

Comprehensive Annual  
Financial Report  
For the Fiscal Year  
Ended June 30, 2004

## **The New York City Water and Sewer System**

*A Component Unit of the City of New York*



Letter of Transmittal . . . . . 3

Certificate of Achievement in Financial Reporting . . . . . 12

Independent Auditors' Report . . . . . 13

Management's Discussion and Analysis . . . . . 14

Balance Sheets . . . . . 19  
June 30, 2004 and 2003

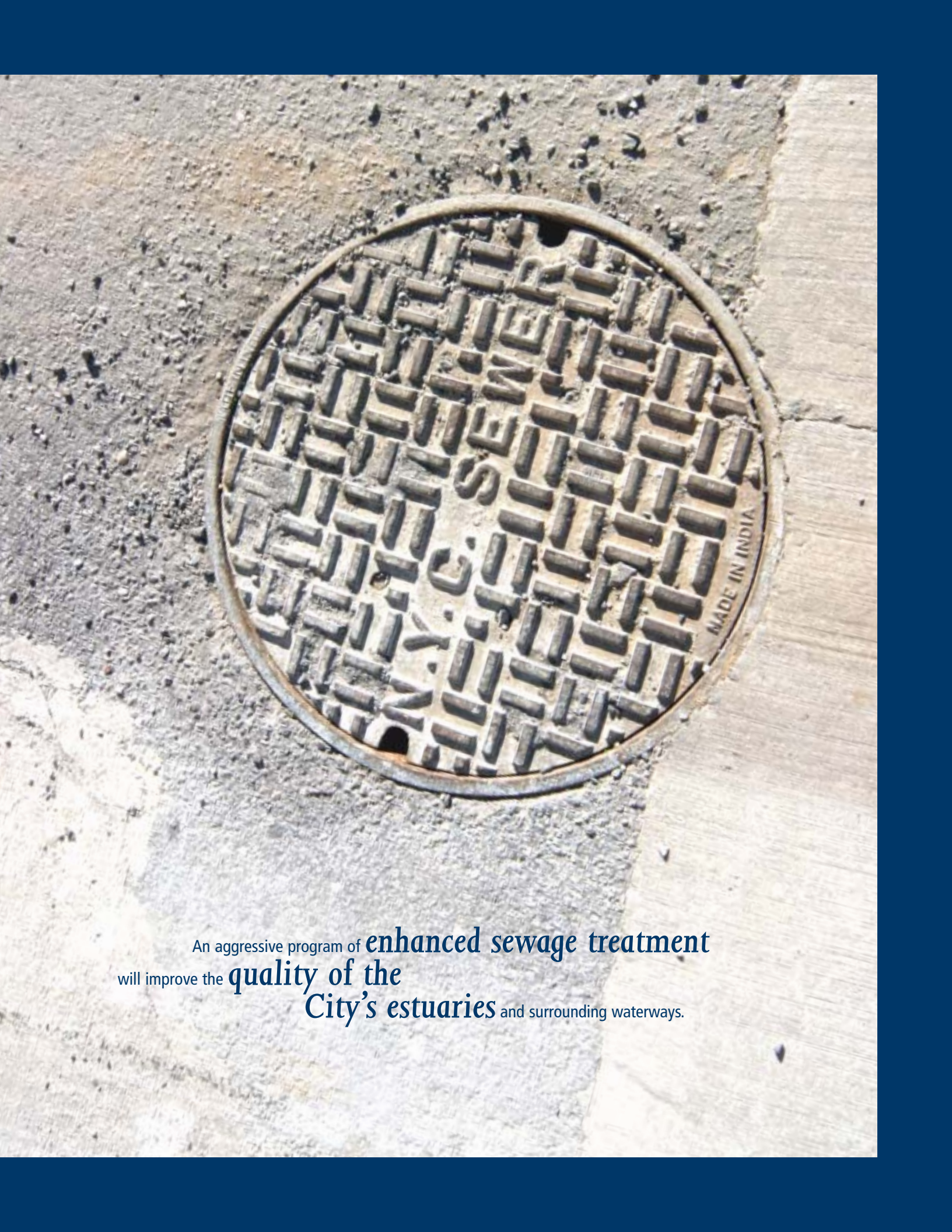
Statements of Revenues, Expenses and Changes in Net Assets . . . . . 20  
Years ended June 30, 2004 and 2003

Statements of Cash Flow . . . . . 21  
Years ended June 30, 2004 and 2003

Notes to Financial Statements . . . . . 22  
June 30, 2004 and 2003

Statistics . . . . . 34

New York Water and Sewer System Organizational Chart . . . . . 38



An aggressive program of **enhanced sewage treatment**  
will improve the **quality of the**  
**City's estuaries** and surrounding waterways.

December 30, 2004

Letter of transmittal to:

- Members of the board of the New York City Municipal Water Finance Authority
- Members of the board of the New York City Water Board
- The commissioner of the New York City Department of Environmental Protection

We are pleased to submit to you this Comprehensive Annual Financial Report (“CAFR”) of the New York City Water and Sewer System (the “System”) for the year ended June 30, 2004.

The CAFR is presented in three major sections: introductory, financial and statistical. The introductory section, which is not audited, includes this letter of transmittal. The financial section includes management’s discussion and analysis, the general purpose financial statements and the combining financial statements and schedules, as well as the independent auditor’s report on these financial statements and schedules. The statistical section, which is not audited, includes selected financial and System information, presented on a multi-year basis. An organizational chart and a list of the System’s principal officials is also provided at the end of the CAFR.

The reporting entity, the System, consists of two separate and independent corporate bodies that are combined for reporting purposes: the New York City Municipal Water Finance Authority (the “Authority”) and the New York City Water Board (the “Water Board”). In addition, the New York City Department of Environmental Protection (“DEP”) operates the System. The passage of the New York City Municipal Finance Authority Act (the “Act”) of 1984 by the New York State Legislature authorized this operating and financing relationship. The System is a component unit of the City of New York (the “City”) for financial reporting purposes.

The Authority is authorized to issue bonds and other debt instruments for construction and improvement of the System and the acquisition of the System by the Board. The Authority also has the power to refund its bonds and notes and the general obligation bonds of the City issued for water or sewer purposes. The Authority is administered by a Board of Directors composed of seven members, four of whom serve ex officio, two of whom are appointed by the Mayor of the City and one of whom is appointed by the Governor of the

State of New York (the “State”). One seat on the Board of Directors is currently vacant. The staff of the Authority operates under the direction of an Executive Director.

The Water Board leases the operating system from the City, sets rates, and collects System revenue. The Lease Agreement (the “Lease”), dated July 1, 1985, provides for a lease term until such time as all the bonds of the Authority are paid in full, or provision for payment has been made. The Lease requires the Water Board to make a payment to the City which is no more than the greater of: i) principal and interest for the fiscal year on City general obligation bonds issued for water and sewer purposes, or ii) fifteen percent of principal and interest on Authority debt for the fiscal year. The Water Board is obligated to allocate the revenues of the System in sequential order of importance to debt service on Authority bonds, DEP’s cost of operating and maintaining the System, and rental fees to the City for the use of the System.

The Water Board consists of seven members who are appointed by the Mayor. The Act requires that at least one member have experience in the science of water resource development. Members of the Water Board cannot be members of the Authority. The Chairman is appointed by the Mayor. One seat on the Board of Directors is currently vacant. The staff of the Water Board operates under the direction of an Executive Director.

The operation and maintenance of the System is performed by DEP. DEP is managed by a Commissioner who is appointed by the Mayor and oversees a workforce of over 5,700 people. DEP works to protect the environmental welfare and health of the City’s residents and natural resources, manages the City’s water supply, transmission and distribution system, and collects, treats, and disposes of waste and storm water. DEP supplies water and sewer service to the Boroughs of the Bronx, Brooklyn, Manhattan, Queens and Staten Island,



Our City's drinking water is among the best in the country, and our watershed protection programs are designed to ensure its **continued quality.**

an area of over 300 square miles, and serves over eight million people. The City is also required by State law to sell water in counties where its water supply facilities are located and currently provides water to approximately one million people located in Westchester, Putnam, Orange and Ulster Counties.

The System provides an average of approximately 1,200 million gallons per day of water. In addition to a system of dams, reservoirs, aqueducts, and water tunnels, DEP maintains approximately 6,200 miles of water mains which distribute water throughout the five boroughs. DEP also maintains approximately 6,600 miles of sewers which collect and transport waste and storm water for treatment at the City's 14 water pollution control plants. The System collects and treats an average of approximately 1,300 million gallons per day of wastewater. Sewer service is provided to virtually the entire City, except for significant parts of the Borough of Staten Island, the Borough of Queens communities of Breezy Point and Douglaston, and the Borough of Brooklyn community of Seagate. Sewer service is also provided to certain upstate communities in System watershed areas.

## **SECURITY**

In recent years DEP has taken a number of steps to enhance and augment its security arrangements to protect the water system, including the structures, facilities and reservoirs. These steps include, among others, increasing the size of the DEP police force to a total of approximately 182 officers; obtaining legislation authorizing the DEP police force to function as police officers within the City as well as in the upstate watersheds; purchasing additional police vehicles and surveillance equipment, and further securing facilities through additional locks, fencing and other physical barriers to prevent access by unauthorized persons, restricting vehicular access at certain facilities and more frequent monitoring of the water supply for contaminants. In addition, DEP consults other governmental agencies, including the Federal Bureau of Investigation and the US Army Corps of Engineers on longer-term plans to modernize and improve security systems.

## **CREDIT RATINGS**

Standard and Poor's Ratings Services upgraded its rating on the Authority's bonds to AA+ from AA, in July 2004, just one rating level from the highest AAA rating. The rating upgrade was the result of "... greater predictability

surrounding costs and requirements of large capital projects, moderating rate increases and gradually improving coverage." Additionally, the Standard and Poor's report makes note of the Systems's affordable rates and sound management. The Authority's ratings from all three rating agencies also reflect the credit strengths resulting from the strong legal protections provided to bondholders and structural features of the Authority, which provide a true gross pledge of revenue to bondholders for debt payments. Fitch Ratings and Moody's Investor Service, rate the Authority AA and Aa2, respectively.

New York State Environmental Facilities Corporation ("EFC") bonds issued for eligible Authority State Revolving Fund projects are rated AAA from all three rating agencies. Bonds which the Authority places with EFC are an element of security for the EFC bonds issued to investors, but are unrated Second Resolution bonds of the Authority.

