

Financial Statements and Supplemental Schedules and Required Supplementary Information

June 30, 2015 and 2014

(With Independent Auditors' Report Thereon)

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#### **KPMG LLP**

Two Financial Center 60 South Street Boston, MA 02111

## **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, 2015 and 2014, 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.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority at June 30, 2015 and 2014, and the changes in net position and cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



#### **Emphasis of Matter**

As discussed in Note 2a to the financial statements, the Authority adopted Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions*. Our opinion is not modified with respect to this matter.

#### **Other Matters**

#### Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3 through 11 and schedules of funding progress, schedules of employer contributions and schedules of changes in net pension liability and related ratios on pages 53 through 55 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 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 26, 2015 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.



Boston, Massachusetts August 26, 2015

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(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, 2015 and 2014. Please read it in conjunction with the Authority's financial statements, which immediately follow this section.

## Financial Highlights – Fiscal Year 2015

The Fiscal Year 2015 customer service revenues were approximately \$661.3 million. Of this amount, rate revenues represent approximately 98.3%, or \$650.3 million, and were \$21.6 million higher than Fiscal Year 2014. This was due to an increase in assessments.

Total operating expenses, excluding depreciation, were approximately \$263.4 million in Fiscal Year 2015. The 3.7% decrease in total operating expenses over Fiscal Year 2014 is the result of a decrease in utility and maintenance costs.

Net nonoperating expenses decreased \$8.1 million, or 3.6%, due to a \$10.5 million increase in investment income offset by a \$1.6 million increase in interest expense and no debt service assistance. The increase in investment income was primarily due to an increase in the unrealized gain on investments. Lower long-term interest rates have caused the market values of investments to increase.

Total assets at June 30, 2015 were approximately \$7.9 billion, a \$166.3 million, or 2.0%, decrease over total assets at June 30, 2014.

During Fiscal Year 2015, the Authority issued General Revenue Bonds 2014 Series D and General Revenue Refunding Bonds, 2014 Series E and 2014 Series F for a total of \$243.9 million. The proceeds from these bonds were used to finance new capital projects and refund \$194.6 million of the Authority's outstanding bonds. The interest rate on these bonds was 4% to 5% during Fiscal Year 2015.

Total capital assets (net of depreciation) were approximately \$5.9 billion at June 30, 2015, a \$137.8 million, or 2.3%, decrease over June 30, 2014. The decrease was primarily due to the rate of depreciation being higher than the rate of capitalization.

## Financial Highlights – Fiscal Year 2014

The Fiscal Year 2014 customer service revenues were approximately \$639.7 million. Of this amount, rate revenues represent approximately 98.3%, or \$628.7 million, and were \$21.2 million higher than Fiscal Year 2013. This was due to an increase in assessments.

Total operating expenses, excluding depreciation, were approximately \$273.5 million in Fiscal Year 2014. The 2.3% increase in total operating expenses over Fiscal Year 2013 is the result of increases in personnel costs, maintenance and pension costs. Pension expense increased as an additional, optional \$5 million contribution was made in Fiscal Year 2014, as well as a \$1.6 million payment that reflects recognition of the projected increases associated with revised mortality tables.

Net nonoperating expenses decreased \$14.3 million, or 6.0%, due to an \$8.5 million increase in investment income, a \$5 million decrease in interest expense and receipt of \$0.8 million of debt service assistance. The increase in

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

investment income was due to a changing portfolio of investments, yielding a smaller unrealized loss on investments.

Total assets at June 30, 2014 were approximately \$8.1 billion, a \$155.3 million, or 1.9%, decrease over total assets at June 30, 2013.

During Fiscal Year 2014, the Authority issued direct-purchase General Revenue Refunding Bonds, 2014 Series A and 2014 Series B for a total of \$114.8 million. The proceeds from these bonds were used to refund \$114.8 million of the Authority's outstanding bonds. The interest rate on these bonds was 0.44% to 0.59% during Fiscal Year 2014.

Total capital assets (net of depreciation) were approximately \$6.1 billion at June 30, 2014, a \$80.8 million, or 1.3%, decrease over June 30, 2013. The decrease was primarily due to the rate of depreciation being higher than the rate of capitalization.

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

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

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

### **Financial Analysis of the Authority**

#### Net Position

The Authority's total net position at June 30, 2015 was approximately \$1.7 billion, a \$44.8 million decrease from June 30, 2014. Total assets decreased \$166.3 million, or 2.0%, to \$7.9 billion, and total liabilities decreased \$167.0 million, or 2.6%, to \$6.3 billion.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

The Authority's total net position at June 30, 2014 was approximately \$1.8 billion, a \$38.8 million decrease from June 30, 2013. Total assets decreased \$155.3 million, or 1.9%, to \$8.1 billion, and total liabilities decreased \$115.7 million, or 1.8%, to \$6.5 billion.

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

	2015	2014	2013	Percentage change 2015–2014	Percentage change 2014–2013
Current assets	\$ 130,438	126,567	125,159	3.1%	1.1%
Restricted assets	675,664	718,750	762,951	(6.0)	(5.8)
Capital assets	5,935,338	6,073,139	6,153,926	(2.3)	(1.3)
Other assets	1,208,077	1,197,311	1,229,006	0.9	(2.6)
Total assets	7,949,517	8,115,767	8,271,042	(2.0)	(1.9)
Deferred outflows of resources from					
pension	14,601	_	_	100.0	_
Deferred outflows of resources from					
derivative instruments	44,183	40,977	43,867	7.8	(6.6)
Deferred outflows of resources from					
refunded debt	73,204	73,617	87,360	(0.6)	(15.7)
Current liabilities	356,568	371,594	328,837	(4.0)	13.0
Payable from restricted assets	159,064	217,707	204,905	(26.9)	6.2
Long-term debt	5,601,104	5,697,812	5,876,695	(1.7)	(3.0)
Long-term lease	30,114	30,938	31,700	(2.7)	(2.4)
Other liabilities	153,028	148,803	140,422	2.8	6.0
Total liabilities	6,299,878	6,466,854	6,582,559	(2.6)	(1.8)
Deferred inflows of resources from pension	6,983	_	_	100.0	_
Deferred inflows of resources from					
regulated activities	63,051	7,092	24,543	789.0	(71.1)
Net position:					
Net investment in capital assets	788,429	774,390	755,266	1.8	2.5
Restricted	290,362	271,424	307,208	7.0	(11.6)
Unrestricted	\$ 632,802	710,601	732,693	(10.9)	(3.0)
Total net position	1,711,593	1,756,415	1,795,167	(2.6)%	(2.2)%

### **Changes in Net Position**

The decrease in net position at June 30, 2015 was \$44.8 million, or 2.6%, as compared with June 30, 2014. The Authority's total operating revenues increased by 3.2% to \$668.6 million and total operating expenses decreased 3.7% to \$263.4 million.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

The decrease in net position at June 30, 2014 was \$38.8 million, or 2.2%, as compared with June 30, 2013. The Authority's total operating revenues increased by 3.9% to \$648 million and total operating expenses increased 2.3% to \$273.5 million.

# Changes in Net Position (Dollars in thousands)

		2015	2014	2013	Percentage change 2015–2014	Percentage change 2014–2013
Operating revenues:						
Customer service revenues	\$	661,305	639,691	617,415	3.4%	3.6%
Other revenues	_	7,299	8,326	5,978	(12.3)	39.3
Total operating revenues		668,604	648,017	623,393	3.2	3.9
Operating expenses:						
Operations		102,322	100,778	101,425	1.5	(0.6)
Maintenance		28,323	29,453	26,956	(3.8)	9.3
Payments in lieu of taxes		7,966	7,872	7,640	1.2	3.0
Engineering, general, and administrative	_	124,792	135,401	131,329	(7.8)	3.1
Total operating expenses		263,403	273,504	267,350	(3.7)	2.3
Depreciation and amortization		194,000	193,062	190,852	0.5	1.2
Operating income		211,201	181,451	165,191	16.4	9.8
Nonoperating items:						
Regulatory accounting provisions		(41,634)	(3,808)	23,917	993.3	(115.9)
Net nonoperating expenses		(217,218)	(225,293)	(239,616)	(3.6)	(6.0)
Capital grants and contributions		6,429	5,958	6,630	7.9	(10.1)
Changes in derivative related accounts		2,940	2,940	5,798		(49.3)
Total nonoperating items		(249,483)	(220,203)	(203,271)	13.3	8.3
Change in net position		(38,282)	(38,752)	(38,080)	(1.2)	1.8
Total net position – beginning of year		1,756,415	1,795,167	1,833,247	(2.2)	(2.1)
Restatement to comply with GASB 68		(6,540)			100.0	
Total net position – end of year	\$	1,711,593	1,756,415	1,795,167	(2.6)%	(2.2)%

During Fiscal Year 2015, the increases in customer service revenues were primarily due to the 3.43% increase in the rate revenue requirement (\$21.6 million).

During Fiscal Year 2014, the increases in customer service revenues were primarily due to the 3.49% increase in the rate revenue requirement (\$21.2 million).

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

Total operating costs, before depreciation and amortization, were approximately \$263.4 million in Fiscal Year 2015. The 3.7% decrease in total operating expenses over Fiscal Year 2014 is the result of a decrease in utility and maintenance costs.

Total operating costs, before depreciation and amortization, were approximately \$273.5 million in Fiscal Year 2014. The 2.3% increase in total operating expenses over Fiscal Year 2013 is the result of increases in personnel costs, maintenance and pension costs. Pension expense increased as an additional, optional \$5 million contribution, as well as a \$1.6 million payment that reflects recognition of the projected increases associated with revised mortality tables were made in Fiscal Year 2014.

In Fiscal Year 2015, net nonoperating expenses decreased \$8.1 million, or 3.6%, due to due to a \$10.5 million increase in investment income offset by a \$1.6 million increase in interest expense and no debt service assistance. The increase in investment income was primarily due to an increase in the unrealized gain on investments. Lower long-term interest rates have caused the market values of investments to increase.

