



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Financial Statements and Supplemental Schedules  
and Required Supplementary Information

June 30, 2013 and 2012

(With Independent Auditors' Report Thereon)

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Table of Contents

	<b>Page(s)</b>
Independent Auditors' Report	1 – 2
Management's Discussion and Analysis – Required Supplementary Information	3 – 10
Financial Statements:	
Statements of Net Position as of June 30, 2013 and 2012	11
Statements of Revenues, Expenses, and Changes in Net Position for the years ended June 30, 2013 and 2012	12
Statements of Cash Flows for the years ended June 30, 2013 and 2012	13
Notes to Financial Statements	14 – 44
<b>Required Supplementary Information</b>	
Schedules of Funding Progress	45
<b>Supplemental Schedules</b>	
Accounts Established by the General Revenue Bond Resolution for the year ended June 30, 2013 and Comparative Totals for the year ended June 30, 2012	46
Combining Statement of Net Position as of June 30, 2013	47
Combining Statement of Net Position as of June 30, 2012	48
Combining Statement of Revenues, Expenses, and Changes in Net Position for the year ended June 30, 2013	49
Combining Statement of Revenues, Expenses, and Changes in Net Position for the year ended June 30, 2012	50



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## Independent Auditors' Report

The Board of Directors  
Massachusetts Water Resources Authority:

### Report on the Financial Statements

We have audited the accompanying statements of net position of the Massachusetts Water Resources Authority (the Authority), as of June 30, 2013 and 2012, and the statements of revenues, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes 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.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinions*

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority at June 30, 2013 and 2012, and the changes in net position and cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



**Other Matters**

*Required Supplementary Information*

U.S. generally accepted accounting principles require that the management’s discussion and analysis on pages 3 through 10 and schedules of funding progress on page 45 be presented to supplement the basic financial statements. Such information, 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 auditing standards generally accepted in the United States of America, 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 audit 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 and Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority’s basic financial statements. The supplemental schedules listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplemental schedules listed in the table of contents are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit 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 auditing standards generally accepted in the United States of America. In our opinion, the supplemental schedules listed in the table of contents 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 August 23, 2013 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 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 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.

**KPMG LLP**

Boston, Massachusetts  
August 23, 2013

## MASSACHUSETTS WATER RESOURCES AUTHORITY

### Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(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, 2013 and 2012. Please read it in conjunction with the Authority's financial statements, which immediately follow this section.

#### **Financial Highlights – Fiscal 2013**

The fiscal 2013 customer service revenues were approximately \$617.4 million. Of this amount, rate revenues represent approximately 98.4%, or \$607.5 million, and were \$17.8 million higher than fiscal 2012. This was due to an increase in assessments.

Total operating expenses, excluding depreciation, were approximately \$267.4 million in fiscal 2013. The 2.2% increase in total operating expenses over fiscal 2012 is the result of increases in personnel costs, other materials and pension costs. Other material costs increased due to the purchase of new mobile and handheld radios to complete the conversion to digital transmission. Pension expense increased as an additional, optional \$4.7 million contribution was made in fiscal 2013.

Net nonoperating expenses decreased \$19.9 million, or 7.7%, due to a \$24 million decrease in investment income and a \$44.3 million decrease in interest expense. A \$400,000 debt service grant in fiscal 2012 comprises the remaining difference. The decrease in investment income was due to an increase in the unrealized loss on fixed rate investments due to higher market rates at June 30. The decrease in interest expense was due to reclassification in fiscal 2012 for regulatory accounting provisions.

Total assets at June 30, 2013 were approximately \$8.3 billion, a \$145.8 million, or 1.7%, decrease over total assets at June 30, 2012.

During fiscal 2013, the Authority issued direct-purchase General Revenue Refunding Bonds, 2012 Series E, 2012 Series F and 2012 Series G for a total of \$180.9 million. The proceeds from these bonds were used to refund \$180.9 million of the Authority's outstanding bonds. The interest rate on these bonds was 0.61% to 0.93% during fiscal 2013. The Authority also issued General Revenue Refunding Bonds, 2013 Series A for \$170.6 million. The proceeds from these bonds were used to refund \$175.6 million of the Authority's outstanding bonds. The interest rate on these bonds is 3% to 5%.

Total capital assets (net of depreciation) were approximately \$6.2 billion at June 30, 2013, a \$78.5 million, or 1.3%, decrease over June 30, 2012. The decrease was primarily due to the capitalization of community-owned CSO projects from construction in progress to other assets.

In fiscal 2013 the Authority implemented GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position* and GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*. These financial statements now contain Statements of Net Position. Deferred outflows from hedging derivative instruments and deferred losses on bond refundings are now reported as deferred outflows of resources. Deferred losses on bond refundings were previously reported as a reduction to long-term debt. Additionally, amounts previously reported as deferred credits in accordance with regulatory accounting provisions are now reported as deferred inflows from regulated activities.

## MASSACHUSETTS WATER RESOURCES AUTHORITY

### Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

#### **Financial Highlights – Fiscal 2012**

The fiscal 2012 customer service revenues were approximately \$599.4 million. Of this amount, rate revenues represent approximately 98.4%, or \$589.7 million, and were \$19.9 million higher than fiscal 2011. This was due to an increase in assessments.

Total operating expenses, excluding depreciation, were approximately \$261.5 million in fiscal 2012. The 2.6% increase in total operating expenses over fiscal 2011 is the result of increases in personnel costs, diesel fuel, pension and other post employment benefits. Diesel fuel expenses increased as purchases expected to be made in fiscal 2011 were made in fiscal 2012. Pension expense increased as an additional, optional \$1.9 million contribution was made in fiscal 2012.

Net nonoperating expenses decreased \$4.2 million, or 1.6%, primarily due to a \$7.8 million increase in interest expense, an \$11.6 million increase in investment income and receipt of a debt service grant of \$0.4 million. The decrease in interest expense was due to lower variable interest rates. The increase in investment income was primarily due to an increase in the unrealized gain on investments.

Total assets at June 30, 2012 were approximately \$8.4 billion, an \$82.4 million, or 1.0%, increase over total assets at June 30, 2011.

During fiscal 2012, the Authority issued General Revenue Refunding Bonds, 2011 Series C for \$327.2 million. The proceeds from these bonds were used to refund \$352.2 million of the Authority's outstanding bonds. The interest rate on these bonds is 3.125% to 5.25%. The Authority also issued General Revenue Bonds, 2012 Series A and General Revenue Refunding Bonds Series B, for \$150 million and \$86.8 million, respectively. The proceeds from the Series A bonds were used to fund on-going capital projects. The interest rate on these bonds is 2% to 5%. The proceeds from the Series B bonds were used to refund \$102.9 million of the Authority's outstanding bonds. The interest rate on these bonds is 4.25% to 5%.

Total capital assets (net of depreciation) were approximately \$6.2 billion at June 30, 2012, a \$72.0 million, or 1.1%, decrease over June 30, 2011. The decrease was primarily due to the capitalization of community-owned CSO projects from construction in progress to other assets.

#### **Overview of the Financial Statements**

The financial section of this annual report consists of three 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 other supplementary information that further explains and supports the information in the financial statements.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

**Financial Analysis of the Authority**

***Net Position***

The Authority's total net position at June 30, 2013 was approximately \$1.8 billion, a \$38 million decrease from June 30, 2012. Total assets decreased \$145.8 million, or 1.7%, to \$8.3 billion, and total liabilities decreased \$129.3 million, or 1.9%, to \$6.6 billion.

The Authority's total net position at June 30, 2012 was approximately \$1.8 billion, a \$41.7 million decrease from June 30, 2011. Total assets increased \$82.4 million, or 1.0%, to \$8.4 billion, and total liabilities increased \$165.6 million, or 2.5%, to \$6.7 billion.

**Net Position**  
(Dollars in thousands)

	<b>2013</b>	<b>2012*</b>	<b>2011*</b>	<b>Percentage change 2013 – 2012</b>	<b>Percentage change 2012 – 2011</b>
Current assets	\$ 125,159	117,332	117,010	6.7%	0.3%
Restricted assets	762,951	869,715	785,751	(12.3)	10.7
Capital assets	6,153,926	6,232,394	6,304,377	(1.3)	(1.1)
Other assets	1,229,006	1,197,421	1,127,303	2.6	6.2
<b>Total assets</b>	<b>8,271,042</b>	<b>8,416,862</b>	<b>8,334,441</b>	<b>(1.7)</b>	<b>1.0</b>
Deferred outflows of resources from derivative instruments	43,867	92,381	48,623	(52.5)	90.0
Deferred outflows of resources from refunded debt	87,360	84,132	92,522	3.8	(9.1)
Current liabilities	328,837	300,868	291,357	9.3	3.3
Payable from restricted assets	204,905	202,306	208,930	1.3	(3.2)
Long-term debt	5,876,695	5,998,205	5,892,789	(2.0)	1.8
Long-term lease	31,700	32,404	33,056	(2.2)	(2.0)
Other liabilities	140,422	178,119	120,133	(21.2)	48.3
<b>Total liabilities</b>	<b>6,582,559</b>	<b>6,711,902</b>	<b>6,546,265</b>	<b>(1.9)</b>	<b>2.5</b>
Deferred inflows of resources	24,543	48,226	54,388	(49.1)	(11.3)
<b>Net Position:</b>					
Net investment in capital assets	755,266	845,989	972,480	(10.7)	(13.0)
Restricted	307,208	293,373	227,411	4.7	29.0
Unrestricted	732,693	693,885	675,042	5.6	2.8
<b>Total net position</b>	<b>\$ 1,795,167</b>	<b>1,833,247</b>	<b>1,874,933</b>	<b>(2.1)%</b>	<b>(2.2)%</b>

\*Certain amounts were reclassified to conform to the fiscal 2013 presentation

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

**Changes in Net Position**

The decrease in net position at June 30, 2013 was \$38 million, or 2.1%, as compared with June 30, 2012. The Authority's total operating revenues increased by 3.4% to \$623.4 million and total operating expenses increased 2.2% to \$267.4 million.

The decrease in net position at June 30, 2012 was \$41.7 million, or 2.2%, as compared with June 30, 2011. The Authority's total operating revenues increased by 3.1% to \$602.6 million and total operating expenses increased 2.6% to \$261.5 million.

