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Boston Water and
Sewer Commission

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Setting the Standards

Raising the Level
of Service and
Satisfaction

Annual Report
2004



EXCELLENCE




TOWARD



RISING





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A Message from the Executive Director

Left to right:
Muhammad Ali-Salaam, Commissioner,
Dennis DiMarzio, Chair, Board of Commissioners,
Cathleen Douglas Stone, Commissioner, and
Vincent G. Mannering, Executive Director



Throughout our history, the Boston Water and Sewer Commission has endeavored to build and constantly improve its service obligation to ratepayers by being an efficient and well managed agency. The Commission is proud not only of its record of past accomplishments, but also of the significant initiatives we have undertaken to ensure the proper delivery and maintenance of quality water and wastewater services to the City of Boston. The intelligent use of integrated technology is critical to that mission.

Last year we reported that the Boston Water and Sewer Commission introduced *SmartRead*, an automated meter reading system designed to revolutionize the way we serve our customers. This year I am happy to report that the installation is complete. Over 86,000 residential and commercial water meters are now read daily, eliminating the need for estimated bills.

Technology also helps us track the flow of water throughout the system, reducing leakage that wastes water and helping to pinpoint where maintenance is needed. In addition, an integrated geographic information system and state-of-the-art inventory and work order management systems help us improve workforce productivity.

Since 1995, our Capital Improvement Program has spent over \$375 million while repairing or replacing over 351 miles of water, sewer or drain pipe. While accomplishing this, the Boston Water and Sewer Commission has also received two bond upgrades and now has the highest bond rating in our history.

The support of Mayor Thomas Menino, along with innovative technology, a strong fiscal position and award winning business procedures, enables the Commission to continue its quest for excellence in public service.

Sincerely,

Vincent G. Mannering
Executive Director



Raising the Standard Toward Excellence

International, national and local agencies have all recognized the Boston Water and Sewer Commission (BWSC) for excellence in metering, financial management, operational efficiency and system maintenance. However, the BWSC does not rest on its laurels. It continues to search for innovative ways to improve service to customers and raise the standard in its quest for excellence.

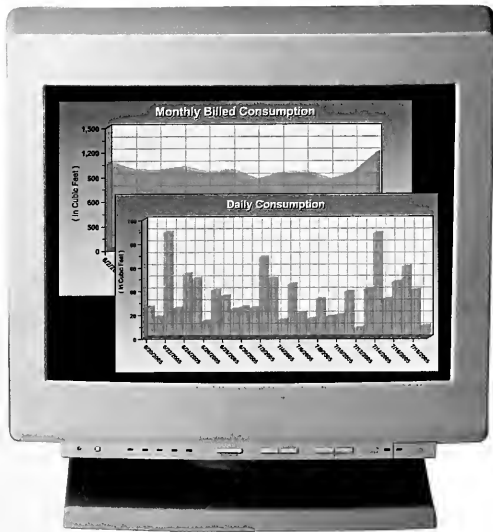
Improved Customer Service

In 2004, the Commission completed the installation of *SmartRead*, a citywide state-of-the-art automated meter reading system. With *SmartRead*, meters across Boston, in both homes and commercial buildings, are now read via radio frequency four times daily, eliminating the need for conventional meter reading. The *SmartRead* system improves customer service and billing accuracy and provides BWSC with the ability to track the use of water throughout the system.

Thanks to the successful implementation of *SmartRead*, more than 86,000 customers can now access their BWSC account information 24 hours a day, seven days a week at the Commission's website, www.bwsc.org. Customers can review the last 90 days of water consumption, monthly billing statements and recent transactions. Water and sewer bills can also be paid online. Graphs that display monthly and daily water consumption enable customers to monitor their water usage, track the results of their conservation efforts and identify leaks.

For its part, the Commission now uses *SmartRead* data to periodically analyze meter readings and find anomalies in water usage. Recently, *SmartRead* data enabled the Commission to identify four buildings in a commercial area that were identical in occupancy and function yet differed in water usage. In one of the buildings,





Thanks to the successful implementation of *SmartRead*, more than 86,000 customers can now access their BWSC account information 24 hours a day, seven days a week at the Commission's website, www.bwsc.org.

water consumption was much higher than in the others. When BWSC technicians investigated and found that a pipe in that building had been damaged during interior renovations and was leaking considerably, they notified the building's facilities personnel, who fixed the problem.

Integrated business systems also help the Commission to respond quickly to customers. The *Work Order Management System (WOMS)* helps workers coordinate preventive maintenance and respond efficiently to emergencies and customer concerns. When ratepayers call the Commission's 24-hour Emergency Operations Center to request service, work orders are opened. Work orders track the nature and location of the call and are integrated with the Commission's database, to allow maximum efficiency in our response. In a major emergency, all details can be displayed graphically on the Commission's *SmartBoard*, an interactive, computerized whiteboard, and staff can coordinate and determine how best to respond to the emergency.

The *Work Order Management System* prevents duplication of effort by ensuring that when multiple calls for the same problem are received, only one crew is dispatched to investigate. BWSC managers analyze this information to determine a course of action, track the progress of repairs, and mobilize the requisite workforce and equipment efficiently from a central location.

The Commission's use of the latest technology makes it possible not only to improve worker productivity and response time but also to anticipate customer problems and move proactively to solve them.

In recognition of its citywide installation of *SmartRead* devices, the Commission has earned the prestigious international award for "*Best Automated Meter Reading Initiative in a North American Municipal Utility*" from Metering International. Additionally, the use of integrated business systems has helped the Commission win the *Gold Award for Competitiveness Achievement* from the Association of Metropolitan Water Agencies. The award recognizes large public drinking water systems whose management practices chart new financial courses, seek new growth opportunities and meet the ever-expanding array of customer service needs and expectations.



Repairing the infrastructure



Installing a data-logger



Data-logging devices

Recently, BWSC's Leak Detection Program won national attention on the *CBS Evening News*.

In 2004, this program surveyed approximately 700 miles of the BWSC's 1,021 linear miles of water mains in order to find and repair hidden leaks.

System-wide Water Monitoring

A key facet of the Commission's mission is to ensure the continued adequate supply of high quality, potable water at a reasonable cost to ratepayers. This involves reducing the amount of non-revenue producing water throughout the system. Much of the system's unbilled water is due to water leakage which may end up in city sewers, causing the Commission and its customers to pay for the water that was never used.

One way the Commission reduces this gap is through its Leak Detection Program. In 2004, this program surveyed approximately 700 miles of the BWSC's 1,021 linear miles of water mains in order to find and repair hidden leaks. A series

of data-logging devices are remotely positioned in the city to "listen" for leaks on water mains within a defined area. Correlating devices then pinpoint the exact location of leaks so that engineers and technicians can find and repair them.

Recently, BWSC's Leak Detection Program won national attention on the *CBS Evening News*. BWSC was also prominently recognized by the Massachusetts Department of Environmental Protection's Drinking Water Program with the *2004 Public Water System Award*. This state award recognizes Boston for outstanding performance in maintaining a consecutive water distribution system and water management practices.

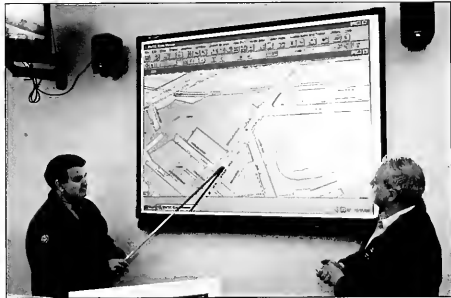
Strategic Information Technology Plan

Integration of technologies is essential to the Commission's raising the bar toward excellence. The goal of our Information Technology Strategic Plan is to become "one Commission," so that we have a single, Commission-wide view of all the data necessary to resolve customer issues quickly and efficiently.

To that end, a robust data base has been set up to capture and store citywide information about BWSC's infrastructure. Data governance guidelines set the rules and make it possible for users to access data from across multiple storage applications. Instead of paper maps, BWSC staff can now access computerized infrastructure maps remotely from laptops in their vehicles to quickly identify the exact location of shut-off valves and other infrastructure components for repairs. Using the same technology, emergency and special conditions can easily be noted and efficiently handled based on real-time information.

The Commission has also committed to funding new technologies that track material and work crews, which is essential to efficient resource management. For instance, the Commission has integrated the WOMS system with our Geographic Information System (GIS), so we can track and graphically display work performed throughout the city as well as monitor the use of materials and equipment used in preventive maintenance and emergency repairs. Using historical data, we have developed preventive and corrective maintenance protocols that help us perform those tasks and ensure that vehicles are equipped with the proper tools and materials.

