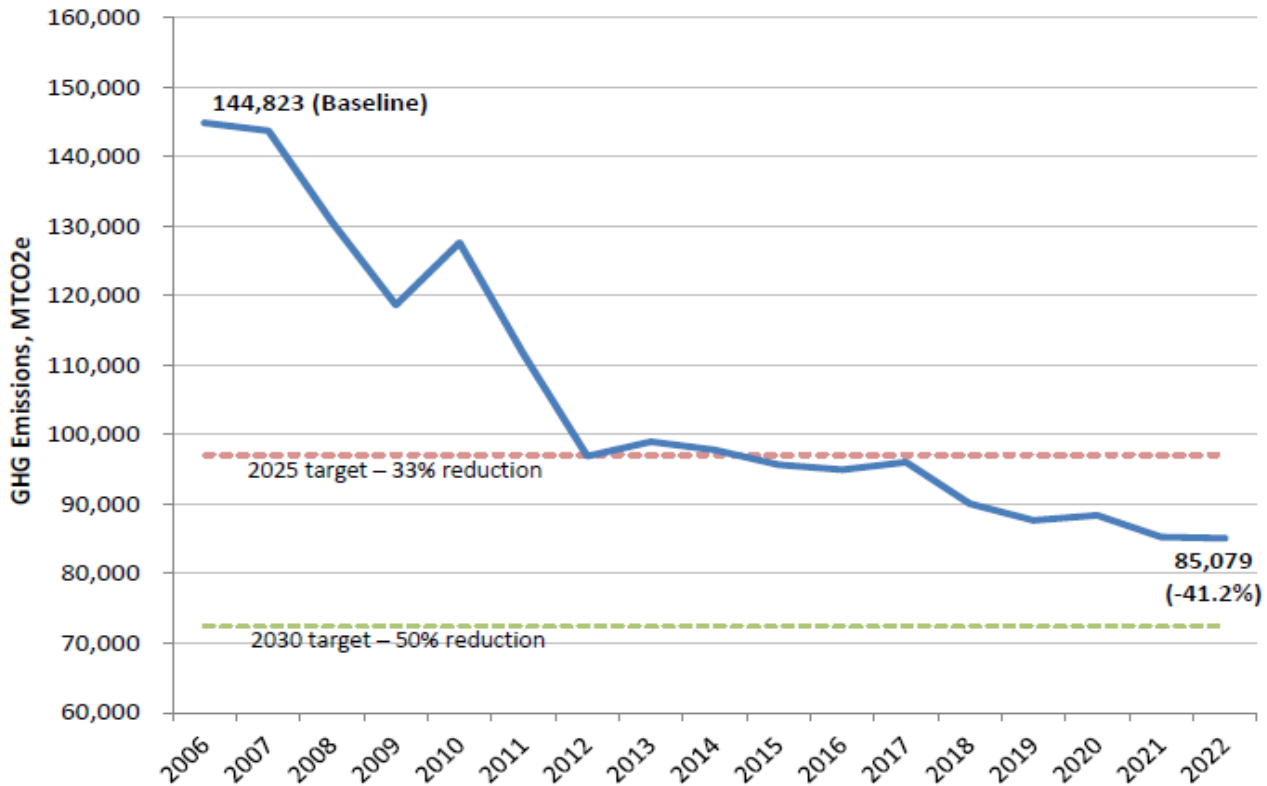


Proposed Fiscal Year 2025 CEB



Energy & Utilities

MWRA Greenhouse Gas (CO2) Emissions 2006-2022



Future Efficiency & Decarbonization Projects

New DITP – Combined Heat Power (CHP) system

	Projected Energy consumption Reductions	Projected GHG Reductions
Fuel oil reductions	3,000 gal per year	3,000 metric tons per year
Purchased Electricity	40 GWh per year	9,800 metric tons per year



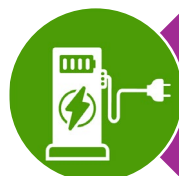
Heat Pump Design & Installations:

- Newton Street Pump Station
- New Neponset Pump Station
- Wachusett Lower Gate House
- Ward Street Headworks (60/40 Electric/Natural Gas)
- Columbus Park Headworks (60/40 Electric/Natural Gas)



Solar Installations:

- Norumbega Covered Storage (~4MW) - to be sold to grid (no GHG emission credit)
- DITP Parking Lot Canopy & Roof (~2MW) - “behind the meter” (will reduce DITP GHG emissions)



Electric Vehicles & Charging Stations:

- 18 vehicles (goal = 10 additional /yr)
- 3 existing Level II charges (2 DC Fast installations in FY25)
 - Chelsea (FY25 DC Fast)
 - DITP (FY25 DC Fast + Solar Parking Canopy)
 - Southborough

Energy Efficiency & Decarbonization

MWRA Progress

MWRA staff frequently say, “the environment is built into our DNA.” So it is no surprise that the Authority has committed talent and resources toward “Leading by Example” to meet or exceed the goals of Massachusetts Executive Order 594, which establishes emissions reduction targets for state agencies, as well as the Clean Energy and Climate Plan, which commits the Commonwealth to net zero greenhouse gas emissions by 2050 with intermediate targets of 33% and 50% reductions by 2025 and 2030, respectively.

Since 2006, MWRA Greenhouse Gas (GhG) emissions have decreased 41.25% from 144,823 Metric Ton of Carbon Dioxide equivalent to 85,079 per year. Given how energy intensive MWRA operations are, most especially wastewater treatment, this progress and projected future reductions, merit special attention and recognition by the Advisory Board.

While the progress made since 2006 has been significant, the rate of GhG reductions has decreased in recent years. This recent slowdown reflects the fact that many of the lower cost, readily available methods of mitigation have been implemented. A significant reduction in GHG emissions is expected from the replacement of the existing combined heat and power (CHP) system at Deer Island, which will begin in 2025 and currently scheduled for completion by 2033. The Combined Heat and Power upgrade promises to increase the efficiency of conversion of digester gas to energy by 16% resulting in 15% increase in the amount of Deer Island’s energy being produced on-site and a 27% increase in electricity being supplied to the grid. The energy efficiency gains and GhG emissions reductions associated with this project should bring total MWRA emissions to its 50%/2030 targets, albeit a few years later than the goal.

In the intervening years, MWRA plans to pursue additional efficiency and renewable energy projects, working closely with the MassDEP-Climate Mitigation Trust Fund and Eversource to leverage available rebates and incentives toward its emissions goals. Near term projects include:

- Building electrification at three waterworks pump stations and 2 wastewater headworks.
- Solar Installations totaling 6MW at the Norumbega covered storage and on the Deer Island rooftop and a new parking lot canopy.
- EV DC fast charging stations at Deer Island and Chelsea and a procurement target of 10 electric vehicles each year.
- Battery storage pilot projects at Brattle Court Pump Station and Chelsea.

Future Opportunities

The MWRA Advisory Board applauds the work and tangible success the MWRA has achieved in energy efficiency and decarbonization of its operation. We are enthused by the prospect of future projects such as sewer heat recovery and the possibility of creating a microgrid with a battery energy storage system at Deer Island.

Regardless of whether the innovative ideas being discussed today come to fruition or not, MWRA now has energy efficiency and decarbonization built into its DNA which is beneficial for the triple bottom line of keeping rates low, society healthy, and the planet from overheating.



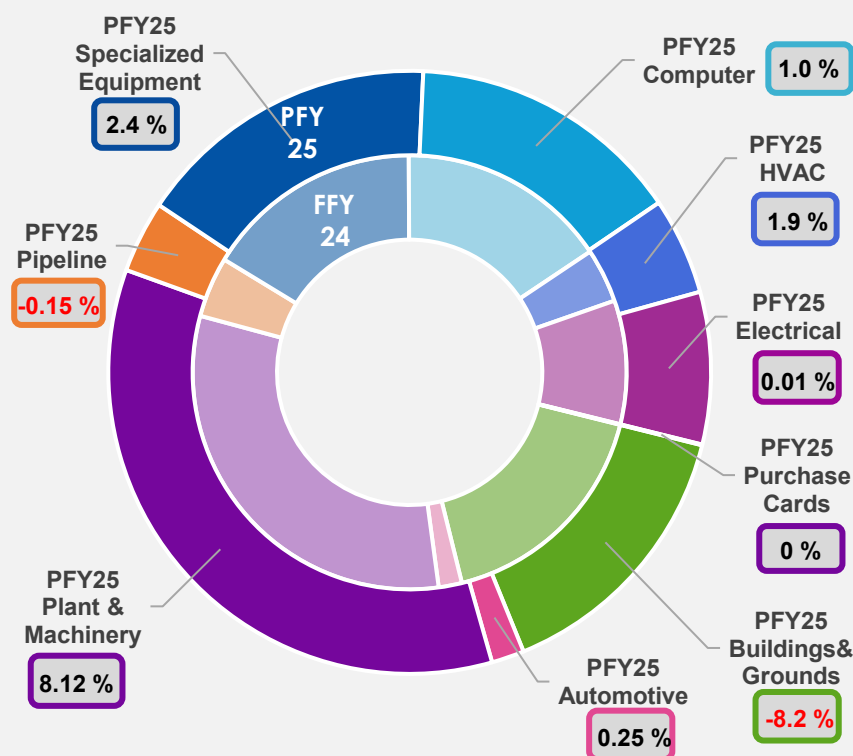
Proposed Fiscal Year 2025 CEB



Maintenance

	Final FY24	Proposed FY25	Change (\$)	Change (%)
BUILDINGS & GROUNDS	\$ 6,651,070	\$ 6,513,601	-\$ 137,469	-2.1%
AUTOMOTIVE	667,500	765,500	98,000	14.7%
PLANT & MACHINERY	12,086,562	15,218,410	3,131,848	25.9%
PIPELINE	1,735,405	1,678,105	- 57,300	-3.3%
SPECIALIZED EQUIPMENT	6,263,798	7,127,299	863,501	13.8%
COMPUTER	6,051,020	6,435,520	384,500	6.3%
HVAC	1,553,258	2,269,346	716,088	46.1%
ELECTRICAL	3,550,642	3,555,538	4,896	0.14%
PURCHASE CARDS	15,000	15,000	-	-
TOTAL MAINTENANCE	\$ 38,574,255	\$ 43,578,319	\$ 5,004,063	12.97%

Maintenance Expenses: FFY24 to PFY25



PFY25 Maintenance Expense Highlights

Buildings & Grounds	↓ 2.1% (\$137K)
Automotive	↑ 14.7% (\$8K)
Plant & Machinery	↑ 25.9% (\$3.13M) – includes repairs and services on DITP machinery
Pipeline	↓ 3.3% (\$57K)
Specialized Equipment	↑ 13.8% (\$863K) includes service contracts and upgrades to PICS @DI
Computer	↑ 6.3% (384K)
HVAC	↑ 46.1% (\$716K)
Electrical	↑ 0.14% (~\$5K)
Purchase Cards	- No change from FFY24

Maintenance

Overview

The Maintenance category of expense for the proposed Fiscal Year 2025 budget shows an overall increase of \$5,004,063, or 12.97%, compared to the previous fiscal year. This substantial rise is primarily driven by significant increases in certain categories.

The most notable increase is in the Plant & Machinery line item, which sees a substantial \$3,131,848 (8.12%) hike, which includes a \$1,000,000 placeholder for upgrading the out-of-date Human Machine Interface (HMI) of the DITP Process Information Control System (PICS) system. Additionally, the HVAC line item experiences a significant 46.1% (\$716,088) increase, while the Specialized Equipment line item also sees a notable 13.7% (\$863,501) rise.

Other line items, such as Computer and Automotive, also witness increases of 1% (\$384,500) and 0.25% (\$98,000), respectively. However, some areas see decreases, with Buildings & Grounds experiencing a 0.36% (\$137,469) reduction and Pipeline seeing a 0.15% (\$57,300) decrease.

The Electrical category remains relatively stable, with only a marginal 0.01% (\$4,896) increase, while the Purchase Cards category remains unchanged from the previous fiscal year.

These changes in the Maintenance expenses reflect a strategic allocation of resources to address the evolving needs of the organization, with a particular emphasis on upgrading and maintaining critical infrastructure, such as plant and machinery, HVAC systems, and specialized equipment. MWRA staff have noted that they had fallen behind their targeted maintenance activities during and just after the pandemic but are getting back to their desired levels of maintenance.



Proposed Fiscal Year 2025 CEB

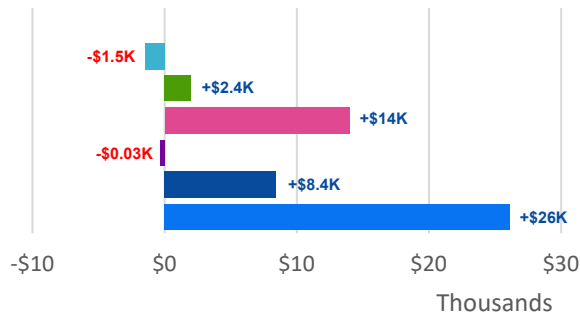


Training & Meetings

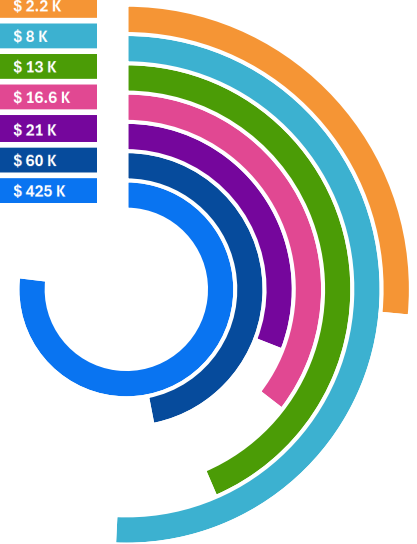
	Final FY24	Proposed FY25	Change (\$)	Change (%)
TRAININGS & MEETINGS	\$ 399,628	\$ 425,777	\$26,149	6.5%
OUT OF STATE MTGS / BRIEFINGS	11,140	13,140	2,000	8.0%
OUT OF STATE PROF ASSOC/SEMINARS	21,269	20,969	-300	-1.4%
OUT OF STATE INDUSTRY ASSOC/CONF	2,600	16,600	14,000	538.5%
IN STATE OVERNIGHT MEETINGS	2,225	2,225	-	-
IN STATE LOCAL MEETINGS	51,585	59,985	8,400	16.3%
TM OTHER CONSULTANTS/VENDORS	10,150	8,650	-1,500	-14.8%
TOTAL TRAININGS & MEETINGS	\$ 498,597	\$ 547,346	\$ 48,749	9.78%

▲ from FFY24

PFY25 ↑ \$ 0.54 M

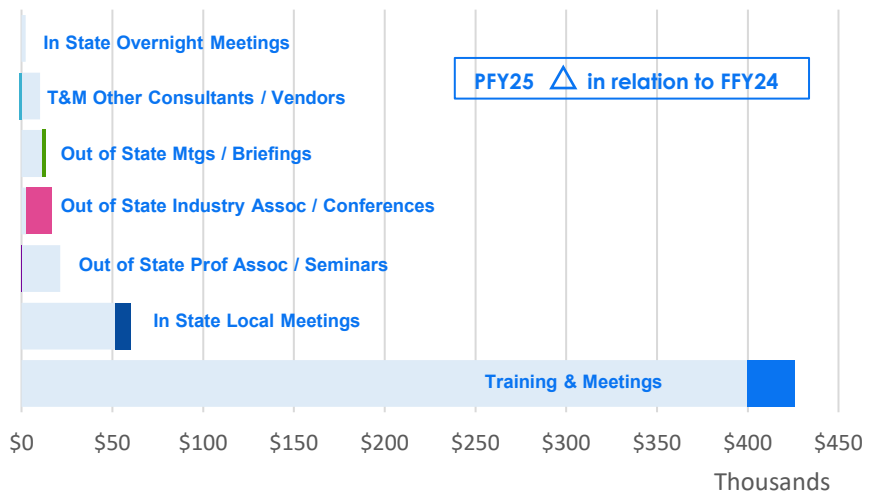


IN STATE OVERNIGHT MEETINGS	\$ 2.2 K
TM OTHER CONSULTANTS/VENDORS	\$ 8 K
OUT OF STATE MTGS / BRIEFINGS	\$ 13 K
OUT OF STATE INDUSTRY ASSOC/CONF	\$ 16.6 K
OUT OF STATE PROF ASSOC/SEMINARS	\$ 21 K
IN STATE LOCAL MEETINGS	\$ 60 K
TRAININGS & MEETINGS	\$ 425 K



PFY25 Trainings & Meetings Expense Highlights

Trainings & Meetings	↑ 6.5% (\$26K)
Out of State Mtgs/Briefings	↑ 8.0% (\$2K)
Out of State Prof Assoc/Seminars	↓ 1.4% (-\$0.3K)
Out of State Industry Assoc/Conf	↑ 538.5% (\$14K)
In State Overnight Mtgs	- No change from FFY24
In State Local Mtgs	↑ 16.3% (\$8K)
TM other Consultants / Vendors	↓ 14.8% (-\$1.5K)





Proposed Fiscal Year 2025 CEB

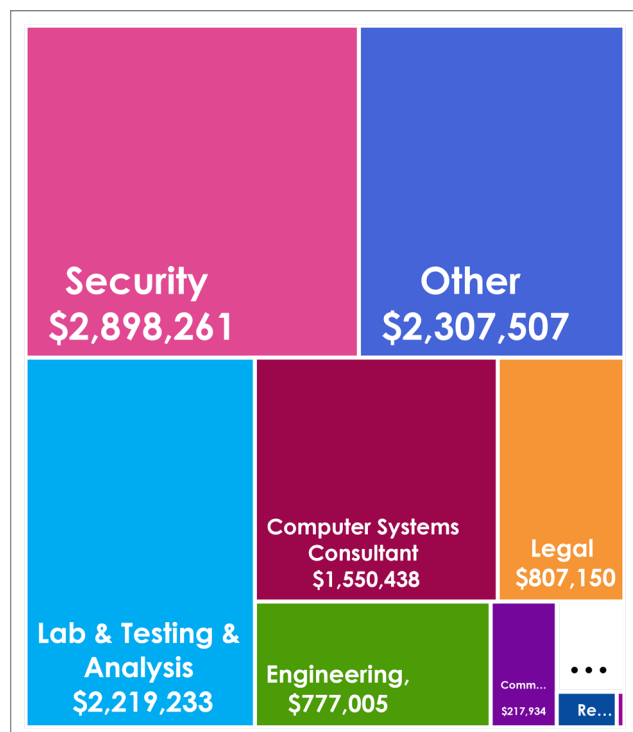
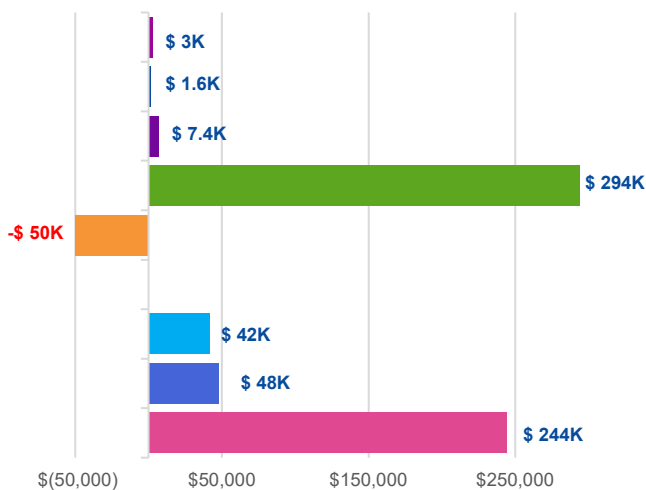