**Changes in Net Position**  
(Dollars in thousands)

	<u>2013</u>	<u>2012*</u>	<u>2011*</u>	<u>Percentage change 2013 – 2012</u>	<u>Percentage change 2012 – 2011</u>
Operating revenues:					
Customer service revenues	\$ 617,415	599,372	579,240	3.0%	3.5%
Other revenues	5,978	3,248	5,114	84.1	(36.5)
Total operating revenues	<u>623,393</u>	<u>602,620</u>	<u>584,354</u>	<u>3.4</u>	<u>3.1</u>
Operating expenses:					
Operations	101,425	99,802	93,756	1.6	6.4
Maintenance	26,956	26,776	27,964	0.7	(4.2)
Payments in lieu of taxes	7,640	7,311	7,000	4.5	4.4
Engineering, general, and administrative	131,329	127,621	126,127	2.9	1.2
Total operating expenses	<u>267,350</u>	<u>261,510</u>	<u>254,847</u>	<u>2.2</u>	<u>2.6</u>
Depreciation and amortization	<u>190,852</u>	<u>191,124</u>	<u>180,734</u>	<u>(0.1)</u>	<u>5.7</u>
Operating income	<u>165,191</u>	<u>149,986</u>	<u>148,773</u>	<u>10.1</u>	<u>0.8</u>
Nonoperating items:					
Regulatory accounting provisions	23,917	57,229	74,139	(58.2)	(22.8)
Net nonoperating expenses	(239,616)	(259,537)	(263,761)	(7.7)	(1.6)
Capital grants and contributions	6,630	7,696	7,036	(13.9)	9.4
Changes in derivative related accounts	5,798	2,940	(8,728)	97.2	(133.7)
Total nonoperating items	<u>(203,271)</u>	<u>(191,672)</u>	<u>(191,314)</u>	<u>6.1</u>	<u>0.2</u>
Change in net position	<u>(38,080)</u>	<u>(41,686)</u>	<u>(42,541)</u>	<u>(8.7)</u>	<u>(2.0)</u>
Total net position – beginning of year	<u>1,833,247</u>	<u>1,874,933</u>	<u>1,917,474</u>	<u>(2.2)</u>	<u>(2.2)</u>
Total net position – end of year	\$ <u><u>1,795,167</u></u>	<u><u>1,833,247</u></u>	<u><u>1,874,933</u></u>	<u><u>(2.1)%</u></u>	<u><u>(2.2)%</u></u>

\*Certain amounts were reclassified to conform to the fiscal 2013 presentation



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

During fiscal 2013, the increases in customer service revenues were primarily due to the 3.0% increase in the rate revenue requirement (\$17.8 million).

During fiscal 2012, the increases in customer service revenues were primarily due to the 3.49% increase in the rate revenue requirement (\$19.9 million).

Total operating costs, before depreciation and amortization, were approximately \$267.4 million in fiscal 2013. The 2.2% increase in total operating expenses over fiscal 2012 is the result of increases in personnel costs, other materials and pension costs. Other material costs increased due to the purchase of new mobile and handheld radios to complete the conversion to digital transmission. Pension expense increased as an additional, optional \$4.7 million contribution was made in fiscal 2013.

Total operating costs, before depreciation and amortization, were approximately \$261.5 million in fiscal 2012. The 2.6% increase in total operating expenses over fiscal 2011 is the result of increases in personnel costs, diesel fuel, pension and other post employment benefits. Diesel fuel expenses increased as purchases expected to be made in fiscal 2011 were made in fiscal 2012. Pension expense increased as an additional, optional \$1.9 million contribution was made in fiscal 2012.

In fiscal 2013, net nonoperating expenses decreased \$19.9 million, or 7.7%, due to a \$24 million decrease in investment income and a \$44.3 million decrease in interest expense. A \$400,000 debt service grant in fiscal 2012 comprises the remaining difference. The decrease in investment income was due to an increase in the unrealized loss on fixed rate investments due to higher market rates at June 30. The decrease in interest expense was due to reclassifications in fiscal 2012 for regulatory accounting provisions.

In fiscal 2012, net nonoperating expenses decreased \$4.2 million, or 1.6%, primarily due to a \$7.8 million increase in interest expense, an \$11.6 million increase in investment income and receipt of a debt service grant of \$0.4 million.

**Operating Costs by Functionality**  
(Dollars in thousands)

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<b>Percentage change 2013 – 2012</b>	<b>Percentage change 2012 – 2011</b>
Wastewater treatment and transport	\$ 96,255	95,137	91,223	1.2%	4.3%
Water treatment and transport	34,702	33,762	34,113	2.8	(1.0)
Water and wastewater quality	7,430	7,815	8,508	(4.9)	(8.1)
Metering and monitoring	5,845	5,511	6,054	6.1	(9.0)
Facilities planning, design, and construction	9,337	9,604	9,914	(2.8)	(3.1)
Management information systems	9,115	8,901	8,533	2.4	4.3
Administration and support	45,923	44,105	45,928	4.1	(4.0)
<b>Total direct operating costs</b>	<u>208,607</u>	<u>204,835</u>	<u>204,273</u>	1.8	0.3
<b>Indirect operating costs</b>	<u>58,743</u>	<u>56,675</u>	<u>50,574</u>	3.6	12.1
<b>Total operating costs</b>	<u>\$ 267,350</u>	<u>261,510</u>	<u>254,847</u>	<u>2.2%</u>	<u>2.6%</u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Management’s Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

Wastewater and water treatment and transport expenses increased due to increases in salaries and wages and equipment purchases. Water and wastewater quality expenses decreased due to lower Harbor Outfall Monitoring activities. Metering and monitoring expenses increased due to increases in salaries and wages and maintenance costs. Administration and support expenses increased due to additional vehicle purchases.

**Capital Assets and Debt Administration**

***Capital Assets***

As of June 30, 2013 and 2012, respectively, the Authority had \$6.2 billion of capital assets (net of depreciation). This includes land, construction in progress, plant and equipment for the water and sewer systems, furniture and fixtures, leasehold improvements, and motor vehicles and equipment. The Authority’s net capital assets decreased approximately \$78.5 million, or 1.3%, during fiscal 2013, primarily due to the capitalization of community-owned CSO projects from construction in progress to other assets.

**Capital Assets**  
(Net of depreciation, dollars in thousands)

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<b>Percentage change 2013 – 2012</b>	<b>Percentage change 2012 – 2011</b>
Land	\$ 23,733	24,255	23,497	(2.2)%	3.2%
Construction in progress	163,916	159,878	177,070	2.5	(9.7)
Plant and equipment, water, and sewer systems	5,962,858	6,045,143	6,100,592	(1.4)	(0.9)
Furniture and fixtures	750	1,033	1,324	(27.4)	(22.0)
Leasehold improvements	339	351	362	(3.4)	(3.0)
Motor vehicles and equipment	2,330	1,734	1,532	34.4	13.2
	<u>\$ 6,153,926</u>	<u>6,232,394</u>	<u>6,304,377</u>	<u>(1.3)%</u>	<u>(1.1)%</u>

***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.

## MASSACHUSETTS WATER RESOURCES AUTHORITY

### Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

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.

#### ***Credit Rating***

The Authority's \$3.5 billion Senior Lien General Revenue Bonds are rated Aa1 from Moody's Investors Service, AA+ by Standard and Poors Ratings Services and AA+ from FitchRatings. The \$1.1 billion Subordinate Lien General Revenue Bonds are rated Aa2 from Moody's Investors Service, AA by Standard and Poors Ratings Services and AA from FitchRatings. 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 \$1.1 billion with the Massachusetts Water Pollution Abatement Trust is not rated as the Authority's debt.

#### ***Economic Factors and Next Year's Budget***

In June 2013, the Board approved the fiscal 2014 Current Expense Budget (CEB), which totals \$658.4 million in expenses.

The \$658.4 million expense total is comprised of \$397.2 million (60%) in capital financing costs and \$261.2 million (40%) in operating expenses, of which \$214.4 million (82.1%) is for direct expenses and \$46.8 million (17.9%) is for indirect expenses. The total represents an increase of \$24.4 million from fiscal 2013 spending, which is comprised of \$7.5 million in higher operating costs and \$16.9 million in higher debt service costs.

The fiscal 2014 rate revenue requirement approved by the Board is \$628.7 million; an increase of 3.49% compared with the fiscal 2013 budget.

Fiscal 2014 budgeted nonrate revenue totals \$29.7 million, an increase of \$0.2 million from actual fiscal 2013 nonrate revenue. The nonrate revenue budget is comprised of \$11.6 million in investment income, \$13.9 million in other user charges and other revenue, \$3.5 million use of rate stabilization funds and \$0.7 million in entrance fees.

## MASSACHUSETTS WATER RESOURCES AUTHORITY

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2013 and 2012

(Unaudited)

### ***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:

- Improvement and replacement of equipment on Deer Island and at major headworks facilities to ensure continued efficient and effective operations.
- Completion of the long-term CSO control plan, resulting in closing CSO outfalls and reducing CSO discharges to Boston Harbor and the Mystic, Charles, and Neponset River systems.
- Commitment to long-term redundancy plan for the metropolitan water tunnel system and an emergency pump station at the Wachusett reservoir.
- Installation of ultraviolet light disinfection facilities at the John J. Carroll water treatment plan.
- Completion of covered storage facilities to provide safe, reliable storage for water treated at John J. Carroll water treatment plan and transported through the MetroWest Tunnel and Hultman Aqueduct.
- 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.
- Continued commitment to the community assistance programs for both the sewer and water systems to improve local infrastructure.
- Continued investment for the upgrade of Management Information Systems to ensure the availability, integrity and security of data.
- Commence the Residuals Asset Protection program for maintaining and improving the operations and infrastructure of the biosolids processing in the long term.
- Commencement of a pilot program to determine potential benefit and costs of co-digestion of pre-processed organics in the Deer Island digesters.

### **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, Administration and Finance Division, 100 First Avenue, Boston, MA 02129.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Statements of Net Position

June 30, 2013 and 2012

(Dollars in thousands)

Assets	2013	2012
Unrestricted current assets:		
Cash and cash equivalents (note 4)	\$ 45,961	42,237
Investments (note 4)	48,819	47,827
Intergovernmental loans (note 7)	29,768	26,263
Accounts receivable	611	1,005
Total unrestricted current assets	125,159	117,332
Restricted assets:		
Investments (note 4)	759,498	866,922
Interest receivable	3,453	2,793
Total restricted assets	762,951	869,715
Capital assets:		
Capital assets – not being depreciated (note 8)	187,649	184,133
Capital assets – being depreciated – net (note 8)	5,966,277	6,048,261
Total capital assets	6,153,926	6,232,394
Regulatory assets (note 3)	818,680	817,048
Other assets, net (note 7)	410,326	380,373
Total assets	8,271,042	8,416,862
<b>Deferred Outflows of Resources</b>		
Deferred outflows from derivative instruments (note 6)	\$ 43,867	92,381
Deferred outflows from refunding debt	87,360	84,132
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 54,849	53,097
Commercial paper notes (note 6)	144,000	144,000
Current portion of long-term debt (note 6)	129,988	103,771
Total current liabilities	328,837	300,868
Payable from restricted assets:		
Accounts payable for construction	17,023	17,427
Accrued interest on bonds payable	85,963	84,358
Reserves (note 5)	101,919	100,521
Total payable from restricted assets	204,905	202,306
Retainage on construction in progress	8,073	10,378
Long-term debt – less current portion (note 6)	5,876,695	5,998,205
Long-term capital lease (note 9)	31,700	32,404
Other postemployment benefits (note 11)	88,482	75,360
Liability for derivative instruments (note 6)	43,867	92,381
Total liabilities	6,582,559	6,711,902
<b>Deferred Inflows of Resources</b>		
Deferred inflows from regulated activities (note 3)	\$ 24,543	48,226
<b>Net Position</b>		
Net investment in capital assets	755,266	845,989
Restricted	307,208	293,373
Unrestricted	732,693	693,885
Total net position	\$ 1,795,167	1,833,247
Commitments and contingencies (notes 9, 10, 11, 12, and 13)		