## **INTERNAL CONTROLS**

The management of the Water Board and the Authority is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the System are protected from loss, theft or misuse, and to ensure that accounting policies are complied with and to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America.

The System is subject to the internal control directives and memorandums that originate from the New York City Comptroller's office. These directives establish internal controls and accountability which safeguard City assets. In addition, the System is also subject to the City's internal auditors who periodically check the City's agencies' and component units' adherence to internal control policies and procedures.

## **BUDGETARY CONTROLS**

The Water Board and the Authority maintain separate control structures for their specific areas of responsibility. The Water Board and the Authority establish separate operating budgets approved by their respective Boards of Directors. The City also maintains an encumbrance accounting system as another technique of accomplishing budgetary control.

A wide-angle photograph of a triathlon swim leg in the Hudson River. In the foreground and middle ground, hundreds of swimmers are visible, their heads and arms above water as they swim. Several boats, including sailboats and a motorboat, are scattered across the water. In the background, the massive concrete towers and suspension cables of the Manhattan Bridge span across the sky. The scene is captured in a hazy, early morning light.

More than **1,800 competitors** from around the world participated in the 2004 New York City Triathlon, which included a **one-mile swim** in the Hudson River.

## CAPITAL PROGRAM GOALS

- To maintain the sufficiency, quality and security of the water in the City's watersheds and, where necessary, treat the supply to ensure drinking water continues to be of high quality;
- To maintain and improve the transmission and distribution capabilities of the City's water supply system;
- To maintain and improve the quality of the surrounding waters by upgrading the City's water pollution control plants;
- To remove sanitary sewage and prevent flooding by replacing failing sewers and extending service to underserved areas of the City.

The capital budget of the Authority is appropriated through the City's capital budget. The operation and maintenance budget of the System is appropriated through the City's annual operating budget.

## CAPITAL IMPROVEMENT PROGRAM AND FINANCING PROGRAM

The City's Ten Year Capital Strategy, published in April 2003 and which is updated every two years, includes the projected capital improvements to the System for fiscal years 2004 through 2013. The City's Current Capital Plan, the most recent published in September 2004, is updated quarterly and supersedes the Ten Year Capital Strategy for Fiscal Years 2005 through 2008. The Ten Year Capital Strategy as modified by the Current Capital Plan comprises the System's Capital Improvement Program ("CIP"). The CIP provides for the rebuilding of the System's infrastructure, including water and sewer facilities.

The CIP, which establishes long range programmatic goals for the System, reflects a review of the present condition and long-term needs of the plant and equipment constituting the System. The CIP incorporates the requirements of legal mandates, the present replacement cycle for these facilities, extensions to the present service area, and programs to enhance and optimize the operation of the System.

Allowances are included in the CIP for emergency repair and replacement. An annual allowance for cost escalation due to inflation is also included. The total capital commitments projected to be provided from System funds, most of which will come from the proceeds of notes and bonds of the Authority is \$15.2 billion. The table below reflects the CIP as of September 2004, and is the basis for the System's annual cash flow requirements. For a number of reasons, including unforeseen inflation and changes in plans, actual costs may vary from the estimates set forth below. The CIP is divided into five project types, each discussed below. The capital commitments shown in each year represent capital contracts authorized to be entered into in each year. Actual expenditures from such capital contracts and the issuance of Authority bonds to fund such expenditures occur in the current and subsequent years.

### Water Supply and Transmission

This component of the CIP includes approximately \$1.0 billion for Stages I and II of the City's Water Tunnel No. 3. Water Tunnel No. 3 will augment the transmission capacity from the watersheds into the City, permit the inspection and rehabilitation of Tunnels 1 and 2, and provide delivery alternatives to the City in the event of disruption in Tunnels 1 or 2. Stage I of Tunnel No. 3 commenced operation in July 1998. Construction of Stage II continues towards its expected operational date of 2012. The remaining section of the Stage II underground excavation includes the Manhattan leg, which will stretch across Manhattan from the valve chamber at Central Park. When Stage II comes on line, DEP will have achieved full redundancy of Tunnels No. 1 and 2. This will allow DEP to inspect and repair these tunnels for the first time since they were put into operation in 1917 and 1936, respectively.

The DEP is planning to implement water supply and transmission redundancy projects to enhance the water system and ensure its long term viability. DEP is planning to construct the Kensico-City Tunnel, a 16 mile tunnel from Kensico Reservoir to the Van Cortland Park Valve Chamber, bypassing the Hillview reservoir and providing redundancy for the sections of the Catskill and Delaware Aqueducts that

| System Funds (in thousands)       | 2005        | 2006        | 2007        | 2008        | 2009        | 2010        | 2011        | 2012        | 2013        | Total        |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Water Supply and Transmission     | \$ 710,730  | \$ 222,500  | \$ -        | \$ 50,000   | \$ 500,000  | \$ 725,000  | \$ 500,000  | \$ 567,800  | \$ 500,000  | \$ 3,776,030 |
| Water Distribution                | 848,113     | 476,374     | 1,581,867   | 490,341     | 127,609     | 134,927     | 127,255     | 129,333     | 163,845     | 4,079,664    |
| Water Pollution Control           | 710,745     | 1,145,872   | 125,800     | 514,522     | 870,300     | 489,957     | 638,500     | 469,500     | 618,500     | 5,583,696    |
| Sewers                            | 223,037     | 122,125     | 123,771     | 96,222      | 134,000     | 119,000     | 139,000     | 121,639     | 144,542     | 1,223,336    |
| Equipment                         | 146,809     | 128,384     | 58,714      | 36,961      | 66,716      | 28,598      | 28,628      | 28,780      | 28,990      | 552,580      |
| Total                             | \$2,639,434 | \$2,095,255 | \$1,890,152 | \$1,188,046 | \$1,698,625 | \$1,497,482 | \$1,433,383 | \$1,317,052 | \$1,455,877 | \$15,215,306 |
| Projected Authority bond issuance | \$1,463,000 | \$1,682,000 | \$1,773,000 | \$1,736,000 | \$1,704,000 | \$1,637,000 | \$1,686,000 | \$1,641,000 | \$1,450,000 | \$14,772,000 |



New York City is undertaking the most comprehensive  
**nitrogen removal** program in the United States,  
which will **benefit aquatic species**  
in our waterways by increasing levels of dissolved oxygen.



run from the Kensico reservoir to the City. The CIP includes \$1.7 billion for the new Kensico-City tunnel. DEP is also researching and developing other alternate conveyance conduits and water supplies for the City, to provide more dependability within the water system. The alternate water supplies could be used during drought situations to augment the City's daily water supply or during repairs and inspections of existing aqueducts and tunnels. The CIP includes \$1.1 billion for these projects.

### **Water Distribution**

The System's drinking water is rated among the best in the country. To ensure its continuing quality, and to comply with federal standards, DEP is pursuing a comprehensive program to halt further environmental deterioration in the increasingly urbanized Croton watershed, and to prevent similar problems in the still relatively pristine Catskill and Delaware watersheds. The CIP projects \$4.1 billion for the protection, expansion, and distribution of the City's water supply. This includes approximately \$1.2 billion for the construction of a full-scale filtration plant for the treatment of water from the Croton watershed, which reflects full funding based on current estimates for the plant. The program also calls for \$1.5 billion to be committed to on-going water quality preservation programs to ensure the continued purity of the water supply. This includes ultraviolet disinfection of water from the Catskill and Delaware systems, the acquisition of environmentally sensitive property in the upstate watershed, and the ongoing projects associated with the Filtration Avoidance Determination ("FAD") issued by the US Environmental Protection Agency ("USEPA"), allowing the City to avoid filtering water from the Catskill and Delaware Systems. The FAD will remain in effect until further determinations are made, with the next scheduled for April 2007. USEPA has issued a series of FADs to the City since 1993.

### **WATER POLLUTION CONTROL**

To improve the quality of the City's estuaries and surrounding waterways and to implement long-range land based solutions to sludge disposal, an end-product of the sewage treatment process, \$5.6 billion is allocated to water pollution control programs in the CIP.

Combined Sewer Overflow ("CSO") is currently a source of pollution in the City's waters. CSO occurs during and after heavy rainstorms, when the flow of wastewater and storm water in the sewers exceeds the treatment capacity of a water pollution control plant and therefore enters surrounding waterways. DEP's CIP includes approximately \$600 million for

the abatement of CSOs, including CSO storage tank construction. The City is also exploring alternative approaches to CSO problems that focus on cost effective means of protecting water quality.

Approximately \$700 million has been allocated in the CIP for the upgrade of the Newtown Creek Water Pollution Control Plant to full secondary treatment. Newtown Creek is the last of the City's 14 in-City water pollution control plants to be upgraded to meet the full secondary treatment requirements of the Clean Water Act. Another significant program included in the CIP is over \$1.0 billion to be used for the reconstruction and modernization of ten water pollution control plants in order for these plants to continue to meet strict guidelines contained in State operating permits. The CIP also includes \$2.0 billion for the upgrade of five plants discharging into the Long Island Sound or Jamaica Bay, and includes projected funds for biological nutrient removal at these plants which involves enhanced nitrogen removal processes at these plants.

### **Sewers**

Approximately \$1.2 billion is projected in the CIP to be committed to replace existing sewers in areas requiring increased capacity, to extend sewers to unserved or underserved areas, and to replace failing, flawed, or collapsed sewer mains.

### **Equipment**

Programs in this category of the CIP include the installation of water meters, the procurement of vehicles and equipment, management information systems, and utility relocation for sewers and water mains. A total of \$553 million of City funds is projected in the CIP for these projects.

### **RISK MANAGEMENT**

In accordance with the Lease, the Water Board is required to reimburse the City for any judgment or settlement paid by the City arising out of a tort claim to the extent that the City's liability is related to capital improvements and the operation or maintenance of the System. However, the yearly payment made to the City is limited to 5% of the aggregate revenues shown on the last year-end audited financial statements of the System. In addition, the System is required to reimburse the City, to the extent requested by the City, for the payment of any judgment or settlement arising out of a contract claim with respect to the construction of capital improvements. The City has agreed, subject to certain conditions, to indemnify the Authority and the Water Board against any and all liability in connection with any act done or omitted in good faith.



We are committed to improving our water pollution infrastructure by **replacing failing sewers** and **extending service** to underserved areas of the City.

