Financial Statements and Supplemental Schedules and Required Supplementary Information

June 30, 2024 and 2023

(With Independent Auditors' Report Thereon)



Table of Contents

Independent Auditors' Report	1
Management's Discussion and Analysis	4
Financial Statements	12
Statements of Net Position	12
Statements of Revenues, Expenses, and Changes in Net Position	13
Statements of Cash Flows	14
Statements of Fiduciary Net Position	15
Statements of Changes in Fiduciary Net Position	16
Notes to Financial Statements	17
Required Supplementary Information	63
Schedules of Employer Contributions – Last Ten Years – GASB No. 67 and 68	63
Schedules of Changes in the Net Pension Liability and Related Ratios – Last Ten Years – GASB No. 67 and 68	64
Schedules of Investment Returns – Last Ten Years – GASB No. 67	65
Schedules of Changes in the Employer's Net OPEB Liability and Related Ratios – Last Ten Years – GASB No. 74 and 75	66
Schedules of Employer Contributions – Last Ten Years – GASB No. 75	67
Schedules of Investment Returns – Last Ten Years – GASB No. 74	68
Supplemental Schedules	69
Accounts Established by the General Revenue Bond Resolution	69
Combining Statements of Net Position	70
Combining Statements of Revenues, Expenses, and Changes in Net Position	72
Combining Statements of Fiduciary Net Position	74
Combining Statements of Changes in Fiduciary Net Position	76



INDEPENDENT AUDITORS' REPORT

Board of Directors Massachusetts Water Resources Authority Boston, Massachusetts

Report on the Audits of the Financial Statements

Opinions

We have audited the accompanying financial statements of the business-type activities and fiduciary activities of the Massachusetts Water Resources Authority (Authority) as of and for the years ended June 30, 2024 and 2023, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and fiduciary activities of the Authority as of June 30, 2024 and 2023, and the respective changes in financial position, and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
 appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of
 the Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and certain pension and other postemployment benefits schedules, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The Schedule of Accounts Established by the General Revenue Bond Resolution, Combining Statements of Net Position, Combining Statements of Revenues, Expenses, and Changes in Net Position, Combining Statements of Fiduciary Net Position, and Combining Statements of Changes in Fiduciary Net Position (Supplemental Schedules) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the Supplemental Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated September 27, 2024, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Authority's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

Slifton Larson Allen LLP

Boston, Massachusetts September 27, 2024

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

This section of the Authority's annual financial report presents our discussion and analysis of the Authority's financial performance during the fiscal years ended June 30, 2024 and 2023. Please read it in conjunction with the Authority's financial statements, which immediately follow this section.

Financial Highlights - Fiscal Year 2024

The fiscal year 2024 customer service revenues were approximately \$847.9 million. Of this amount, rate revenues represent approximately 98.4%, or \$834.3 million, and were \$19.6 million higher than fiscal year 2023. This was due to an increase in assessments.

Total operating expenses, excluding depreciation, were approximately \$348.8 million in fiscal year 2024. The 11.4% increase in total operating expenses over fiscal year 2023 is the result of increases in personnel (\$12 million), chemical (\$3 million), maintenance (\$3 million), sludge pelletization (\$3 million), watershed reimbursement (\$2.8 million) and OPEB (\$10 million) expenses. These increases were offset by a decrease in pension expense of \$8.7 million.

Net non-operating expenses decreased \$30.5 million, or 24.3%, primarily due to a \$9.4 million reduction in interest expense and a \$19.7 million increase in investment income. Interest expense decreased due to a combination of principal repayments and refunding/defeasance of outstanding debt. Interest income increased due to an increase in the unrealized gain on investments (\$12.3 million) and an increase in actual interest earned on investments (\$7.4 million).

Total assets at June 30, 2024 were approximately \$6.9 billion, a \$77.1 million, or 1.1%, increase over total assets at June 30, 2023.

On June 26, 2024, the Authority issued General Revenue Bonds, 2024 Series B for \$166,260 and General Revenue Refunding Bonds, 2024 Series C for \$279,275. The proceeds from the Series B bonds were used to permanently finance outstanding tax-exempt commercial paper of \$80,000 and 2015C revolving loan of \$100,000. The interest rate on these bonds are 5%.

The proceeds from the Series C bonds, as well as other available funds, were used to tender \$240 of General Revenue Bonds 2016 Series B, \$1,330 of General Revenue Bonds 2018 Series B, \$9,050 of General Revenue Bonds 2020 Series B and \$450 of General Revenue Refunding Bonds 2016 Series D and refund \$31,795 of General Revenue Bonds 2017 Series B, \$27,795 of General Revenue Bonds 2018 Series B, \$21,145 of General Revenue Refunding Bonds 2016 Series C, \$100,175 of General Revenue Refunding Bonds 2019 Series F and \$167,025 of General Revenue Refunding Bonds 2021 Series C.

The interest rates of these bonds are 5%. The cash flow required to make principal and interest payments on the funding bonds is approximately \$39,938 less than the debt service requirements of the refunded bonds. The economic gain (the difference between the present values of the debt service payments on the old and new debt) obtained from this refunding is \$26,576.

Total capital assets (net of depreciation) were approximately \$5.5 billion at June 30, 2024, a \$49.5 million, or 0.8%, decrease over June 30, 2023. The decrease was primarily due to the rate of depreciation being higher than the rate of capitalization.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

Financial Highlights – Fiscal Year 2023

The fiscal year 2023 customer service revenues were approximately \$831.9 million. Of this amount, rate revenues represent approximately 97.9%, or \$814.6 million, and were \$22.6 million higher than fiscal year 2022. This was due to an increase in assessments.

Total operating expenses, excluding depreciation, were approximately \$313 million in fiscal year 2023. The 11.3% increase in total operating expenses over fiscal year 2022 is the result of increases in pension expense of \$27.1 million, chemical costs of \$6.2 million, maintenance costs of \$5.5 million, utility costs of \$3.2 million, and personnel costs of \$2.4 million. These increases were offset by decreases in watershed reimbursements of \$5.1 million.

Net non-operating expenses decreased by \$49 million, or 28.5%, primarily due to a \$42 million increase in investment gains and a \$6.9 million decrease in interest expense. Interest income increased due to a decrease in the unrealized loss on investments (\$21.9 million) combined with an increase in actual interest earned on investments (\$20.1 million). Interest expense decreased due to a combination of principal repayments and refunding/defeasance of outstanding debt.

Total assets at June 30, 2023 were approximately \$6.8 billion, a \$3.2 million, or 0.05%, increase over total assets at June 30, 2022.

On April 27, 2023, the Authority issued General Revenue Bonds, 2023 Series B for \$133,975 and General Revenue Refunding Bonds, 2023 Series C for \$100,340.

The proceeds from the Series B bonds were used to permanently finance outstanding tax-exempt commercial paper of \$50,000 and 2015C revolving loans of \$90,000. The interest rate on these bonds are 5% and 5.25%.

The proceeds from the Series C bonds were used to refund \$710 of General Revenue Bonds 2016 Series B, \$2,260 of General Revenue Bonds 2017 Series B, \$5,815 of General Revenue Bonds 2018 Series B, \$370 of General Revenue Bonds 2019 Series B, \$8,105 of General Revenue Refunding Bonds 2016 Series C, \$13,905 of General Revenue Refunding Bonds 2017 Series C and \$88,920 of General Revenue Refunding Bonds 2019 Series F.

Total capital assets (net of depreciation) were approximately \$5.5 billion at June 30, 2023, a \$43.2 million, or 0.8%, decrease over June 30, 2022. The decrease was primarily due to the rate of depreciation being higher than the rate of capitalization.

Overview of the Financial Statements

The financial section of this annual report consists of four parts: management's discussion and analysis (this section), the financial statements and related notes to the financial statements, required supplementary information, and other supplementary information.

The financial statements provide both long-term and short-term information about the Authority's overall financial status. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The statements are followed by a section of required supplementary information and other supplementary information that further explains and supports the information in the financial statements.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

Financial Analysis of the Authority

Net Position

The Authority's total net position at June 30, 2024 was approximately \$1.96 billion, a \$170.4 million increase from June 30, 2023. Total assets increased \$77.1 million, or 1.1%, to \$6.9 billion, and total liabilities decreased \$100 million, or 1.9%, to \$5 billion.

The Authority's total net position at June 30, 2023 was approximately \$1.8 billion, a \$226 million increase from June 30, 2022. Total assets increased \$5.2 million, or 0.08%, to \$6.8 billion, and total liabilities decreased \$55.1 million, or 1.1%, to \$5.1 billion.

Net Position (Dollars in thousands)

	(Donais i	ii tiiousaiius)			
				Percentage	Percentage
				change	change
	2024	2023	2022	2024-2023	2023-2022
Current assets	\$ 1,068,174	\$ 958,172	\$ 903,848	11.5%	6.0%
Capital assets	5,476,320	5,525,902	5,569,082	(0.9)	(0.8)
Other noncurrent assets	357,580	340,872	346,849	4.9	(1.7)
Total assets	6,902,074	6,824,946	6,819,779	1.1	0.1
Deferred outflows from pension	55,189	80,550	30,846	(31.5)	161.1
Deferred outflows from OPEB	45,749	3,933	4,223	1,063.2	(100.0)
Deferred outflows from derivative instrumer	-	2,820	8,832	(100.0)	(68.1)
Deferred outflows from refunded debt	7,495	7,981	8,467	(6.1)	(5.7)
Current liabilities	506,094	440,092	428,672	15.0	2.7
Noncurrent liabilities	4,481,072	4,645,560	4,712,110	(3.5)	(1.4)
Total liabilities	4,987,166	5,085,652	5,140,782	(1.9)	(1.1)
Deferred inflows from pension	2,775	4,062	66,076	(31.7)	(93.9)
Deferred inflows from OPEB	15,581	31,392	48,128	(50.4)	(34.8)
Deferred inflows from refunded debt	43,691	7,912	-	100.0	-
Net position:					
Net investment in capital assets	1,128,827	1,184,617	902,395	(4.7)	31.3
Restricted	, -,	, - ,	,	(')	
Construction	156,606	145,029	115,765	8.0	25.3
Debt service	277,068	276,719	263,956	0.1	4.8
Operating	6,756	6,802	8,102	(0.7)	(16.0)
Revenue	64,575	41,356	38,256	56.1	8.1
Rate Stabilization	39,009	39,314	40,295	(0.8)	(2.4)
Unrestricted	288,453	97,376	196,268	196.2	(50.4)
Total net position	\$ 1,961,294	\$ 1,791,213	\$ 1,565,037	9.5%	14.5%
<u>*</u>					

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

Changes in Net Position

The increase in net position at June 30, 2024 was \$170.4 million, or 9.5%, as compared with June 30, 2023. The Authority's total operating revenues increased by 1.8% to \$851.7 million and total operating expenses increased 11.3% to \$348.8 million.

The increase in net position at June 30, 2023 was \$226 million, or 14.5%, as compared with June 30, 2022. The Authority's total operating revenues increased by 3.1% to \$836.9 million and total operating expenses increased by 11.3% to \$312.9 million.

	U	n Net Position			
	(Dollars	in thousands)			
	2024	2023	2022	Percentage change 2024–2023	Percentage change 2023–2022
Operating revenues:					
Customer service revenues	\$ 847,938	\$ 831,932	\$ 805,741	1.9%	3.3%
Other revenues	3,780	5,023	6,113	(24.7)	(17.8)
Total operating revenues	851,718	836,955	811,854	1.8	3.1
Operating expenses:					
Operations	144,165	133,377	126,065	8.1	5.8
Maintenance	37,678	34,318	28,842	9.8	19.0
Payments in lieu of taxes	8,489	8,479	8,469	0.1	0.1
Engineering, general, and administrative	157,926	136,797	117,916	15.4	16.0
Total operating expenses	348,258	312,971	281,292	11.3	11.3
Depreciation and amortization	236,818	230,810	215,079	2.6	7.3
Operating income	266,642	293,174	315,483	(9.0)	(7.1)
Nonoperating items:					
Regulatory accounting provisions	-	52,124	(70,700)	(100.0)	(173.7)
Net nonoperating expenses	(102,858)	(125,459)	(172,009)	(18.0)	(27.1)
Changes in derivative related accounts		2,940	2,940	(100.0)	
Total nonoperating items	(102,858)	(70,395)	(239,769)	46.1	(70.6)
Capital grants and contributions	6,297	3,397	3,299	85.4	3.0
Change in net position	170,081	226,176	79,013	(24.8)	186.3
Total net position – beginning of year	1,791,213	1,565,037	1,486,024	14.5	5.3
Total net position – end of year	\$ 1,961,294	\$ 1,791,213	\$ 1,565,037	9.5%	14.5%

During fiscal year 2024, the increases in customer service revenues were primarily due to the 2.40% increase in the rate revenue requirement (\$19.6 million).

During fiscal year 2023, the increases in customer service revenues were primarily due to the 2.85% increase in the rate revenue requirement (\$22.6 million).

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

Operating Costs by Functionality

(Dollars in thousands)

	2024	2023	2022	Percentage change 2024–2023	Percentage change 2023–2022
Wastewater treatment and transport	\$ 129,529	\$ 116,317	\$ 107,476	11.4%	8.2%
Water treatment and transport	48,993	45,527	39,922	7.6	14.0
Water and wastewater quality	11,031	10,348	9,975	6.6	3.7
Metering and monitoring	8,417	7,580	6,672	11.0	13.6
Facilities planning, design, and construction	13,239	11,674	11,388	13.4	2.5
Management information systems	14,080	13,057	12,573	7.8	3.8
Administration and support	59,977	48,375	 54,109	24.0	(10.6)
Total direct operating costs	285,266	252,878	 242,115	12.8	4.4
Indirect operating costs	62,992	 60,093	39,177	4.8	53.4
Total operating costs	\$ 348,258	\$ 312,971	\$ 281,292	11.3%	11.3%

Increases in wastewater treatment and transport were mainly due to increased chemical, utility and maintenance costs and the increase in the contracted O & M costs at the pelletization plant. Water treatment and transport costs increased due to increases in electricity, chemicals and maintenance costs – mainly cost incurred to clean a cell of the Norumbega Covered Storage facility. Administration and support costs increased due to the effects of the prior year adjustment of costs related to the lease asset - building.

Retirement Benefits

The Massachusetts Water Resources Authority Employees' Retirement System (System) was established to provide pension benefits to Massachusetts Water Resources Authority (Authority) employees and their beneficiaries. The System is governed by a five-member board comprised of the Secretary of the Authority's Board (ex-officio), two members elected by the System's participants, one member appointed by the Authority's Board and one member appointed by the System's Board members.

The System has total plan assets of \$675.2 million and \$630.5 million at December 31, 2023 and 2022, respectively.

Other Post-Employment Benefits (OPEB) Irrevocable Trust

In April 2015, the Authority established the MWRA Other Post-Employment Benefits (OPEB) Irrevocable Trust. The Trust was established for the sole purpose of providing for the advance funding of future costs of retired employee health insurance and other benefits provided to retirees. It is intended that the Trust shall constitute a "Qualified OPEB Trust" according to the standards set forth in GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions and the standards of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The Authority's Board of Directors appointed a five-member Board of Trustees, made up of Authority senior managers, to control and manage the trust.

An initial deposit of \$10.8 million was made to the trust upon establishment of the trust. The balance of the trust at June 30, 2024 and 2023 was \$82.1 million and \$72.4 million, respectively.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

Capital Assets and Debt Administration Capital Assets

As of June 30, 2024 and 2023, the Authority had \$5.48 billion and \$5.52 billion of capital assets (net of depreciation), respectively. This includes land, construction in progress, plant and equipment for the water and sewer systems, lease asset - building, furniture and fixtures, leasehold improvements, and motor vehicles and equipment. The Authority's net capital assets decreased approximately \$49.6 million, or 0.9%, during fiscal year 2024, primarily due to the rate of depreciation being higher than the rate of capitalization.

Capital Assets
(Net of depreciation, dollars in thousands)

				Percentage	Percentage
				change	change
	2024	2023	2022	2024-2023	2023-2022
Land	\$ 30,214	\$ 30,060	\$ 30,058	0.5%	0.0%
Construction in progress	279,826	298,535	172,476	(6.3)	73.1
Plant and equipment, water, and					
sewer systems	5,140,501	5,172,729	5,347,916	(0.6)	(3.3)
Lease asset - building	16,634	18,735	12,377	(11.2)	51.4
Furniture and fixtures	4,177	24	30	17,304.2	(20.0)
Leasehold improvements	207	219	231	(5.5)	(5.2)
Motor vehicles and equipment	4,761	5,600	5,994	(15.0)	(6.6)
Total	\$ 5,476,320	\$ 5,525,902	\$ 5,569,082	(0.9%)	(0.8%)

Additional information on the Authority's capital assets can be found in Note 8 of this financial report.

Debt Administration

The Authority's bond sales must be approved by its board of directors (the Board) and must comply with rules and regulations of the United States Treasury Department. Neither the Commonwealth of Massachusetts (the Commonwealth) nor any political subdivision thereof shall be obligated to pay the principal of, or premium or interest on, any debt outstanding and neither the faith and credit nor the taxing power of the Commonwealth or any political subdivision thereof is pledged to such payment.

Bond Resolutions

Pursuant to its general bond resolution, the Authority must comply with a rate covenant that requires it to set rates to maintain revenues sufficient to pay current expenses; debt service on indebtedness; required deposits to reserves; costs of maintenance, replacement, and/or improvements to the wastewater and water systems that are considered current expenses and any additional amounts the Authority may be required to pay by any law or contract.

In addition to the rate covenant, the Authority is required to meet two covenants with respect to debt service coverage. The primary debt service coverage requires that the Authority fix and adjust rates and charges to provide revenues available for bond debt service in an amount equal to 1.2 times that is required for debt service on all outstanding bonds, not including subordinated bonds. The subordinated debt service coverage requires that the Authority fix and adjust rates and charges to provide revenues available for bond debt service in an amount equal to 1.1 times that is required for debt service on all outstanding bonds, including subordinated bonds.

Additional information on the Authority's long-term debt can be found in Note 6 of this financial report.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

Credit Rating

The Authority's \$3.0 billion Senior Lien General Revenue Bonds are rated Aa1 from Moody's Investors Service, AA+ by S&P Global Ratings and AA+ from Fitch Ratings. The \$382.4 million Subordinate Lien General Revenue Bonds are rated Aa2 from Moody's Investors Service, AA by S&P Global Ratings and AA from Fitch Ratings. Some of the Authority's revenue bonds are enhanced by bond insurance. The credit ratings of these bond series will be the higher rating of either the Authority or the firm providing the enhancement. In the case of bonds enhanced by a letter of credit, the rating will be the highest of the Authority's, the provider or, if available, a joint rating. The subordinated debt of \$798.8 million with the Massachusetts Clean Water Trust is not rated as the Authority's debt.