The GIS system is also integrated with the Customer Information & Billing System, so that by reconciling GIS spatial data with account data, abnormalities can quickly be identified and displayed and buildings showing no water usage can be investigated to ensure that all active buildings have accounts.



BWSC managers and staff utilize *SmartBoard*, WOMS, and GIS technologies to coordinate response to emergency situations.

Applications for new water services are now processed automatically by the General Service Application (GSA) tracking system. When engineers apply for permits, a checklist of requisite tasks is generated. As requirements are completed, the tracking system is updated, streamlining both the installation process and establishment of new accounts.

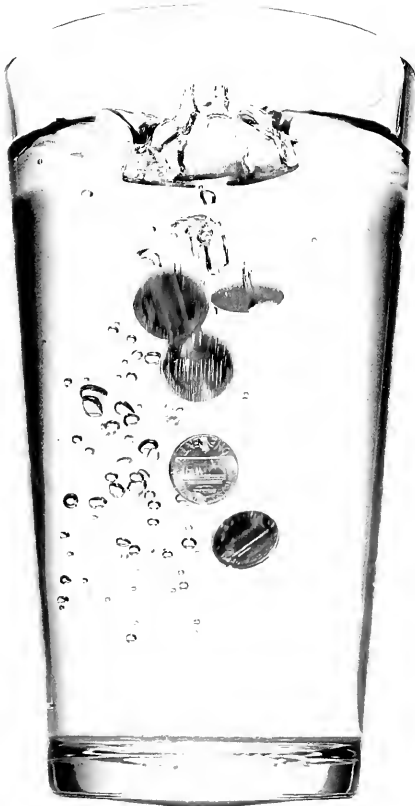


Exceptional Fiscal Management

Over the last ten years, the Commission's water and sewer rates have risen less than the rate of inflation, despite a more than 45 percent rise in wholesale prices. In fact, during that period, the rates BWSC customers pay went from among the highest in the MWRA service district to among the lowest. BWSC has achieved this stability by keeping direct operating expenses controlled, and by careful, effective management. The Commission's conservative fiscal policy, combined with prudent management of its debt, has resulted in two upgrades in its bond rating. The Commission now has the highest bond rating in its history: AA- from Fitch Investor Services, AA from Standard and Poor's and Aa2 from Moody's Investor Services.

In 2004, the Commission's fiscal management received the Government Finance Officers Association (GFOA) top honors in financial reporting for the thirteenth consecutive year with the *Distinguished Budget Presentation Award*. GFOA commended the Commission's budget both as a communications tool and as a model financial plan, noting a strong willingness to embrace changes in budgeting standards and regulatory requirements. The *Distinguished Budget Presentation Award* is the highest form of recognition in governmental budgeting. It is based on meeting GFOA's program criteria as a policy document, operation guide, financial plan and communications device and represents a celebrated accomplishment for a municipality or governmental agency.

Equally important was GFOA's *2004 Certificate of Achievement for Excellence in Financial Reporting* for BWSC's Comprehensive Annual Financial Report of strategic departmental goals and objectives. The Commission's report is judged based on its conformity to Generally Accepted Accounting Principles (GAAP) and its compliance with legal and contractual provisions. This high honor was also received for the thirteenth consecutive year and represents a significant achievement for a government agency.





BWSC has been honored for 13 consecutive years with both the *Distinguished Budget Presentation Award* and the *Certificate of Achievement for Excellence in Financial Reporting*

Over the last ten years, the Commission's water and sewer rates have risen less than the rate of inflation, despite a more than 45 percent rise in wholesale prices. In fact, during that period, the rates BWSC customers pay went from among the highest in the MWRA service district to among the lowest.

Awards Won by BWSC in 2004

Public Water System Award

The Massachusetts Department of Environmental Protection's Drinking Water Program

Best Automated Meter Reading Initiative in a North American Municipal Utility

Metering International

Gold Award for Competitiveness Achievement

Association of Metropolitan Water Agencies

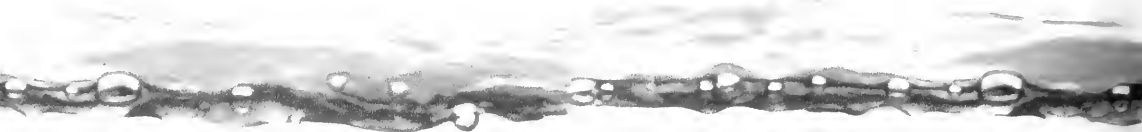
Certificate of Achievement for Excellence in Financial Reporting

Government Finance Officers Association

Distinguished Budget Presentation Award

Government Finance Officers Association





Boston Water and Sewer Commission

Financial Statements

**Required Supplementary Information,
and Supplemental Schedules**

December 31, 2004 and 2003



Independent Auditors' Report

The Commissioners Boston Water and Sewer Commission

We have audited the accompanying statements of net assets of the Boston Water and Sewer Commission (the Commission) as of December 31, 2004 and 2003, and the related statements of operations, and cash flows for the years then ended. These financial statements are the responsibility of the Commission'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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control over financial reporting. Accordingly, we express no such opinion. 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 Commission at December 31, 2004 and 2003, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The management's discussion and analysis on pages 11 through 14 is not a required part of the basic financial statements, but is 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 basic financial statements. The accompanying supplemental schedules are not required parts of the basic financial statements. Such information has been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG LLP

March 31, 2005

Management's Discussion and Analysis

Required Supplementary Information, December 31, 2004 and 2003

Since its creation in 1977, the Boston Water and Sewer Commission (the Commission) has assumed the responsibility to provide water distribution, wastewater collection, and storm water drainage services in the City of Boston (the City).

The Commission has realized surpluses from its operations in each year since its inception. In accordance with the Boston Water and Sewer Reorganization Act of 1977 (the Enabling Act), the Commission applies audited surpluses to reduce its rates in succeeding years.

To accommodate the rate-making process, the Commission follows the accounting standards set forth in Statement of Financial Accounting Standards (SFAS) No. 71. SFAS No.

71 allows certain (a) revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred credits) and (b) costs incurred to be capitalized if future recovery is reasonably assured (deferred charges).

The statements of net assets provide information on the assets and liabilities of the Commission, with net assets (deficits) reported as the difference between assets and liabilities. The statements of operations of the Commission reflect all revenues earned and all expenses incurred for each of the years ended December 31, 2004 and 2003.

Condensed financial information for the three most recent fiscal years is presented in this section of the report.

	2004	2003	2002
Current assets	\$26,430,582	27,371,123	27,527,877
Capital assets, net	739,101,305	686,412,129	627,393,255
Other assets	274,110,222	230,477,452	280,074,598
Total assets	<u>1,039,642,109</u>	<u>944,260,704</u>	<u>934,995,730</u>
Current liabilities	38,655,940	37,587,106	31,755,677
Noncurrent liabilities	763,595,703	695,411,346	717,989,162
Total liabilities	<u>802,251,643</u>	<u>732,998,452</u>	<u>749,744,839</u>
Net assets			
Invested in capital assets, net of related debt	417,744,545	379,695,558	318,390,253
Restricted net assets	82,331,511	75,559,717	83,636,998
Unrestricted net deficits	(262,685,590)	(243,993,023)	(216,776,360)
Total net assets	<u>\$237,390,466</u>	<u>211,262,252</u>	<u>185,250,891</u>

Management’s Discussion and Analysis, continued

In 2004, the Commission’s net assets totaled \$237.4 million, an increase of \$26.1 million, or 12.4%, from FY 03, and in 2003, net assets totaled \$211.3 million, an increase of \$26.0 million, or 14.0%, from FY 02. The Commission recognized statutory surplus of \$7.8 million in FY 04, \$0.5 million in FY 03, and \$0.4 million in FY 02.

Total assets in FY 04 were \$1.0 billion, an increase of \$95.4 million, or 10.1%, from FY 03 total assets of \$944.3 million. In FY 03, total assets were \$944.3 million, an increase of \$9.3 million, or 1.0%, from FY 02 total assets of \$935.0 million.

The Commission invested in various capital assets, including capital improvement projects, machinery and equipment, buildings, and improvements. These investments, net of accumulated depreciation, totaled \$739.1 million, an increase of \$52.7 million, or 7.7%, over FY 03’s total investment in capital assets. In FY 03, these investments totaled \$686.4 million, an increase of \$59.0 million, or 9.4%, over FY 02’s total investment in capital assets.

