



**MASSACHUSETTS WATER RESOURCES AUTHORITY**  
Financial Statements,  
Required Supplementary Information and Supplemental Schedules  
June 30, 2003 and 2002  
(With Independent Auditors' Report Thereon)

# MASSACHUSETTS WATER RESOURCES AUTHORITY

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## Independent Auditors' Report

The Board of Directors  
Massachusetts Water Resources Authority:

We have audited the balance sheets of the Massachusetts Water Resources Authority (the Authority) as of June 30, 2003 and 2002, and the related statements of revenues, expenses and changes in net assets, and cash flows for the years then ended. These financial statements are the responsibility of the Authority's management. 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 of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2003 and 2002, and the changes in its financial position and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As discussed in note 2 to the financial statements, in 2002, the Authority adopted the provisions of Governmental Accounting Standards Board Statements No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, No. 37 – *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments: Omnibus* and No. 38, *Certain Financial Statement Note Disclosures*.

The Management's Discussion and Analysis on pages 3 through 11 and the historical pension required supplementary information on page 37 are not a required part of the basic financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were made for the purpose of forming an opinion on the financial statements taken as a whole. The supplemental schedules listed in the accompanying table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the financial statements taken as a whole.





In accordance with *Government Auditing Standards*, we have also issued a report, dated August 15, 2003, 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 grants. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

KPMG LLP

August 15, 2003  
Boston, Massachusetts

## MASSACHUSETTS WATER RESOURCES AUTHORITY

Required Supplementary Information  
Management's Discussion and Analysis  
Fiscal Year Ended June 30, 2003

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, 2003 and 2002. Please read it in conjunction with the Authority's financial statements, which immediately follow this section.

### Financial Highlights – Fiscal 2003

During fiscal year 2003, the Commonwealth of Massachusetts eliminated funding for the debt service assistance program. Debt service assistance has been available to all cities, towns and authorities in the Commonwealth to offset capital financing expenses for sewer (and some water) related improvements. In its fiscal year 2003 budget adopted by the Board of Directors in June 2002, the Authority estimated that its share of the statewide debt service assistance appropriation would be \$47.1 million. In response to the mid-year elimination of this expected assistance, the Authority implemented a three-part plan to cover the \$47.1 million revenue loss:

- (1) Assessment of a 4% mid-year rate increase to raise \$15.7 million, bringing the overall fiscal 2003 increase to 6.97%.
- (2) Use of rate stabilization and bond redemption funds to increase revenue and reduce expenses by \$15.7 million.
- (3) \$15.7 million in reductions to operating and debt service expenses. As part of the operating reductions, MWRA reduced its workforce by 50 positions (about 3.6%), through attrition and layoffs.

The 2003 rate revenues were approximately \$417 million and were 6.97% higher than fiscal 2002 rate revenues, due to an increase in assessments. This was offset by a decrease in other customer services revenues of \$1.9 million or 19%. This decrease was primarily due to a reduction in water services provided to the City of Cambridge in fiscal 2003 as compared to fiscal 2002.

Total operating expenses were approximately \$208.7 million in fiscal 2003. The 0.7% decrease in total operating expenses over 2002 is the result of lower salaries and wages caused by the Authority's early retirement program and staff reductions. Operating expenses for fiscal 2003 were 4% greater than the annual operating budget.

Net nonoperating expenses increased \$53.6 million or 41% primarily due to a \$50 million decrease in debt service assistance from the Commonwealth of Massachusetts.

Total assets at June 30, 2003 were approximately \$7.7 billion, a \$40.7 million or 0.5% increase over total assets at June 30, 2002.

Total capital assets (net of depreciation) were approximately \$6.6 billion at June 30, 2003, a \$109 million or 1.7% increase over June 30, 2002. The increase in total capital assets is primarily the result of the ongoing water system construction projects, including the MetroWest Water Supply Tunnel, the Walnut Hill Water Treatment Plant and the Norumbega Covered Storage Project.

See independent auditors' report.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Required Supplementary Information Management's Discussion and Analysis Fiscal Year Ended June 30, 2003

### **Financial Highlights – Fiscal 2002**

The 2002 rate revenues were approximately \$389.5 million and were 3.5% higher than fiscal 2001 rate revenues due to an increase in assessments. This was offset by a decrease in other customer services revenues of \$2.5 million or 1.8%. This decrease was primarily due to a reduction in water services provided to the City of Cambridge in fiscal 2002 as compared to fiscal 2001.

Other revenues decreased \$1.2 million or 37% due to a \$1.6 million settlement received in fiscal 2001.

Total operating expenses were approximately \$210.2 million in fiscal 2002. The 3.4% decrease in total operating expenses over 2001 is the result of lower salaries and wages caused by the Authority's early retirement incentive program and a lower operating contract for residuals processing. Operating expenses for fiscal 2002 were 2% less than the annual operating budget.

Net nonoperating expenses increased \$9.5 million or 8% primarily due to a decrease in interest income of \$18 million offset by a decrease in interest expense of \$9.5 million.

Total assets at June 30, 2002 were approximately \$7.7 billion, a \$330 million or 4.5% increase over total assets at June 30, 2001.

Total capital assets (net of depreciation) were approximately \$6.4 billion at June 30, 2002, a \$218 million or 3.5% increase over June 30, 2001. The increase in total capital assets is primarily the result of the ongoing construction water projects, including the MetroWest Water Supply Tunnel, the Walnut Hill Water Treatment Plant and the Norumbega Covered Storage Project.

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

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

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

# MASSACHUSETTS WATER RESOURCES AUTHORITY

Required Supplementary Information  
Management's Discussion and Analysis  
Fiscal Year Ended June 30, 2003

## Financial Analysis of the Authority

### *Net Assets*

The Authority's total net assets at June 30, 2003 were approximately \$2.3 billion, a \$49 million decrease from June 30, 2002. Total assets increased \$40.7 million or 0.5% to \$7.7 billion, and total liabilities increased 1.7% to \$5.4 billion.

The Authority's total net assets at June 30, 2002 were approximately \$2.3 billion, a \$57.8 million decrease from June 30, 2001. Total assets increased \$330 million or 4.5% to \$7.7 billion, and total liabilities increased 7.9% to \$5.3 billion.

<b>Massachusetts Water Resources Authority</b>					
<b>Net Assets</b>					
<b>(Dollars in thousands)</b>					
	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>Percentage change 2003-2002</b>	<b>Percentage change 2002-2001</b>
Current assets	\$ 106,813	102,393	101,990	4.3%	0.4%
Restricted assets	655,613	756,572	694,576	(13.3)%	8.9%
Capital assets	6,551,209	6,441,861	6,223,985	1.7%	3.5%
Other assets	398,513	370,591	321,030	7.5%	15.4%
Total assets	7,712,148	7,671,417	7,341,581	0.5%	4.5%
Current liabilities	413,848	481,091	451,453	(14.0)%	6.6%
Payable from restricted assets	108,840	101,648	103,531	7.1%	(1.8)%
Long-term debt	4,607,288	4,386,967	4,061,710	5.0%	8.0%
Long-term lease	36,785	37,108	—	(0.9)%	100.0%
Other liabilities	247,607	317,801	320,264	(22.1)%	(0.8)%
Total liabilities	5,414,368	5,324,615	4,936,958	1.7%	7.9%
Net assets:					
Invested in capital assets, net of related debt	1,956,432	2,005,980	2,107,007	(2.5)%	(4.8)%
Restricted	123,409	128,190	114,040	(3.7)%	12.4%
Unrestricted	217,939	212,632	183,577	2.5%	15.8%
Total net assets	\$ 2,297,780	2,346,802	2,404,624	(2.1)%	(2.4)%

See independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Required Supplementary Information  
Management's Discussion and Analysis  
Fiscal Year Ended June 30, 2003

**Changes in Net Assets**

The decrease in net assets at June 30, 2003 was \$49 million or 2.1% as compared to June 30, 2002. The Authority's total operating revenues increased by 6.3% to \$429 million and total operating expenses decreased 0.4% to \$364 million.

The decrease in net assets at June 30, 2002 was \$57.8 million or 2.4% as compared to June 30, 2001. The Authority's total operating revenues increased by 2.4% to \$403 million, and total operating expenses increased 1.5% to \$365 million.

<b>Massachusetts Water Resources Authority</b>					
<b>Change in Net Assets</b>					
<b>(Dollars in thousands)</b>					
	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>Percentage change 2003-2002</b>	<b>Percentage change 2002-2001</b>
Operating revenues:					
Customer services revenues	\$ 426,666	401,391	390,718	6.3%	2.7%
Other revenue	2,381	2,091	3,301	13.9%	(36.7)%
Total operating revenue	<u>429,047</u>	<u>403,482</u>	<u>394,019</u>	<u>6.3%</u>	<u>2.4%</u>
Operating expenses:					
Operations	78,417	80,907	116,921	(3.1)%	(30.8)%
Maintenance	17,214	16,346	16,658	5.3%	(1.9)%
Payments in lieu of taxes	4,966	4,911	4,877	1.1%	0.7%
Engineering, general, and administrative	108,101	108,003	79,153	0.1%	36.4%
Depreciation	155,159	155,258	142,248	(0.1)%	9.1%
Total operating expenses	<u>363,857</u>	<u>365,425</u>	<u>359,857</u>	<u>(0.4)%</u>	<u>1.5%</u>
Operating income	65,190	38,057	34,162	71.3%	11.4%
Nonoperating items:					
Regulatory accounting provisions	63,124	27,953	24,128	125.8%	15.9%
Net nonoperating expenses	(183,256)	(129,685)	(120,190)	41.3%	7.9%
Capital grants and contributions	5,920	5,853	10,654	1.1%	(45.1)%
Change in net assets	<u>(49,022)</u>	<u>(57,822)</u>	<u>(51,246)</u>	<u>(15.2)%</u>	<u>12.8%</u>
Total assets, beginning of year	<u>2,346,802</u>	<u>2,404,624</u>	<u>2,455,870</u>	<u>(2.4)%</u>	<u>(2.1)%</u>
Total assets, end of year	<u>\$ 2,297,780</u>	<u>2,346,802</u>	<u>2,404,624</u>	<u>(2.1)%</u>	<u>(2.4)%</u>

See independent auditors' report.