Professional Services

	PFY24 (\$M)	PFY25 (\$M)	Change (\$M)	Change (%)
ENGINEERING	\$ 0.48	\$ 0.77	\$ 0.29	60.8%
LAB/TESTING/ANALYSIS	2.18	2.22	0.04	1.9%
LEGAL	0.86	0.81	-0.50	-5.8%
AUDIT	0.16	0.16	0.00	0%
COMMUNICATIONS	0.210	0.217	0.007	3.5%
OTHER	2.26	2.30	0.04	2.1%
SECURITY	2.65	2.89	0.24	9.2%
RESIDENT INSPECTIONS	0.054	0.056	0.002	2.9%
CONSTRUCTION SERVICES	0.004	0.007	0.003	75%
COMPUTER SYSTEM CONSULTANTS	1.55	1.55	-	0%
TOTAL PROFESSIONAL SERVICES	\$ 10.4	\$ 11.0	\$ 0.59	5.6%

▲ from FFY24

PFY25 ↑ \$ 0.59 M



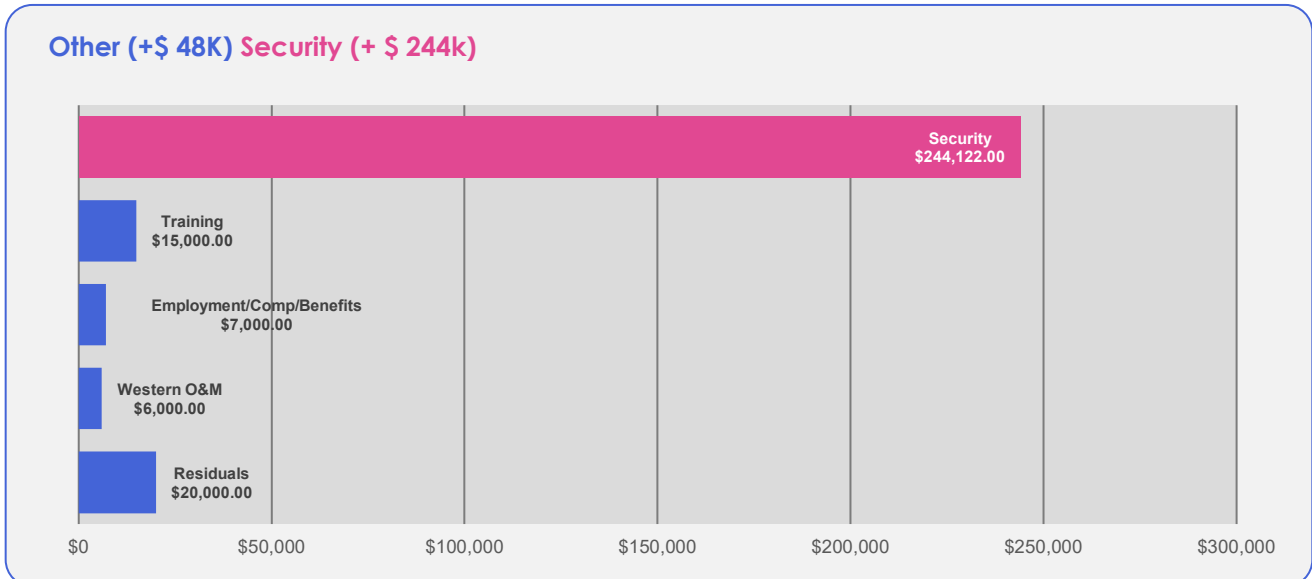
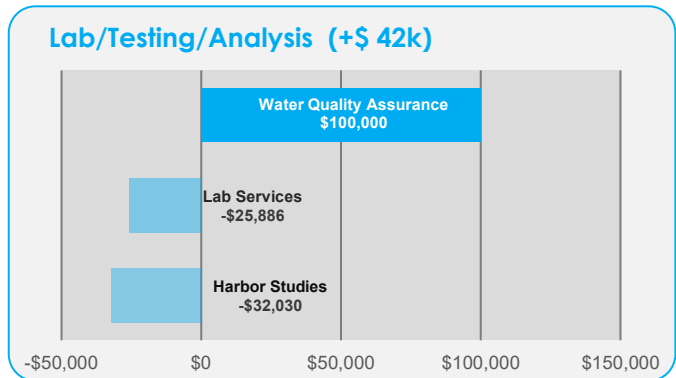
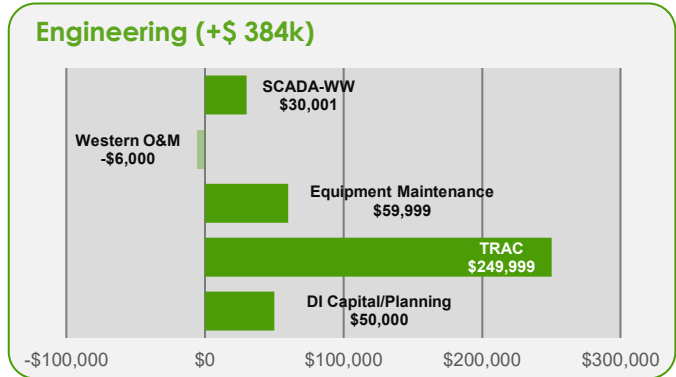


Proposed Fiscal Year 2025 CEB



Professional Services

PFY25 Professional Services Highlights	
Engineering	↑ 60.8% (\$294K) primarily due to increased TRAC compliance? \$300k for battery backup study
Security	↑ 9.2% (\$244K) - cybersecurity & incidence response (\$40K)
Communications	↑ 3.5% (\$7K)
Legal	↓ 5.8% (\$50K) - reflects prior year increased fees associated with NPDES permitting
Resident Inspections	↑ 2.9% (\$1.6K)
Lab / Testing / Analysis	↑ 1.9% (\$42K) - Algae & cyanobacteria controls at Wachusett & Quabbin
Other	↑ 2.1% (\$48K)
Construction Services	↑ 75% (\$3K)
Computer System Consultant	- No change from FFY24



Professional Services

Overview

Professional Services overall saw an increase of \$590,144, or 5.67%, largely due to increases in Engineering and Security, and a decrease in Lab, Testing, and Analysis. Engineering saw an increase in Engineering costs of \$293,999, or 60.87%, largely from a \$250,000 increase in Toxic Reduction & Control (TRAC) related to consulting services for data analysis due to projected costs associated with the NPDES permit. Deer Island Capital Programs and Planning saw an engineering increase of \$50,000, or 18.9%, and Western Operations & Maintenance saw an engineering decrease of \$6,000, or 12%.

Security was increased \$244,122, or 9.2%, with an additional increase of \$48,000 after Spring Revisits due to inflation and union contracts associated with security guard wages in the Boston area. Lab, Testing, and Analysis decreased \$42,084, or 1.93%, of which \$25,886 reflects accurate testing costs per sample for the fifth Unregulated Contaminant Monitoring Rule (UCMR5) required by the Safe Drinking Water Act (SDWA). Construction services also saw an increase of \$3,000, or 75%, associated with Employment, Compensation, and Benefits.

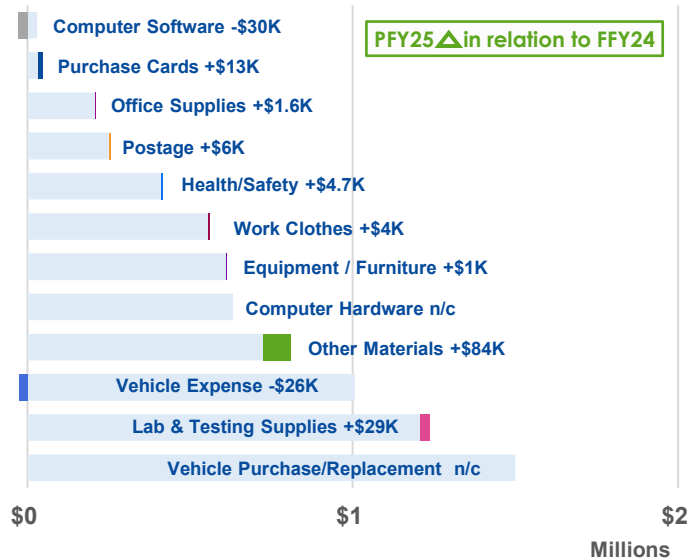
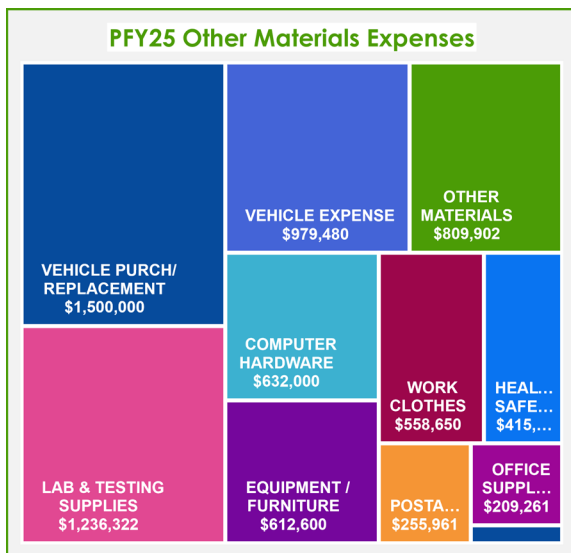


Proposed Fiscal Year 2025 CEB



Other Materials

	Final FY24	Proposed FY25	Change (\$)	Change (%)
OFFICE SUPPLIES	\$ 207,569	\$ 209,261	\$ 1,692	0.8%
POSTAGE	249,982	255,961	5,979	2.4%
LAB & TESTING SUPPLIES	1,207,175	1,236,322	29,147	2.4%
HEALTH / SAFETY	410,478	415,179	4,701	1.1%
EQUIPMENT / FURNITURE	611,371	612,600	1,229	0.2%
VEHICLE PURCH / REPLACEMENT	1,500,000	1,500,000	-	-
WORK CLOTHES	554,704	558,650	3,946	0.7%
VEHICLE EXPENSE	1,006,105	979,480	-26,625	-2.6%
OTHER MATERIALS	725,152	809,902	84,750	11.7%
COMPUTER HARDWARE	632,000	632,000	-	-
COMPUTER SOFTWARE	30,000	-	-30,000	-100%
PURCHASE CARDS	32,864	45,864	13,000	39.6%
TOTAL OTHER MATERIALS	\$ 7,167,400	\$ 7,255,219	\$ 87,819	1.23%



PFY25 Other Materials Expense Highlights

Lab & Testing Supplies	↑ 2.4% (\$29K) represents items withdrawn from warehouse for most cost centers. Water O&M Supplies warehouse code changed (\$7.5K)	Other Materials	↑ 11.7% (- \$85K) Includes replacement of cubicles @ DITP (\$80K) & Gravel for Clinton Sludge Landfill reuse (\$291K) & Tunnel Program Core Storage (\$15K)
Vehicle Purchase / Replacement	- No change from FFY24 – covers prioritized list of replacement (~41) assumes some carryover spending due to FY21 delivery delays	Vehicle Expense	↓ 2.6% (-26.6K) due to decrease in prices

Other Materials

Overview

The Other Materials category in the proposed Fiscal Year 2025 budget reflects an overall increase of \$87,819, or 1.23%, compared to the previous fiscal year. While some subcategories show minimal changes or decreases, others experience notable increases.

One of the most significant increases is in the Other Materials subcategory itself, which sees an 11.7% (\$84,750) rise. This hike can be attributed to the replacement of cubicles at the Deer Island Treatment Plant, amounting to \$80,000, as well as the acquisition of gravel for the Clinton Sludge Landfill reuse project (\$291,000) and the Tunnel Program Core Storage (\$15,000).

The Lab & Testing Supplies subcategory also witnesses a 2.4% (\$29,147) increase, representing items withdrawn from the warehouse for various cost centers, with the Water O&M Supplies warehouse code changing by \$7,500.

While the Vehicle Purchase/Replacement subcategory remains unchanged from the previous fiscal year, covering the prioritized list of approximately 41 replacement vehicles, the Vehicle Expense subcategory experiences a 2.6% (\$26,625) decrease.

Other subcategories that see increases include Work Clothes (0.7%, \$3,946), Health/Safety (1.1%, \$4,701), Postage (2.4%, \$5,979), Office Supplies (0.8%, \$1,692), and Purchase Cards (39.6%, \$13,000). However, the Computer Software subcategory faces a substantial 100% (\$30,000) decrease.

These changes in the Other Materials category reflect a strategic allocation of resources to address various operational needs, such as upgrading facilities, maintaining equipment, and ensuring the availability of necessary supplies and materials for efficient operations.



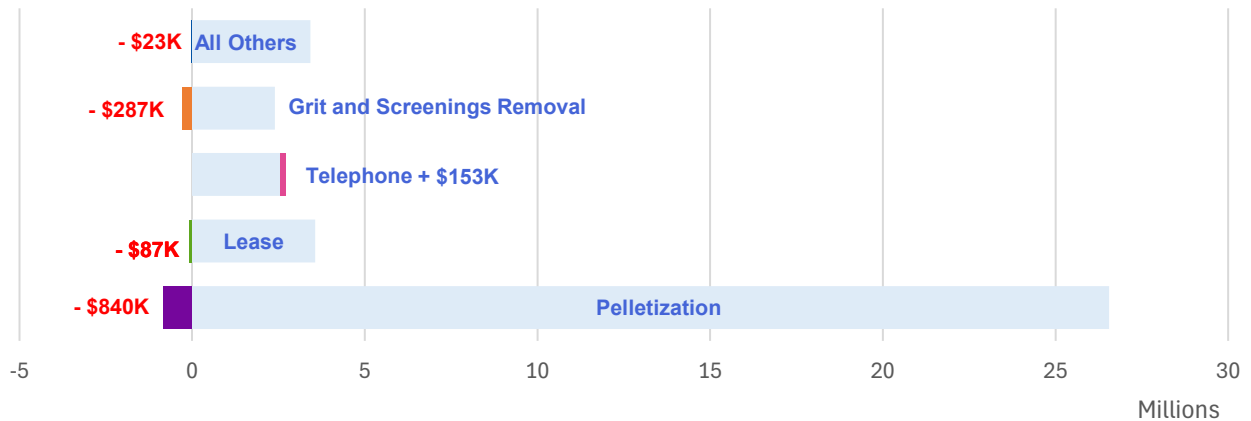
Proposed Fiscal Year 2025 CEB



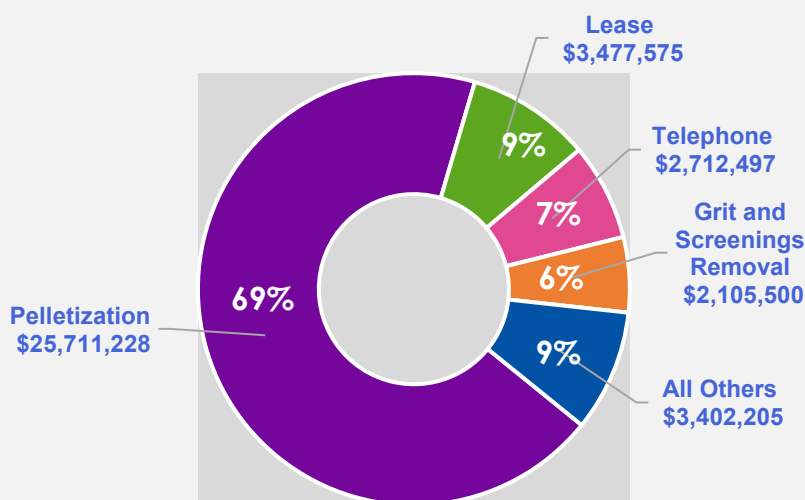
Other Services

	Final FY24	Proposed FY25	Change (\$)	Change (%)
PELLETIZATION	\$ 26,552,167	\$ 25,711,228	-\$ 840,939	-3.2%
LEASE	3,564,523	3,477,575	-86,948	-2.4%
TELEPHONE	2,559,222	2,712,497	153,275	6.0%
GRIT & SCREENINGS	2,392,699	2,105,500	-287,199	-12.0%
ALL OTHERS	3,425,824	3,402,205	-23,619	-0.7%
TOTAL OTHER SERVICES	\$ 38,494,435	\$ 37,409,005	\$ 1,085,430	- 2.8%

PFY25 change in Relation to FFY24



PFY25 Other Services



PFY25 Other Services Expense Highlights

Pelletization	↓ 3.2% (\$840K) New Contract started January 2024. The second half of PFY25 will be inflated to FFY24 per contract.
Lease	↓ 2.4% (\$87K)
Telephone	↑ 6% (\$153K)
Grit & Screenings Removal	↓ 12% (\$287K) Estimated tonnage of 5,196. FFY24 utilized estimated tonnage of 7,092.
All Others	↓ includes \$1.2M cost to landfill pellets in second half of year as contingency for state regulations regarding PFAS in biosolids

Other Services

Overview

The Other Services category of expense in the proposed Fiscal Year 2025 budget exhibits a decrease of \$1,085,430, or 2.8%, compared to the previous fiscal year. This reduction is primarily driven by changes in specific subcategories.

One of the most notable decreases is in the Grit & Screenings Removal subcategory, which sees a significant 12% (\$287,199) decline. This decrease is based on an estimated tonnage of 5,196 for the upcoming fiscal year, significantly lower than the estimated tonnage of 7,092 utilized in the previous fiscal year.

The Pelletization subcategory, which accounts for the largest portion (69%) of the Other Services category, also experiences a 3.2% (\$840,939) decrease. This reduction can be attributed to a new contract that started in January 2024, with the second half of the proposed fiscal year reflecting inflated costs compared to the previous fiscal year, as per the contract terms.

Additionally, the Lease subcategory witnesses a 2.4% (\$86,948) decrease, while the All Others subcategory, which includes a contingency cost of \$1.2 million for landfilling pellets in the second half of the year due to potential state regulations regarding PFAS in biosolids, sees a modest 0.7% (\$23,619) reduction. The All Others subcategory is a sum of multiple smaller line items such as Advertising, Permit Fees, Police Details and others.

It's important to note that one year ago in the proposed FY24 CEB that the costs for potentially landfilling the pellets was estimated at \$12.4 million. While the new estimated expense is certainly a welcome relief from the much higher estimate from FY24, it's important to note that landfilling the pellets is, at best, a temporary solution. The Advisory Board will continue to watch this category of expense and future options for how to manage any impacts of PFAS in the biosolids over the long term.

Conversely, the Telephone subcategory experiences a notable 6% (\$153,275) increase, reflecting potential adjustments to telecommunication expenses.

These changes in the Other Services category demonstrate a strategic approach to managing operational costs, with considerations given to regulatory compliance, contract negotiations, and efficient resource allocation across various subcategories.

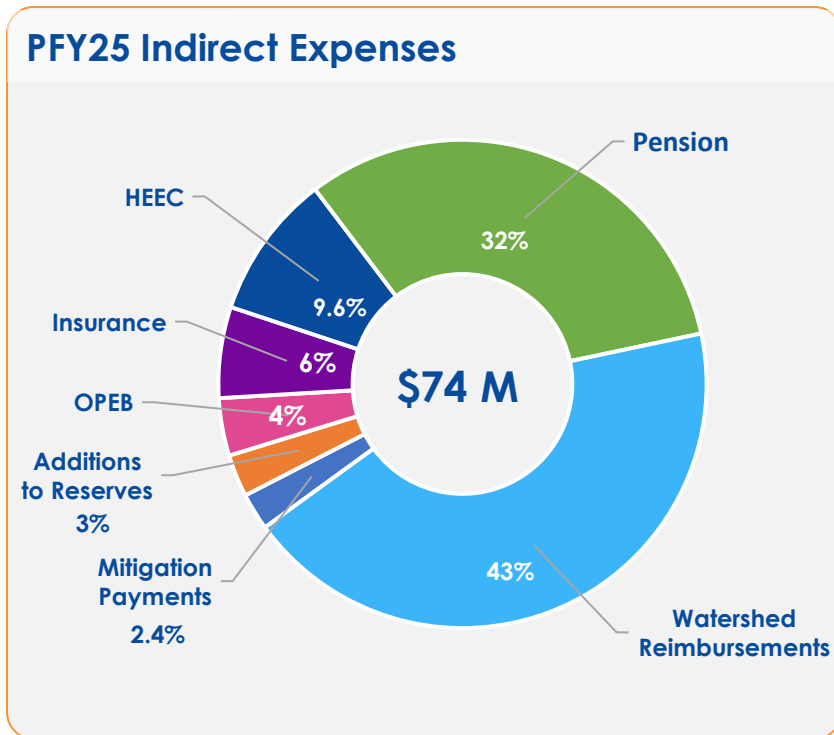
Recommendation: That MWRA reduce Other Services by \$28,176 for the Advisory Board's FY25 final Operating Budget.