See accompanying notes to financial statements.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Statements of Revenues, Expenses, and Changes in Net Position

Years ended June 30, 2013 and 2012

(Dollars in thousands)

	<u>2013</u>	<u>2012</u>
Operating revenues (note 2):		
Customer services	\$ 617,415	599,372
Other	5,978	3,248
Total operating revenues	<u>623,393</u>	<u>602,620</u>
Operating expenses:		
Operations	101,425	99,802
Maintenance	26,956	26,776
Payments in lieu of taxes	7,640	7,311
Engineering, general, and administrative	131,329	127,621
Total operating expenses	<u>267,350</u>	<u>261,510</u>
Income from operations before depreciation	356,043	341,110
Depreciation and amortization	<u>190,852</u>	<u>191,124</u>
Operating income	<u>165,191</u>	<u>149,986</u>
Regulatory accounting provisions:		
Change in reserves (note 5)	(1,398)	(195)
Change in regulatory provisions, net (note 3)	25,315	57,424
Total regulatory accounting provisions	<u>23,917</u>	<u>57,229</u>
Nonoperating revenues (expenses):		
Debt service grant	—	384
Investment income (loss)	(3,079)	20,902
Interest expense	(236,537)	(280,823)
Changes in derivative related accounts	5,798	2,940
Total nonoperating expenses	<u>(233,818)</u>	<u>(256,597)</u>
Net loss before capital contributions	(44,710)	(49,382)
Capital grants and contributions	<u>6,630</u>	<u>7,696</u>
Decrease in net position	(38,080)	(41,686)
Total net position, beginning of year	<u>1,833,247</u>	<u>1,874,933</u>
Total net position, end of year	<u>\$ 1,795,167</u>	<u>1,833,247</u>

See accompanying notes to financial statements.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Statements of Cash Flows

Years ended June 30, 2013 and 2012

(Dollars in thousands)

	<u>2013</u>	<u>2012</u>
Cash flows from operating activities:		
Cash received from customers	\$ 617,807	598,958
Cash paid to suppliers for goods and services	(119,266)	(119,506)
Cash paid to employees for services	(122,179)	(119,046)
Cash paid in lieu of taxes	(7,640)	(7,311)
Other operating receipts	6,065	3,248
Net cash provided by operating activities	<u>374,787</u>	<u>356,343</u>
Cash flows from capital and related financing activities:		
Proceeds from sale of revenue bonds, loans, and notes	111,852	256,488
Capital grants for construction	6,630	7,696
Debt service grant	—	384
Capital lease principal payments	(705)	(652)
Capital lease interest payments	(2,512)	(2,565)
Repayment of debt	(199,130)	(185,514)
Interest paid on debt	(232,954)	(223,227)
Plant expenditures	(156,937)	(145,418)
Net cash used for capital and related financing activities	<u>(473,756)</u>	<u>(292,808)</u>
Cash flows from investing activities:		
Purchases of short-term investments	(206,118)	(150,702)
Sales and maturities of short-term investments	135,000	224,200
Changes in restricted cash and investments – net	161,152	(152,520)
Interest received	12,659	16,095
Net cash provided by (used for) investing activities	<u>102,693</u>	<u>(62,927)</u>
Net increase in cash and cash equivalents	3,724	608
Cash and cash equivalents, beginning of year	42,237	41,629
Cash and cash equivalents, end of year	\$ <u>45,961</u>	<u>42,237</u>
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	\$ 165,191	149,986
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	190,852	191,124
Change in other accounts	133	(352)
Change in accounts payable	18,611	15,585
Net cash provided by operating activities	\$ <u>374,787</u>	<u>356,343</u>

Noncash capital and related financing activities:

In fiscal 2013, general revenue refunding bonds in the aggregate principal amount of \$284,840 were issued to defease \$289,800 of bonds outstanding.

In fiscal 2012, general revenue refunding bonds in the aggregate principal amount of \$413,935 were issued to defease \$455,105 of bonds outstanding.

See accompanying notes to financial statements.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(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.

### (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 nonoperating 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 nonoperating revenues and expenses. 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.

The Authority has implemented GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position* and GASB Statement No. 65, *Items*



# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

*Previously Reported as Assets and Liabilities.* These financial statements now contain Statements of Net Position. Deferred outflows from hedging derivative instruments and deferred losses on bond refundings are now reported as deferred outflows of resources. Deferred losses on bond refundings were previously reported as a reduction to long-term debt. Additionally, amounts previously reported as deferred credits in accordance with regulatory accounting provisions are now reported as deferred inflows from regulated activities.

**(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 historical 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.

**(c) Interest Cost and Principal Payments on Construction**

During fiscal 2013 and 2012, none of the Authority's interest expense was capitalized to construction in progress in accordance with its current policy of recovering such costs through rates as incurred. Rates collected for principal payments on debt related to assets under construction are deferred until the related asset is completed and depreciation commences.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(d) 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:

	<u>Years</u>
Plant and equipment, water and sewerage systems	5 – 100
Motor vehicles and equipment	5
Furniture and fixtures	7
Leasehold improvements	3 – 5

**(e) 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.

**(f) Cash and Cash Equivalents**

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.

**(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**

Investments, other than guaranteed investment contracts, are recorded at fair value. Fair value is determined based on quoted market price. Guaranteed investment contracts are recorded at cost. The Authority recorded unrealized losses of \$16,672 in fiscal 2013 and unrealized gains of \$4,632 in fiscal 2012 as part of investment income.

**(i) 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

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

statements, and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

**(j) 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.

**(k) Reclassifications**

Certain reclassifications were made to the fiscal 2012 financial statements to conform to the fiscal 2013 presentation.

**(3) Regulatory Assets and 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*, regulatory assets and deferred inflows from regulatory activities result primarily from differences between depreciation on property, plant, and equipment not financed by grants or capital contributions, which is recovered through rates as principal payments on debt service, and from amounts determined by the Board to be utilized in a subsequent year to reduce customer billings (rate stabilization).

A summary of the activity of regulatory assets and deferred inflows for fiscal 2013 and 2012 is as follows:

	<u>Sewer</u>	<u>Water</u>	<u>Total</u>
Balance – June 30, 2011 – net	\$ 600,723	110,675	711,398
Difference between depreciation of capital assets not financed by grants or capital contributions, and debt service in excess of interest expense	38,729	12,533	51,262
Rate stabilization, net	482	(9,212)	(8,730)
Other – net	<u>(24)</u>	<u>14,916</u>	<u>14,892</u>
Balance – June 30, 2012 – net	639,910	128,912	768,822
Difference between depreciation of capital assets not financed by grants or capital contributions, and debt service in excess of interest expense	(866)	2,499	1,633
Other – net	<u>15,322</u>	<u>8,360</u>	<u>23,682</u>
Balance – June 30, 2013 – net	\$ <u><u>654,366</u></u>	<u><u>139,771</u></u>	<u><u>794,137</u></u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

The net balance at June 30, 2013 and 2012 is presented on the statements of net position as follows:

	<u>2013</u>	<u>2012</u>	<u>Current year change</u>
Regulatory assets	\$ 818,680	817,048	1,632
Deferred inflows from regulatory activities	(24,543)	(48,226)	23,683
Net change	<u>\$ 794,137</u>	<u>768,822</u>	<u>25,315</u>

The balance in the rate stabilization reserve, which is included in deferred inflows from regulatory activities was \$40,012 at June 30, 2013 and 2012.

**(4) Deposits and Investments**

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. The deposits in the bank in excess of the insured amount are uninsured and uncollateralized.

The bank deposits at June 30, 2013 and 2012 were \$47,191 and \$43,795, respectively. Of these amounts, \$46,941 and \$43,545 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, money market 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.

The following guaranteed investment contract was in force as of June 30, 2013 and 2012, respectively. Such contracts are fully collateralized and recorded at cost:

<u>Investment agreement provider</u>	<u>Rate</u>	<u>Maturity</u>	<u>2013</u>	<u>2012</u>
Wells Fargo Bank, N.A.	5.17%	August 1, 2016	\$ 14,456	14,456
Total			<u>\$ 14,456</u>	<u>14,456</u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(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 guaranteed investment contracts and money market 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.

**(d) Concentration Risk**

The Authority has no investments, at fair value, which exceeds 5% of the Authority's total investments as of June 30, 2013 and 2012.

**(e) Interest Rate Risk**

The following is a listing of the Authority's fixed income investments and related maturity schedule as of June 30, 2013 and 2012:

<b>June 30, 2013</b>					
<b>Investment maturities (in years)</b>					
<b>Investment type</b>	<b>Fair value</b>	<b>&lt;1</b>	<b>1 – 3</b>	<b>4 – 8</b>	<b>&gt;9</b>
Money market mutual funds	\$ 459,159	459,159	—	—	—
U.S. Treasury notes and bonds	4,096	4,096	—	—	—
U.S. agency obligations	330,606	70,006	—	39,433	221,167
Guaranteed investment contract	14,456	—	—	14,456	—
Total	\$ 808,317	533,261	—	53,889	221,167

<b>June 30, 2012</b>					
<b>Investment maturities (in years)</b>					
<b>Investment type</b>	<b>Fair value</b>	<b>&lt;1</b>	<b>1 – 3</b>	<b>4 – 8</b>	<b>&gt;9</b>
Money market mutual funds	\$ 620,311	620,311	—	—	—
U.S. Treasury notes and bonds	4,238	—	4,238	—	—
U.S. agency obligations	275,744	—	72,982	58,362	144,400
Guaranteed investment contract	14,456	—	—	14,456	—
Total	\$ 914,749	620,311	77,220	72,818	144,400

The Authority's bond resolution limits maturities to less than 15 years. The majority of the Authority's investments are long-term investments held in the debt service reserve funds where the

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

intent is to hold until maturity. This reduces the exposure to fair value losses arising from increasing interest rates.