In Fiscal Year 2014, net nonoperating expenses decreased \$14.3 million, or 6.0%, due to an \$8.5 million increase in investment income, a \$5 million decrease in interest expense and receipt of \$0.8 million of debt service assistance. The increase in investment income was due to a changing portfolio of investments, yielding a smaller unrealized loss on investments.

# Operating Costs by Functionality (Dollars in thousands)

		2015	2014	2013	Percentage change 2015–2014	Percentage change 2014–2013
Wastewater treatment and transport	\$	93,870	94,703	96,255	(0.9)%	(1.6)%
Water treatment and transport		35,545	35,395	34,702	0.4	2.0
Water and wastewater quality		8,041	7,731	7,430	4.0	4.1
Metering and monitoring		6,662	6,094	5,845	9.3	4.3
Facilities planning, design, and construction		9,504	9,318	9,337	2.0	(0.2)
Management information systems		10,162	10,325	9,115	(1.6)	13.3
Administration and support	_	48,625	47,997	45,923	1.3	4.5
Total direct operating costs		212,409	211,563	208,607	0.4	1.4
Indirect operating costs		50,994	61,941	58,743	(17.7)	5.4
Total operating costs	\$	263,403	273,504	267,350	(3.7)%	2.3%

All functional areas experienced increased spending due to contractual salary increases. Wastewater and water treatment and transmission cost increases were offset by decreases in chemical and utility costs. In addition, metering and monitoring expenses increased due to increased maintenance and telephone costs. Management information systems costs decreased due to a reduction in purchases of computer hardware. Administration and support expenses increased due to higher health insurance and workers' compensation expenses.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

## Other Post-Employment Benefits (OPEB) Irrevocable Trust

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

An initial deposit of \$10.8 million was made to the trust upon establishment of the trust.

# **Capital Assets and Debt Administration**

#### Capital Assets

As of June 30, 2015 and 2014, the Authority had \$5.9 billion and \$6.1 billion of capital assets (net of depreciation), respectively. 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 \$137.8 million, or 2.3%, during Fiscal Year 2015, primarily due to the rate of depreciation being higher than the rate of capitalization.

Capital Assets (Net of depreciation, dollars in thousands)

	_	2015	2014	2013	Percentage change 2015–2014	Percentage change 2014–2013
Land	\$	23,750	23,741	23,733	%	%
Construction in progress		205,582	193,180	163,916	6.4	17.9
Plant and equipment, water, and sewer						
systems		5,701,134	5,852,085	5,962,858	(2.6)	(1.9)
Furniture and fixtures		503	425	750	18.4	(43.3)
Leasehold improvements		315	327	339	(3.7)	(3.5)
Motor vehicles and equipment	_	4,054	3,381	2,330	19.9	45.1
	\$	5,935,338	6,073,139	6,153,926	(2.3)%	(1.3)%

#### 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.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

#### **Bond Resolutions**

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

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

In April 2015, the Authority released \$46.3 million in reserves as authorized under a 2007 amendment to the General Bond Resolution. Of the \$46.3 million, \$25 million came from the Renewal and Replacement reserve and the balance from the Community Obligation and Revenue Enhancement reserve. The \$46.3 million was deployed to defease debt of \$36.3 million, and \$10 million was deposited into the MWRA Other Post-Employment Benefits (OPEB) Irrevocable Trust. The 2007 amendment also included new calculations for determining the Debt Service Reserve Fund requirement. At June 30, 2015 these new calculations resulted in an excess in the Debt Service Reserve of \$67.1 million, which will be used to defease debt in Fiscal Year 2016.

The 2007 General Bond Resolution amendment was accomplished as a result of the Authority's history of meeting its debt service obligations and the completion of major projects. The Authority continues to have over \$275 million in reserves after this activity.

## Credit Rating

The Authority's \$3.4 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 \$963 million 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 \$1.0 billion with the Massachusetts Clean Water Trust is not rated as the Authority's debt.

## Economic Factors and Next Year's Budget

In June 2015, the Board approved the Fiscal Year 2016 Current Expense Budget (CEB), which totals \$702.5 million in expenses.

The \$702.5 million expense total is comprised of \$432.7 million (61.6%) in capital financing costs and \$269.8 million (38.4%) in operating expenses, of which \$222.8 million (82.6%) is for direct expenses and \$47.0 million (17.4%) is for indirect expenses. The total represents an increase of \$34.2 million from Fiscal Year

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

2015 spending, which is comprised of \$10.7 million in higher operating costs and \$23.5 million in higher debt service costs.

The Fiscal Year 2016 rate revenue requirement approved by the Board is \$672.5 million; an increase of 3.4% compared with the Fiscal Year 2015 budget.

Fiscal Year 2016 budgeted nonrate revenue totals \$30.0 million, an increase of \$2.7 million from actual Fiscal Year 2015 nonrate revenue. The nonrate revenue budget is comprised of \$9.4 million in investment income, \$19.8 million in other user charges and other revenue and \$.8 million in entrance fees.

### CIP 10 Year Plan

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

Major planned and ongoing projects include:

- 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.
- 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 and promotion of improved self-generation.
- Enhanced 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.

Management's Discussion and Analysis – Required Supplementary Information

June 30, 2015 and 2014

(Unaudited)

## **Contacting the Authority's Financial Management**

This report is designed to provide our bondholders, member communities and other interested parties with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the revenue it receives. If you have questions about this report or need additional information, contact the Massachusetts Water Resources Authority, Finance Division, 100 First Avenue, Boston, MA 02129.

Statements of Net Position
June 30, 2015 and 2014
(Dollars in thousands)

Assets	2015	2014
Unrestricted current assets: Cash and cash equivalents (note 4) Investments (note 4) Intergovernmental loans (note 7) Accounts receivable	\$ 41,451 58,031 30,587 369	57,488 37,769 30,304 1,006
Total unrestricted current assets	130,438	126,567
Restricted assets: Investments (note 4) Interest receivable	673,198 2,466	716,208 2,542
Total restricted assets	675,664	718,750
Capital assets: Capital assets – not being depreciated (note 8) Capital assets – being depreciated – net (note 8)	229,332 5,706,006	216,921 5,856,218
Total capital assets	5,935,338	6,073,139
Regulatory assets (note 3)	767,283	797,591
Other assets, net (notes 7 and 10)	440,794	399,720
Total assets	7,949,517	8,115,767
Deferred Outflows of Resources  Deferred outflows from pension (note 10)  Deferred outflows from derivative instruments (note 6)  Deferred outflows from refunding debt	14,601 44,183 73,204	
Liabilities		
Current liabilities: Accounts payable and accrued expenses Commercial paper notes (note 6) Current portion of long-term debt (note 6)	59,320 130,000 167,248	59,434 170,000 142,160
Total current liabilities	356,568	371,594
Payable from restricted assets: Accounts payable for construction Accrued interest on bonds payable Reserves (note 5)	16,060 85,548 57,456	28,635 86,983 102,089
Total payable from restricted assets	159,064	217,707
Retainage on construction in progress  Long-term debt – less current portion (note 6)  Long-term capital lease (note 9)  Other postemployment benefits (note 11)  Liability for derivative instruments (note 6)	8,248 5,601,104 30,114 100,597 44,183	5,823 5,697,812 30,938 102,003 40,977
Total liabilities	6,299,878	6,466,854
Deferred Inflows of Resources		
Deferred inflows from pension (note 10) Deferred inflows from regulated activities (note 3)	6,983 63,051	7,092
Net Position Net investment in capital assets Restricted	788,429 290,362	774,390 271,424
Unrestricted	632,802	710,601
Total net position	\$1,711,593	1,756,415
Commitments and contingencies (notes 9, 10, 11, 12, and 13)		

See accompanying notes to financial statements.

Statements of Revenues, Expenses, and Changes in Net Position

# Years ended June 30, 2015 and 2014

(Dollars in thousands)

		2015	2014
Operating revenues (note 2): Customer services Other	\$	661,305 7,299	639,691 8,326
Total operating revenues		668,604	648,017
Operating expenses: Operations Maintenance Payments in lieu of taxes Engineering, general, and administrative	_	102,322 28,323 7,966 124,792	100,778 29,453 7,872 135,401
Total operating expenses		263,403	273,504
Income from operations before depreciation		405,201	374,513
Depreciation and amortization		194,000	193,062
Operating income		211,201	181,451
Regulatory accounting provisions: Change in reserves (note 5) Change in regulatory provisions, net (note 3)		44,633 (86,267)	(170) (3,638)
Total regulatory accounting provisions		(41,634)	(3,808)
Nonoperating revenues (expenses): Debt service grant Investment income Interest expense Changes in derivative related accounts		15,949 (233,167) 2,940	854 5,433 (231,580) 2,940
Total nonoperating expenses		(214,278)	(222,353)
Net loss before capital contributions		(44,711)	(44,710)
Capital grants and contributions		6,429	5,958
Decrease in net position		(38,282)	(38,752)
Total net position, beginning of year		1,756,415	1,795,167
Restatement to comply with GASB Statement No. 68 (note 2a)		(6,540)	
Total net position, end of year	\$	1,711,593	1,756,415

See accompanying notes to financial statements.