## MASSACHUSETTS WATER RESOURCES AUTHORITY

### Required Supplementary Information Management's Discussion and Analysis Fiscal Year Ended June 30, 2003

During fiscal 2003, the increases in customer services revenues were primarily due to the 6.97% increase in the rate revenue requirement (\$25.3 million). This was offset by a decrease in other customer services revenues of \$1.9 million or 19%. This decrease was primarily due to a reduction in water services provided to the City of Cambridge in fiscal 2003 as compared to fiscal 2002.

During fiscal 2002, the increases in customer services revenues were primarily due to the 3.5% increase in the rate revenue requirement (\$13.2 million). This was offset by a decrease in other customer services revenues of \$2.5 million or 1.8%. This decrease was primarily due to a reduction in water services provided to the City of Cambridge in fiscal 2002 as compared to fiscal 2001. Other revenues decreased \$1.2 million due to a \$1.6 million settlement received in fiscal 2001.

Total operating costs in fiscal 2003 were \$1.6 million or 0.4% less than in fiscal 2002. This decrease is the net of \$3.1 million in lower direct operating costs offset by \$1.5 million in greater indirect expenses. Total wages and salaries expenses were \$5.8 million less than in fiscal 2002, primarily because of lower staffing levels resulting from the early retirement program implemented in fiscal 2002 and the fiscal 2003 staff reductions. Overall operating expense decreases are also attributable to a directed slowdown in all areas of spending resulting from the loss of debt service assistance.

Fiscal 2002 operating expenses before depreciation decreased \$7.4 million or 3.4% primarily in wages and salaries expenses and expenses related to residuals processing. Wages and salaries expenses were \$1.5 million lower than the prior year due to a one-time increase in the authority-wide accumulated leave balance accrual done in fiscal 2001. The new residuals processing contract increased sludge pelletization expenses by \$935,000, but resulted in savings in chemical expenses of \$1.1 million, utility expenses of \$3.6 million and landfill use costs of \$1.7 million. Operating expense increases were also seen in lab testing and analysis (\$828,000), security (\$962,000) and lease rentals related to a new facility (\$748,000).

Fiscal 2003 net nonoperating expenses increased \$53.6 million or 41% primarily due to the decrease of \$50 million in debt service assistance from the Commonwealth of Massachusetts.

Fiscal 2002 net nonoperating expenses increased \$9.5 million or 8% primarily due to a decrease in interest income of \$18 million offset by a decrease in interest expense of \$9.5 million. Interest income decreased largely due to lower investment balances and lower interest rates during the year. Interest expense decreased due to the effect of lower interest rates on variable debt and the swap agreements associated with this debt. Lower interest rates reduced interest expense on variable rate debt, but at the same time, increased swap expenses on certain swap agreements which have the Authority paying a fixed rate and receiving a variable rate. Working together, these two components reduced interest expenses by \$7.4 million.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Required Supplementary Information  
 Management's Discussion and Analysis  
 Fiscal Year Ended June 30, 2003

**Massachusetts Water Resources Authority  
 Operating Costs by Functionality  
 (Dollars in thousands)**

	<u>2003</u>	<u>2002</u>	<u>2001</u>	<b>Percentage change 2003-2002</b>	<b>Percentage change 2002-2001</b>
Wastewater treatment and transport	\$ 78,064	78,559	84,637	(0.6)%	(7.2)%
Water treatment and transport	18,087	18,571	21,705	(2.6)%	(14.4)%
Water and wastewater quality	9,356	9,101	8,711	2.8%	4.5%
Metering and monitoring	3,778	3,501	3,016	7.9%	16.1%
Facilities planning, design, and construction	10,133	12,308	14,458	(17.7)%	(14.9)%
MIS	8,710	9,418	8,358	(7.5)%	12.7%
Administration and support	46,981	46,754	43,105	0.5%	8.5%
<b>Total direct operating costs</b>	<u>175,109</u>	<u>178,212</u>	<u>183,990</u>	<u>(1.7)%</u>	<u>(3.1)%</u>
Indirect operating costs	<u>33,589</u>	<u>31,955</u>	<u>33,619</u>	<u>5.1%</u>	<u>(4.9)%</u>
<b>Total operating costs</b>	<u>\$ 208,698</u>	<u>210,167</u>	<u>217,609</u>	<u>(0.7)%</u>	<u>(3.4)%</u>

Expenses for wages and salaries decreased in all functional areas, largely because of the fiscal 2002 early retirement program. In addition, in some functional areas primarily outside of the Authority's core operations, spending was affected by staff reductions implemented in response to the loss of debt service assistance.

The increase in Metering and Monitoring expenses is due to the purchase of spare parts for metering and monitoring equipment. Facilities Design, Planning and Construction expenses decreased due to the completion of the Boston Harbor Project and retirements.

The directed slowdown in all spending, again in response to the loss of debt service assistance, is reflected in the lower MIS operating costs and contributes to lower costs in other functional areas. Some MIS operating costs are expected to increase in future fiscal years to cover spending deferred in the current fiscal year.

## MASSACHUSETTS WATER RESOURCES AUTHORITY

Required Supplementary Information  
Management's Discussion and Analysis  
Fiscal Year Ended June 30, 2003

### Capital Asset and Debt Administration

#### *Capital Assets*

As of June 30, 2003 and 2002, the Authority had approximately \$6.6 billion and \$6.4 billion of capital assets (net of depreciation). This includes land, construction in progress, plant and equipment for the water and sewer systems, furniture and fixtures, leasehold improvements and motor vehicles and equipment. The Authority's net capital assets increased approximately \$109 million or 1.7% during fiscal 2003 and \$218 million or 3.5% during fiscal 2002.

<b>Massachusetts Water Resources Authority</b>					
<b>Capital Assets</b>					
<b>(Net of depreciation, dollars in thousands)</b>					
	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>Percentage change 2003-2002</b>	<b>Percentage change 2002-2001</b>
Land	\$ 16,806	16,806	16,806	—	—
Construction in progress	822,349	1,177,074	991,444	(30.1)%	18.7%
Plant and equipment, water and sewer systems	5,699,757	5,245,583	5,214,698	8.7%	0.6%
Furniture and fixtures	9,917	21	358	47,123.8%	(94.1)%
Leasehold improvements	1,756	1,734	—	1.3%	100.0%
Motor vehicles and equipment	624	643	679	(3.0)%	(5.3)%
Total net assets	<u>\$ 6,551,209</u>	<u>6,441,861</u>	<u>6,223,985</u>	<u>1.7%</u>	<u>3.5%</u>

Decreases in construction in progress are primarily due to the transfer of capital assets related to completed projects. These projects include the final Boston Harbor Project costs (\$50 million), Walnut Hill Treatment Plant (\$39 million), and the MetroWest Tunnel (\$448 million). Increases in furniture and fixtures relate to the new computer systems (\$10 million).

Ongoing CIP includes work on the Braintree/Weymouth Relief Facilities, the Norumbega Covered Storage facility, and the Combined Sewer Overflow (CSO) Program.

#### *Debt Administration*

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

See independent auditors' report.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Required Supplementary Information Management's Discussion and Analysis Fiscal Year Ended June 30, 2003

### ***Bond Resolutions***

Under the General Bond Resolution rate covenant, the Authority is required to maintain revenues sufficient to pay: current expenses; debt service on indebtedness; required deposits to reserves; costs of maintenance, replacement and/or improvement to the wastewater and water systems that are considered current expenses; and 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 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 required for debt service on all outstanding bonds, including subordinated bonds.

### ***Credit Rating***

Of the \$4.8 billion of revenue bonds the Authority currently has outstanding, \$3.5 billion is credit enhanced by a combination of bond insurance, liquidity, or letters of credit. The Authority's enhanced revenue bonds are rated "AAA" by FITCHRATINGS, "Aaa" by Moody's Investors Service, and "AAA" by Standard and Poor's. The Authority's unenhanced \$0.7 billion long-term, senior debt is rated "AA-" by FITCHRATINGS, "Aa3" by Moody's Investors Service, and "AA" by Standard and Poor's.

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

In June 2003, the Board of Directors approved the fiscal 2004 Current Expense Budget (CEB), which totals \$489.1 million in expenses before debt service offsets of \$13.3 million, for a net expense total of \$475.8 million. The \$13.3 million in debt service offsets is comprised of \$6 million in variable rate debt savings rolled forward from fiscal 2003 and \$7.3 million in variable rate savings assumed for fiscal 2004.

The \$489.1 million expense total (before debt service offsets) is comprised of \$284.8 million (58%) in capital financing costs and \$204.3 million (42%) in operating expenses, of which \$173 million (85%) is for direct expenses and \$31.3 million (15%) is for indirect expenses. The total represents a decrease of \$2.9 million from fiscal 2003 spending; comprised of \$4.4 million in lower operating costs offset by \$1.5 million less use of variable rate savings to offset debt service.

Fiscal 2004 nonrate revenue totals \$40 million, a decrease of \$21.6 million from actual fiscal 2003 nonrate revenue. The decrease is due to no planned use of rate stabilization funds in fiscal 2004 and continued lower interest rates resulting in less investment income. The nonrate revenue budget is comprised of \$29.2 million in investment income, including swap receipts, \$10.2 million in other user charges and other revenue, and \$0.6 million in entrance fees.