## CASH MANAGEMENT

Both the Authority and the Water Board have funds which are invested. The Authority's investments must conform to the policies set forth in the Authority's Investment Guidelines, dated April 17, 1998. Specifically, the Authority may invest in any bonds or other obligations which constitute direct obligations of, or are guaranteed by, the federal government, including obligations of any agency, corporation or instrumentality thereof; direct obligations of, or obligations guaranteed by the State or direct obligations of any agency or public authority thereof, provided such obligations are rated in one of the two highest rating categories by a Rating Agency; bankers' acceptances or certificates of deposit issued by a commercial bank with its principal place of business within the State and having capital or surplus in excess of \$100 million; corporate securities, including commercial paper and fixed income obligations, rated by a Rating Agency in its highest category for comparable types of obligations; or repurchase agreements collateralized by obligations of the federal government.

The Authority employs various methods for the investment of its funds. The Authority's management is responsible for the investment of certain funds, and utilizes an investment manager for the active management of some funds; additionally, the Authority invests in forward purchase agreements and guaranteed investment contracts. The Water Board makes its own investments through the City Comptroller's investment group.

Funds are invested for periods of one day up to twenty years based upon cash flow requirements and subject to the restrictions on investments set forth in the Authority's General Bond Resolution. Daily cash from user payments is received into a lock box by the Water Board and is transferred daily to the Authority for debt service payments and to the City Comptroller to pay for the operation and maintenance of the System. No cash is retained by the Water Board until all requirements for debt service, operation and maintenance, and rental payments are met. Any surplus cash over these requirements is retained by the Water Board for use in the following year to pay required deposits.

## INDEPENDENT AUDIT

Section 6.11 (b) of the Financing Agreement by and among the City, the Authority and the Water Board dated as of July 1, 1985 requires that the Authority shall submit to the Mayor, the Comptroller and the Director of Management and Budget of the City audited annual financial statements of the Authority and the Water Board. The financial section of the 2004 Comprehensive Annual Financial Report begins with the report of our independent auditors, Grant Thornton LLP. This report expresses an unqualified opinion as to the fairness of the presentation of our financial statements.

Respectfully submitted,



Alan Anders  
Executive Director



Lawrence R. Glantz  
Comptroller

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

## New York City Water and Sewer System

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2003

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



President

Executive Director

## Report of Independent Certified Public Accountants

To the Members of the Boards of  
New York City Municipal Water Finance Authority  
and the New York City Water Board

We have audited the accompanying balance sheets, statements of revenues, expenses and changes in net assets, and cash flows of the business-type activities, the New York City Municipal Water Finance Authority and the New York City Water Board, which collectively comprise the New York City Water and Sewer System (“the System”), a component unit of the City of New York, New York, as of and for the year ended June 30, 2004, which collectively comprise the basic financial statements of the System. These financial statements are the responsibility of the System’s management. Our responsibility is to express an opinion on these financial statements based on our audit. The 2003 summarized comparative financial information of the System was derived from the System’s 2003 financial statements which were audited by other auditors. Those auditors expressed an unqualified opinion on those financial statements in their report dated October 23, 2003. As discussed in Note 14, the System has restated its 2003 financial statements, including beginning balances, during the current year to adjust capital assets, in conformity with accounting principles generally accepted in the United States of America. The other auditors reported on the 2003 financial statements before the restatement.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America as established by the Auditing Standards Board of the American Institute of Certified Public Accountants. 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 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 System’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinions.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities, the New York City

Municipal Water Finance Authority and the New York City Water Board of the System as of June 30, 2004, and the respective changes in its financial position and cash flows thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The financial statements include summarized 2003 comparative information. Such information does not include all of the information required to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System’s financial statements for the year ended June 30, 2003, from which such summarized information was derived.

As discussed above, the financial statements of the System as of and for the year ended June 30, 2003, were audited by other auditors. As discussed in Note 14, these financial statements have been restated. We audited the adjustments described in Note 14 to the financial statements that were applied to restate the 2003 financial statements, including beginning balances, from which the accompanying 2003 summarized financial information was derived. In our opinion, such adjustments are appropriate and have been properly applied. However, we were not engaged to audit, review, or apply any procedures to the 2003 financial statements or summarized financial information of the System other than with respect to such adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2003 financial statements or summarized financial information taken as a whole.

The accompanying management’s discussion and analysis is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.



New York, New York  
October 25, 2004

## Management's Discussion and Analysis

### OVERVIEW OF THE FINANCIAL STATEMENTS

The following is an overview of the financial activities of the New York City Water and Sewer System (the System) for the fiscal years ended June 30, 2004 and 2003.

The basic financial statements of the System, which include the balance sheets, the statements of revenues, expenses and changes in net assets and the statements of cash flows, are presented to display information about the reporting entity as a whole, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 34, Basic Financial Statements and Managements Discussion and Analysis for State and Local Governments as amended by

GASB Statement No. 37, Basic Financial Statements and Managements Discussion and Analysis — for State and Local Governments: Omnibus. The statements are prepared using the economic resources measurement focus and the accrual basis of accounting.

The 2003 financial statements have been restated, from the amounts previously reported, to reflect adjustments to utility plant in service and utility plant construction. These adjustments are described further in the capital assets section of this discussion and analysis and in footnote 14 to the financial statements.

### FINANCIAL ANALYSIS AND RESULTS OF OPERATIONS

The following summarizes the activities of the System for the years 2004 and 2003.

| (in thousands)                        | 2004               | 2003             |
|---------------------------------------|--------------------|------------------|
| Revenues:                             |                    |                  |
| Water supply and distribution         | \$ 713,097         | 690,093          |
| Sewer collection and treatment        | 984,753            | 952,985          |
| Other operating revenues              | 75,283             | 68,842           |
| Total operating revenues              | <u>1,773,133</u>   | <u>1,711,920</u> |
| Subsidy Income                        | 68,311             | 65,816           |
| Investment income                     | 86,949             | 96,236           |
| Total revenues                        | <u>1,928,393</u>   | <u>1,873,972</u> |
| Expenses:                             |                    |                  |
| Operations and maintenance            | 933,736            | 875,762          |
| Bad debt expense                      | 116,108            | 89,400           |
| Administration and general            | 19,853             | 15,181           |
| Depreciation and amortization         | 451,585            | 389,626          |
| Loss on retirement of fixed assets    | 25,214             | —                |
| Interest expense                      | 612,054            | 584,347          |
| Total expenses                        | <u>2,158,550</u>   | <u>1,954,316</u> |
| Net loss before capital contributions | (230,157)          | (80,344)         |
| Capital contributions                 | 29,875             | 7,233            |
| Change in net assets                  | <u>(200,282)</u>   | <u>(73,111)</u>  |
| Net Assets — beginning                | 3,754,465          | 3,827,576        |
| Net Assets — ending                   | <u>\$3,554,183</u> | <u>3,754,465</u> |

Total operating revenues increased by 3.6% on a rate increase of 5.5%. Water consumption declined by 1.5 % over the year.

The following summarizes other operating revenues:

| (in thousands)            | 2004             | 2003          |
|---------------------------|------------------|---------------|
| Upstate water fees        | \$ 24,611        | 22,790        |
| Late payment fees         | 41,767           | 38,235        |
| Connection fees & permits | 8,905            | 7,817         |
| Total other revenues      | <u>\$ 75,283</u> | <u>68,842</u> |

## Management's Discussion and Analysis

Investment income decreased by 9.7%. The Authority had \$5.7 million in arbitrage rebates in 2004 which are netted against investment income. Total investments decreased by \$300 million.

Total operations and maintenance expense increased by \$58 million or 6.6%. Expenses for operations of the system increased by \$44 million and the rental payment to the City for debt service increased by \$14 million. The two major components of the increase in operations and maintenance were increased costs of \$17 million for upstate watershed protection, and an increase of \$12 million in judgments and

claims. The rental payment increased primarily due to higher debt service payments coming due on bonds issued by New York City prior to the inception of the System.

Bad debt expense increased by \$27 million. The system continues to evaluate the accounts receivable balances and where required deem uncollectible accounts to be written off to bad debt expense.

Interest expense increased by \$28 million or 4.7%. The total debt of the System has increased by \$550 million or 4% and interest expense has increased by nearly the same percentage.

On the balance sheet, the changes in assets, liabilities and net assets are summarized as follows:

| (in thousands)                                  | 2004                | 2003              |
|---|---------------------|-------------------|
| Current unrestricted assets                     | \$ 458,454          | 506,598           |
| Current restricted assets                       | 1,964,855           | 2,272,548         |
| Capital assets                                  | 15,174,128          | 14,163,830        |
| Total assets                                    | <u>17,709,977</u>   | <u>17,054,770</u> |
| Long-term liabilities                           | 12,565,882          | 11,894,966        |
| Current liabilities                             | 1,589,912           | 1,405,339         |
| Total liabilities                               | <u>14,155,794</u>   | <u>13,300,305</u> |
| Net assets:                                     |                     |                   |
| Invested in capital assets, net of related debt | 3,368,355           | 3,271,440         |
| Restricted for debt service                     | 179,106             | 203,695           |
| Restricted for operations & maintenance         | 135,701             | 132,107           |
| Unrestricted (deficit)                          | (128,979)           | 147,223           |
| Total net assets                                | <u>3,554,183</u>    | <u>3,754,465</u>  |
| Total liabilities and net assets                | <u>\$17,709,977</u> | <u>17,054,770</u> |



## Management's Discussion and Analysis

Current unrestricted assets decreased by \$48 million or 9.5%. Net receivables including unbilled revenues decreased by \$32 million and the System's receivable from the City for over payment of operations and maintenance expense decreased from 2003 by \$10 million.

Current restricted assets decreased \$308 million or 14%. The major decrease in restricted assets was \$267 million in the construction fund. The balances in this fund are available to pay for capital projects and vary due to the timing of the reissuance of commercial paper following the issue of long term bonds. In 2004 \$40 million in principal payments were made from the escrow funds.

Capital assets are described in a separate section of this discussion.

In 2004, the System issued an additional \$100 million of commercial paper and terminated \$125 million which brought the total program amount to \$800 million. Current liabilities increased by \$184 million primarily due to an increase in payable to the City of \$219 million. Total commercial paper outstanding decreased by \$25 million.

Long-term liabilities increased by \$671 million or 6%. A detailed discussion of the debt issued by the System is provided in the Debt Administration section of this discussion.