Economic Factors and Next Year's Budget

In June 2024, the Board approved the fiscal year 2025 Current Expense Budget (CEB), which totals \$900.6 million in expenses.

The \$900.6 million expense total is comprised of \$504.2 million (56%) in capital financing costs and \$396.4 million (44%) in operating expenses, of which \$321 million (81%) is for direct expenses and \$75.4 million (19%) is for indirect expenses. The total represents an increase of \$46.4 million from fiscal year 2024 spending, which is comprised of \$41.5 million in higher operating costs and \$4.9 million in higher debt service costs.

The fiscal year 2025 rate revenue requirement approved by the Board is \$855.5 million; an increase of 2.5% compared with the fiscal year 2024 budget.

Fiscal year 2025 budgeted nonrate revenue totals \$45.1 million, a decrease of \$5.6 million from actual fiscal year 2024 nonrate revenue. The nonrate revenue budget is comprised of \$28.4 million in investment income, \$16.3 million in other user charges and other revenue and \$0.4 million in entrance fees.

CIP 10 Year Plan

The Authority's planned spending for capital improvements in future years reflects the Authority's ongoing efforts to upgrade and maintain the system and to align its project prioritization process with the Master Plan.

Major planned and ongoing projects include:

- Commitment to long-term redundancy plan for the metropolitan water tunnel system.
- Improvement and replacement of equipment on Deer Island and at major headworks facilities to ensure continued efficient and effective operations.
- Continued asset protection projects for both wastewater and water systems (pump stations and pipelines)
- Dedication to using resources efficiently, responding to climate change and reducing the environmental impacts of the Authority's daily operations by installing alternative energy sources and promotion of improved self-generation.
- Enhanced commitment to the community assistance programs for both the sewer and water systems to improve local infrastructure, including an initiative to provide interest-free loans to assist communities in replacing lead service lines.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2024 and 2023

(Unaudited)

- Continued investment for the upgrade of Management Information Systems to ensure the availability, integrity and security of data.
- Continue the Residuals Asset Protection program for maintaining and improving the operations and infrastructure of the biosolids processing in the long term.
- Improvement and replacement of equipment at CWTP to ensure continued efficient and effective operations.

Contacting the Authority's Financial Management

This report is designed to provide our bondholders, member communities and other interested parties with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the revenue it receives. If you have questions about this report or need additional information, contact the Massachusetts Water Resources Authority, Finance Division, 33 Tafts Avenue, Boston, MA 02128.

Statements of Net Position

June 30, 2024 and 2023

(Dollars in thousands)

Assets	2024	2023
Current assets:		
Cash and cash equivalents (note 4)	\$ 84,200	\$ 79,056
Investments (note 4)	5,397	5,278
Restricted investments (note 4)	934,688	831,549
Intergovernmental loans (note 7)	41,323	38,157
Accounts receivable	1,797	3,323
Interest receivable	769	809
Total current assets	1,068,174	958,172
Noncurrent assets:		
Capital assets:		
Capital assets – not being depreciated (note 8)	310,040	328,595
Capital assets – being depreciated – net (note 8)	5,149,646	5,178,572
Lease asset - building (note 8)	16,634	18,735
Other assets, net (note 7)	357,580	340,872
Total noncurrent assets	5,833,900	5,866,774
Total assets	6,902,074	6,824,946
Deferred Outflows of Resources		
Deferred outflows from pension (note 10)	55,189	80,550
Deferred outflows from OPEB (note 11)	45,749	3,933
Deferred outflows from derivative instruments (note 6)	7.405	2,820
Deferred outflows from refunding debt	7,495	7,981
Liabilities		
Current liabilities:	56.710	50.400
Accounts payable and accrued expenses	56,712	50,408
Accounts payable for construction	29,687	30,474
Commercial paper (note 6)	80,000	207.454
Current portion of long-term debt (note 6)	284,890	297,454
Current portion of lease liability (note 9)	1,798	1,664
Accrued interest on bonds payable Total current liabilities	53,007 506,094	60,092 440,092
	300,094	440,092
Noncurrent liabilities:		
Reserves (note 5)	75,557	67,696
Retainage on construction in progress	12,585	11,155
Long-term debt – less current portion (note 6)	4,143,367	4,346,599
Lease liability (note 9)	17,138	18,936
Net pension liability (note 10)	137,935	152,974
Net OPEB liability (note 11) Liability for derivative instruments (note 6)	94,490	45,380
Total noncurrent liabilities	4,481,072	2,820 4,645,560
Total liabilities	4,987,166	5,085,652
	1,507,100	3,003,032
Deferred Inflows of Resources Deferred inflows from pension (note 10)	2,775	4,061
Deferred inflows from OPEB (note 11)	15,581	31,392
Deferred inflows from refunding debt	43,691	7,912
Deferred inflows from retaining deor	45,071	7,712
Net Position	1 120 027	1 104 (17
Net investment in capital assets Restricted	1,128,827	1,184,617
Construction	156,606	145,029
Debt service	277,068	276,719
Operating	6,756	6,802
Revenue	64,575	41,356
Rate Stabilization	39,009	39,314
Unrestricted	288,453	97,376
Total net position	\$ 1,961,294	\$ 1,791,213
G 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		

Commitments and contingencies (notes 9,10,11,12 and 13)

Statements of Revenues, Expenses, and Changes in Net Position Years ended June 30, 2024 and 2023

(Dollars in thousands)

	2024	2023
Operating revenues (note 2):		
Customer services	\$ 847,938	\$ 831,932
Other	3,780	5,023
Total operating revenues	851,718	836,955
Operating expenses:		
Operations	144,165	133,377
Maintenance	37,678	34,318
Payments in lieu of taxes	8,489	8,479
Engineering, general, and administrative	157,926_	136,797
Total operating expenses	348,258	312,971
Income from operations before depreciation	503,460	523,984
Depreciation and amortization	236,818	230,810
Operating income	266,642	293,174
Regulatory accounting provisions:		
Change in regulatory provisions, net (note 3)		52,124
Total regulatory accounting provisions		52,124
Nonoperating revenues (expenses):		
Debt service grant	-	1,187
Investment gain	39,002	19,313
Interest expense	(133,999)	(143,541)
Change in reserves (note 5)	(7,861)	(2,418)
Changes in derivative related accounts	-	2,940
Total nonoperating expenses	(102,858)	(122,519)
Net gain before capital grants and contributions	163,784	222,779
Capital grants and contributions	6,297	3,397
Increase in net position	170,081	226,176
Total net position - beginning of year	1,791,213	1,565,037
Total net position - end of year	\$ 1,961,294	\$ 1,791,213

Statements of Cash Flows

Years ended June 30, 2024 and 2023

(Dollars in thousands)

	2024	2023
Cash flows from operating activities:	¢ 947.475	¢ 922.401
Cash received from customers Cash paid to suppliers for goods and services	\$ 847,475	\$ 832,491
Cash paid to suppliers for goods and services Cash paid to employees for services	(168,432) (164,948)	(132,768) (176,103)
Cash paid to employees for services Cash paid in lieu of taxes	(8,489)	(8,479)
Other operating receipts	3,888	4,870
Net cash provided by operating activities	509,494	520,011
The cash provided by operating activities	303,131	320,011
Cash flows from capital and related financing activities:		
Proceeds from sale of revenue bonds, loans, notes and commercial paper	380,801	280,423
Capital grants for construction	6,297	3,397
Debt service grant	-	1,187
Principal paid on leases payable	(1,663)	(1,538)
Interest paid on leases payable	(1,554)	(1,678)
Repayment of debt	(429,363)	(438,869)
Interest paid on debt	(188,183)	(164,322)
Plant expenditures	(206,468)	(165,608)
Net cash used for capital and related financing activities	(440,133)	(487,008)
Cash flows from investing activities:		
Purchases of short-term investments	_	(25,970)
Sales and maturities of short-term investments	18,700	26,000
Changes in restricted money market investments	(115,994)	(52,669)
Interest received	33,077	25,461
Net cash used for investing activities	(64,217)	(27,178)
Net increase in cash and cash equivalents	5,144	5,825
Cash and cash equivalents - beginning of year	79,056	73,231
Cash and cash equivalents - end of year	\$ 84,200	\$ 79,056
Reconciliation of operating income to net cash provided by operating		
activities:		
Operating income	266,642	293,174
Adjustments to reconcile operating income to net cash provided		
by operating activities:		
Depreciation and amortization	236,818	230,810
Change in net pension liability	(15,039)	132,945
Change in deferred outflows from pension	25,361	(49,703)
Changed in deferred inflows from pension	(1,286)	(62,015)
Change in net OPEB liability	49,110	(4,448)
Change in deferred outflows from OPEB	(41,816)	290
Change in deferred inflows from OPEB	(15,811)	(16,736)
Change in other accounts	464	(7,899)
Change in accounts payable and accruals	5,051	3,593
Net cash provided by operating activities	\$ 509,494	\$ 520,011

NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES

In fiscal 2024, general revenue refunding bonds in the aggregate principal amount of \$279,275 were issued to refund \$359,005 of bonds outstanding. In fiscal 2023, general revenue refunding bonds in the aggregate principal amount of \$110,340 were issued to refund \$120,085 of bonds outstanding.

Statements of Fiduciary Net Position June 30, 2024 and 2023

(Dollars in thousands)

		2024	2023		
	Pensio Empl Tr	Pension (and Other Employee Benefit) Trust Funds			
Assets					
Cash and cash equivalents (note 4)	\$	23,843	\$	19,238	
Investments: (note 4)					
Fixed income		137,357		126,381	
Equities		316,015		286,128	
Real estate		61,296		70,330	
Private equity		75,630		71,726	
Hedge funds		27,512		26,675	
External investment pool		114,655		101,857	
Total investments		732,465		683,097	
Accounts receivable		995		564	
Total assets		757,303		702,899	
Liabilities					
Current liabilities:					
Accounts payable and accrued expenses		165		187	
Due to primary government		92		180	
Payables for securities purchased		-		914	
Total liabilities		257		1,281	
Fiduciary Net Position					
Restricted					
Pensions		674,932		629,240	
Postemployment benefits other than pensions		82,114		72,378	
Total fiduciary net position	\$	757,046	\$	701,618	

Statements of Changes in Fiduciary Net Position

Years ended June 30, 2024 and 2023

(Dollars in thousands)

	2024	2023		
	Pension (and Other Employee Benefit) Trust Funds	Pension (and Other Employee Benefit) Trust Funds		
Additions				
Contributions:				
Employer	\$ 26,610	\$ 22,616		
Plan members	10,576	10,551		
Total contributions	37,186	33,167		
Investment income:				
Interest and dividends	10,483	9,096		
Net realized and unrealized gains (losses)	57,068	(87,701)		
Less: investment fees	(3,648)	(6,373)		
Net investment income (loss)	63,903	(84,978)		
Reimbursements and transfers from other systems	2,409	3,224		
Total additions	103,498	(48,587)		
Deductions				
Benefits paid to participants or beneficiaries	46,428	40,726		
Reimbursements and transfers to other systems	1,137	1,086		
Administrative expenses	505	585		
Total deductions	48,070	42,397		
Change in fiduciary net position	55,428	(90,984)		
Total fiduciary net position - beginning of year	701,618	792,602		
Total fiduciary net position - end of year	\$ 757,046	\$ 701,618		

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(1) Organization

The Massachusetts Water Resources Authority (the Authority) was established in January 1985 pursuant to Chapter 372 (the Enabling Act) of the Act of 1984 of the Commonwealth of Massachusetts (the Commonwealth). The Authority, a successor agency to certain functions of the Metropolitan District Commission (the MDC) (which became part of the Department of Conservation and Recreation (the DCR) in July 2003), is a public instrumentality and, effective July 1, 1985, provides water supply services and sewage collection, treatment, and disposal services to areas of the Commonwealth.

The Authority is governed by an 11-member board of directors (the Board) chaired by the Secretary of Energy and Environmental Affairs for the Commonwealth. The Secretary and two other members are appointed by the Governor. Three members of the Board are appointed by the Mayor of Boston and three are appointed by the Authority's Advisory Board. One member is appointed by the Mayor of Quincy and one by the Winthrop Council President.

The Authority has also considered all component units for which it is financially accountable as well as other organizations for which the nature and /or significance of their relationship with the Authority are such that exclusion would cause the Authority's basic financial statements to be misleading or incomplete. As required by GAAP, these basic financial statements present the Authority (primary government) and its component units.

The Authority has included entities as fiduciary fund component units in the reporting entity because of the significance of their operational and financial relationship with the Authority. Component units are entities that are legally separate from the Authority, but are so closely related that they are, in substance, the same as the Authority or entities providing services entirely or almost entirely for the benefit of the Authority.

Fiduciary Fund Component Units

The Massachusetts Water Resources Authority Employees' Retirement System (Pension Trust) was established to provide pension benefits to Authority employees and their beneficiaries. The Pension Trust is governed by a five-member board comprised of the Secretary of the Authority's Board (exofficio), two members elected by the Pension Trust's participants, one member appointed by the Authority's Board and one member appointed by the Pension Trust's Board members. The Pension Trust is presented using the accrual basis of accounting and is reported in the Pension (and Other Employee Benefit) Trust Funds in the fiduciary funds financial statement. The Pension Trust's year end is December 31st.

The Massachusetts Water Resources Authority Irrevocable OPEB Trust (OPEB Trust) is a single-employer other post-employment benefits (OPEB) plan, for the purpose of accumulating and investing assets to fund certain post-retirement medical and life insurance for retirees of the Authority. The Board of Trustees is composed of five members including the following Authority employees: Executive Director, Director of Finance, Treasurer, Budget Director and Director of Human Resources. The OPEB Trust is presented using the accrual basis of accounting and is reported in the Pension (and Other Employee Benefit) Trust Funds in the fiduciary funds financial statement. The OPEB Trust's year end is June 30th.

Complete financial statements for the Trusts can be obtained from the Authority's administrative offices at 33 Tafts Avenue, Boston, MA 02129.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(2) Summary of Significant Accounting Policies

The accounting policies of the Authority conform to U.S. generally accepted accounting principles as applicable to government enterprises. The following is a summary of the Authority's significant accounting policies:

(a) Basis of Presentation

The Authority is required by the Enabling Act to establish user rates for its water and sewer services which provide sufficient funds to recover the costs of operations (excluding depreciation), debt service, maintenance, replacements, improvements to its facilities, and appropriate reserves. The Authority's financial statements are reported on the accrual basis of accounting and the economic measurement focus as specified by the Governmental Accounting Standards Board's (GASB) requirements for an enterprise fund.

The Authority distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing water and sewer services to its member communities. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses, with the exception of regulatory provisions as discussed below. All operating revenues are pledged for repayment of outstanding debt service.

In addition, the Authority applies the provisions of GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, to provide a better matching of revenues and expenses. The effect of this policy has been to defer certain outflows of resources, which will be recovered through future revenues in accordance with the Authority's rate model, and to record deferred inflows of resources for revenue collected through current rates for costs expected to be incurred in the future. The effects of the Authority's accounting policies are discussed further in Note 3.

In fiscal year 2023, the Authority implemented GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*. This statement did not have an impact on the Authority.

In fiscal year 2024, the Authority implemented GASB Statement No. 100, *Accounting Changes and Error Corrections*. This statement did not have an impact on the Authority.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(b) Capital Assets

On July 1, 1985, ownership of the MDC's sewer and waterworks personal property was transferred to the Authority. Pursuant to the Enabling Act, ownership of the real property of the MDC sewer and waterworks systems was not transferred from the Commonwealth to the Authority; however, the Authority has the right to use, improve, maintain, and manage that property. In addition, ownership of the real and personal property of the watershed system remains with the Commonwealth; however, the Authority has the right to utilize the water therefrom for water supply purposes.

The personal property, together with the rights to the real property and watershed system, was recorded at its estimated fair value of \$2,331,465 (including certain construction projects which were in progress as of July 1, 1985), based upon an appraisal performed by valuation specialists. Property, plant, and equipment acquired or constructed since July 1, 1985, is stated at acquisition cost, and includes the expenditure of capital grants in aid of construction.

Betterments and major renewals are capitalized and included in capital asset accounts, while expenditures for maintenance and repairs are charged to expense when incurred. The cost of depreciable assets and related accumulated depreciation is eliminated from the accounts when such items are disposed of or otherwise retired.

The Authority's capitalization threshold is \$100.

(c) Depreciation

The Authority provides for depreciation by use of the straight-line method. Depreciation is intended to distribute the cost of depreciable properties, including those financed by capital grants in aid of construction, over the following estimated average useful lives:

	Years
Plant and Equipment, Water and Sewerage Systems	5-100
Motor Vehicles and Equipment	5
Furniture and Fixtures	7
Leasehold Improvements	3–5

(d) Revenue Recognition

The Authority recognizes revenue as amounts become collectible from its customers for water and sewer services provided. The majority of the Authority's billings to cities and towns are subject to, in the event of nonpayment, the local aid intercept allowed by the Enabling Act.

(e) Net Position

When both restricted and unrestricted resources are available for use, it is the Authority's policy to use the restricted resources first, then unrestricted as they are needed.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(f) Cash and Cash Equivalents

Authority:

The Authority's policy is to treat unrestricted investments with a maturity date of three months or less when purchased as cash equivalents for purposes of the statements of cash flows. Restricted cash and cash equivalents are combined with investments on the statements of net position and shown separately on the statements of cash flows as an investing activity.

Pension and OPEB Trust:

Cash and cash equivalents is considered to be cash on hand, demand deposits and short-term investments with an original maturity of three months or less from the date of acquisition.

(g) Payments in Lieu of Taxes

The Enabling Act authorizes and directs the Authority to pay to the DCR (formerly the MDC) Division of Watershed Management, who in turn remits payment to each city or town in which land of the Quabbin watershed and Ware River watershed is located. Each such payment is equal to the amount which the respective city or town would receive in property taxes, based upon the fair value of such land if such land were not tax exempt.

(h) Investments

Authority:

Investments are recorded at fair value, other than certain investments that are recorded at net asset value (NAV). The Authority uses an independent pricing source to determine the fair value of investments at quoted market prices. Changes in fair value are included in non-operating investment income in the Statements of Revenues, Expenses, and Changes in Net Position. Investments that are measured at NAV are the investments in the Massachusetts Municipal Depository Trust (MMDT) which is a 2a7-like external investment pool that is overseen by the Massachusetts State Treasurer and whose fair value of each share is equal to the number of shares; thus NAV is equal to \$1.00 per share.

Pension and OPEB Trusts:

Investments are reported at fair value. Fair values of investments are based on quotations from a national securities exchange, except for the Systems' investment in the Pension Reserves Investment Trust (PRIT), hedge funds, private equity and real estate investments, for which fair values are estimated as detailed below.

External Investment Pool (PRIT)

PRIT is an external investment pool comprised of securities measured at various fair value measurements. The investment pool is managed by the Pension Reserves Investment Management (PRIM) Board and the System's share of the pool is reported at fair value in the System's financial statements. A complete copy of PRIT's separately issued financial statements can be obtained from PRIM Board at 84 State Street, Boston, MA 02109, or by visiting the PRIM Board's website at http://www.mapension.com/public-records/records-of-interest/.