## Statements of Cash Flows

## Years ended June 30, 2015 and 2014

#### (Dollars in thousands)

		2015	2014
Cash flows from operating activities: Cash received from customers Cash paid to suppliers for goods and services Cash paid to employees for services Cash paid in lieu of taxes Other operating receipts	\$	661,941 (125,248) (138,669) (7,966) 6,271	639,306 (119,056) (128,816) (7,872) 8,286
Net cash provided by operating activities		396,329	391,848
Cash flows from capital and related financing activities: Proceeds from sale of revenue bonds, loans, and notes Capital grants for construction Debt service grant Capital lease principal payments Capital lease interest payments Repayment of debt Interest paid on debt Plant expenditures		113,915 6,429 — (829) (2,388) (232,024) (221,871) (114,369)	151,146 5,958 854 (762) (2,455) (274,415) (228,522) (92,808)
Net cash used for capital and related financing activities		(451,137)	(441,004)
Cash flows from investing activities: Purchases of short-term investments Sales and maturities of short-term investments Changes in restricted money market investments Interest received		(2,070) 21,200 9,880 9,761	(3,936) 72,050 (20,011) 12,580
Net cash provided by investing activities		38,771	60,683
Net (decrease) increase in cash and cash equivalents		(16,037)	11,527
Cash and cash equivalents, beginning of year		57,488	45,961
Cash and cash equivalents, end of year	\$	41,451	57,488
Reconciliation of operating income to net cash provided by operating activities:  Operating income  Adjustments to reconcile operating income to net cash provided by operating activities:	\$	211,201	181,451
Depreciation and amortization Change in other accounts Change in accounts payable	_	194,000 (322) (8,550)	193,062 (431) 17,766
Net cash provided by operating activities	\$	396,329	391,848

Noncash capital and related financing activities:

In fiscal 2015, general revenue refunding bonds in the aggregate principal amount of \$170,800 were issued to defease \$194,615 of bonds outstanding.

In fiscal 2014, general revenue refunding bonds in the aggregate principal amount of \$114,755 were issued to defease \$114,755 of bonds outstanding.

See accompanying notes to financial statements.

Notes to Financial Statements
June 30, 2015 and 2014
(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. 68, *Accounting and Financial Reporting for Pensions*. This Statement requires that the net pension liability (asset) be reflected on the Statements of Net Position, as well as deferred inflows and outflows from pension activities. The Authority's 2015 Statement of Net Position reflects a net pension asset due to the fair value of pension assets at the

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

measurement date exceeding pension liability. In accordance with the Statement, the Authority has restated Net Position as of July 1, 2014. Restating the prior year was not practical.

In April, 2015, the Authority established the MWRA Other Post-Employment Benefits (OPEB) Irrevocable Trust. The Trust was established for the sole purpose of providing for the advance funding of future costs of retired employee health insurance and other benefits provided to retirees. In no event shall any part of the principal or income of the Trust be paid or revert back to the Authority or be used for any purpose whatsoever other than for the exclusive benefit of retirees and their beneficiaries.

## (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 Years 2015 and 2014, 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.

Notes to Financial Statements
June 30, 2015 and 2014
(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:

	Years
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 gains of \$6,252 in Fiscal Year 2015 and unrealized losses of \$6,699 in Fiscal Year 2014 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

Notes to Financial Statements
June 30, 2015 and 2014
(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) Pensions

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

## (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).

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

A summary of the activity of regulatory assets and deferred inflows for Fiscal Years 2015 and 2014 is as follows:

	 Sewer	Water	Total
Balance – June 30, 2013 – net	\$ 654,366	139,771	794,137
Difference between depreciation of capital assets not financed by grants or capital contributions, and debt service in excess of interest expense	(21,060)	(29)	(21,089)
Other – net	 15,922	1,529	17,451
Balance – June 30, 2014 – net Difference between depreciation of capital assets not financed by grants or capital contributions, and debt service in excess	649,228	141,271	790,499
of interest expense Other – net	 (25,504) (45,130)	(4,804) (10,829)	(30,308) (55,959)
Balance – June 30, 2015 – net	\$ 578,594	125,638	704,232

The net balance at June 30, 2015 and 2014 is presented on the statements of net position as follows:

	_	2015	2014	Current year change
Regulatory assets Deferred inflows from regulatory activities	\$	767,283 (63,051)	797,591 (7,092)	(30,308) (55,959)
Net change	\$	704,232	790,499	(86,267)

The balance in the rate stabilization reserve was \$36,512 at June 30, 2015 and 2014, respectively.

### (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, 2015 and 2014 were \$41,993 and \$58,008, respectively. Of these amounts, \$41,743 and \$57,758 were exposed to custodial credit risks as uninsured and uncollateralized.

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

#### (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, 2015 and 2014, respectively. Such contracts are fully collateralized and recorded at cost:

Investment agreement provider	Rate	Maturity	_	2015	2014
Wells Fargo Bank, N.A.	5.17%	August 1, 2016	\$	14,456	14,456
Total			\$	14,456	14,456

## (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, 2015 and 2014, except for the following investment with the Federal Farm Credit Bureau (FFCB):

	<b>June 30, 2015 June 3</b>				30, 2014
			% of		
Investment	Fair Value	Investments	_	Fair Value	<b>Investments</b>
2.97% FFBC U.S. Security	\$ 46,681	6.4	\$	45,378	6.0

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

## (e) Interest Rate Risk

The following is a listing of the Authority's fixed income investments and related maturity schedule as of June 30, 2015 and 2014:

June 30, 2015 Investment maturities (in years)

Investment type	 Fair value	<1	1–3	4–8	>9
Money market mutual funds U.S. agency obligations	\$ 469,289 247,484	469,289		38,817	208,667
Guaranteed investment contract	14,456		14,456		
Total	\$ 731,229	469,289	14,456	38,817	208,667

June 30, 2014 Investment maturities (in years)

Investment type		Fair value	<1	1–3	4-8	>9
Money market mutual funds	\$	479,170	479,170	_	_	_
U.S. agency obligations		260,351	_	_	43,497	216,854
Guaranteed investment contract		14.456		14.456	_	_
	Φ.	,	470.170		42.407	216.054
Total	\$ =	753,977	479,170	14,456	43,497	216,854

The Authority's bond resolution limits maturities to less than 15 years. The majority of the Authority's investments are held in short-term money market funds and long-term investments in U.S. agency obligations that are held in the debt service reserve funds where the intent is to hold until maturity.

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

#### (f) Restricted Investments by Fund

The following summarizes restricted investments as of June 30, 2015 and 2014 by various funds and accounts established by the Authority for debt covenants and other purposes:

	 2015	2014
Restricted investments:		
Construction	\$ 72,375	80,109
Debt service reserves	215,749	224,484
Debt service	256,852	232,143
Revenue redemption	25,025	32,716
Revenue	74,618	74,128
Renewal and replacement reserve	8,466	32,182
Insurance	14,000	14,000
Community obligation and revenue enhancement		20,447
OPEB Reserve		807
Insurance related escrow deposits	 6,113	5,192
Total restricted investments	\$ 673,198	716,208

### (5) Bond Resolution Reserves

The components of the reserves required by the general and supplemental bond resolutions at June 30, 2015 and 2014 are as follows:

Reserves	 Sewer	Water	2015 Total	2014 Total
Renewal and replacement Insurance	\$ 2,544 7,000	1,457 7,000	4,001 14,000	29,001 14,000
Operating Community obligation and	26,536	12,919	39,455	38,972
revenue enhancement	 			20,116
Total	\$ 36,080	21,376	57,456	102,089

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, 2015 and 2014.

In April, 2015, the Authority released \$46,300 in reserves as authorized under a 2007 amendment to the General Bond Resolution. Of the \$46,300, \$25,000 came from the Renewal and Replacement reserve and the balance from the Community Obligation and Revenue Enhancement reserve.

During 2015, modifications to the Resolution included new calculations for determining the debt service reserve fund balance. The new calculation now requires the reserve fund level to be at least 50% of the maximum annual debt service or \$150,000 at June 30, 2015. The amount deposited in the reserve fund at June 30, 2015 was \$215,749 of which \$67,100 is to be used to defease outstanding debt in Fiscal Year 2016.

Notes to Financial Statements June 30, 2015 and 2014

(Dollars in thousands)

# (6) Notes Payable and Long-Term Debt

Long-term debt at June 30, 2015 and 2014 consisted of the following:

Long-term debt at June 30, 2015 and 2014 consisted of the following:	2015	2014
General Revenue Bonds:		
1993 Series C, 5 1/4%, issued December 2, 1993, due 2015 \$ 2002 Series J, 5% to 5 1/2%, issued December 18, 2002,	10,065	19,625
due 2016 to 2042	282,030	297,300
2006 Series A, 4%, issued March 16, 2006,		
due 2042 to 2046	62,320	149,990
2007 Series A, 4 3/8% to 5%, issued February 1, 2007,	100.000	100.000
due 2023 to 2046	198,000	198,000
2009 Series A, 5%, issued February 19, 2009, due 2029 to 2039	64,240	76,445
2010 Series A, 4% to 5%, issued May 6, 2010,	04,240	70,443
due 2020 to 2040	85,150	96,530
2011 Series B, 2% to 5%, issued May 19, 2011,	00,100	, 0,000
due 2015 to 2041	134,785	140,140
2012 Series A, 3% to 5%, issued April 19, 2012,		
due 2018 to 2042	132,620	139,365
2014 Series D, 5%, issued November 19, 2014,		
due 2015 to 2044	70,665	
-	1,039,875	1,117,395
General Revenue Refunding Bonds:		
2004 Series B, 5%, issued September 29, 2004		38,405
2005 Series A, 5% to 5 1/4%, issued April 14, 2005,	207.050	244.020
due 2015 to 2034	307,050	344,830
2005 Series B, 5%, issued April 14, 2005, due 2031 to 2035 2006 Series B, 4% to 5%, issued March 16, 2006,	80,290	80,290
due 2016 to 2040	172,575	216,935
2007 Series B, 5 1/4%, issued February 1, 2007,	172,373	210,933
due 2023 to 2038	647,950	647,950
2009 Series B, 3 3/8% to 5%, issued February 19, 2009,	017,550	017,550
due 2016 to 2039	268,115	271,030
2010 Series B, 5%, issued May 6, 2010, due 2015 to 2032	165,235	173,835
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,	160.025	1.00.025
due 2016 to 2036	169,825	169,835
2014 Series E, 5%, issued November 19, 2014, due 2016 to 2020	28,245	
2014 Series F, 4% to 5%, issued November 19, 2014,	20,243	
due 2020 to 2041	141,525	_
•	2,394,745	2,357,045
•	_,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