## MASSACHUSETTS WATER RESOURCES AUTHORITY

Required Supplementary Information  
Management's Discussion and Analysis  
Fiscal Year Ended June 30, 2003

### *CIP 10 Year Plan*

The Authority's planned spending for capital improvements in future years reflects the continuation and completion of projects now underway. These include:

- Completion of the Walnut Hill Water Treatment Plant to ensure continued provision of high quality drinking water to all customers.
- Completion of the MetroWest Water Supply Tunnel, providing redundancy to the Hultman Aqueduct thus making water delivery to all MWRA customers more reliable.
- Completion of covered storage facilities, including Norumbega and Blue Hills Covered Storage, to provide safe, reliable storage for water treated at Walnut Hill and transported through the MetroWest Tunnel and Hultman Aqueduct.
- Rehabilitation of the Wachusett and Hultman Aqueducts as well as rehabilitation of top shaft structures on the Quabbin Tunnel, Dorchester Tunnel, City Tunnel, Southborough Tunnel, and City Tunnel Extension.
- Rehabilitation of a significant portion of the West Roxbury Tunnel.
- Completion of the long-term CSO control plan, resulting in closing of 36 of 84 CSO outfalls and reducing CSO discharges to Boston Harbor and the Mystic, Charles, and Neponset River systems by 88% from 1987, when MWRA accepted responsibility for CSO control, with 95% of remaining discharges receiving treatment.
- Construction of new interceptor facilities to serve Braintree, Hingham, Holbrook, Randolph, Weymouth, and sections of Quincy, and to reduce sewage overflows into the Weymouth Fore River.
- Continued rehabilitation of the water distribution system at a rate of seven to ten miles per year (2.5% to 3% of the total 265 miles of MWRA pipeline).
- Improvement and replacement of equipment on Deer Island to ensure that the plant continues to operate efficiently and effectively.
- Security improvements to protect MWRA facilities.

### **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.

See independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Balance Sheets

June 30, 2003 and 2002

(Dollars in thousands)

<b>Assets</b>	<b>2003</b>	<b>2002</b>
Unrestricted current assets:		
Cash and cash equivalents (note 4)	\$ 30,249	34,058
Investments (note 4)	53,920	54,003
Intergovernmental loans (note 7)	12,767	12,515
Accounts receivable	<u>9,877</u>	<u>1,817</u>
Total unrestricted current assets	<u>106,813</u>	<u>102,393</u>
Restricted assets:		
Cash and investments (note 4)	646,662	743,742
Interest receivable	6,580	7,177
Grants receivable:		
Billed	2,163	1,540
Unbilled	<u>208</u>	<u>4,113</u>
Total restricted assets	<u>655,613</u>	<u>756,572</u>
Capital assets, not being depreciated (note 8)	839,155	1,193,880
Capital assets, being depreciated, net (note 8)	5,712,054	5,247,981
Deferred charges (notes 3 and 9)	239,280	243,386
Other assets, net (notes 7 and 9)	<u>159,233</u>	<u>127,205</u>
Total assets	\$ <u><u>7,712,148</u></u>	\$ <u><u>7,671,417</u></u>
<b>Liabilities and Net Assets</b>		
Current liabilities:		
Accounts payable and accrued expenses (note 13)	\$ 54,422	46,121
Commercial paper notes (note 6)	311,000	317,000
Current portion of long-term debt (note 6)	<u>48,426</u>	<u>117,970</u>
Total current liabilities	<u>413,848</u>	<u>481,091</u>
Payable from restricted assets:		
Accounts payable for construction	41,956	45,935
Accrued interest on bonds payable	<u>66,884</u>	<u>55,713</u>
Total payable from restricted assets	<u>108,840</u>	<u>101,648</u>
Retainage on construction in progress	41,261	44,225
Long-term debt, less current portion (note 6)	4,607,288	4,386,967
Long-term capital lease (note 10)	36,785	37,108
Reserves (note 5)	119,184	119,184
Deferred credits (note 3)	<u>87,162</u>	<u>154,392</u>
Total liabilities	<u>5,414,368</u>	<u>5,324,615</u>
Net assets		
Invested in capital assets, net of related debt	1,956,432	2,005,980
Restricted	123,409	128,190
Unrestricted	<u>217,939</u>	<u>212,632</u>
Total net assets	<u>2,297,780</u>	<u>2,346,802</u>
Commitments and contingencies (notes 10, 12, and 13)		
Total liabilities and net assets	\$ <u><u>7,712,148</u></u>	\$ <u><u>7,671,417</u></u>

See accompanying notes to financial statements.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Statements of Revenues, Expenses and Changes in Net Assets

Years ended June 30, 2003 and 2002

(Dollars in thousands)

	<u>2003</u>	<u>2002</u>
Operating revenues:		
Customer services	\$ 426,666	401,391
Other	2,381	2,091
	<u>429,047</u>	<u>403,482</u>
Operating expenses:		
Operations	78,417	80,907
Maintenance	17,214	16,346
Payments in lieu of taxes	4,966	4,911
Engineering, general, and administrative	108,101	108,003
	<u>208,698</u>	<u>210,167</u>
Income from operations before depreciation	220,349	193,315
Depreciation	<u>155,159</u>	<u>155,258</u>
Operating income	<u>65,190</u>	<u>38,057</u>
Regulatory accounting provisions:		
Increase in deferrals, net (note 3)	63,124	27,953
	<u>63,124</u>	<u>27,953</u>
Nonoperating revenues (expense):		
Debt service grants	—	50,207
Investment income	40,263	42,951
Interest expense	(223,519)	(222,843)
	<u>(183,256)</u>	<u>(129,685)</u>
Net loss before capital contributions	(54,942)	(63,675)
Capital grants and contributions	<u>5,920</u>	<u>5,853</u>
Decrease in net assets	(49,022)	(57,822)
Total net assets, beginning of year	<u>2,346,802</u>	<u>2,404,624</u>
Total net assets, end of year	<u>\$ 2,297,780</u>	<u>2,346,802</u>

See accompanying notes to financial statements.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Statements of Cash Flows

Years ended June 30, 2003 and 2002

(Dollars in thousands)

	<u>2003</u>	<u>2002</u>
Cash flows from operating activities:		
Cash received from customers	\$ 418,589	401,455
Cash paid to suppliers for goods and services	(112,896)	(118,226)
Cash paid to employees for services	(81,382)	(92,172)
Cash paid in lieu of taxes	(4,966)	(4,911)
Other operating receipts	2,381	2,091
Net cash provided by operating activities	<u>221,726</u>	<u>188,237</u>
Cash flows from capital and related financing activities:		
Proceeds from sale of revenue bonds, loans and notes	331,109	412,992
Capital grants for construction	8,770	7,444
Capital contributions	432	—
Debt service grant	—	50,026
Capital lease principal payments	(323)	(26)
Capital lease interest payments	(2,894)	(242)
Repayment of debt	(206,146)	(67,656)
Interest paid on debt	(190,220)	(207,107)
Plant expenditures	(304,286)	(364,680)
Net cash used for capital and related financing activities	<u>(363,558)</u>	<u>(169,249)</u>
Cash flows from investing activities:		
Purchases of short-term investments	(132,713)	(214,674)
Sales and maturities of short-term investments	298,030	75,959
(Increase) decrease in restricted cash and investments, net	(55,696)	77,230
Interest received	28,402	33,911
Net cash provided by (used in) investing activities	<u>138,023</u>	<u>(27,574)</u>
Net decrease in cash and cash equivalents	(3,809)	(8,586)
Cash and cash equivalents, beginning of year	34,058	42,644
Cash and cash equivalents, end of year	\$ <u>30,249</u>	<u>34,058</u>
Reconciliation of operating income to net cash provided from operating activities:		
Operating income	\$ 65,190	38,057
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	155,159	155,258
(Increase) decrease in other accounts, net	(7,490)	64
Increase (decrease) in accounts payable	8,867	(5,142)
Net cash provided by operating activities	\$ <u>221,726</u>	<u>188,237</u>

Noncash financing activities:

In August 2002, general revenue refunding bonds in the aggregate principal amount of \$430,000 were issued to refinance outstanding 1992 Series B bonds. In December 2002, general revenue refunding bonds in the aggregate principal amount of \$400,410 were issued to refinance outstanding 1993 Series B bonds.

See accompanying notes to financial statements.



# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2003 and 2002

(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), 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 eleven-member board of directors (the Board) chaired by the Secretary of Environmental Affairs for the Commonwealth. The Secretary and four other members are appointed by the Governor, one upon recommendation of the Mayor of Quincy and one upon recommendation of the Selectmen of Winthrop. Three members of the Board are appointed by the Mayor of Boston and three are appointed by the Authority's Advisory Board.

### (2) Summary of Significant Accounting Policies

The accounting policies of the Authority conform to 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, and 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 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.

Under the Governmental Accounting Standards Board (GASB) Statement No. 20, *Accounting and Reporting for Proprietary Funds and Other Governmental Entities That Use Proprietary Fund Accounting*, the Authority has adopted the option to apply all Financial Accounting Standards Board (FASB) Statements and Interpretations issued before November 30, 1989, except for those that conflict with or contradict GASB pronouncements.

In addition, the Authority has adopted the provisions of FASB No. 71, *Accounting for the Effects of Certain Types of Regulation*, to provide a better matching of revenues and expenses. The effect of this policy has been to defer certain costs, which will be recovered through future revenues in accordance with the Authority's rate model, and to record deferred credits for revenue collected through current rates for costs expected to be incurred in the future. The effects of the Authority's accounting policies under Statement No. 71 are discussed further in notes 3 and 9.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

**(b) Capital Assets**

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

The personal property, together with the rights to the real property and watershed system, was recorded at its estimated fair market 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 are eliminated from the accounts when such items are disposed of or otherwise retired.

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

During fiscal 2003 and 2002, 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.

**(d) Depreciation**

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

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

**(e) Revenue Recognition**

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

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

**(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 cash flow statements. Restricted cash and cash equivalents are combined with investments on the balance sheets, 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 MDC Division of Watershed Management an amount for 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 are recorded at fair value. Fair value is determined based on quoted market price. The Authority recorded unrealized gains of \$8,776 and \$7,516 in fiscal 2003 and 2002, respectively.