Water and sewer charges in FY 04 represented 97.0% of operating revenues. Water and sewer charges totaled \$221.7 million, which was \$16.7 million, or 8.2%, higher than the same period in the prior year, due primarily to a rate increase of 5.8% in water and sewer charges in FY 04. The Commission accrued billing adjustments at 2.5% and bad debts at 0.3% of accrued water and sewer charges for the year. Additionally, discounts were accrued at 1.0% of unbilled water revenue.

Total operating revenues in FY 04, which, in addition to water and sewer revenue, include fire pipe and other

revenues, totaled \$228.8 million, representing an increase in total operating revenue of \$6.8 million, or 3.1%, over FY 03.

In FY 03, water and sewer charges represented 92.4% of operating revenues. They totaled \$205 million, which is \$17.9 million, or 9.6%, higher than water and sewer charges in FY 02 due to a combined rate increase of 12.8% in water and sewer charges in FY 03. The Commission accrued billing adjustments at 2.75% and bad debts at 0.3% of accrued water and sewer charges for the year. Additionally, discounts were accrued at 1.0% of unbilled water revenue.

Total operating revenues in FY 03, which, in addition to water and sewer revenue, include fire pipe and other revenues, totaled \$221.9 million, representing an increase in revenue of \$17.5 million, or 8.6%, over FY 02’s revenue.

Direct operating expenses in FY 04 totaled \$200.8 million, which was \$3.1 million, or 1.5%, less than direct operating expenses for the same period in FY 03. This decrease was due primarily to decreased maintenance expense in the current fiscal year, which was driven by a decrease in the contract to repair sewer systems. Investment income increased by \$2.4 million, or 57.6%, in FY 04, reflecting the slightly higher interest rate environment compared to FY 03. In FY 03, direct operating expenses totaled \$203.9 million, which was \$11.1 million, or 5.7%, over direct operating expenses in FY 02. This increase was due primarily to an increase in the Massachusetts Water Resources Authority (MWRA) assessment. Investment income decreased by \$7.5 million in FY 03, offset slightly by a decrease of \$1.0 million in interest paid.

	2004	2003	2002
Operating revenues	\$228,758,914	221,915,418	204,389,352
Operating expenses	<u>200,801,196</u>	<u>203,889,999</u>	<u>192,848,177</u>
Excess operating revenues	27,957,718	18,025,419	11,541,175
Nonoperating expenses	<u>(8,344,315)</u>	<u>(11,327,734)</u>	<u>(5,118,090)</u>
Excess revenues before capital grants and contributions and transfer requirements	19,613,403	6,697,685	6,423,085
Capital grants and contributions	29,781,881	29,352,147	25,169,818
Excess revenues used to fund reserves and other deferrals	(16,016,268)	(9,949,275)	(9,369,771)
Change in accumulated revenues used to offset future rates	<u>(7,250,802)</u>	<u>(89,196)</u>	<u>(17,183)</u>
Change in net assets	26,128,214	26,011,361	22,205,949
Net assets, beginning of year	<u>211,262,252</u>	<u>185,250,891</u>	<u>163,044,942</u>
Net assets, end of year	<u>\$237,390,466</u>	<u>211,262,252</u>	<u>185,250,891</u>

Capital Assets

In FY 04, the Commission's infrastructure project additions totaled \$27.6 million, of which \$12.6 million was financed with bond proceeds. Infrastructure project expenditures are as follows (in millions):

Relay of water mains	\$6.5
Reline of water mains	2.4
Rehabilitation/replacement of sewer or storm drains	8.8
Interceptor improvements	0.3
Separation of combined sewers	1.1
Infiltration and inflow	1.1
Meter replacement	7.4

The Commission's FY 05–FY 07 capital budget includes projected expenditures of \$175.5 million for infrastructure and capital projects. The major projects are for the rehabilitation of water mains and the replacement/rehabilitation of the sewer system. Some water projects are financed on a pay-as-you-go cash basis combined with an interest-free loan for water rehabilitation provided by the Massachusetts Water Resources Authority (MWRA). The majority of the sewer improvements will be financed through bond proceeds. However, there are sewer improvements that are funded through the utilization of the MWRA loan programs.

More detailed information about the Commission's capital assets is presented in note 3 to the financial statements.

Debt Plan

The Commission is empowered by the Enabling Act to issue bonds and notes payable constituting sole general obligations of the Commission. The Commission has no legal restrictions concerning the amount of debt that it may have outstanding, subject to the coverage requirements described below.

The Commission issues general revenue bonds to finance portions of its capital improvement projects. The Commission's FY 05–FY 07 capital budget, which totals \$175.5 million, anticipates that projects totaling \$123.9 million, or 70.6%, of the Commission's FY 05–FY 07 capital budget, will be funded from bond proceeds. The FY 05 budget for debt service is \$33.3 million.

The Commission currently has nine series of general revenue bonds outstanding at the end of 2004, totaling approximately \$343.2 million:

\$30.8 million	1992 Series A
46.7 million	1993 Series A
33.5 million	1994 Series A
13.0 million	1998 Series A
11.2 million	1998 Series C
117.6 million	1998 Series D
11.7 million	2002 Series A
25.7 million	2003 Series A
53.0 million	2004 Series A

In FY 04, the Commission completed an issue of \$53.0 million General Revenue Series A Bonds to fund future capital projects.

More detailed information about the Commission's long-term obligations is presented in note 4 to the financial statements.

Debt Service Coverage Requirements

The Commission's bond covenant requires that rates and charges be at least sufficient to provide revenues (i) to pay all current expenses of the Commission, (ii) to pay the principal of, premium, if any, and interest on all bonds issued by the Commission as they become due and payable, (iii) to create and maintain such reasonable reserves as may be reasonably required by any trust agreement or resolution-securing bonds, (iv) to provide funds for paying the cost of all necessary repairs, replacements, and renewal of the systems, and (v) to pay or provide for any and all amounts which the Commission may be obligated to pay or provide for by law or contract. The Commission is also required to establish and maintain rates and charges at levels sufficient so that total net revenues in each year during which bonds are outstanding will equal at least 125% of (1) the bond debt service requirement during such year less (2) the amount, if any, of bond proceeds available to pay interest becoming due in such year on bonds outstanding as of the first day of such year. The Commission has exceeded the 125% debt service coverage requirement of the Resolution in each year since its inception in 1977.

Management's Discussion and Analysis, continued

Additional Bonds and Refunding Bonds

The Enabling Act permits the issuance of additional bonds for paying the cost of any project, making deposits in various funds established under the Enabling Act, paying the costs of issuance, paying the principal, premium, and interest on any notes issued in anticipation of additional bonds, or any combination of the above.

Refunding bonds may also be issued by the Commission only upon certifying that the aggregate debt service in each fiscal year in which refunding bonds are outstanding will not be increased as a result of the issuance of the refunding bonds; provided that, in lieu of such certification, the Commission may deliver to the Trustee certificates satisfying the conditions described above for the issuance of additional bonds.

Next Year's Budget and Rates

The Commission, from 1994 to 2001, was able to maintain its water and sewer rates to its customers without an increase. Additionally, the Commission is required by law to be self-sustaining, to set its rates at a level sufficient to cover expenses and debt service requirements each year.

The Commission instituted a rate increase of 8.9% in FY 02. In FY 03, a rate increase of 8.9% was implemented on January 1 and another rate increase of 3.9% was implemented on April 1. As a result, the total increase in water and sewer rates for FY 03 was 12.8%. The April increase was due to special assessment from the MWRA and the elimination of the debt service assistance program from the Commonwealth of Massachusetts. In FY 04, the water and sewer rate revenue increased by a combined 5.8%. This new rate increase was effective on January 1, 2004. The major reasons behind these increases were: (i) the increase in assessments paid to the MWRA, and (ii) the decline in water sales due to general water conservation efforts of individuals and businesses throughout the City. There will be no rate increase in FY 05.