**(f) Restricted Investments by Fund**

The following summarizes restricted investments as of June 30, 2013 and 2012 by various funds and accounts established by the Authority for debt covenants and other purposes:

	<b>2013</b>	<b>2012</b>
	<u>          </u>	<u>          </u>
Restricted investments:		
Construction	\$ 129,783	240,904
Debt service reserves	229,895	235,723
Debt service	221,641	197,022
Revenue redemption	32,574	33,163
Revenue	72,195	82,033
Renewal and replacement reserve	32,793	37,072
Insurance	14,000	14,000
Community obligation and revenue enhancement	20,504	20,745
OPEB Reserve	805	803
Insurance related escrow deposits	5,308	5,457
	<u>          </u>	<u>          </u>
Total restricted investments	\$ <u>759,498</u>	<u>866,922</u>

**(5) Bond Resolution Reserves**

The components of the reserves required by the general and supplemental bond resolutions at June 30, 2013 and 2012 are as follows:

<b>Reserves</b>		<b>Sewer</b>	<b>Water</b>	<b>2013 Total</b>	<b>2012 Total</b>
		<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Renewal and replacement	\$	17,300	11,701	29,001	29,001
Insurance		7,000	7,000	14,000	14,000
Operating		26,573	12,229	38,802	37,404
Community obligation and revenue enhancement		18,399	1,717	20,116	20,116
		<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total	\$	<u>69,272</u>	<u>32,647</u>	<u>101,919</u>	<u>100,521</u>

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, 2013 and 2012.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(6) Notes Payable and Long-Term Debt**

Long-term debt at June 30, 2013 and 2012 consisted of the following:

	<u>2013</u>	<u>2012</u>
General Revenue Bonds:		
1993 Series C, 5 1/4%, issued December 2, 1993, due 2013 to 2015	\$ 28,705	28,705
2002 Series J, 5% to 5 1/2%, issued December 18, 2002, due 2014 to 2042	297,300	297,300
2006 Series A, 4% to 5%, issued March 16, 2006, due 2024 to 2046	149,990	200,000
2007 Series A, 4 3/8% to 5%, issued February 1, 2007 due 2023 to 2046	198,000	198,000
2009 Series A, 4% to 5%, issued February 19, 2009 due 2013 to 2039	80,280	91,160
2010 Series A, 3% to 5%, issued May 6, 2010 due 2017 to 2040	97,740	98,895
2011 Series B, 2% to 5%, issued May 19, 2011 due 2013 to 2041	144,840	147,335
2012 Series A, 2% to 5%, issued April 19, 2012 due 2013 to 2042	144,675	150,000
	<u>1,141,530</u>	<u>1,211,395</u>
General Revenue Refunding Bonds:		
2004 Series B, 5%, issued September 29, 2004, due 2016 to 2020	48,950	48,950
2005 Series A, 5% to 5 1/4%, issued April 14, 2005, due 2015 to 2034	344,830	356,665
2005 Series B, 5%, issued April 14, 2005, due 2031 to 2035	80,290	80,290
2006 Series B, 4% to 5%, issued March 16, 2006, due 2016 to 2040	216,935	263,940
2007 Series B, 5 1/4%, issued February 1, 2007 due 2023 to 2038	647,950	647,950
2009 Series B, 3 3/8% to 5%, issued February 19, 2009 due 2013 to 2039	274,100	280,220
2010 Series B, 5%, issued May 6, 2010 due 2014 to 2032	183,570	183,570
2011 Series C, 3 1/8% to 5 1/4%, issued December 8, 2011 due 2018 to 2042	327,160	327,160
2012 Series B, 4 1/4% to 5%, issued April 19, 2012, due 2026 to 2029	86,775	86,775
2013 Series A, 3% to 5%, issued March 27, 2013, due 2016 to 2036	170,635	—
	<u>2,381,195</u>	<u>2,275,520</u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

	<u>2013</u>	<u>2012</u>
General Revenue Bonds with the Massachusetts		
Water Pollution Abatement Trust:		
1993 Series A, 5 1/2%, issued March 18, 1993	\$ —	600
1993 Series D, 5 1/4%, issued		
January 6, 1994, due 2013 to 2014	615	1,005
1995 Series A, 5% to 5 1/2%, issued		
November 21, 1995, due 2013 to 2015	1,065	1,445
1998 Series C, 4 3/4% to 5 3/8%, issued		
July 9, 1998, due 2013 to 2018	3,661	4,606
1999 Series E Sewer, 4 3/4% to 5 3/8%, issued		
October 6, 1999, due 2013 to 2029	7,305	7,615
1999 Series E Water, 4 3/4% to 5 3/8%, issued		
October 6, 1999, due 2013 to 2019	5,095	5,730
1999 Series F, 5 1/2% to 6%, issued		
November 3, 1999, due 2013 to 2029	264,940	279,865
2000 Series E Sewer, 5% to 5 5/8%, issued		
November 1, 2000, due 2013 to 2030	54,700	56,688
2000 Series E Water, 5% to 5 5/8%, issued		
November 1, 2000, due 2013 to 2020	6,070	6,720
2001 Series C Water, 5% to 5 1/4%, issued		
July 26, 2001, due 2014 to 2021	2,620	2,900
2001 Series D Sewer, 5 1/4% to 5 3/4%, issued		
July 26, 2001, due 2013 to 2029	3,874	4,303
2001 Series D Water, 5 1/4% to 5 3/4%, issued		
July 26, 2001, due 2013 to 2019	721	810
2002 Series H Sewer, 5% to 5 1/4%, issued		
October 31, 2002, due 2013 to 2032	70,420	72,805
2002 Series H Water, 5% to 5 1/4%, issued		
October 31, 2002, due 2013 to 2022	19,160	20,735
2002 Series I Sewer, 5% to 5 5/8%, issued		
October 31, 2002, due 2013 to 2030	1,970	2,047
2002 Series I Water, 5% to 5 5/8%, issued		
October 31, 2002, due 2013 to 2020	15	17
2003 Series A Water, 5% to 5 1/4%, issued		
October 31, 2002, due 2013 to 2022	882	955
2003 Series B Water, 5% to 5 1/4%, issued		
July 24, 2003, due 2014 to 2021	2,368	2,619
2003 Series C Sewer, 4% to 5 1/2%, issued		
November 6, 2003, due 2013 to 2033	25,495	26,296



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

	<u>2013</u>	<u>2012</u>
2003 Series C Water, 3 3/4% to 5 1/2%, issued November 6, 2003, due 2013 to 2023	\$ 13,307	14,292
2004 Series C Sewer, 4% to 5 1/2%, issued October 26, 2004, due 2013 to 2033	8,655	8,929
2004 Series C Water, 5% to 5 1/4%, issued October 26, 2004, due 2013 to 2022	970	1,069
2004 Series D Sewer, 4 1/2% to 5 1/4%, issued November 29, 2004, due 2013 to 2034	47,992	50,315
2004 Series D Water, 5% to 5 1/4%, issued November 29, 2004, due 2013 to 2024	9,146	9,725
2005 Series C Sewer, 4% to 5 1/2%, issued November 3, 2005, due 2013 to 2033	5,748	5,985
2005 Series C Water, 4% to 5 1/2%, issued November 3, 2005, due 2013 to 2023	695	747
2005 Series D Sewer, 2% to 2 3/10%, issued November 16, 2005, due 2013 to 2035	53,705	55,733
2005 Series D Water, 0% to 2%, issued November 16, 2005, due 2013 to 2025	9,888	10,621
2005 Series E Sewer, 2%, issued November 16, 2005, due 2013 to 2025	282	301
2005 Series E Water, 2%, issued November 16, 2005, due 2013 to 2025	63	67
2006 Series C Sewer, 5% to 5 1/4%, issued October 26, 2006, due 2013 to 2034	7,119	7,391
2006 Series D Sewer, 2% to 2 3/10%, issued December 14, 2006, due 2013 to 2036	53,478	55,844
2006 Series D Water, 0% to 2%, issued November 16, 2006, due 2013 to 2026	21,275	22,736
2006 Series E Sewer, 2%, issued December 14, 2006, due 2013 to 2026	277	294
2006 Series E Water, 2%, issued December 14, 2006, due 2013 to 2026	124	132
2007 Series C Sewer, 2% to 2 3/10%, issued November 9, 2007, due 2013 to 2035	3,510	3,737
2007 Series C Water, 2%, issued November 9, 2007, due 2013 to 2025	1,983	2,133
2007 Series D Sewer, 2 3/10%, issued November 9, 2007, due 2013 to 2036	20,530	21,163
2007 Series E Sewer, 2% to 2 2/5%, issued December 18, 2007, due 2013 to 2037	51,752	53,653

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

	<u>2013</u>	<u>2012</u>
2007 Series E Water, 2%, issued		
December 18, 2007, due 2013 to 2027	\$ 15,701	16,591
2008 Series G Sewer, 2%, issued		
December 9, 2008, due 2013 to 2026	4,680	4,981
2008 Series G Water, 2%, issued		
December 9, 2008, due 2013 to 2026	976	1,036
2009 Series C Sewer, 2% to 2 2/5%, issued		
March 18, 2009, due 2013 to 2038	76,666	80,441
2009 Series C Water, 2%, issued		
March 18, 2009, due 2013 to 2028	25,212	26,536
2009 Series D Sewer, 2% to 2 2/5%, issued		
December 15, 2009, due 2013 to 2037	9,802	10,210
2009 Series D Water, 2%, issued		
December 15, 2009, due 2013 to 2027	1,085	1,146
2010 Series D Sewer, 2% to 2 2/5%, issued		
July 8, 2010, due 2013 to 2040	24,764	25,557
2010 Series D Water, 2%, issued		
July 8, 2010, due 2013 to 2030	21,173	22,140
2011 Series A Sewer, 2% to 2 2/5%, issued		
March 15, 2012, due 2013 to 2038	5,458	5,707
2011 Series A Water, 2%, issued		
March 15, 2012, due 2013 to 2028	4,890	5,153
2012 Series C Sewer, 2% to 2 2/5%, issued		
June 6, 2012, due 2013 to 2040	7,701	8,053
2012 Series C Water, 2%, issued		
June 6, 2012, due 2013 to 2030	3,772	3,942
2012 Series D Sewer, 2% to 2 2/5%, issued		
June 13, 2012, due 2013 to 2042	44,049	44,049
2012 Series D Water, 2%, issued		
June 13, 2012, due 2013 to 2032	8,589	8,589
2013 Series B Sewer, 2% to 2 2/5%, issued		
May 22, 2013, due 2014 to 2043	31,947	—
2013 Series B Water, 2%, issued		
May 22, 2013, due 2014 to 2033	8,610	—
	<u>1,076,550</u>	<u>1,086,759</u>
General Revenue Bonds (variable rates):		
1999 Series B, 0.07% to 0.23%, issued		
January 29, 1999, due 2016 to 2028	62,300	62,300
	<u>62,300</u>	<u>62,300</u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

	<u>2013</u>	<u>2012</u>
General Revenue Refunding Bonds (variable rates):		
2002 Series C, 0.03% to 0.22%, issued August 15, 2002, due 2020	\$ 35,120	35,120
2002 Series D, 0.06% to 0.22%, issued August 15, 2002	—	56,450
2008 Series A, 0.06% to 0.24%, issued May 29, 2008, due 2014 to 2037	337,675	337,675
2008 Series B, 0.20% to 0.27%, issued May 29, 2008	—	123,130
2008 Series C, 0.05% to 0.28%, issued May 29, 2008, due 2013 to 2026	117,680	181,700
2008 Series E, 0.05% to 0.23%, issued May 29, 2008, due 2013 to 2037	173,060	210,670
2008 Series F, 0.04% to 0.20%, issued May 29, 2008, due 2018 to 2029	164,755	184,910
2012 Series E, 0.61% to 0.78%, issued November 15, 2012, due 2016 to 2031	62,830	—
2012 Series F, 0.66% to 0.83%, issued November 15, 2012, due 2016 to 2031	60,300	—
2012 Series G, 0.76% to 0.93%, issued November 15, 2012, due 2013 to 2023	57,820	—
	<u>1,009,240</u>	<u>1,129,655</u>
	<u>5,670,815</u>	<u>5,765,629</u>
Less:		
Unamortized bond premiums and discounts	251,237	233,398
Current portion of long-term debt	<u>(129,988)</u>	<u>(103,771)</u>
	<u>121,249</u>	<u>129,627</u>
Long-term debt, net	\$ <u><u>5,792,064</u></u>	<u><u>5,895,256</u></u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