**(i) Use of Estimates**

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

**(j) Changes in Accounting Principles**

The Authority adopted the provisions of Governmental Accounting Standards Board Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* (Statement 34), in 2002, effective July 1, 2001. Statement 34 establishes financial reporting standards for all state and local governments and related entities. Statement 34 primarily relates to presentation and disclosure requirements and had no impact on net assets as of June 30, 2002. The impact of changes in the report includes the inclusion of Management's Discussion and Analysis.

The Authority adopted the provisions of Governmental Accounting Standards Board Statement No. 37 – *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments: Omnibus*, and Governmental Accounting Standards Board Statement No. 38, *Certain Financial Statement Note Disclosures*, in 2002, effective July 1, 2001. The implementation of Statement No. 37 and Statement No. 38 had an impact on the presentation of the notes to the financial statements, but no impact on net assets.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

**(k) Reclassifications**

Certain reclassifications were made to the fiscal year 2002 financial statements to conform to the fiscal year 2003 presentation.

**(3) Deferred Charges and Credits**

In accordance with FASB No. 71, deferred charges and credits result primarily from differences between depreciation on property, plant, and equipment not financed by grants or capital contributions, which is recovered through rates as principal payments on debt service and from amounts determined by the Board to be utilized in a subsequent year to reduce customer billings (rate stabilization).

A summary of the activity of FASB No. 71 charges (credits) for fiscal 2003 and 2002 is as follows:

	<u>Sewer</u>	<u>Water</u>	<u>Total</u>
Balance, June 30, 2001, net	\$ 11,673	49,368	61,041
Difference between depreciation of capital assets not financed by grants or capital contributions, and debt service in excess of interest expense	21,566	3,559	25,125
Rate stabilization:			
Current year recovery	679	(5,352)	(4,673)
Current year usage	6,728	4,872	11,600
Other, net	<u>(1,099)</u>	<u>(3,000)</u>	<u>(4,099)</u>
Balance, June 30, 2002, net	39,547	49,447	88,994
Difference between depreciation of capital assets not financed by grants or capital contributions, and debt service in excess of interest expense	32,130	5,188	37,318
Bond redemption, net	41,442	(2,136)	39,306
Rate stabilization: current year usage	14,691	—	14,691
Other, net	<u>(30,969)</u>	<u>2,778</u>	<u>(28,191)</u>
Balance, June 30, 2003, net	\$ <u>96,841</u>	<u>55,277</u>	<u>152,118</u>

The net balance at June 30, 2003 and 2002 is presented on the balance sheets as follows:

	<u>2003</u>	<u>2002</u>	<u>Current year change</u>
Deferred charges	\$ 239,280	243,386	(4,106)
Deferred credits	<u>(87,162)</u>	<u>(154,392)</u>	67,230
Net change in deferrals	\$ <u>152,118</u>	<u>88,994</u>	<u>63,124</u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

The balance in the rate stabilization reserve which is included in deferred credits was \$41,445 and \$56,135 at June 30, 2003 and 2002, respectively.

**(4) Deposits and 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. These investments are recorded at fair value.

**(a) Deposits**

The Authority's deposits are classified as follows: those deposits that are fully insured or collateralized with securities held by the Authority or its agent in the Authority's name (Category 1), those deposits that are collateralized with securities held by the pledging financial institution's trust department or agent in the Authority's name (Category 2), and those deposits that are not collateralized (Category 3). Money market mutual funds are not categorized. A summary of these deposits as of June 30, 2003 and 2002 is as follows:

		<b>2003</b>				
		<b>Category</b>			<b>Total bank balance</b>	<b>Carrying amount</b>
		<b>1</b>	<b>2</b>	<b>3</b>		
Cash and cash equivalents	\$	200	—	35,262	35,462	33,349
Not categorized:						
Money market mutual funds					312,907	312,907
Total					\$ 348,369	346,256
		<b>2002</b>				
		<b>Category</b>			<b>Total bank balance</b>	<b>Carrying amount</b>
		<b>1</b>	<b>2</b>	<b>3</b>		
Cash and cash equivalents	\$	200	—	39,060	39,260	34,258
Not categorized:						
Money market mutual funds					257,211	257,211
Total					\$ 296,471	291,469

Outstanding checks largely account for the difference between the bank balance and the carrying amount of deposits.

**(b) Investments**

The Authority's investments are categorized according to the level of risk assumed by the Authority. Category 1 includes investments that are insured, registered, or held by the Authority's trustee in the Authority's name. Category 2 includes uninsured and unregistered investments held by the counterparty's trust department or agent in the Authority's name. Category 3 includes uninsured or

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

unregistered investments held by the counterparty, its trust department or agent but not in the Authority's name. A summary of these investments as of June 30, 2003 and 2002 is as follows:

		<b>2003</b>			
		<b>Category</b>			
		<b>1</b>	<b>2</b>	<b>3</b>	<b>Fair value</b>
U.S. Government obligations	\$	50,223	—	—	50,223
U.S. Government Agency obligations		253,229	—	—	253,229
Guaranteed interest contracts		81,123	—	—	81,123
Total	\$	<u>384,575</u>	<u>—</u>	<u>—</u>	<u>384,575</u>
		<b>2002</b>			
		<b>Category</b>			
		<b>1</b>	<b>2</b>	<b>3</b>	<b>Fair value</b>
U.S. Government obligations	\$	48,393	—	—	48,393
U.S. Government Agency obligations		247,640	—	—	247,640
Guaranteed interest contracts		244,301	—	—	244,301
Total	\$	<u>540,334</u>	<u>—</u>	<u>—</u>	<u>540,334</u>

**(5) Bond Resolution Reserves**

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

<b>Reserves</b>		<b>Sewer</b>	<b>Water</b>	<b>2003 Total</b>	<b>2002 Total</b>
Renewal and replacement	\$	27,300	16,701	44,001	44,001
Insurance		9,000	9,000	18,000	18,000
Operating		27,971	9,096	37,067	37,067
Community obligation and revenue enhancement		18,399	1,717	20,116	20,116
Total	\$	<u>82,670</u>	<u>36,514</u>	<u>119,184</u>	<u>119,184</u>

A renewal and replacement reserve of \$6,000 was established through grant receipts transferred from the Commonwealth in 1985 and is included in restricted net assets at June 30, 2003 and 2002.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

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

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

	<u>2003</u>	<u>2002</u>
General Revenue Bonds:		
1990 Series A, 7 1/2%, issued February 15, 1990, due 2006	\$ 20,721	19,259
1992 Series A, 6 1/2%, issued April 8, 1992, due 2007 to 2019	387,845	387,845
1993 Series C, 4 3/4% to 6%, issued December 2, 1993, due 2003 to 2023	285,485	327,370
1994 Series A, 5 1/10% to 5 6/10%, issued August 16, 1994, due 2003 to 2007	17,210	20,155
1995 Series B, 4% to 6 1/4%, issued January 4, 1996, due 2003 to 2024	223,630	234,155
1996 Series A, 5 1/10% to 6%, issued November 5, 1996, due 2003 to 2010	25,295	30,865
1998 Series A, 4 1/2% to 5 1/2%, issued January 27, 1998, due 2003 to 2032	193,710	196,835
2000 Series A, 4 1/2% to 6 1/8%, issued March 1, 2000, due 2003 to 2039	281,020	282,710
2002 Series B, 5% to 5 1/2%, issued March 15, 2002, due 2003 to 2027	179,365	180,000
2002 Series J, 3% to 5 1/2%, issued December 18, 2002, due 2003 to 2042	600,410	—
	<u>2,214,691</u>	<u>1,679,194</u>
General Revenue Refunding Bonds:		
1992 Series B, 5 1/2% to 6 1/4%, issued December 17, 1992, retired August 15, 2002	—	446,160
1993 Series B, 5% to 5 1/2%, issued May 6, 1993, due retired December 18, 2002	—	452,865
1997 Series D, 4 1/4% to 6%, issued December 15, 1997, due 2003 to 2020	134,095	135,015
1998 Series B, 4 1/4% to 5 1/2%, issued January 27, 1998, due 2005 to 2022	104,545	104,545
	<u>238,640</u>	<u>1,138,585</u>
Subordinated debt:		
General Revenue Bonds with the Massachusetts Water Pollution Abatement Trust:		
1993 Series A, 4 5/8% to 5 1/2%, issued March 18, 1993, due 2003 to 2013	9,190	10,610
1993 Series D, 4 1/2% to 5 1/4%, issued January 6, 1994, due 2003 to 2014	7,060	7,915

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

	<u>2003</u>	<u>2002</u>
1995 Series A, 4 1/2% to 6%, issued November 21, 1995, due 2003 to 2015	\$ 8,355	9,260
1998 Series C, 4% to 5 3/8%, issued July 9, 1998, due 2003 to 2018	15,655	17,030
1999 Series E Sewer, 4% to 5 3/8%, issued October 6, 1999, due 2003 to 2029	10,016	10,250
1999 Series E Water, 4% to 5 3/8%, issued October 6, 1999, due 2003 to 2029	10,646	11,127
1999 Series F, 4 2/10% to 6%, issued November 3, 1999, due 2003 to 2029	376,570	384,335
2000 Series E Sewer, 4 1/2% to 5 5/8%, issued November 1, 2000, due 2003 to 2030	71,869	73,371
2000 Series E Water, 4 1/2% to 5 5/8%, issued November 1, 2000, due 2003 to 2030	11,724	12,200
2001 Series C Water, 3% to 5 1/4%, issued July 26, 2001, due 2003 to 2021	5,056	5,270
2001 Series D Sewer, 4% to 5 3/4%, issued July 26, 2001, due 2003 to 2019	7,689	8,025
2001 Series D Water, 4% to 5/3/4%, issued July 26, 2001, due 2003 to 2019	1,504	1,572
2001 Series D Sewer, 1.525%, issued July 26, 2001, retired October 31, 2002 (interim)	—	10,979
2001 Series D Water, 1.525%, issued July 26, 2001, retired October 31, 2002 (interim)	—	4,424
2002 Series A Sewer, 1.09%, issued May 7, 2002, retired October 31, 2002 (interim)	—	20,000
2002 Series A Water, 1.09%, issued May 7, 2002, retired October 31, 2002 (interim)	—	5,000
2002 Series H Sewer, 3% to 5 1/4%, issued October 31, 2002, due 2003 to 2032	91,665	—
2002 Series H Water, 3% to 5 1/4%, issued October 31, 2002, due 2003 to 2032	33,135	—
2002 Series I Sewer, 4 1/4% to 5 5/8%, issued October 31, 2002, due 2003 to 2030	2,645	—
2002 Series I Water, 4 1/4% to 5 5/8%, issued October 31, 2002, due 2003 to 2030	30	—
2003 Series A Water, 3% to 5 1/4%, issued October 31, 2002, due 2003 to 2020	1,532	—
	<u>664,341</u>	<u>591,368</u>