Statements of Net Assets

Years ended December 31, 2004 and 2003

See accompanying notes to financial statement

ASSETS	2004	2003
Current assets:		
Cash and cash equivalents (note 8)	\$3,362,967	8,135,734
Accounts receivable, net:		
Customers, less allowances of \$4,096,888 and \$5,435,458 in 2004 and 2003, respectively (note 1)	9,540,851	8,128,780
Unbilled revenues, less allowances of \$1,702,361 in 2004 and 2003	11,653,861	9,334,029
Construction grants receivable	1,306,091	1,279,663
Prepaid expenses	566,812	492,917
Total current assets	26,430,582	27,371,123
Noncurrent assets:		
Restricted cash and investments (notes 4 and 8)	251,760,009	207,173,685
Capital assets:		
Depreciable, net (note 3)	528,698,771	511,515,378
Nondepreciable (note 3)	210,402,534	174,896,751
Deferred charges (note 2)	20,280,541	21,375,118
Bond issue costs, net	2,069,672	1,928,649
Total noncurrent assets	1,013,211,527	916,889,581
TOTAL ASSETS	1,039,642,109	944,260,704
LIABILITIES		
Current liabilities:		
Payable from current assets:		
Accounts payable	15,468,167	15,830,813
Other accrued liabilities	5,755,337	5,710,434
Current portion of long-term notes (note 4)	5,892,436	5,690,859
Current portion of revenue bonds (note 4)	11,540,000	10,355,000
Total current liabilities	38,655,940	37,587,106
Noncurrent liabilities:		
Long-term notes payable (note 4)	45,779,790	44,096,735
Long-term revenue bonds, net (note 4)	328,171,880	283,067,334
Other long-term liabilities	8,572,648	10,552,258
Deferred credits and reserves (note 2)	381,071,385	357,695,019
Total noncurrent liabilities	763,595,703	695,411,346
TOTAL LIABILITIES	802,251,643	732,998,452
NET ASSETS		
Net assets:		
Invested in capital assets, net of related debt	417,744,545	379,695,558
Restricted for debt service	35,243,278	31,070,812
Restricted for capital assets	4,460,086	3,666,284
Restricted for debt covenants	42,628,147	40,822,621
Unrestricted net deficit	(262,685,590)	(243,993,023)
Commitments and contingencies (notes 9, 10, 11, and 12)		
TOTAL NET ASSETS	\$237,390,466	211,262,252

Statements of Operations

Years ended December 31, 2004 and 2003

See accompanying notes to financial statement

	2004	2003
Operating revenues:		
Water and sewer usage	\$221,749,374	205,000,340
Fire pipe	3,222,465	3,108,779
Other	3,787,075	13,806,299
Total operating revenues	<u>228,758,914</u>	<u>221,915,418</u>
Operating expenses:		
Operations	44,365,699	45,156,684
Maintenance	5,691,954	7,704,164
MWRA assessment (note 5)	136,473,253	135,185,604
Depreciation and amortization	14,270,290	15,843,547
Total operating expenses	<u>200,801,196</u>	<u>203,889,999</u>
Excess operating revenues	<u>27,957,718</u>	<u>18,025,419</u>
Nonoperating revenue (expense):		
Investment income	6,687,643	4,243,091
Interest expense	(15,031,958)	(15,570,825)
Total nonoperating net expense	<u>(8,344,315)</u>	<u>(11,327,734)</u>
Excess revenues before capital grants and contributions, and transfer requirements	19,613,403	6,697,685
Capital grants and contributions	<u>29,781,881</u>	<u>29,352,147</u>
Excess revenues before transfer requirements	49,395,284	36,049,832
Excess revenues used to fund reserves and other deferrals (note 2)	(16,016,268)	(9,949,275)
Change in accumulated revenues used to offset future rates (note 2)	<u>(7,250,802)</u>	<u>(89,196)</u>
Change in net assets	26,128,214	26,011,361
Net assets, beginning of year	<u>211,262,252</u>	<u>185,250,891</u>
Net assets, end of year	<u>\$237,390,466</u>	<u>211,262,252</u>

Statements of Cash Flows

Years ended December 31, 2004 and 2003

See accompanying notes to financial statement

	2004	2003
Cash flows from operating activities:		
Receipts from customers	\$225,000,583	210,409,164
Payments to suppliers	(158,588,250)	(155,197,516)
Payments to employees	(30,697,104)	(28,026,178)
Net cash provided by operating activities	<u>35,715,229</u>	<u>27,185,470</u>
Cash flows from investing activities:		
Investment income	6,687,643	4,243,091
(Purchase) sale of investments	(44,586,324)	44,967,857
Net cash (used) provided by investing activities	<u>(37,898,681)</u>	<u>49,210,948</u>
Cash flows from capital and related financing activities:		
Purchase of capital assets	(62,539,231)	(75,293,961)
Proceeds from debt	60,525,497	40,189,895
Payment of bond principal	(16,045,865)	(56,377,115)
Capital contributions	29,781,881	29,352,147
Payment of bond interest	(14,311,597)	(15,472,096)
Net cash used in capital and related financing activities	<u>(2,589,315)</u>	<u>(77,601,130)</u>
Net (decrease)	(4,772,767)	(1,204,712)
Cash and cash equivalents, beginning of year	<u>8,135,734</u>	<u>9,340,446</u>
Cash and cash equivalents, end of year	<u>\$3,362,967</u>	<u>8,135,734</u>
Reconciliation of operating income to net cash provided by operating activities:		
Excess operating revenues	\$ 27,957,718	18,025,419
Adjustments to reconcile operating income to net cash:		
Reserves released to stabilize rates	—	(10,530,561)
Depreciation and amortization	14,270,290	15,843,547
Changes in assets and liabilities:		
Accounts receivable, net	(1,412,071)	(561,260)
Unbilled revenues	(2,319,832)	(460,267)
Construction grants receivable	(26,428)	45,834
Prepaid expenses	(73,895)	(72,265)
Accounts payable	(362,646)	4,630,812
Other accrued liabilities	(338,297)	409,117
Other long-term liabilities	(1,979,610)	(144,906)
Net cash provided by operating activities	<u>\$ 35,715,229</u>	<u>27,185,470</u>

Notes to Financial Statements

December 31, 2004 and 2003

(1) Organization, Basis of Presentation, and Summary of Significant Accounting Policies

The Boston Water and Sewer Commission (the Commission) has the responsibility to provide water and wastewater services on a fair and equitable basis in the City of Boston (the City) as required under the Boston Water and Sewer Reorganization Act of 1977.

Under the Enabling Act, the Commission is subject to regulation with respect to rates, accounting, and other matters, where applicable, by the board of commissioners (the Board). The Board is appointed by the City’s mayor subject to confirmation by the city council. It regulates the rates that the Commission can charge its customers for water and sewer usage. The rates charged to customers are based on the cash required for the Commission’s operations, debt service, and reserve contributions. However, there is no legally adopted budget that the Commission must adhere to. To comply with the external financial reporting requirements of the Board, the accompanying financial statements are presented on a basis that is

consistent with generally accepted accounting principles (GAAP) for regulated utilities (i.e., the accrual basis of accounting and the capital maintenance measurement focus).

To accommodate the rate-making process, the Commission follows the accounting standards set forth in Statement of Financial Accounting Standards (SFAS) No. 71, *Accounting for the Effects of Certain Types of Regulation*. SFAS No. 71 allows certain (a) revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred credits) and (b) costs incurred to be capitalized if future recovery is reasonably assured (deferred charges). Revenues and expenses appearing in the supplemental schedule of revenues and expenses – rate basis are presented in the same format utilized in the Commission’s operational budgeting and rate-setting process. The revenues and expenses shown on the statements of operations are presented on a GAAP basis. A reconciliation between the revenues and expenses of these two operating statements for the year ended December 31, 2004 is provided below:

	Revenues	Expenses
As presented in the statements of operations:		
Operating revenues/expenses	\$228,758,914	200,801,196
Other revenues/expenses	<u>6,687,643</u>	<u>15,031,958</u>
Total	235,446,557	215,833,154
Reclassifications and deferrals:		
Contributions to reserves	—	877,786
Revenue adjustments/bad debt expense	(5,468,201)	(5,468,201)
Excess bond payments over depreciation and amortization	—	1,899,482
Interest expense (escrowed funds)	—	(914,987)
Investment income (escrowed funds)	(962,444)	—
Capital expenditures	—	9,624,738
Excess revenue used to offset current rates	527,804	—
Other deferrals	—	(86,862)
As presented in the supplemental schedule	<u>\$ 229,543,716</u>	<u>221,765,110</u>

The Enabling Act requires that any net surplus, as defined by the rate-setting process, be either turned over to the City or applied to offset water and sewer rates for the following year. The Commission has applied \$7,778,606 and \$527,804 for the years ended December 31, 2004 and 2003, respectively, to offset rates in the respective subsequent years.

(a) Revenue Billings

Water and sewerage fees are billed on a monthly cycle basis. Revenues are accrued for periods between the termination of billings for the various cycles and the end of the year. Various adjustments are made on a post-billing basis that reduce the amount of total billings. Accordingly, the 2004 and 2003 total customer bills outstanding of \$22,157,519 and \$23,584,018, respectively, have been reduced by provisions for billing adjustments and sewer abatements of \$8,519,780 and \$10,019,780 in 2004 and 2003, respectively. These net billing amounts are further reduced by an allowance for uncollectible accounts of \$4,096,888 and \$5,435,458 in 2004 and 2003, respectively, to arrive at net accounts receivable.