# Notes to Financial Statements

# June 30, 2015 and 2014

	 2015	2014
General Revenue Bonds with the Massachusetts		
Clean Water Trust:		
1993 Series D, 5 1/4%, issued		
January 6, 1994	\$ 	315
1995 Series A, 5%%, issued		
November 21, 1995, due 2015	340	665
1998 Series C, 4 3/4% to 5 3/8%, issued		
July 9, 1998, due 2015 to 2018	2,035	2,800
1999 Series E Sewer, 4 3/4% to 5 3/8%, issued		
October 6, 1999, due 2015 to 2029	6,649	6,984
1999 Series E Water, 4 3/4% to 5 3/8%, issued		
October 6, 1999, due 2015 to 2019	3,760	4,440
1999 Series F, 5 3/4% to 6%, issued		
November 3, 1999, due 2015 to 2029	232,560	248,850
2000 Series E Sewer, 5 1/5% to 5 5/8%, issued		
November 1, 2000, due 2015 to 2030	50,478	52,615
2000 Series E Water, 5 1/5% to 5 5/8%, issued	4 = 0 =	~ 400
November 1, 2000, due 2015 to 2020	4,705	5,400
2001 Series C Water, 5% to 5 1/4%, issued	• • • •	2.220
July 26, 2001, due 2016 to 2021	2,030	2,330
2001 Series D Sewer, 5 1/4% to 5 3/4%, issued	2.002	2.420
July 26, 2001, due 2015 to 2029	2,983	3,438
2001 Series D Water, 5 1/4% to 5 3/4%, issued	520	<b>62</b> 0
July 26, 2001, due 2015 to 2019	532	628
2002 Series H Sewer, 5% to 5 1/4%, issued	<i>(5.27</i> 0)	(7.025
October 31, 2002, due 2015 to 2032	65,370	67,935
2002 Series H Water, 5% to 5 1/4%, issued October 31, 2002, due 2015 to 2022	15,845	17,530
2002 Series I Sewer, 5 1/5% to 5 5/8%, issued	13,643	17,550
October 31, 2002, due 2015 to 2030	1,807	1,890
2002 Series I Water, 5 1/5% to 5 5/8%, issued	1,007	1,090
October 31, 2002, due 2015 to 2020	12	14
2003 Series A Water, 5%, issued	12	14
October 31, 2002, due 2015 to 2022	728	806
2003 Series B Water, 5% to 5 1/4%, issued	720	000
July 24, 2003, due 2016 to 2021	1,834	2,106
2003 Series C Sewer, 4% to 5 1/2%, issued	1,05	2,100
November 6, 2003, due 2015 to 2033	23,798	24,664
2003 Series C Water, 3 3/4% to 5 1/2%, issued	- ,	
November 6, 2003, due 2015 to 2023	11,240	12,285
, ,	,	, -

# Notes to Financial Statements

# June 30, 2015 and 2014

		2015	2014
2004 Series C Sewer, 4% to 5 1/2%, issued			
October 26, 2004, due 2015 to 2033	\$	8,076	8,373
2004 Series C Water, 5%, issued	т	2,0.0	5,2
October 26, 2004, due 2015 to 2022		758	867
2004 Series D Sewer, 4 1/2% to 5 1/4%, issued			
November 29, 2004, due 2015 to 2034		43,115	45,591
2004 Series D Water, 5% to 5 1/4%, issued			
November 29, 2004, due 2015 to 2024		7,925	8,544
2005 Series C Sewer, 4% to 5 1/2%, issued			
November 3, 2005, due 2015 to 2033		5,245	5,502
2005 Series C Water, 4% to 5 1/2%, issued			
November 3, 2005, due 2015 to 2023		588	642
2005 Series D Sewer, 2% to 2 3/10%, issued			
November 16, 2005, due 2015 to 2035		49,509	51,631
2005 Series D Water, 0% to 2%, issued			
November 16, 2005, due 2015 to 2025		8,412	9,152
2005 Series E Sewer, 2%, issued		2.42	2.52
November 16, 2005, due 2015 to 2025		243	263
2005 Series E Water, 2%, issued		~ ~	<b>5</b> 0
November 16, 2005, due 2015 to 2025		55	59
2006 Series C Sewer, 5% to 5 1/4%, issued		6.540	6.026
October 26, 2006, due 2015 to 2034		6,543	6,836
2006 Series D Sewer, 2% to 2 3/10%, issued		10 501	£1.050
December 14, 2006, due 2015 to 2036 2006 Series D Water, 0% to 2%, issued		48,584	51,058
November 16, 2006, due 2015 to 2026		18,333	19,808
2006 Series E Sewer, 2%, issued		10,333	19,000
December 14, 2006, due 2015 to 2026		243	260
2006 Series E Water, 2%, issued		243	200
December 14, 2006, due 2015 to 2026		108	116
2007 Series C Sewer, 2% to 2 3/10%, issued		100	110
November 9, 2007, due 2015 to 2035		3,043	3,279
2007 Series C Water, 2%, issued		3,013	3,219
November 9, 2007, due 2015 to 2025		1,683	1,833
2007 Series D Sewer, 2 3/10%, issued		1,000	1,000
November 9, 2007, due 2015 to 2036		19,218	19,882
2007 Series E Sewer, 2% to 2 2/5%, issued		- , -	- ,
December 18, 2007, due 2015 to 2037		47,817	49,807
2007 Series E Water, 2%, issued			•
December 18, 2007, due 2015 to 2027		13,891	14,818

# Notes to Financial Statements

# June 30, 2015 and 2014

	 2015	2014
2008 Series G Sewer, 2%, issued		
December 9, 2008, due 2015 to 2026	\$ 4,062	4,374
2008 Series G Water, 2%, issued	,	,
December 9, 2008, due 2015 to 2026	852	914
2009 Series C Sewer, 2% to 2 2/5%, issued		
March 18, 2009, due 2015 to 2038	68,865	72,808
2009 Series C Water, 2%, issued		
March 18, 2009, due 2015 to 2028	22,484	23,862
2009 Series D Sewer, 2% to 2 2/5%, issued		
December 15, 2009, due 2015 to 2037	8,960	9,386
2009 Series D Water, 2%, issued		
December 15, 2009, due 2015 to 2027	958	1,022
2010 Series D Sewer, 2% to 2 2/5%, issued		
July 8, 2010, due 2015 to 2040	23,124	23,954
2010 Series D Water, 2%, issued		
July 8, 2010, due 2015 to 2030	19,179	20,186
2011 Series A Sewer, 2% to 2 2/5%, issued	4.0.4.4	~ <b>~</b> ~
March 15, 2011, due 2015 to 2038	4,944	5,204
2011 Series A Water, 2%, issued	4.250	4.600
March 15, 2011, due 2015 to 2028	4,350	4,622
2012 Series C Sewer, 2% to 2 2/5%, issued	6.076	7.240
June 6, 2012, due 2015 to 2040	6,976	7,342
2012 Series C Water, 2%, issued	2 421	2.500
June 6, 2012, due 2015 to 2030 2012 Series D Sewer, 2% to 2 2/5%, issued	3,421	3,599
June 13, 2012, due 2015 to 2042	40,367	42,229
2012 Series D Water, 2%, issued	40,307	42,229
June 13, 2012, due 2015 to 2032	7,886	8,241
2013 Series B Sewer, 2% to 2 2/5%, issued	7,000	0,211
May 22, 2013, due 2016 to 2043	28,972	30,476
2013 Series B Water, 2%, issued	20,772	20,170
May 22, 2013, due 2016 to 2033	7,906	8,262
2014 Series C Sewer, 2% to 2 2/5%, issued	. ,	-, -
May 30, 2014, due 2015 to 2042	4,743	4,911
2014 Series C Water, 2%, issued	•	
May 30, 2014, due 2015 to 2032	5,499	5,760

# Notes to Financial Statements

# June 30, 2015 and 2014

	_	2015	2014
2015 Series A Sewer, 2% to 2 2/5%, issued January 7, 2015, due 2016 to 2045 2015 Series A Water, 2%, issued	_	47,933	_
January 7, 2015, due 2016 to 2035		15,807	_
2015 Series B Sewer, 2% to 2 2/5%, issued May 14, 2015, due 2015 to 2043 2015 Series B Water, 2%, issued		3,388	_
May 14, 2015, due 2015 to 2033	_	2,193	
	_	1,042,964	1,031,168
General Revenue Bonds (variable rates): 1999 Series B, 0.02% to 0.12%, issued		59,600	<b>5</b> 9.600
January 29, 1999, due 2017 to 2028	-	58,600	58,600
	-	58,600	58,600
General Revenue Refunding Bonds (variable rates): 2002 Series C, 0.01% to 0.12%, issued			
August 15, 2002, due 2020	\$	35,120	35,120
2008 Series A, 0.02% to 0.13%, issued May 29, 2008, due 2015 to 2037		285,725	334,345
2008 Series C, 0.01% to 0.11%, issued May 29, 2008, due 2015 to 2026 2008 Series E, 0.02% to 0.14%, issued May 29, 2008,		109,820	113,840
due 2020 to 2037		133,640	133,640
2008 Series F, 0.01% to 0.11%, issued May 29, 2008, due 2025 to 2029 2012 Series E, 0.02% to 0.11%, issued November 15, 2012,		50,000	50,000
due 2016 to 2031		62,830	62,830
2012 Series F, 0.02% to 0.11%, issued November 15, 2012, due 2016 to 2031		60,300	60,300
2012 Series G, 0.02% to 0.11%, issued November 15, 2012, due 2015 to 2023		52,580	55,260
2014 Series A, 0.11% to 0.13%, issued May 20, 2014, due 2022 to 2025		50,000	50,000
2014 Series B, 0.11% to 0.13%, issued May 20, 2014, due 2018 to 2022		64,755	64,755
	-	904,770	960,090
	-	5,440,954	5,524,298
	-	· · · ·	<del></del>