Hedge Funds, Private Equity, and Real Estate Investments

The fair values of these types of investments have been determined by third party investment managers using Net Asset Value (NAV) per share (or its equivalent) on the System's ownership interest in the pool or partner's capital.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(i) Compensated Absences

Employees of the Authority may accumulate unused sick time of which 30% will be paid in cash upon retirement from the Authority. The liability for vacation leave is based on the amount earned but not used; for sick leave, it is based on a percentage of the amount accumulated at the statement of net position dates. The liability for both amounts is calculated based on the pay or salary rates in effect at the statements of net position dates.

(j) Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Plan and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Authority. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

(k) Postemployment Benefits Other Than Pensions (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the OPEB Trust and additions to/deductions from the OPEB Trust's fiduciary net position have been determined on the same basis as they are reported by the Authority. For this purpose, the Authority recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

(1) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

(m) Reclassifications

Certain reclassifications were made to the fiscal year 2023 financial statements to conform to the fiscal year 2024 presentation.

(3) Deferred Inflows from Regulatory Activities

In accordance with GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, the Authority previously reported regulatory assets and deferred inflows from regulatory activities that result primarily from differences between depreciation on property, plant, and equipment not financed by grants or capital contributions, which is recovered through rates. It was determined in fiscal year 2023 that the accounting for regulatory activity no longer applied to the Authority and was discontinued.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(4) Deposits and Investments

(1) Authority (Excluding the Pension and OPEB Trusts):

The following represents essential risk information about the Authority's deposits and investments:

(a) Custodial Credit Risk – Deposits

The custodial credit risk for deposits and certificates of deposit is the risk that, in the event of a bank failure, the Authority's deposits may not be recovered. Per the Authority's policy, credit risk is minimized by diversifying portfolio of funds and ensuring the amounts held in deposits is adequate to accommodate the reasonable cash needs of the Authority.

The bank deposits at June 30, 2024 and 2023 were \$75,812 and \$71,058, respectively. Of these amounts, \$75,562 and \$70,080, were exposed to custodial credit risks as uninsured and uncollateralized.

(b) Investments

The Authority is authorized by its general bond resolution to invest in obligations of the U.S. Treasury, its agencies and instrumentalities, bonds, or notes of public agencies or municipalities, bank time deposits, guaranteed interest contracts, Massachusetts Municipal Depository Trust (MMDT) accounts, interest rate swap agreements, and repurchase agreements. All investments are held by a third-party in the Authority's name. These investments are recorded at fair value.

(c) Credit Ratings

All debt securities purchased, such as FNMA, FHLMC, and FHLB issues have historically had a credit rating of AAA or they have been collateralized to AAA. On August 8, 2011, Standard & Poor's reduced the credit rating for these agencies to AA+. The reduction in credit rating did not affect the Authority's bond covenants or escrow requirements.

The Massachusetts Municipal Depository Trust funds are not rated.

The general bond resolution limits the Authority to investing in securities that are rated in the three highest rating categories as defined by S&P and Moody's or other rating agencies.

(d) Concentration Risk

At June 30, 2024 and 2023, the Authority had investments with the issuer, Federal Home Loan Bank (FHLB), which totaled 4.5% and 7.6%, respectively, of the total investments.

At June 30, 2024 and 2023, the Authority had investments with the issuer, Federal Farm Credit Banks (FFCB), which totaled 7.7% and 8.4%, respectively, of the total investments.

At June 30, 2024 and 2023, the Authority had investments with the issuer, Federal National Mortgage Association (FNMA), which totaled 7.9% and 8.6%, respectively of total investments.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(e) Interest Rate Risk

The following is a listing of the Authority's fixed income investments and related maturity schedule as of June 30, 2024 and 2023:

June 30, 2024

	Inv	vestment ma	ıturi	ties (in yea	rs)					
Investment Type	F	air Value	_	<1		1–3	_	4–8	-	>9
Mass Municipal Depository Trust U.S. Agency Obligations	\$	714,602 225,483	\$	714,602 8,380	\$	- 128,591	\$	- 88,512	\$	-
Total	\$	940,085	\$	722,982	\$	128,591	\$	88,512	\$	
	Inv	June vestment ma	,		rs)					
Investment Type	F	air Value		<1		1–3		4–8		>9
Mass Municipal Depository Trust U.S. Agency Obligations U.S. Treasury Bills	\$	598,626 238,201	\$	598,626 18,594	\$	67,836	\$	- 151,771 -	\$	- - -
Total	\$	836,827	\$	617,220	\$	67,836	\$	151,771	\$	_

The majority of the Authority's investments are held in short-term money market funds and long-term investments in U.S. agency obligations that are held in the debt service reserve funds where the intent is to hold until maturity.

(f) Investment Values

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. Debt securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The Authority has no securities classified in Level 3. The investment in MMDT, an external investment pool, is measured at \$1.00 per share – the net asset value determined by the pool.

The Authority has the following recurring fair value measurements as of June 30, 2024 and 2023: U.S. Government agency obligations \$225,483 and \$238,201 (Level 2), respectively, and MMDT \$714,602 and \$598,626 (NAV), respectively. There are no withdrawal restrictions or unfunded commitments related to the MMDT investment.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(g) Restricted Investments by Fund

The following summarizes restricted investments as of June 30, 2024 and 2023 by various funds and accounts established by the Authority for debt covenants and other purposes:

	2024		 2023
Restricted Investments:			
Construction	\$	156,604	\$ 145,028
Debt Service Reserves		150,786	148,384
Debt Service Principal and Interest		414,851	359,426
Debt Service - Revenue Redemption		22,609	21,911
Operating Reserve		58,022	49,692
Rate Stabilization Reserve		39,009	39,314
Revenue		64,575	41,356
Combined Reserves - Renewal and Replacement Reserve		10,045	10,000
Combined Reserves - Insurance Reserve		12,200	10,445
Insurance Related Escrow Deposits		5,987	 5,993
Total Restricted Investments	\$	934,688	\$ 831,549

No funds were withdrawn from the Operating Reserve, Renewal and Replacement Reserve or Insurance Reserve during the fiscal year. Changes in investment balances reflect changes in fair value.

(2) Pension Trust:

(a) Deposits – Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the Pension Trust's deposits may not be recovered. The Pension Trust's policy for custodial credit risk of deposits is to rely on FDIC insurance. As of December 31, 2023 and 2022, the Pension Trust was not exposed to custodial credit risk. The carrying value of the Pension Trust's deposits totaled \$10 and \$10 at December 31, 2023 and 2022, respectively.

(b) Investment Summary

The Pension Trust's investments at December 31, 2023 and 2022 are presented below. All investments are presented by investment type, with debt securities presented by maturity (using segmented time distribution).

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

December 31, 2023

	Iı	ivestment m	aturitie	es (in years)							
Investment Type	Fair Value			<1		1-5	-5 6-10			>10	
Debt Securities:											
Money market mutual funds	\$	20,799	\$	20,799	\$		-	\$	-	\$	-
Fixed income securities		137,357		106,830					12,019		18,508
Total Debt Securities		158,156	\$	127,629	\$			\$	12,019	\$	18,508
Other Investments:											
Equity Securities		316,015									
External Investment Pools (PRIT)		35,575									
Hedge Funds		27,512									
Real Estate		61,296									
Private Equity		75,630									
Total Other Investments		516,028									
Total Investments	\$	674,184									
		Decem	oer 31.	2022							
	Iı	Decem nvestment m									
Investment Type		December of the December of th				1–5			6-10		>10
Investment Type Debt Securities:		ivestment m		es (in years)		1–5		_	6-10	_	>10
		ivestment m		es (in years)	<u> </u>	1–5		\$	6-10	<u> </u>	>10
Debt Securities:	F	nvestment m air Value	aturitic	es (in years)	\$	1–5		\$	6-10	\$	>10 - 20,921
Debt Securities: Money market mutual funds	F	air Value 14,206	aturitic	es (in years) <1 14,206	\$	1–5		\$	-	\$	-
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities	F	14,206 126,381	\$	es (in years) <1 14,206 94,971		1–5	- - -	_	10,489		20,921
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities Other Investments:	F	14,206 126,381 140,587	\$	es (in years) <1 14,206 94,971		1–5	- - -	_	10,489		20,921
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities Other Investments: Equity Securities	F	14,206 126,381 140,587	\$	es (in years) <1 14,206 94,971		1–5	- - -	_	10,489		20,921
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities Other Investments: Equity Securities External Investment Pools (PRIT)	F	14,206 126,381 140,587 286,128 34,501	\$	es (in years) <1 14,206 94,971		1–5	- - - -	_	10,489		20,921
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities Other Investments: Equity Securities External Investment Pools (PRIT) Hedge Funds	F	14,206 126,381 140,587 286,128 34,501 26,675	\$	es (in years) <1 14,206 94,971		1–5	- - -	_	10,489		20,921
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities Other Investments: Equity Securities External Investment Pools (PRIT) Hedge Funds Real Estate	F	14,206 126,381 140,587 286,128 34,501 26,675 70,330	\$	es (in years) <1 14,206 94,971		1–5	- - -	_	10,489		20,921
Debt Securities: Money market mutual funds Fixed income securities Total Debt Securities Other Investments: Equity Securities External Investment Pools (PRIT) Hedge Funds	F	14,206 126,381 140,587 286,128 34,501 26,675	\$	es (in years) <1 14,206 94,971		1–5	- - -	_	10,489		20,921

(c) Investments – Interest Rate Risk of Debt Securities

Interest rate risk for debt securities is the risk that changes in interest rates of debt securities will adversely affect the fair value of an investment. The Pension Trust's policy for interest rate risk is the duration of the portfolio should be consistent with the appropriate indices. Unless otherwise agreed to, the duration of the portfolio must be within 25% of the appropriate benchmark.

629,947

(d) Investments – Custodial Credit Risk

Total Investments

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the Pension Trust will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Pension Trust's policy for custodial credit risk of investments intends that all investments are either insured and/or registered in the name of the Pension Trust. As of December 31, 2023 and 2022, the Pension Trust was not exposed to custodial credit risk.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(e) Investments - Credit Risk of Debt Securities

Credit risk for debt securities is the risk that an issuer or other counterparty to a debt security will not fulfill its obligations. The Pension Trust's policies for credit risk of debt securities include the minimum quality rating at the time of purchase cannot be below a rating of CCC. Non-rated securities may comprise 10% of the portfolio, provided that the applicable manager determines that, if such an issue was rated, it would be allowed under the above limitation and that the non-rated issue is deemed to be below BAA (investment grade). Compliance with credit ratings provided by Moody's, Standard & Poor's and Fitch is not sufficient for an issue to be deemed an appropriate investment. The managers are responsible for making an independent analysis of the credit-worthiness of securities.

As of December 31, 2023 and 2022, the credit quality ratings of the Pension Trust's money market mutual funds are unrated by any nationally recognized statistical rating organization. As of December 31, 2023 and 2022, the credit quality ratings of the Pension Trust's fixed income securities, excluding U.S. Treasury securities of \$27,080 and \$25,903 respectively, are as follows:

	2023	2022		
Quality Ratings *	 Fixed incor	ne secu	ırities	
A-	\$ 2,724	\$	3,050	
BBB+	723		2,456	
Unrated	 106,830		94,971	
Total	\$ 110,277	\$	100,477	

^{*}Per Standard and Poors, a nationally recognized statistical rating organization.

(f) Deposits and Investments – Foreign Currency Risk

Foreign currency risk is the risk that fluctuations in exchange rates will adversely affect the fair value of an investment or a deposit. The Pension Trust does not have a policy regarding foreign currency risk. As of December 31, 2023 and 2022, the Pension Trust was not exposed to foreign currency risk.

(g) Investments – Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the Pension Trust's investment in a single issuer. The Pension Trust's policy for concentration of credit risk is that not more than 5% of the fair value of the Pension Trust's portfolio can be invested in the debt obligations of any one issuer, with the exception of securities issued by the U.S. Government, or its agencies, which may be held without limitation. As of December 31, 2023 and 2022, the Pension Trust was not exposed to concentration of credit risk.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(h) Fair Value Measurements

The Pension Trust categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Pension Trust has the following recurring fair value measurements as of December 31, 2023 and 2022:

Dece	mber 3	31, 2023				
			Fa	ir Value Meas	suremer	nts Using
			Quoted			
			I	Prices in		
				Active	Si	gnificant
			M	arkets for		Other
			I	dentical	Ol	oservable
				Assets		Inputs
Investments by Fair Value Level	Fa	air Value	(Level 1)	(I	Level 2)
Debt Securities:				_		
Money market mutual funds	\$	20,799	\$	20,799	\$	-
Fixed income securities		30,527		27,080		3,447
Total Debt Securities		51,326		47,879		3,447
				_		
Equity Securities		113,505		113,505		
Total Investments by Fair Value Level		164,831	\$	161,384	\$	3,447
Investments measured at Net Asset Value (NAV)					
Pooled Equity Funds		202,510				
Pooled Fixed Income Funds		106,830				
Private Equity		75,630				
Real Estate		61,296				
Hedge Funds		27,512				
Investments measured at NAV		473,778				
Other investments measured at fair value						
External Investment Pool (PRIT)		35,575				
Total Investments	\$	674,184				

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

December 31, 2022

Dece	ember :	31, 2022								
			Fa	ir Value Meas	uremen	ts Using				
				Quoted						
			J	Prices in						
				Active	Sig	gnificant				
			M	arkets for		Other				
			I	dentical	Ob	servable				
				Assets]	Inputs				
Investments by Fair Value Level	F	Fair Value		Fair Value		Fair Value		Level 1)	(L	level 2)
Debt Securities:	· ·			_						
Money market mutual funds	\$	14,206	\$	14,206	\$	-				
Fixed income securities		31,410		25,903		5,507				
Total Debt Securities		45,616		40,109		5,507				
Equity Securities		125,418		125,418						
Total Investments by Fair Value Level		171,034	\$	165,527	\$	5,507				
Investments measured at Net Asset Value (NAV	<u>V)</u>									
Pooled Equity Funds		160,710								
Pooled Fixed Income Funds		94,971								
Private Equity		71,726								
Real Estate		70,330								
Hedge Funds		26,675								
Investments measured at NAV		424,412								
Other investments measured at fair value										
External Investment Pool (PRIT)		34,501								
Total Investments	\$	629,947								

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Equity securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities relationship to benchmark quoted prices.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the following table.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Decem	ber	31.	2023

		cember 01, 2	020		
		Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private equity (1)	\$	75,630	23,615	N/A ⁽¹⁾	N/A ⁽¹⁾
Real estate (2)		61,296	8,922	N/A ⁽²⁾	N/A ⁽²⁾
Hedge funds (3)		27,512	-	Quarterly	90-100 days
Pooled Equity Funds (4)		202,510	-	1-30 days	1 - 60 days
Pooled Fixed Income Funds (5)		106,830	114,794	1-30 days	1 - 15 days
Total Investments Measured at the NAV	\$	473,778			
	De	ecember 31, 2	022		
		Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private equity (1)	\$	71,726	28,735	N/A ⁽¹⁾	N/A ⁽¹⁾
Real estate (2)		70,330	3,658	N/A ⁽²⁾	N/A ⁽²⁾
Hedge funds (3)		26,675	-	Quarterly	90-100 days
Pooled Equity Funds (4)		160,710	-	1-30 days	1 - 60 days
Pooled Fixed Income Funds (5)		94,971	115	1-30 days	1 - 15 days

Total Investments Measured at the NAV

- (1) Private Equity Funds: This type includes 21 private equity funds that consist primarily of limited partnership interests in corporate finance and venture capital funds. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Pension Trust's ownership interest in partners' capital. The investments can never be redeemed with the funds. Distributions from each of these funds will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 1 to 12 years.
- (2) Real Estate Funds: This type includes 11 real estate funds that invest primarily in U.S. commercial real estate and value added opportunities. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Pension Trust's ownership interest in partners' capital. There are two investments with approximate values of \$23,700 and \$23,400 at December 31, 2023, and \$26,800 and \$26,000 at December 31, 2022, for which the investments can be redeemed quarterly, with a redemption notice period of 90 days. The remaining investments can never be redeemed with the funds. Distributions from each of these funds will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 1 to 10 years.
- (3) Hedge Funds: This type includes 3 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Pension Trust's ownership interest in partners' capital. There are three investments with approximate values of \$49, \$13,300 and \$14,100 at December 31, 2023 and \$66, \$12,600 and \$14,000 at December 31, 2022. The investments can be redeemed quarterly, with a redemption notice period of 90 days, 90 days, and 100 days, respectively.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

- (4) Pooled Equity Funds: This type includes 7 funds with capital pooled from multiple investors in order to achieve mutual return objectives through investments in various types of equity securities. The fair value of pooled equity funds is measured at NAV by multiplying the pool's share price by the number of shares held.
- (5) Pooled Fixed Income Funds: This type includes 4 funds with capital pooled from multiple investors in order to achieve mutual return objectives through investments in fixed income securities. The fair value of pooled fixed income funds is measured at NAV by multiplying the pool's share price by the number of shares held.

(3) OPEB Trust:

(a) Deposits – Custodial Credit Risk

The custodial credit risk for deposits and certificates of deposit is the risk that, in the event of a bank failure, the OPEB Trust's deposits may not be recovered.

The bank deposits at June 30, 2024 and 2023 were \$3,034 and \$5,022, respectively. Of these amounts, \$2,784 and \$4,772, were exposed to custodial credit risks as uninsured and uncollateralized.

(b) Investments Summary

The Trustees have adopted a formal cash and investment policy. All funds will be invested with the Commonwealth of Massachusetts Pension Reserves Investment Trust (PRIT) fund through the State Retiree Benefits Trust Fund.

The investment in the PRIT fund is not subject to custodial or concentration risk and the Trust does not have policies to address such risks. The investment in PRIT is subject to foreign currency risk to the extent exchange rates will adversely affect the fair value of PRIT's international investments. The Trust does not have a policy to address this risk. The PRIT fund is unrated. PRIT does not place any limitations or restrictions on withdrawals.

Investments are recorded at fair value. The Trust categorizes its fair value measurements with the fair value hierarchy established by generally accepted accounting principles. Debt securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The Trust has no debt securities classified in Level 3.