Proposed Fiscal Year 2025 CEB

\$ ↗ Indirect Expenses

	FFY24 (\$ M)	PFY25 (\$ M)	Change (\$ M)	Change (%)
MITIGATION PAYMENTS	\$ 1.78	\$ 1.82	\$ 0.04	2.5%
ADDITIONS TO RESERVES	7.86	2.07	-5.78	-73.6%
OTHER POST-EMPLOYMENT BENEFITS (OPEB)	2.85	2.82	-0.02	-0.9%
INSURANCE	4.07	4.47	0.40	10.0%
HEEC PAYMENTS	7.50	7.10	-0.39	-5.3%
PENSION	15.97	23.72	7.75	48.5%
WATERSHED REIMBURSEMENTS	30.56	32.10	1.75	5.8%
TOTAL INDIRECT EXPENSES	\$ 70.38	\$ 74.12	\$ 3.74	5.3%



PFY25 Indirect Expense Highlights

Pension	↑48% to assist with reaching full funding by 2030. Includes \$16M (Jan 2022 valuation) + \$1.9 OPEB savings + \$5.8M additional
OPEB	↓ 0.9% (\$24K)
Insurance	↑ 10% (\$406K) due to increased premiums.
Additions to Reserves	↓ 73.6% due to application of a one-time \$5.8M toward Pension.
HEEC	↓5.3% (\$397K) per HEEC proforma
Watershed	↑5.8% (\$1.8M). 150 FTEs, no vacancy adjustment included. YoY change=↑ wages & benefits
Mitigation Payments	↑ 2.5% (\$ 40K) payments to the host communities of Quincy & Winthrop

Overview

MWRA's proposed FY25 CEB includes significant changes in indirect expenses. The most notable increase is in the pension category, which is projected to rise by 48.5%, or \$7.75 million, to \$23.72 million. In addition to the \$16 million required from the January 2022 valuation, the MWRA is making an additional payment of \$5.8 million and transferring \$1.9 million from Other Post-Employment Benefits (OPEB) savings to this line item. This substantial increase is part of MWRA's strategy to fully fund its pension by its current deadline of 2030.

On the other hand, additions to reserves are expected to decrease by 73.6%, or \$5.78 million, to \$2.07 million. This category of expense is based on the terms of the MWRA's bond resolutions, which require that 1/6th of MWRA's operating expenses be held in reserve.

Insurance expenses are anticipated to rise by 10%, or \$406,665, to \$4.47 million, driven by increased premiums.

Conversely, OPEB expenses are projected to decrease slightly by 0.9%, or \$24,516, to \$2.82 million.

The HEEC (Harbor Electric Energy Company) payments are expected to decrease by 5.3%, or \$397,265, to \$7.10 million, as per the HEEC pro forma.

Watershed reimbursements, which include 150 full-time employees without vacancy adjustments, are projected to increase by 5.8%, or \$1.75 million, to \$32.10 million, primarily due to increases in wages and benefits. Understaffing at the Division of Water Supply Protection (DWSP) had been a long-standing concern of the Advisory Board in recent years, and the subject of many comments and recommendations. That DWSP has substantively achieved full staffing and has no need this year for the application of a vacancy rate, a credit to their efforts on this front.

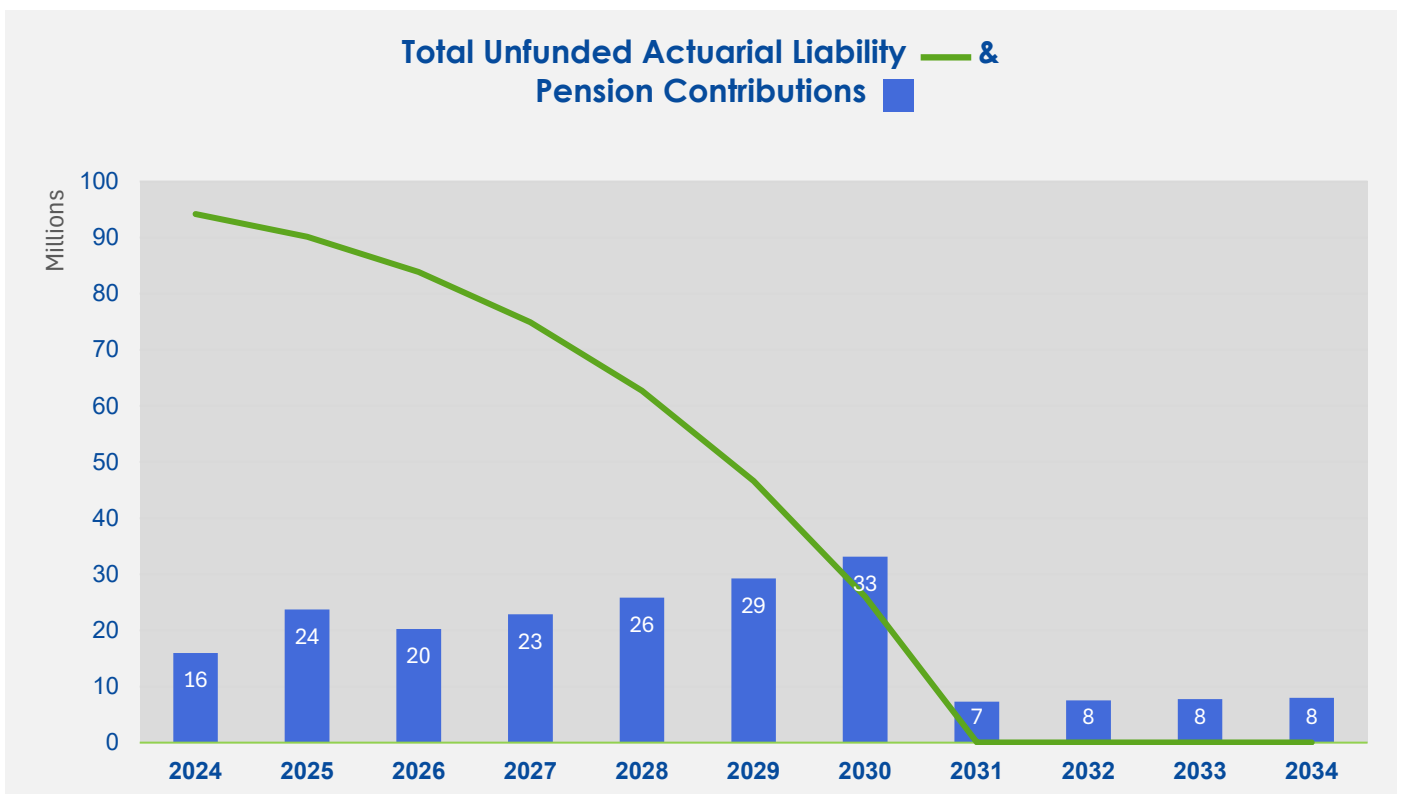
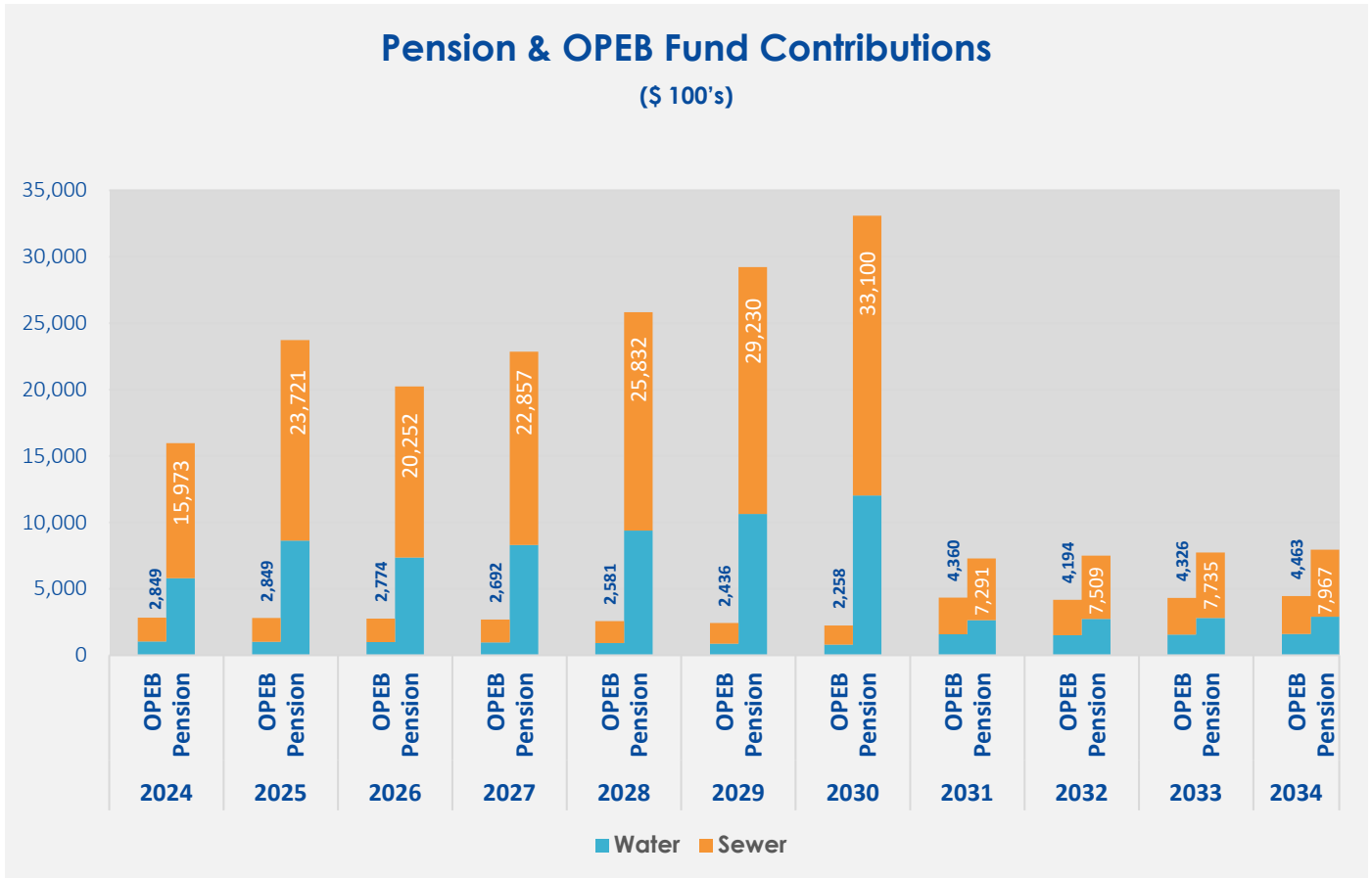
Comment: The Advisory Board applauds the Division of Water Supply Protection in its aggressive and successful push to target adding sufficient staff to support its operations and mission.

Finally, mitigation payments to the host communities of Quincy and Winthrop are expected to rise by 2.5%, or \$40,000, to \$1.82 million.



Proposed Fiscal Year 2025 CEB

\$ Indirect Expenses



Prioritizing Pension

Background

The MWRA Advisory Board commends the strong standing of the MWRA Retirement System. However, with the pension system nearing "heartbreak hill" – close to full funding but facing a steep climb – we must prioritize responsible strategies that minimize the burden on ratepayers.

The Challenge: A Looming Deadline and Market Uncertainty

The current funding schedule requires substantial annual increases in actuarial determined contributions (ADCs) to reach full funding by 2030. The Advisory Board's previous proposal, including extending the payoff date and utilizing a rolling funding schedule, was not accepted by the Retirement Board making this deadline non-negotiable, unlike the OPEB liability. Market uncertainties like inflation and potential debt ceiling issues further complicate the situation. Indeed, from the CY21 actuarial valuation to the CY22 valuation of the retirement fund, the rounded ratio decreased from 89.1% to 88.4%.

The Challenge: Time is of the Essence and Resources Matter

- **Urgent Deadline:** The pension system has a **mandatory** full funding deadline of 2030. This means only five years remain to pay down the \$91.1 million unfunded liability. Each year leaves less time and places greater pressure on the pension line item and impact on ratepayers.
- **Flexibility with OPEB:** Unlike the pension, OPEB reporting currently only requires carrying the liability on the balance sheet. There is no mandated funding schedule for OPEB.

Financial Justification: Strategic Use of Resources

The proposed budget reflects the MWRA's view of the urgency of the pension situation. While the required increase to the ADC is only \$2.0 million, MWRA staff are recommending an additional \$5.8 million contribution. Further, it has redirected \$1.9 million of OPEB expense to the pension. This means a total of \$7.7 million in additional payments are being made to hopefully reduce this liability and the ADCs in future years. This demonstrates the MWRA's commitment to and the importance of accelerating pension funding. However, considering the pension's looming deadline and the OPEB's current funding status (as of January 1, 2024, with a 45% funded ratio), focusing additional resources on achieving full pension funding by 2030 is the most responsible course of action.

Conclusion

By prioritizing pension funding, MWRA can achieve full funding by the 2030 deadline and ensure a sustainable future for the MWRA and its ratepayers. To achieve this goal, the Advisory Board recommends a strategic shift in resource allocation. We propose redirecting **all water and sewer utility funds currently budgeted for OPEB contributions to the pension line item**. This targeted approach will accelerate pension funding towards the previously agreed-upon "virtual full funding" range of 95%-105%.



Simply put, the deadline for the pension is mandatory and looming, while OPEB currently is not. Funding should focus on the liability with the deadline rather than funding a liability that does not.

Recommendation: That MWRA redirect the \$2.8 million currently budgeted to fund the OPEB line item to the pension line item.

Recommendation: MWRA should continue to redirect all future OPEB contributions to the pension line item until full funding is achieved in FY30.



Proposed Fiscal Year 2025 CEB

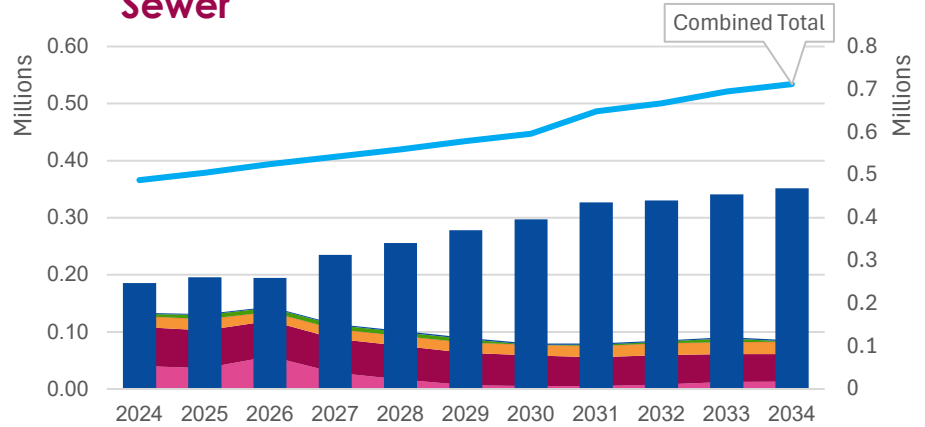


Capital Financing

Annual Expense \$ M

	2025	2028	2031	2034
Chelsea Lease	1.9	1.9	1.9	1.9
Debt Service Prepayment	6.8	7.1	2.2	0
Revenue for Capital	19.8	17.4	19.6	21.9
Variable Rate Debt Service	36.6	17	5	12.9
SRF Debt Service	66	58.3	50.7	48.4
Senior Debt Service	195	255	326	351

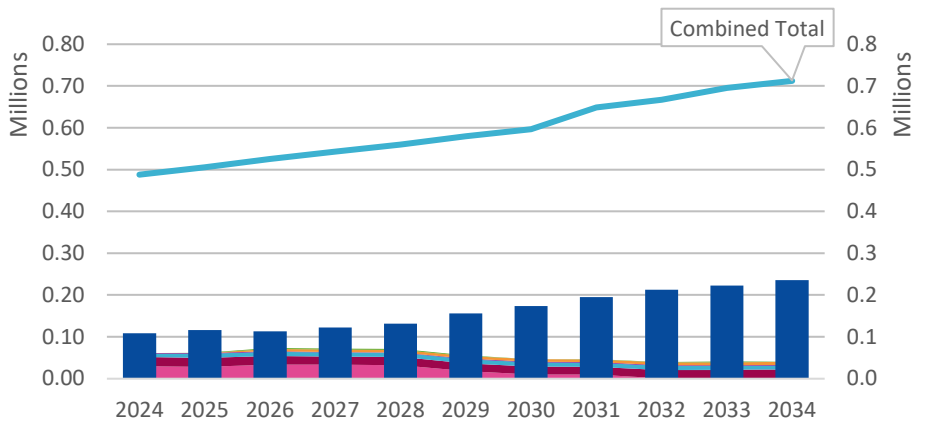
Sewer



Annual Expense \$ M

	2025	2028	2031	2034
Debt Service Prepayment	0.14	2.3	0.75	0
Revenue for Capital	0.4	5.8	6.5	7.3
Chelsea Lease	1.28	1.28	1.28	1.28
CP Interest-Water Pipeline Program	9.8	9.8	9.8	9.8
SRF Debt Service	21.7	19.6	18.8	20.3
Variable Rate Debt Service	28.1	32.1	9.5	1.4
Senior Debt Service	116	131	195	235

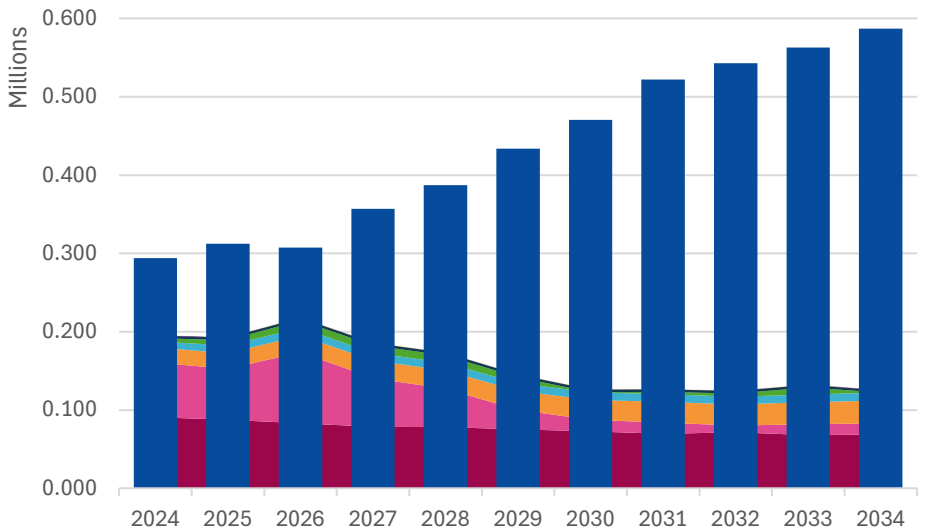
Water



Annual Expense \$ M

	2025	2028	2031	2034
Chelsea Lease	3.2	3.2	3.2	3.2
Debt Service Prepayment	7.0	9.5	3.0	0
CP Interest-Water Pipeline Program	9.8	9.8	9.8	9.8
Revenue for Capital	20.2	23.2	26.2	29.2
SRF Debt Service	87.7	78.0	69.5	68.7
Variable Rate Debt Service	64.7	78.0	14.5	15.3
Senior Debt Service	312	387	522	587

Combined



MWRA's Capital Financing Strategy and Long-Term Debt Management

The proposed capital financing expenses for FY25 highlight the significant long-term debt obligations the MWRA faces in maintaining and upgrading its water and sewer infrastructure. The combined capital financing costs are projected to rise from around \$505 million in FY25 to over \$700 million by FY34, driven primarily by increasing debt service payments. While variable rate debt service declines from \$64.7 million to \$14.3 million over this period, SRF debt service remains relatively stable averaging \$75 million annually. Importantly, the MWRA anticipates utilizing \$20.2 million in revenue for capital projects in FY25, growing to \$29.2 million by FY34 to help offset these debt costs.