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	2015	2014
Less:		
Unamortized bond premiums and discounts	248,648	233,984
Current portion of long-term debt	(167,248)	(142,160)
	81,400	91,824
Long-term debt, net	\$ 5,522,354	5,616,122

Long-term obligations at June 30, 2015 and 2014 consisted of the following:

		2015 beginning balance	Additions	Reductions	2015 ending balance	Due within one year
General revenue bonds	\$	1,175,995	73,105	150,625	1,098,475	13,890
General revenue refunding bonds		3,317,135	170,800	188,420	3,299,515	93,225
General revenue bonds with the						
Massachusetts Clean Water Trust		1,064,204	69,321	57,525	1,076,000	60,133
Borrowings associated with						
derivative instruments	_	48,654		2,940	45,714	
	\$	5,605,988	313,226	399,510	5,519,704	167,248

	_	2014 beginning balance	Additions	Reductions	2014 ending balance	Due within one year
General revenue bonds	\$	1,203,830		27,835	1,175,995	20,715
General revenue refunding bonds General revenue bonds with the		3,390,435	114,755	188,055	3,317,135	63,920
Massachusetts Clean Water Trust Borrowings associated with		1,109,586	10,695	56,077	1,064,204	57,525
derivative instruments		51,594		2,940	48,654	
	\$	5,755,445	125,450	274,907	5,605,988	142,160

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, 2015, the Authority had primary and subordinated debt service coverage ratios of 212% and 120%, 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.

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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 Clean Water Trust (formerly the Massachusetts Water Pollution Abatement Trust) 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 drawn down \$33,036 to date, which is presented as long-term debt on the Authority's statements of net position. In July 2015, the Massachusetts Clean Water Trust cancelled \$27,550 of these notes, as all ARRA requirements were met. The remaining \$5,486 is expected to be closed out in Fiscal Year 2016.

On November 19, 2014, the Authority issued General Revenue Bonds, 2014 Series D for \$73,105 and General Revenue Refunding Bonds, 2014 Series E and 2014 Series F for \$28,245 and \$142,555, respectively.

The proceeds from the Series D bonds were used to finance new construction projects and to pay a portion of outstanding commercial paper notes.

The proceeds from the Series E bonds were used to refund \$38,405 of General Revenue Refunding Bonds 2004 Series B. The proceeds from the Series F bonds were used to refund \$6,080 of General Revenue Refunding Bonds 2005 Series A, \$87,670 of General Revenue Bonds 2006 Series A, \$41,470 of General Revenue Refunding Bonds 2006 Series B, \$12,205 of General Revenue Bonds 2009 Series A and \$8,785 of General Revenue Bonds 2010 Series A.

The interest rate on these bonds is 4% to 5%. The cash flow required to make principal and interest payments on the refunding bonds is approximately \$56,425 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 \$20,169.

On May 20, 2014, the Authority issued direct-purchase General Revenue Refunding Bonds, 2014 Series A and General Revenue Refunding Bonds 2014 Series B for \$50,000 and \$64,755, respectively. The Series A and B bonds refunded a portion of the General Revenue Refunding Bonds 2008 Series F.

The variable interest rate on these bonds will be based on 70% of LIBOR set on the first business day of each month. The monthly payment will be a combination of this variable interest and a fixed component of 34 basis points for 2014 Series A and 48 basis points for 2014 Series B.

## Synthetic Fixed Rate Swap Transactions

In connection with several of its bond issues, the Authority has entered into various interest rate swap agreements to reduce the impact of changes in interest rates on its variable rate debt. Under these agreements, the Authority pays a fixed interest rate (ranging from 4.0% to 6.6%) and receives interest from the swap counterparties at a variable rate (either Securities Industry and Financial Markets Association (SIFMA) rate

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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.

Item	Objective	Effective date	Current notional amount	Termination date	Fixed payable swap rate	Variable receivable swap rate	Fair value at June 30, 2015	Fair value at June 30, 2014
A	Hedge changes in cash flows on the 2008 Series A Bonds	April 4, 2011	\$ 133,300	August 1, 2030	5.144%	67% LIBOR \$ PLUS 0.13%	(10,676)	(9,467)
В	Hedge changes in cash flows on the 2008 Series E Bonds	October 28, 2008	133,300	August 1, 2030	5.494	SIFMA	(20,492)	(17,485)
С	Hedge changes in cash flows on the 2008 Series A and 2008 Series E Bonds	August 1, 2030	70,400	August 1, 2037	6.585	67% LIBOR PLUS 0.13%	(1,896)	(1,079)
D	Hedge changes in cash flows on the 2008 Series C Bonds	May 29, 2008	97,135	November 1, 2026	3.994	SIFMA	(10,366)	(10,709)
Е	Hedge changes in cash flows on the 2008 Series C and 2012 Series G Bonds	May 29, 2008	64,760	November 1, 2026	4.033	SIFMA	(577)	(185)
F	Hedge changes in cash flows on the 2008 Series A Bonds	August 15, 2002	50,710	August 1, 2015	4.127	67% LIBOR Total \$	(176)	(2,052)

All of the above are pay-fixed interest rate swap agreements. Under these interest rate swap agreements, the Authority incurred net interest expense of \$22,334 and \$24,364 in Fiscal Year 2015 and Fiscal Year 2014, respectively.

For the swap effective 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, 2015 and 2014 is \$(44,183) and \$(40,977), 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.

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#### 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 may be obtained from any counterparty that does not maintain a set credit rating. Since all derivatives are in a liability position, there is no amount exposed to credit risk.

The following represents the credit ratings of the counterparties as of June 30, 2015:

<b>Derivative instrument</b>	Counterparty credit rating
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.

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Using rates as of June 30, 2015, debt service requirements of the hedged variable rate bonds and net swap payments, assuming current interest rates remain constant, were as follows:

		Variab	ole-rate	Interest rate	
		Principal	Interest	swaps, net	Total
Fiscal year ending June 30:					
2016	\$	57,710	214	20,566	78,490
2017		7,197	209	17,714	25,120
2018		25,003	206	14,941	40,150
2019		26,000	195	12,599	38,794
2020		27,000	168	12,685	39,853
2021–2025		201,000	480	40,590	242,070
2026–2030		64,895	207	17,364	82,466
2031–2035		28,900	150	13,277	42,327
2036–2038	_	41,500	22	2,775	44,297
Total	\$	479,205	1,851	152,511	633,567

#### **Demand Bonds**

Included in variable rate long-term debt of \$963,370 is \$672,905 of subordinated variable rate demand obligations (VRDOs). The bonds were issued on various dates from 1999 through 2008. Subordinated VRDOs are subject to purchase on the demand of the holder at a price equal to principal plus accrued interest. The ability of the Authority to purchase such bonds, if not remarketed, is secured through letters of credit and standby bond purchase agreements with various nationally recognized financial institutions that expire between December 2015 and May 2018. The VRDOs are classified as long-term debt because the liquidity agreement for each series contains term out provisions that, if demand is made to repurchase the bonds, calls for a three to five year amortization to repay the bonds.

In 2014, \$114,755 of 2014 Series A and B General Revenue Refunding Bonds were issued as direct-purchase bonds, to be held by the purchaser for a specific period of time and are not subject to purchase or remarketing at the demand of the holder and therefore do not require a letter of credit or standby bond purchase agreement. The \$50,000 of Series A and \$64,775 of Series B have been purchased through April 2017 and April 2019, respectively. These bonds, in addition to 2012 Series E, F & G General Revenue Refunding Bonds, totaling \$175,710, have three to five year term out provisions beginning at the expiration date.

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At June 30, 2015, the following bonds outstanding are considered defeased in-substance:

Description	Redemption date	Redemption price	 Outstanding principal amount
1992 Series A	2015–2019	100	\$ 201,850
1993 Series C	2015	100	15,740
1998 Series B	2015–2016	100	13,410
2002 Series J	2015, 2017	100	15,725
2005 Series A	2017	100	49,615
2006 Series A	2016, 2018	100	137,680
2006 Series B	2015–2018	100	113,745
2007 Series A	2017	100	2,000
2009 Series A	2015–2016, 2019	100	19,385
2009 Series B	2015, 2017	100	6,035
2010 Series A	2015-2020	100	14,850
2010 Series B	2017	100	9,735
2011 Series B	2017-2018, 2020	100	7,460
2012 Series A	2015–2017, 2020	100	12,360
2013 Series A	2017-2018	100	810
2014 Series D	2017–2018	100	2,440
2014 Series F	2018	100	1,030

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 2015, the Authority used funds on hand to defease \$2,595 of the 2010 Series A, \$2,395 of the 2011 Series B, \$1,000 of the 2012 Series A and \$2,440 of the 2014 Series D General Revenue bonds outstanding and \$12,250 of the 2005 Series A, \$2,890 of the 2006 Series B, \$2,915 of the 2009 Series B, \$10 of the 2013 Series A and \$1,030 of the 2014 Series F General Revenue Refunding bonds outstanding.

In April 2015, the Authority used funds on hand to defease \$6,650 of the 2002 Series J, \$2,960 of the 2011 Series B and \$3,210 of the 2012 Series A General Revenue bonds outstanding and \$19,450 of the 2005 Series A General Revenue Refunding bonds outstanding.

In June 2014, the Authority used funds on hand to defease \$1,210 of the 2010 Series A, \$2,105 of the 2011 Series B and \$2,825 of the 2012 Series A General Revenue bonds outstanding and \$10,545 of the 2004 Series B and \$9,735 of the 2010 Series B and \$800 of the 2013 Series A General Revenue Refunding bonds outstanding.