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

	<u>2003</u>	<u>2002</u>
General Revenue Bonds (variable rate):		
1997 Series A, 0.8% to 1.75%, issued June 18, 1997, due 2004 to 2028	\$ 81,600	82,700
1997 Series B, 0.9% to 1.8%, issued June 18, 1997, due 2004 to 2028	81,600	82,700
1999 Series A, 0.85% to 2.05%, issued January 14, 1999, due 2003 to 2028	93,000	94,200
1999 Series B, 0.8% to 1.75%, issued January 29, 1999, due 2003 to 2028	93,000	94,200
1999 Series C, 0.85% to 1.65%, issued June 8, 1999, due 2004 to 2029	71,700	72,600
1999 Series D, 1% to 1.5%, issued June 8, 1999, due 2004 to 2029	71,700	72,600
2001 Series A, 0.85% to 1.8%, issued September 26, 2001, due 2003 to 2023	93,100	95,000
2001 Series B, 0.45% to 1.8%, issued September 26, 2001, due 2024 to 2031	85,000	85,000
	<u>670,700</u>	<u>679,000</u>
General Revenue Refunding Bonds (variable rate):		
1998 Series D, 0.9% to 1.8%, issued December 22, 1998, due 2008 to 2026	198,895	198,895
2000 Series B, 0.9% to 1.8%, issued March 22, 2000, due 2003 to 2037	134,600	135,000
2000 Series C, 0.9% to 1.8%, issued March 22, 2000, due 2003 to 2037	134,600	134,900
2002 Series C, 0.7% to 2.1%, issued August 15, 2002, due 2020	80,000	—
2002 Series D, 0.65% to 2%, issued August 15, 2002, due 2008 to 2017	76,450	—
2002 Series E, 1% to 1.55%, issued August 15, 2002, due 2010 to 2011	83,400	—
2002 Series F, 0.85% to 1.55%, issued August 15, 2002, due 2012 to 2013	90,900	—
2002 Series G, 0.75% to 1.45%, issued August 15, 2002, due 2014 to 2015	99,250	—
	<u>898,095</u>	<u>468,795</u>

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

	<u>2003</u>	<u>2002</u>
General Revenue Bonds (fixed rates):		
2000 Series D, 5 1/2%, issued October 1, 2000, due 2009 to 2011	\$ 150,000	150,000
	<u>4,836,467</u>	<u>4,706,942</u>
Less:		
Unamortized issuance and discount costs	(32,599)	(112,693)
Unamortized excess of reacquisition price over net carrying amount of defeased bonds	(148,154)	(89,312)
Current portion of long-term debt	(48,426)	(117,970)
	<u>(229,179)</u>	<u>(319,975)</u>
Long-term debt, net	\$ <u>4,607,288</u>	<u>4,386,967</u>

Long-term debt at June 30, 2003 and 2002 consisted of the following:

	<u>2002 Beginning balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>2003 Ending balance</u>	<u>Due within one year</u>
General Revenue Bonds	\$ 2,508,194	601,872	74,675	3,035,391	27,536
General Revenue Refunding Bonds	1,607,380	430,000	900,645	1,136,735	1,760
General Revenue Bonds with the Massachusetts Water Pollution Abatement Trust	<u>591,368</u>	<u>129,007</u>	<u>56,034</u>	<u>664,341</u>	<u>19,130</u>
	\$ <u>4,706,942</u>	<u>1,160,879</u>	<u>1,031,354</u>	<u>4,836,467</u>	<u>48,426</u>
	<u>2001 Beginning balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>2002 Ending balance</u>	<u>Due within one year</u>
General Revenue Bonds	\$ 2,175,591	361,358	28,755	2,508,194	35,540
General Revenue Refunding Bonds	1,631,655	—	24,275	1,607,380	26,395
General Revenue Bonds with the Massachusetts Water Pollution Abatement Trust	<u>536,267</u>	<u>69,727</u>	<u>14,626</u>	<u>591,368</u>	<u>56,035</u>
	\$ <u>4,343,513</u>	<u>431,085</u>	<u>67,656</u>	<u>4,706,942</u>	<u>117,970</u>

The Authority is required to establish water and sewer rates and charges at a level sufficient to provide, among other things, primary and subordinated debt service coverage ratios of 120% and 110%, respectively. For the year ended June 30, 2003, the Authority had primary and subordinated debt service coverage ratios of 168% and 110%, respectively.

## MASSACHUSETTS WATER RESOURCES AUTHORITY

### Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

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 \$5,400,000.

On August 15, 2002, the Authority issued Multi-Modal Subordinated General Revenue Refunding Bonds, 2002 Series C, 2002 Series D, 2002 Series E, 2002 Series F and 2002 Series G in the principal amounts of \$80,000, \$76,450, \$83,400, \$90,900 and \$99,250, respectively. The proceeds from these bonds were used to defease \$446,155 of bonds outstanding. Series C and D bonds have variable interest rates, which are currently reset daily. The interest rate for these bonds outstanding during fiscal 2003 ranged from 0.65% to 2.1%. Series E, F and G bonds have variable interest rates which are reset and payable on a weekly basis. The interest rate for these bonds outstanding during fiscal 2003 ranged from 0.75% to 1.55%.

The cash flow required to make principal and interest payments on the Refunding bonds is approximately \$14,484 less than the debt service requirements for the defeased 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 was \$26,729.

In connection with the Series D, E, F and G bonds, the Authority has entered into an interest rate swap arrangement, in the initial notional amount of \$350,000 for a period of approximately 13 years, ending August 1, 2015. Under this arrangement, the Authority will pay interest to the swap counterparty at a fixed rate of 4.127% per annum and will receive interest from the swap counterparty at a variable rate based on 67% of the 1-month USD-LIBOR.

On December 18, 2002, the Authority issued General Revenue Bonds, 2002 Series J in the principal amount of \$600,410. The proceeds from these bonds were used to defease \$428,090 of bonds outstanding. These bonds have a variable interest rate ranging from 3% to 5.5% per annum. The cash flow required to make principal and interest payments on the Refunding bonds is approximately \$13,383 less than the debt service requirements for the defeased 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 was \$23,760.

On March 15, 2002, the Authority issued General Revenue Bonds, 2002 Series B in the principal amount of \$180,000. The proceeds from these bonds will be used to fund ongoing capital projects. The interest rates on these bonds range from 5% to 5.5%.

On September 26, 2001, the Authority issued Multi-Modal Subordinated General Revenue Bonds, 2001 Series A and B in the principal amount of \$180,000. The proceeds from these bonds will be used to fund ongoing capital projects. These bonds have a variable interest rate, which is currently reset weekly. The interest rate for the bonds outstanding during fiscal 2003 ranged from 0.45% to 1.8%. The maximum interest rate on the bonds shall not exceed 12% per annum. The bonds are secured by a \$180,000 standby bond purchase agreement, which terminates on September 26, 2006 and carries a fee of 0.15% per annum on the amount available.

The Authority has entered into several interest rate swap agreements to reduce the impact of changes in interest rates on the Authority's variable rate debt. Under these agreements the Authority pays an average

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fixed interest rate of 3.96% and receives interest from the swap counterparties at a variable rate. This rate is based on the seven-day, high grade market index of tax-exempt, variable rate demand obligations published as the Bond Market Association Index. Under these agreements the Authority incurred net interest expense of \$28,562 and \$17,931 in fiscal 2003 and fiscal 2002, respectively.

***Summary of Swap Transactions by Category***

*Synthetic Fixed Rate Swap Transactions*

<u>Date of execution</u>	<u>Notional amount</u>	<u>Termination date</u>	<u>Associated bonds</u>	<u>Fixed payable swap rate</u>	<u>Variable receivable swap rate</u>	<u>Lump-sum payment from counterparty</u>	<u>Counterparty credit rating at June 30, 2003</u>	<u>Fair value at June 30, 2003</u>
03/15/00	\$ 269,200	08/01/30	2000 Series B & C	5.130%	BMA	N/A	Aaa	\$ (46,266)
03/15/00	70,400	08/01/37	2000 Series B & C	6.935	BMA	N/A	Aaa	(2,006)
01/14/99	93,000	08/01/06	1999 Series A	3.947	BMA	N/A	Aaa	(6,234)
01/14/99	93,000	08/01/06	1999 Series B	3.949	BMA	N/A	Aaa	(6,390)
12/22/98	198,895	11/01/26	1998 Series D	3.994	BMA	N/A	Aaa	(6,894)
08/15/02	350,000	08/01/15	2002 Series D, E, F, G	4.127	67% LIBOR	N/A	Aa3	(44,995)

*Synthetic Variable Rate Swap Transactions*

<u>Date of execution</u>	<u>Notional amount</u>	<u>Termination date</u>	<u>Associated bonds</u>	<u>Fixed receivable swap rate</u>	<u>Variable payable swap rate</u>	<u>Lump-sum payment from counterparty</u>	<u>Counterparty credit rating at June 30, 2003</u>	<u>Fair value at June 30, 2003</u>
10/26/00	\$ 150,000	08/01/11	2000 Series D	4.906%	BMA	N/A	Aaa	\$ 20,523

*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. All Fair Values have been calculated using the Mark to Market or Par Value Method. To mitigate credit risk, the Authority maintains strict credit standards for swap counterparties. All swap counterparties for longer term swaps are rated in the double-A category or higher by at least two of the three rating agencies (FITCH RATINGS, Moody's Investors Service and Standard and Poor's).