The OPEB Trust's investment in the PRIT fund, totaling \$79,080 and \$67,356 at June 30, 2024 and 2023, respectively, is classified as Level 2.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(5) Bond Resolution Reserves

The components of the reserves funded from revenues and required by the general and supplemental bond resolutions at June 30, 2024 and 2023 are as follows:

				Total			
Reserves	 Sewer Water			2024		2023	
Renewal and Replacement	\$ 2,544	\$	1,457	\$	4,001	\$	4,001
Insurance	7,000		7,000		14,000		14,000
Operating	37,540		20,016		57,556		49,695
Total	\$ 47,084	\$	28,473	\$	75,557	\$	67,696

A renewal and replacement reserve of \$6,000 was established through grant receipts transferred from the Commonwealth in 1985 and is included in restricted net position at June 30, 2024 and 2023.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(6) Notes Payable and Long-Term Debt

Long-term debt at June 30, 2024 and 2023 consisted of the following:

Long term deet at valie 50, 2021 and 2025 consisted of the following	۶.	2024	2023
General Revenue Bonds:			
2016 Series B, 4% to 5%, issued May 12, 2016,			
due 2024 to 2030	\$	7,630	\$ 9,280
2017 Series B, 5%, issued May 18, 2017,		21.720	52 515
due 2028 to 2042 2018 Series B, 5%, issued May 16, 2018,		21,720	53,515
due 2025 to 2043		57,340	86,465
2019 Series B, 5%, issued May 22, 2019,		37,340	00,403
due 2024 to 2044		115,895	115,895
2019 Series E, 1 9/10% to 3 1/5%, issued November 1, 2019,		115,055	110,000
due 2024 to 2044		50,000	50,000
2020 Series B, 5% issued August 20, 2020,		,	Í
due 2025 to 2045		141,155	151,705
2021 Series B, 5%, issued December 22, 2021,			
due 2024 to 2041		53,305	58,635
2023 Series B, 5% to 5.25%, issued April 27, 2023,			
due 2024 to 2048		133,975	133,975
2024 Series B, 5%, issued June 26, 2024,			
due 2025 to 2049		166,260	
Total		747,280	 659,470
General Revenue Refunding Bonds:			
2007 Series B, 5 1/4%, issued February 1, 2007,			
due 2024 to 2038		602,275	647,950
2013 Series A, 5%, issued		002,273	017,550
March 27, 2013		_	29,645
2014 Series F, 5%, issued November 19, 2014,			- ,
due 2024		4,350	4,350
2016 Series C, 4% to 5%, issued May 12, 2016,			
due 2024 to 2040		276,560	320,140
2016 Series D, 3% to 5%, issued August 24, 2016,			
due 2029 to 2042		43,075	43,525
2017 Series C, 5%, issued May 18, 2017,			
due 2024 to 2032		135,875	166,710
2018 Series C, 5%, issued May 16, 2018,			
due 2024 to 2026		8,030	13,100
2019 Series F, 1 7/10% to 3 1/10%, issued November 1, 2019,		200.000	122 500
due 2024 to 2039		290,880	423,500
2021 Series C, 1/2% to 2 9/10%, issued December 22, 2021, due 2024 to 2044		406 970	(71 575
2023 Series C, 5%, issued April 27, 2023,		496,870	671,575
due 2026 to 2033		100,340	100,340
2024 Series C, 5%, issued June 26, 2024,		100,540	100,540
due 2027 to 2042		279,275	_
			 2 420 925
Total		2,237,530	 2,420,835

Notes to Financial Statements

June 30, 2024 and 2023

(Dollars in thousands)

	2024	2023
General Revenue Bonds with the Massachusetts		
Clean Water Trust - Direct Borrowings:		
1999 Series E Sewer, 4 3/4%, issued		
October 6, 1999, due 2024 to 2029	\$ 3,072	\$ 3,527
1999 Series F Sewer, 5 3/4% to 6%, issued		
November 3, 1999, due 2024 to 2029	62,970	84,410
2000 Series E Sewer, 5 1/2%, issued		
November 1, 2000, due 2024 to 2030	26,244	29,524
2001 Series D Sewer, 5 3/8% to 5 1/2%, issued		
July 26, 2001, due 2024 to 2029	313	359
2002 Series H Sewer, 5%, issued		
October 31, 2002, due 2024 to 2032	37,630	41,165
2002 Series I Sewer, 5 1/2%, issued		
October 31, 2002, due 2024 to 2030	916	1,031
2003 Series C Sewer, 5% to 5 1/4%, issued		
November 6, 2003, due 2024 to 2033	14,526	15,703
2003 Series C Water, 4 3/4% to 5%, issued		
November 6, 2003	-	1,410
2004 Series C Sewer, 5% to 5 1/4%, issued		
October 26, 2004, due 2024 to 2033	4,914	5,309
2004 Series D Sewer,5%, issued		
November 29, 2004, due 2024 to 2034	27,850	29,820
2004 Series D Water, 5%, issued		
November 29, 2004, due 2024 to 2024	970	1,925
2005 Series C Sewer, 5% to 5 1/4%, issued		
November 3, 2005, due 2024 to 2033	2,464	2,820
2005 Series C Water, 5%, issued		
November 3, 2005	-	74
2005 Series D Sewer, 2 3/10%, issued		
November 16, 2005, due 2024 to 2035	30,973	33,188
2005 Series D Water, 0% to 2%, issued		
November 16, 2005, due 2024 to 2025	1,569	2,347
2005 Series E Sewer, 2%, issued		
November 16, 2005, due 2024 to 2025	47	71
2005 Series E Water, 2%, issued		
November 16, 2005, due 2024 to 2025	12	17
2006 Series C Sewer, 5%, issued		
October 26, 2006, due 2024 to 2034	3,283	3,722
2006 Series D Sewer, 2 3/10%, issued		
December 14, 2006, due 2024 to 2036	30,510	32,494
2006 Series D Water, 0% to 2%, issued		
December 14, 2006, due 2024 to 2026	4,700	6,248
2006 Series E Sewer, 2%, issued		
December 14, 2006, due 2024 to 2026	66	87
2006 Series E Water, 2%, issued		
December 14, 2006, due 2024 to 2026	30	39

Notes to Financial Statements

June 30, 2024 and 2023

(Dollars in thousands)

	2024		2023	
General Revenue Bonds with the Massachusetts				
Clean Water Trust - Direct Borrowings (Continued):				
2007 Series C Sewer, 2% to 2 3/10%, issued				
November 9, 2007, due 2024 to 2035	\$	986	\$	1,154
2007 Series C Water, 2%, issued				
November 9, 2007, due 2024 to 2025		310		465
2007 Series D Sewer, 2 3/10%, issued				
November 9, 2007, due 2024 to 2036		12,509		13,325
2007 Series E Sewer, 2 2/5%, issued				
December 18, 2007, due 2024 to 2037		31,125		32,971
2007 Series E Water, 2%, issued				
December 18, 2007, due 2024 to 2027		4,665		5,774
2008 Series G Sewer, 2%, issued				
December 9, 2008, due 2024 to 2026		1,036		1,387
2008 Series G Water, 2%, issued				
December 9, 2008, due 2024 to 2026		227		302
2009 Series C Sewer, 2% to 2 2/5%, issued				
March 18, 2009, due 2024 to 2038		39,674		41,841
2009 Series C Water, 2%, issued				
March 18, 2009, due 2024 to 2028		8,761		10,411
2009 Series D Sewer, 2% to 2 2/5%, issued				
December 15, 2009, due 2024 to 2037		4,708		5,219
2009 Series D Water, 2%, issued				
December 15, 2009, due 2024 to 2027		322		398
2010 Series D Sewer, 2% to 2 2/5%, issued				
July 8, 2010, due 2024 to 2040		14,751		15,768
2010 Series D Water, 2%, issued				
July 8, 2010, due 2024 to 2030		9,149		10,355
2011 Series A Sewer, 2% to 2 2/5%, issued				
March 15, 2011, due 2024 to 2038		2,598		2,835
2011 Series A Water, 2%, issued				
March 15, 2011, due 2024 to 2028		1,677		1,995
2012 Series C Sewer, 2% to 2 2/5%, issued				
June 6, 2012, due 2024 to 2040		3,329		3,763
2012 Series C Water, 2%, issued				
June 6, 2012, due 2024 to 2030		1,642		1,857
2012 Series D Sewer, 2% to 2 2/5%, issued				
June 13, 2012, due 2024 to 2042		21,684		23,854
2012 Series D Water, 2%, issued				
June 13, 2012, due 2024 to 2032		4,323		4,754
2013 Series B Sewer, 2% to 2 2/5%, issued				
May 22, 2013, due 2025 to 2043		13,982		15,652
2013 Series B Water, 2%, issued				
May 22, 2013, due 2025 to 2033		4,334		4,766

Notes to Financial Statements

June 30, 2024 and 2023

(Dollars in thousands)

		2024	2023
General Revenue Bonds with the Massachusetts			
Clean Water Trust - Direct Borrowings (Continued):			
2014 Series C Sewer, 2% to 2 2/5%, issued	•		
May 30, 2014, due 2024 to 2042	\$	3,044	\$ 3,250
2014 Series C Water, 2%, issued		2.070	2 105
May 30, 2014, due 2024 to 2032		2,878	3,195
2015 Series A Sewer, 2% to 2 2/5%, issued		22 215	25.007
January 7, 2015, due 2025 to 2045		33,315	35,097
2015 Series A Water, 2%, issued		0.526	10 205
January 7, 2015, due 2025 to 2035 2015 Series B Sewer, 2% to 2 2/5%, issued		9,526	10,285
May 14, 2015, due 2023 to 2043		1,705	1,877
2015 Series B Water, 2%, issued		1,703	1,677
May 14, 2015, due 2023 to 2033		1,123	1,248
2016 Series A Sewer, 2% to 2 2/5%, issued		1,123	1,270
March 11, 2016, due 2024 to 2046		29,215	30,582
2016 Series A Water, 2%, issued		27,213	30,362
March 11, 2016, due 2024 to 2036		8,904	9,547
2017 Series A Sewer, 2%, issued		0,704),547
April 13, 2017, due 2024 to 2036		6,100	6,502
2017 Series A Water, 2%, issued		0,100	0,502
April 13, 2017, due 2024 to 2037		17,314	18,456
2018 Series E Sewer, 2%, issued		17,011	10,.00
September 12, 2018, due 2023 to 2038		13,713	14,480
2018 Series E Water, 2%, issued		-)	,
September 12, 2018, due 2023 to 2038		25,725	27,163
2019 Series D Sewer, 2%, issued		,	,
October 24, 2019, due 2023 to 2039		27,292	28,706
2019 Series D Water, 2%, issued		ŕ	*
October 24, 2019, due 2023 to 2039		16,424	17,274
2021 Series A Sewer, 2%, issued			
May 11, 2021, due 2024 to 2041		22,030	23,092
2021 Series A Water, 2%, issued			
May 11, 2021, due 2024 to 2041		22,154	23,222
2022 Series A Sewer, 2%, issued			
December 14, 2022, due 2024 to 2043		8,623	8,986
2022 Series A Water, 2%, issued			
December 14, 2022, due 2024 to 2043		9,402	9,799
2023 Series A Sewer, interim loans, issued			
January 26, 2023		-	29,197
2023 Series A Water, interim loans, issued			
January 26, 2023		-	9,872
2023 Series D Sewer, 2%, issued			
November 1, 2023, due 2025 to 2044		29,658	-
2023 Series D Water, 2%, issued			
November 1, 2023, due 2025 to 2044		8,885	-
2024 Series A Sewer, interim loans, issued		26045	
June 12, 2024		36,915	-
2024 Series A Water, interim loans, issued		20.000	
June 12, 2024		30,000	
Total		798,796	 805,966

Notes to Financial Statements June 30, 2024 and 2023

(Dollars in thousands)

	2024	2023
General Revenue Bonds (Variable Rates): 1999 Series B, 0.61% to 4.42%, issued January 29, 1999, due 2023 to 2028	\$ 27,900	\$ 32,800
Total	27,900	32,800
General Revenue Refunding Bonds (Fixed Rates): 2012 Series G, 1.38%, issued November 15, 2012, (Direct Borrowing)		2,265
Total		2,265
General Revenue Refunding Bonds (Variable Rates): 2008 Series A, 0.64% to 4.29%, issued May 29, 2008, due 2024 to 2037 2008 Series C, 0.68% to 4.30%, issued May 29, 2008, due 2024 to 2026 2008 Series E, 0.65% to 4.38%, issued May 29, 2008, due 2024 to 2037 2012 Series E, 1.18% to 4.88%, issued November 15, 2012, due 2024 to 2031 (Direct Borrowing) 2014 Series A, 1.09% to 4.79%, issued May 20, 2014, due 2024 to 2025 (Direct Borrowing)	97,165 28,035 62,070 47,357 25,050	108,860 34,350 65,395 50,060 44,365
2018 Series A, 1.19% to 4.62%, issued March 26, 2018, due 2024 to 2031 (Direct Borrowing) 2018 Series D, 1.05% to 4.75%, issued May 31, 2018, due 2025 to 2029 (Direct Borrowing)	44,827 50,000	47,530 50,000
Total	354,504	400,560
Revolving Loan: 2015 Series C, issued November 1, 2015, due 2045 Total	4,166,010	55,000 4,376,896
Less: Unamortized Bond Premiums and Discounts Current Portion of Long-Term Debt Borrowings Associated with Derivative Instruments	262,247 (284,890)	244,963 (297,454) 22,194
Total	(22,643)	(30,297)
Long-Term Debt, Net	\$ 4,143,367	\$ 4,346,599

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Long-term obligations at June 30, 2024 and 2023 consisted of the following:

		2024					2024		Due
]	Beginning					Ending		Within
		Balance	A	dditions	Re	eductions	Balance		ne Year
General Revenue Bonds	\$	692,270	\$	166,260	\$	83,350	\$ 775,180	\$	29,435
General Revenue Refunding Bonds		2,629,440		279,275		483,915	2,424,800		167,170
Refunding from Direct Borrowings		194,220		-		26,986	167,234		19,330
General Revenue Bonds with the									
Massachusetts Clean Water Trust									
- Direct Borrowings		805,966		108,850		116,020	798,796		68,955
Borrowings Associated with									
Derivative Instruments		22,194		-		22,194	-		-
Revolving Loan		55,000		45,000		100,000	 		
Total	\$	4,399,090	\$	599,385	\$	832,465	\$ 4,166,010	\$	284,890
		2023					2023		Due
]	Beginning					Ending		Within
		Balance	A	dditions	Re	eductions	Balance	C	ne Year
General Revenue Bonds	\$	620,830	\$	133,975	\$	62,535	\$ 692,270	\$	13,140
General Revenue Refunding Bonds		2,832,835		100,340		303,735	2,629,440		186,035
Refunding from Direct Borrowings		218,935		-		24,715	194,220		24,721
General Revenue Bonds with the									
Massachusetts Clean Water Trust									
- Direct Borrowings		822,049		57,854		73,937	805,966		73,558
Borrowings Associated with									
Derivative Instruments		25,134		-		2,940	22,194		-
Revolving Loan		53 000		72 000		00.000	55,000		
8		73,000		72,000		90,000	 33,000		

The Authority is required to establish water and sewer rates and charges at a level sufficient to provide, among other things, primary and subordinated debt service coverage ratios of 120% and 110%, respectively. For the year ended June 30, 2024, the Authority had primary and subordinated debt service coverage ratios of 198% and 130%, respectively.

Under the Authority's General Revenue Bond Resolution, all revenues, together with the investment earnings thereon, except to the extent that such earnings are required to be deposited in the Rebate Fund pursuant to a Supplemental Resolution, are pledged for payment of the Bonds.

The Act of 1984 imposes a limitation of \$600,000 on the total amount of bonds and notes which may be outstanding at any one time. The Authority has requested increases in its debt limit as necessary to allow for issuances of bonds in amounts required to finance the capital program. The state legislature increased the debt limit to \$6,450,000.

On June 26, 2024, the Authority issued General Revenue Bonds, 2024 Series B for \$166,260 and General Revenue Refunding Bonds, 2024 Series C for \$279,275.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

The proceeds from the Series B bonds were used to permanently finance outstanding tax-exempt commercial paper of \$80,000 and 2015C revolving loan of \$100,000. The interest rate on these bonds are 5%.

The proceeds from the Series C bonds, as well as other available funds, were used to tender \$240 of General Revenue Bonds 2016 Series B, \$1,330 of General Revenue Bonds 2018 Series B, \$9,050 of General Revenue Bonds 2020 Series B and \$450 of General Revenue Refunding Bonds 2016 Series D and refund \$31,795 of General Revenue Bonds 2017 Series B, \$27,795 of General Revenue Bonds 2018 Series B, \$21,145 of General Revenue Refunding Bonds 2016 Series C, \$100,175 of General Revenue Refunding Bonds 2019 Series F and \$167,025 of General Revenue Refunding Bonds 2021 Series C.

The interest rate of these bonds are 5%. The cash flow required to make principal and interest payments on the funding bonds is approximately \$39,938 less than the debt service requirements of the refunded bonds. The economic gain (the difference between the present values of the debt service payments on the old and new debt) obtained from this refunding is \$26,576.

On April 27, 2023, the Authority issued General Revenue Bonds, 2023 Series B for \$133,975 and General Revenue Refunding Bonds, 2023 Series C for \$100,340.

The proceeds from the Series B bonds were used to permanently finance outstanding tax-exempt commercial paper of \$50,000 and 2015C revolving loan of \$90,000. The interest rate on these bonds are 5% and 5.25%.

The proceeds from the Series C bonds were used to refund \$710 of General Revenue Bonds 2016 Series B, \$2,260 of General Revenue Bonds 2017 Series B, \$5,815 of General Revenue Bonds 2018 Series B, \$370 of General Revenue Bonds 2019 Series B, \$8,105 of General Revenue Refunding Bonds 2016 Series C, \$13,905 of General Revenue Refunding Bonds 2017 Series C and \$88,920 of General Revenue Refunding Bonds 2019 Series F.

The interest rate of these bonds are 5%. The cash flow required to make principal and interest payments on the funding bonds is approximately \$19,914 less than the debt service requirements of the refunded bonds. The economic gain (the difference between the present values of the debt service payments on the old and new debt) obtained from this refunding is \$11,964.

On November 1, 2015, the Authority entered into a revolving credit agreement with a bank. The Authority shall repay the loan at the Commitment Termination Date, December 29, 2023. The revolving loan automatically converts into a term loan if the Authority does not extend or refund the agreement by this date. Interest is payable at the Securities Industry and Financial Markets Association (SIFMA) index rate, beginning January 19, 2021 and, prior to this date, at 80% of the 1 month LIBOR rate. These rates were 4.18% and 0.98% at June 30, 2023 and 2022, respectively. Initial drawdown was \$100,000, which was reduced to \$79,000 at June 30, 2016. The balance was further reduced in fiscal year 2018 to \$53,000 using the proceeds from the General Revenue Bonds, 2018 Series B. During fiscal year 2022, the balance was increased to \$73,000. During fiscal year 2023, the balance was increased to \$90,000 before the total balance was paid off in April 2023. In May 2023 an additional \$55,000 was issued.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

In fiscal year 2024 an additional \$45,000 was borrowed, bringing the total to \$100,000; which was subsequently paid off in June 2024 with proceeds from the General Revenue Bonds, 2024 Series B.