(b) Investments

Investments are stated at fair value. Fair value is determined based on quoted market prices.

(c) Capital Assets

Capital assets are stated at historical cost. Depreciation is provided on the straight-line method based upon the estimated useful lives of the various classes of assets. Maintenance and repairs are charged to expense as incurred. Major renewals or betterments over \$500 are capitalized and depreciated over their estimated useful lives.

The Commission capitalizes interest costs during construction of assets for its own use. No interest was capitalized in 2004 or 2003 because the amount calculated was not material.

(d) Compensated Absences

Various employees of the Commission accumulate unused sick and vacation time (subject to certain limitations) to be used at a later date or a percentage paid in cash upon voluntary resignation and/or retirement from the Commission (subject to Commission policies and/or bargaining agreements). The liability for vacation leave is based on the amount earned but not used; for sick leave, it is based on a percentage of the amount accumulated at the statements of net assets dates. The

liability for both amounts is calculated based on the pay or salary rates in effect at the statements of net assets dates.

(e) Depreciation

The Commission provides for depreciation using the straight-line method. Estimated useful lives used in computing depreciation are as follows:

	Years
Water:	
Works	100
Meters	10
Hydrants	40
Sewerage:	
Works	75
Pumping station	35
Buildings	40
Other	4 to 14

(f) Cash Equivalents

The Commission considers all highly liquid, short-term investments with original maturities of three months or less to be cash equivalents for purposes of the statements of cash flows.

(g) Bond Issue Costs

Bond issue costs are amortized on a weighted average basis over the life of the bonds, which approximates the effective interest method.

(h) Business-Type Activity Accounting and Financial Reporting

Under the Governmental Accounting Standards Board (GASB) Statement No. 20, *Accounting and Financial Reporting for Proprietary Activities*, the Commission has elected to apply all Financial Accounting Standards Board (FASB) statements and interpretations issued on or before November 30, 1989, except those that conflict with or contradict GASB pronouncements.

Business-type activity funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses result from providing services in connection with ongoing operations. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Notes to Financial Statements, continued

(i) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

(j) Reclassifications

Certain 2003 amounts have been reclassified to conform with the 2004 presentation.

(2) Deferred Charges and Credits

As discussed in note 1, the application of SFAS No. 71 results in certain revenues and expenses being removed from the statements of operations and reflected in the statements of net assets as deferred credits or deferred charges, respectively. The revenues and expenses that have been removed from the statements of operations and added to the statements of net assets as deferred credits or charges appear in the line "Excess revenues used to fund reserves and other deferrals" on the statements of operations. The components of these amounts, which are based on approval of the Board, are as follows:

	2004	2003
Contributions to reserves	\$877,786	855,201
Principal payments on long-term debt	15,556,963	14,518,527
Interest paid from escrow funds	(914,987)	(974,798)
Capital expenditures	9,624,738	10,768,406
Depreciation and amortization	(10,616,624)	(12,502,761)
Investment income on project and escrow funds	962,444	(3,602,058)
Other	525,948	886,758
	<u>\$16,016,268</u>	<u>9,949,275</u>

The components of deferred charges included in the accompanying statements of net assets are as follows:

	2004	2003
Deferred loss on land taking	\$5,526,667	5,747,733
Deferred pension expense	11,195,398	11,808,209
Debt extinguishment expense	3,558,476	3,819,176
Total deferred charges	<u>\$ 20,280,541</u>	<u>21,375,118</u>

The activity in and components of deferred credits and reserves included in the accompanying statements of net assets are as follows:

	December 31, 2002	Increase/(decrease)	December 31, 2003	Increase	December 31, 2004
Debt service	\$ 124,445,837	855,201	125,301,038	877,786	126,178,824
Capital improvements	198,346,649	9,094,073	207,440,722	15,247,778	222,688,500
Working capital	24,528,426	(2,342,971)	22,185,455	—	22,185,455
Self-insurance	<u>2,240,000</u>	<u>—</u>	<u>2,240,000</u>	<u>—</u>	<u>2,240,000</u>
	349,560,912	7,606,303	357,167,215	16,125,564	373,292,779
Reduction of future rates	<u>438,608</u>	<u>89,196</u>	<u>527,804</u>	<u>7,250,802</u>	<u>7,778,606</u>
Total deferred credits and reserves	<u>\$349,999,520</u>	<u>7,695,499</u>	<u>357,695,019</u>	<u>23,376,366</u>	<u>381,071,385</u>

(3) Capital Assets

The cost and activity of water and sewerage capital assets in service and related accumulated depreciation at December 31, 2004 and 2003 are as follows:

	Balance at December 31, 2003	Increases	Decreases	Balance at December 31, 2004
Capital assets not being depreciated:				
Land	\$2,519,243	—	—	2,519,243
Construction in progress	<u>172,377,508</u>	<u>63,686,615</u>	<u>28,180,832</u>	<u>207,883,291</u>
Total capital assets not being depreciated	<u>174,896,751</u>	<u>63,686,615</u>	<u>28,180,832</u>	<u>210,402,534</u>
Capital assets being depreciated:				
Buildings and improvements	60,850,992	9,085	—	60,860,077
Machinery and equipment	22,502,364	1,882,254	—	24,384,618
Infrastructure	<u>579,737,104</u>	<u>27,641,794</u>	<u>—</u>	<u>607,378,898</u>
Total capital assets being depreciated	<u>663,090,460</u>	<u>29,533,133</u>	<u>—</u>	<u>692,623,593</u>
Less accumulated depreciation for:				
Buildings and improvements	4,015,201	1,622,614	—	5,637,815
Machinery and equipment	16,642,536	1,691,362	—	18,333,898
Infrastructure	<u>130,917,345</u>	<u>9,035,764</u>	<u>—</u>	<u>139,953,109</u>
Total accumulated depreciation	<u>151,575,082</u>	<u>12,349,740</u>	<u>—</u>	<u>163,924,822</u>
Total capital assets being depreciated, net	<u>511,515,378</u>	<u>17,183,393</u>	<u>—</u>	<u>528,698,771</u>
Capital assets, net	<u>\$686,412,129</u>	<u>80,870,008</u>	<u>28,180,832</u>	<u>739,101,305</u>

Notes to Financial Statements, continued

	Balance at December 31, 2003	Increases	Decreases	Balance at December 31, 2004
Capital assets not being depreciated:				
Land	\$2,519,243	—	—	2,519,243
Construction in progress	143,685,107	71,395,248	42,702,847	172,377,508
Total capital assets not being depreciated	<u>146,204,350</u>	<u>71,395,248</u>	<u>42,702,847</u>	<u>174,896,751</u>
Capital assets being depreciated:				
Buildings and improvements	59,730,528	1,120,464	—	60,850,992
Machinery and equipment	21,979,210	795,509	272,355	22,502,364
Infrastructure	537,305,662	42,431,442	—	579,737,104
Total capital assets being depreciated	<u>619,015,400</u>	<u>44,347,415</u>	<u>272,355</u>	<u>663,090,460</u>
Less accumulated depreciation for:				
Buildings and improvements	2,397,760	1,617,441	—	4,015,201
Machinery and equipment	14,797,209	2,076,821	231,494	16,642,536
Infrastructure	120,631,526	10,285,819	—	130,917,345
Total accumulated depreciation	<u>137,826,495</u>	<u>13,980,081</u>	<u>231,494</u>	<u>151,575,082</u>
Total capital assets being depreciated, net	<u>481,188,905</u>	<u>30,367,334</u>	<u>40,861</u>	<u>511,515,378</u>
Capital assets, net	<u>\$627,393,255</u>	<u>101,762,582</u>	<u>42,743,708</u>	<u>686,412,129</u>

During 1999, the Boston Redevelopment Authority (the BRA) took land owned by the Commission through eminent domain. The book value of the land, at the time of the taking, was \$7,598,710. A portion of this loss, \$6,632,000, of which \$5,526,667 remains unamortized at December 31, 2004, was included in deferred charges in the accompanying statements of net assets as that amount will be recovered through future rates. The Commission was paid no compensation for the land and does not expect to receive any consideration from the BRA in the future.

(4) Long-Term Obligations

The Commission issues revenue bonds to support various projects.