Water Debt Service

For the water system, senior debt service is expected to grow from \$117 million in FY25 to \$235 million in FY34, reflecting the MWRA's ongoing capital investments in projects like Carroll Water Treatment Plant and MetroWest Tunnel for which the debt is now coming due. However, water variable rate debt service drops more significantly from \$28.1 million to just \$1.4 million over the next decade.

Sewer Debt Service

The sewer system faces similar pressures, with senior debt service rising from \$196 million in FY25 to \$352 million in FY34. SRF similarly stays relatively constant with an average of \$56 million per year. Variable rate is projected to decline sharply from \$37 million in FY25 to \$13 million in 2034.

Variable Rate Debt Service

Notably, while the projected decreases in variable rate debt service may seem prudent as a method of reducing potential risk, the MWRA has successfully used variable rate debt over the years to realize significant savings and provide a natural hedge against fluctuations in investment income assumptions. When interest rates are low and investment income is down, variable rate debt instruments offer lower interest costs, offsetting the diminished returns. Conversely, when interest rates rise, the MWRA's increased investment income helps balance out the higher variable rate debt service payments.

Historically, the MWRA has carried as much as 23% of its debt portfolio in variable rate instruments, benefiting from this hedge. However, the current projections put the variable rate debt proportion at only around 9% by FY34, out of alignment with rating agencies' recommended "safe level" of 15%. At its peak variable rate debt level, the MWRA was able to strategically manage its risk exposure while capitalizing on opportunities to reduce borrowing costs.

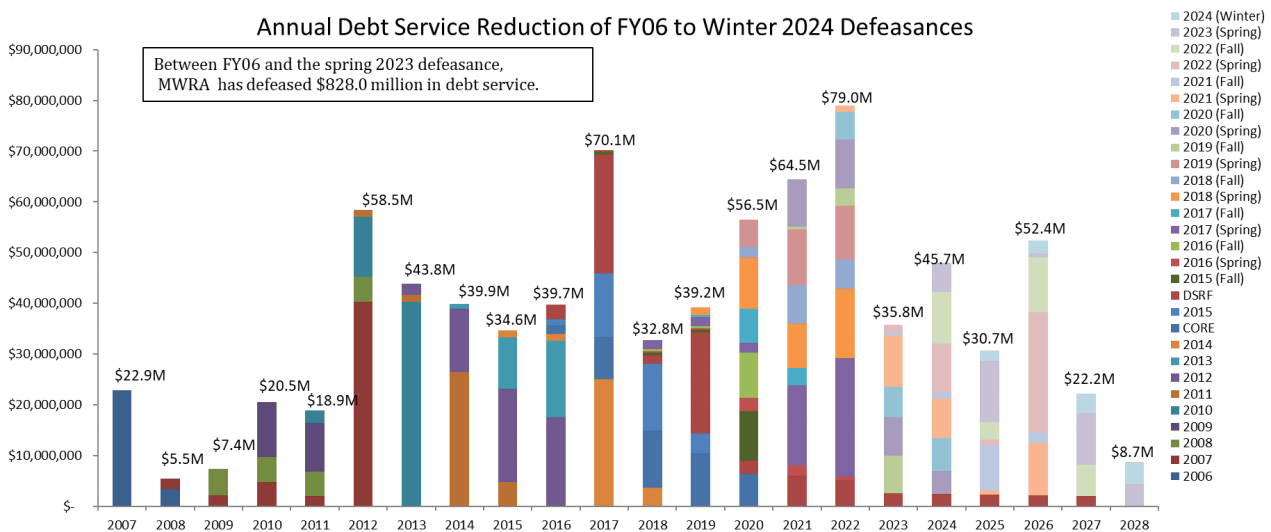
Given the MWRA's positive track record with variable rate debt and the potential savings it can provide, it would be prudent for the authority to revisit its debt portfolio strategy.

Recommendation: The MWRA should evaluate its current variable rate debt service portfolio and develop a plan to bring the variable rate debt composition up to the 15% target level to help optimize the MWRA's capital financing approach by balancing stability and cost savings over the long term.

Strategic Use of Defeasances to Reduce Debt Burden and Manage Rates

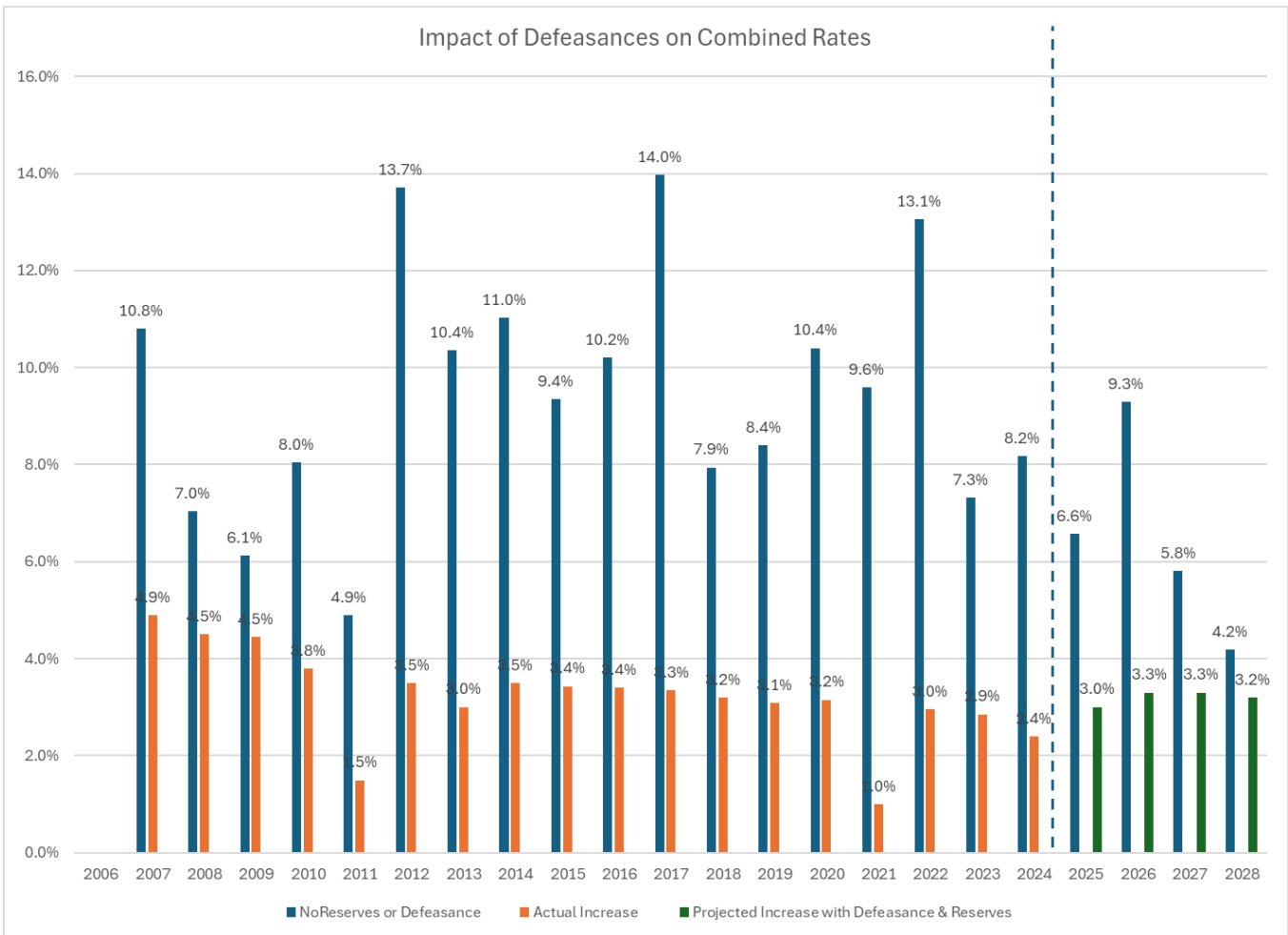
Another method the MWRA has used to strategically reduce its outstanding debt and associated costs is to actively pursue defeasance opportunities. Since FY 2006, the MWRA has executed defeasances totaling \$828 million in debt service through the winter of FY 2024. These defeasances have helped mitigate the overall rate increases by generating savings on future debt service payments.

The following chart provides a detailed breakdown of the specific defeasance transactions and the resulting debt service reductions from FY 2006 through the projected FY 2028. It highlights major defeasance initiatives like the FY 2016 Core and DSRF defeasances, as well as the series of smaller, targeted defeasances in subsequent years.



Cumulatively, these defeasances have yielded over \$39 million in savings for the MWRA through FY 2023. The charts illustrate the annual debt service reductions achieved, with the largest impacts seen in the years immediately following the major defeasance activities.

This next chart provides a focused view on how the MWRA's defeasance activities and reserve usage impacted rate increases specifically from FY2007 through FY2028.



For the combined rate increases during this period, the chart clearly illustrates the moderating effects of the defeasance program and reserves. In addition to defeasance, from FY 2007 through FY 2024, the MWRA has also used a total of \$37.7 million in reserves. While some of these reflect the use of the reserves released with the changes made to the bond covenants, \$3.1 million has been used from FY20-24. Without these mitigation strategies, the projected combined rate increases peaked at around 14% in FY 2017 before declining gradually. However, after accounting for defeasances and reserves, the actual combined increases averaged only around 3-4% annually from FY 2016 to FY 2027.

The chart clearly shows this one-two combination of defeasances and reserve deployments successfully kept rate increases relatively stable in the 3-4% range annually from FY 2024 through the FY 2027 projections.

In summary, the chart details quantify how the MWRA's defeasance initiatives and tactical use of reserves meaningfully impacted rate increases from FY 2007 through FY 2028 (projected), preventing major spikes and enabling more affordable and predictable adjustments for its ratepayer communities.

Furthermore, the MWRA has proposed an additional \$15 million defeasance targeting the 2016C bonds in FY 2025, which is projected to generate interest savings over the remaining life of those bonds. This, combined with the optional debt defeasance opportunity for the 2019B bonds from FY 2026 through FY 2029, demonstrates the MWRA's ongoing commitment to prudent debt management.



Overall, these defeasance initiatives have played a crucial role in moderating the rate increases for the MWRA's ratepayer communities by strategically reducing the authority's debt burden and associated financing costs over the long term.

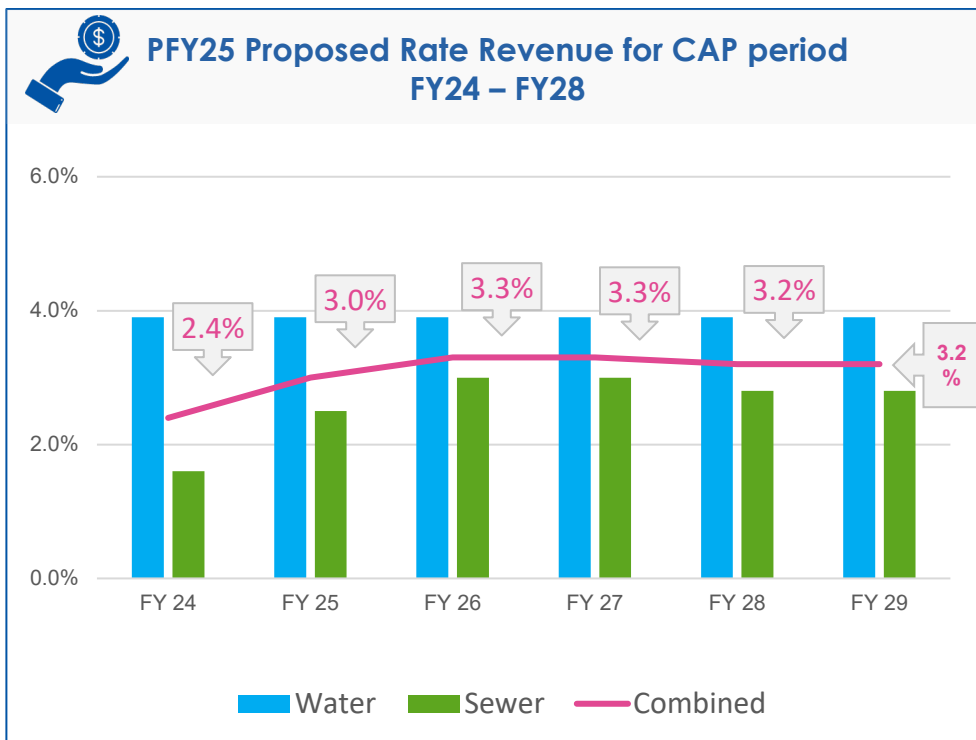
Comment: The Advisory Board applauds the Authority for and continues to support its strategic use of defeasance as a part of its long-term rates management strategy.



Proposed Fiscal Year 2025 CEB

Authority Level - Revenues

Combined	FFY24 (\$M)	PFY25 (\$M)	PFY26 (\$M)	PFY27 (\$M)	PFY28 (\$M)
TOTAL EXPENSES	874.148	899.898	924.843	956.200	988.060
TOTAL NON-RATE REVENUE	39.880	40.460	36.788	38.408	40.565
OTHER USER CHARGES	10.39	10.719	11.03	11.35	11.75
Non-member Sewer	0.877	0.799	0.823	0.848	0.872
Non-member Water	9.512	9.920	10.207	10.504	10.884
OTHER REVENUE	5.838	5.985	6.116	6.253	6.396
Other Revenue-Sewer	4.586	4.804	4.935	5.072	5.214
Other Revenue-Water	1.252	1.181	1.181	1.181	1.181
INVESTMENT INCOME	23.346	23.755	18.833	20.023	21.631
Investment Income-Sewer	13.875	13.728	11.017	11.851	12.819
Investment Income-Water	9.470	10.027	7.816	8.172	8.812
RATE STABILIZATION	0.305	-	0.809	0.780	0.782
RATE REVENUE REQUIRED	834.268	859.438	888.056	917.792	947.495
RATE CHANGE	2.4%	3.0%	3.3%	3.3%	3.2%



FY25 Proposed Revenue Considerations

- Rate Revenue**
 Increased by 3.0% - slightly lower than the Planning Estimate Model of 3.4%
 \$900k = 0.10% on the rate
- Rate Stabilization**
 \$0 being used in FY 25
- Investment Income**
 Increase of \$409k or 1.8% over FY24. Short-term interest projected at 4.25% (no change from FY 24)



Proposed Fiscal Year 2025 CEB

Authority Level - Revenues

WATER	FFY24 (\$M)	PFY25 (\$M)	PFY26 (\$M)	PFY27 (\$M)	PFY28 (\$M)
TOTAL EXPENSES	320.217	332.639	343.140	356.544	370.803
TOTAL NON-RATE REVENUE	20.541	21.129	19.857	20.287	21.359
OTHER USER CHARGES	9.512	9.920	10.207	10.504	10.884
DI Water	2.092	2.355	2.446	2.542	2.642
Water Supplied	0.149	0.149	0.155	0.161	0.167
Clinton WWTP	1.250	1.228	1.248	1.268	1.289
CVA Water System	5.594	5.762	5.932	6.107	6.360
Entrance Fees	0.425	0.00	0.426	0.426	0.426
OTHER REVENUE	1.252	1.181	1.181	1.181	1.181
Energy	0.293	0.573	0.573	0.573	0.573
Miscellaneous	0.959	0.608	0.608	0.608	0.608
INVESTMENT INCOME	9.470	10.027	7.816	8.172	8.812
Construction Fund Interest	1.328	1.661	0.537	0.527	0.695
Investment Income	8.141	8.426	7.278	7.645	8.118
RATE STABILIZATION	-305	-	-384	-430	-482
RATE REVENUE	299.675	311.510	323.552	336.256	349.443
RATE CHANGE		3.95 %	3.87 %	3.93 %	3.92 %

SEWER	FFY24 (\$M)	PFY25 (\$M)	PFY26 (\$M)	PFY27 (\$M)	PFY28 (\$M)
TOTAL EXPENSES	553.931	567.259	581.704	599.656	617.257
TOTAL NON-RATE REVENUE	19.339	19.330	17.200	18.120	19.206
OTHER USER CHARGES	0.877	0.799	0.823	0.848	0.872
Sewer Retail	0.066	0.073	0.075	0.078	0.080
Water Treatment Residuals	0.811	0.726	0.748	0.770	0.792
OTHER REVENUE	4.586	4.804	4.935	5.072	5.214
Permit Fees (TRAC)	-	1.300	1.359	1.420	1.484
Monitoring Fees (TRAC)	2.700	1.607	1.679	1.755	1.834
Penalties (TRAC)	0.050	0.050	0.050	0.050	0.050
Energy	-	0.940	0.940	0.940	0.940
Miscellaneous	1.836	0.907	0.907	0.907	0.907
INVESTMENT INCOME	13.875	13.728	11.017	11.851	12.819
Construction Fund Interest	2.035	0.370	0.267	0.313	0.368
Investment Income	11.840	13.727	10.750	11.538	12.451
RATE STABILIZATION	-	-	-425	-350	-300
RATE REVENUE	534,592	547,928	564,504	581,535	598,052
RATE CHANGE		2.49 %	3.03 %	3.02 %	2.84 %

Combined Revenue Summary

The total expenses for the MWRA are projected to increase steadily from \$874.148 million in FY24 to \$988.060 million in FY28. To support these escalating costs, the proposed rate revenue is set to rise from \$834.268 million in FY24 to \$947.495 million in FY28, with annual rate increases ranging from 3.0% in FY25 to 3.3% in both FY26 and FY27, before declining slightly to 3.2% in FY28. Non-rate revenue sources, such as Other User Charges, Investment Income, and other miscellaneous revenue streams, are anticipated to contribute modest amounts, ranging from \$40.460 million in FY25 to \$40.565 million in FY28.

Water Operations

For the water operations, the total expenses are projected to rise from \$320.217 million in FY24 to \$370.803 million in FY28. The non-rate revenue sources, including Other User Charges, Other Revenue, and Investment Income, are expected to contribute \$21.129 million in FY25.

The proposed rate revenue for water operations in FY25 is \$311.510 million, representing a 3.95% increase from the previous year. This rate increase is driven by the projected growth in expenses while accounting for the non-rate revenue sources. The rate revenue is forecasted to continue rising, reaching \$349.443 million by FY28, with annual increases averaging 3.92%.

Sewer Operations

On the sewer side, total expenses are estimated to grow from \$553.931 million in FY24 to \$617.257 million in FY28. Non-rate revenue sources, such as Other User Charges, Other Revenue, and Investment Income, are anticipated to contribute \$19.330 in the proposed FY25.