**Basis Risk.** The Authority is exposed to basis risk if the relationship between the floating index the Authority receives on the swaps (BMA or 67% of LIBOR) falls short of the variable rate on the associated bonds. Should this occur, the expected savings may not be realized.

**Rollover Risk:** Because the swaps for the 1999 A and B bonds terminate prior to the maturity of such bonds, the Authority is exposed to rollover risk. Upon the termination of the swaps, the Authority will no

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longer realize the synthetic rate on these bonds and will be exposed to the floating rate risk on the underlying bonds if no new swap is put in place.

At June 30, 2003, the following bonds outstanding are considered defeased in substance:

<b>Description</b>	<b>Redemption date</b>	<b>Redemption price</b>	<b>Outstanding principal amount</b>
1990 Series A	2004-2020	102%	\$ 649,335
1991 Series A	2004-2021	100% to 102%	246,430
1992 Series A	2012-2022	100% to 102%	283,500
1992 Series B	2003-2020	100%	446,160
1993 Series A	2003-2013	100% to 102%	79,485
1993 Series B	2004-2022	100% to 102%	428,090
1993 Series C	2017-2020	100% to 102%	95,760
1993 Series D	2003-2014	100% to 102%	52,250
1994 Series A	2008-2024	101.5%	113,145
1995 Series A	2003-2015	100% to 102%	55,410
1995 Series B	2003-2025	100% to 102%	5,375
1996 Series A	2011-2025	100% to 102%	111,950
1998 Series C	2003-2018	100% to 102%	92,720

The proceeds and available funds were deposited in an irrevocable trust with an escrow agent 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 balance sheet in an in-substance defeasance transaction.

Outstanding bonds that are redeemable before their scheduled due dates are as follows at June 30, 2003:

<b>Description</b>	<b>Redemption date</b>	<b>Redemption price</b>	<b>Outstanding principal amount</b>
1993 Series C	December 2004	100% to 102%	\$ 120,245
1994 Series A	August 2004	100% to 101.5%	10,860
1995 Series B	December 2005	100% to 102%	179,730
1996 Series A	November 2006	100% to 101%	15,625
1997 Series D	August 2008	100% to 101%	113,375
1998 Series A	August 2008	100%	141,290
1998 Series B	August 2008	100%	72,945
2000 Series A	August 2010	100% to 101%	246,655
2002 Series B	August 2011	100% to 101%	161,885
2002 Series J	August 2012	100%	200,000

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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.

During fiscal 2003, the Authority executed loan agreements with MWPAT providing for 2002 Series H Sewer and Water, 2002 Series I Sewer and Water, and 2003 Series A Water loans in the principal amounts of \$91,665, \$33,135, \$2,645, \$30, and \$1,532, respectively. All proceeds for these loans were received by June 30, 2003.

During fiscal 2002, the Authority executed loan agreements with the Massachusetts Water Pollution Abatement Trust (MWPAT) providing for 2001 Series C Water, 2001 Series D Sewer and Water and 2002 Series A Sewer and Water loans in the principal amounts of \$5,270, \$19,004, \$5,996, \$20,000 and \$5,000, respectively. All proceeds for these loans were received by June 30, 2002.

Federal and Commonwealth subsidies for purposes of offsetting principal payments aggregating \$138,283 will be recognized as capital grants in aid of construction over the term of the loans.

Interest is payable semiannually on all debt, except on the commercial paper and capital appreciation bonds, on which interest is payable upon maturity and the General Revenue Bonds with variable interest rates on which interest is payable monthly. The Senior General Revenue Bonds and the General Revenue Refunding Bonds are collateralized equally and ratably by a lien and pledge on substantially all of the Authority's cash and revenues, except the operating fund. The subordinated debt series, including the commercial paper are collateralized equally and ratably by a subordinated pledge on substantially all of the Authority's revenues and cash and investments, except the operating, debt service and debt service reserve funds. Discounts, issuance costs, and the excess of reacquisition price over the carrying amount of the defeased debt are being amortized over the lives of the respective issues.

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

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Year ending June 30:			
2004	\$ 48,426	217,632	266,058
2005	49,256	218,550	267,806
2006	85,326	215,470	300,796
2007	66,237	211,827	278,064
2008	85,354	208,213	293,567
2009-2013	872,566	935,672	1,808,238
2014-2018	1,123,366	712,025	1,835,391
2019-2023	1,278,470	446,214	1,724,684
2024-2028	687,830	214,840	902,670
2029-2033	297,655	101,749	399,404
2034-2038	144,120	50,639	194,759
2039-2041	97,861	10,343	108,204
Total	<u>\$ 4,836,467</u>	<u>3,543,174</u>	<u>8,379,641</u>

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The Authority issued commercial paper notes of \$311,000 to finance capital expenditures, which are secured by a \$102,466 and \$219,000 irrevocable direct-pay letters of credit which expire on September 8, 2004 and March 14, 2008, respectively.

The maximum aggregate principal amount of commercial paper which may be outstanding at any one time is \$350,000. These letters of credit carry a fee of 0.225% and 0.28% per annum, respectively, on the amount available. The weighted average interest rate on commercial paper outstanding at June 30, 2003 was 1.5%.

### **(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 \$26,965 and \$24,843 in fiscal 2003 and 2002, respectively, to be received in four or five equal annual installments.

The long-term portion of these loans at June 30, 2003 and 2002 is \$53,637 and \$39,595, respectively, and is included in other assets. This program is designed to assist member communities with sewer and water systems rehabilitation.

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**(8) Capital Assets**

Capital assets consisted of the following at June 30:

	<u>2002</u>	<u>Additions</u>	<u>Disposals/ transfers</u>	<u>2003</u>
Capital assets, not being depreciated:				
Land	\$ 16,806	—	—	16,806
Construction in progress	1,177,074	297,021	651,746	822,349
Total capital assets, not being depreciated	<u>1,193,880</u>	<u>297,021</u>	<u>651,746</u>	<u>839,155</u>
Capital assets, being depreciated:				
Plant and equipment, water and sewage system	6,608,337	599,079	—	7,207,416
Furniture and fixtures	19,234	9,917	—	29,151
Leasehold improvements	4,614	467	—	5,081
Motor vehicles and equipment	1,595	—	—	1,595
Total capital assets, being depreciated	<u>6,633,780</u>	<u>609,463</u>	<u>—</u>	<u>7,243,243</u>
Less accumulated depreciation for:				
Plant and equipment, water and sewage system	1,362,754	144,905	—	1,507,659
Furniture and fixtures	19,213	21	—	19,234
Leasehold improvements	2,880	445	—	3,325
Motor vehicles and equipment	952	19	—	971
Total accumulated depreciation	<u>1,385,799</u>	<u>145,390</u>	<u>—</u>	<u>1,531,189</u>
Total capital assets, being depreciated, net	<u>5,247,981</u>	<u>464,073</u>	<u>—</u>	<u>5,712,054</u>
Capital assets, net	\$ <u>6,441,861</u>	<u>761,094</u>	<u>651,746</u>	<u>6,551,209</u>



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Capital assets consisted of the following at June 30:

	<u>2001</u>	<u>Additions</u>	<u>Disposals/ transfers</u>	<u>2002</u>
Capital assets, not being depreciated:				
Land	\$ 16,806	—	—	16,806
Construction in progress	991,444	364,934	179,304	1,177,074
Total capital assets, not being depreciated	<u>1,008,250</u>	<u>364,934</u>	<u>179,304</u>	<u>1,193,880</u>
Capital assets, being depreciated:				
Plant and equipment, water and sewage system	6,430,350	177,987	—	6,608,337
Furniture and fixtures	19,199	35	—	19,234
Leasehold improvements	2,447	2,167	—	4,614
Motor vehicles and equipment	1,595	—	—	1,595
Total capital assets, being depreciated	<u>6,453,591</u>	<u>180,189</u>	<u>—</u>	<u>6,633,780</u>
Less accumulated depreciation for:				
Plant and equipment, water and sewage system	1,215,652	147,102	—	1,362,754
Furniture and fixtures	18,841	372	—	19,213
Leasehold improvements	2,447	433	—	2,880
Motor vehicles and equipment	916	36	—	952
Total accumulated depreciation	<u>1,237,856</u>	<u>147,943</u>	<u>—</u>	<u>1,385,799</u>
Total capital assets, being depreciated, net	<u>5,215,735</u>	<u>32,246</u>	<u>—</u>	<u>5,247,981</u>
Capital assets, net	\$ <u>6,223,985</u>	<u>397,180</u>	<u>179,304</u>	<u>6,441,861</u>

Depreciation for fiscal 2003 and 2002 was \$155,159 and \$155,258, respectively.

**(9) Other Assets**

On December 17, 1997, the Authority sold to Massachusetts Heavy Industries, Inc. (MHI) certain land, buildings, machinery, equipment, and other items located within a former shipbuilding facility, known as

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the Fore River Shipyard, for a total purchase price of \$10,000. The Authority received \$3,000 in December 1997. The remaining balance of \$7,000 was due to be received beginning in December 1999. In accordance with FASB No. 71, the original loss of \$28,303 was accounted for as a deferred charge and is expected to be recovered through future rates. During fiscal 2000, the \$7,000 receivable was determined to be uncollectible increasing the deferred loss on the original sale to \$35,303.