### CAPITAL ASSETS

The System's capital assets include buildings, equipment, water treatment systems and water collections systems. Such amounts are detailed as follows:

| (in thousands)                                   | 2004                | 2003              |
|--|---------------------|-------------------|
| Utility plant construction                       | \$ 3,564,455        | 2,845,080         |
| Land   | 142,409             | 116,576           |
| Buildings  | 22,071              | 22,071            |
| Equipment  | 378,333             | 288,250           |
| Water supply and wastewater treatment systems    | 9,619,222           | 9,577,106         |
| Water distribution and sewage collection systems | 7,196,035           | 6,676,855         |
| Total utility plant in service                   | 17,358,070          | 16,680,858        |
| Less accumulated depreciation                    | 5,748,397           | 5,362,108         |
| Total, net utility plant in service              | 11,609,673          | 11,318,750        |
| <b>Total capital assets</b>                      | <b>\$15,174,128</b> | <b>14,163,830</b> |

The net increase in the System's capital assets during fiscal year 2004 was \$1.0 billion or 7.1%. Net capital asset additions for 2004 were \$1,397 million.

The 2003 capital assets have been restated. Certain amounts previously reported as utility plant construction were placed into service in prior years and should have been reclassified to utility plant in service and depreciated accordingly. In addition, certain amount included in utility plant construction should have been expenses in 2003 and in prior years.

The capital assets of the System are detailed in footnote numbers 2(d) and 4 of the notes to the financial statements.

## Management's Discussion and Analysis

### DEBT ADMINISTRATION

The New York City Municipal Water Finance Authority, (the Authority) issues debt to pay for the capital improvements to the System. The debt program of the Authority includes commercial paper and long-term debt of the Authority and subsidized bonds issued through the New York State Environmental Facilities Corporation (EFC). The commercial paper program is the main source of financing to reimburse the City for payments made for water and sewer projects. The Authority then issues long-term debt of its own or through EFC to retire outstanding commercial paper. The Authority also issues refunding bonds to refinance higher coupon debt.

At June 30, 2004, the total outstanding debt of the system was \$14 billion, of which \$800 million was commercial paper. The remaining \$13.2 billion consisted of variable and fixed rate bonds and notes maturing in varying installments through 2039. The total outstanding long-term debt at June 30, 2004 was as follows:

| (in thousands)              | Issue Date          |
|-----------------------------|---------------------|
| 2004                        | \$1,712,389         |
| 2003                        | 3,007,393           |
| 2002                        | 2,250,595           |
| 2001                        | 1,062,425           |
| 2000 and prior              | 5,200,115           |
| <b>Total long-term debt</b> | <b>\$13,232,917</b> |

In the above, bonds retired through refundings in 2004 are removed from the year in which the refunded bonds were issued.

In fiscal year 2004, the Authority issued \$1,166,160,000 of water and sewer revenue bonds directly to the public, including \$649,275,000 of refunding bonds and \$516,885,000 in long-term financing. The Authority also issued \$558,688,873 in Clean Water and Drinking Water State Revolving Fund (SRF) bonds to EFC, all of which were issued for new money purposes. The new money bond proceeds provided long-term financing of commercial paper notes which had previously financed capital improvements to New York City's water and sewer system.

Highlights of the financing program in fiscal year 2004 included continued low interest costs on both fixed and variable rate borrowing. The sizable issuance in fiscal 2004 was the result of both a sizable capital program financed by the Authority and EFC bonds and refunding opportunities, which accounted for more than one-third of the Authority's bond issuance. In fiscal 2004, the Authority continued to make

maximum use of the EFC's State Revolving Fund program, which provides an interest rate subsidy to the Authority for qualifying projects, helping to minimize the overall costs of the Authority's long term debt.

In fiscal year 2004, the Authority closed five bond transactions and entered into an interest rate exchange agreement (or swap). The First Resolution Fiscal 2004 Series A, B and C bonds consisted of bond sales directly to the public. The Second Resolution Fiscal 2004 Series 1 and Series 2 bonds were issued to EFC to secure bonds issued by EFC on behalf of the Authority.

On September 18, 2003, the Authority closed its first transaction of fiscal year 2004. The Fiscal 2004 Series A bonds were sold for a par amount of \$217 million. The issue included term bonds in years 2027 and 2035. Proceeds from the sale were used to defease all of the Authority's Series 4 and a portion of its Series 6 commercial paper notes, fund a portion of the debt service reserve fund and pay costs of issuance.

On October 9, 2003, the Authority closed its first transaction with EFC in fiscal year 2004. The Fiscal 2004 Series 1 bonds, issued to EFC in the amount of \$301,008,574 to secure bonds issued by EFC, were sold in a combined plan of finance with the Authority's Series A bonds. Proceeds were used to defease a portion of the Authority's commercial paper Series 5 and 7 notes, which had funded eligible Clean Water and Drinking Water SRF projects, and were used to pay the costs of issuance for the bonds.

On March 18, 2004, the Authority closed two transactions, Fiscal 2004 Series B and Series C, which were sold in a combined plan of finance along with Fiscal 2004 Series 2 bonds. The Series B bonds were sold for a par amount of \$347,615,000 and currently refunded Fiscal 1994 Series B, D, E, F and G bonds. The issue included serial bonds in years 2004 through 2023. Proceeds from the sale also paid for the costs of issuance.

The Fiscal 2004 Series C bonds were sold for a par amount of \$601,545,000. Proceeds from the sale were used to refund Fiscal 1996 Series A and Series B bonds and Fiscal 1997 Series A and Series B bonds, to defease all of the Authority's commercial paper Series 6 and a portion of its Series 5 Lot A notes, pay certain costs of issuance, fund a portion of the debt service reserve fund and fund a portion of the Authority's capital program. The issue included serial bonds in years 2004 through 2025 and term bonds in 2034 and 2035.

## Management's Discussion and Analysis

On April 7, 2004, the Authority closed the Fiscal 2004 Series 2 bonds, which were issued to EFC in the amount of \$257,680,299 to secure bonds issued by EFC. Proceeds were used to defease a portion of the Authority's commercial paper Series 5 and 7 notes, which had funded eligible Clean Water and Drinking Water SRF projects, and were used to pay the costs of issuance for the bonds. The issuance included serial bonds in 2004 through 2033 and term bonds in 2030 and 2033.

In fiscal 2004, the Authority defeased with revenues, \$147,450,000 of outstanding General Resolution Bonds on March 25, 2004, including portions of Fiscal 1994 Series D, 1994 Series E and 1996 Series A bonds. On June 29, 2004, \$45,716,609 of outstanding General Resolution Bonds, including portions of Fiscal 1993 Series A and 1996 Series C bonds were also defeased with revenues.

The Authority terminated its \$125 million commercial paper Series 4 notes on September 24, 2003, leaving the combined commercial paper authorized to be outstanding at \$800 million. The commercial paper program, the Authority's primary source of short-term financing, is used to reimburse the City for spending on water and sewer related projects. Throughout the year the Authority issues long-term debt to retire the outstanding commercial paper.

The total of bonds and notes payable are detailed in footnote numbers 9 and 10 of the notes to the financial statements.

### DERIVATIVES

On December 23, 2003, the Authority closed an interest rate exchange agreement extending to 2019 on a principal amount of \$200 million. The exchange was structured with the Authority receiving a fixed interest rate from the counterparty, in exchange for a floating rate based on the BMA Municipal Swap Index ("BMA Swap"). The fixed interest rate the Authority will receive is 3.567%, as determined by a competitive bid among six firms. The transaction effectively converts a portion of the Authority's bonds from a fixed rate basis to a floating rate basis, and increases its variable rate exposure at a cost lower than conventional variable rate demand bonds.

### ECONOMIC FACTORS AND NEXT YEAR'S RATES

Rates are adopted each year by the Board in May, for the following fiscal year. A rate increase of 5.5% for fiscal 2005 became effective July 1, 2004 based on projected revenues and costs.

### REQUEST FOR INFORMATION

This financial report is provided as an overview of the System's finances. Questions concerning any of the information in this report or requests for additional information should be directed to Raymond Orlando, Manager of Public Relations, New York City Municipal Water Finance Authority, 75 Park Place, New York, NY 10007. His phone number is (212) 788-5875 and his fax number is (212) 788-9721.

## Financial Statements

**BALANCE SHEETS**

(Year ended June 30, 2004 with summarized financial information as of June 30, 2003)