The proposed rate revenue for sewer operations in FY25 is \$547.928 million, reflecting a 2.49% increase over the previous year. This rate increase aligns with the projected growth in expenses and considers the non-rate revenue sources. The sewer rate revenue is projected to reach \$598.052 million by FY28, with annual increases averaging 2.85%.

Rate Stabilization Funds

It's worth noting that the MWRA's proposed FY25 CEB does not use any Rate Stabilization funds in FY25, while FY26 through FY28 feature the use of Rate Stabilization funds.

While the Advisory Board had historically focused its review on the overall budget and the impacts to the combined assessment increases, our member communities felt the impact wasn't evenly distributed between water and sewer charges. In response, in recent years the Advisory Board took a closer look at the water and sewer split, recognizing a significant disparity.

The challenge stems from the way existing debt for water projects is maturing. This has resulted in water rate increases consistently hovering around 4% for the next few years, compared to a more manageable 2.8% average for sewer. The Advisory Board's efforts to reduce water utility costs through budget cuts alone proved limited.

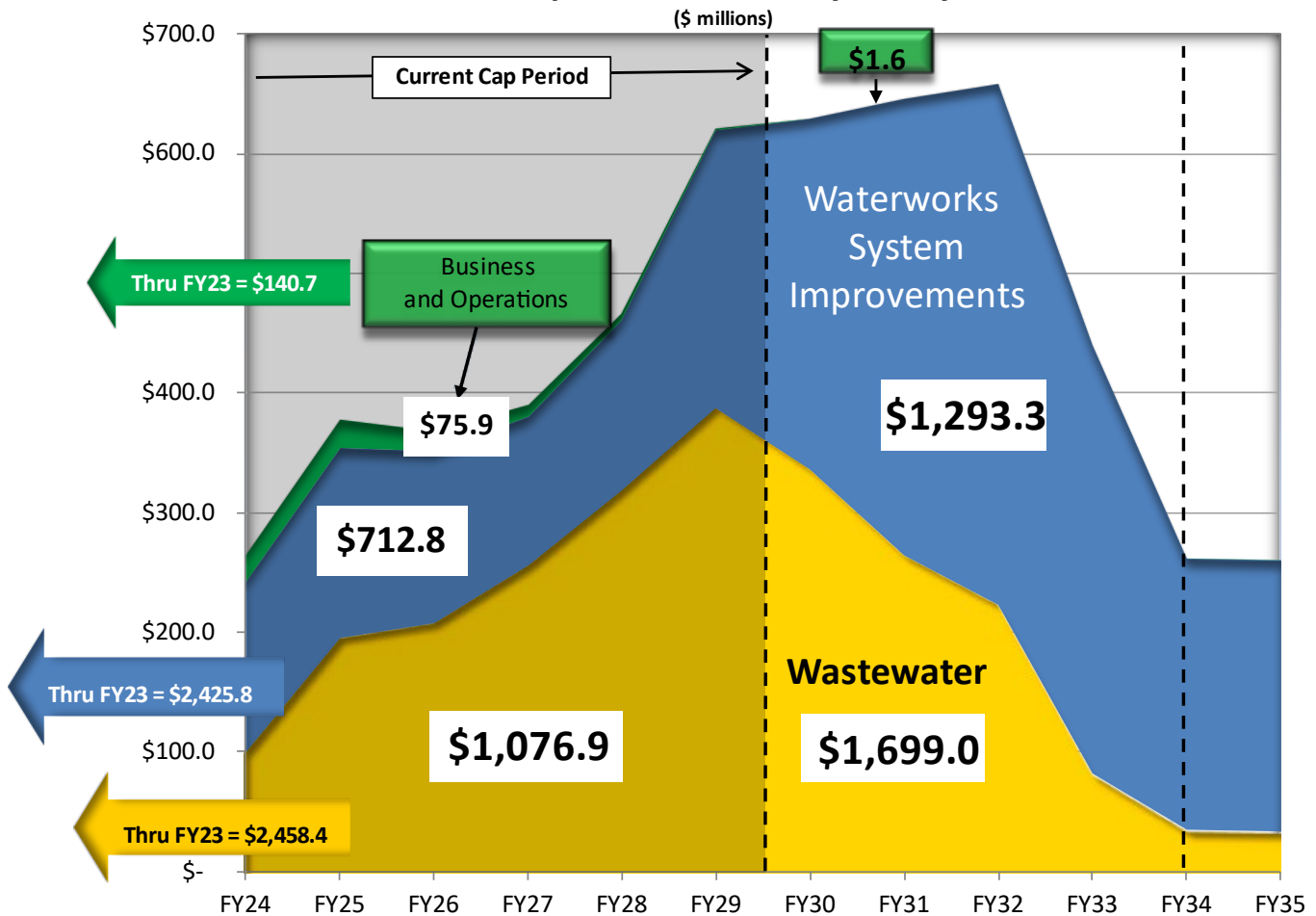
Understanding the communities' need for relief the Advisory Board recommends strategically utilizing rate stabilization funds to address rising water assessments in FY25. While the FY25 budget proposal avoids them, these funds (totaling \$65.4 million at the beginning of FY24) exist specifically for such situations.

This recommendation aligns with the MWRA's recent use of these funds (\$305,482 in FY24) and aligns with original budget projections anticipating their use from FY25-31. Importantly, it leverages their intended purpose: providing rate relief during periods of higher assessment increases on communities. By strategically using \$1.5 million from these funds, we can directly target water assessments and offer targeted relief to member communities.

Recommendation: Use \$1.5 million in rate stabilization funds directed toward the water utility's costs to provide some modest rate relief for MWRA communities.

Recommendation: Use \$1.5 million in rate stabilization funds directed toward the water utility's costs to provide some modest rate relief for MWRA communities.

Proposed FY25 CIP by Utility



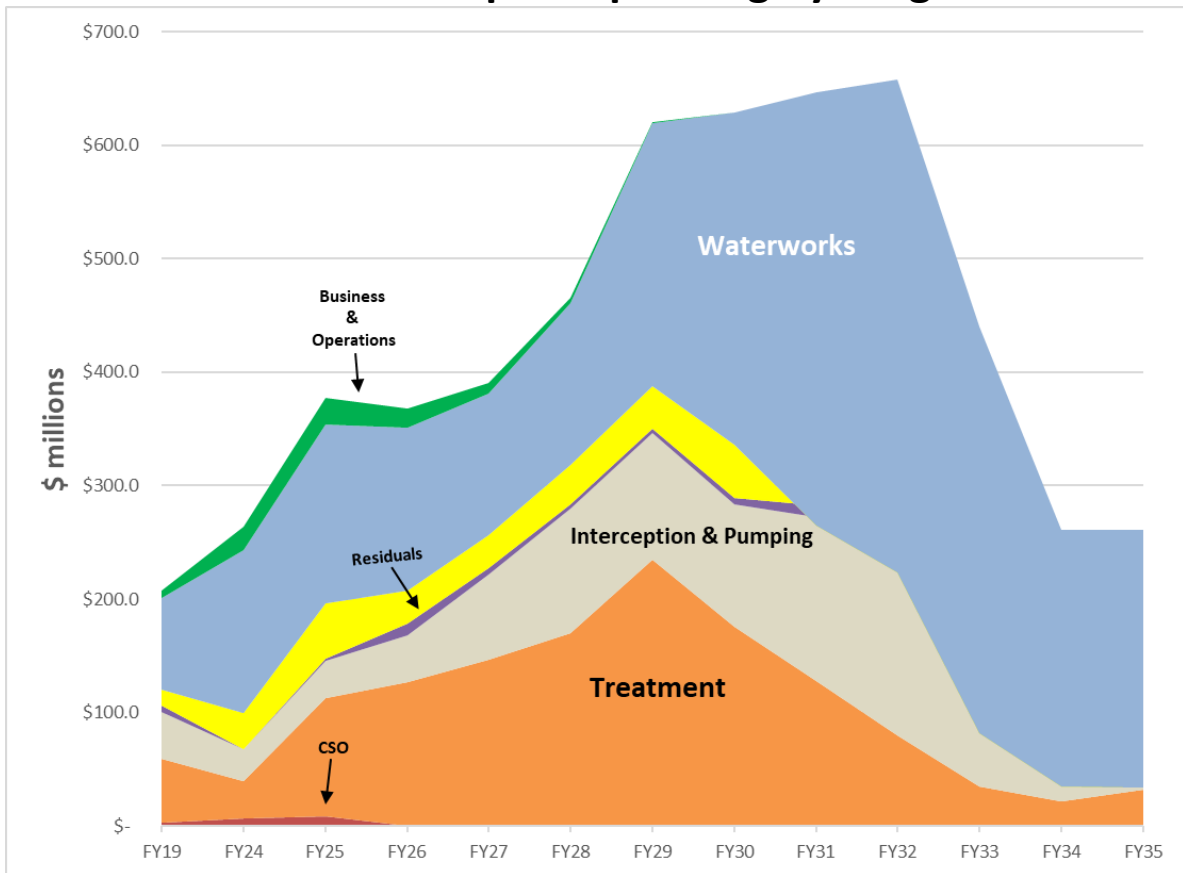
CIP Overview

The Capital Improvement Program (CIP) places a particular emphasis on the FY24-FY28 period, often referred to as the "capital spending cap period." During this five-year window, the MWRA plans to invest \$1.8 billion in its wastewater and waterworks systems, with the majority of funds earmarked for critical infrastructure upgrades.

Beyond the capital spending cap period, the CIP outlines continued investments in both wastewater and waterworks systems, albeit at varying levels. From FY29 to FY35, an additional \$1.3 billion is slated for wastewater projects, reflecting the ongoing need for infrastructure maintenance and upgrades. Similarly, waterworks initiatives are projected to receive \$1.7 billion in funding during the same period, with a strong emphasis on transmission and distribution improvements to address aging infrastructure.

It should be noted that the spending beyond the five-year cap period is very likely to change and represents only a rough projection of anticipated CIP needs.

Wastewater Capital Spending by Program



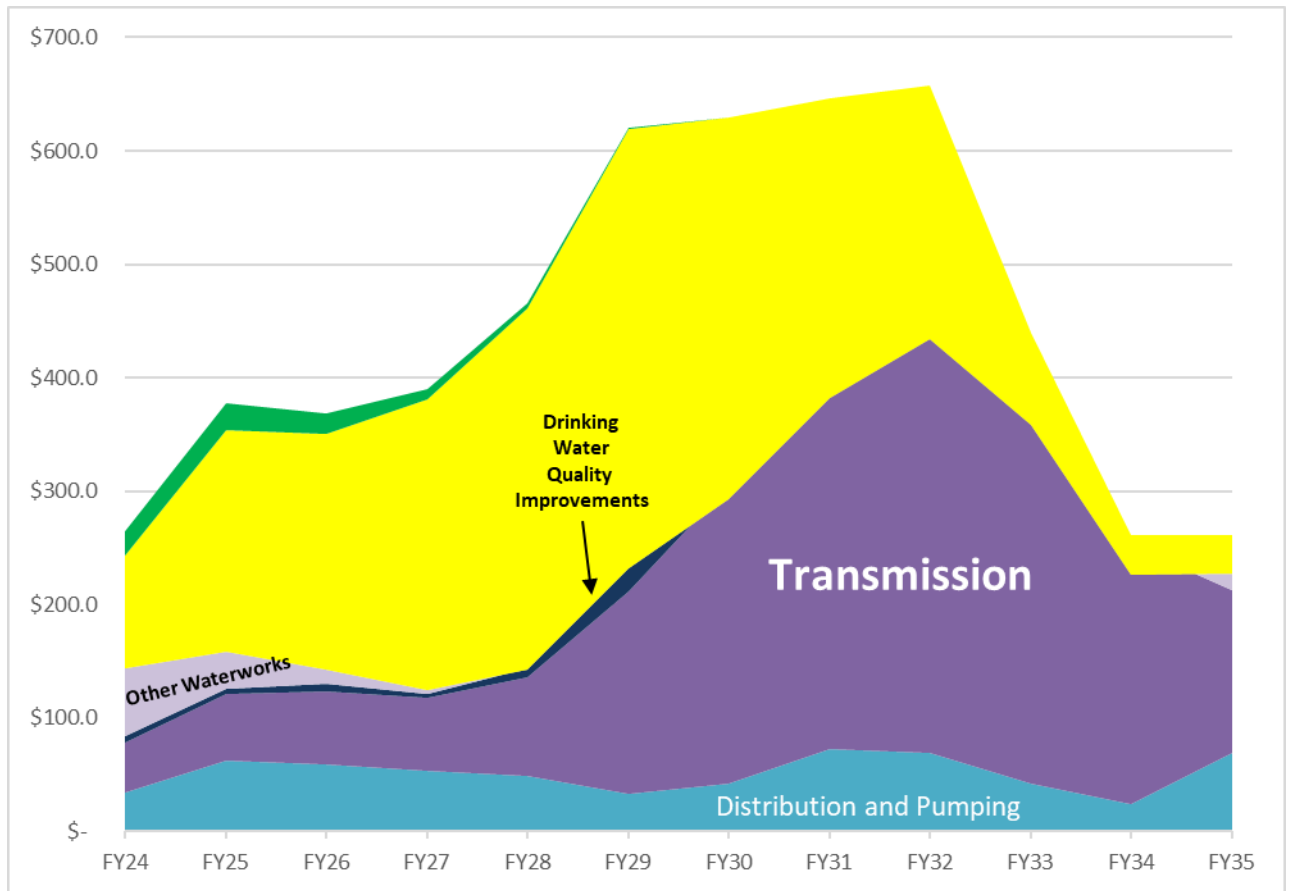
Wastewater Capital Spending

In the wastewater sector, expenditures during the FY24-FY28 timeframe are projected to total \$1.1 billion, with significant allocations for treatment plant improvements (\$579.5 million), interception and pumping facilities (\$287.8 million), and combined sewer overflow (CSO) control projects (\$15.7 million). These investments aim to enhance the capacity and efficiency of the wastewater treatment process while addressing environmental concerns related to CSOs.

Waterworks Capital Spending

The waterworks system improvements account for a substantial portion of the FY24-28 capital spending cap period, with \$712.8 million allocated for projects such as transmission (\$316.5 million), distribution and pumping (\$258.6 million), and drinking water quality enhancements (\$28.7 million). These initiatives are crucial for maintaining the reliability and quality of the water supply infrastructure, ensuring seamless delivery to MWRA's service areas.

Waterworks Capital Spending by Program



FY24 Approved Baseline Cap

FY24-28 Baseline CAP		FY24	FY25	FY26	FY27	FY28	FY24-28
	Projected Expenditures excl. Metro Tunnel	\$288.2	\$357.9	\$313.5	\$349.8	\$349.1	\$1,658.5
	Metropolitan Tunnel	\$14.4	\$25.2	\$23.9	\$23.9	\$78.6	\$166.2
	I/I Program	(42.9)	(41.5)	(27.5)	(28.4)	(34.2)	(174.5)
	Water Loan Program	(14.1)	(10.9)	(5.0)	(2.6)	(8.6)	(24.0)
	MWRA Spending	\$245.6	\$330.8	\$304.9	\$342.8	\$402.2	\$1,626.3
	Contingency	15.2	21.8	20.7	23.6	31.7	113.0
	Inflation on Unawarded Construction	1.9	8.1	12.2	22.1	36.1	80.4
	Chicopee Valley Aqueduct Projects	(0.3)	(0.5)	0.0	0.0	0.0	(0.8)
	Projected Spending before Adjustment	\$262.4	\$360.2	\$337.8	\$388.5	\$469.9	\$1,818.9
Spend Rate Adjustment (25%)	(65.6)	(90.1)	(84.5)	(97.1)	(117.5)	(454.7)	
FY24 Final FY24-28 Spending	\$196.8	\$270.2	\$253.4	\$291.4	\$352.5	\$1,364.2	

The FY25 Proposed Capital Improvement Program (CIP) represents a significant increase in capital spending compared to the FY24 Approved CIP. The proposed spending for FY25 is \$377.3 million, a substantial increase from the FY24 Approved spending of \$262.4 million before the spend rate adjustment. This higher spending level is driven by several major projects, including the Deer Island Clarifier Rehabilitation Phase 2 Construction (\$50.0 million), the Northern High Service CP-1 Section 53 Connection Construction (\$12.8 million), and the Metropolitan Tunnel Redundancy Final Design/Engineering Services During Construction (\$10.0 million).

Proposed FY25 CIP

FY25 Proposed CAP		FY24	FY25	FY26	FY27	FY28	FY24-28
	Projected Expenditures excl. Metro Tunnel	\$251.3	\$354.3	\$331.1	\$350.3	\$398.2	\$1,685.2
	Metropolitan Tunnel	\$12.8	\$23.0	\$37.0	\$39.8	\$67.9	\$180.4
	I/I Program	(31.6)	(48.6)	(29.8)	(28.5)	(34.5)	(173.1)
	Water Loan Program	(52.5)	(10.3)	(2.8)	9.6	14.8	(41.2)
	MWRA Spending	\$180.0	\$318.3	\$335.5	\$371.2	\$446.3	\$1,651.3
	Contingency	10.8	20.5	22.7	25.3	30.8	110.1
	Inflation on Unawarded Construction	0.0	3.2	7.8	16.5	30.6	58.1
	Chicopee Valley Aqueduct Projects	-	(0.5)	-0.3	0.0	0.0	(0.8)
	Projected Spending before Adjustment	\$190.8	\$341.6	\$365.8	\$413.0	\$507.8	\$1,818.9
Spend Rate Adjustment (25%)	(47.7)	(85.4)	(91.4)	(103.2)	(126.9)	(454.7)	
FY25 Proposed FY24-28 Spending	\$143.1	\$256.2	\$274.3	\$309.7	\$380.8	\$1,364.1	

Notably, the FY25 Proposed CIP includes a significant increase in the budget for the Metropolitan Tunnel Redundancy project, with \$2.1 billion allocated, an increase of \$347.8 million over the FY24 Approved CIP. This increase is attributed to updated cost estimates from the completed preliminary design phase, underscoring the importance of this critical redundancy initiative.

The FY25 Proposed CIP also highlights MWRA's commitment to community financing assistance programs, with \$29.7 million allocated for projects supporting the Division of Water Supply Protection, including the Quabbin Administration Building Design and Construction (\$15.1 million), the New Salem Building Design and Construction (\$6.1 million), and the Quabbin Maintenance Garage Design and Construction (\$5.4 million).

While the proposed spending for FY25 is higher, the FY25 Proposed CIP does not exceed the Baseline 5-year Cap set in June 2023. The Proposed FY24-28 spending of \$1.3641 billion is slightly below the Baseline Cap of \$1.3642 billion, suggesting a disciplined approach to capital expenditures.

However, it is important to note that the projected expenditures for the FY24-28 period have increased significantly compared to the FY24 Approved CIP. The FY25 Proposed CIP projects MWRA spending of \$1,651.3 million for FY24-28, a substantial increase from the FY24 Approved spending of \$1,193.8 million for the same period. This increase is primarily driven by updated cost estimates, revised schedules, and the addition of new projects.



While the projected expenditures for the FY24-28 period have increased significantly, it is important to note the incorporation of a spend rate adjustment in both the FY24 Approved and FY25 Proposed CIPs. This adjustment accounts for the historical underspending of the capital program and is applied as a 25% reduction to the projected spending levels before the final spending numbers are determined.

In the FY24 Approved CIP, the projected spending before the adjustment was \$1,818.9 million for FY24-28. After applying the 25% spend rate adjustment, the FY24 Final FY24-28 Spending was reduced to \$1,364.2 million.

Similarly, in the FY25 Proposed CIP, the projected spending before the adjustment is \$1,818.9 million for FY24-28. With the 25% spend rate adjustment applied, the FY25 Proposed FY24-28 Spending is reduced to \$1,364.1 million.