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At June 30, 2015, outstanding bonds that are redeemable before their scheduled due dates are as follows:

<b>Description</b>	Redemption date	Redemption price	_ ,	Outstanding principal amount
2002 Series J	on or after			
	August 1, 2012	100	\$	1,000
2005 Series A	August 2017	100		240,625
2005 Series B	August 2017	100		80,290
2006 Series A	August 2016	100		62,320
2006 Series B	August 2018	100		33,080
2006 Series B	August 2016	100		138,440
2007 Series A	February 2017	100		198,000
2009 Series A	August 2019	100		64,240
2009 Series B	August 2019	100		181,885
2010 Series A	August 2020	100		83,760
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
2014 Series D	August 2024	100		59,485
2014 Series F	August 2024	100		93,655

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 on any business day for bond Series 2008A, 2008C through F, 2012G, 2014A and 2014B, respectively. Series 2012E and 2012F are subject to redemption prior to maturity on any interest payment date after November 15, 2014 and November 3, 2014, respectively.

During Fiscal Year 2015, the Authority executed loan agreements with the Massachusetts Clean Water Trust providing for 2015 Series A Sewer and Water loans in the principal amounts of \$47,933 and \$15,807, respectively and 2015 Series B Sewer and Water loans in the principal amounts of \$3,388 and \$2,193, respectively. All proceeds for these loans were received by June 30, 2015.

During Fiscal Year 2014, the Authority executed loan agreements with the Massachusetts Clean Water Trust providing for 2014 Series C Sewer and Water loans in the principal amounts of \$4,911 and \$5,760, respectively. All proceeds for these loans were received by June 30, 2014.

Federal and Commonwealth subsidies for purposes of offsetting principal payments aggregating \$47,847 will be recognized as capital grants in aid of construction over the term of the loans.

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

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

	 Principal	Interest	Total
Year ending June 30:			
2016	\$ 167,248	227,793	395,041
2017	179,366	222,170	401,536
2018	213,195	213,823	427,018
2019	216,200	232,675	448,875
2020	248,050	197,728	445,778
2021–2025	1,479,768	805,992	2,285,760
2026–2030	1,261,835	507,210	1,769,045
2031–2035	800,440	285,109	1,085,549
2036–2040	567,499	128,419	695,918
2041–2045	252,083	34,608	286,691
2046–2050	 55,270	2,380	57,650
Total	\$ 5,440,954	2,857,907	8,298,861

The Authority issued commercial paper notes of \$130,000 to finance capital expenditures, which are secured by \$100,000 and \$250,000 irrevocable direct-pay letters of credit which expire on September 8, 2015, and November 30, 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.

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Commercial paper at June 30, 2015 and 2014 consisted of the following:

	2015 Beginning balance	Additions	Reductions	2015 Ending balance
0.15% commercial paper \$		34,000		34,000
0.33% commercial paper		47,000		47,000
0.11% commercial paper	_	49,000	_	49,000
0.21% commercial paper	34,000		34,000	
0.31% commercial paper	87,000	_	87,000	
0.17% commercial paper	49,000		49,000	
\$ =	170,000	130,000	170,000	130,000

	_	2014 Beginning balance	Additions	Reductions	2014 Ending balance
0.21% commercial paper	\$		34,000		34,000
0.31% commercial paper			87,000		87,000
0.17% commercial paper		_	49,000	_	49,000
0.32% commercial paper		34,000		34,000	
0.35% commercial paper		87,000		87,000	
0.17% commercial paper	_	23,000		23,000	
	\$	144,000	170,000	144,000	170,000

#### (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 \$30,094 and \$29,531 in Fiscal Year 2015 and 2014, respectively, to be received in five or ten equal annual installments.

The long-term portion of these loans at June 30, 2015 and 2014, is \$124,946 and \$125,439, respectively, and is included in other assets. The loans due within one year total \$30,587 and \$30,304 at June 30, 2015 and 2014, respectively. This program is designed to assist member communities with sewer and water systems rehabilitation.

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# (8) Capital Assets

Capital assets at June 30, 2015 and 2014 consisted of the following:

				Disposals/	
	_	2014	Additions	transfers	2015
Capital assets – not being depreciated:					
Land	\$	23,741	9	_	23,750
Construction in progress	_	193,180	39,186	(26,784)	205,582
Total capital assets –					
not being depreciated	_	216,921	39,195	(26,784)	229,332
Capital assets – being depreciated: Plant and equipment – water					
and sewage system		9,039,342	25,423	_	9,064,765
Furniture and fixtures		17,177	331	_	17,508
Leasehold improvements		2,423	_	_	2,423
Motor vehicles and equipment	_	4,430	1,022		5,452
Total capital assets –					
being depreciated	_	9,063,372	26,776		9,090,148
Less accumulated depreciation for:					
Plant and equipment – water and					
sewage system		3,187,257	176,374	_	3,363,631
Furniture and fixtures		16,752	253	_	17,005
Leasehold improvements		2,096	12	_	2,108
Motor vehicles and equipment	_	1,049	349		1,398
Total accumulated					
depreciation	_	3,207,154	176,988		3,384,142
Total capital assets – being depreciated –					
net	_	5,856,218	(150,212)		5,706,006
Capital assets – net	\$_	6,073,139	(111,017)	(26,784)	5,935,338

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Capital assets at June 30, 2014 and 2013 consisted of the following:

		2013	Additions	Disposals/ transfers	2014
Capital assets – not being depreciated:					
Land	\$	23,733	8	_	23,741
Construction in progress	_	163,916	95,499	(66,235)	193,180
Total capital assets –					
not being depreciated		187,649	95,507	(66,235)	216,921
Capital assets – being depreciated: Plant and equipment – water					
and sewage system		8,974,445	64,897	_	9,039,342
Furniture and fixtures		17,177	´ —	_	17,177
Leasehold improvements		2,423	_	_	2,423
Motor vehicles and equipment		3,100	1,330	_	4,430
Total capital assets –					
being depreciated	_	8,997,145	66,227		9,063,372
Less accumulated depreciation for: Plant and equipment – water and					
sewage system		3,011,587	175,670	_	3,187,257
Furniture and fixtures		16,427	325	_	16,752
Leasehold improvements		2,084	12	_	2,096
Motor vehicles and equipment		770	279	_	1,049
Total accumulated					
depreciation	_	3,030,868	176,286	<u> </u>	3,207,154
Total capital assets – being depreciated –					
net	_	5,966,277	(110,059)		5,856,218
Capital assets – net	\$	6,153,926	(14,552)	(66,235)	6,073,139

Depreciation and amortization for Fiscal Years 2015 and 2014 was \$194,000 and \$193,062, respectively.

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#### (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 non-cancelable lease terms in excess of one year at June 30, 2015 are as follows:

Year ending June 30:	
2016	\$ 3,452
2017	2,389
2018	3,180
2019	3,214
2020	3,192
2021–2023	 8,204
Total	\$ 23,631

Rental expense was \$6,268 and \$6,970 in Fiscal Years 2015 and 2014, respectively.

#### (b) Capital

In Fiscal Year 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, 2015 are as follows:

	_	Principal	Interest	Total
Year ending June 30:				
2016	\$	891	2,326	3,217
2017		963	2,254	3,217
2018		1,041	2,176	3,217
2019		1,126	2,091	3,217
2020–2024		7,156	8,929	16,085
2025–2029		10,572	5,513	16,085
2030–2034		8,365	1,019	9,384
Total	\$	30,114	24,308	54,422

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 \$16,093 of accumulated depreciation as of June 30, 2015.

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#### (10) Retirement Benefits under GASB 68

#### (a) Plan Description

The Enabling Act provided for the establishment of the Massachusetts Water Resources Authority Employees' Retirement System (the Plan), a contributory single-employer retirement system that is separate from the State Employees Retirement System. The Plan is a defined benefit pension plan covering those employees not employed by the MDC prior to July 1, 1985. Complete financial statements for the Plan can be obtained from the Authority's administrative offices at Charlestown Navy Yard, 100 First Avenue, Boston, MA 02129.

#### (b) Benefits Provided

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

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

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

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

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

#### (c) Employees covered by benefit terms

At December 31, 2014, the date of the Plan's latest actuarial valuation, the following employees were covered by the benefit terms:

Retired participants and beneficiaries receiving benefits	476
Inactive participants entitled to a return of their employee contributions	47
Inactive participants with a vested right to a deferred or immediate benefit	48
Active participants	1,090
	1,661

#### (d) Contributions

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

The Authority's 2015 and 2014 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.

# (e) Net Pension Liability (Asset)

The Plan's net pension liability (asset) was measured as of December 31, 2014, and the total pension liability (asset) used to calculate the net pension liability (asset) was determined by an actuarial valuation as of that date.