| (in thousands)   | New York City<br>Water Board | New York City<br>Municipal Water<br>Finance Authority | Eliminations | 2004 Total | 2003 Total<br>(Restated) |
|--|------------------------------|---|--------------|------------|--------------------------|
| <b>ASSETS</b>  |                              |   |              |            |                          |
| Utility plant in service, less accumulated depreciation of \$5,748,397 and \$5,362,108, respectively | \$11,609,673                 | –   | –            | 11,609,673 | 11,318,750               |
| Utility plant construction   | 3,564,455                    | –   | –            | 3,564,455  | 2,845,080                |
| Total capital assets   | 15,174,128                   | –   | –            | 15,174,128 | 14,163,830               |
| Current assets:  |                              |   |              |            |                          |
| Unrestricted cash and cash equivalents   | 10,927                       | 2   | –            | 10,929     | 8,567                    |
| Investments  | 95                           | –   | –            | 95         | –                        |
| Accounts receivable:   |                              |   |              |            |                          |
| Billed, less allowance for uncollectible receivables of \$242,478 and \$268,235, respectively        | 298,322                      | –   | –            | 298,322    | 336,943                  |
| Unbilled   | 143,625                      | –   | –            | 143,625    | 137,500                  |
| Receivable from the City   | 3,323                        | –   | –            | 3,323      | 13,213                   |
| Other  | 1                            | 2,159   | –            | 2,160      | 10,375                   |
| Total current unrestricted assets  | 456,293                      | 2,161   | –            | 458,454    | 506,598                  |
| Restricted assets:   |                              |   |              |            |                          |
| Cash and cash equivalents  | 70,407                       | 1,067,749   | –            | 1,138,156  | 1,531,401                |
| Investments  | 64,810                       | 758,132   | –            | 822,942    | 738,789                  |
| Accrued interest receivable  | 484                          | 3,273   | –            | 3,757      | 2,358                    |
| Total current restricted assets  | 135,701                      | 1,829,154   | –            | 1,964,855  | 2,272,548                |
| Total current assets   | 591,994                      | 1,831,315   | –            | 2,423,309  | 2,779,146                |
| Revenue requirement to be billed by and received from the Board                                      | –                            | 6,861,567   | (6,861,567)  | –          | –                        |
| Long-term deferred bond and financing expenses   | –                            | 112,540   | –            | 112,540    | 111,794                  |
| Total assets   | \$15,766,122                 | 8,805,422   | (6,861,567)  | 17,709,977 | 17,054,770               |
| <b>LIABILITIES AND NET ASSETS</b>  |                              |   |              |            |                          |
| Long-term liabilities:   |                              |   |              |            |                          |
| Bonds and notes payable, less current portion  | \$ –                         | 13,028,277  | –            | 13,028,277 | 12,425,832               |
| Net discount on bonds and notes payable  | –                            | (197,293)   | –            | (197,293)  | (296,637)                |
| Deferred bond refunding costs  | –                            | (265,102)   | –            | (265,102)  | (234,229)                |
| Revenue requirement payable to the Authority   | 6,861,567                    | –   | (6,861,567)  | –          | –                        |
| Total long-term liabilities  | 6,861,567                    | 12,565,882  | (6,861,567)  | 12,565,882 | 11,894,966               |
| Current liabilities:   |                              |   |              |            |                          |
| Accounts payable and accrued expenses  | 6,745                        | 30,560  | –            | 37,305     | 27,102                   |
| Revenues received in advance   | 78,231                       | –   | –            | 78,231     | 69,156                   |
| Current portion of bonds and notes payable   | –                            | 1,004,640   | –            | 1,004,640  | 1,057,318                |
| Payable to the City  | –                            | 451,162   | –            | 451,162    | 231,390                  |
| Refunds payable to customers   | 18,574                       | –   | –            | 18,574     | 20,373                   |
| Total current liabilities  | 103,550                      | 1,486,362   | –            | 1,589,912  | 1,405,339                |
| Total liabilities  | 6,965,117                    | 14,052,244  | (6,861,567)  | 14,155,794 | 13,300,305               |
| Net Assets:  |                              |   |              |            |                          |
| Invested in capital assets, net of related debt  | 15,174,128                   | (11,805,773)  | –            | 3,368,355  | 3,271,440                |
| Restricted for debt service  | –                            | 179,106   | –            | 179,106    | 203,695                  |
| Restricted for operations and maintenance  | 135,701                      | –   | –            | 135,701    | 132,107                  |
| Unrestricted (deficit)   | (6,508,824)                  | 6,379,845   | –            | (128,979)  | 147,223                  |
| Total net assets   | 8,801,005                    | (5,246,822)   | –            | 3,554,183  | 3,754,465                |
| Total liabilities and net assets   | \$15,766,122                 | 8,805,422   | (6,861,567)  | 17,709,977 | 17,054,770               |

See accompanying notes to the financial statements.

## Financial Statements

**STATEMENTS OF REVENUE, EXPENSES AND CHANGES IN NET ASSETS**

(Year ended June 30, 2004 with summarized financial information for the year ended June 30, 2003)

| (in thousands)   | New York City<br>Water Board | New York City<br>Municipal Water<br>Finance Authority | 2004 Total       | 2003 Total<br>(Restated) |
|--|------------------------------|---|------------------|--------------------------|
| Operating revenues:                                    |                              |   |                  |                          |
| Water supply and distribution                          | \$ 713,097                   | –   | 713,097          | 690,093                  |
| Sewer collection and treatment                         | 984,753                      | –   | 984,753          | 952,985                  |
| Other operating revenues                               | 75,283                       | –   | 75,283           | 68,842                   |
| Total operating revenues                               | <u>1,773,133</u>             | <u>–</u>  | <u>1,773,133</u> | <u>1,711,920</u>         |
| Operating expenses:                                    |                              |   |                  |                          |
| Operations and maintenance                             | 933,736                      | –   | 933,736          | 875,762                  |
| Bad debt expense                                       | 116,108                      | –   | 116,108          | 89,400                   |
| Administration and general                             | 4,970                        | 14,883  | 19,853           | 15,181                   |
| Total operating expenses                               | <u>1,054,814</u>             | <u>14,883</u>   | <u>1,069,697</u> | <u>980,343</u>           |
| Depreciation and amortization                          | 409,139                      | 42,446  | 451,585          | 389,626                  |
| Operating income (loss)                                | <u>309,180</u>               | <u>(57,329)</u>                                       | <u>251,851</u>   | <u>341,951</u>           |
| Nonoperating revenue (expense):                        |                              |   |                  |                          |
| Interest expense                                       | –                            | (612,054)   | (612,054)        | (584,347)                |
| Loss on retirement of fixed assets                     | (25,214)                     | –   | (25,214)         | –                        |
| Subsidy income   | –                            | 68,311  | 68,311           | 65,816                   |
| Investment income                                      | 1,237                        | 85,712  | 86,949           | 96,236                   |
| Net income (loss) before capital contributions         | <u>285,203</u>               | <u>(515,360)</u>                                      | <u>(230,157)</u> | <u>(80,344)</u>          |
| Capital contributions                                  | <u>29,875</u>                | <u>–</u>  | <u>29,875</u>    | <u>7,233</u>             |
| Change in net assets                                   | <u>315,078</u>               | <u>(515,360)</u>                                      | <u>(200,282)</u> | <u>(73,111)</u>          |
| Net assets (deficit) at beginning of year, as restated | <u>8,485,927</u>             | <u>(4,731,462)</u>                                    | <u>3,754,465</u> | <u>3,827,576</u>         |
| Net assets (deficit) at end of year                    | <u>\$8,801,005</u>           | <u>(5,246,822)</u>                                    | <u>3,554,183</u> | <u>3,754,465</u>         |

See accompanying notes to the financial statements.

## Financial Statements

## STATEMENTS OF CASH FLOW

(Year ended June 30, 2004 with summarized financial information for the year ended June 30, 2003)

| (in thousands)  | New York City<br>Water Board | New York City<br>Municipal Water<br>Finance Authority | 2004 Total  | 2003 Total<br>(Restated) |
|---|------------------------------|---|-------------|--------------------------|
| Cash flows from operating activities:   |                              |   |             |                          |
| Receipts from customers   | \$ 1,696,738                 | –   | 1,696,738   | 1,588,898                |
| Payments for operations and maintenance   | (874,854)                    | –   | (874,854)   | (868,811)                |
| Payments for administration   | (4,732)                      | (14,948)  | (19,680)    | (14,616)                 |
| Net cash provided by (used in) operating activities                               | 817,152                      | (14,948)  | 802,204     | 705,471                  |
| Cash flows from capital and related financing activities:                         |                              |   |             |                          |
| Proceeds from issuing bonds, notes and<br>other borrowings, net of issuance costs | –                            | 2,728,279   | 2,728,279   | 4,679,212                |
| Acquisition and construction of capital assets                                    | –                            | (1,238,298)   | (1,238,298) | (1,217,895)              |
| Payments by the Board to the Authority  | (811,421)                    | 811,421   | –           | –                        |
| Repayments of bonds, notes and other borrowings                                   | –                            | (2,174,239)   | (2,174,239) | (3,343,065)              |
| Interest paid on bonds, notes and other borrowings                                | –                            | (515,787)   | (515,787)   | (576,516)                |
| Net cash used in capital and related financing activities                         | (811,421)                    | (388,624)   | (1,200,045) | (458,264)                |
| Cash flows from investing activities:   |                              |   |             |                          |
| Proceeds from sales and maturities of investments                                 | 64,422                       | 89,473  | 153,895     | 61,240                   |
| Purchases of investments  | (64,845)                     | (175,659)   | (240,504)   | (114,299)                |
| Interest on investments   | 1,142                        | 92,425  | 93,567      | 163,167                  |
| Net cash provided by investing activities   | 719                          | 6,239   | 6,958       | 110,108                  |
| Net increase (decrease) in cash and cash equivalents                              | 6,450                        | (397,333)   | (390,883)   | 357,315                  |
| Cash and cash equivalents, beginning of year                                      | 74,884                       | 1,465,084   | 1,539,968   | 1,182,653                |
| Cash and cash equivalents, end of year  | \$ 81,334                    | 1,067,751   | 1,149,085   | 1,539,968                |

Cash and cash equivalents are reported in the Balance Sheet as follows:

|  |           |           |           |           |
|--|-----------|-----------|-----------|-----------|
| Unrestricted cash and cash equivalents | \$ 10,927 | 2         | 10,929    | 8,567     |
| Restricted cash and cash equivalents   | 70,407    | 1,067,749 | 1,138,156 | 1,531,401 |
|  | \$ 81,334 | 1,067,751 | 1,149,085 | 1,539,968 |

Reconciliation of Operating Income to Net Cash Provided by (used in) Operating Activities:

|   |            |          |          |           |
|---|------------|----------|----------|-----------|
| Operating income (Loss)   | \$ 309,180 | (57,329) | 251,851  | 341,951   |
| Adjustments to reconcile operating income to net cash provided by (used in) operating activities: |            |          |          |           |
| Depreciation and amortization   | 409,139    | 42,446   | 451,585  | 389,626   |
| Bad debt expense  | 116,108    | –        | 116,108  | 89,400    |
| Operations and maintenance expense paid with bond proceeds  | 43,230     | –        | 43,230   | 25,941    |
| Changes in net assets and liabilities:  |            |          |          |           |
| Receivables, net  | (83,609)   | –        | (83,609) | (119,893) |
| Receivable from the City  | 9,890      | –        | 9,890    | (22,216)  |
| Accounts payable  | 5,938      | (65)     | 5,873    | 565       |
| Revenues received in advance  | 9,075      | –        | 9,075    | (6,875)   |
| Refunds payable   | (1,799)    | –        | (1,799)  | 6,972     |
| Net cash provided by (used in) operating activities   | \$ 817,152 | (14,948) | 802,204  | 705,471   |

The following are the noncash capital and related financing activities:

- Interest expense includes the amortization of premium and discount in the amount of \$8,189 in 2004 and \$7,312 in 2003
- Capital expenditures in the amount of \$451,162 and \$231,390 had been incurred but not paid at June 30, 2004 and June 30, 2003
- The Board received capital assets of \$29,878 and \$7,233 in 2004 and 2003, respectively, which represents capital contributed by the City

See accompanying notes to the financial statements.

Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

**1 ORGANIZATION**

The New York City Water and Sewer System (the “System”) provides water supply and distribution, and sewage collection, treatment, and disposal for The City of New York (the “City”). The System, as presented in the accompanying financial statements, began operations on July 1, 1985 and is a joint operation consisting of two legally separate and independent entities, the New York City Municipal Water Finance Authority (the “Authority”) and the New York City Water Board (the “Board”). The Authority is a public benefit corporation created in accordance with the New York City Municipal Water Finance Act (the “Act”), duly enacted into law as Chapter 513 of the laws of 1984 of the State of New York, as amended by Chapter 514 of the laws of 1984 of the State of New York. The Board was created by Chapter 515 of the laws of 1984 of the State of New York. The Act empowers the Authority to issue bonds or notes to finance the cost of capital improvements to the System, and to refund any and all outstanding bonds and general obligation bonds of the City issued for water and sewer purposes. The Act empowers the Board to lease the System from the City and to fix and collect rates, fees, rents and other charges for the use of, or for services furnished, rendered, or made available by the System, to produce cash sufficient to pay debt service on the Authority’s bonds and to place the System on a self-sustaining basis.

The physical operation and capital improvements of the System are performed by the City’s Department of Environmental Protection subject to contractual agreements with the Authority and Board.

In accordance with Statement 14 of Governmental Accounting Standards Board (GASB), the Board and the Authority are considered to be part of the same reporting entity (the System) since they are fiscally interdependent. Accordingly, the accompanying financial statements for the System present the individual financial statements of the Board and the Authority as major funds. In addition, the accompanying financial statements present a total column which represents the entity wide financial statements of the System. Transactions and balances between the Board and the Authority are eliminated in the entity wide financial statements.

**2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The accompanying financial statements of the System have been prepared on the accrual basis of accounting. Revenues are recognized when earned and expenses recognized when incurred. GASB Statement No. 20, Accounting and Financial Reporting for Proprietary Funds and Other Government Entities that Use Proprietary Funds, provides proprietary activities with a choice of authoritative guidance issued after November 30, 1989. The System has elected to follow GASB pronouncements exclusively after that date. Other significant accounting policies are:

**(a) Investments and Cash Equivalents**

Investments and cash equivalents consist principally of securities of the United States and its agencies, certificates of deposit, and repurchase agreements with maturity periods of one year or less, and are carried at amortized cost, which approximates fair value. For purposes of the statements of cash flows, the System generally considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

**(b) Restricted Assets**

Proceeds from the issuance of debt and monies set aside for the operation and maintenance of the System are classified as restricted by applicable bond indentures.

**(c) Bond Discount and Bond Issuance Costs**

Bond discount and bond issuance costs are amortized over the life of the related bond issue, using the effective yield method of amortization for bond discount and the straight-line method for bond issuance costs.

**(d) Utility Plant**

Utility plant acquired through purchase or internal construction is recorded at cost, net of retirements. Contributed utility plant is recorded at its estimated historical cost based on appraisals or other methods when historical cost information is not available, net of depreciation. Depreciation is computed using the straight-line method based upon estimated useful lives, as follows:

|  | Years |
|--|-------|
| Buildings  | 40-50 |
| Water supply and wastewater treatment systems    | 15-50 |
| Water distribution and sewage collection systems | 15-75 |
| Equipment  | 5-35  |

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

Maintenance and repairs of property are charged to maintenance expense. Replacements and betterments are recorded as utility plant.

**(e) Operating Revenues and Operating Expenses**

Operating revenues consist of customer payments for services of the System. Revenues are based on billing rates imposed by the Board and upon customers' water and sewer usage. The System records estimated unbilled revenue at year end.

Operating expenses consist of administration, maintenance, repair and operations of the System, administration costs of the Board and the Authority, rental payments to the City, and bad debt expense.

**(f) Deferred Revenues**

Revenues received in advance of the period to which they relate are deferred and recorded as revenue when earned.

**(g) Deferred Bond Refunding Costs**

Deferred bond refunding costs represent the accounting loss incurred in advance refundings of outstanding bonds. In accordance with the provisions of GASB Statement No. 23, Accounting and Financial Reporting of Debt Reported by Proprietary Activities, gains or losses arising from debt refundings are deferred and amortized over the lesser of the remaining life of the old debt or the life of the new debt.

**(h) Comparative Summary Prior Year Information and Reclassifications**

Selected comparative information for 2003 has been provided in the accompanying financial statements and footnotes. Such information does not include all information required for

presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2003 from which it has been derived. Certain 2003 amounts have been reclassified to conform to the 2004 financial statement presentation.

**(i) Use of Estimates**

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions in determining the 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 expenses during the reporting period. Actual amounts could differ from those estimates.

**3 FINANCING AGREEMENT**

The Financing Agreement (the "Agreement") provides that the Authority will issue bonds to finance the cost of capital investment in the water and sewer system serving the City. It also sets forth the funding priority for the debt service costs of the Authority, operating costs of the water and sewer system, and the rental payment to the City.

**4 UTILITY PLANT**

As discussed in footnote 14, the System has restated its 2003 financial statements to adjust capital assets. The following is a summary of utility plant activity for the fiscal years ended June 30, 2004 and 2003.

| (in thousands)                                      | Balance at<br>June 30, 2002<br>(as restated) | Additions | Deletions | Balance at<br>June 30, 2003<br>(as restated) | Additions | Deletions | Balance at<br>June 30, 2004 |
|---|--|-----------|-----------|--|-----------|-----------|-----------------------------|
| Utility construction                                | \$ 2,446,417                                 | 1,146,968 | 748,305   | 2,845,080                                    | 1,444,655 | 725,280   | 3,564,455                   |
| Land  | 89,891                                       | 26,685    | —         | 116,576                                      | 25,833    | —         | 142,409                     |
| Buildings   | 21,615                                       | 456       | —         | 22,071                                       | —         | —         | 22,071                      |
| Equipment   | 275,701                                      | 12,549    | —         | 288,250                                      | 107,364   | 17,281    | 378,333                     |
| Water supply and wastewater<br>treatment systems    | 9,123,546                                    | 453,560   | —         | 9,577,106                                    | 72,903    | 30,787    | 9,619,222                   |
| Water distribution and sewage<br>collection systems | 6,443,819                                    | 281,740   | 48,704    | 6,676,855                                    | 519,180   | —         | 7,196,035                   |
| Total   | 18,400,989                                   | 1,921,958 | 797,009   | 19,525,938                                   | 2,169,935 | 773,348   | 20,922,525                  |
| Less accumulated depreciation                       | 5,065,891                                    | 344,921   | 48,704    | 5,362,108                                    | 409,141   | 22,852    | 5,748,397                   |
| Total   | \$13,335,098                                 | 1,577,037 | 748,305   | 14,163,830                                   | 1,760,794 | 750,496   | 15,174,128                  |



## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

**5 NET ASSETS**

At June 30, 2004 and 2003, the Authority had a net asset deficit of \$5,247 million and \$4,731 million, respectively, which amount is less than the \$8,801 million and \$8,486 million total net assets of the Board at June 30, 2004 and 2003, respectively.

**6 INVESTMENTS, CASH EQUIVALENTS AND DEPOSITS CASH**

The Water and Sewer General Revenue Bond Resolution (the "Resolution") authorizes the investment of bond proceeds. The guidelines issued by the Office of the New York State Comptroller and the Resolution establish the criteria for permissible investments of the System. In addition, the Board and the Authority have investment guidelines approved by their respective Boards of Directors. The System may invest in obligations of the Federal government or any subdivision or instrumentality thereof, obligations of the State of New York or any subdivision or instrumentality thereof provided that they are in the two highest rating categories of a rating agency, bankers' acceptances or certificates of deposit (CDs) issued by a New York State commercial bank with capital or surplus in excess of \$100 million, corporate securities or commercial paper rated highest by a rating agency when compared to similar type securities, or repurchase agreements that are collateralized by obligations of the Federal government.

Investments and deposits held by the System at June 30, 2004, and 2003 comprised:

| (in thousands)  | 2004               | 2003             |
|---|--------------------|------------------|
| Unrestricted Investments  | \$ 95              | -                |
| Unrestricted cash, cash equivalents<br>(including accrued interest)               | \$10,929           | 8,567            |
| Restricted cash, cash equivalents and<br>investments (including accrued interest) | 1,964,855          | 2,272,548        |
|   | <u>\$1,975,879</u> | <u>2,281,115</u> |

This amount is comprised of:

|   |                    |                  |
|---|--------------------|------------------|
| Carrying amount of deposits (including CDs) | \$ 11,028          | 7,146            |
| Investments (including accrued interest)    | 1,964,851          | 2,273,969        |
|   | <u>\$1,975,879</u> | <u>2,281,115</u> |

**Cash Deposits**

The System follows the New York City Banking Commission designations for the System's bank depositories. The Commission consists of the Comptroller, the Mayor, and the Finance Commissioner of the City and uses independent bank rating agencies in part to assess the financial soundness of each bank, and the banking relationships are under constant operational and credit reviews. Each bank in which the System's cash is deposited is required to have its principal office in New York State and have capital stock, surplus, and undivided earnings aggregating at least \$100 million. The System had \$200 thousand on deposit at June 30, 2004 and 2003, which were covered by Federal depository insurance and the balance was uncollateralized.

**Investments**

The System's investment of cash is limited to U.S. Government guaranteed securities and U.S. Government agency securities purchased directly and through repurchase agreements as well as New York State securities, mutual funds and guaranteed investment contracts. The repurchase agreements must be collateralized by U.S. Government guaranteed securities in a range of 100% to 300% for the Board and 102% for the Authority. The fair value of investments is determined based on quoted market prices. All investments are held in the Authority's name by the trustee or in the Board's name by the agent.

Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

As of June 30, 2004 the System had the following investments and maturities:

| Investment Type<br>(in thousands) | Amortized Cost     | Fair Value       | Investment Maturity   |
|-----------------------------------|--------------------|------------------|-----------------------|
| <b>Unrestricted</b>               |                    |                  |                       |
| Certificate of Deposit            | \$ 95              | 96               | Greater than one year |
| <b>Restricted</b>                 |                    |                  |                       |
| US Government securities          | \$1,233,127        | 1,233,668        | Less than one year    |
| New York State securities         | 42,916             | 44,391           | Greater than one year |
| Repurchase agreements             | 19,780             | 19,797           | Less than one year    |
| Guaranteed investment contracts   | 665,176            | 666,899          | Greater than one year |
|                                   | <u>\$1,960,999</u> | <u>1,964,755</u> |                       |

As of June 30, 2003 the System had the following investments and maturities:

| Investment Type<br>(in thousands) | Amortized Cost     | Fair Value       | Investment Maturity   |
|-----------------------------------|--------------------|------------------|-----------------------|
| <b>Unrestricted</b>               |                    |                  |                       |
| Mutual Funds                      | \$ 1,005           | 1,005            | Less than one year    |
| Repurchase agreements             | 850                | 850              | Less than one year    |
|                                   | <u>\$ 1,855</u>    | <u>1,855</u>     |                       |
| <b>Restricted</b>                 |                    |                  |                       |
| US Government securities          | \$1,577,965        | 1,578,479        | Less than one year    |
| New York State securities         | 5,756              | 5,901            | Greater than one year |
| Repurchase agreements             | 67,000             | 67,099           | Less than one year    |
| Guaranteed investment contracts   | 619,084            | 620,685          | Less than one year    |
|                                   | <u>\$2,269,805</u> | <u>2,272,164</u> |                       |

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

### 7 LEASE AGREEMENT

The Board is party to a long-term lease (the "Lease") with the City, which transfers all the water and sewer related real and personal property to the Board for the term of the lease. The Lease term commenced on July 1, 1985, and continues until the later of the fortieth anniversary of the commencement of the lease, or the date on which all bonds, notes or other obligations of the Authority are paid in full, or provisions for such payment have been made pursuant to the applicable debt instrument. The Lease provides for payments to the City to cover the following:

(a) an amount sufficient to pay the cost of administration, maintenance, repair and operation of the leased property, which includes overhead costs incurred by the City attributable to the leased property, net of the amount of any Federal, State, or other operating grants received by the City;

(b) an amount sufficient to reimburse the City for capital costs incurred by the City for the construction of capital improvements to the leased property which are not paid or reimbursed from any other source.

In addition to the payments described above, the Board pays rent to the City in each fiscal year in an amount not to exceed the greater of (a) the principal and interest payable on general obligation bonds issued by the City for water and sewer purposes certified by the City to be paid within such

fiscal year or (b) 15% of principal and interest payable on the bonds of the Authority to be paid within such fiscal year.

A summary of operation and maintenance expenses for the years ended June 30, 2004 and 2003 is as follows:

| (in thousands)                      | 2004              | 2003           |
|-------------------------------------|-------------------|----------------|
| Water transmission and distribution | \$ 284,461        | 285,929        |
| Sewer collection systems            | 338,566           | 336,391        |
| City agency support cost            | 52,399            | 36,557         |
| Fringe benefits                     | 70,466            | 73,740         |
| Payments for watershed improvements | 43,292            | 25,942         |
| Judgments and claims                | 27,910            | 15,055         |
|                                     | <u>817,094</u>    | <u>773,614</u> |
| Rental payments to the City         | 116,642           | 102,148        |
|                                     | <u>\$ 933,736</u> | <u>875,762</u> |

### 8 PAYABLE TO AND RECEIVABLE FROM THE CITY

As of June 30, 2004 and 2003, all utility construction recorded by the System, which has not been reimbursed to the City, has been recorded as a payable to the City, net of the amount of any State or Federal capital grants received by the City.

As of June 30, 2004 and 2003 the System had a receivable from the City for overpayment of operations and maintenance expense.

### 9 SHORT-TERM LIABILITIES

In fiscal years 2003 and 2004 the changes in short-term liabilities were as follows:

| (in thousands)                | Balance at<br>June 30, 2002 | Additions | Deletions | Balance at<br>June 30, 2003 | Additions | Deletions | Balance at<br>June 30, 2004 |
|-------------------------------|-----------------------------|-----------|-----------|-----------------------------|-----------|-----------|-----------------------------|
| Commercial paper <sup>1</sup> | \$628,000                   | 1,558,800 | 1,361,800 | 825,000                     | 964,500   | 989,500   | 800,000                     |

<sup>1</sup>Commercial paper is used to pay construction costs in advance of long term bond financing.

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

Commercial paper activity comprises the following for the year ended June 30, 2004:

| (in thousands)  | Balance at<br>June 30, 2003 | Issued         | Retired        | Balance at<br>June 30, 2004 |
|---|-----------------------------|----------------|----------------|-----------------------------|
| Commercial Paper Series 1 —   |                             |                |                |                             |
| Variable Rate, Short-term Rolling Maturity Backed by Letter of Credit | \$ 200,000                  | —              | —              | 200,000                     |
| Commercial Paper Series 4 —   |                             |                |                |                             |
| Variable Rate, Short-term Rolling Maturity Backed by Letter of Credit | 125,000                     | —              | 125,000        | —                           |
| Commercial Paper Series 5 —   |                             |                |                |                             |
| Variable Rate, Short-term Rolling Maturity Backed by Line of Credit   | 200,000                     | 203,300        | 203,300        | 200,000                     |
| Commercial Paper Series 6 —   |                             |                |                |                             |
| Variable Rate, Short-term Rolling Maturity Backed by Line of Credit   | 200,000                     | 275,000        | 275,000        | 200,000                     |
| Commercial Paper Series 7 —   |                             |                |                |                             |
| Variable Rate, Short-term Rolling Maturity                            | 100,000                     | 486,200        | 386,200        | 200,000                     |
| Total commercial paper payable  | <u>\$ 825,000</u>           | <u>964,500</u> | <u>989,500</u> | <u>800,000</u>              |

## 10 LONG-TERM LIABILITIES

In fiscal years 2003 and 2004, the changes in long-term liabilities were as follows:

| Bonds payable:<br>(in thousands) | Balance at<br>June 30, 2002 | Additions        | Deletions        | Balance at<br>June 30, 2003 | Additions        | Deletions        | Balance at<br>June 30, 2004 | Due Within<br>One Year |
|----------------------------------|-----------------------------|------------------|------------------|-----------------------------|------------------|------------------|-----------------------------|------------------------|
| First resolution                 | \$ 8,856,014                | 2,010,310        | 1,232,234        | 9,634,090                   | 1,166,160        | 1,057,437        | 9,742,813                   | 94,127                 |
| Second resolution                | 2,662,990                   | 1,110,102        | 749,031          | 3,024,061                   | 558,688          | 92,645           | 3,490,104                   | 110,513                |
| Total bonds payable              | 11,519,004                  | 3,120,412        | 1,981,265        | 12,658,151                  | 1,724,848        | 1,150,082        | 13,232,917                  | 204,640                |
| Less discounts (net)             | 371,892                     | (49,341)         | 25,914           | 296,637                     | (58,916)         | 40,428           | 197,293                     | —                      |
| Less deferred refunding costs    | 208,521                     | 50,889           | 25,181           | 234,229                     | 53,534           | 22,661           | 265,102                     | —                      |
| Total long-term liabilities      | <u>\$10,938,591</u>         | <u>3,118,864</u> | <u>1,930,170</u> | <u>12,127,285</u>           | <u>1,730,230</u> | <u>1,086,993</u> | <u>12,770,522</u>           |                        |

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

With respect to all series, the Board has agreed to maintain rates and charges to provide revenues at levels sufficient to pay principal and interest requirements as well as to meet certain debt service coverage and operating cost funding requirements. All series are specific obligations of the Authority payable solely from and secured by a pledge of and lien on the gross revenue of the System, as defined.

Certain bonds issued by the Authority involve the concurrent issuance of long-term variable rate securities that are matched with long-term floating rate securities. These obligations, taken together as a whole, yield a fixed rate of interest at all times. These securities have been issued to achieve a lower prevailing fixed rate of interest in relation to traditional fixed rate bonds.

During 2004 and 2003, the Authority issued \$949.1 million and \$1.0 billion, respectively, of bonds to advance refund \$652 million and \$973.5 million, respectively, of outstanding bonds. The advance refundings resulted in an accounting loss of \$21.2 million and \$50.9 million, respectively. The Authority in effect reduced its aggregate debt service by \$102 million and \$123 million, respectively, and obtained an economic benefit of \$69.4 million and \$102 million, respectively.

During 2004 and 2003, the Authority defeased \$213.3 million and \$145.1 million, respectively, of outstanding bonds with \$215.1 million and \$158.1 million, respectively, of current revenue which resulted in an accounting loss of

\$16.5 million and \$15.7 million, respectively.

During 2003 the Authority renegotiated the terms of \$666.6 million of its notes with the New York State Environmental Facilities Corporation. The Authority in effect increased its aggregate debt service by \$173.7 million and obtained an economic benefit of \$52.3 million.

During 2004 the Authority issued \$50 million of bonds that will refund \$50 million of principal of the 2003 B issue in June 2005. During 2003 the Authority issued \$50 million of bonds that refunded \$50 million of the 2003 B issue in June 2004.

The Authority has defeased cumulatively \$6.664 billion and \$5.759 billion of outstanding bonds as of June 30, 2004 and 2003, respectively, by placing proceeds of refunding bonds issued in an irrevocable escrow account to provide for all future debt service payments on defeased bonds. Proceeds were used to purchase U.S. Government securities that were placed in the irrevocable escrow account. Accordingly, the escrow account assets and liabilities for the defeased bonds are not included in the Authority's financial statements.

As of June 30, 2004 and 2003, \$5.493 billion and \$4.663 billion of the defeased bonds respectively had been retired from the assets of the escrow accounts.

Debt service requirements to maturity including amounts relating to commercial paper at June 30, 2004 are as follows:

| Year ending June 30<br>(in thousands) | Principal    | Interest <sup>1</sup> | Total      |
|---------------------------------------|--------------|-----------------------|------------|
| 2005                                  | \$ 1,004,640 | 500,565               | 1,505,205  |
| 2006                                  | 221,605      | 487,295               | 708,900    |
| 2007                                  | 174,735      | 497,594               | 672,329    |
| 2008                                  | 208,936      | 500,908               | 709,844    |
| 2009                                  | 235,382      | 496,057               | 731,439    |
| 2010-2014                             | 1,447,627    | 2,370,636             | 3,818,263  |
| 2015-2019                             | 1,990,228    | 2,079,480             | 4,069,708  |
| 2020-2024                             | 2,349,929    | 1,694,362             | 4,044,291  |
| 2025-2029                             | 2,875,320    | 1,197,834             | 4,073,154  |
| 2030-2034                             | 2,861,255    | 515,670               | 3,376,925  |
| 2035-2039                             | 663,260      | 39,932                | 703,192    |
| Total                                 | \$14,032,917 | 10,380,333            | 24,413,250 |

<sup>1</sup>Includes interest for variable rate bonds estimated at .92% which is the rate at the end of the fiscal year. Variable rate bonds are sold daily or weekly and interest rates are determined by the market on the day sold.