The spend rate adjustment was added in FY24 in recognition of the historical trend of underspending in the capital program. By incorporating this adjustment, the CIP aims to present a more realistic and achievable spending projection for the FY24-28 period. MWRA staff have indicated that they view the proposed CIP spending as aspirational rather than definitive or concrete.

However, the Advisory Board will continue to carefully evaluate the appropriateness of the 25% adjustment rate, as well as the underlying factors contributing to the underspending patterns. It is crucial to ensure that the adjustment does not inadvertently underestimate the capital funding requirements or mask potential inefficiencies in project execution.

Overall, while the spend rate adjustment seems like a useful tool for aligning projections with past trends, the Advisory Board will scrutinize the assumptions and methodology used to determine the adjustment rate, as well as the measures being taken to improve capital project delivery and minimize underspending in the future.

Overall, the FY25 Proposed CIP reflects MWRA's commitment to maintaining and enhancing its critical infrastructure, with a particular focus on asset protection and water system redundancy initiatives. However, the Advisory Board will carefully review the proposed spending levels as we progress through the current cap period and the underlying assumptions to ensure that the capital program remains fiscally responsible and aligned with the Authority's long-term goals and priorities.

Comment: The Advisory Board remains committed to reducing the levels of CIP underspending and will work with the Authority to analyze, and respond to, trends following the implementation of the 25% Spend Rate Adjustment.

Inflow/Infiltration Grant/Loan Community Assistance Program

The Challenge

Infiltration/Inflow (I/I) and stormwater (in combined sewers) can overwhelm the MWRA's regional wastewater collection system, causing sanitary sewer overflows (SSOs) and exceeding discharge permit limits.

Program Purpose and Mission

The MWRA's I/I Local Financial Assistance Program provides grants and loans to member communities for sewer system rehabilitation projects to reduce I/I and improve overall system efficiency.

History and Background

The MWRA's I/I Local Financial Assistance Program, established in 1993, seeks to address the challenge of excessive infiltration and inflow (I/I) overwhelming the regional wastewater system. To date, the program has budgeted \$860.75 million allocated for grant and loan distributions across its 14 funding phases, and significantly impacted improved regional wastewater management.

The program's journey began with the initial phases, distributing funds to member communities based on their share of sewer charges. This ensured fair allocation of resources to address I/I challenges throughout the system. As of December 2023, \$551 million has been distributed, funding a total of 676 I/I reduction and rehabilitation projects. 587 of these projects been completed with 89 in progress, demonstrating the program's effectiveness in tackling I/I issues.

The program has undergone strategic adjustments over time. Phases 9 through 12 and the recently added Phase 14 adopted a 75% grant and 25% interest-free loan structure to provide communities with more flexible financial options. This shift recognizes the long-term nature of I/I reduction efforts and the potential financial burden on member communities.

The program was further adapted to assist some communities that required additional support beyond the existing grant/loan phases. Phase 13, a dedicated interest-free loan phase, serves as a safety net for communities that exhaust their grant/loan allocations before a new funding phase begins. This ensures continuous progress in addressing I/I for communities aggressively targeting their local I/I challenges.

Results and Benefits

A remarkable feat has been achieved in the regional wastewater system with this program: wastewater flow entering the Deer Island Treatment Plant has now been significantly reduced. The long-term average daily flow has decreased by 67 MGD, representing a substantial 17% drop. This achievement is even more remarkable considering the natural tendency for flow to increase due to population growth and expanding sewer areas.

This success stems from a multi-pronged approach, with the MWRA's I/I Local Financial Assistance Program playing an integral role alongside other efforts. By providing grants and loans to member communities for sewer system rehabilitation projects, the program directly addresses the root causes of excess flow – infiltration and inflow. This targeted approach has effectively tackled these issues at their source, ensuring that the regional wastewater collection system operates efficiently with current flow levels and has the potential to adapt to stricter discharge permit limits in the future.

Need for Continued Funding

Continued funding of this program is crucial to address the ongoing challenges of infiltration and inflow and the associated deterioration of the regional wastewater system. The program's success in funding local sewer system improvements has demonstrably contributed to the cost-effective management of regional wastewater flow.

At its January 5, 2024 meeting, the MWRA Advisory Board's Operations Committee unanimously voted to recommend two additional program funding phases (Phase 15 and 16). Beginning in FY25, Phase 15, similar to Phase 13, offers a \$100 million "stop-gap" loan phase, providing crucial support without adding immediate loan repayment obligations. Beginning in FY26, Phase 16 further expands the program with a \$125 million grant-loan phase, offering a 75% grant and 25% interest-free loan structure with longer repayment terms. This phased approach ensures long-term program sustainability and provides member communities multiple options to address I/I issues effectively. This proposal was subsequently approved unanimously by both the Executive Committee and the full Advisory Board.

Implementing additional funding phases, such as the proposed Phases 15 and 16, is essential to ensure the long-term stewardship of the region's wastewater infrastructure would demonstrate MWRA's continued commitment to supporting its member communities in addressing their local infrastructure challenges.

Conclusion

In conclusion, the MWRA's I/I Local Financial Assistance Program has evolved strategically across its funding phases, adapting to the needs of member communities while maintaining a focus on reducing I/I and improving the overall health of the regional wastewater system. The program's success, evident in the completed projects and significantly decreased dry weather flow to the Deer Island Treatment Plant, underscores the importance of continued funding and strategic adaptation in addressing I/I challenges.

Recommendation: The MWRA Advisory Board recommends that the MWRA approve the following and include projected spending into its final FY25 CIP:

- 1. Phase 15: \$100 million interest-free loan phase (similar to Phase 13) available in FY25.**
- 2. Phase 16: \$125 million grant-loan phase (75% grant, 25% loan) available in FY26 with 10-year loan repayments.**

MWRA Local Water System Assistance Program

Introduction

The Massachusetts Water Resources Authority (MWRA) is committed to providing financial assistance to its member communities for the improvement of local water systems. This policy position outlines the background, purpose, history, and successes of the Local Water System Assistance Program (LWSAP), along with a recommendation from the MWRA Advisory Board to add a Phase 4 to the program.

Background

MWRA recognizes the importance of maintaining high water quality throughout the entire water delivery system, from its treatment facilities to customers' taps. Unlined cast iron pipes, a common material in older water mains, are susceptible to tuberculation (rust buildup) and potential bacteria growth. These factors can lead to loss of disinfectant residual and ultimately, compromised water quality. Additionally, lead service lines can leach lead into drinking water, posing a significant health risk.

Purpose

The LWSAP was established to address these concerns by providing financial assistance to member communities for critical water infrastructure projects. These projects include:

- Replacement or cleaning and lining of unlined water mains
- Replacement of lead service lines
- Water tank rehabilitation
- Other water quality improvement projects

History and Successes

Since its inception in 1998, the LWSAP has been instrumental in improving water quality across the MWRA service area. Here's a breakdown of the program's achievements:

- **\$593 million invested:** This investment has resulted in the replacement or cleaning and lining of 620 miles of water mains, significantly reducing the risk of water quality problems.
- **Community-funded projects:** An additional 442 miles of water mains have been rehabilitated through funding from member communities.
- **Focus on unlined pipes:** Approximately 1,974 miles of unlined water mains remain, highlighting the ongoing need for investment.
- **Interest-free loans:** The LWSAP offers ten-year interest-free loans to member communities, making critical infrastructure improvements more affordable.
- **High participation rate:** 43 out of 47 eligible communities have participated in the program.
- **Repaid loans:** All scheduled loan repayments have been made by communities, totaling \$384 million to date.



Phase 4 Proposal

The MWRA Advisory Board recognizes the ongoing need for investment in local water infrastructure. To address this need, the Board engaged in the process to develop proposal to add a Phase 4 to the LWSAP. This proposal was met with a series of unanimous endorsements:

- **January 5, 2024:** The MWRA Advisory Board's Operations Committee met and developed and discussed the proposal for Phase 4. They voted unanimously to recommend it to the Executive Committee.
- **January 11, 2024:** The Executive Committee reviewed the Operations Committee's proposal and unanimously voted to support it, recommending it to the full Advisory Board for a vote.
- **January 18, 2024:** The full Advisory Board reviewed and discussed the proposal and unanimously voted to support it and request that the MWRA approve the proposal for Phase 4.

By continuing the LWSAP, MWRA can ensure that its member communities have the resources they need to maintain high water quality for residents and businesses.

Recommendation: The Advisory Board recommends that the MWRA authorize Phase 4 of the Local Water Supply Assistance Program with the current terms and conditions with a total amount of \$300 million.

Lead Loan Program

Background

The Lead and Copper Rule (LCR), originally established by the US Environmental Protection Agency (EPA) in 1991, aimed to minimize lead and copper levels in public water systems. While the rule underwent revisions over the years, it primarily focused on treatment techniques to reduce corrosion within the water distribution system rather than mandating the removal of lead service lines.

Recognizing the limitations of the original LCR, the EPA took significant action:

- **Lead and Copper Rule Revisions (LCRR):** Released in December 2020 and went into effect in December 2021, with a compliance deadline of October 16, 2024. This rule introduced stricter requirements, including a reduced lead action level and mandatory lead service line inventory and removal plans.
- **Lead and Copper Rule Improvements (LCRI):** Proposed in November 2023, the LCRI aims to further strengthen the LCRR by simplifying and expanding upon its regulations, as well as the original 1991 LCR. Key proposed changes include a potentially lower lead action level and a faster timeline for complete lead service line replacement.

Issue and Rationale

Representing the interests of our member communities, the Advisory Board is deeply concerned about the significant local impacts and potential system-wide repercussions of the LCRR and LCRI. While ensuring safe and reliable drinking water for all communities is our top priority, the emphasis on lead service line removal presents a substantial financial and compliance challenge for member communities. Recognizing the urgency of addressing this issue and the potential burden on local resources, the Advisory Board proposes modifications to the Lead Loan Community Assistance Program (LLP) to incentivize expedited removal and support our member communities in navigating these critical changes.

Timeline of Actions

- **January 5, 2024:** MWRA staff introduced the possibility of modifying the LLP program to help communities comply with the upcoming rule changes at the Operations Committee.
- **February 21, 2024:** MWRA staff introduced the possibility of modifying the LLP program to the MWRA Board of Directors.
- **April 1, 2024:** The Advisory Board's Operations Committee discussed a proposal to modify the LLP into a grant/loan program and voted unanimously to recommend it to the Executive Committee.
- **April 11, 2024:** The Executive Committee discussed the proposal and voted unanimously to recommend it to the full Advisory Board.

Proposed Changes

- **Grant and Loan Program:** Transition the LLP to a 25% grant/75% interest-free loan program, offering

substantial financial relief to communities undertaking lead service line replacements provided they commit to full lead service line removal (both public and private sections).

- **As-Needed Basis:** Make the program available on an as-needed basis, providing flexibility for communities to address their specific lead service line replacement needs.
- **No Funding Cap:** The initial LLP was funded at \$100 million to start with an understanding that the amount would be increased as needed. Similarly, the aim would be to fund the modified program to the extent needed to complete the mission of helping communities remove all lead service lines.
- **Expedited Removal Incentive:** Align with the Lead and Copper Rule Revisions and Improvements, which incentivize communities to remove all lead service lines within five years instead of ten. This faster timeline potentially waives the requirement for adding orthophosphate treatment to the water supply.

Benefits of Expedited Lead Service Line Removal

- **Financial Advantage:** Estimates suggest adding orthophosphate treatment could cost \$60-80 million over the next two decades. Once orthophosphates are added to the system, MWRA is unlikely to be allowed to discontinue their use even after member communities remove all lead service lines by the ten-year deadline. This could result in an ongoing financial burden for member communities.
- **Reduced Burden on Residents and Barriers to Success:** Successful lead service line replacement programs minimize disruption and expense for property owners through features like:
 - **Zero Cost to the Owner:** Property owners incur no out-of-pocket expense for lead service line replacement.
 - **Pre-Determined Contractors:** The community selects qualified contractors, eliminating the need for property owners to find their own.
 - **Modifying the program as recommended** makes it easier for communities to incorporate these features into their lead service line removal program and minimize costs by optimizing program implementation.
- **Public Health and Environmental Justice:** Removing lead service lines offers significant public health benefits beyond financial savings:
 - **Eliminates the risk of lead exposure,** particularly for vulnerable populations like children and pregnant women.
 - **Provides a permanent solution,** unlike the temporary reduction achieved through orthophosphate treatment.
 - **Addresses environmental justice concerns** disproportionately impacting low-income communities and communities of color where lead service lines tend to be more prevalent.



Recommendation: The MWRA Advisory Board recommends that the MWRA Board of Directors approve the proposed modifications to the LLP and incorporate associated spending into the final FY25 Capital Improvement Program (CIP) with specific program requirements and mechanisms to be determined between MWRA and Advisory Board staff.

This action will significantly incentivize expedited lead service line removal, supporting MWRA's communities, protecting public health, reducing long-term costs, and promoting environmental justice within MWRA member communities.

Watershed Forestry & Climate Change

Background

The enabling legislation establishing the MWRA created a unique relationship. The Authority owns the water itself, while the Commonwealth retains ownership of the surrounding forest. These forests play a critical role in MWRA meeting its mission to provide reliable, cost-effective, high-quality water.

For close to 40 years, the Commonwealth, through the Department of Conservation & Recreation (DCR) - Division of Water Supply Protection (DWSP), has managed publicly owned lands within the Quabbin, Ware and Wachusett watersheds to meet its legislative mandate to provide “a sufficient supply of pure water to the MWRA” and “assure the availability of pure water for future generations.”¹

It is DWSP’s unique responsibility to manage unfiltered source waters and surrounding watersheds for over 3 million people’s drinking water that sets it apart from the expansive range of natural and cultural resources under the purview of DCR.

Forests play a critical role in the delivery of water to the MWRA:

At the simplest level, forests filter rainwater and buffer the water sources from polluting land uses. They enhance water storage, naturally regulate streamflow, reduce flood damages, diminish storm water runoff, replenish groundwater and provide myriad ancillary ecological benefits. The vast forested watersheds surrounding the MWRA source waters also deliver an unparalleled economic value to MWRA ratepayers in the form of the system’s filtration waiver. In fact, the MWRA often refers to its water system not as “unfiltered” but “forest filtered.”

The long-term capacity of watershed forests to deliver these essential eco-system benefits to the MWRA water system and its ratepayers is determined by their ability to resist or rebound from biological and meteorological threats which, in turn, relies on the structural and age-class diversity of its trees.

The watershed forests like all forests around the globe are currently playing the starring role in mitigating the climate changing effects of greenhouse gas emissions. Climate change has ushered an era of more destructive storms and with it an increased likelihood that all of these forest gifts we currently rely upon could be erased with one storm akin to the Hurricane of 1938. Without the benefit of an expansive, protected, intact forest surrounding the MWRA’s terrestrial source waters, expensive, energy-intensive and greenhouse gas emitting filtration would be needed to meet drinking water standards.

State 2050 Climate Goals- unrealistic expectations of forests

A climate crisis is upon us and the climate changes underway are disrupting all of the natural, economic and social systems we rely on. For decades, the Commonwealth has been a national leader in addressing this crisis through legislation, strategic plans and regulations.

In December 2022, the Clean Energy and Climate Plan (CECP) for 2050 was issued. Like the plans before it, this plan recognizes the imperative of reaching net zero greenhouse gas (ghg) emissions as quickly as possible, creating a road-map to meet ambitious goals within each sector of the economy. Despite setting ambitious

¹ [MGL c. 92 A1/2½, §2:](#)

sector goals, the CECP 2050 relies upon carbon storage in Massachusetts forests increasing by 15% in order to meet the 2050 statutory levels established in 2008 with the Global Warming Solutions Act (GWSA). Estimates of forest capture and storage have both been decreasing over the past decade. The majority of this decrease in forest carbon capture is attributed to permanent forest clearing for development, while the remainder is presumed to be due to the increasing age of our forests. Generally, young forests have high rates of carbon capture and conversion (sequestration), older forests have lower carbon capture but store greater amounts of carbon.

The CECP's proposition to "set additional regulatory pathways to limit forest clearing" raised concern with the Advisory Board because it is the active forest management of harvesting trees on 1% of the watershed lands each year that acts as an insurance policy for MWRA's filtration waiver. Carefully considered and deliberately limited tree clearing promotes regeneration and age-class diversity. It increases forest resilience to a variety of threats like invasive species and destructive storms like the Hurricane of 1938, which blew down nearly 3 billion feet of timber on more than 600,000 acres of forest land in the Northeast.

Forestry operations have been suspended on watershed lands since early 2023, when the Healey-Driscoll Administration initiated a six-month moratorium on logging contracts on all state-owned lands. The moratorium was extended for another six months to provide time for the Forests as Climate Solutions Initiative to develop guidelines. The 12-member Climate Forestry Committee issued its recommendations for climate-oriented forest management guidelines in early 2024. Committee members held strong and divergent opinions on the merits of passive versus active management approaches and "there was significant disagreement.... on the ability and merit of active forest management to increase forest resilience or adapt forests to future conditions."

Similar to The Forest School at Yale University comments on these recommendations, the Advisory Board suggests the state of Massachusetts:

- interpret topics such as the merits of active forest management with high disagreement as needing further investigation
- recognize that there is currently no scientific consensus on which forest management approach is best for carbon storage and climate mitigation.
- acknowledge that the forests under the stewardship of the DWSP require a different consideration because active forest management is the only method we have to ensure that our forests will be resilient to ongoing and future disturbances.

Climate Change requires adaptation and an increased focus on resilience:

An idea of watershed with a diverse, resilient old-growth forest is appealing, but the reality is that Massachusetts, like all of New England, has been repeatedly deforested since colonial times which has resulted in our forests being homogenous in age and structure and predisposed to invasive insects, disease, and climate disturbance. In the absence of an "ideal" old-growth forest, watershed forests have been and should continue to be managed in carefully considered and deliberately limited ways that promote and accelerate the diversity and resilience that would naturally occur over much longer time frames.

Climate Change and the increasing threat of destructive storms, precipitation extremes and the shifting species distributions it brings, requires that all watershed management practices be assessed within a lens of the need

to adapt to warmer, more variable weather patterns and the increased frequency and destructive impact of high wind and precipitation events.

It is the Advisory Board's observation that forest management methods have evolved over time and should continue to evolve but that protecting water quality and retaining our filtration waiver through forest resilience must be at the center of all forestry operations. Climate change presents an additional challenge to established active management regimes and we call upon DCR-DWSP to demonstrate how it is:

- adjusting forestry operations to the “new normal” of limited winter freezing and increased seasonal variability of precipitation.
- incorporating Best Management Practices (BMP)s to minimize disturbance and compaction of the soil structure.
- deploying new strategies to maximize regeneration and species diversity.

Recommendations:

- 1. That MWRA using its role on the Water Supply Protection Trust advocate for continued, carefully considered, deliberately limited active forestry for the watersheds through DWSP's current practice of 1% of watershed forests being harvested in small parcels.**
- 2. That MWRA similarly advocate for DWSP to demonstrate how its forestry program utilizes current best management practices including methods to ensure that contracted foresters are conducting their harvests according to the DWSP's specifications and safeguarding soil structure.**
- 3. That MWRA request DWSP share its detailed records of forestry activities and present it as a standardized report, provide regular updates to the Water Supply Protection Trust at its quarterly meetings, and highlight their on-going research on forest health and the innovative approaches they are testing to deliberately increase species composition within the watershed forests.**

Proposed Legislation - “Quabbin Watershed and Regional Equity Act”

Background

The Quabbin Reservoir serves as an exceptionally high quality source of water for for millions of residents and businesses in the MWRA waterworks system. Created in the 1930s, the reservoir flooded four towns and displaced thousands of residents. While the project provided a vital source of clean water, it also had a profound impact on the surrounding communities.