Synthetic Fixed Rate Swap Transactions

In connection with several of its bond issues, the Authority has entered into various interest rate swap agreements to reduce the impact of changes in interest rates on its variable rate debt. Under these agreements, the Authority paid a fixed interest rate (ranging from 4.0% to 6.9%) and receives interest from the swap counterparties at a variable rate (either SIFMA rate or a percentage of LIBOR). The SIFMA rate is based on the seven-day high-grade market index of tax-exempt variable rate demand obligations.

		Effective	Current Notional	Termination	Fixed Payable Swap	Variable Receivable		Value ine 30,
Item	Objective	Date	Amount	Date	Rate	Swap Rate	2024	2023
A	Hedge changes in cash flows on the 2008 Series A Bonds	April 4, 2011	\$ -	November 17,2023	6.585%	67% LIBOR Plus 0.13%	\$ -	\$ 376
В	Hedge changes in cash flows on the 2008 Series E Bonds	October 28, 2008	-	November 17,2023	6.935	SIFMA	-	(1,567)
С	Hedge changes in cash flows on the 2008 Series A and 2008 Series E Bonds	August 1, 2030	-	November 17,2023	6.585	67% LIBOR Plus 0.13%	-	(2,002)
D	Hedge changes in cash flows on the 2008 Series C Bonds	May 29, 2008	-	November 20,2023	3.994	SIFMA	-	(102)
E	Hedge changes in cash flows on the 2008 Series C and 2012 Series G Bonds	May 29, 2008	-	November 20,2023	4.033	SIFMA		475
	Total						\$ -	\$ (2,820)

All of the above are pay-fixed interest rate swap agreements. Under these interest rate swap agreements, the Authority incurred net interest expense of \$1,312 and \$5,982 in fiscal year 2024 and fiscal year 2023, respectively. In November 2023 the Authority paid \$28,088 to terminate the swaps.

For the swap effective on April 4, 2011, with a current notional amount of \$65,050, the fixed rate paid by the Authority is as follows: 4.120% from execution until August 2013, 5.144% from August 2013 until August 2019, and 6.585% from August 2019 until terminated on November 17, 2023.

For the swap execution on October 28, 2008, with a current notional amount of \$65,050, the fixed rate paid by the Authority is as follows: 4.470% from execution until August 2013, 5.494% from August 2013 until August 2019, and 6.935% from August 2019 until terminated on November 17, 2023.

The aggregate fair value balance of the derivative instruments at June 30, 2023 was \$(2,820), and is reflected on the Authority's statements of net position as a liability for derivative instruments. This liability was offset by deferred outflows from derivative instruments. The original notional amounts of the interest rate swaps totaled \$535,895. All swaps were terminated in November 2023.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Demand Bonds

Included in variable rate long-term debt of \$382,404 is \$215,170 of subordinated variable rate demand obligations (VRDOs). The bonds were issued on various dates from 1999 through 2008. Subordinated VRDOs are subject to purchase on the demand of the holder at a price equal to principal plus accrued interest. The ability of the Authority to purchase such bonds, if not remarketed, is secured through letters of credit and standby bond purchase agreements with various nationally recognized financial institutions that expire between November 2025 and November 2026. The VRDOs are classified as long-term debt because the liquidity agreement for each series contains term out provisions that, if demand is made to repurchase the bonds, calls for a two to three year amortization to repay the bonds.

In 2014, \$114,755 of 2014 Series A and B General Revenue Refunding Bonds were issued as direct-purchase bonds, to be held by the purchaser for a specific period of time and are not subject to purchase or remarketing at the demand of the holder and therefore do not require a letter of credit or standby bond purchase agreement. The \$25,050 of Series A has been purchased through August 2025. In addition, the 2012 Series E General Revenue Refunding Bonds, totaling \$47,357, has a three year term out provision beginning at the expiration date and the 2018 Series A & D General Revenue Refunding Bonds, totaling \$94,827, have three year term out provisions beginning at the expiration dates.

Defeased Debt
At June 30, 2024, the following bonds outstanding are considered defeased in-substance:

Description	Redemption date	Redemption price	Outstanding Principal amount		
2014 Series D	2024	100	\$ 61,175		
2014 Series F	2024	100	110,505		
2016 Series B	2025 - 2026	100	51,730		
2016 Series C	2024 - 2026	100	378,600		
2016 Series D	2024 - 2026	100	61,185		
2017 Series B	2025 - 2027	100	41,095		
2017 Series C	2025 - 2027	100	23,280		
2018 Series B	2024 - 2025 and 2028	100	49,065		
2018 Series C	2024 and 2026	100	8,800		
2019 Series B	2023 - 2027 and 2029	100	5,370		
2019 Series F	2026 - 2029	100	189,095		
2020 Series B	2024 and 2026	100	14,625		
2021 Series C	2027 - 2044	100	167,025		

The proceeds and available funds were deposited in irrevocable trusts with escrow agents in an amount which will provide for payment of interest due to the redemption date and redemption of the defeased bonds outstanding on such date. The defeased portion of such debt, accrued interest thereon, and related unamortized issuance and discount costs were removed from the statements of net position in an in-substance defeasance transaction.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

In February 2024, the Authority used funds on hand to defease \$11,350 of the 2016 Series C General Revenue Refunding Bonds.

In June 2023, the Authority used funds on hand to defease \$1,525 of the 2016 Series B, \$4,695 of the 2017 Series B, \$7,425 of the 2018 Series B and \$1,000 of the 2019 Series B General Revenue Bonds outstanding and \$4,350 of the 2016 Series C, \$5,220 of the 2016 Series D and \$4,570 of the 2017 Series C General Revenue Refunding Bonds outstanding.

In October 2022, the Authority used funds on hand to defease \$1,665 of the 2016 Series B, \$1,500 of the 2019 Series B and \$1,750 of the 2020 Series B General Revenue Bonds, \$13,020 of the 2014 Series F, \$4,815 of the 2016 Series C and \$4,400 of the 2018 Series C General Revenue Refunding Bonds outstanding.

At June 30, 2024, outstanding bonds that are redeemable before their scheduled due dates are as follows:

Description	Redemption date	Redemption price	Outstanding Principal amount
2016 Series B	August 2026	100	\$ 4,570
2016 Series C	August 2026	100	256,075
2016 Series D	August 2026	100	43,525
2017 Series B	August 2027	100	21,720
2017 Series C	August 2027	100	100,890
2018 Series B	August 2025	100	10,130
2018 Series B	August 2028	100	43,875
2019 Series B	August 2029	100	69,895
2019 Series E	August 2029	100	10,985
2019 Series E	August 2039	100	12,640
2019 Series E	August 2044	100	14,770
2019 Series F	August 2029	100	55,260
2019 Series F	August 2039	100	63,290
2020 Series B	August 2030	100	118,325
2021 Series B	August 2031	100	21,500
2021 Series C	August 2041	100	231,215
2021 Series C	August 2044	100	10,605
2023 Series B	August 2033	100	76,340
2024 Series B	August 2034	100	59,120
2024 Series B	August 2034	100	42,305
2024 Series C	August 2034	100	155,020

The variable rate General Revenue Bonds are subject to redemption prior to maturity at the option of the Authority in whole or in part, on any interest payment date for bond Series 1999B and on any business day for bond Series 2008A, 2008C, 2008E, 2012G, 2014A, 2018A and 2018D, respectively. Series 2012E is subject to redemption prior to maturity on any interest payment date after November 15, 2014.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

During fiscal 2024, the Authority executed interim loan agreements with Massachusetts Clean Water Trust providing for 2024 Series A Sewer and Water loans in the principal amounts of \$36,915 and \$30,000, respectively. All proceeds for these loans were received by June 30, 2024.

During fiscal 2024, the Authority executed loan agreements with Massachusetts Clean Water Trust providing for 2023 Series D Sewer and Water loans in the principal amounts of \$29,658 and \$8,885, respectively, replacing interim loans executed in fiscal year 2023. All proceeds for these loans were received by June 30, 2024.

During fiscal 2023, the Authority executed interim loan agreements with Massachusetts Clean Water Trust providing for 2023 Series A Sewer and Water loans in the principal amounts of \$29,197 and \$9,872, respectively. All proceeds for these loans were received by June 30, 2023.

During fiscal 2023, the Authority also executed loan agreements with Massachusetts Clean Water Trust providing for 2022 Series A Sewer and Water loans in the principal amounts of \$8,986 and \$9,799, respectively. All proceeds for these loans were received by June 30, 2023, except \$1,988, principal for 2022 Series A Water.

Federal and Commonwealth subsidies for purposes of offsetting principal payments aggregating \$11,068 will be recognized as capital grants in aid of construction over the term of the loans.

Interest is payable semiannually on all debt, except on the commercial paper, on which interest is payable upon maturity and the General Revenue Bonds and General Revenue Refunding Bonds with variable interest rates on which interest is payable monthly. The Senior General Revenue Bonds and the Senior General Revenue Refunding Bonds are collateralized equally and ratably by a lien and pledge on substantially all of the Authority's cash and revenues, except the operating fund.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

The subordinated debt series, including the commercial paper interest are collateralized equally and ratably by a subordinated pledge on substantially all of the Authority's revenues and cash and investments, except the operating, senior debt service, and debt service reserve funds. Premiums, discounts, issuance costs, and the excess of reacquisition price over the carrying amount of the defeased debt are being amortized over the lives of the respective issues.

The amounts of long-term debt, principal, and interest payable in future fiscal years are as follows:

Year Ending June 30:	Principal	Interest	Total
2025	\$ 284,890	\$ 148,135	\$ 433,025
2026	293,043	145,165	438,208
2027	287,167	134,384	421,551
2028	288,659	122,989	411,648
2029	287,504	112,002	399,506
2030–2034	1,180,224	411,902	1,592,126
2035–2039	902,851	211,547	1,114,398
2040–2044	459,644	62,208	521,852
2045–2049	172,723	13,230	185,953
2050-2054	9,305	233	9,538
Total	\$ 4,166,010	\$ 1,361,795	\$ 5,527,805

Commercial paper activity during fiscal years 2024 and 2023 consisted of the following:

	2024 Beginning			2024 Ending
3.55% Commercial Paper	<u>balance</u>	**************************************	Reductions	balance \$ 80,000
•	<u> </u>		<u> </u>	
Total	\$ -	\$ 80,000	\$ -	\$ 80,000
	2023 Beginning			2023 Ending
	0 0			
	balance	Additions	Reductions	balance
1.28% Commercial Paper	\$ -	Additions \$ 50,000	Reductions \$ 50,000	\$ -

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(7) Intergovernmental Loans

The Authority has entered into various interest-free loan agreements with certain member communities. Under these agreements, the Authority loaned these communities \$86,592 and \$54,560 in fiscal years 2024 and 2023, respectively, to be received in five or ten equal annual installments.

The long-term portion of these loans at June 30, 2024 and 2023 is \$216,791 and \$192,994, respectively, and is included in other assets. The loans due within one year total \$41,323 and \$38,157 at June 30, 2024 and 2023, respectively. This program is designed to assist member communities with sewer and water systems rehabilitation.

(8) Capital Assets

Capital assets at June 30, 2024 and 2023 consisted of the following:

	2023	Additions	Disposals/ transfers	2024
Capital assets not being depreciated:	2025	Additions	transiers	2024
Land	\$ 30,060	\$ 154	\$ -	\$ 30,214
Construction in progress	298,535	157,975	(176,684)	279,826
Total capital assets	290,333	137,973	(170,004)	279,820
not being depreciated	229 505	150 120	(176 694)	210.040
not being depreciated	328,595	158,129	(176,684)	310,040
Capital assets being depreciated:				
Plant and equipment – water				
and sewage system	10,125,898	172,130	_	10,298,028
Lease asset - building	25,039	-	_	25,039
Furniture and fixtures	17,561	4,400	_	21,961
Leasehold improvements	2,423	-	_	2,423
Motor vehicles and equipment	13,013	_	_	13,013
Total capital assets				
being depreciated	10,183,934	176,530		10,360,464
Less: accumulated depreciation for:				
plant and equipment – water and				
sewage system	4,953,169	204,358	-	5,157,527
Lease asset - building	6,304	2,101	-	8,405
Furniture and fixtures	17,537	247	-	17,784
Leasehold improvements	2,204	12	-	2,216
Motor vehicles and equipment	7,413	839		8,252
Total accumulated depreciation	4,986,627	207,557		5,194,184
Total capital assets being				
depreciated, net	5,197,307	(31,027)		5,166,280
Total capital assets, net	\$ 5,525,902	\$ 127,102	\$ (176,684)	\$ 5,476,320

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Capital assets at June 30, 2023 and 2022 consisted of the following:

	2022	Additions	Disposals/ transfers	2023
Capital assets not being depreciated:		Huntions	transiers	2020
Land	\$ 30,058	\$ 2	\$ -	\$ 30,060
Construction in progress	172,476	152,097	(26,038)	298,535
Total capital assets				
not being depreciated	202,534	152,099	(26,038)	328,595
Capital assets being depreciated:				
Plant and equipment – water				
and sewage system	10,098,133	27,765	-	10,125,898
Lease asset - building	37,134	-	(12,095)	25,039
Furniture and fixtures	17,561	-	-	17,561
Leasehold improvements	2,423	-	-	2,423
Motor vehicles and equipment	12,560	453	-	13,013
Total capital assets				
being depreciated	10,167,811	28,218	(12,095)	10,183,934
Less: accumulated depreciation for:				
plant and equipment – water and				
sewage system	4,750,217	202,952	-	4,953,169
Lease asset - building	24,757	2,101	(20,554)	6,304
Furniture and fixtures	17,531	6	-	17,537
Leasehold improvements	2,192	12	-	2,204
Motor vehicles and equipment	6,566	847	-	7,413
Total accumulated depreciation	4,801,263	205,918	(20,554)	4,986,627
Total capital assets being				
depreciated, net	5,366,548	(177,700)	8,459	5,197,307
Total capital assets, net	\$ 5,569,082	\$ (25,601)	\$ (17,579)	\$ 5,525,902

Depreciation and amortization for fiscal years 2024 and 2023 was \$236,818 and \$230,810, respectively.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(9) Lease Liability

The Authority has entered into a 30-year building lease related to the Chelsea maintenance facility. Annual installments range between \$1,538 and \$2,837, plus interest at 7.83%; due dates range from July 2022 through May 2032.

Maturity analysis of future principal and interest payments at June 30, 2023 are as follows:

Fiscal Year Ending June	Interest		Principal		Total	
2025	\$	1,419	\$	1,798	\$	3,217
2026		1,273		1,944		3,217
2027		1,115		2,102		3,217
2028		945		2,272		3,217
2029		760		2,457		3,217
2030-2032		1,019		8,363		9,382
	\$	6,531	\$	18,936	\$	25,467

(10) Retirement Benefits

(a) Plan Description

The Enabling Act provided for the establishment of the Massachusetts Water Resources Authority Employees' Retirement System (the Plan), a contributory single-employer retirement system that is separate from the State Employees Retirement System. The Plan is a defined benefit pension plan covering those employees not employed by the MDC prior to July 1, 1985. Complete financial statements for the Plan can be obtained from the Authority's administrative offices at 2 Griffin Way, Chelsea, MA 02150.

(b) Benefits Provided

The Plan provides retirement, disability and death benefits. For employees hired prior to April 2, 2012, the annual amount of the retirement allowance is based on the member's final three-year average salary multiplied by (1) the number of years and full months of creditable service at the time of retirement and (2) a percentage based on age at retirement in accordance with a schedule provided by state law. Assuming normal retirement at age 65, this percentage is 2.5%, which is reduced for individuals who retire prior to age 65 to reflect the longer pay out period.

For employees hired on or after April 2, 2012, the annual amount of the retirement allowance is based on the member's final five-year average salary multiplied by (1) the number of years and full months of creditable service at the time of retirement and (2) a percentage based on age at retirement in accordance with a schedule provided by state law. Assuming normal retirement at age 67, this percentage is 2.5%.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Employees hired prior to April 2, 2012, may elect early retirement after 20 years of service or at any time after attaining age 55 with 10 years of eligible service. Plan members who become permanently and totally disabled may be eligible to receive a disability retirement allowance. The amount of benefits to be received depends on several factors, including the member's age, compensation, veteran status, years of service and whether or not the disability is work-related. In addition, certain death benefits exist for beneficiaries of employees who die in active service.

All MDC personnel who became employees of the Authority on July 1, 1985, and were members of the State Employees Retirement System, retained their membership in that system. The Authority is not liable for retirement allowances paid to or on account of these employees. Funding of the pension liability of the State Employees Retirement System is the obligation of the Commonwealth. Employees covered by this plan become 100% vested after 10 years of service.

(c) Employees Covered by Benefit Terms

At December 31, 2023 and 2022 (the date of the Plan's latest actuarial valuation), the following employees were covered by the benefit terms:

	2023	2022
Retired Participants and Beneficiaries Receiving Benefits	834	797
Inactive Participants Entitled to a Return of their Employee Contributions	116	113
Inactive Participants with a Vested Right to a Deferred or Immediate Benefit	42	38
Active Participants	1,063	1,045
Total	2,055	1,993

(d) Contributions

Contributions made by employees are based upon a percentage of employee base pay (5% for employees hired before December 31, 1974, 7% for employees hired between January 1, 1975 and December 31, 1983, 8% for employees hired between December 31, 1983, and June 30, 1996, and 9% for employees hired after July 1, 1996). Additionally, certain employees earning in excess of \$30 contribute an extra 2% of their salary effective January 1, 1979. Employees receive full payment of contributions upon withdrawal from the Plan and 50% of interest earned for employees with five to nine years of service or 100% of interest earned for employees with 10 or more years of service.

The Authority's 2023 and 2022 contributions to the plan were based on an amount approved by the Retirement Board and the Authority's board of directors, which is based on an actuarially determined amount. The Authority's Enabling Act requires funding to be made in accordance with the Retirement Board's recommendation. In fiscal year 2024 the Authority made a \$15.97 million required contribution. In fiscal year 2023 the Authority made a \$12.6 million required contribution.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Net Pension Liability (Pension Trust Reporting) Investment Policy:

Deposits and investments made by the Pension Trust are governed by Chapter 32 of the MGL. The Pension Trust has the ability to invest in equity securities, corporate bonds, annuities and other specified investments in accordance with state laws and regulations.

The Retirement Board has the authority for establishing and amending investment policy decisions. Based on the investment objectives and constraints of the Pension Trust, and based on an annual review of the asset allocation and asset classes, the Retirement Board will specify a long-term target allocation for each class of permissible assets. These targets will be expressed as a percentage of the total portfolio, and will have ranges surrounding them, allowing for the portfolio to maintain policy through market fluctuations.