The following is a summary of revenue bond activity for the years ended December 31, 2004 and 2003 (amounts in thousands):

DESCRIPTION	Balance at December 31, 2003	Additions	Reductions	Balance at December 31, 2004
Revenue bonds:				
1992 Series A, bearing interest rates ranging from 5.5% to 5.75%, with maturity dates ranging from November 1, 2004 to 2013	\$ 30,810	—	—	30,810
1993 Series A, bearing interest rates ranging from 4.6% to 5.25%, with maturity dates ranging from November 1, 2004 to 2019	46,735	—	—	46,735
1994 Series A, bearing a variable interest rate, with maturity dates ranging from November 1, 2004 to 2024	34,300	—	800	33,500
1998 Series A, bearing interest rates ranging from 5.0% to 5.125%, with maturity dates ranging from November 1, 2014 to 2015	12,960	—	—	12,960
1998 Series C, bearing interest rates ranging from 4.5% to 5.2%, with maturity dates ranging from November 1, 2004 to 2021	11,250	—	10	11,240
1998 Series D, bearing interest rates ranging from 4.5% to 5.0%, with maturity dates ranging from November 1, 2004 to 2028	120,225	—	2,615	117,610
2002 Series A, bearing interest rates ranging from 2.0% to 3.0%, with maturity dates ranging from November 1, 2004 to 2007	15,365	—	3,705	11,660
2003 Series A, bearing interest rates ranging from 2.4% to 4.0%, with maturity dates ranging from November 1, 2004 to 2011	28,930	—	3,225	25,705
2004 Series A, bearing interest rates ranging from 3.0% to 5.0%, with maturity dates ranging from November 1, 2005 to 2025	—	52,950	—	52,950
	<u>300,575</u>	<u>52,950</u>	<u>10,355</u>	<u>343,170</u>
Less unamortized loss on refunding	(6,746)	—	(2,147)	(4,599)
Less net unamortized (discount) unaccreted premium	(407)	1,751	203	1,141
Net revenue bonds	<u>\$293,422</u>	<u>54,701</u>	<u>8,411</u>	<u>339,712</u>

Notes to Financial Statements, continued

DESCRIPTION	Balance at December 31, 2002	Additions	Reductions	Balance at December 31, 2003
Revenue bonds:				
1992 Series A, bearing interest rates ranging from 5.5% to 5.75%, with maturity dates ranging from November 1, 2003 to 2013	\$30,810	—	—	30,810
1993 Series A, bearing interest rates ranging from 4.6% to 5.25%, with maturity dates ranging from November 1, 2003 to 2019	90,950	—	44,215	46,735
1994 Series A, bearing a variable interest rate, with maturity dates ranging from November 1, 2003 to 2024	35,100	—	800	34,300
1998 Series A, bearing interest rates ranging from 5.0% to 5.125%, with maturity dates ranging from November 1, 2014 to 2015	12,960	—	—	12,960
1998 Series C, bearing interest rates ranging from 4.5% to 5.2%, with maturity dates ranging from November 1, 2003 to 2021	11,260	—	10	11,250
1998 Series D, bearing interest rates ranging from 4.5% to 5.0%, with maturity dates ranging from November 1, 2003 to 2028	122,730	—	2,505	120,225
2002 Series A, bearing interest rates ranging from 2.0% to 3.0%, with maturity dates ranging from November 1, 2003 to 2007	19,005	—	3,640	15,365
2003 Series A, bearing interest rates ranging from 2.4% to 4.0%, with maturity dates ranging from November 1, 2004 to 2011	—	28,930	—	28,930
	<u>322,815</u>	<u>28,930</u>	<u>51,170</u>	<u>300,575</u>
Less unamortized loss on refunding	1,025	6,087	366	6,746
Less unamortized issue discount	1,433	—	1,026	407
Net revenue bonds	<u>\$320,357</u>	<u>22,843</u>	<u>49,778</u>	<u>293,422</u>

Annual sinking fund requirements and debt principal and interest maturities for all future years are as follows (amounts in thousands):

	REVENUE BONDS	
	Principal	Interest
2005	\$11,540	16,912
2006	11,930	16,530
2007	12,355	16,109
2008	12,825	15,629
2009	13,430	15,020
2010-2014	78,000	64,228
2015-2019	85,505	42,896
2020-2024	83,210	20,305
2025-2029	34,375	3,762
	\$343,170	211,391

(a) Prior Year Debt Refundings

In the aggregate, \$181,755,000 remains outstanding at December 31, 2004 on the bond issues that were defeased “in-substance” during prior years.

(b) Trusteed and Nontrusteed Cash and Investments

The Commission has established both trusteeed and nontrusteed funds with investments, principally short-term securities, which are restricted for payment of specified liabilities, capital projects, or other costs of operations. The components of the trusteeed and nontrusteed investments at December 31, 2004 and 2003 are as follows:

	2004	2003
Trusteed:		
Other governmental obligations	\$100,983,157	106,945,246
Money market and cash investments	608,878	1,777,909
Open-ended mutual funds	4,893,913	8,601,319
Commercial paper	46,031,993	28,176,876
Repurchase agreements	11,746,250	8,416,250
	164,264,191	153,917,600
Nontrusteed:		
Other governmental obligations	274,423	439,619
Money market and cash investments	1,734,501	1,586,052
Open-ended mutual funds	20,487,990	38,215,494
Commercial paper	13,307,978	13,014,920
Repurchase agreements	51,690,926	—
	87,495,818	53,256,085
	251,760,009	207,173,685
Less trusteeed and nontrusteed cash	(2,343,379)	(3,363,961)
Trusteed and nontrusteed investments	\$249,416,630	203,809,724

Notes to Financial Statements, continued

(c) Long-Term Notes Payable

During 1997 and 1996, the Commission executed loan agreements with the Massachusetts Water Pollution Abatement Trust (MWPAT) to finance and refinance a portion of the Commission's water pollution abatement projects. For purposes of offsetting principal and interest payments, an amount aggregating \$12,381,288, consisting of contract assistance payments from the Commonwealth of Massachusetts and other interest subsidies from MWPAT, will be recognized as capital grants over the remaining term of the loans.

The Commission has entered into various interest-free loan agreements with the Massachusetts Water Resources Authority (the MWRA or the Authority). Under these agreements, the Commission is required to repay these loans in annual installments as part of the Authority's Infiltration/Inflow Local Financial Assistance program (I/I), Local Water Infrastructure Rehabilitation Program (WIR), and Pipeline Assistance Program (PAP). These programs are designed to assist service area communities with sewer system rehabilitation.

The scheduled loan payments for all MWPAT obligations and related subsidies are shown below (amounts in thousands):

	LOAN SUBSIDY AMOUNTS								
	SCHEDULED LOAN REPAYMENTS			Equity earnings	Contract assistance payments	Total	NET LOAN REPAYMENTS		
	Principal	Interest	Total				Principal	Interest	Total
2005	\$1,510	1,115	2,625	\$542	859	1,401	\$992	232	1,224
2006	1,573	1,031	2,604	501	862	1,363	1,029	212	1,241
2007	1,647	940	2,587	458	862	1,320	1,075	192	1,267
2008	1,728	845	2,573	413	859	1,272	1,129	172	1,301
2009	1,813	742	2,555	365	860	1,225	1,185	145	1,330
2010–2014	9,498	2,081	11,579	1,042	3,783	4,825	6,359	395	6,754
2015–2019	2,974	190	3,164	103	872	975	2,178	11	2,189
	<u>\$20,743</u>	<u>6,944</u>	<u>27,687</u>	<u>\$3,424</u>	<u>8,957</u>	<u>12,381</u>	<u>\$13,947</u>	<u>1,359</u>	<u>15,306</u>

The following is a summary of long-term note activities for the years ended December 31, 2004 and 2003:

	Balance at December 31, 2003	Additions	Reductions	Balance at December 31, 2004
MWRA I/I Program Phase III, interest free, due November 15, 2009	\$2,032,298	1,416,008	749,475	2,698,831
MWRA I/I Program Phase IV, interest free, due February 15, 2008	3,501,589	—	700,319	2,801,270
MWRA WIR Program, interest free, due November 15, 2004	332,521	—	332,521	—
MWRA PAP Program, interest free, due November 15, 2014	21,732,285	6,159,489	2,462,619	25,429,155
MWPAT Pool I, subsidized interest, due August 1, 2013	6,846,959	—	531,637	6,315,322
MWPAT Pool II, subsidized interest, due August 1, 2015	6,178,350	—	375,425	5,802,925
MWPAT Pool III, subsidized interest, due February 1, 2017	9,163,592	—	538,869	8,624,723
Total long-term notes	<u>\$49,787,594</u>	<u>7,575,497</u>	<u>5,690,865</u>	<u>51,672,226</u>