Long-term obligations at June 30, 2013 and 2012 consisted of the following:

	<b>2013 beginning balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>2013 ending balance</b>	<b>Due within one year</b>
General revenue bonds	\$ 1,273,695	—	69,865	1,203,830	19,210
General revenue refunding bonds	3,405,175	351,585	366,325	3,390,435	54,705
General revenue bonds with the Massachusetts Water Pollution Abatement trust	1,119,704	40,648	50,766	1,109,586	56,073
Borrowings associated with derivative instruments	57,392	—	5,798	51,594	—
	<u>\$ 5,855,966</u>	<u>392,233</u>	<u>492,754</u>	<u>5,755,445</u>	<u>129,988</u>
	<b>2012 beginning balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>2012 ending balance</b>	<b>Due within one year</b>
General revenue bonds	\$ 1,593,320	150,000	469,625	1,273,695	6,195
General revenue refunding bonds	3,062,115	413,935	70,875	3,405,175	46,810
General revenue bonds with the Massachusetts water pollution Abatement trust	1,100,358	68,141	48,795	1,119,704	50,766
Borrowings associated with derivative instruments	60,332	—	2,940	57,392	—
	<u>\$ 5,816,125</u>	<u>632,076</u>	<u>592,235</u>	<u>5,855,966</u>	<u>103,771</u>

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, 2013, the Authority had primary and subordinated debt service coverage ratios of 210.3% and 117.7%, 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 2, 2010, the Authority executed Bond Anticipation Notes with the Massachusetts Water Pollution Abatement Trust (MWPAT) for funding under the American Reinvestment and Recovery Act of 2009 (ARRA). The principal on these notes, totaling \$33,036, will be forgiven upon issuance of a Project Completion Certificate and the Authority's compliance with the requirements of ARRA. The Authority has

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

drawn down \$33,036 to date, including \$91 and \$2,836 during fiscal years 2013 and 2012, respectively, which is presented as long-term debt on the Authority's statements of net position.

On March 27, 2013, the Authority issued General Revenue Refunding Bonds, 2013 Series A for \$170,635. The proceeds from the Series A bonds were used to refund \$56,450 of General Revenue Refunding Bonds 2002 Series D, \$11,835 of General Revenue Refunding Bonds 2005 Series A, \$50,010 of General Revenue Bonds 2006 Series A, \$47,005 of General Revenue Refunding Bonds 2006 Series B and \$10,295 of General Revenue Refunding Bonds 2008 Series F.

The interest rate on these bonds is 3% to 5%. The cash flow required to make principal and interest payments on the refunding bonds is approximately \$9,758 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 \$13,107.

On November 12, 2012, the Authority issued direct-purchase General Revenue Refunding Bonds, 2012 Series E, General Revenue Refunding Bonds 2012 Series F and General Revenue Refunding Bonds 2012 Series G for \$62,830, \$60,300 and \$57,820, respectively. The Series E and F bonds replaced the General Revenue Refunding Bonds 2008 Series B in their entirety and the Series G bonds replaced a portion of the General Revenue Refunding Bonds 2008 Series C.

On April 19, 2012, the Authority issued General Revenue Bonds, 2012 Series A and General Revenue Refunding Bonds, 2012 series B, for \$150,000 and \$86,775, respectively. The 2012 Series A bonds were used to fund on-going capital projects and the 2012 Series B bonds were used to refund certain of the Authority's outstanding secured bonds. The interest rate on the 2012 Series A bonds is 2% to 5%.

The proceeds from the Series B bonds were used to refund \$53,355 of General Revenue Bonds 2003 Series D, \$47,120 of General Revenue Bonds 2004 Series A, \$440 of General Revenue Refunding Bonds 2004 Series B and \$2,000 of General Revenue Bonds 2007 Series A. The interest rate on these bonds is 4.25% to 5%. The cash flow required to make principal and interest payments on the refunding bonds is approximately \$15,884 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 \$5,243.

On December 8, 2011, the Authority issued General Revenue Refunding Bonds, 2011 Series C for \$327,160. The proceeds from these bonds were used to refund \$35,455 of General Revenue Refunding Bonds 2002 Series C, \$199,000 of General Revenue Bonds 2002 Series J, \$59,985 of General Revenue Bonds 2003 Series D and \$57,750 of General Revenue Bonds 2004 Series A. The interest rate on these bonds is 3.125% to 5.25%. The cash flow required to make principal and interest payments on the refunding bonds is approximately \$51,355 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 \$25,262.

### ***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

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

agreements, the Authority pays a fixed interest rate (ranging from 3.9% to 6.9%) and receives interest from the swap counterparties at a variable rate (either Securities Industry and Financial Markets Association (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.

<u>Item</u>	<u>Objective</u>	<u>Effective date</u>	<u>Current notional amount</u>	<u>Termination date</u>	<u>Fixed payable swap rate</u>	<u>Variable receivable swap rate</u>	<u>Fair value at June 30, 2013</u>	<u>Fair value at June 30, 2012</u>
A	Hedge changes in cash flows on the 2008 Series A Bonds	April 4, 2011	\$ 133,300	August 1, 2030	4.120%	67% LIBOR	\$ (8,781)	(18,089)
B	Hedge changes in cash flows on the 2008 Series E Bonds	October 28, 2008	133,300	August 1, 2030	4.470	PLUS 0.13% SIFMA	(17,085)	(27,791)
C	Hedge changes in cash flows on the 2008 Series A and E Bond	August 1, 2030	70,400	August 1, 2037	6.585	67% LIBOR	(829)	(2,533)
D	Hedge changes in cash flows on the 2008 Series C Bonds	May 29, 2008	104,995	November 1, 2026	3.994	PLUS 0.13% SIFMA	(11,665)	(16,840)
E	Hedge changes in cash flows on the 2008 Series C and 2012 Series G Bonds	May 29, 2008	70,000	November 1, 2026	4.033	SIFMA	193	(15,228)
F	Hedge changes in cash flows on the 2008 Series A and E Bond	August 15, 2002	145,690	August 1, 2015	4.127	67% LIBOR	(5,700)	(11,900)
						Total	\$ <u>(43,867)</u>	<u>(92,381)</u>

All of the above are pay-fixed interest rate swap agreements. Under these interest rate swap agreements, the Authority incurred net interest expense of \$23,591 and \$25,494 in fiscal 2013 and fiscal 2012, respectively.

For the swap execution on April 4, 2011, with a current notional amount of \$133,300, the fixed rate paid by the Authority is as follows: 4.120% from execution through August 2013, 5.144% from August 2013 through August 2019, and 6.585% from, August 2019 through August 2030.

For the swap execution on October 28, 2008, with a current notional amount of \$133,300, the fixed rate paid by the Authority is as follows: 4.470% from execution through August 2013, 5.494% from August 2013 through August 2019, and 6.935% from August 2019 through August 2030.

The aggregate fair value balance of the derivative instruments at June 30, 2013 and 2012 is \$(43,867) and \$(92,381), respectively, and is reflected on the Authority's statements of net position as a liability for derivative instruments. This liability is offset by deferred outflows from derivative instruments. The original notional amounts of the interest rate swaps totaled \$885,895.

The fair values of the interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

***Risk Disclosure***

Credit Risk – Because all of the Authority’s swaps rely upon the performance of the third parties who serve as swap counterparties, the Authority is exposed to credit risk, or the risk that a swap counterparty fails to perform according to its contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swaps, as shown in the columns labeled Fair Value in the tables above. To mitigate credit risk, the Authority maintains strict credit standards for swap counterparties. The Authority monitors swap counterparties’ credit ratings by the three rating agencies (FitchRatings, Moody’s Investors Service, and Standard and Poor’s). Collateral is may be obtained from any counterparty that does not maintain a set credit rating. Since all derivatives, except Derivative E, are in a liability position, there is no amount exposed to credit risk other than the \$193 associated with Derivative E.

The following represents the credit ratings of the counterparties as of June 30, 2013:

<b>Derivative instrument</b>	<b>Counterparty credit rating</b>
Derivative A	A+
Derivative B	AA-
Derivative C	A+
Derivative D	A
Derivative E	A
Derivative F	A

Basis Risk – The Authority is exposed to basis risk because the floating index the Authority receives on the swaps (SIFMA or 67% of LIBOR) may be different than the basis of the variable rate on the associated bonds. Should this occur, the expected savings may not be realized.

Termination Risk – The Authority or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. If, at the time of termination, a derivative is in a liability position, the Authority would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Rollover Risk – The Authority can be exposed to rollover risk on hedging derivative instruments that are hedges of debt that terminate prior to the maturity of the debt. The Authority currently has no rollover risk. When derivative instruments A and B terminate in 2030, those bond series will then be hedged by derivative instrument C.

***Swap Payments and Associated Bonds Outstanding***

Bonds outstanding include certain variable rate bonds where the Authority pays a fixed interest rate and receives interest at a variable rate from the counterparty. The table below presents the debt service requirements and related net swap payments for these bonds. As rates vary, variable rate interest payments will vary.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

Using rates as of June 30, 2013, debt service requirements of the hedged variable rate bonds and net swap payments, assuming current interest rates remain constant, were as follows:

	<b>Variable-rate</b>		<b>Interest rate</b>	<b>Total</b>
	<b>Principal</b>	<b>Interest</b>	<b>swaps, net</b>	
Fiscal year ending June 30:				
2014	\$ 45,590	714	23,672	69,976
2015	55,200	642	22,007	77,849
2016	57,750	566	17,938	76,254
2017	7,197	551	14,042	21,790
2018	25,003	541	10,950	36,494
2019 – 2023	230,225	1,794	40,535	272,554
2024 – 2028	95,920	723	17,553	114,196
2029 – 2033	5,600	450	12,443	18,493
2034 – 2038	64,800	182	6,580	71,562
<b>Total</b>	<b>\$ 587,285</b>	<b>6,163</b>	<b>165,720</b>	<b>759,168</b>

At June 30, 2013, the following bonds outstanding are considered defeased in-substance:

<b>Description</b>	<b>Redemption date</b>	<b>Redemption price</b>	<b>Outstanding principal amount</b>
1992 Series A	2013 – 2019	100	\$ 277,585
1993 Series C	2013 – 2015	100	44,890
1995 Series B	2013	100	8,505
1997 Series D	2013 – 2014	100	14,210
1998 Series A	2013 – 2014	100	11,190
1998 Series B	2013– 2016	100	14,300
2002 Series J	2013, 2015	100	27,615
2003 Series D	2013	100	147,445
2004 Series A	2013 – 2014	100	119,770
2004 Series B	2014	100	16,305
2005 Series A	2013 – 2014, 2017	100	33,030
2006 Series A	2016 and 2018	100	50,010
2006 Series B	2015 – 2018	100	69,385
2007 Series A	2017	100	2,000
2009 Series A	2014 – c2016	100	11,175
2009 Series B	2014 – 2015	100	5,760
2010 Series A	2015 – 2016	100	2,260
2011 Series B	2014	100	2,665
2012 Series A	2015 – 2016	100	5,325



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

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.