The long-term target allocations are intended as strategic goals. Thus, it is permissible for the overall Pension Trust's asset allocation to deviate from the long-term target, as would likely occur during manager transitions, asset class restructurings, and other temporary changes in the Pension Trust. Surplus cash flows are utilized to maintain the asset management structure. Should these cash flows not be sufficient to reallocate the plan according to policy, the transfer of assets may occur between managers. At least annually, the Retirement Board reevaluates the portfolio weightings by asset class and adjustments are made accordingly. The following identifies the asset allocation policy as of December 31, 2023 and 2022:

	December 31, 2023	December 31, 2022
Asset Class	Target Allocation	Target Allocation
Domestic Equity	34%	31%
International Equity	16	19
Real Estate	10	12
Private Equity	15	12
Hedge Funds	5	6
Fixed Income	20	20
Total	100%	100%

Rates of Return:

For the years ended December 31, 2023 and 2022, the annual money-weighted rate of return on investments, net of investment expense, was 9.1% and (12.30%), respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

The components of the net pension liability of the Pension Trust at December 31, 2023 and 2022, were as follows

	 2023	2022
Total Pension Liability	\$ 812,867	\$ 782,214
Plan Fiduciary Net Position	 674,932	 629,240
Net Pension Liability	\$ 137,935	\$ 152,974
Plan's Fiduciary Net Position as Percentage of the Total Pension Liability	83.03%	80.44%

Actuarial assumptions: The total pension liability was determined by actuarial valuations as of January 1, 2024 and January 1, 2023, and update procedures were used to roll back the total pension liability to the December 31, 2023 and 2022 measurement dates. The following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified

Inflation 3% Salary Increases Based on years of service, starting at 5.75% at 0 years of service decreasing to 4% after 9 years of service Discount Rate 6.90% at December 31, 2023 and 2022, respectively	
4% after 9 years of service	
Discount Rate 6.90% at December 31, 2023 and 2022, respectively	3
Cost of Living Adjustments There was a one-time increase in July 2022 from 3% to 5% of the current bas \$17,000. Prior, adjusted to 3% of the first \$15,000 at December 31, 2022 as permitted under Massachusetts Chapter 188 of the Acts of 2010	e of
Mortality Rates (2024):	
Pre-Retirement: Pub-2010 General Employee, Healthy Retiree and Contingent Survivor Amore weighted Mortality Tables projected generationally using Scale MP-2021	ınt -
Healthy Retiree: Pub-2010 General Employee, Healthy Retiree and Contingent Survivor Amor Weighted Mortality Tables projected generationally using Scale MP-2021	ınt -
Disabled Retiree: Pub-2010 General Disabled Retiree Amount - weighted Mortality Tables set forward one year projected generationally using Scale MP-2021	
Mortality Rates (2023):	
Pre-Retirement: Pub-2010 General Employee, Healthy Retiree and Contingent Survivor Amore weighted Mortality Tables projected generationally using Scale MP-2021	ınt -
Healthy Retiree: Pub-2010 General Employee, Healthy Retiree and Contingent Survivor Amo Weighted Mortality Tables projected generationally using Scale MP-2021	.int -

Disabled Retiree: Pub-2010 General Disabled Retiree Amount - weighted Mortality Tables set forward one year projected generationally using Scale MP-2021

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Rates of return on investments: The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plan's target asset allocation are summarized as follows:

	Long-Term Expected Rate of Return (%				
Asset Class	December 31, 2023	December 31, 2022			
Domestic Equity	6.29	6.59			
International Equity	6.39 - 7.63	6.87 - 8.30			
Real Estate	3.24	3.44			
Private Equity	5.91 - 9.43	9.49			
Hedge Funds	2.87	3.06			
Fixed Income	0.95 - 3.43	1.53 - 3.54			

(e) Discount Rate

The discount rate used to measure the total pension liability was 6.90% for December 31, 2023 and 2022. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and that the Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(f) Changes in the Net Pension Liability (Employer Reporting)

The Plan's net pension liability was measured as of December 31, 2023 and 2022 for the reporting dates June 30, 2024 and 2023, respectively. The total pension liability was determined by actuarial valuations as of January 1, 2024 and January 1, 2023, respectively, rolled back to the measurement dates.

	Increase (Decrease)					
	Total Pension Liability		Plan Fiduciary Net Position		Net Pension Liability	
		(a)		(b)	((a) - (b)
Balances at June 30, 2022	\$	748,702	\$	728,673	\$	20,029
Changes for the Year:						
Service Cost		13,949		-		13,949
Interest		51,475		-		51,475
Change of benefit terms		2,649		-		2,649
Differences Between Expected						
and actual experience		(1,280)		-		(1,280)
Contributions - employer		-		12,555		(12,555)
Contributions - employee		-		10,551		(10,551)
Net investment income		-		(88,673)		88,673
Benefit payments		(33,281)		(33,281)		-
Administrative expenses				(585)		585
Net changes		33,512		(99,433)		132,945
Balances at June 30, 2023		782,214		629,240		152,974
Changes for the year:						
Service cost		14,275		-		14,275
Interest		53,669		-		53,669
Differences between expected						
and actual experience		78		-		78
Contributions - employer		-		15,973		(15,973)
Contributions - employee		-		10,576		(10,576)
Net investment loss		-		57,017		(57,017)
Benefit payments		(37,369)		(37,369)		-
Administrative expenses				(505)		505
Net changes		30,653		45,692	-	(15,039)
Balances at June 30, 2024	\$	812,867	\$	674,932	\$	137,935

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(g) Sensitivity of the Net Pension Liability (Asset) to Changes in the Discount Rate

The following presents the net pension liability (asset), calculated using the discount rate of 6.90%, as well as what the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (5.90%) or 1-percentage-point higher (7.90%) than the current rate:

		Decrease 5.90%)	Discount (6.90%)	Increase 7.90%)
Net pension liability as of June 30, 2024	\$	232,390	\$ 137,935	\$ 57,858
	-,,	Decrease 5.90%)	Discount 6.90%)	Increase 7.90%)
Net pension liability as of June 30, 2023	\$	245,098	\$ 152,974	\$ 74,869

(h) Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the years ended June 30, 2024 and 2023, the Authority recognized pension expense of \$25,010 and \$33,781, respectively, and reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	June 30, 2024			June 30, 2023				
		ed Outflows		ed Inflows		ed Outflows		ed Inflow s
	of F	Resources	of R	esources	of I	Resources	of R	esources
Differences between expected and								
actual experience	\$	651	\$	-	\$	1,718	\$	4,061
Changes of assumptions		7,222		-		16,945		-
Net difference between projected and actual								
earnings on pension plan investments		47,316		2,775		61,887		
Total	\$	55,189	\$	2,775	\$	80,550	\$	4,061

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending June 30:	A	mount
2025	\$	15,502
2026		15,016
2027		24,678
2028		(2,782)
Total	\$	52,414

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(11) Other Postemployment Benefits (OPEB)

(a) Plan Description

In addition to providing the pension benefits described, the Authority provides postemployment health care and life insurance benefits for retired employees through the Group Insurance Commission (GIC). The GIC is a quasi-independent state agency that administers an agent multi-employer defined benefit OPEB plan. The benefits, benefit levels, employee contributions and employer contributions are governed by the Authority and can be amended by the Authority. The plan issues a separate financial report that can be obtained by contacting the Massachusetts Water Resources Authority, Finance Division, 33 Tafts Avenue, Boston, MA 02128.

In April 2015, the Authority established the MWRA OPEB Irrevocable Trust. The Trust was established for the sole purpose of providing for the advance funding of future costs of retired employee health insurance and other benefits provided to retirees. An initial deposit of \$10.8 million was made to the trust upon establishment of the trust. The balance of the trust was \$82.1 million and \$72.4 million at June 30, 2024 and June 30, 2023, respectively.

(b) Plan Membership

At June 30, 2024 and 2023, plan membership consisted of the following:

	2,024	2023
Inactive plan members or beneficiaries currently receiving benefits	771	1,072
Inactive plan members entitled to but not yet receiving benefits	38	37
Active plan members	1,025	875
Total	1,834	1,984

(c) Benefits Provided

The Authority provides medical, prescription drug, mental health/substance abuse and life insurance to retirees and their covered dependents. All active employees who retire from the Authority and meet the eligibility criteria will receive these benefits.

(d) Contributions

Retirees who retired on or before July 1, 1994 contribute 10% of the cost of the health plans, as determined by the GIC. Those who retired after July 1, 1994 contribute 15% of the cost of the health plan and those who retired after October 1, 2009 contribute 20% of the cost of the health plan, as determined by the GIC. The Authority contributes the remainder of the health plan costs on a pay-as-you-go basis.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(e) Investments

Investment policy. The assets are invested by the Trust with the Commonwealth of Massachusetts Pension Reserves Investment Trust (PRIT) fund. The Trust's Board of Trustees may vote to approve a different investment vehicle, at its discretion. The following was the PRIT fund's asset allocation at June 30, 2024 and 2023:

	June 30, 2024	June 30, 2023
Asset Class	Target Allocation	Target Allocation
Domestic Equity	22%	20%
International Equity	14	17
Fixed Income	24	23
Private Equity	16	16
Real Estate	10	10
Other	14	14
Total	100 %	100 %

Concentrations. No investment in any one organization represented 5% or more of the Trust's investments.

Rate of return. For the year ended June 30, 2024 and 2023, the annual money-weighted rate of return on investments, net of investment expense was 9.51% and 5.78%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

(f) Net OPEB Liability (Trust Reporting)

The components of the net OPEB liability at June 30, 2024 and 2023, were as follows:

	 2024	2023
Total OPEB Liability	\$ 176,604	\$ 117,758
Plan Fiduciary Net Position	 82,114	 72,378
Net OPEB Liability	\$ 94,490	\$ 45,380
Plan's Fiduciary Net Position as Percentage of the Total OPEB Liability	46.50%	61.46%

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Actuarial assumptions. The total OPEB liability was determined by actuarial valuations as of January 1, 2024 and December 31, 2021 and update procedures were used to roll forward the total OPEB liability to June 30, 2024 and 2023 measurement dates, respectively. The following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation 3.0%

Salary increases 5.75%, decreasing over 9 years to an ultimate level of 4.0%

Discount rate and investment rate of

return 6.75%, net of OPEB plan investment expense, including inflation

Healthcare cost trend rates (2024)

Non-Medicare Medical and Prescription Drug: 5.99% for 2023, then 7.06% for

2024, decreasing to an long-term rate of 4.50% after ten years

Medicare Medical and Prescription Drug: 1.92% in 2023 then 4.49% for 2024,

decreasing to an long-term rate of 4.50% after four years

Healthcare cost trend rates (2023) Non-Medicare Medical and Prescription Drug: 5.99% for 2022, then 7.06%, then

6.83%, then 6.59%, then 6.36%, then 6% decreasing by 0.25% for 6 years to an

ultimate rate of 4.50%

Medicare Medical and Prescription Drug: 1.92%, then 4.49%, then 4.57%, then

4.66%, then 4.75%, then an ultimate rate of 4.50%

Mortality Rates (2024): Mortality rates were based on the Pub-2010 Headcount-Weighted Mortality

Tables, sex-distinct, projected using generational mortality and scale MP-2021.

Set forward one year for disabled retirees.

Mortality Rates (2023):

Mortality rates were based on the Pub-2010 General Employee, Healthy Retiree

and Contingent Survivor Headcount- Weighted Mortality Tables projected generationally using Scale MP-2021 for retirees and Pub-2010 General Healthy Retiree Headcount-Weighted Mortality Tables set forward one year projected

generationally using Scale MP-2021 for the disabled.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of June 30, 2024 and 2023 (see discussion of the Trust's investment policy) are summarized in the following table:

	Long-Term Expected Rate of Return (%)				
Asset Class	June 30, 2024	June 30, 2023			
Domestic Equity	4.19%	6.59%			
International Equity	3.9	6.87 - 8.30			
Fixed Income	1.56 - 5.07	1.53 - 3.54			
Private Equity	7.41	9.49			
Real Estate	3.90	3.44			
Other	3.70 - 4.39	3.06 - 4.01			

Discount rate. The discount rate used to measure the total OPEB liability was 6.75% for June 30, 2024 and 2023. The projection of cash flows used to determine the discount rate assumed that Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(g) Changes in the Net OPEB Liability (Employer Reporting)

		Increase (Decrease))
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances at June 30, 2022	\$ 113,757	\$ 63,929	\$ 49,828
Changes for the year:			
Service cost	2,742	-	2,742
Interest	7,688	-	7,688
Contributions - employer	-	10,061	(10,061)
Net investment loss	-	3,694	(3,694)
Benefit payments	(5,306)	(5,306)	-
Changes of assumptions	(1,123)		(1,123)
Net changes	4,001	8,449	(4,448)
Balances at June 30, 2023	117,758	72,378	45,380
Changes for the year:			
Service cost	2,825	-	2,825
Interest	7,876	-	7,876
Contributions - employer	-	10,636	(10,636)
Net investment income	-	6,887	(6,887)
Benefit payments	(7,787)	(7,787)	-
Differences between expected			
and actual experience	17,386	-	17,386
Changes of assumptions	38,546		38,546
Net changes	58,846	9,736	49,110
Balances at June 30, 2024	\$ 176,604	\$ 82,114	\$ 94,490

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability of the Authority, as well as what the Authority's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current discount rate:

	Decrease 5.75%)		ount Rate 6.75%)	Increase 7.75%)
Net OPEB Liability as of	 	_	_	_
June 30, 2024	\$ 107,136	\$	94,490	\$ 67,240
	Decrease 5.75%)		ount Rate 6.75%)	Increase 7.75%)
Net OPEB Liability as of June 30, 2023	\$ 59,703	\$	45,380	\$ 33,373

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability of the Authority, as well as what the Authority's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	Decrease % - 3.5%)	 nse Rate % - 4.5%)	Increase % - 5.5%)
Net OPEB Liability as of June 30, 2024	\$ 64,946	\$ 94,490	\$ 110,401
	Decrease 2% - 3.5%)	 ase Rate 2% - 4.5%)	Increase 2% - 5.5%)
Net OPEB Liability as of June 30, 2023	\$ 30,640	\$ 45,380	\$ 63,435

(h) OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the years ended June 30, 2024 and 2023, the Authority recognized OPEB expense of (\$5,984) and (\$10,832), respectively, and reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	June 3	0, 2024		June 30), 2023	
	ed Outflows Resources		red Inflows Resources	ed Outflows Resources		red Inflows Resources
Differences between expected and actual experience	\$ 15,217	\$	-	\$ 2,168	\$	1,173
Changes of assumptions	30,532		15,510	-		30,219
Net difference between projected and actual earnings on OPEB Trust investments			71_	1,765		
Total	\$ 45,749	\$	15,581	\$ 3,933	\$	31,392

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ending June 30:	A	mount
2025	\$	3,756
2026		6,232
2027		11,161
2028		9,019
Total	\$	30,168

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

(12) Commitments and Contingencies

(a) General

The Authority's capital improvement program continues to proceed. As part of this program, the Authority has entered into a number of contracts for the design and construction of infrastructure and improvements to its facilities. Commitments under these contracts aggregated approximately \$870,102 at June 30, 2024.

The Authority's operating and construction plans are designed to comply with the Federal District Court's schedule of actions. The Authority has incurred capital expenditures of approximately \$9,259,484 from fiscal years 1986 through 2024, including those projects required to comply with the Federal District Court's schedule. The Authority anticipates spending an additional \$1,752,280 on these projects through fiscal year 2028. These capital expenditures have been forecasted based upon certain preliminary assumptions and estimates, which may change significantly as design and construction of the necessary facilities proceed. Funding is expected to come from various federal and state grants, as available and approved, and from the Authority's debt proceeds. To date, federal appropriations for the Boston Harbor Project have aggregated \$810,000.

(b) Boston Harbor Case

The Authority continues to be a defendant in the federal Boston Harbor Case. The federal action was originally brought in 1985 by the United States on behalf of the United States Environmental Protection Agency ("EPA") and by certain citizens' groups for Clean Water Act violations. As part of the Boston Harbor Case, the Authority was required to undertake certain corrective actions to meet wastewater treatment, discharge and combined sewer overflow ("CSO") requirements, including the completion of new and improved primary and secondary treatment facilities at Deer Island. Beyond these major improvements to its wastewater treatment capabilities, the Authority also was required to adopt a Long Term CSO Control Plan ("LTCP") which was comprised of 35 projects, the last three of which were completed on time by the close of calendar year 2015. In March 2016, the federal district court formally received the Authority's 2015 annual CSO project report, officially noting completion of LTCP projects.

In March 2006, the Authority had reached agreement with the United States and the Massachusetts Department of Environmental Protection ("DEP") on the scope and schedule for the remaining CSO projects which was filed with the Court as part of a joint motion to amend the Court Schedule. In April 2006, the Court allowed the joint motion and issued an Order with a schedule. As part of the agreement, DEP agreed to reissue, and EPA agreed to approve, five consecutive Water Quality Standards variances ("variances") of no more than three years duration each, through the year 2020, for the Lower Charles River/Charles River Basin and Alewife Brook/Upper Mystic River (collectively "variance waterbodies") that are consistent with and limited to the requirements in the MWRA's revised LTCP. The United States and MWRA also agreed to withdraw the February 27, 1987 Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflows and replace it with a Second Stipulation that requires MWRA to implement the CSO requirements set forth in the Court Schedule and to meet the levels of control (activations and volume of discharge in the "Typical Year") described in the LTCP. In addition to filing biannual compliance reports, the April 2006 court schedule required the Authority to conduct a post-construction

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

performance assessment to verify whether the levels of CSO control included in the LTCP have been achieved.

The Authority commenced the performance assessment in 2017, with the final performance assessment report originally due in December 2020. At the request of the Authority, with the assent of EPA and DEP, the Court extended the time for the Authority to submit the final report to December 2021.

On December 30, 2021, the Authority filed its Performance Assessment Report and Interim Update ("Final Report") with the Court. The Final Report documents the substantial reduction in CSO discharge volumes over the last several decades. The Authority also reported that there are certain outfalls where CSO discharge estimates indicated higher CSO activity than the LTCP goals. The Authority reported, among other things, that as of the end of 2021 the LTCP goals were met or materially met at 70 of 86 CSO outfalls; and that 16 CSO outfalls (the "16 Outfalls") did not attain their respective LTCP goals. Prior to the filing of the Final Report the Authority had commenced discussions with EPA, DEP and the Conservation Law Foundation ("CLF") to determine whether an agreement could be reached on a framework and path forward in the case. Ultimately, the parties agreed on a three-year extension in the case with certain requirements, which the Court approved and entered as an order. With respect to the 16 Outfalls, during the three-year extension period, additional improvements would be performed at certain outfalls and investigations at other outfalls would continue. During the three-year period, the Authority was required to file annual reports with the Court and meet at certain intervals with EPA, DEP, and CLF to provide updates. The agreement further provided that by December 2024, the Authority would file a Supplemental Report (see below).