**(10) Leases**

*(a) Operating*

The Authority leases electrical power assets, office space in Boston, and other property under long-term operating leases. Future minimum rental payments required under operating leases having initial or remaining noncancelable lease terms in excess of one year are as follows at June 30, 2003:

Year ending June 30:	
2004	\$ 10,410
2005	9,665
2006	9,486
2007	6,824
2008	5,705
2009-2013	26,037
2014-2018	11,292
2019-2022	795
	<u>\$ 80,214</u>

The Authority has the option to extend the lease agreements on the Boston offices for a subsequent five-year period at costs ranging from the current market rent at the extension date to an 18% increase.

Rental expense was \$17,265 and \$13,126 in fiscal years 2003 and 2002, respectively.

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**(b) Capital**

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

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Year ending June 30:			
2004	\$ 349	2,868	3,217
2005	377	2,840	3,217
2006	408	2,809	3,217
2007	441	2,776	3,217
2008	477	2,740	3,217
2009-2013	3,033	13,052	16,085
2014-2018	4,480	11,605	16,085
2019-2023	6,619	9,466	16,085
2024-2028	9,778	6,307	16,085
2029-2032	10,823	1,779	12,602
Total	\$ <u>36,785</u>	<u>56,242</u>	<u>93,027</u>

**(11) Retirement Benefits**

All MDC personnel who became employees of the Authority on July 1, 1985, and were members of the State Employees Retirement System, retained their membership in that system. The Authority is not liable for retirement allowances paid to or on account of these employees. Funding of the pension liability of the State Employees Retirement System is the obligation of the Commonwealth. Employees covered by this plan become 100% vested after ten years of service. The Authority's covered payroll for members of this plan for the year ended June 30, 2003 was \$9,215. Total covered payroll for all Authority employees was \$66,420 for the year ended June 30, 2003.

**(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.

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 1/2% 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 ten

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(Dollars in thousands)

years of service. Complete financial statements for the Plan can be obtained from the Authority's administrative offices at Charlestown Navy Yard, 100 First Avenue, Boston, Massachusetts 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 ten or more years of service.

The 2002 contribution to the plan was based on an amount approved by the Retirement Board and the Authority's board of directors. The 2001 contribution to the Plan was based on 3.78% of covered payroll, as determined by the Retirement Board and approved by the Authority's board of directors. The Authority's Enabling Act requires funding to be made in accordance with the Retirement Board's recommendation.

**(c) Annual Pension Cost**

The annual required contribution for the current year was determined as part of the January 1, 2001, actuarial valuation using the entry age normal cost method. The actuarial assumptions included (a) 8% investment rate of return and (b) projected salary increase of 5.5% per year. Liabilities for cost of living increases have been assumed at an annual increase of 3%, on the first \$12 of benefit payments. Assets are valued at market value.

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

	<b>Annual pension cost (APC)</b>	<b>Percentage of APC contributed</b>	<b>Net pension obligation</b>
Fiscal year ending:			
2003	\$ 2,560	100%	\$ —
2002	2,438	100%	—
2001	2,616	100%	—

The Authority's policy is to provide certain health care and life insurance benefits for retired employees. Substantially all of the Authority's employees may become eligible for those benefits if they reach normal retirement age while working for the Authority. Those and similar benefits for active employees are provided through an insurance company whose premiums are based on the benefits paid during the year. Premiums for retired employees were immaterial in fiscal year 2003 and 2002.

# MASSACHUSETTS WATER RESOURCES AUTHORITY

## Notes to Financial Statements

June 30, 2003 and 2002

(Dollars in thousands)

### **(12) Commitments and Contingencies**

A major capital improvement program is currently in progress. As part of this program, the Authority has entered into a number of contracts for the design and construction of facilities. Commitments under these contracts aggregated approximately \$482,962 at June 30, 2003.

Under an order of the Federal District Court of Massachusetts, the Authority is required to comply with a detailed schedule of actions to achieve and maintain compliance with the requirements of the Clean Water Act. On December 15, 2000, the Authority reported substantial completion of the construction of Battery C of secondary treatment, the last milestone relating to the construction of new primary and secondary treatment facilities that commenced in December 1990. The remaining schedule establishes, among other things, a timetable of target dates for construction of a number of combined sewer overflow control projects that commenced in April 1996 and are to be completed by November 2008. Despite certain unanticipated delays related to siting issues or newly discovered information in a few projects, the Authority is in substantial compliance with the schedule requirements for these projects.

As a result of a finding of liability for a Clean Water Act violation by the MDC's sewerage operations, a substantial part of the Authority's construction programs have been subject to court supervision. In addition, the Court has reserved the right to order further remedial action and assess penalties. The Authority cannot predict whether penalties will be requested by litigants or assessed by the Courts in the future. No penalties have been assessed to date, and the Authority has no reason to expect any at this time.

The Authority's operating and construction plans are designed to comply with the Federal District Court's schedule of actions. The Authority anticipates capital expenditures of approximately \$7,793,130 from fiscal 1986 through fiscal 2013, of which \$6,121,387 has been spent as of June 30, 2003, including those projects required to comply with the Federal District Court's schedule. 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.

The Authority is also a defendant, or may derivatively be a defendant, in several legal actions arising out of the operations of the water and sewer systems. It is the opinion of management that no material adverse assessments will result from these actions.

### **(13) Risk Management**

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

On July 1, 1998, the Authority instituted an Alternative Risk Transfer insurance program, which combines the Authority's various insurance coverages into one program with a per occurrence deductible of \$2,500. The Authority reimburses the Commonwealth on a paid-claims basis for unemployment claims. Claims expensed during fiscal 2003 and 2002 were \$1,039 and \$79, respectively. The Authority is a licensed self-

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insurer for workers' compensation. Excess loss insurance is carried on workers' compensation as required by law in excess of \$500 per occurrence retention, with a limit of \$25,000 per occurrence.

The Authority participates in and pays premiums to the Commonwealth's Group Insurance Contract for employee health benefits. The Authority pays 85% of these health premiums, with employees paying the balance.

Insurance claims have not exceeded insurance coverage in any of the last three fiscal years.

The MetroWest Water Supply Tunnel is being insured under an Owner's Controlled Insurance Program (OCIP). The Authority provides workers' compensation, general liability, and pollution coverage for operations of the contractors on this project. There is a \$500 self-insurance retention for each coverage with a total aggregate self-insurance retention of \$1,250 for a combined claim under the OCIP.

The Authority also instituted a second OCIP for the Walnut Hill Water Treatment Plant. The Authority provides workers' compensation, general liability, and pollution coverage for operations of the contractors on this project. There is a \$500 self-insured retention per occurrence for each coverage.

GASB Statement No. 10 requires that liabilities for self insured claims be reported if it is probable that a loss has been incurred and the amount can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. The Authority records such liabilities in accrued expenses.

Changes in the claims liability insurance reserves in fiscal 2003 and 2002 were as follows:

	<b>General liability, property, and casualty</b>	<b>Workers' compensation</b>	<b>OCIP projects</b>
Liability balance, June 30, 2001	\$ 1,868	365	2,921
Provision to record estimated losses	371	1,363	5,537
Payments	<u>(779)</u>	<u>(1,561)</u>	<u>(2,669)</u>
Liability balance, June 30, 2002	1,460	167	5,789
Provision to record estimated losses	3,826	3,195	3,198
Payments	<u>(1,623)</u>	<u>(1,352)</u>	<u>(4,633)</u>
Liability balance, June 30, 2003	<u>\$ 3,663</u>	<u>2,010</u>	<u>4,354</u>

**(14) Subsequent Events**

On July 24, 2003, the Authority executed a loan agreement with the Massachusetts Water Pollution Abatement Trust (MWPAT) providing for the 2003 Series B Water loan in the principal amount of \$4,566. On November 1, 2003, the Authority executed a loan agreement with the MWPAT providing for the 2003 Series C Sewer and Water loans in the principal amounts of \$32,192 and \$21, 630, respectively. Proceeds from these loans will be used to fund construction projects.

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Required Supplementary Information  
(Unaudited)

June 30, 2003

(Dollars in thousands)

Schedule of Funding Progress

<b>Actuarial valuation</b>	<b>Assets (a)</b>	<b>Actuarial accrued liability (AAL) – entry age (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded ratio (a/b)</b>	<b>Covered payroll (c)</b>	<b>UAAL as a percentage covered payroll ((b-a)/(c))</b>
1/1/2001	\$ 128,385	\$ 128,385	—	100%	\$ 65,955	—
1/1/1999	96,318	96,318	—	100	66,782	—
1/1/1998	77,712	77,712	—	100	63,579	—
1/1/1997	58,185	58,185	—	100	60,120	—
1/1/1996	46,076	46,980	(904)	98	56,660	—

Actuarial information about the Plan for other years is not readily available.

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Supplemental Schedule of Accounts Established  
by the General Revenue Bond Resolution

Activity for the year ended June 30, 2003 and  
comparative totals as of June 30, 2003 and 2002

(Dollars in thousands)

	<u>Construction</u>	<u>Revenue</u>	<u>Debt service</u>	<u>Reserves</u>	<u>Total</u>
Balance at June 30, 2002	\$ 112,504	78,178	482,498	70,562	743,742
Proceeds from:					
Revenue bonds and loans	281,109	—	50,000	—	331,109
Commercial paper	—	420,970	—	—	420,970
Capital contribution	—	432	—	—	432
Interest income	1,181	8,655	28,879	1,098	39,813
Grant receipts	4,127	—	4,643	—	8,770
Construction payments	(304,286)	—	—	—	(304,286)
Capital lease payments	(331)	—	(2,886)	—	(3,217)
Debt service payment	(1,139)	—	(395,227)	—	(396,366)
Other Commonwealth payments	—	(18,684)	—	—	(18,684)
Interfund transfers	(3,407)	(256,259)	259,690	(24)	—
Transfers (to) from operating account	673	(179,187)	2,893	—	(175,621)
Balance at June 30, 2003	\$ <u>90,431</u>	<u>54,105</u>	<u>430,490</u>	<u>71,636</u>	<u>646,662</u>

	<u>Sewer</u>	<u>Water</u>	<u>2003 Total</u>	<u>2002 Total</u>
Restricted cash and investments:				
Construction	\$ 71,765	18,666	90,431	112,504
Debt service reserves	181,082	49,206	230,288	262,450
Debt service	115,759	55,868	171,627	151,974
Revenue redemption	3,365	3,440	6,805	47,131
Revenue	29,858	24,247	54,105	78,178
Renewal and replacement reserve	35,248	18,391	53,639	52,565
Insurance	8,999	8,998	17,997	17,997
Community obligation and revenue enhancement	18,632	3,138	21,770	20,943
Total restricted cash and investments	\$ <u>464,708</u>	<u>181,954</u>	<u>646,662</u>	<u>743,742</u>

See accompanying independent auditors' report.