In June 2013, the Authority used funds on hand to defease \$7,180 of the 2009 Series A, \$1,155 of the 2010 Series A and \$5,325 of the 2012 Series A General Revenue bonds outstanding and \$3,120 of the 2009 Series B General Revenue Refunding bonds outstanding.

In June 2012, the Authority used funds on hand to defease \$9,075 of the 2002 Series J, \$1,105 of the 2010 Series A and \$2,665 of the 2011 Series B General Revenue bonds outstanding and \$7,310 of the 1997 Series D and \$19,330 of the 1998 Series B General Revenue Refunding bonds outstanding.

At June 30, 2013, outstanding bonds that are redeemable before their scheduled due dates are as follows:

<b>Description</b>	<b>Redemption date</b>	<b>Redemption price</b>	<b>Outstanding principal amount</b>
2002 Series J	on or after August 1, 2012	100	\$ 1,000
2004 Series B	December 2014	100	48,950
2005 Series A	August 2017	100	273,155
2005 Series B	August 2017	100	80,290
2006 Series A	August 2018	100	14,895
2006 Series A	August 2016	100	135,095
2006 Series B	August 2018	100	76,330
2006 Series B	August 2016	100	138,440
2007 Series A	February 2017	100	198,000
2009 Series A	August 2019	100	76,445
2009 Series B	August 2019	100	181,885
2010 Series A	August 2020	100	92,545
2010 Series B	August 2020	100	114,565
2011 Series B	August 2021	100	120,385
2011 Series C	August 2016	100	6,000
2011 Series C	August 2021	100	291,160
2012 Series A	August 2016	100	6,440
2012 Series A	August 2022	100	120,740
2012 Series B	August 2022	100	86,775
2013 Series A	August 2023	100	46,515

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 2002C and D and on any business day for bond Series 2008A, 2008C through F, and 2012G, respectively. Series 2012E and

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

2012F are subject to redemption prior to maturity on any interest payment date after November 15, 2014 and November 3, 2014, respectively.

During fiscal 2013, the Authority executed loan agreements with the MWPAT providing for 2013 Series B Sewer and Water loans in the principal amounts of \$31,947 and \$8,610 respectively. All proceeds for these loans were received by June 30, 2013.

During fiscal 2012, the Authority executed loan agreements with the MWPAT providing for 2012 Series C Sewer and Water loans in the principal amounts of \$8,053 and \$3,942 respectively and 2012 Series D Sewer and Water loans in the principal amounts of \$44,049 and \$8,589, respectively. All proceeds for these loans were received by June 30, 2012.

Federal and Commonwealth subsidies for purposes of offsetting principal payments aggregating \$74,367 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 and capital appreciation bonds, on which interest is payable upon maturity and the General Revenue Bonds with variable interest rates on which interest is payable monthly. The Senior General Revenue Bonds and the 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. The subordinated debt series, including the commercial paper 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:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Year ending June 30:			
2014	\$ 129,988	238,172	368,160
2015	141,732	234,613	376,345
2016	163,293	228,412	391,705
2017	176,001	222,888	398,889
2018	254,237	213,548	467,785
2019 – 2023	1,412,126	908,994	2,321,120
2024 – 2028	1,343,636	607,260	1,950,896
2029 – 2033	940,802	351,423	1,292,225
2034 – 2038	644,679	178,735	823,414
2039 – 2043	358,301	58,563	416,864
2044 – 2048	106,020	9,275	115,295
Total	\$ <u>5,670,815</u>	<u>3,251,883</u>	<u>8,922,698</u>

The Authority issued commercial paper notes of \$144,000 to finance capital expenditures, which are secured by \$100,000 and \$250,000 irrevocable direct-pay letters of credit which expire on September 8,

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

2015, and November 15, 2015, respectively. These letters of credit carry a fee of 0.65% and 0.30% per annum, respectively, on the amount available. The maximum aggregate principal amount of commercial paper which may be outstanding at any one time is \$350,000.

Commercial paper at June 30, 2013 and 2012 consisted of the following:

	<b>2013 Beginning balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>2013 Ending balance</b>
0.32% commercial paper	\$ 34,000	—	—	34,000
0.35% commercial paper	87,000	—	—	87,000
0.17% commercial paper	—	23,000	—	23,000
0.29% commercial paper	23,000	—	23,000	—
	<u>\$ 144,000</u>	<u>23,000</u>	<u>23,000</u>	<u>144,000</u>
	<b>2012 Beginning balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>2012 Ending balance</b>
0.32% commercial paper	\$ —	34,000	—	34,000
0.35% commercial paper	—	87,000	—	87,000
0.29% commercial paper	—	23,000	—	23,000
0.31% commercial paper	34,000	—	34,000	—
0.40% commercial paper	87,000	—	87,000	—
0.34% commercial paper	23,000	—	23,000	—
	<u>\$ 144,000</u>	<u>144,000</u>	<u>144,000</u>	<u>144,000</u>

**(7) Accounts Receivable/Intergovernmental Loans**

The Authority has entered into various interest-free loan agreements with certain member communities. Under these agreements, the Authority loaned these communities \$52,389 and \$30,404 in fiscal 2013 and 2012, respectively, to be received in five or ten equal annual installments.

The long-term portion of these loans at June 30, 2013 and 2012, is \$126,212 and \$103,591, respectively, and is included in other assets. The loans due within one year total \$29,768 and \$26,263 at June 30, 2013 and 2012, respectively. This program is designed to assist member communities with sewer and water systems rehabilitation.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(8) Capital Assets**

Capital assets at June 30, 2013 and 2012 consisted of the following:

	<u>2012</u>	<u>Additions</u>	<u>Disposals/ transfers</u>	<u>2013</u>
Capital assets – not being depreciated:				
Land	\$ 24,255	—	(522)	23,733
Construction in progress	<u>159,878</u>	<u>96,237</u>	<u>(92,199)</u>	<u>163,916</u>
Total capital assets – not being depreciated	<u>184,133</u>	<u>96,237</u>	<u>(92,721)</u>	<u>187,649</u>
Capital assets – being depreciated:				
Plant and equipment – water and sewage system	8,882,812	91,633	—	8,974,445
Furniture and fixtures	17,136	41	—	17,177
Leasehold improvements	2,423	—	—	2,423
Motor vehicles and equipment	<u>2,339</u>	<u>761</u>	<u>—</u>	<u>3,100</u>
Total capital assets – being depreciated	<u>8,904,710</u>	<u>92,435</u>	<u>—</u>	<u>8,997,145</u>
Less accumulated depreciation for:				
Plant and equipment – water and sewage system	2,837,669	173,918	—	3,011,587
Furniture and fixtures	16,103	324	—	16,427
Leasehold improvements	2,072	12	—	2,084
Motor vehicles and equipment	<u>605</u>	<u>165</u>	<u>—</u>	<u>770</u>
Total accumulated depreciation	<u>2,856,449</u>	<u>174,419</u>	<u>—</u>	<u>3,030,868</u>
Total capital assets – being depreciated – net	<u>6,048,261</u>	<u>(81,984)</u>	<u>—</u>	<u>5,966,277</u>
Capital assets – net	\$ <u><u>6,232,394</u></u>	<u><u>14,253</u></u>	<u><u>(92,721)</u></u>	<u><u>6,153,926</u></u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

Capital assets at June 30, 2012 and 2011 consisted of the following:

	<u>2011</u>	<u>Additions</u>	<u>Disposals/ transfers</u>	<u>2012</u>
Capital assets – not being depreciated:				
Land	\$ 23,497	758	—	24,255
Construction in progress	<u>177,070</u>	<u>127,473</u>	<u>(144,665)</u>	<u>159,878</u>
Total capital assets – not being depreciated	<u>200,567</u>	<u>128,231</u>	<u>(144,665)</u>	<u>184,133</u>
Capital assets – being depreciated:				
Plant and equipment – water and sewage system	8,767,460	143,554	(28,202)	8,882,812
Furniture and fixtures	17,109	27	—	17,136
Leasehold improvements	2,423	—	—	2,423
Motor vehicles and equipment	<u>2,013</u>	<u>326</u>	<u>—</u>	<u>2,339</u>
Total capital assets – being depreciated	<u>8,789,005</u>	<u>143,907</u>	<u>(28,202)</u>	<u>8,904,710</u>
Less accumulated depreciation for:				
Plant and equipment – water and sewage system	2,666,868	175,281	(4,480)	2,837,669
Furniture and fixtures	15,785	318	—	16,103
Leasehold improvements	2,061	11	—	2,072
Motor vehicles and equipment	<u>481</u>	<u>124</u>	<u>—</u>	<u>605</u>
Total accumulated depreciation	<u>2,685,195</u>	<u>175,734</u>	<u>(4,480)</u>	<u>2,856,449</u>
Total capital assets – being depreciated – net	<u>6,103,810</u>	<u>(31,827)</u>	<u>(23,722)</u>	<u>6,048,261</u>
Capital assets – net	<u>\$ 6,304,377</u>	<u>96,404</u>	<u>(168,387)</u>	<u>6,232,394</u>

Depreciation and amortization for fiscal 2013 and 2012 was \$190,852 and \$191,124, respectively.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(9) Leases**

**(a) Operating**

The Authority leases electrical power assets, office space in Boston, and other property under long-term operating leases. Future minimum rental payments required under operating leases having initial or remaining noncancelable lease terms in excess of one year at June 30, 2013 are as follows:

Year ending June 30:		
2014	\$	4,754
2015		5,013
2016		3,795
2017		3,104
2018		3,160
2019 – 2023		14,626
		<hr/>
Total	\$	<u>34,452</u>

Rental expense was \$7,133 and \$7,107 in fiscal years 2013 and 2012, respectively.

**(b) Capital**

In fiscal 2003, the Authority entered into a 30-year capital lease agreement for the new maintenance facility. The interest rate for the capital lease is 7.83%. Future minimum lease payments for the capital lease at June 30, 2013 are as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Year ending June 30:			
2014	\$ 762	2,455	3,217
2015	824	2,393	3,217
2016	891	2,326	3,217
2017	963	2,254	3,217
2018	1,041	2,176	3,217
2019 – 2023	6,619	9,466	16,085
2024 – 2028	9,779	6,307	16,086
2029 – 2033	10,821	1,779	12,600
	<hr/>	<hr/>	<hr/>
Total	\$ <u>31,700</u>	<u>29,156</u>	<u>60,856</u>

Under this lease, the Authority is also responsible for “Additional Rent,” as defined in the lease. The Additional Rent includes real estate taxes, assessments, and other government charges.

The associated capital asset is reported in plant and equipment – water and sewage system at a cost of \$37,134 with \$13,617 of accumulated depreciation as of June 30, 2013.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

### (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. Covered payroll for all Authority employees in the Plan was \$84,429 at the actuarial valuation date, January 1, 2013.

Under the provisions of the Plan, pension benefits vest after 10 years of full-time employment. An employee may retire after 20 years of service or at age 55 and completion of 10 years of service. At age 65, annual pension benefits equal 2.5% of the employee's average regular compensation earned during the last three years of employment or any three consecutive years when compensation was higher, multiplied by each year of creditable service. The benefit is reduced if retirement occurs before age 65 or if survivor's benefits are elected. The Plan also provides death and disability benefits. Ordinary disability benefits are available only to employees under age 55 with at least 10 years of service. Complete financial statements for the Plan can be obtained from the Authority's administrative offices at Charlestown Navy Yard, 100 First Avenue, Boston, MA 02129.