The Authority filed its annual reports under the agreement in April 2022, 2023, and 2024. In the third and most recent annual report the Authority reported, among other information, that as of the end of 2023 it continued to surpass the overall CSO discharge volume reduction goal of 404 MG from 1988 levels (estimated to be 3.3 billion gallons) and that the total CSO discharge volume was modeled to be 397 MG (96% of which is treated). The Authority also reported that as of the end of 2023, 73 of 86 outfalls met or materially met their LTCP goals. Finally, of 13 outfalls that did not meet or materially meet the LTCP goals, the Authority reported that: (i) projects forecasted to enable five outfalls to meet or materially meet their LTCP goals were under construction with an expected completion by the end of 2024; (ii) improvements predicted to result in two additional outfalls materially meeting their LTCP goals was expected to be substantially complete by the end of 2025; and (iii) the LTCP goals for the remaining six outfalls would not be met by the final milestone of December 2024.

By December 2024 the Authority will file the Supplemental Report to include: (i) the final Typical Year performance of all 86 outfalls as compared to 1992 system conditions and the LTCP; and (ii) the Authority's final results and conclusions as to the 16 Outfalls, including an alternatives analysis describing what further action could be taken, and the costs associated with those actions, to further reduce or meet LTCP activation and volume goals for any of the 16 Outfalls that have not met their respective LTCP goals. This supplemental report, coupled with the Final Report and the water quality assessment report filed in December 2021, will provide information to EPA, DEP and the Court to make final determinations as to attainment of the levels of control in the LTCP and draw any final conclusions.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

There has been no imposition of penalties by the Court against the Authority on the merits of the claims originally asserted in the Boston Harbor Case to date. The Court always retains the right to order remedial action and to assess penalties.

(c) Massachusetts Natural Fertilizer Company, Inc. et al., Notice of Potential Liability Pursuant to MG.L. c. 21E. § 4A

In July 2023, the Authority received a notice pursuant to Massachusetts General Laws Chapter 21E, Section 4A ("Chapter 21E Notice"). The Chapter 21E Notice alleges that there is reason to believe that the Authority is liable under §§4, 4A, 5, and 15 of Chapter 21E to Massachusetts Natural Fertilizer Co., Inc. ("Mass Natural"), Otter Farm, Inc. and The Newark Group (collectively the "claimants") for their past and future costs and damages incurred for real and personal property damage and response actions to address the release of certain per- and polyfluoroalkyl substances (generally, "PFAS"), in the vicinity of Bean Porridge Hill Road, Westminster, Massachusetts ("Property").

According to the Chapter 21E Notice, DEP determined that there was a release of PFAS in the vicinity of the Property ("Release"). The Chapter 21E Notice asserts that testing of nearby private wells has identified PFAS at levels that exceed the drinking water Maximum Contaminant Level and applicable Imminent Hazard Levels for PFAS. The Chapter 21E Notice alleges that materials originating at MWRA's Deer Island facility and processed into biosolids at MWRA's Fore River Pelletizing Plant by the plant operator¹ were delivered to Mass Natural from May 3, 2018, to February 3, 2022, and that the biosolids were determined to contain PFAS.

In addition to indemnity for future claims, the claimants seek reimbursement from the Authority for forty percent of their past and future response costs and any other liability under Chapter 21E and any and all real and personal property damage associated with the Release of PFAS. The Authority is aware that the claimants have alleged that they have incurred in excess of \$5.5 million in remediation costs and damages. The claimants asserted in the Chapter 21E Notice that they are not in a position to provide a firm estimate of the total anticipated remedial costs, but have indicated that those costs may be in the range of \$30-\$50 million. The Authority responded to the Chapter 21E Notice contesting liability and requesting certain additional information.

A class action complaint was filed in the Massachusetts federal district court in which the plaintiffs seek damages allegedly caused by the release of PFAS in the vicinity of the Property. The action is captioned Thomas Ryan et al. v. The Newark Group, Inc. et al., No. 4:22-cv-40089-MRG ("Ryan Litigation"). The plaintiffs in the Ryan Litigation have asserted claims of, among others, property damage, personal injury and medical monitoring and seek damages arising out of alleged PFAS contamination of drinking water wells and soil. The defendants in the Ryan Litigation include, among others, the claimants in the Chapter 21E Notice.

¹ The New England Fertilizer Company entered into a contract with the Authority for the operation and maintenance of the Fore River Pelletizing Plant in Quincy, Massachusetts.

Notes to Financial Statements
June 30, 2024 and 2023
(Dollars in thousands)

In May 2024, certain defendants in the Ryan Litigation filed a motion for leave to amend their answers to join the Authority, among other entities, in the action as cross-claim defendant, or in the alternative, for leave to file a third-party complaint against the Authority. These defendants sought to assert claims of indemnity and/or contribution and claims pursuant to Chapter 21E against the Authority. The Authority filed an opposition to the motion. The Court denied the motion to join the Authority finding that because this was a suit against the Authority under state law involving water pollution, pursuant to the Authority's Enabling Act such suits could only be brought in the Massachusetts Supreme Judicial Court. In a supplemental memorandum one of the parties whom the moving defendants sought to join in the action stated that it will likely seek to join the Authority, among others, to a pending state action involving claims related to the above referenced Chapter 21E Notice and then seek to transfer the case to the Supreme Judicial Court.

(d) Miscellaneous

The Authority is also a defendant in several legal actions and administrative proceedings arising out of its operation, maintenance, and improvement of the water and sewer systems under its care. It is the opinion of management that any judgments or settlements that may result from these actions will not have a materially adverse effect upon the Authority.

(13) Risk Management

The Authority is exposed to various risks of loss. The risk management program involves insurance and self-insurance related to property, general liability (including automobile, marine and employers' liability), excess liability, public officials' liability, workers' compensation, unemployment liability, and employee health care and life insurance.

Buildings, plants, and equipment are insured on an all risk replacement basis to the extent that losses exceed \$2,500 per occurrence, up to an aggregate limit of \$300,000. The Authority maintains insurance coverage for general liability, automobile liability, marine liability, and employers' liability to the extent that losses exceed \$2,500 per occurrence, up to a limit of \$25,000. In addition to the primary liability insurance, the Authority maintains excess liability policies with additional limits of \$75,000. The Authority is self-insured for workers' compensation claims up to \$1,000 per occurrence and maintains excess workers' compensation insurance coverage with a limit of \$25,000 per occurrence. The Authority also maintains public officials' liability insurance with a limit of \$5,000 per occurrence with a \$1,000 self-insured retention. All insurance policies are renewed on an annual basis. The amount of claim settlements has not exceeded insurance coverage in any of the previous three fiscal years.

Schedules of Employer Contributions – Last Ten Years

Required Supplementary Information – GASB No. 67 and 68

(Unaudited)

(Dollars in Thousands)

Plan, Year Ended December 31,	2023)22	2021		2020		2019	_	2018		2017		2016	2015	 2014
Employer, Year Ended June 30,	2024	20)23	2022		2021		2020		2019		2018		2017	 2016	 2015
Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined Contribution	\$ 14,068 15,973		12,555 12,555	\$ 11,20 11,20		10,000 10,000	\$	7,315 7,315	\$	7,000 7,000	\$	3,277 3,277	\$	3,133 4,633	\$ 8,159 8,159	\$ 7,808 12,630
Contribution Deficiency (Excess)	\$ (1,905)	\$		\$	- \$	-	\$		\$		\$		\$	(1,500)	\$ 	\$ (4,822)
Covered Payroll Contributions as a Percentage of Covered Payroll	109,017 14.65%		04,839 11.98%	\$ 101,06 11.09		99,988 10.00%	\$	97,814 7.48%	\$	95,819 7.31%	\$	92,975 3.52%	\$	89,755 5.16%	\$ 89,169 9.15%	\$ 88,646 14.25%
Notes to Required Supplementary Information	on															
Valuation Date Actuarial Cost Method Amortization Method Asset Valuation Method	Actuarial dete Entry age nor Total appropr Fair value of Unrecognize return and is	mal iation inc assets as d return	creases 12 reported i	2.05% per y in the Plan's the differe	ear. annua	l statement tween the a	less ctual	unrecognize I market val	ed ret ue ret	turn in each	h of t	he last five	years value	s.		
Actuarial Assumptions: Investment Rate of Return Discount Rate Inflation Rate Projected Salary Increases Cost of Living Adjustments	6.90% 6.90% 3.00% Based on year 3% on first \$		ice, rangin	ng from 5.75	5% at 0	years of se	rvice	e decreasing	; to 4.	00% after	9 yea	urs of servi	ce.			
Plan Membership: Retired Participants and Beneficiaries Receiving Benefits Inactive Participants Entitled to a Return of their Employee Contributions Inactive Participants with a Vested Right to a Deferred or Immediate Benefit Active Participants	887 125 38 1,046															

See accompanying independent auditors' report

2,096

Total

Schedules of Changes in the Net Pension Liability and Related Ratios – Last Ten Years Required Supplementary Information – GASB No. 67 and 68

(Unaudited)

(Dollars in Thousands)

	2023		2022		2021		2020		2019		2018		2017		2016		2015		2014
Total Pension Liability:																			
Service cost	\$ 14,275	\$	13,949	\$	14,330	\$	13,338	\$	12,735	\$	11,762	\$	11,308	\$	11,080	\$	10,638	\$	10,529
Interest	53,669		51,475		49,159		46,455		44,062		41,392		38,520		36,917		34,598		33,587
Differences between expected and actual experience	78		(1,280)		(4,886)		(263)		3,529		3,250		(146)		(9,143)		-		(8,380)
Changes of assumptions	-		-		1,161		25,031		10,507		16,401		7,977		13,298		-		4,921
Changes of benefit terms	-		2,649		5,568		-		-		5,027		-		2,050		-		-
Benefit payments, including refunds of employee contributions	(37,369)		(33,281)		(29,494)		(25,313)		(24,464)		(21,428)		(18,222)	_	(16,129)		(15,390)		(12,963)
Net change in total pension liability	30,653		33,512		35,838		59,248		46,369		56,404		39,437		38,073		29,846		27,694
Total pension liability - beginning	782,214	_	748,702	_	712,864		653,616	_	607,247	_	550,843	_	511,406	_	473,333	_	443,487	_	415,793
Total pension liability - ending	\$812,867	\$	782,214	\$	748,702	\$	712,864	\$	653,616	\$	607,247	\$	550,843	\$	511,406	\$	473,333	\$	443,487
Plan Fiduciary Net Position:																			
Contributions - employer	\$ 15,973	\$	12,555	\$	11,205	\$	10,000	\$	7,315	\$	7,000	\$	3,277	\$	4,633	\$	8,159	\$	12,630
Contributions - employee	10,576		10,551		9,892		10,188		9,722		9,484		9,091		8,757		8,402		8,245
Net investment income (loss)	57,017		(88,673)		89,019		74,947		79,557		(17,114)		70,517		24,183		(530)		20,484
Benefit payments, including refunds of employee contributions	(37,369)		(33,281)		(29,494)		(25,313)		(24,464)		(21,428)		(18,222)		(16,129)		(15,390)		(12,963)
Administrative expenses	(505)		(585)		(325)		(403)		(464)		(469)		(447)		(426)		(412)		(408)
Other - military service fund contribution			-		-	_		_			-	_	-	_	-			_	16
Net change in fiduciary net position	45,692		(99,433)		80,297		69,419		71,666		(22,527)		64,216		21,018		229		28,004
Plan fiduciary net position - beginning	629,240		728,673		648,376	_	578,957	_	507,291		529,818	_	465,602	_	444,584	_	444,355	_	444,355
Plan fiduciary net position - ending	\$ 674,932	\$	629,240	\$	728,673	\$	648,376	\$	578,957	\$	507,291	\$	529,818	\$	465,602	\$	444,584	\$	444,584
Net Pension Liability (Asset) - Ending	\$137,935	\$	152,974	\$	20,029	\$	64,488	\$	74,659	\$	99,956	\$	21,025	\$	45,804	\$	28,749	\$	28,749
Plan's Fiduciary Net Position as a																			
Percentage of the Total Pension Liability	83.03%		80.44%		97.32%		90.95%		88.58%		83.54%		96.18%		91.04%		93.93%		93.93%
Covered Payroll	\$106,531	\$	102,316	\$	99,689	\$	102,143	\$	98,145	\$	95,819	\$	92,975	\$	89,755	\$	89,169	\$	89,169
Net Pension Liability (Asset) as a Percentage of Covered Payroll	129.48%		149.51%		20.09%		63.14%		76.07%		104.32%		22.61%		51.03%		32.24%		32.24%
	127.1370				20.0570		03.1		,0.0,70		.0		22.0170		31.03.0		32.2.70		-2.2

Schedules of Investment Returns – Last Ten Years
Required Supplementary Information – GASB No. 67
(Unaudited)

					Year ended De	cember 31,				
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expenses	9.10%	-12.30%	16.70%	12.78%	15.58%	-10.03%	15.02%	5.81%	-0.24%	4.40%

Schedules of Changes in the Employer's Net OPEB Liability and Related Ratios – Last Ten Years

Required Supplementary Information – GASB No. 74 and 75

(Unaudited)

(Dollars in Thousands)

	 2024	2023	2022	 2021	2020	2019	2018		2017
Total OPEB Liability	 								
Total OPEB Liability - Beginning	\$ 117,758	\$ 113,757	\$ 136,805	\$ 132,819	\$ 161,064	\$ 150,978	\$	154,254	\$ 146,143
Service Cost	2,825	2,742	3,771	3,739	4,604	4,463		2,820	2,705
Interest	7,876	7,688	9,673	9,372	11,424	10,705		10,821	10,253
Differences between expected and actual experience	17,386	-	3,613	-	(5,862)	-		(11,860)	-
Change of assumptions	38,546	(1,123)	(35,250)	(3,685)	(33,488)	-		-	-
Benefit Payments	(7,787)	(5,306)	(4,855)	(5,440)	(4,923)	(5,082)		(5,057)	(4,847)
Net Change in total OPEB liability	58,846	4,001	(23,048)	3,986	(28,245)	10,086		(3,276)	8,111
Total OPEB Liability - Ending	176,604	 117,758	113,757	136,805	 132,819	 161,064		150,978	154,254
Plan Fiduciary Net Position									
Plan fiduciary net position - beginning	 72,378	 63,929	 61,764	43,729	 37,072	 29,774		22,782	 16,123
Contributions - employer (claims + additional funding)	10,636	10,061	9,529	11,506	10,885	10,656		10,093	9,723
Net Investment Income (Loss)	6,887	3,694	(2,509)	11,969	695	1,724		1,956	1,783
Benefit Payments	(7,787)	(5,306)	(4,855)	(5,440)	(4,923)	(5,082)		(5,057)	(4,847)
Net Change in plan fiduciary net position	9,736	 8,449	2,165	 18,035	 6,657	 7,298		6,992	6,659
Plan fiduciary net position - ending	 82,114	 72,378	 63,929	61,764	43,729	 37,072		29,774	22,782
Net OPEB Liability	\$ 94,490	\$ 45,380	\$ 49,828	\$ 75,041	\$ 89,090	\$ 123,992	\$	121,204	\$ 131,472
Plan fiduciary net position as a percentage of the total OPEB liability	46.5%	61.5%	56.2%	45.1%	32.9%	23.0%		19.7%	14.8%
Covered-employee payroll	\$ 118,658	\$ 113,764	\$ 111,297	\$ 106,879	\$ 103,778	\$ 98,238	\$	94,816	\$ 86,475
MWRA's net OPEB liability as a percentage of covered-employee payroll	79.6%	39.9%	44.8%	70.2%	85.8%	126.2%		127.8%	152.0%

Notes to Schedule

Changes in Assumptions - June 30, 2024: The trend assumptions were revised to account for known premium increases. The percentage to which spouses and families of current active members are expected to elect coverage in the Plan after retirement has been changed to reflect the spouses and family elections of current retirees.

Changes in Assumptions - June 30, 2023: The trend assumptions were revised to account for known premium increases and changes in GIC plan offerings.

Changes in Assumptions - June 30, 2022: The generational mortality improvement scale was updated from Scale MP-2019 to Scale MP-2021. The per capita health costs and contributions were updated to reflect current premiums and the costs in the most recent Commonwealth OPEB valuation report. The discount rate was lowered from 7.00% to 6.75%.

Changes in Plan Provisions - June 30, 2023: Effective July 1, 2022, Fallon plans are no longer offered by the GIC; Also, effective July 1, 2023, due to the merger of Turfs and Harvard Pilgrim, Tufts plans are no longer offered by GIC. The migration away from these plans have been accounted for through medical trend assumption.

Data is being accumulated annually to present 10 years of the reported information.

Schedules of Employer Contributions - Last Ten Years Required Supplementary Information – GASB No. 75 (Unaudited)

(Dollars in Thousands)

						Fiscal year ende	ed June 30,				
	_	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Actuarially determined contribution	\$	5,699	5,701	5,772	9,144	8,997	11,812	11,400	10,948	14,996	14,564
Contributions in relation to the actuarially determined contribution Contribution deficiency (excess)	\$ <u></u>	10,637 (4,938)	10,061 (4,360)	9,529 (3,757)	11,506 (2,362)	10,885 (1,888)	10,656 1,156	10,093 1,307	9,723 1,225	9,804 5,192	14,852 (288)
Covered-employee payroll Contributions as a percentage of	\$	118,658	113,764	111,297	106,879	103,778	98,238	94,816	86,475		
covered-employee payroll		8.96%	8.84%	8.56%	10.77%	10.49%	10.85%	10.64%	11.24%		

Notes to Schedule

Methods and assumptions used to determine contributions rates:

Actuarial cost method Entry Age Normal Amortization method Asset valuation method 30 years (closed) Fair value of assets Inflation Discount rate 6.75%

Non-Medicare Medical and Prescription Drug: 5.99% for 2023, then 7.06%, then 6.83%, then 6.59%, then 6.36%, then 6% decreasing by 0.25% for 6 years to an ultimate rate of 4.50% Medicare Medical and Prescription Drug: 1.92% in 2023, 4.49% in 2024, decreasing to a long-term rate of 4.50% after four years Healthcare cost trend rates

Mortality The PUB-2010 Headcount-weighted Mortality Tables, sex-distinct, projected using generational mortality and scale MP-2021. Set forward one year for disabled retirees.

Schedules of Investment Returns - Last Ten Years

Required Supplementary Information – GASB No. 74

(Unaudited)

			I	Fiscal year endo	ed June 30,			
	2024	2023	2022	2021	2020	2019	2018	2017
Annual money-weighted rate of return, net of investment expenses	9.51%	5.78%	-4.06%	27.37%	1.88%	5.80%	8.58%	10.58%

This schedule is intended to present 10 years of data. Additional years will be presented when available.