Notes to Financial Statements
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(Dollars in thousands)

Actuarial assumptions. The total pension liability (asset) in the December 31, 2014 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation 4%

Salary increases

Based on years of service, starting at 6% at 0 years of service decreasing to 4.25% after 9 years of service

Investment rate of return 7.75%

Cost of living adjustments 3% of first \$12,000

Mortality rates:

Pre-retirement: RP-2000 Employee Mortality Table projected

generationally from 2005 with Scale AA

Healthy retiree: RP-2000 Healthy Annuitant Mortality Table projected

generationally from 2005 with Scale AA

RP-2000 Healthy Annuitant Mortality Table set

Disabled retiree: forward two years projected generationally from 2005

with Scale AA

Notes to Financial Statements
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(Dollars in thousands)

Rates of returns on investments: The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of December 31, 2014 are summarized as follows:

Asset Class	Target Allocation (%)	Long-Term Expected Rate of Return (%)
Domestic Bonds	25	4.25
Domestic Equity	18	6.4
International Equity	17	7.07 - 9.26
Real Estate	6	4.3
Private Equity	9	11.26
Hedge Funds	9	3.44 - 3.77
Fixed Income	16	1.53 - 4.25
Cash	0 100	0.96

(f) Discount rate. The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and that the Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

#### (g) Changes in the Net Pension Liability (Asset)

	Increase (Decrease)					
	•	Total Pension Liability		Plan Fiduciary Net Position	Net Pension Liability (Asset)	
	-	(a)		(b)		(a) - (b)
Balances at 6/30/2014	\$	415,793	\$	416,351	\$	(558)
Changes for the year						
Service cost		10,529				10,529
Interest		33,587		_		33,587
Differences between expected						
and actual experience		(8,380)		_		(8,380)
Contributions - employer				12,630		(12,630)
Contributions - employee				8,245		(8,245)
Net investment income				20,484		(20,484)
Benefit payments		(12,963)		(12,963)		
Administrative expenses				(408)		408
Other changes	_	4,921	_	16		4,905
Net changes	-	27,694		28,004		(310)
Balances at 6/30/2015	\$	443,487	\$	444,355	\$	(868)

(h) Sensitivity of the net pension liability (asset) to changes in the discount rate. The following presents the net pension liability (asset), calculated using the discount rate of 7.75%, as well as what the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.75%) or 1-percentage-point higher (8,75%) than the current rate:

	1% Decrease (6.75%)	Discount (7.75%)	1% Increase (8.75%)	
Net Pension Liability (Asset) as of June 30, 2015	\$56,442	(\$868)	(\$49,555)	

(i) Pension expense and deferred outflows of resources and deferred inflows of resources related to pensions. For the year ended June 30, 2015, the Authority recognized pension expense of \$4,719 and reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

	Deferred Outflow of Resources		Deferred Inflow of Resources	
Differences between expected and actual experience	\$	-	\$ 6,983	
Changes of assumptions		4,101	-	
Net difference between projected and actual earnings on pension plan investments		10,500	-	
	\$	14,601	\$ 6,983	

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

2016	\$ 2,048
2017	2,048
2018	2,049
2019	2,049
2020	(576)

#### **Retirement Benefits under GASB 27**

#### (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 \$84,829 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

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

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 2014 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.

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

The annual required contribution for the year ended June 30, 2014, determined by the January 1, 2011 actuarial valuation, was as follows:

Annual required contribution Contributions made	\$	5,903 (5,903)
Increase (decrease) in net pension obligation		_
Net pension obligation, beginning of year	_	
Net pension obligation, end of year	\$_	

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

	_	Annual pension cost (APC)	Percentage of ARC contributed	Net pension asset (obligation)
Fiscal year ending:				
2014	\$	5,903	100% \$	
2013		5,750	100	
2012		5,489	100	_

Notes to Financial Statements
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(Dollars in thousands)

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

As of January 1, 2013, the funded status of the Plan was as follows:

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

#### (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.

#### (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, 2014, the actuarial valuation date, approximately 529 retirees and survivors and 1,088 active employees meet the eligibility requirements. The plan does not issue a separate financial report.

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

In April, 2015, the Authority established the MWRA Other Post-Employment Benefits (OPEB) Irrevocable Trust. The Trust was established for the sole purpose of providing for the advance funding of future costs of retired employee health insurance and other benefits provided to retirees. An initial deposit of \$10.8 million was made to the trust upon establishment of the trust.

#### (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 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 Year 2015 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, 2015, 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, 2014:

Annual Required Contribution (ARC)	\$ 14,564
Interest on net OPEB obligation	6,484
Adjustment to ARC	 (5,356)
Annual OPEB cost	15,692
Contributions made	 (14,851)
Increase in net OPEB obligation	841
Net OPEB obligation – beginning of year	 99,756
Net OPEB obligation – end of year	\$ 100,597

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

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

	Annual OPEB	Percentage of OPEB cost	Net OPEB
Fiscal year ended	 cost	contributed	 obligation
2015	\$ 15,692	95%	\$ 100,597
2014	15,897	22	99,756
2013	14,806	18	87,352

Net OPEB obligation – beginning of year reflected above is from revised January 1, 2012 actuarial valuation.

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

The funded status of the plan as of January 1, 2014, the date of the most recent actuarial valuation, was as follows:

Actuarial accrued liability (AAL) Actuarial value of plan assets	\$_	166,493 —
Unfunded actuarial accrued liability (UAAL)	\$	166,493
Funded ratio (actuarial value of plan assets/AAL)		%
Covered payroll (active plan members) UAAL as a percentage of covered payroll	\$	85,993 193.6%

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.

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

In the January 1, 2014 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 6.5% 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 an open basis. This has been calculated assuming the amortization payment increases at a rate of 3.25%.

#### (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 \$429,180 at June 30, 2015.

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 \$10,540,000 from Fiscal Years 1986 through 2015, including those projects required to comply with the Federal District Court's schedule. The Authority anticipates spending an additional \$1,578,000 on these projects through Fiscal Year 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

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

in or about August 2013. The variances will respectively remain in place for the Charles River until October 1, 2016 and for the Alewife/Upper Mystic until September 1, 2016. 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 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, 32 are complete and the remaining three are under construction.

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 and in anticipation of a Massachusetts Port Authority project known as the Boston Harbor Deep Draft Navigation Improvement Project. The Project involves dredging operations intended to deepen the harbor channel so as to make it navigable by deep-draft vessels. The intended route of the Project's dredging operations will come very close to the depth at which the cable is believed to be located. The Project has now received the various design, environmental and state and federal funding approvals necessary to the start of the work. Project dredging operations in the vicinity of the cable could begin within one year's time.

Notes to Financial Statements
June 30, 2015 and 2014
(Dollars in thousands)

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. Discussions among the interested parties over the years has produced a method proposed and intended by NSTAR and HEEC for protection of the cable from the Massport project by way of carefully exposing it and placing concrete mats over it, without either moving it or burying it deeper in the channel. The Authority has advised NSTAR and HEEC that it has no financial responsibility whatsoever for the costs of either protecting or relocating the cable.

## (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, up to a limit of \$300,000. The Authority maintains insurance coverage for general liability, automobile liability, marine liability, and employers' liability to the extent that losses exceed \$2,500 per occurrence, up to a limit of \$25,000. In addition to the primary liability insurance, the Authority maintains excess liability policies with additional limits of \$75,000. The Authority 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.



Schedules of Funding Progress

Required Supplementary Information - GASB No. 27

June 30, 2015

(Unaudited)

(Dollars in thousands)

**Employees' retirement system** 

		Actuarial Accrued Liability	Unfunded AAL	Funded	Covered	UAAL as a percentage of covered
Actuarial valuation	Assets (a)	(AAL) – (b)	(UAAL) (b-a)	ratio (a/b)	payroll (c)	payroll ((b-a)/(c))
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

Actuarial valuation	 Assets (a)	Actuarial Accrued Liability (AAL) – (b)	Unfunded AAL (UAAL) (b-a)	Funded ratio (a/b)	Covered payroll (c)	UAAL as a percentage of covered payroll ((b-a)/(c))
January 1, 2014	\$ _	166,493	166,493	_ \$	85,993	193.6
January 1, 2012*	_	179,595	179,595	_	82,679	217.2
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

<sup>\*</sup>Actuarial accrued liability and unfunded actuarial accrued liability is from revised January 1, 2012 actuarial valuation.

Schedules of Employer Contributions - Last Ten Years Required Supplementary Information- GASB No. 68 (Unaudited)

(Dollars in thousands)

_	Year End December 31,										
		2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Actuarially determined contribution		7,808	5,919	5,766	5,512	5,343	5,621	5,334	4,259	4,904	3,408
Contributions in relation to the actuarially determined contribution		12,629	12,447	10,490	7,363	5,343	5,621	8,630	11,358	4,904	3,408
Contribution deficiency (excess)	\$	(4,821)	\$ (6,528)	\$ (4,724)	\$ (1,851)	\$ -	\$ -	\$ (3,296)	\$ (7,099)	\$ -	\$ -
Employee covered payroll	\$	88,646	84,829	84,829	82,870	82,870	81,962	82,314	75,444	75,444	65,790
Contributions as a percentage of employee covered payroll		14.25%	14.67%	12.37%	8.89%	6.45%	6.86%	10.48%	15.05%	6.50%	5.18
Notes to Required Supplementary Information	1										
Valuation date			contributions for f arial valuation.	iscal 2016 and 2	017 are determin	ned with the					
Actuarial cost method	Entry	age normal									
Amortization method	Payme	ents increase at	4.5% per year								
Remaining amortization period	9 year	s from July 1,	2015								
Asset valuation method	each o marke	of the last five y	ts as reported in the years. Unrecognized and the expected mated, if necessary, to	d return is equal arket value retur	to the difference on and is recognic	e between the a zed over a five-	ctual				
Actuarial assumptions:											
Investment rate of return		7.75%									
Discount rate		7.75%									
Inflation rate		4%									
Projected salary increases		on years of se s of service.	rvice, ranging from	6% at 0 years o	f service decreas	ing to 4.25% at	iter				
Cost of living adjustments	3% or	first \$12,000									
Plan membership:											
Retired participants and beneficiaries receiving benefits		476									
Inactive participants entitled to a return of their employee contributions		47									
Inactive participants with a vested right to a deferred or immediate benefit		48									
Active participants		1,090									
Total		1,661									

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

Required Supplementary Information- GASB No. 68

June 30, 2015

(Unaudited)

(Dollars in thousands)

	2014
<b>Total Pension Liability</b>	
Service Cost	\$ 10,529
Interest	33,587
Differences between expected	
and actual experience	(8,380
Changes of assumptions	4,921
Changes of benefit terms	0
Benefit payments, including	
refunds of employee contributions	(12,963
Net change in total pension liability	\$ 27,694
Total pension liability - beginning	415,793
Total pension liability - ending	\$ 443,487
Plan Fiduciary Net Position	
Contributions - employer	\$ 12,630
Contributions - employee	8,245
Net investment income	20,484
Benefit payments, including refunds of	
employee contributions	(12,963
Administrative expenses	(408
Other - military service fund	
contribution	16
Net change in fiduciary net position	\$ 28,004
Plan fiduciary net position - beginning	416,351
Plan fiduciary net position - end	\$ 444,355
Net pension liability (asset) - ending	(868
Plan's fiduciary net position as a	(000
percentage of the total pension liability	100.20%
Covered employee payroll	88,646
Net pension liability (asset) as a percentage of	
covered employee payroll	-0.98%