#### (b) *Funding Policy*

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 2013 and 2012 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.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(c) Annual Pension Cost and Net Pension Obligation**

The annual required contribution for the year ended June 30, 2013, determined by the January 1, 2011 actuarial valuation, was as follows:

Annual required contribution	\$	5,750
Contributions made		<u>(5,750)</u>
Increase (decrease) in net pension obligation		—
Net pension obligation, beginning of year		<u>—</u>
Net pension obligation, end of year	\$	<u><u>—</u></u>

**(d) Three-Year Trend Information**

	<u>Annual pension cost (APC)</u>	<u>Percentage of ARC contributed</u>	<u>Net pension asset (obligation)</u>
Fiscal year ending:			
2013	\$ 5,750	100%	\$ —
2012	5,489	100	—
2011	5,343	100	—

**(e) Funded Status and Funding Progress**

As of January 1, 2013, the most recent actuarial valuation date, the funded status of the Plan was as follows:

Actuarial accrued liability	\$	385,296
Actuarial value of assets		<u>341,515</u>
Unfunded actuarial accrued liability (UAAL)	\$	<u>43,781</u>
Funded ratio		88.6%
Covered payroll	\$	84,829
UAAL as percentage of covered payroll		51.6%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits. Effective for the January 1, 2007 actuarial valuation, the Authority changed to the entry age normal actuarial cost method. Prior actuarial valuations were completed using the aggregate cost method.



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(f) Actuarial Methods and Assumptions**

The annual required contribution for the current year was determined as part of the January 1, 2011, actuarial valuation using the entry age normal actuarial cost method. Under this method an unfunded actuarial accrued liability of \$42,190 was calculated. The actuarial assumptions included (a) 8% investment rate of return and (b) projected salary increase of 4.75% per year. Liabilities for cost of living increases have been assumed at an annual increase of 3%, on the first \$12 of benefit payments. The actuarial value of assets is determined by projecting the market value of assets as of the beginning of the prior plan year with the assumed rate of return during that year (8.0%) and accounting for deposits and disbursements with interest at the assumed rate of return. An adjustment is then applied to recognize the difference between the actual investment return and expected return over a five year period. As of January 1, 2011 the unfunded actuarially accrued liability is being amortized over 13 years using an open group method which assumes a 4.5% per year increase in payroll.

**(g) Other Benefits**

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.

**(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. As of January 1, 2012, the actuarial valuation date, approximately 478 retirees and survivors and 1,149 active employees meet the eligibility requirements. The plan does not issue a separate financial report.

**(b) 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.

**(c) Funding Policy**

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

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

determined by the GIC. The Authority contributes the remainder of the health plan costs on a pay-as-you-go basis.

**(d) Annual OPEB Costs and Net OPEB Obligation**

The Authority's fiscal 2013 annual OPEB expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost per year and amortize the unfunded actuarial liability over a period of thirty years. The following table shows the components of the Authority's annual OPEB cost for the year ending June 30, 2013, the amount actually contributed to the plan, and the change in the Authority's net OPEB obligation based on an actuarial valuation as of January 1, 2012:

Annual Required Contribution (ARC)	\$	15,720
Interest on net OPEB obligation		3,203
Adjustment to ARC		<u>(2,879)</u>
Annual OPEB cost		16,044
Contributions made		<u>(2,922)</u>
Increase in net OPEB obligation		13,122
Net OPEB obligation – beginning of year		<u>75,360</u>
Net OPEB obligation – end of year	\$	<u><u>88,482</u></u>

The Authority's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation were as follows:

<u>Fiscal year ended</u>	<u>Annual OPEB cost</u>	<u>Percentage of OPEB cost contributed</u>	<u>Net OPEB obligation</u>
2013	\$ 16,044	18%	\$ 88,482
2012	19,104	21	75,360
2011	17,462	19	60,241

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(e) *Funded Status and Funding Progress***

The funded status of the plan as of January 1, 2010, the date of the most recent actuarial valuation, was as follows:

Actuarial accrued liability (AAL)	\$	197,191
Actuarial value of plan assets		—
		—
Unfunded actuarial accrued liability (UAAL)	\$	197,191
Funded ratio (actuarial value of plan assets/AAL)		—%
Covered payroll (active plan members)	\$	82,679
UAAL as a percentage of covered payroll		238.5%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amount and assumptions about the probability of occurrence of events far into the future. Examples included assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

**(f) *Actuarial Methods and Assumptions***

Projections of benefits for financial reporting purposes are based on the plan as understood by the Authority and the plan members and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the Authority and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the January 1, 2012 actuarial valuation the projected unit credit cost method was used. The actuarial value of assets was not determined as the Authority has not advance funded its obligation. The actuarial assumptions included a 4.25% investment rate of return and an initial annual healthcare cost trend rate of 9.5% which decreases to a 5.5% long-term trend rate for all healthcare benefits after ten years. The amortization costs for the initial UAAL is a level percentage of payroll for a period of 30 years, on a closed basis. This has been calculated assuming the amortization payment increases at a rate of 3.25%.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(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 \$372,230 at June 30, 2013.

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 \$10,137,000 from fiscal 1986 through fiscal 2013, including those projects required to comply with the Federal District Court's schedule. The Authority anticipates spending an additional \$1,910,000 on these projects through fiscal 2023. 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, along with Boston Water and Sewer Commission (BWSC) and the Commonwealth, 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. The only corrective action remaining is CSO related which is currently scheduled for completion in 2015.

In March 2006, the Authority 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. Under the Order, the Authority has until 2020 to complete the remaining CSO work and subsequent monitoring which will be used to verify that the long term CSO control goals are achieved.

As part of the agreement, DEP agreed to reissue and EPA agreed to approve five (5) consecutive variances of no more than three years duration each, through the year 2020, for the Charles River and Alewife Brook/Upper Mystic River that are consistent with and limited to the requirements in the Authority's revised Long Term CSO Control Plan. Variances have most recently been issued by DEP in September and October 2010. The variances will respectively remain in place for the Charles River until October 1, 2013 and for the Alewife/Upper Mystic until September 1, 2013. In addition, the United States and the Authority 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 the Authority to implement the CSO requirements set forth in the Court Schedule and to meet the levels

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

of control described in the Authority's long term CSO control plan. Upon completion of the long term CSO control plan and with results that demonstrate performance parameters are as predicted, the stipulation makes the Authority responsible for only those CSO outfalls which it owns and operates. As a result of the agreement, the Authority now has 35 CSO projects, of which, 31 are complete, two are under construction and two are in the design phase.

December 2015 is the scheduled completion date for the last of the CSO projects. The federal court schedule requires MWRA to commence a three-year performance assessment of the completed projects starting in January 2018 and to submit a report to the Court assessing attainment of the long term control levels by December 2020.

There has been no imposition of penalties by the Court against MWRA 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) ***Deer Island Submarine Power Cable***

In 2004, the United States Army Corps of Engineers (Corps) asserted that Boston Edison Co. (NStar), its subsidiary Harbor Energy Electric Company (HEEC), and the Authority were in violation of a permit (MA BOSS 198900530, dated August 31, 1989) which authorized the installation of a submarine electric power cable. The cable runs under the channel bed of Boston Harbor and extends from South Boston to Deer Island and is used to provide electric power for Deer Island operations. The Corps alleges that the power cable, in places, has been installed at depths less than those required by the permit. The Corps has demanded that the permittees develop plans and an implementation schedule for bringing the cable's depth and location into compliance with the permit. The demand has been made in connection with proposed dredging operations intended to deepen the harbor channel so as to make it navigable by deep-draft vessels. The Authority has responded to the Corps stating that it had become a co-permittee only to facilitate issuance of the permit, that it did not install and has never owned the cable, and therefore, it has neither any right nor financial responsibility, nor the ability, to move or alter the position of the cable. In May 2005, the Department of Justice (DOJ) advised the permittees that the matter had been referred to DOJ by the Corps for the purpose of either commencing a lawsuit to compel the relocation of the cable or negotiating an amicable resolution that would bring the permittees into compliance with the permit's conditions. The Authority has informed the Court in the Boston Harbor Case of its position in its Compliance and Progress report filed on June 15, 2005. The last substantive meeting and communication among the Corps, DOJ and permittees occurred in May, 2011. Discussions involved the potential for use of a so-called "mechanical option" which involves protecting the cable from dredging operations by covering it with concrete mats. The Authority has advised NStar and HEEC that it has no financial responsibility whatsoever for the costs of either protecting or relocating the cable. The Authority is aware that the dredging project is close to clearing environmental review hurdles under the Massachusetts Environmental Policy Act statute and that dredging operations could begin within about three years' time.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2013 and 2012

(Dollars in thousands)

**(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 fully insured on an all risk replacement basis to the extent that losses exceed \$2,500 per occurrence. 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 also maintains public officials' errors and omissions insurance with a limit of \$5,000 per occurrence with a \$1,000 deductible. All insurance policies are renewed on an annual basis.

**REQUIRED SUPPLEMENTARY INFORMATION**

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Schedules of Funding Progress

Required Supplementary Information

June 30, 2013

(Unaudited)

(Dollars in thousands)

**Employees' retirement system**

<b>Actuarial valuation</b>	<b>Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) – (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded ratio (a/b)</b>	<b>Covered payroll (c)</b>	<b>UAAL as a percentage of covered payroll ((b-a)/(c))</b>
January 1, 2013	\$ 341,515	385,296	43,781	88.6%	\$ 84,829	51.6%
January 1, 2011	299,331	341,521	42,190	87.6	82,870	50.9
January 1, 2010	276,270	319,876	43,606	86.4	81,962	53.2
January 1, 2009	222,477	301,652	79,175	73.8	82,314	96.2
January 1, 2008	240,484	278,050	37,566	86.5	78,925	47.6
January 1, 2007	211,716	255,962	44,246	82.7	75,444	58.6

Effective for the January 1, 2007 actuarial valuation, the Authority changed actuarial cost methods. See footnote 10 (e).

**Other postemployment benefits**

<b>Actuarial valuation</b>	<b>Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) – (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded ratio (a/b)</b>	<b>Covered payroll (c)</b>	<b>UAAL as a percentage of covered payroll ((b-a)/(c))</b>
January 1, 2012	\$ —	197,191	197,191	—%	\$ 82,679	238.5%
January 1, 2010	—	192,096	192,096	—	81,372	236.1
January 1, 2008	—	180,833	180,833	—	79,298	228.0
January 1, 2006	—	154,449	154,449	—	72,476	213.1

See accompanying independent auditors' report.