These communities, sometimes referred to as the "Quabbin Watershed Towns," have historically raised concerns about the economic and social costs associated with the reservoir's creation. Limited development opportunities due to strict land-use regulations and a decline in the tax base are some of the challenges these towns face.

Recently, new legislation was proposed - H.897/S.447, also known as the "Quabbin Watershed and Regional Equity Act." While this legislation is positioned as a solution for the Quabbin communities, the MWRA Advisory Board believes it overlooks the significant benefits and fair compensation these communities already receive from MWRA ratepayers. The Advisory Board believes in maintaining a balanced and equitable relationship between the MWRA and these communities, and further believes that alternative approaches can achieve this goal without placing undue burdens on ratepayers across the state.

Advisory Board’s Position

The MWRA Advisory Board representing the interests of communities and ratepayers served by the MWRA stands firmly against H.897/S.447 in its current form. While the Advisory Board acknowledges the well-intentioned goals of the Act, we believe the proposed solutions would disrupt a well-functioning system and create undue and unfair burdens on MWRA’s ratepayers.

Proposed Water Tax - an Unfair Burden with Environmental Justice Concerns

One of the most contentious proposals within the Act is the introduction of a per-gallon tax on water withdrawn from the Quabbin Reservoir. This tax fundamentally disregards the core principle of the MWRA’s cost recovery. Unlike private utilities seeking to maximize profits, the MWRA operates on a non-profit model, recovering costs solely to deliver water, which ensures a fair price for consumers. The proposed tax would introduce an unfair and regressive burden on communities and their ratepayers. Low-income families and residents from minority and non-English speaking communities served by the MWRA already face financial challenges. A per-gallon tax would disproportionately impact these populations, adding a significant, unexpected, and unnecessary cost to their essential water needs.

H.897/S.447, in its current form, raises significant environmental justice concerns. By placing an additional cost burden on these vulnerable communities, the Act risks making clean water an even greater financial strain. This could have a ripple effect, forcing residents to cut back on other necessities to afford this basic necessity. The MWRA already provides substantial support to Quabbin communities, and alternative solutions should be explored that address concerns without unduly burdening low-income residents and communities of color in the

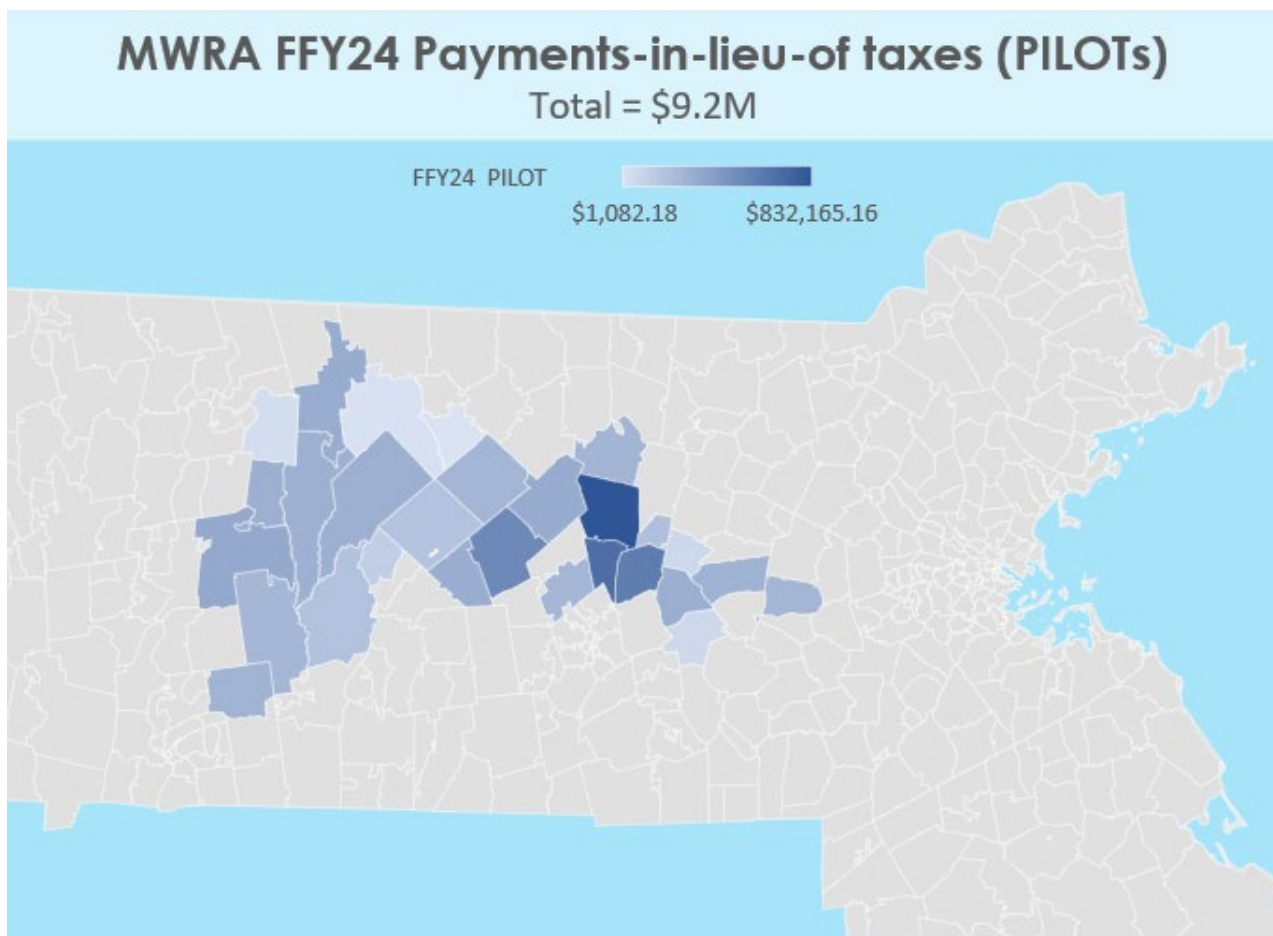
MWRA's communities.

Proposed Changes to PILOT Payments

The legislation's proposed change to include submerged land in the PILOT payment calculation is not only patently unfair to ratepayers but sets a dangerous precedent for other public lands making similar payments statewide. This expansion would significantly increase the financial burden on organizations holding land in public trust, including the MWRA, which already pays the highest possible PILOT rates to communities; furthermore, it sets aside the [public trust doctrine](#) that underpins the state's land laws, which holds submerged lands to be wholly in the public domain.

Additionally, the bill disregards the "duplicate" payments made to towns that received annexed land from the Quabbin creation. Several towns received annexed land from the creation of the Quabbin Reservoir. In 1938, these towns were granted a one-time payment of \$50,000 to offset the loss of tax revenue from the annexed land (Acts of 1938, Chapter 240). This act also explicitly stated that these towns would not receive any further PILOT payments for the annexed land.

However, with the passage of MGL Chapter 59, Section 50 in 1985, these same towns began receiving an annual PILOT payment for the annexed land, seemingly contradicting the previous legislation. The 1985 legislation also included text that these six towns receive an extra (duplicate) payment for the land they inherited "...the sum of which shall not be less than fifty thousand annually." This creates a situation where the towns are receiving duplicate payments for the same land: the ongoing annual PILOT payment as well as the extra payment. These extra payments continue to this day.



It's important to acknowledge the significant benefits Quabbin communities already receive beyond PILOT payments. The Division of Water Supply Protection provides grants and training programs that enhance environmental protection and directly benefit these communities. Additionally, the presence of the Quabbin Reservoir can attract visitors for fishing, hiking, and other recreational activities, potentially boosting local economies through tourism and increased spending at restaurants, shops, and other local businesses.

Unnecessary Interference with MWRA Governance

Another aspect of the Act proposes altering the composition of the MWRA Board of Directors. Currently, the Board boasts a carefully balanced structure with representation from various stakeholders, including gubernatorial appointees, City of Boston representatives, Advisory Board appointees, and representatives from MWRA facility host communities. This diversity ensures that a range of perspectives are considered when making crucial decisions impacting the MWRA.

The Act proposes adding additional gubernatorial appointees, potentially disrupting this intentional balance. Altering the Board composition for seemingly unrelated reasons could jeopardize the Authority's well-established governance structure that has demonstrably served the ratepayers, the water system, and the Commonwealth well.

Expanding Feasibility Study Beyond Appropriate Scope

The final point of contention for the MWRA Advisory Board centers on the proposed expansion of the water system evaluation outlined in H.897/S.447. While the Board previously expressed strong support for exploring the feasibility of delivering water to some Quabbin-surrounding communities, the Act significantly broadens the scope in an unreasonable way.

The MWRA recently completed three separate system expansion feasibility studies. The Ipswich Basin study was undertaken at the behest of the Baker Administration, while the South Shore study fulfilled a request from the Legislature. The third study, focused on the MetroWest region, addressed inquiries from communities exploring potential connections to the MWRA water system. All three studies benefitted from external funding provided by the Commonwealth and the American Rescue Plan Act (ARPA).

The Advisory Board initially supported the request for a feasibility study focused on 10 Quabbin Reservoir watershed communities; further, the MWRA Board of Directors approved this initial study. The Advisory Board maintained its supportive stance when two additional communities were later added to the study, recognizing the potential benefits for these specific locations. This incremental cost increase, estimated at roughly \$30,000 per additional community, was deemed a reasonable accommodation.

However, the proposed legislation in H.897/S.447 goes far beyond these initial considerations. The Act calls for including an additional 70 communities across four separate river basins, transforming the study from a focused feasibility analysis for water delivery into a broad economic development study for Central and Western Massachusetts. This not only significantly deviates from the MWRA's core mission of managing and delivering clean water but imposes ratepayers with a substantial financial burden of approximately \$2.5 million.

The Advisory Board emphasizes its record of being accommodating to reasonable requests, as demonstrated by its support for the initial Quabbin reservoir communities study and the subsequent addition of two further communities. However, the sheer scale and scope of the study envisioned in H.897/S.447 is simply too extensive and financially irresponsible.

A more responsible approach would prioritize a focused water delivery feasibility study for the original 12 Quabbin communities. This targeted study, with a more realistic cost of \$375,000 though funded entirely by ratepayers, aligns better with the MWRA's expertise and provides valuable insights into the feasibility of water service expansion in this specific region.

Recommendation: The MWRA Advisory Board strongly recommends that the MWRA join the Advisory Board in vigorously opposing the proposed legislation H.897/S.447, "An Act Relative to the Quabbin Watershed and Regional Equity."

Watershed - DCR Rangers Enforcement Concerns

Background

The following executive summary of the issue was provided to the Advisory Board at its April 18, 2024 meeting for discussion along with the accompanying charts.

In June 2022, Department of Conservation and Recreation (DCR) rangers in Massachusetts lost the authority to issue citations or written warnings for violations of watershed rules and regulations. This change was made in response to the Massachusetts Police Reform Bill of 2020, which was passed in an effort to deescalate situations and ensure that park rangers are not acting as law enforcement officers.

Prior to the change, DCR rangers had the authority to issue citations for a variety of violations, including littering, speeding, and disorderly conduct. However, the Police Reform Bill limited the authority of park rangers to educational outreach and directed them to work with law enforcement to address violations.

The change has led to some concerns about the safety of the watersheds and the effectiveness of ranger enforcement. Some people have argued that the lack of citations is leading to an increase in violations, while others have expressed concern that rangers are less likely to enforce the rules if they do not have the authority to issue citations.

In the meantime, DCR watershed rangers are focusing on educational outreach and are supposed to be working with law enforcement to address violations. But they aren't, with few exceptions, engaging law enforcement, and that's a significant problem. However, some stakeholders are calling for a legislative fix to the issue. Efforts are underway to pursue a legislative solution to address the issue, and DCR is working with Massachusetts State Police (MSP) and the courts to identify additional options for enforcement.

Here is a timeline of the events leading up to and following the change:

December 2020

- The Massachusetts Police Reform Bill of 2020 is passed

July 2021

- Key provisions of the Police Reform Bill go into effect

June 2022

- DCR Rangers were informed that they can no longer issue written warnings or citations for watershed rules and regulation violations.

September 27, 2022

- The Executive Office of Energy and Environmental Affairs (EEA) General Counsel attends the Water Supply Protection Trust (WSPT) meeting and explains that the authority for Park Rangers to issue non-criminal citations comes from a portion of the General Laws Chapter 132A, Section 7A, which only applies to Park Rangers who have been appointed as Deputy Environmental Police Officers.
- When the Police Reform Bill went into effect, it led to a review of the Deputy Environmental Police Office Program by the Office of Law Enforcement and an update to the general order.
- The review found that Park Rangers are not trained police officers and should not be issuing citations to individuals, as this could escalate situations rather than deescalate them.
- EEA issued a verbal directive to Park Rangers across the state to exercise their authority in a way that is primarily educational and to reach out to Law Enforcement if there is a situation that requires a citation.

December 15, 2022

- Discussion among the Trustees regarding Ranger Enforcements and the idea to distribute educational brochures.
- Trustee Meehan expressed continued concern regarding Rangers' inability to issue tickets, particularly regarding the most serious offenses.

June 7, 2023

- At a WSPT meeting, Peter Mulcahy, EEA General Counsel, explained that Post Commission Certification requires that all law enforcement officers undergo training and meet certain standards in order to perform police work.
- He explained that Watershed Rangers are not Post Commission Certified, and therefore cannot issue citations or summons.
- He suggested working together to identify creative solutions to address problem points in the watershed, such as specific locations or individuals.

March 5, 2024

- For their Mar 7 Trust meeting, Meehan sent an email to trustees providing data from Ranger Activity Reports showing a decline in encounters/contacts, an increase in violations/verbal warnings, and a lack of referrals to law enforcement. If they understood and agreed to an existing problem, he offered corrective options, including a non-judicial and non-punitive warning notice for violators. After discussion, trustees could not agree a problem existed that needed to be fixed.

March 11, 2024

- In response to a trustee's request, Meehan sent an email to the WSPT with examples of egregious violations that have occurred in the watersheds since Rangers lost the ability to issue citations.

March 12, 2024

- Trustee Meehan sent an email to various elected officials and Commissioners of DCR and Department of Environmental Protection (DEP) expressing concerns about the gap in security of the watersheds due to Rangers not being able to issue citations and asking for their assistance in addressing the issue.

March 21, 2024

- Trustee Meehan sent an email to a state representative, providing an update on the issue and requesting assistance in finding a legislative fix.
- The representative responded that they have been advised that Senator Lewis of the Massachusetts State Senate is exploring a legislative fix to this issue and that DCR is working with MSP and the courts to identify additional options for enforcement in the meantime.

Ongoing

- The issue of Ranger enforcements and the inability to issue citations and ask for individual ID is still being discussed by the WSPT and other stakeholders.
- There is a legislative effort underway to find a fix to the issue.
- DCR is working with MSP and the courts to identify additional options for enforcement in the meantime.

General References

- MGL 92A ½ Watershed Management-Section 8 directs DCR to “enforce” all applicable rules and regulations
- 302 CMR 12:00 Parks and Recreation 12:20 Violations and Enforcement
- 313 CMR 11:09 Watershed rules and regulations.

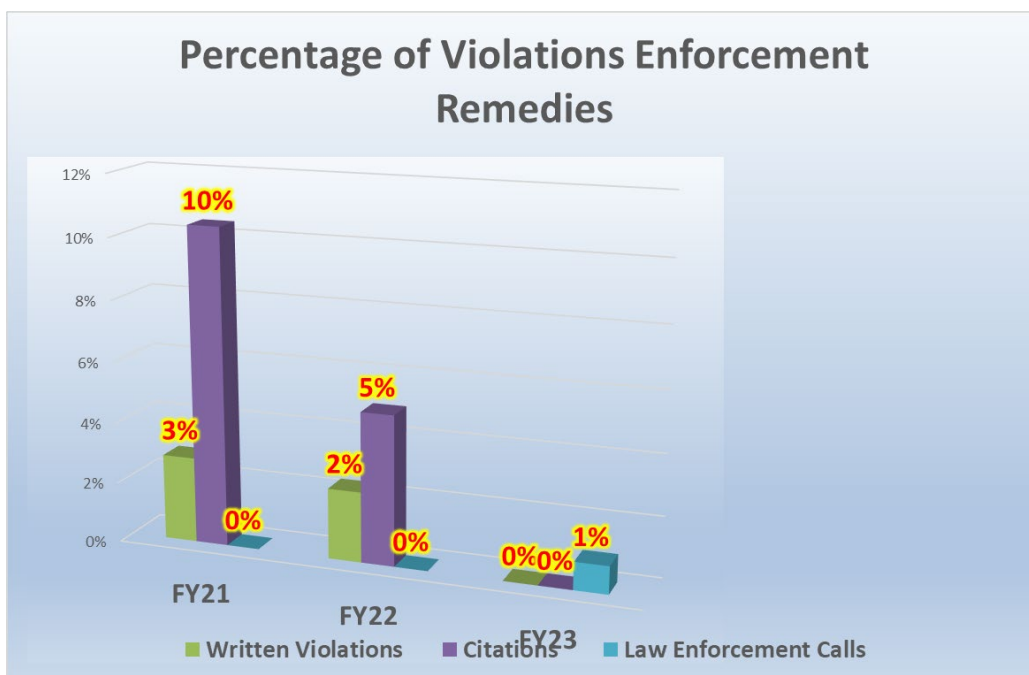
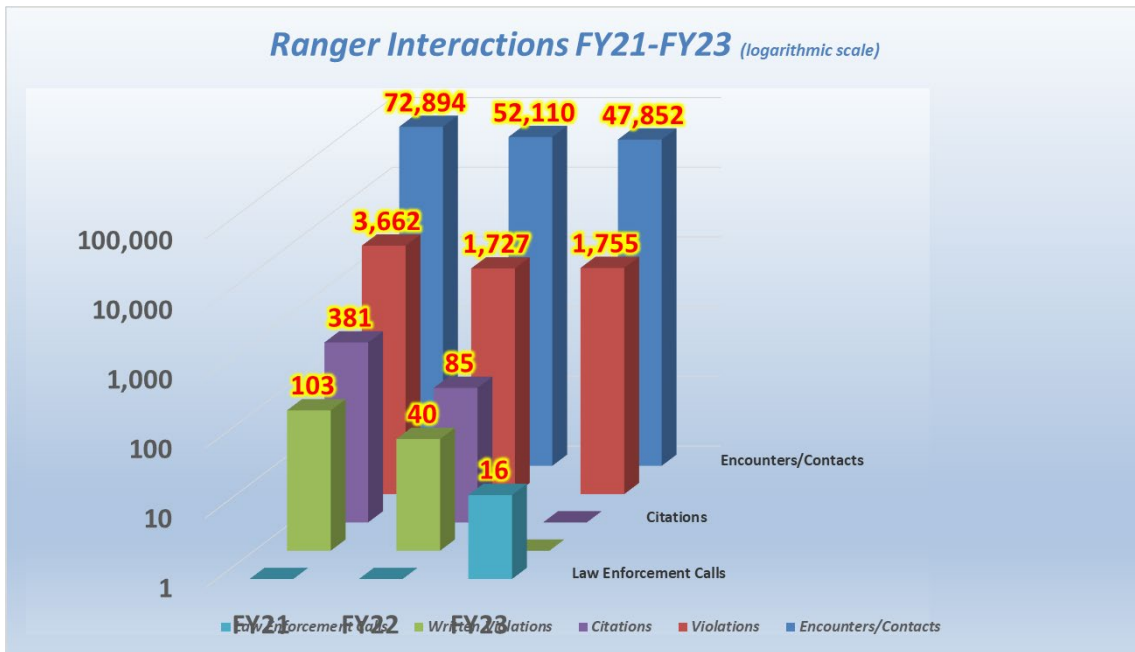
Specific Provisions – Citations Issued by DCR and Other Law Enforcement:

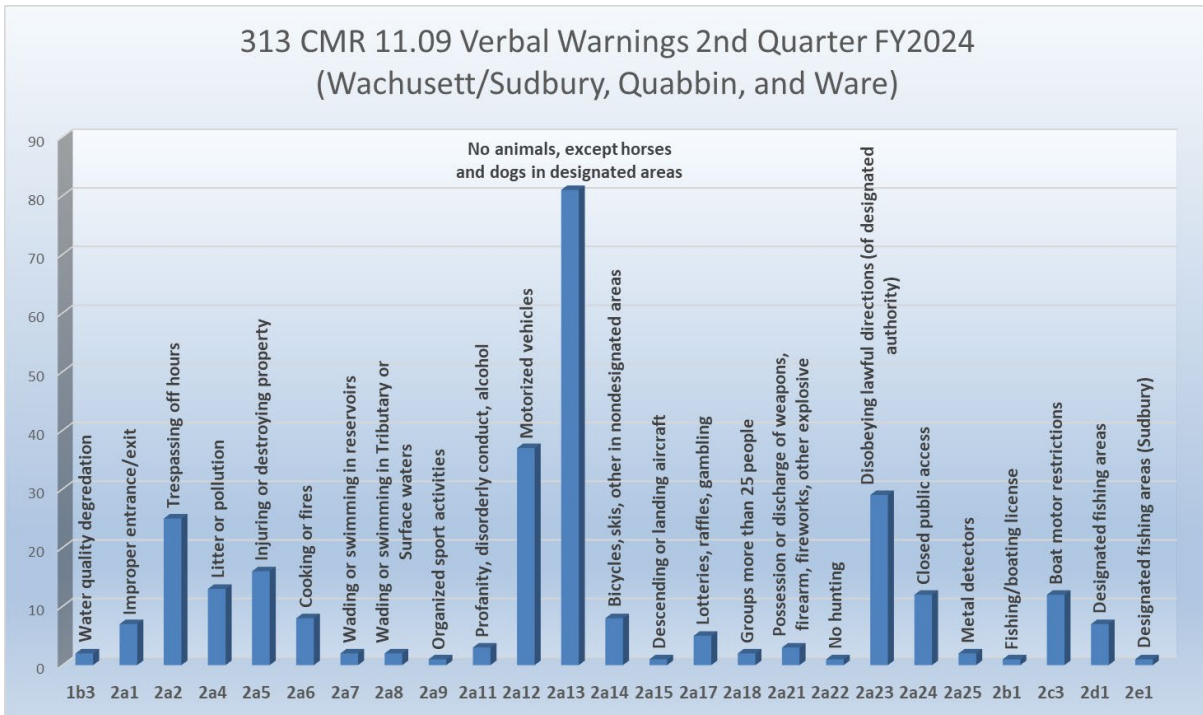
- DCR rangers, district forest fire wardens, district forest fire patrolmen, and other DCR personnel are authorized to issue citations for violations of all DCR regulations (302 CMR 12.02: Citation).
- DCR rangers and other authorized law enforcement officials are authorized to issue citations for violations of all DCR regulations, including violations of 302 CMR 11.00 (302 CMR 11.11: Enforcement).
- Failure to stop or position a vehicle when directed by a DCR ranger, authorized law enforcement official, or other authorized DCR personnel is considered a violation (302 CMR 11.04: Violations).

Specific Provisions – Enforcement of Regulations:

- Authorized DCR personnel or authorized law enforcement officials may divert vehicular traffic or pedestrians when necessary (302 CMR 11.04: Violations).

- Authorized DCR personnel or authorized law enforcement officials may notify persons in violation of a DCR regulation or other Massachusetts or U.S. law or regulation on DCR property or roadways to exit DCR property immediately for a temporary period of time (302 CMR 11.02: Removal).
- DCR rangers, other DCR personnel, and other law enforcement officers are authorized to issue citations for violations of all DCR regulations (302 CMR 12.20: Enforcement).
- The Department may suspend or revoke a construction and access permit if the applicant has violated any of the provisions of the permit (302 CMR 11.08: Construction and Access Permits).
- For violations DCR may ban individuals from its property for a period not to exceed a year.





Policy Position

The Advisory Board has significant concerns about the declining enforcement capabilities of Department of Conservation and Recreation (DCR) rangers in the watersheds that supply the MWRA's drinking water. This issue stems from the impacts of the Massachusetts Police Reform Bill of 2020, which led DCR to inform the Division of Water Supply Protection's (DWSP's) rangers in June 2022 that they could no longer issue written warnings or citations for violations of watershed rules and regulations.

Data from DWSP's reports through 2nd Quarter, FY24 shared by Trustee Meehan to the full Water Supply Protection Trust (WSPT) shows a worrying trend - while overall encounters/contacts with visitors have decreased slightly from pre-pandemic levels, the number of violations and verbal warnings issued by rangers has increased across most watersheds. This suggests the loss of citation authority has emboldened offenders. Furthermore, the data reveal only the Wachusett watershed has referred any violators to law enforcement since the change.

Most alarmingly, the data indicate there are now 450-500 offenders per year who previously would have received written warnings or citations but are now simply let go with verbal warnings due to the rangers' restricted enforcement abilities. Examples of serious offenses in this category include animals such as dogs in areas they are not allowed, people swimming or polluting water sources, illegal fires, trespassing incidents, and most concerningly "disobeying lawful directions (of designated authority)." [footnote reference: 313 CMR 11.09 section 2a13]

Trustee Meehan, representing the recreational interests that benefit from policies on watershed lands that carefully balance the need to protect the water supply with the aim to share the resource of the watersheds in a safe and sensible way, is rightly concerned that a single egregious violation or fatality enabled by lax enforcement could provide impetus to severely restrict or revoke visitor access altogether.

The Advisory Board believes firmly that allowing serious violators to face no real consequences poses an unacceptable risk to our pristine drinking water supply. As representatives of MWRA's ratepayer communities, we have a solemn duty to protect the watersheds to avoid scenarios that could trigger a revocation of the MWRA's filtration waivers. Construction of filtration facilities would come at a very high cost, not only to MWRA's ratepayers who would shoulder the hundreds of millions of dollars to construct and operate these facilities, but also to society as a whole as a result of the significant greenhouse gas emissions they would generate.

To date, the cited justification for limiting ranger enforcement has been the Energy and Environmental Affairs (EEA) general counsel's interpretation of the impacts of the Police Reform Bill and a general order update by the Office of Law Enforcement. However, to our knowledge there has been only verbal guidance provided on this issue. That the Commissioner of DCR and EEA general counsel collaborate and create a legally sufficient, written policy for current ranger enforcement, and specifically clarify all deviations from Code of Massachusetts Regulations. Key outstanding questions include:

- Clarification of whether rangers can or cannot request identification from visitors to DWSP lands. Following the enactment of the Police Reform Act of 2020, the initial guidance indicated that rangers could continue requesting identification but could no longer issue citations. Subsequent guidance revoked ranger authorization to request IDs without explanation. A written justification and explanation for this shift in policy should also be provided.
- Whether alternative interpretations or solutions have been overlooked that could empower rangers with fuller enforcement capabilities while respecting the Police Reform Bill's aims.

The Advisory Board endorses and recommends a two-pronged approach to begin addressing this issue:

Recommendations:

Short-Term:

- **It is unacceptable to simply take no action, allowing the current situation of weak and limited enforcement to persist.**
- **MWRA should ask DWSP to account for what is happening with the estimated 450-500 annual offenders who would previously have faced stiffer penalties. Are they being appropriately referred to law enforcement, as DCR has insisted is still an option?**
- **MWRA should urge DWSP to develop a non-punitive, educational "reminder notice" that rangers could provide to serious offenders, identifying them by name and citing the specific violation observed. This would require restoring rangers' ability to request ID from violators.**
- **MWRA should push DWSP to revive its suspended ban/suspension system for watershed access, as allowed under existing regulations. Regional directors should be delegated authority to impose temporary 6-month bans, with the DWSP Director maintaining authority for longer 1-year bans.**

Long-Term:

- **MWRA should support legislative or administrative efforts to secure a permanent remedy that restores sensible enforcement abilities for rangers while upholding the spirit of the Police Reform Bill.**
- **Alternatively, the lengthy process of restructuring and training rangers to attain whatever certification is required under the new legislation should be explored, with DCR providing full transparency on the specific challenges involved rather than dismissing it as "too hard" anecdotally. Only after all the information is gathered can well-thought out and fully informed decision be made.**

The Advisory Board views the current stagnation on this issue as deeply unsatisfactory, given the paramount importance of protecting the quality and availability of the MWRA's water supply for millions of residential and business consumers across Massachusetts. We call on the MWRA to make resolving this enforcement gap a top priority through a combination of interim mitigation measures and an insistence on a long-term legislative or administrative solution. protecting the quality and availability of the MWRA's water supply for millions of residential and business consumers across Massachusetts. We call on the MWRA to make resolving this enforcement gap a top priority through a combination of interim mitigation measures and an insistence on a long-term legislative or administrative solution.

A Legacy of Collaboration and Continued Challenges

The MWRA Advisory Board's review of the FY25 Capital Improvement Program (CIP) and Current Expense Budget (CEB) reflects its longstanding role as the voice of the cities and towns within the MWRA service area. In this role, the Advisory Board aims to be a productive partner when possible and a constructive critic when necessary. Its success over the years is undoubtedly the result of the MWRA's willingness to collaborate with the Advisory Board and its member communities.

Building on Success: A History of Meeting Challenges

Created to be a "financial watchdog" representing the cities and towns, the Advisory Board has continued to challenge the MWRA to lower assessment increases. With its "Four No More" challenge, the MWRA successfully managed to bring its combined assessment consistently increases below 4% helping to provide some consistency and predictability for its member communities. Following that, the MWRA rose to the Advisory Board's challenge of "2.4% by '24" when it achieved a 2.4% combined assessment increase in its final FY 2024 Current Expense Budget. In fact, the MWRA has managed to keep final combined assessments below 3% since FY21. This year's recommendations aim to continue this trend.

However, future success will require addressing emerging issues. The disparity between water and sewer assessment increases necessitates continued advocacy for bringing these costs closer together, with a long-term goal of achieving complete parity.

Challenges and Opportunities: A Look Forward

The unfunded pension liability presents a significant financial hurdle. With only five years remaining to fully address this issue, the MWRA's ability to meet its funding schedule rests heavily on market conditions. The Advisory Board recognizes the importance of this issue and encourages continued focus on this critical financial obligation.

The ongoing staffing challenges facing the water and sewer industry remain a concern as evidenced by the MWRA's continued staffing shortage. The Advisory Board applauds the MWRA's proactive efforts to address these challenges and looks forward to continued innovation in workforce recruitment and retention.

Regulatory issues, such as PFAS regulations and the resulting operational and financial costs on the MWRA as well as the evolving NPDES permit impacts for Deer Island, add further complexity. The Advisory Board recognizes the ongoing challenges associated with the CSO program as well.

That said, the MWRA is also being proactive by working to improve the reliability of its services via its Metropolitan Tunnel Redundancy project, which had been shelved since it was first developed 1936 by MWRA's predecessor, the MDC. When completed, this project will help to ensure not only a redundant water supply for the metro Boston area communities, but also allow operational flexibility to inspect and maintain portions of MWRA's water system.


Looking Back, Looking Forward: A Legacy of Success

As the MWRA and the Advisory Board celebrate the 35th anniversary of their Enabling Legislation, it is vital to acknowledge the agency's remarkable achievements. The transformation of "America's Dirtiest Harbor"

into an environmental and economic asset stands as a testament to the MWRA's dedication. Consistently delivering "the best drinking water in the country" further underscores this commitment to excellence.

More importantly, member communities have a reliable support system in the MWRA and its talented staff. From helping to fund local infrastructure projects to emergency assistance, the MWRA's unwavering support strengthens our region. The Advisory Board takes pride in this shared history of success.

The future holds both opportunities and challenges. The Advisory Board is confident that through continued collaboration, the MWRA will navigate these challenges and ensure clean water, a healthy environment, and a thriving economy for generations to come. We look forward to the next 35 years of working together to build upon this legacy of success.

A handwritten signature in black ink, appearing to read 'Matthew A. Romero'.

Matthew A. Romero
Executive Director

Appendix A

List of Recommendations

1. The Advisory Board recommends reducing the FY25 Rate Revenue Requirement by \$4,098,434 resulting in a combined wholesale assessment increase of 2.53%.
2. Reduce Wages & Salaries by \$3,930,000 by increasing the vacancy rate assumption by 35 FTEs.
3. Reduce Fringe Benefits by \$1,572,000 to account for the fringe benefits expense that will not be incurred for both the MWRA's 35 FTEs vacancy rate adjustment and the Advisory Board's recommended additional 35 FTE vacancy rate.
4. Reduce Other Services by \$28,176 for the Advisory Board's FY25 final Operating Budget.
5. That MWRA redirect the \$2.8 million currently budgeted to fund the OPEB line item to the pension line item.
6. MWRA should continue to redirect all future OPEB contributions to the pension line item until full funding is achieved in FY30.
7. Advisory Board recommends that the MWRA should evaluate its current variable rate debt service portfolio and develop a plan to bring the variable rate debt composition up to the 15% target level to help optimize the MWRA's capital financing approach by balancing stability and cost savings over the long term.
8. Use \$1.5 million in rate stabilization funds directed toward the water utility's costs to provide some modest rate relief for MWRA communities.
9. Advisory Board recommends that the MWRA approve the following and include projected spending into its final FY25 CIP
 1. Phase 15: \$100 million interest-free loan phase (similar to Phase 13) available in FY25.
 2. Phase 16: \$125 million grant-loan phase (75% grant, 25% loan) available in FY26 with 10-year loan repayments.
10. The Advisory Board recommends that the MWRA authorize Phase 4 of the Local Water Supply Assistance Program with the current terms and conditions with a total amount of \$300 million.
11. Advisory Board recommends that the MWRA Board of Directors approve the proposed modifications to the LLP and incorporate associated spending into the final FY25 Capital Improvement Program (CIP) with specific program requirements and mechanisms to be determined between MWRA and Advisory Board staff.
12. That MWRA using its role on the Water Supply Protection Trust advocate for continued, carefully considered, deliberately limited active forestry for the watersheds through DWSP's current practice of 1% of watershed forests being harvested in small parcels.
13. That MWRA similarly advocate for DWSP to demonstrate how its forestry program utilizes current best management practices including methods to ensure that contracted foresters are conducting their harvests according to the DWSP's specifications and safeguarding soil structure.

Appendix A

14. That MWRA request DWSP share its detailed records of forestry activities and present it as a standardized report, provide regular updates to the Water Supply Protection Trust at its quarterly meetings, and highlight their on-going research on forest health and the innovative approaches they are testing to deliberately increase species composition within the watershed forests.
15. The Advisory Board strongly recommends that the MWRA join the Board of Directors in vigorously opposing the proposed legislation H.897/S.447, "An Act Relative to the Quabbin Watershed and Regional Equity". We further recommend that no funding be allocated for the Quabbin study beyond the existing 12 communities included in the initial proposal.
16. Advisory Board endorses and recommends a two-pronged approach to begin addressing watershed DCR Rangers enforcement concerns:

Short Term:

- It is unacceptable to simply take no action, allowing the current situation of weak and limited enforcement to persist.
- MWRA should ask DWSP to account for what is happening with the estimated 450-500 annual offenders who would previously have faced stiffer penalties. Are they being appropriately referred to law enforcement, as DCR has insisted is still an option?
- MWRA should urge DWSP to develop a non-punitive, educational "reminder notice" that rangers could provide to serious offenders, identifying them by name and citing the specific violation observed. This would require restoring rangers' ability to request ID from violators.
- MWRA should push DWSP to revive its suspended ban/suspension system for watershed access, as allowed under existing regulations. Regional directors should be delegated authority to impose temporary 6-month bans, with the DWSP Director maintaining authority for longer 1-year bans.

Long Term:

- MWRA should support legislative or administrative efforts to secure a permanent remedy that restores sensible enforcement abilities for rangers while upholding the spirit of the Police Reform Bill.
- Alternatively, the lengthy process of restructuring and training rangers to attain whatever certification is required under the new legislation should be explored, with DCR providing full transparency on the specific challenges involved rather than dismissing it as "too hard" anecdotally. Only after all the information is gathered can well-thought out and fully informed decision be made.

Appendix B

List of Comments

1. The Advisory Board anticipates spring revisit item totals of \$1,362,784 on the water utility and \$2,490,655 on the sewer utility.
2. The Advisory Board applauds the Division of Water Supply Protection in its aggressive and successful push to target adding sufficient staff to support its operations and mission.
3. The Advisory Board applauds the Authority for and continues to support its strategic use of defeasance as a part of its long-term rates management strategy.
4. The Advisory Board remains committed to reducing the levels of CIP underspending and will work with the Authority to analyze, and respond to, trends following the implementation of the 25% Spend Rate Adjustment.

Appendix C

The Dunphy Sheet

Combined Water & Sewer Utility

IMPACTS ON RATE REVENUE REQUIREMENT	Water	Sewer	Combined
Final FY2024 RRR	\$ 299,675,873	\$ 534,592,131	\$ 834,268,004
Proposed FY2025 RRR	\$ 311,510,000	\$ 547,928,221	\$ 859,438,001
MWRA Proposed FY25 RRR Increase	3.95%	2.49%	3.02%
	0.00%	0.00%	0.00%
AB Recommendations	\$ (2,304,174)	\$ (1,794,260)	\$ (4,098,434)
FY2025 RRR, less changes	\$ 309,205,826	\$ 546,133,961	\$ 855,339,567
Advisory Board Recommended FY25 RRR Increase	3.18%	2.16%	2.53%

IMPACTS ON EXPENDITURES		
MWRA ADVISORY BOARD RECOMMENDATIONS FOR FY25 CEB		
	Water	Sewer
Staffing (vacancy rate assumptions)	\$ (1,320,000)	\$ (2,610,000)
Fringe benefits	\$ (528,000)	\$ (1,044,000)
Rate stabilization funds	\$ (1,500,000)	
Advisory Board budget reduction	\$ (9,392)	\$ (18,784)
Subtotal AB Recommendations	\$ (3,357,392)	\$ (3,672,784)
ANTICIPATED ADJUSTMENTS TO PROPOSED FY25 CEB		
	Water	Sewer
Wages & Salaries	\$ 283,261	\$ (305,714)
Fringe Benefits	\$ 209,653	\$ 358,706
Chemicals	\$ (281,071)	\$ (69,527)
Energy & Utilities	\$ 411,849	\$ 1,981,193
Maintenance	\$ 457,754	\$ 2,527,127
Training and Meetings	\$ 8,859	\$ 12,141
Professional Services	\$ (21,601)	\$ 82,062
Other Materials	\$ 20,066	\$ (4,406)
Other Services	\$ (136,096)	\$ (3,304,153)
Watershed/Pilot	\$ 398,250	\$ -
Pension	\$ (893,692)	\$ 1,082,338
OPEB	\$ 893,692	\$ (1,562,265)
Additions to Reserves	\$ 11,859	\$ 1,562,265
Defeasance Impact	\$ -	\$ 130,888
Subtotal of Changes to Operating Costs	\$ 1,362,784	\$ 2,490,655
OPERATING RESERVE REQUIREMENT ADJUSTMENT		
Updated based on applicable adjustments; applies only to direct and indirect costs (revenue not		
Operating Reserve Requirement	\$ (309,565)	\$ (612,131)
NET CHANGES TO PROPOSED FY25 CEB	\$ (2,304,174)	\$ (1,794,260)