**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Supplemental Schedule  
Combining Balance Sheet

June 30, 2003

(Dollars in thousands)

<b>Assets</b>	<b>Sewer</b>	<b>Water</b>	<b>Combined total</b>
Unrestricted current assets:			
Cash and cash equivalents	\$ 22,360	7,889	30,249
Investments	37,483	16,437	53,920
Intergovernmental loans	5,997	6,770	12,767
Accounts receivable	8,066	1,811	9,877
Total unrestricted current assets	<u>73,906</u>	<u>32,907</u>	<u>106,813</u>
Restricted assets:			
Cash and investments	464,707	181,955	646,662
Interest receivable	4,926	1,654	6,580
Grants receivable:			
Billed	2,219	(56)	2,163
Unbilled	208	—	208
Total restricted assets	<u>472,060</u>	<u>183,553</u>	<u>655,613</u>
Capital assets, not being depreciated	294,621	544,534	839,155
Capital assets, being depreciated, net	3,790,403	1,921,651	5,712,054
Deferred charges	167,503	71,777	239,280
Other assets, net	117,772	41,461	159,233
Total assets	<u>\$ 4,916,265</u>	<u>2,795,883</u>	<u>7,712,148</u>
<b>Liabilities and Net Assets</b>			
Current liabilities:			
Accounts payable and accrued expenses	\$ 29,295	25,127	54,422
Commercial paper notes	—	311,000	311,000
Current portion of long-term debt	34,889	13,537	48,426
Total current liabilities	<u>64,184</u>	<u>349,664</u>	<u>413,848</u>
Payable from restricted assets:			
Accounts payable for construction	21,149	20,807	41,956
Accrued interest on bonds payable	48,763	18,121	66,884
Total payable from restricted assets	<u>69,912</u>	<u>38,928</u>	<u>108,840</u>
Retainage on construction in progress	8,587	32,674	41,261
Long-term debt, less current portion	3,393,607	1,213,681	4,607,288
Long-term capital leases	25,017	11,768	36,785
Reserves	82,670	36,514	119,184
Deferred credits	70,662	16,500	87,162
Total liabilities	<u>3,714,639</u>	<u>1,699,729</u>	<u>5,414,368</u>
Net assets:			
Invested in capital assets, net of related debt	977,850	978,582	1,956,432
Restricted	74,530	48,879	123,409
Unrestricted	149,246	68,693	217,939
Total net assets	<u>1,201,626</u>	<u>1,096,154</u>	<u>2,297,780</u>
Commitments and contingencies			
Total liabilities and net assets	<u>\$ 4,916,265</u>	<u>2,795,883</u>	<u>7,712,148</u>

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Supplemental Schedule  
Combining Balance Sheet

June 30, 2002

(Dollars in thousands)

<b>Assets</b>	<b>Sewer</b>	<b>Water</b>	<b>Combined total</b>
Unrestricted current assets:			
Cash and cash equivalents	\$ 24,212	9,846	34,058
Investments	37,740	16,263	54,003
Intergovernmental loans	4,842	7,673	12,515
Accounts receivable	1,291	526	1,817
Total unrestricted current assets	<u>68,085</u>	<u>34,308</u>	<u>102,393</u>
Restricted assets:			
Cash and investments	504,807	238,935	743,742
Interest receivable	4,699	2,478	7,177
Grants receivable:			
Billed	1,596	(56)	1,540
Unbilled	4,113	—	4,113
Total restricted assets	<u>515,215</u>	<u>241,357</u>	<u>756,572</u>
Capital assets, not being depreciated	317,343	876,537	1,193,880
Capital assets, being depreciated, net	3,788,219	1,459,762	5,247,981
Deferred charges	172,655	70,731	243,386
Other assets, net	95,628	31,577	127,205
Total assets	<u>\$ 4,957,145</u>	<u>2,714,272</u>	<u>7,671,417</u>
<b>Liabilities and Net Assets</b>			
Current liabilities:			
Accounts payable and accrued expenses	\$ 24,738	21,383	46,121
Commercial paper notes	—	317,000	317,000
Current portion of long-term debt	96,158	21,812	117,970
Total current liabilities	<u>120,896</u>	<u>360,195</u>	<u>481,091</u>
Payable from restricted assets:			
Accounts payable for construction	26,541	19,394	45,935
Accrued interest on bonds payable	41,730	13,983	55,713
Total payable from restricted assets	<u>68,271</u>	<u>33,377</u>	<u>101,648</u>
Retainage on construction in progress	11,244	32,981	44,225
Long-term debt, less current portion	3,287,529	1,099,438	4,386,967
Long-term capital leases	25,234	11,874	37,108
Reserves	82,670	36,514	119,184
Deferred credits	133,108	21,284	154,392
Total liabilities	<u>3,728,952</u>	<u>1,595,663</u>	<u>5,324,615</u>
Net assets:			
Invested in capital assets, net of related debt	1,000,195	1,005,785	2,005,980
Restricted	85,861	42,329	128,190
Unrestricted	142,137	70,495	212,632
Total net assets	<u>1,228,193</u>	<u>1,118,609</u>	<u>2,346,802</u>
Commitments and contingencies			
Total liabilities and net assets	<u>\$ 4,957,145</u>	<u>2,714,272</u>	<u>7,671,417</u>

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Supplemental Schedule  
Combining Statement of Revenues, Expenses and Changes in Net Assets

Year ended June 30, 2003

(Dollars in thousands)

	<u>Sewer</u>	<u>Water</u>	<u>Combined total</u>
Operating revenues:			
Customer services	\$ 306,153	120,513	426,666
Other	2,154	227	2,381
	<u>308,307</u>	<u>120,740</u>	<u>429,047</u>
Operating expenses:			
Operations	51,577	26,840	78,417
Maintenance	14,249	2,965	17,214
Payments in lieu of taxes	—	4,966	4,966
Engineering, general, and administrative	76,844	31,257	108,101
	<u>142,670</u>	<u>66,028</u>	<u>208,698</u>
Income from operations before depreciation	165,637	54,712	220,349
Depreciation	<u>116,142</u>	<u>39,017</u>	<u>155,159</u>
Operating income	<u>49,495</u>	<u>15,695</u>	<u>65,190</u>
Regulatory accounting provisions:			
Decrease in deferred credits, net	57,294	5,830	63,124
	<u>57,294</u>	<u>5,830</u>	<u>63,124</u>
Nonoperating income (expense):			
Investment income	31,204	9,059	40,263
Interest expense	(169,826)	(53,693)	(223,519)
	<u>(138,622)</u>	<u>(44,634)</u>	<u>(183,256)</u>
Net loss before capital contributions	(31,833)	(23,109)	(54,942)
Capital grants and contributions	<u>5,267</u>	<u>653</u>	<u>5,920</u>
Decrease in net assets	(26,566)	(22,456)	(49,022)
Total net assets, beginning of year	<u>1,228,193</u>	<u>1,118,609</u>	<u>2,346,802</u>
Total net assets, end of year	\$ <u>1,201,627</u>	<u>1,096,153</u>	<u>2,297,780</u>

See accompanying independent auditors' report.

**MASSACHUSETTS WATER RESOURCES AUTHORITY**

Supplemental Schedule  
Combining Statement of Revenues, Expenses and Changes in Net Assets

Year ended June 30, 2002

(Dollars in thousands)

	<u>Sewer</u>	<u>Water</u>	<u>Combined total</u>
Operating revenues:			
Customer services	\$ 288,953	112,438	401,391
Other	1,909	182	2,091
	<u>290,862</u>	<u>112,620</u>	<u>403,482</u>
Operating expenses:			
Operations	53,290	27,617	80,907
Maintenance	13,138	3,208	16,346
Payments in lieu of taxes	—	4,911	4,911
Engineering, general, and administrative	76,727	31,276	108,003
	<u>143,155</u>	<u>67,012</u>	<u>210,167</u>
Income from operations before depreciation	147,707	45,608	193,315
Depreciation	<u>109,323</u>	<u>45,935</u>	<u>155,258</u>
Operating income (loss)	<u>38,384</u>	<u>(327)</u>	<u>38,057</u>
Regulatory accounting provisions:			
Decrease in deferred credits, net	27,874	79	27,953
	<u>27,874</u>	<u>79</u>	<u>27,953</u>
Nonoperating income (expense):			
Debt service grants	44,171	6,036	50,207
Investment income	32,110	10,841	42,951
Interest expense	(174,358)	(48,485)	(222,843)
	<u>(98,077)</u>	<u>(31,608)</u>	<u>(129,685)</u>
Net loss before capital contributions	(31,819)	(31,856)	(63,675)
Capital grants and contributions	<u>5,625</u>	<u>228</u>	<u>5,853</u>
Decrease in net assets	(26,194)	(31,628)	(57,822)
Total net assets, beginning of year	<u>1,254,387</u>	<u>1,150,237</u>	<u>2,404,624</u>
Total net assets, end of year	\$ <u><u>1,228,193</u></u>	<u><u>1,118,609</u></u>	<u><u>2,346,802</u></u>

See accompanying independent auditors' report.