## **SUPPLEMENTAL SCHEDULES**

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Accounts Established by the General Revenue Bond Resolution

Year ended June 30, 2013  
(comparative totals for June 30, 2012)

(Dollars in thousands)

	<u>Construction</u>	<u>Revenue</u>	<u>Debt service</u>	<u>Reserves</u>	<u>Total</u>
Balance – June 30, 2012	\$ 240,904	82,033	486,653	51,072	860,662
Proceeds from:					
Revenue bonds and loans	40,586	—	71,266	—	111,852
Cash received from customers	—	623,872	—	—	623,872
Interest income	373	4,222	(3,809)	(4,260)	(3,474)
Grant receipts	298	—	6,332	—	6,630
Construction payments	(156,937)	—	—	—	(156,937)
Capital lease payments	(709)	—	(2,508)	—	(3,217)
Debt service payment	(2,478)	(20,189)	(409,417)	—	(432,084)
Other commonwealth payments	—	(25,866)	—	—	(25,866)
Interfund transfers	6,757	(359,928)	353,190	(19)	—
Transfers from (to) operating account	989	(231,949)	2,907	—	(228,053)
Balance – June 30, 2013	\$ <u>129,783</u>	<u>72,195</u>	<u>504,614</u>	<u>46,793</u>	<u>753,385</u>
		<u>Sewer</u>	<u>Water</u>	<u>2013 total</u>	<u>2012 total</u>
Restricted cash and investments:					
Construction	\$	96,887	32,896	129,783	240,904
Debt service reserves		149,228	80,667	229,895	235,723
Debt service		162,062	59,579	221,641	197,022
Revenue redemption		5,874	26,700	32,574	33,163
Revenue		12,680	59,515	72,195	82,033
Renewal and replacement reserve		21,028	11,765	32,793	37,072
Insurance		7,000	7,000	14,000	14,000
Community obligation and revenue enhancement		17,560	2,944	20,504	20,745
Total restricted cash and investments	\$	<u>472,319</u>	<u>281,066</u>	<u>753,385</u>	<u>860,662</u>

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Combining Statement of Net Position

June 30, 2013

(Dollars in thousands)

<b>Assets</b>	<b>Sewer</b>	<b>Water</b>	<b>Combined total</b>
Unrestricted current assets:			
Cash and cash equivalents	\$ 28,346	17,615	45,961
Investments	33,839	14,980	48,819
Intergovernmental loans	8,505	21,263	29,768
Accounts receivable	75	536	611
Total unrestricted current assets	<u>70,765</u>	<u>54,394</u>	<u>125,159</u>
Restricted assets:			
Investments	476,452	283,046	759,498
Interest receivable	2,065	1,388	3,453
Total restricted assets	<u>478,517</u>	<u>284,434</u>	<u>762,951</u>
Capital assets:			
Capital assets – not being depreciated	106,687	80,962	187,649
Capital assets – being depreciated – net	3,596,390	2,369,887	5,966,277
Total capital assets	<u>3,703,077</u>	<u>2,450,849</u>	<u>6,153,926</u>
Regulatory assets	648,991	169,689	818,680
Other assets – net	285,330	124,996	410,326
Total assets	<u>5,186,680</u>	<u>3,084,362</u>	<u>8,271,042</u>
<b>Deferred Outflows of Resources</b>			
Deferred outflows from derivative instruments	\$ 39,727	4,140	43,867
Deferred outflows from refunding debt	50,909	36,451	87,360
<b>Liabilities</b>			
Current liabilities:			
Accounts payable and accrued expenses	\$ 45,225	9,624	54,849
Commercial paper notes	92,000	52,000	144,000
Current portion of long-term debt	107,396	22,592	129,988
Total current liabilities	<u>244,621</u>	<u>84,216</u>	<u>328,837</u>
Payable from restricted assets:			
Accounts payable for construction	10,113	6,910	17,023
Accrued interest on bonds payable	55,817	30,146	85,963
Reserves	69,272	32,647	101,919
Total payable from restricted assets	<u>135,202</u>	<u>69,703</u>	<u>204,905</u>
Retainage on construction in progress	2,293	5,780	8,073
Long-term debt – less current portion	3,834,460	2,042,235	5,876,695
Long-term capital leases	21,685	10,015	31,700
Other postemployment benefits	62,561	25,921	88,482
Liability for derivative instruments	39,727	4,140	43,867
Total liabilities	<u>4,340,549</u>	<u>2,242,010</u>	<u>6,582,559</u>
<b>Deferred Inflows of Resources</b>			
Deferred inflows from regulated activities	\$ (5,375)	29,918	24,543
<b>Net Position</b>			
Net investment in capital assets	173,394	581,872	755,266
Restricted	220,065	87,143	307,208
Unrestricted	548,682	184,011	732,693
Total net position	<u>\$ 942,141</u>	<u>853,026</u>	<u>1,795,167</u>
Commitments and contingencies			

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Combining Statement of Net Position

June 30, 2012

(Dollars in thousands)

<b>Assets</b>	<b>Sewer</b>	<b>Water</b>	<b>Combined total</b>
Unrestricted current assets:			
Cash and cash equivalents	\$ 25,995	16,242	42,237
Investments	33,189	14,638	47,827
Intergovernmental loans	7,004	19,259	26,263
Accounts receivable	143	862	1,005
Total unrestricted current assets	<u>66,331</u>	<u>51,001</u>	<u>117,332</u>
Restricted assets:			
Investments	516,991	349,931	866,922
Interest receivable	1,738	1,055	2,793
Total restricted assets	<u>518,729</u>	<u>350,986</u>	<u>869,715</u>
Capital assets:			
Capital assets – not being depreciated	73,851	110,282	184,133
Capital assets – being depreciated – net	3,712,808	2,335,453	6,048,261
Total capital assets	<u>3,786,659</u>	<u>2,445,735</u>	<u>6,232,394</u>
Regulatory assets	649,857	167,191	817,048
Other assets – net	269,551	110,822	380,373
Total assets	<u>5,291,127</u>	<u>3,125,735</u>	<u>8,416,862</u>
<b>Deferred Outflows of Resources</b>			
Deferred outflows from derivative instruments	\$ 84,182	8,199	92,381
Deferred outflows from refunding debt	47,681	36,451	84,132
<b>Liabilities</b>			
Current liabilities:			
Accounts payable and accrued expenses	\$ 42,863	10,234	53,097
Commercial paper notes	92,000	52,000	144,000
Current portion of long-term debt	86,640	17,131	103,771
Total current liabilities	<u>221,503</u>	<u>79,365</u>	<u>300,868</u>
Payable from restricted assets:			
Accounts payable for construction	12,264	5,163	17,427
Accrued interest on bonds payable	55,170	29,188	84,358
Reserves	68,350	32,171	100,521
Total payable from restricted assets	<u>135,784</u>	<u>66,522</u>	<u>202,306</u>
Retainage on construction in progress	5,900	4,478	10,378
Long-term debt – less current portion	3,925,822	2,072,383	5,998,205
Long-term capital leases	22,129	10,275	32,404
Other postemployment benefits	53,507	21,853	75,360
Liability for derivative instruments	84,182	8,199	92,381
Total liabilities	<u>4,448,827</u>	<u>2,263,075</u>	<u>6,711,902</u>
<b>Deferred Inflows of Resources</b>			
Deferred inflows from regulated activities	\$ 9,947	38,279	48,226
<b>Net Position</b>			
Net investment in capital assets	247,657	598,332	845,989
Restricted	204,801	88,572	293,373
Unrestricted	511,758	182,127	693,885
Total net position	<u>\$ 964,216</u>	<u>869,031</u>	<u>1,833,247</u>
Commitments and contingencies			

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Combining Statement of Revenues, Expenses, and Changes in Net Position

Year ended June 30, 2013

(Dollars in thousands)

	<u>Sewer</u>	<u>Water</u>	<u>Combined total</u>
Operating revenues:			
Customer services	\$ 413,841	203,574	617,415
Other	4,340	1,638	5,978
Total operating revenues	<u>418,181</u>	<u>205,212</u>	<u>623,393</u>
Operating expenses:			
Operations	62,413	39,012	101,425
Maintenance	20,125	6,831	26,956
Payments in lieu of taxes	—	7,640	7,640
Engineering, general, and administrative	85,987	45,342	131,329
Total operating expenses	<u>168,525</u>	<u>98,825</u>	<u>267,350</u>
Income from operations before depreciation	249,656	106,387	356,043
Depreciation	<u>137,421</u>	<u>53,431</u>	<u>190,852</u>
Operating income	<u>112,235</u>	<u>52,956</u>	<u>165,191</u>
Regulatory accounting provisions:			
Change in reserves	(922)	(476)	(1,398)
Change in regulatory provisions, net	14,456	10,859	25,315
Total regulatory accounting provisions	<u>13,534</u>	<u>10,383</u>	<u>23,917</u>
Nonoperating income (expense):			
Investment income	(1,605)	(1,474)	(3,079)
Interest expense	(156,404)	(80,133)	(236,537)
Changes in derivative related accounts	4,987	811	5,798
Total nonoperating expense	<u>(153,022)</u>	<u>(80,796)</u>	<u>(233,818)</u>
Net loss before capital grants	(27,253)	(17,457)	(44,710)
Capital grants	5,178	1,452	6,630
Decrease in net position	(22,075)	(16,005)	(38,080)
Total net position – beginning of year	<u>964,216</u>	<u>869,031</u>	<u>1,833,247</u>
Total net position – end of year	<u>\$ 942,141</u>	<u>853,026</u>	<u>1,795,167</u>

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Combining Statement of Revenues, Expenses, and Changes in Net Position

Year ended June 30, 2012

(Dollars in thousands)

	<u>Sewer</u>	<u>Water</u>	<u>Combined total</u>
Operating revenues:			
Customer services	\$ 408,339	191,033	599,372
Other	2,213	1,035	3,248
Total operating revenues	<u>410,552</u>	<u>192,068</u>	<u>602,620</u>
Operating expenses:			
Operations	61,212	38,590	99,802
Maintenance	20,065	6,711	26,776
Payments in lieu of taxes	—	7,311	7,311
Engineering, general, and administrative	83,894	43,727	127,621
Total operating expenses	<u>165,171</u>	<u>96,339</u>	<u>261,510</u>
Income from operations before depreciation	245,381	95,729	341,110
Depreciation	<u>133,543</u>	<u>57,581</u>	<u>191,124</u>
Operating income	<u>111,838</u>	<u>38,148</u>	<u>149,986</u>
Regulatory accounting provisions:			
Change in reserves	141	(336)	(195)
Change in regulatory provisions, net	39,188	18,236	57,424
Total regulatory accounting provisions	<u>39,329</u>	<u>17,900</u>	<u>57,229</u>
Nonoperating income (expense):			
Debt service grant	353	31	384
Investment income	13,396	7,506	20,902
Interest expense	(194,483)	(86,340)	(280,823)
Changes in derivative related accounts	2,528	412	2,940
Total nonoperating expense	<u>(178,206)</u>	<u>(78,391)</u>	<u>(256,597)</u>
Net loss before capital grants	(27,039)	(22,343)	(49,382)
Capital grants	6,329	1,367	7,696
Decrease in net position	(20,710)	(20,976)	(41,686)
Total net position – beginning of year	<u>984,926</u>	<u>890,007</u>	<u>1,874,933</u>
Total net position – end of year	\$ <u>964,216</u>	<u>869,031</u>	<u>1,833,247</u>

See accompanying independent auditors' report.