Accounts Established by the General Revenue Bond Resolution

June 30, 2024 (Comparative totals for June 30, 2023)

(Dollars in thousands)

	Cor	nstruction	De	bt Service	0	perating	Rat	e Stabilization	 Revenue		Combined Reserves				Total
Balance - June 30, 2023	\$	145,028	\$	529,721	\$	49,692	\$	39,314	\$ 41,356	\$	20,445	\$	825,556		
Proceeds from:															
Revenue Bonds and Loans		197,301		183,500		-		-	-		-		380,801		
Cash Received															
from Customers		-		-		-		-	851,362		-		851,362		
Investment Income (Loss)		8,434		13,696		5,920		-	7,568		(1,122)		34,496		
Debt Service Grant													-		
Grant Receipts		-		6,297		-		-	-		-		6,297		
Construction Payments		(206,468)		-		-		-	-		-		(206,468)		
Lease Payments		(1,663)		(1,554)		-		-	-		-		(3,217)		
Debt Service Payment		(536)		(564,286)		-		-	(52,724)		-		(617,546)		
Other Commonwealth													-		
Payments		-		-		-		-	(26,294)		-		(26,294)		
Interfund Transfers		18,455		419,260		6,522		(305)	(442,743)		(1,189)		-		
Transfers from (to)															
Operating Account		(3,947)		1,612		(4,112)		-	(313,950)		4,111		(316,286)		
Balance – June 30, 2024	\$	156,604	\$	588,246	\$	58,022	\$	39,009	\$ 64,575	\$	22,245	\$	928,701		

	Sewer Water		 Tota	al			
			Water		2024		2023
Restricted Investments:							
Construction	\$	82,020	\$	74,584	\$ 156,604	\$	145,028
Debt Service - Debt Service Reserves		87,639		63,147	150,786		148,384
Debt Service - Debt Service P & I		227,125		187,726	414,851		359,426
Debt Service - Revenue Redemption		4,601		18,008	22,609		21,911
Operating Reserve		40,930		17,092	58,022		49,692
Rate Stabilization Reserve		24,554		14,455	39,009		39,314
Revenue		54,660		9,915	64,575		41,356
Combined - Renewal and Replacement Reserve		5,023		5,022	10,045		10,000
Combined - Insurance Reserve		5,869		6,331	12,200		10,445
Total Restricted Investments	\$	532,421	\$	396,280	\$ 928,701	\$	825,556

Combining Statement of Net Position

June 30, 2024

(Dollars in thousands)

Current assets: \$52,153 \$32,047 \$84,20 Investments 3,616 1,781 5,39 Restricted investments 536,432 398,256 934,68 Intergovernmental loans 7,631 33,692 41,32 Accounts receivable 760 1,037 1,79 Interest receivable 474 295 76 Total current assets 601,066 467,108 1,068,17 Noncurrent assets. 2 2,207,371 5,149,64 Capital assets – not being depreciated 134,452 175,588 310,04 Capital assets – being depreciated – net 2,942,275 2,207,371 5,149,64 Capital assets – being depreciated – net 2,942,275 2,207,371 5,149,64 Capital assets, net 151,259 206,321 357,58 Total current assets 3,340,363 3,061,71 5,943,00 Total sasets, net 151,259 206,321 357,58 Total current assets 3,340,363 3,061,71 5,92,07 Total assets
Investments
Restricted investments 536,432 398,256 934,68 Intergovernmental loans 7,631 33,692 41,32 Accounts receivable 760 1,037 1,79 Interest receivable 474 295 76 Total current assets 601,066 467,108 1,068,17 Noncurrent assets Capital assets - not being depreciated 134,452 175,588 310,04 Capital assets - being depreciated - net 2,942,275 2,207,371 5,149,64 Lease asset - building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3239,297 2,594,603 5,833,90 Total assets 35,800 19,389 55,18 Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from refunding debt 5,156 2,339 7,49 Liabilities Current liabilities 32,911 23,801 56,71 Accounts payable and
Intergovernmental loans 7,631 33,692 41,32 Accounts receivable 760 1,037 1,79 Interest receivable 474 295 76 Total current assets 601,066 467,108 1,068,17 Noncurrent assets 8 30,006 1,068,17 Noncurrent assets 8 1,068,17 1,068,17 Noncurrent assets 8 175,588 310,04 Capital assets – not being depreciated – net 2,942,275 2,207,371 5,149,64 Lease asset – building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total annocurrent assets 3,239,297 2,594,603 5,83,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from refunding debt 5,156 2,339 7,49 Current liabilities
Accounts receivable 760 1,037 1,79 Interest receivable 474 295 76 Total current assets 601,066 467,108 1,068,17 Noncurrent assets: Capital assets: Capital assets - not being depreciated 134,452 175,588 310,04 Capital assets - being depreciated - net 2,942,275 2,207,371 5,149,64 Capital assets - being depreciated - net 11,311 5,323 16,63 Other assets, net 151,259 200,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows from pension 35,800 19,389 55,18 Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from refunding debt 5,156 2,339 7,49 Liabilities Current liabilities 32,911 23,801 56,71 Accounts payable and accrued expenses 32,911 23,8
Interest receivable
Total current assets 601,066 467,108 1,068,177 Noncurrent assets: 2 2 2 2 2 2 310,04
Noncurrent assets: Capital assets: Capital assets – not being depreciated 134,452 175,588 310,04 Capital assets – being depreciated – net 2,942,275 2,207,371 5,149,64 Lease asset – building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Deferred outflows from refunding debt 5,156 2,339 7,49 Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Capital assets: Capital assets – not being depreciated 134,452 175,588 310,04 Capital assets – being depreciated – net 2,942,275 2,207,371 5,149,64 Lease asset – building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows of Resources Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Deferred outflows from refunding debt 5,156 2,339 7,49 Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Capital assets – not being depreciated 134,452 175,588 310,04 Capital assets – being depreciated – net 2,942,275 2,207,371 5,149,64 Lease asset – building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Deferred Outflows of Resources Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Deferred outflows from refunding debt 5,156 2,339 7,49 Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Capital assets – being depreciated – net 2,942,275 2,207,371 5,149,64 Lease asset – building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Deferred outflows from refunding debt 5,156 2,339 7,49 Liabilities Current liabilities: 32,911 23,801 56,71 Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Lease asset - building 11,311 5,323 16,63 Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows of Resources Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Deferred outflows from refunding debt 5,156 2,339 7,49 Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Other assets, net 151,259 206,321 357,58 Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows of Resources Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Current dufflows from refunding debt 5,156 2,339 7,49 Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Total noncurrent assets 3,239,297 2,594,603 5,833,90 Total assets 3,840,363 3,061,711 6,902,07 Deferred Outflows of Resources Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Deferred outflows from refunding debt 5,156 2,339 7,49 Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Total assets 3,840,363 3,061,711 6,902,07
Deferred Outflows of Resources S S S S S S S S S
Deferred outflows from pension 35,800 19,389 55,18 Deferred outflows from OPEB 29,080 16,669 45,74 Liabilities Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Deferred outflows from OPEB 29,080 16,669 45,749 Liabilities Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Deferred outflows from refunding debt 5,156 2,339 7,49 Liabilities Current liabilities: Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Liabilities Current liabilities: 32,911 23,801 56,71 Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Current liabilities: 32,911 23,801 56,71 Accounts payable and accrued expenses 18,444 11,243 29,68 Accounts payable for construction 24,000 56,000 80,00 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Accounts payable and accrued expenses 32,911 23,801 56,71 Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Accounts payable for construction 18,444 11,243 29,68 Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Commercial paper 24,000 56,000 80,00 Current portion of long-term debt 173,653 111,237 284,89
Current portion of long-term debt 173,653 111,237 284,89
Current portion of lease liability 1,330 468 1,79
Accrued interest on bonds payable 33,218 19,789 53,00
Total current liabilities 283,556 222,538 506,09
Noncurrent liabilities:
Reserves 47,084 28,473 75,55
Retainage on construction in progress 5,075 7,510 12,58
Long-term debt – less current portion 2,442,733 1,700,634 4,143,36
Lease liability 12,666 4,472 17,13
Net pension liability 87,295 50,640 137,93
Net OPEB liability <u>60,736</u> 33,754 94,49
Total noncurrent liabilities 2,655,589 1,825,483 4,481,07
Total liabilities 2,939,145 2,048,021 4,987,16
Deferred Inflows of Resources
Deferred inflows from pension 2,438 337 2,77
Deferred inflows from OPEB 10,388 5,193 15,58
Deferred inflows from refunding debt 21,745 21,946 43,69
Net Position
Net investment in capital assets 533,773 595,054 1,128,82
Restricted
Construction 82,019 74,587 156,60
Debt service 145,824 131,244 277,06
Operating 4,485 2,271 6,75
Revenue 54,494 10,081 64,57
Rate Stabilization 24,720 14,289 39,00
Unrestricted 91,368 197,085 288,45
Total net position \$ 936,683 \$ 1,024,611 \$ 1,961,29

Commitments and contingencies

Combining Statement of Net Position

June 30, 2023

(Dollars in thousands)

Accepte	Saman	Water	Combined Total
Assets Current assets:	Sewer	Water	Total
Cash and cash equivalents	\$ 52,820	\$ 26,236	\$ 79,056
Investments	2,609	2,669	5,278
Restricted investments	496,158	335,391	831,549
Intergovernmental loans	7,712	30,445	38,157
Accounts receivable	366	2,957	3,323
Interest receivable	473	336	809
Total current assets	560,138	398,034	958,172
Noncurrent assets:			
Capital assets:			
Capital assets – not being depreciated	146,592	182,003	328,595
Capital assets – being depreciated – net	2,994,671	2,183,901	5,178,572
Lease asset - building	12,740	5,995	18,735
Other assets, net	158,453	182,419	340,872
Total noncurrent assets	3,312,456	2,554,318	5,866,774
Total assets	3,872,594	2,952,352	6,824,946
Deferred Outflows of Resources			
Deferred outflows from pension	51,740	28,810	80,550
Deferred outflows from OPEB	2,504	1,429	3,933
Deferred outflows from derivative instruments	2,500	320	2,820
Deferred outflows from refunding debt	5,480	2,501	7,981
-			
Liabilities Current liabilities:			
Accounts payable and accrued expenses	32,722	17,686	50,408
Accounts payable for construction	18,280	12,194	30,474
Current portion of long-term debt	182,400	115,054	297,454
Current portion of lease liability	998	666	1,664
Accrued interest on bonds payable	38,038	22,054	60,092
Total current liabilities	272,438	167,654	440,092
Noncurrent liabilities:			
Reserves	41,441	26,255	67,696
Retainage on construction in progress	5,384	5,771	11,155
Long-term debt – less current portion	2,604,188	1,742,411	4,346,599
Lease liability	13,996	4,940	18,936
Net pension liability	96,747	56,227	152,974
Net OPEB liability	29,524	15,856	45,380
Liability for derivative instruments	2,499	321	2,820
Total noncurrent liabilities	2,793,779	1,851,781	4,645,560
Total liabilities	3,066,217	2,019,435	5,085,652
Deferred Inflows of Resources			
Deferred inflows from pension	3,247	814	4,061
Deferred inflows from OPEB	20,436	10,956	31,392
Deferred inflows from refunding debt	3,288	4,624	7,912
Net Position			
Net investment in capital assets	581,707	602,910	1,184,617
Restricted		•	
Construction	80,772	64,257	145,029
Debt service	164,581	112,138	276,719
Operating	4,488	2,314	6,802
Revenue	32,718	8,638	41,356
Rate Stabilization	24,554	14,760	39,314
Unrestricted	(47,190)	144,566	97,376
Total net position	\$ 841,630	\$ 949,583	\$ 1,791,213
			

Commitments and contingencies

Combining Statement of Revenues, Expenses, and Changes in Net Position Year Ended June 30, 2024 (Dollars in thousands)

	Sewer	Water	Combined Total
Operating revenues:			
Customer services	\$ 538,420	\$ 309,518	\$ 847,938
Other	1,981	1,799	3,780
Total operating revenues	540,401	311,317	851,718
Operating expenses:			
Operations	90,686	53,479	144,165
Maintenance	23,570	14,108	37,678
Payments in lieu of taxes	-	8,489	8,489
Engineering, general, and administrative	99,131	58,795	157,926
Total operating expenses	213,387	134,871	348,258
Income from operating before depreciation	327,014	176,446	503,460
Depreciation and amortization	171,910	64,908	236,818
Operating Income	155,104	111,538	266,642
Nonoperating revenues (expenses):			
Investment income	24,741	14,261	39,002
Interest expense	(83,763)	(50,236)	(133,999)
Change in reserves	(5,643)	(2,218)	(7,861)
Total nonoperating expenses	(64,665)	(38,193)	(102,858)
Net gain before capital grants and contributions	90,439	73,345	163,784
Capital grants and contributions	4,614	1,683	6,297
Increase in net position	95,053	75,028	170,081
Total net position - beginning of year	841,630	949,583	1,791,213
Total net position - end of year	\$ 936,683	\$ 1,024,611	\$ 1,961,294

Combining Statement of Revenues, Expenses, and Changes in Net Position Year Ended June 30, 2023 (Dollars in thousands)

	Sewer	Water	Combined Total
Operating revenues:			
Customer services	\$ 529,818	\$ 302,114	\$ 831,932
Other	2,948	2,075	5,023
Total operating revenues	532,766	304,189	836,955
Operating expenses:			
Operations	82,260	51,117	133,377
Maintenance	21,978	12,340	34,318
Payments in lieu of taxes	-	8,479	8,479
Engineering, general, and administrative	85,414	51,383	136,797
Total operating expenses	189,652	123,319	312,971
Income from operating before depreciation	343,114	180,870	523,984
Depreciation and amortization	166,782	64,028	230,810
Operating Income	176,332	116,842	293,174
Regulatory accounting provisions:			
Change in regulatory provisions, net	29,788	22,336	52,124
Total regulatory accounting provisions	29,788	22,336	52,124
Nonoperating revenues (expenses):			
Debt service grant	1,072	115	1,187
Investment income	12,327	6,986	19,313
Interest expense	(87,133)	(56,408)	(143,541)
Change in reserves	(1,245)	(1,173)	(2,418)
Changes in derivative related accounts	2,528_	412	2,940
Total nonoperating expenses	(72,451)	(50,068)	(122,519)
Net gain before capital grants and contributions	133,669	89,110	222,779
Capital grants and contributions	2,025	1,372	3,397
Increase in net position	135,694	90,482	226,176
Total net position - beginning of year	705,936	859,101	1,565,037
Total net position - end of year	\$ 841,630	\$ 949,583	\$ 1,791,213

Combining Statement of Fiduciary Net Position June 30, 2024

(Dollars in thousands)

	December 31, 2023 MWRA Employees'		June 30, 2024 MWRA OPEB		2024 Total	
	Retire	ement System		Trust	 	
Assets						
Cash and cash equivalents (note 4)	\$	20,809	\$	3,034	\$ 23,843	
Investments: (note 4)						
Fixed income		137,357		-	137,357	
Equities		316,015		-	316,015	
Real estate		61,296		-	61,296	
Private equity		75,630		-	75,630	
Hedge funds		27,512		-	27,512	
External investment pool		35,575		79,080	 114,655	
Total investments		653,385		79,080	732,465	
Accounts receivable		995			 995	
Total assets		675,189		82,114	 757,303	
Liabilities						
Current liabilities:						
Accounts payable and accrued expenses		165		_	165	
Due to primary government		92		_	92	
Payables for securities purchased		-		_	_	
Total liabilities		257		-	257	
Fiduciary Net Position						
Restricted						
Pensions		674,932		-	674,932	
Postemployment benefits other than pensions				82,114	82,114	
Total fiduciary net position	\$	674,932	\$	82,114	\$ 757,046	

Combining Statement of Fiduciary Net Position June 30, 2023

(Dollars in thousands)

	December 31, 2022 MWRA Employees' Retirement System		Jun	e 30, 2023	2023	
				MWRA OPEB		Total
			Trust			
Assets						
Cash and cash equivalents (note 4)	\$	14,216	\$	5,022	\$	19,238
Investments: (note 4)						
Fixed income		126,381		-		126,381
Equities		286,128		-		286,128
Real estate		70,330		-		70,330
Private equity		71,726		-		71,726
Hedge funds		26,675		-		26,675
External investment pool		34,501		67,356		101,857
Total investments		615,741		67,356		683,097
Accounts receivable		564		-		564
Total assets		630,521		72,378		702,899
Liabilities						
Current liabilities:						
Accounts payable and accrued expenses		187		-		187
Due to primary government		180		_		180
Payables for securities purchased		914		-		914
Total liabilities		1,281		-		1,281
Fiduciary Net Position						
Restricted						
Pensions		629,240		-		629,240
Postemployment benefits other than pensions				72,378		72,378
Total fiduciary net position	\$	629,240	\$	72,378	\$	701,618

Combining Statement of Changes in Fiduciary Net Position Year ended June 30, 2024 (Dollars in thousands)

	December 31, 2023 MWRA Employees' Retirement System		June 30, 2024 MWRA OPEB Trust		Total	
Additions						
Contributions:						
Employer	\$	15,973	\$	10,637	\$ 26,610	
Plan members		10,576			 10,576	
Total contributions		26,549		10,637	37,186	
Investment income:						
Interest and dividends		10,349		134	10,483	
Net realized and unrealized gains		49,937		7,131	57,068	
Less: investment fees		(3,269)		(379)	(3,648)	
Net investment income		57,017		6,886	 63,903	
Reimbursements and transfers from other systems		2,409		-	2,409	
Total additions		85,975		17,523	103,498	
Deductions						
Benefits paid to participants or beneficiaries		38,641		7,787	46,428	
Reimbursements and transfers to other systems		1,137		-	1,137	
Administrative expenses		505		-	505	
Total deductions		40,283		7,787	48,070	
Change in fiduciary net position		45,692		9,736	55,428	
Total fiduciary net position - beginning of year		629,240		72,378	 701,618	
Total fiduciary net position - end of year	\$	674,932	\$	82,114	\$ 757,046	

Combining Statement of Changes in Fiduciary Net Position Year ended June 30, 2023 (Dollars in thousands)

	December 31, 2022		June 30, 2023		2023	
		MWRA Employees' Retirement System		MWRA OPEB Trust		Total
Additions	<u>-</u>					
Contributions:						
Employer	\$	12,555	\$	10,061	\$	22,616
Plan members		10,551				10,551
Total contributions		23,106		10,061		33,167
Investment income:						
Interest and dividends		9,012		84		9,096
Net realized and unrealized gains (losses)		(91,626)		3,925		(87,701)
Less: investment fees		(6,058)		(315)		(6,373)
Net investment income (loss)		(88,672)		3,694		(84,978)
Reimbursements and transfers from other systems		3,224		-		3,224
Total additions		(62,342)		13,755		(48,587)
Deductions						
Benefits paid to participants or beneficiaries		35,420		5,306		40,726
Reimbursements and transfers to other systems		1,086		-		1,086
Administrative expenses		585		-		585
Total deductions		37,091		5,306		42,397
Change in fiduciary net position		(99,433)		8,449		(90,984)
Total fiduciary net position - beginning of year		728,673		63,929		792,602
Total fiduciary net position - end of year	\$	629,240	\$	72,378	\$	701,618