	Balance at December 31, 2002	Increases	Decreases	Balance at December 31, 2003
MWRA I/I Program Phase II, interest free, due November 15, 2003	\$221,797	—	221,797	—
MWRA I/I Program Phase III, interest free, due November 15, 2004	1,088,418	1,603,529	659,649	2,032,298
MWRA I/I Program Phase IV, interest free, due February 15, 2008	—	3,501,589	—	3,501,589
MWRA WIR Program, interest free, due November 15, 2004	1,416,015	—	1,083,494	332,521
MWRA PAP Program, interest free, due November 15, 2011	17,424,649	6,154,777	1,847,141	21,732,285
MWPAT Pool I, subsidized interest, due August 1, 2013	7,354,257	—	507,298	6,846,959
MWPAT Pool II, subsidized interest, due August 1, 2015	6,535,728	—	357,378	6,178,350
MWPAT Pool III, subsidized interest, due February 1, 2017	9,693,950	—	530,358	9,163,592
Total long-term notes	<u>\$43,734,814</u>	<u>11,259,895</u>	<u>5,207,115</u>	<u>49,787,594</u>

Notes to Financial Statements, continued

(5) Massachusetts Water Resources Authority

The MWRA provides all of the Commission's water supply and sewer treatment requirements and assesses the Commission for a portion of its actual operating and capital expenses. The assessment is based on the MWRA's fiscal year (July 1 to June 30), and payments are due to the Authority in ten equal installments excluding the months of January and July. Amounts included in the statements of operations as assessments by the Authority for 2004 and 2003 are as follows:

	2004	2003
Assessments allocated on:		
Water usage	\$49,644,220	46,875,982
Wastewater usage	86,829,033	88,309,622
Total	<u>\$136,473,253</u>	<u>135,185,604</u>

In 2004 and 2003, over 81% of water provided from the Authority was billable to customers. Since its inception, the Commission has maintained the percentage of billable water at 78% and is continuing to take steps to improve the amount of billable water, including replacement of old and defective meters and implementation of a comprehensive leak detection and repair program.

(6) Transactions with the City of Boston

The Commission's ongoing program to meter City facilities has resulted in billings to ten City departments during 2004 and 2003, respectively, based on actual consumption of \$4,289,727 and \$4,652,674 in 2004 and 2003, respectively.

The City provides services to the Commission, including paving and facilities rental. Operating costs billed to the Commission by the City were \$561,745 and \$1,200,552 during 2004 and 2003, respectively. Capital costs billed by the City were \$2,564,963 and \$2,678,231 during 2004 and 2003, respectively.

The Commission has an agreement with the City that allows the Commission's water and sewer bills that have remained unpaid for more than two years to be added as liens on the City's property tax bills. Under this agreement, the City provides collection services on these bills for an administrative fee. As of December 31, 2004, receivables totaling approximately \$268,253 of billings had been included on property tax bills.

Under the Commission's own tax lien program, accounts which have unpaid balances over two years old are transferred into the tax lien program for collection. As of December 31, 2004 and 2003, \$1,540,532 and \$2,380,564, respectively, remain outstanding.

(7) Retirement Benefits

The Commission provides retirement benefits to substantially all of its employees through the State-Boston Retirement System (the SBRS or the System). The Commission does not provide any other significant postemployment benefits.

A dispute concerning the Commission's past and future obligations to all Commission employees covered by the SBRS was settled in 1986, resulting in a payment of \$19,100,000 to the SBRS. This payment was funded primarily through 1985 and 1986 bond proceeds and is recorded as a deferred charge that will be recovered through future rates. As part of the settlement with the SBRS, the Commission annually reimburses the City for the Commission's share of pension benefits paid to Commission employees. The Commission's share is based upon the proportion of each employee's total years of creditable service, level of compensation, and group classification. Employees become 100% vested after ten years of creditable service as defined by Chapter 32 of the Massachusetts General Laws (MGL).

(a) Description of the SBRS Plan

The SBRS is a cost-sharing, multiemployer, public employee retirement system established under Chapter 32 of the MGL and is a member of the Massachusetts Contributory Retirement System. The System provides retirement, disability, and death benefits to plan members and beneficiaries. Chapter 32 of the MGL assigns authority to establish and amend benefit provisions of the plan. The System issues a publicly available financial report which can be obtained through the Commonwealth of Massachusetts, Public Employee Retirement Administration Commission (PERAC), One Ashburton Place, Boston, Massachusetts 02108.

(b) Funding Policy

Plan members are required to contribute to the SBRS at rates ranging from 5% to 11% of annual covered compensation. The Commission is required to pay into the SBRS its share of the remaining systemwide actuarially determined contribution plus administration costs, which are apportioned among the employers based on active covered payroll. Through fiscal 1998, the

Commonwealth of Massachusetts reimbursed the SBRS for a portion of benefit payments for cost-of-living increases. Beginning July 1, 1998, the SBRS is locally funding the cost-of-living adjustments as approved by the SBRS' Board of Retirement, the City's mayor, and city council. The contributions of plan members and the Commission are governed by Chapter 32 of the MGL. The Commission's contributions to the System for the years ended December 31, 2004, 2003, and 2002 were \$476,600, \$456,264, and \$481,719, respectively, which equaled its required contribution each year. Total employee contributions, based on actuarially determined amounts, were \$2,102,306, \$1,946,993, and \$2,001,820, or 8.6%, 8.5%, and 8.3% of covered payroll, in 2004, 2003, and 2002, respectively.

(c) The Commission's Trust Fund

On a quarterly basis, the Commission deposits an amount into a trust fund, the assets of which are used to reimburse the SBRS for amounts paid on behalf of the Commission. As required by the Commission's Enabling Act, *employee* pension contributions are transferred to the SBRS directly and are either returned to employees upon termination or, for vested employees, are used to defray a portion of the total retirement benefit. The Commission's policy is to make *employee* contributions to the trust fund based upon the actuarially determined cost of future benefits, net of employee contributions.

Trust fund assets at December 31, 2004 and 2003 are as follows:

	2004	2003
Assets (at fair value):		
Common stock	\$32,461,853	32,005,754
International stock	10,379,740	8,192,654
Mutual funds	753,810	1,012,557
Fixed income	<u>26,187,560</u>	<u>24,870,128</u>
Total	<u>\$69,782,963</u>	<u>66,081,093</u>

The trust fund activity is as follows:

Assets (at fair value), December 31, 2002	\$55,615,132
Employer contributions	456,264
Investment income and gains	12,505,237
Management fees	(286,072)
Payments to the SBRS	<u>(2,209,468)</u>
Assets (at fair value), December 31, 2003	66,081,093
Employer contributions	476,600
Investment income and gains	6,193,214
Management fees	(234,878)
Payments to the SBRS	<u>(2,733,066)</u>
Assets (at fair value), December 31, 2004	<u>\$69,782,963</u>

The investment portfolio is regulated by the MGL, Chapter 32, Section 23. The investments are managed by independent investment advisors. Bank of America is the custodian of the portfolio. The trust fund assets will be used by the Commission to reimburse the SBRS in future years for required employer contributions.

(8) Deposits and Investments

The Commission's General Revenue Bond Resolution, adopted December 6, 1984, as amended, places certain limitations on the nature of deposits and investments available to the Commission. Demand deposits and term deposits without collateralization can only be made with financial institutions meeting certain criteria. Certificates of deposit must be fully collateralized and issued by FDIC-insured banks. Investments can also be made in securities issued by, or unconditionally guaranteed by, the U.S. government or its agencies; public agencies, municipalities, or state obligations carrying the highest bond rating; commercial paper rated A-1 or P-1; A-rated money market funds; fully collateralized investment contracts, and certain futures contracts. In addition, the Commission's trust fund has additional investment powers, most notably the ability to invest in stocks, corporate bonds, and other instruments.