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



Accounts Established by the General Revenue Bond Resolution

Year ended June 30, 2015 (comparative totals for June 30, 2014)

(Dollars in thousands)

	 Construction		Revenue	Debt service	Reserves	Total
Balance – June 30, 2014 Proceeds from:	\$ 80,109		74,128	509,790	46,182	710,209
Revenue bonds and loans Cash received from	99,719		_	14,196	_	113,915
customers			668,213		_	668,213
Interest income	146		1,715	13,512	1,326	16,699
Debt service grant						_
Grant receipts	200		_	6,229	_	6,429
Construction payments	(114,369)			_	_	(114,369)
Capital lease payments	(829)			(2,388)	_	(3,217)
Debt service payment	(2,186)		(28,029)	(408,680)	(15,000)	(453,895)
Other commonwealth						
payments	_		(27,342)	_	_	(27,342)
Interfund transfers	9,001		(371,519)	362,560	(42)	_
Transfers from (to)						
operating account	 584		(242,548)	2,407	(10,000)	(249,557)
Balance – June 30, 2015	\$ 72,375		74,618	497,626	22,466	667,085
					2015	2014
		_	Sewer	Water	total	total
Restricted investments:						
Construction		\$	33,134	39,241	72,375	80,109
Debt service reserves			131,387	84.362	215.749	224,484
Debt service			181,669	75,183	256,852	232,143
Revenue redemption			5,783	19,242	25,025	32,716
Revenue			21,910	52,708	74,618	74,128
Renewal and replacement reserve			6,677	1,789	8,466	32,182
Insurance			7,000	7,000	14,000	14,000
Community obligation and						
revenue enhancement		_				20,447
Total restricted						
investments		\$	387,560	279,525	667,085	710,209

# Combining Statement of Net Position June 30, 2015 (Dollars in thousands)

Assets		Sewer	Water	Combined total
Unrestricted current assets:				
Cash and cash equivalents	\$	38,462	2,989	41,451
Investments		26,284	31,747	58,031
Intergovernmental loans		8,832	21,755	30,587
Accounts receivable		72	297	369
Total unrestricted current assets	_	73,650	56,788	130,438
Restricted assets:		201 (12	201.506	672 100
Investments Interest receivable		391,612 1,184	281,586 1,282	673,198 2,466
Total restricted assets		392,796	282,868	675,664
Capital assets:				
Capital assets – not being depreciated		143,396	85,936	229,332
Capital assets – being depreciated – net		3,385,562	2,320,444	5,706,006
Total capital assets		3,528,958	2,406,380	5,935,338
Regulatory assets		602,426	164,857	767,283
Other assets – net		316,933	123,861	440,794
Total assets		4,914,763	3,034,754	7,949,517
<b>Deferred Outflows of Resources</b>				
Deferred outflows from pension		9,578	5,023	14,601
Deferred outflows from derivative instruments		40,247	3,936	44,183
Deferred outflows from refunding debt		44,888	28,316	73,204
Liabilities				
Current liabilities:				
Accounts payable and accrued expenses		48,729	10,591	59,320
Commercial paper notes Current portion of long-term debt		52,000 126,208	78,000 41,040	130,000 167,248
Total current liabilities		226,937	129,631	356,568
		220,737	127,031	330,300
Payable from restricted assets: Accounts payable for construction		13,335	2,725	16,060
Accounts payable for construction  Accrued interest on bonds payable		55,326	30,222	85,548
Reserves		36,080	21,376	57,456
Total payable from restricted assets		104,741	54,323	159,064
Retainage on construction in progress		4,460	3,788	8,248
Long-term debt – less current portion		3,619,053	1,982,051	5,601,104
Long-term capital leases		20,702	9,412	30,114
Other postemployment benefits		72,141	28,456	100,597
Liability for derivative instruments		40,247	3,936	44,183
Total liabilities		4,088,281	2,211,597	6,299,878
<b>Deferred Inflows of Resources</b>				
Deferred inflows from pension		4,581	2,402	6,983
Deferred inflows from regulated activities		23,832	39,219	63,051
Net Position				
Net investment in capital assets		234,429	554,000	788,429
Restricted Unrestricted		184,678 473,675	105,684 159,127	290,362 632,802
Total net position	\$	892,782	818,811	1,711,593
	Ψ	092,102	010,011	1,711,393
Commitments and contingencies				

Combining Statement of Net Position
June 30, 2014
(Dollars in thousands)

Assets	Sewer	Water	Combined total
Unrestricted current assets: Cash and cash equivalents Investments Intergovernmental loans Accounts receivable	\$ 35,469 26,117 8,634 99	22,019 11,652 21,670 907	57,488 37,769 30,304 1,006
Total unrestricted current assets	70,319	56,248	126,567
Restricted assets: Investments Interest receivable	438,143 1,441	278,065 1,101	716,208 2,542
Total restricted assets	439,584	279,166	718,750
Capital assets: Capital assets – not being depreciated Capital assets – being depreciated – net	142,791 3,493,338	74,130 2,362,880	216,921 5,856,218
Total capital assets	3,636,129	2,437,010	6,073,139
Regulatory assets Other assets – net	627,931 272,532	169,660 127,188	797,591 399,720
Total assets	5,046,495	3,069,272	8,115,767
<b>Deferred Outflows of Resources</b>			
Deferred outflows from derivative instruments Deferred outflows from refunding debt	37,282 42,846	3,695 30,771	40,977 73,617
Liabilities			
Current liabilities: Accounts payable and accrued expenses Commercial paper notes Current portion of long-term debt	48,476 92,000 116,250	10,958 78,000 25,910	59,434 170,000 142,160
Total current liabilities	256,726	114,868	371,594
Payable from restricted assets: Accounts payable for construction Accrued interest on bonds payable Reserves	23,267 56,307 69,068	5,368 30,676 33,021	28,635 86,983 102,089
Total payable from restricted assets	148,642	69,065	217,707
Retainage on construction in progress Long-term debt – less current portion Long-term capital leases Other postemployment benefits Liability for derivative instruments	2,496 3,690,335 21,213 71,890 37,282	3,327 2,007,477 9,725 30,113 3,695	5,823 5,697,812 30,938 102,003 40,977
Total liabilities	4,228,584	2,238,270	6,466,854
<b>Deferred Inflows of Resources</b>			
Deferred inflows from regulated activities	(21,297)	28,389	7,092
Net investment in capital assets Restricted Unrestricted	201,738 189,572 528,026	572,652 81,852 182,575	774,390 271,424 710,601
Total net position	\$ 919,336	837,079	1,756,415

See accompanying independent auditors' report.

Commitments and contingencies

# Combining Statement of Revenues, Expenses, and Changes in Net Position Year ended June 30, 2015

(Dollars in thousands)

	_	Sewer	Water	Combined total
Operating revenues: Customer services Other	\$_	442,571 4,416	218,734 2,883	661,305 7,299
Total operating revenues	_	446,987	221,617	668,604
Operating expenses: Operations Maintenance Payments in lieu of taxes Engineering, general, and administrative	_	61,956 20,339 — 79,505	40,366 7,984 7,966 45,287	102,322 28,323 7,966 124,792
Total operating expenses	_	161,800	101,603	263,403
Income from operations before depreciation		285,187	120,014	405,201
Depreciation	_	136,794	57,206	194,000
Operating income	_	148,393	62,808	211,201
Regulatory accounting provisions: Change in reserves Change in regulatory provisions, net	_	32,988 (70,634)	11,645 (15,633)	44,633 (86,267)
Total regulatory accounting provisions		(37,646)	(3,988)	(41,634)
Nonoperating income (expense): Investment income Interest expense Changes in derivative related accounts	_	11,571 (152,099) 2,528	4,378 (81,068) 412	15,949 (233,167) 2,940
Total nonoperating expense	_	(138,000)	(76,278)	(214,278)
Net loss before capital grants		(27,253)	(17,458)	(44,711)
Capital grants	_	4,989	1,440	6,429
Decrease in net position		(22,264)	(16,018)	(38,282)
Total net position – beginning of year		919,336	837,079	1,756,415
Restatement to comply with GASB Statement No. 68	_	(4,290)	(2,250)	(6,540)
Total net position – end of year	\$ _	892,782	818,811	1,711,593

Combining Statement of Revenues, Expenses, and Changes in Net Position
Year ended June 30, 2014
(Dollars in thousands)

	_	Sewer	Water	Combined total
Operating revenues: Customer services Other	\$	427,971 3,797	211,720 4,529	639,691 8,326
Total operating revenues	_	431,768	216,249	648,017
Operating expenses: Operations Maintenance Payments in lieu of taxes Engineering, general, and administrative	_	61,092 21,311  87,838	39,686 8,142 7,872 47,563	100,778 29,453 7,872 135,401
Total operating expenses	_	170,241	103,263	273,504
Income from operations before depreciation		261,527	112,986	374,513
Depreciation	_	138,092	54,970	193,062
Operating income	_	123,435	58,016	181,451
Regulatory accounting provisions: Change in reserves Change in regulatory provisions, net	_	204 (5,138)	(374) 1,500	(170) (3,638)
Total regulatory accounting provisions	_	(4,934)	1,126	(3,808)
Nonoperating income (expense): Operating grant Investment income Interest expense Changes in derivative related accounts	_	785 3,032 (152,097) 2,528	69 2,401 (79,483) 412	854 5,433 (231,580) 2,940
Total nonoperating expense	_	(145,752)	(76,601)	(222,353)
Net loss before capital grants		(27,251)	(17,459)	(44,710)
Capital grants	_	4,446	1,512	5,958
Decrease in net position		(22,805)	(15,947)	(38,752)
Total net position – beginning of year	_	942,141	853,026	1,795,167
Total net position – end of year	\$ _	919,336	837,079	1,756,415