(a) Deposits

A summary of the Commission's deposits that are fully insured or collateralized with securities held by the Commission or its agent in the Commission's name (Category 1), those deposits that are collateralized with securities held by the pledging financial institution's trust department or agent in the Commission's name (Category 2), and those deposits that are not collateralized as of December 31, 2004 and 2003 (Category 3) follows:

Notes to Financial Statements, continued

2004	Category			Total bank balance	Carrying amount
	1	2	3		
Cash	\$100,000	—	5,342,503	5,442,503	3,362,967
Bank money market deposits	—	—	2,343,379	2,343,379	2,343,379
Total	<u>\$100,000</u>	<u>—</u>	<u>7,685,882</u>	<u>7,785,882</u>	<u>5,706,346</u>

2003	Category			Total bank balance	Carrying amount
	1	2	3		
Cash	\$100,000	—	8,595,758	8,695,758	8,135,734
Bank money market deposits	—	—	3,363,961	3,363,961	3,363,961
Total	<u>\$100,000</u>	<u>—</u>	<u>11,959,719</u>	<u>12,059,719</u>	<u>11,499,695</u>

Deposits in transit and outstanding checks account for the majority of the difference between the bank balance and the carrying amount.

(b) Investments

The Commission's investments are categorized according to the level of custodial credit risk assumed by the Commission. Category 1 includes investments that are insured, registered, or held by the Commission's trustee in the Commission's name. Category 2 includes uninsured and unregistered investments held by the counterparty's trust department or agent in the Commission's name. Category 3 includes uninsured or unregistered investments held by the counterparty, its trust department, or agent but not in the Commission's name.

2004	Category			Fair value
	1	2	3	
Categorized:				
U.S. government agency obligations	\$—	101,257,580	—	101,257,580
Repurchase agreements	—	63,437,176	—	63,437,176
Commercial paper	—	59,339,971	—	59,339,971
Total	<u>—</u>	<u>224,034,727</u>	<u>—</u>	<u>224,034,727</u>
Not categorized:				
Open-ended mutual funds	—	—	—	25,381,903
Total	—	—	—	<u>\$249,416,630</u>

2003	Category			Fair value
	1	2	3	
Categorized:				
U.S. government agency obligations	\$—	107,384,865	—	107,384,865
Repurchase agreements	—	8,416,250	—	8,416,250
Commercial paper	—	41,191,796	—	41,191,796
Total	<u>—</u>	<u>156,992,911</u>	<u>—</u>	<u>156,992,911</u>
Not categorized:				
Open-ended mutual funds	—	—	—	46,816,813
Total	—	—	—	<u>\$203,809,724</u>

The investment portfolio is regulated by MGL Chapter 32, Section 23. The investments are presented in the financial statements at fair market value. U.S. Bank and Trust Company is the custodian of the portfolio, which is managed by independent investment advisors.

(9) Lease Commitments

The Commission leases equipment under various leases that have been accounted for as operating leases. The payments received under these leases are not material.

Rent expense under operating leases amounted to \$92,301 and \$95,866 in 2004 and 2003, respectively.

(10) Commitments

A major capital improvement program is currently in progress. As part of this program, the Commission has entered into a number of contracts for the design and construction of its water and sewer systems. Commitments under these contracts aggregate approximately \$37.9 million as of December 31, 2004. Capital improvements, primarily related to water and wastewater system projects with an emphasis on the cleanup of the Boston Harbor area, are expected to aggregate approximately \$143.6 million for 2005 through 2006. Of this amount, approximately \$123.5 million represents extension and improvement projects, and \$20.1 million represents renewal and replacement projects. The extension and improvement projects are expected to be 22% funded by federal and state grants and Authority grants and loans. The remaining amounts will be funded from the Commission's bond proceeds and operating revenues.

(11) Risk Management and Other Insurance

The Commission carries self-insured retention limits for claims filed under workers' compensation and general liability and completely self insures for all unemployment benefits. The workers' compensation self-insured retention limit is \$750,000 per claim and is supplemented with \$10 million in excess coverage purchased through an outside carrier. For general liability, the Commission's self-insured limits are \$1 million per occurrence, \$2.5 million aggregate, and are subordinate to \$10 million of excess coverage purchased through an outside carrier. Under the sections of the Model Water and Sewer Act, the Commission's tort liability is capped at \$100,000 per claimant.

The Commission maintains other insurance coverage as follows:

Policy type	Coverage
Health	Premium based
Vehicles	Combined single limit of \$1 million
Property	Aggregate limit of \$77 million
Public officials	Coverage of \$3 million; \$100,000 self-insurance retention
Fiduciary	\$2.5 million coverage
Crime	Employee dishonesty coverage of \$5 million

The Commission participates in the City's health benefits plans, for which the City assesses monthly premiums to the Commission based on current enrollments. Insurance claims for all policies have not exceeded coverage by a material amount in the past three years.

Liabilities for self-insured claims are reported if it is probable that a loss has been incurred and the amount can be reasonably estimated. The Commission has established a liability based on historical trends of previous years and attorneys' and independent insurance reserve appraiser's estimates of pending matters and lawsuits in which the Commission is involved. Unemployment claims paid during 2004 and 2003 were immaterial.

Changes for the years ended December 31, 2004, 2003, and 2002 are as follows:

	2004	2003	2002
Beginning balance of reserves	\$3,188,171	3,333,077	2,854,971
Payment of claims attributable to events of both current and prior years:			
Workers' compensation	(406,672)	(339,895)	(333,044)
General liability	(78,835)	(403,689)	(252,215)
Incurred claims	420,000	598,678	1,063,365
Ending balance of reserves	\$3,122,664	3,188,171	3,333,077

Incurred claims represent the total of a provision for events of the current fiscal year and any change in the provision for events of the prior fiscal years.

(12) Contingencies

The Commission is involved in ordinary and routine litigation and other matters related to its operations and the establishment of rates. Management believes that the resolution of these matters will not materially affect the financial position of the Commission.

The Commission has received federal and state grants for specific purposes that are subject to review and audit by the grantor agencies. Such audits could lead to requests for reimbursement to the grantor agency for expenditures disallowed under terms of the grant. The Commission believes such disallowances, if any, will not be significant.

The Commission is involved as a defendant in litigation regarding the pollution of Boston Harbor. Management believes that the Commission's extensive capital improvement program (see note 10) addresses probable actions that the Commission may be required to undertake in connection with this litigation. Additionally, the Commission is likely to bear, either directly or through future assessments of the MWRA, a substantial portion of the financial costs involved. As of December 31, 2004, the overall cleanup costs are estimated to be approximately \$747 million. However, the extent of the Commission's liability for these costs cannot be determined.

Supplemental Schedule of Revenues and Expenses—Rate Basis

Years ended December 31, 2004 and 2003

See accompanying independent auditor's report

	2004	2003
Revenues:		
Water revenue	\$93,775,330	85,996,060
Sewer revenue	<u>127,974,044</u>	<u>119,004,280</u>
Subtotal	<u>221,749,374</u>	<u>205,000,340</u>
Less:		
Adjustments	4,175,472	6,095,736
Discounts	875,848	867,894
Bad debt	<u>416,881</u>	<u>786,729</u>
Subtotal	<u>5,468,201</u>	<u>7,750,359</u>
Net billed charges	216,281,173	197,249,981
Prior year surplus	527,804	438,608
Miscellaneous revenues:		
Late charge revenue	1,226,004	1,309,806
Investment income	4,499,195	6,535,345
Fire pipe revenue	3,222,465	3,108,779
Other income	<u>3,787,075</u>	<u>13,806,299</u>
Total revenues	<u>229,543,716</u>	<u>222,448,818</u>
Direct operating expenses:		
Salaries and wages	25,206,587	24,101,884
Overtime wages	749,687	686,946
Fringe benefits	4,900,011	4,526,164
Supplies and materials	2,220,115	2,013,603
Repairs and maintenance	5,691,954	7,704,164
Utilities	1,174,809	1,090,693
Professional services	2,726,639	2,834,941
Space and equipment rentals	92,301	95,867
Other services	1,175,394	1,201,341
Insurance	729,405	701,958
Travel and training	38,933	53,754
Damage claims	133,287	721,690
Inventory	28,470	7,059
Capital outlay	<u>50,932</u>	<u>623,996</u>
Total direct operating expenses	<u>44,918,524</u>	<u>46,364,060</u>
Nonoperating expenses:		
MWRA assessment	136,473,253	135,185,604
Capital improvements	9,573,805	10,144,410
Principal payments	15,556,963	14,518,527
Interest expense	14,116,971	14,596,027
Deposits to reserve funds	877,786	855,201
SDWA assessment	<u>247,808</u>	<u>257,185</u>
Total nonoperating expenses	<u>176,846,586</u>	<u>175,556,954</u>
Total current expenses	<u>221,765,110</u>	<u>221,921,014</u>
Current year rate surplus	<u>\$7,778,606</u>	<u>527,804</u>

This supplemental schedule presents the Commission's revenues and expenses on the basis that is presented in the Commission's budget and rate-setting documents.





**Boston Water and
Sewer Commission**

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