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

Bonds, notes payable, and commercial paper comprise the following for the year ended June 30, 2004:

| (in thousands)   | Balance at<br>June 30, 2003 | Issued | Retired | Balance at<br>June 30, 2004 |
|--|-----------------------------|--------|---------|-----------------------------|
| 1991 Fiscal Series B — 6.00% to 7.25% Serial and Term Bonds maturing in varying installments through 2012                        | \$ 19,250                   | —      | 3,165   | 16,085                      |
| 1992 Fiscal Series B — 6.66% to 6.86% Serial and Term Bonds maturing in varying installments through 2014                        | 21,610                      | —      | 3,927   | 17,683                      |
| 1993 Fiscal Series A — 5.875% to 6.0% Serial, Term, and Capital Appreciation Bonds maturing in varying installments through 2013 | 229,380                     | —      | 63,515  | 165,865                     |
| 1993 Fiscal Series C — Adjustable Rate Term Bonds maturing 2022  | 100,000                     | —      | —       | 100,000                     |
| 1994 Fiscal Series 1 — 3.00% to 6.00% Serial Bonds maturing in varying installments through 2013                                 | 31,805                      | —      | —       | 31,805                      |
| 1994 Fiscal Series B — 4.875% to 5.125% Fixed Rate Bonds maturing in varying installments through 2019                           | 285,940                     | —      | 285,940 | —                           |
| 1994 Fiscal Series C — Adjustable Rate term bonds maturing in 2023   | 200,000                     | —      | —       | 200,000                     |
| 1994 Fiscal Series D — Auction Rate Bonds maturing in varying installments through 2013  | 83,500                      | —      | 83,500  | —                           |
| 1994 Fiscal Series E — Inverse Rate Bonds maturing in varying installments through 2013  | 83,500                      | —      | 83,500  | —                           |
| 1994 Fiscal Series F — 5.40% to 5.75% Serial Bonds maturing in varying installments through 2023                                 | 117,900                     | —      | 117,900 | —                           |
| 1994 Fiscal Series G — Adjustable, Auction and Leveraged Reverse Rate Bonds maturing in varying installments through 2024        | 205,000                     | —      | 20,000  | 185,000                     |
| 1995 Fiscal Series A — Adjustable Rate Term Bonds maturing in varying installments through 2025                                  | 216,700                     | —      | —       | 216,700                     |
| 1995 Fiscal Series 1 — 5.25% to 6.875% Serial Bonds maturing in varying installments through 2016                                | 36,602                      | —      | 5,387   | 31,215                      |
| 1996 Fiscal Series A — 5.10% to 5.15% Serial Bonds maturing in varying installments through 2023                                 | 122,150                     | —      | 122,150 | —                           |
| 1996 Fiscal Series B — 5.75% to 5.875% Serial Bonds maturing in varying installments through 2026                                | 491,025                     | —      | 114,415 | 376,610                     |
| 1996 Fiscal Series C — 4.90% to 5.75% Serial Bonds maturing in varying installments through 2017                                 | 76,645                      | —      | 14,525  | 62,120                      |
| 1997 Fiscal Series A — 4.85% to 6.0% Serial Bonds maturing in varying installments through 2026                                  | 365,125                     | —      | 23,735  | 341,390                     |
| 1997 Fiscal Series B — 5.75% to 5.80% Serial Bonds maturing in varying installments through 2029                                 | 700,000                     | —      | 43,460  | 656,540                     |
| 1998 Fiscal Series 1 — 4.00% to 5.35% Serial Bonds maturing in varying installments through 2017                                 | 36,105                      | —      | 1,795   | 34,310                      |
| 1998 Fiscal Series 3 — 4.30% to 6.00% Serial Bonds maturing in varying installments through 2016                                 | 405,580                     | —      | 25,546  | 380,034                     |

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

| (in thousands)   | Balance at<br>June 30, 2003 | Issued | Retired | Balance at<br>June 30, 2004 |
|--|-----------------------------|--------|---------|-----------------------------|
| 1998 Fiscal Series 4 — 3.60% to 5.20% Serial Bonds maturing in varying installments through 2018                               | \$ 12,525                   | —      | 700     | 11,825                      |
| 1998 Fiscal Series 6 — 4.827% to 5.125% Serial Bonds maturing in varying installments through 2019                             | 15,965                      | —      | 744     | 15,221                      |
| 1998 Fiscal Series A — 4.80% to 5.125% Serial Bonds maturing in varying installments through 2022                              | 283,850                     | —      | —       | 283,850                     |
| 1998 Fiscal Series B — 5.125% to 5.25% Serial Bonds maturing in varying installments through 2030                              | 449,525                     | —      | —       | 449,525                     |
| 1998 Fiscal Series C — 4.30% to 5.125% Serial Bonds maturing in varying installments through 2021                              | 87,050                      | —      | 285     | 86,765                      |
| 1998 Fiscal Series D — 4.25% to 5.00% Serial and Capital Appreciation Bonds maturing in varying installments through 2025      | 384,400                     | —      | 3,525   | 380,875                     |
| 1999 Fiscal Series 2 — 4.00% to 5.25% Serial Bonds maturing in varying installments through 2020                               | 108,016                     | —      | 4,286   | 103,730                     |
| 1999 Fiscal Series A — 4.75% to 5.00% Serial Bonds maturing in varying installments through 2031                               | 301,470                     | —      | —       | 301,470                     |
| 1999 Fiscal Series B — 4.0% to 5.25% Serial, Term and Capital Appreciation Bonds maturing in varying installments through 2020 | 232,805                     | —      | 6,975   | 225,830                     |
| 2000 Fiscal Series A — 5.50% to 5.75% Serial Bonds maturing in varying installments through 2032                               | 275,735                     | —      | —       | 275,735                     |
| 2000 Fiscal Series B — 6.00% to 6.10% Serial Bonds maturing in varying installments through 2033                               | 131,865                     | —      | —       | 131,865                     |
| 2000 Fiscal Series C — Adjustable Rate Term Bonds maturing in 2033   | 107,500                     | —      | —       | 107,500                     |
| 2000 Fiscal Series 2 — 3.80% to 5.96% Serial Bonds maturing in varying installments through 2019                               | 11,025                      | —      | 460     | 10,565                      |
| 2001 Fiscal Series A — 5.50% Term Bonds maturing in varying installments through 2033  | 328,225                     | —      | —       | 328,225                     |
| 2001 Fiscal Series B — 4.5% to 5.125% Serial and Term Bonds maturing in varying installments through 2031                      | 68,400                      | —      | 145     | 68,255                      |
| 2001 Fiscal Series C — 5.125% Term Bonds maturing in varying installments through 2033   | 112,040                     | —      | —       | 112,040                     |
| 2001 Fiscal Series D — 4.5% to 5.5% Serial and Capital Appreciation Bonds maturing in varying installments through 2025        | 288,375                     | —      | 4,705   | 283,670                     |
| 2001 Fiscal Series E — 4.5% to 5.25% Serial and Term Bonds maturing in varying installments through 2031                       | 86,105                      | —      | —       | 86,105                      |
| 2001 Fiscal Series F — Adjustable Rate Bonds maturing in varying installments through 2033                                     | 184,130                     | —      | —       | 184,130                     |
| 2002 Fiscal Series A — 5.00% to 5.75% Serial and Term Bonds maturing in varying installments through 2033                      | 216,305                     | —      | —       | 216,305                     |
| 2002 Fiscal Series B — 3.625% to 5.00% Serial and Term Bonds maturing in varying installments through 2026                     | 171,455                     | —      | —       | 171,455                     |
| 2002 Fiscal Series C — 4.1% to 5.125% Serial and Term Bonds maturing in varying installments through 2032                      | 46,580                      | —      | —       | 46,580                      |
| 2002 Fiscal Series D — 3.0% to 4.90% Serial and Term Bonds maturing in varying installments through 2020                       | 41,745                      | —      | —       | 41,745                      |
| 2002 Fiscal Series E — 3.4% to 5.0% Serial and Term Bonds maturing in varying installments through 2026                        | 213,850                     | —      | —       | 213,850                     |

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

| (in thousands)  | Balance at<br>June 30, 2003 | Issued    | Retired   | Balance at<br>June 30, 2004 |
|---|-----------------------------|-----------|-----------|-----------------------------|
| 2002 Fiscal Series F — 3.6% to 5.0% Serial and Term Bonds maturing in varying installments through 2029                   | \$ 105,635                  | —         | —         | 105,635                     |
| 2002 Fiscal Series G — 5.00% to 5.125% Term Bonds maturing in varying installments through 2034                           | 216,375                     | —         | —         | 216,375                     |
| 2002 Fiscal Series 1 — 4.82% to 5.25% Serial Bonds maturing in varying installments through 2031                          | 196,816                     | —         | 5,091     | 191,725                     |
| 2002 Fiscal Series 2 — 4.22% to 5.00% Serial Bonds maturing in varying installments through 2031                          | 68,928                      | —         | 2,251     | 66,677                      |
| 2002 Fiscal Series 3 — 4.65% to 5.00% Serial Bonds maturing in varying installments through 2031                          | 501,513                     | —         | 10,812    | 490,701                     |
| 2002 Fiscal Series 4 — 5.13% to 6.74% Serial Bonds maturing in varying installments through 2023                          | 223,498                     | —         | 7,480     | 216,018                     |
| 2002 Fiscal Series 5 — 3.82% to 5.21% Serial Bonds maturing in varying installments through 2031                          | 177,416                     | —         | 3,584     | 173,832                     |
| 2002 Fiscal Series 6 — 3.82% to 5.21% Serial Bonds maturing in varying installments through 2019                          | 94,769                      | —         | 4,327     | 90,442                      |
| 2002 Fiscal Series 7 — 7.4% to 7.5% Serial Bonds maturing in varying installments through 2012                            | 11,050                      | —         | 1,795     | 9,255                       |
| 2003 Fiscal Series A — 4.0% to 6.0% Serial, Term and muni CPI Bonds maturing in varying installments through 2034         | 719,180                     | —         | —         | 719,180                     |
| 2003 Fiscal Series B — 4.0% to 5.25% Refundable Principal Installment Bonds maturing in varying installments through 2006 | 150,000                     | —         | 50,000    | 100,000                     |
| 2003 Fiscal Series C — Adjustable Rate Bonds maturing in 2018   | 300,300                     | —         | —         | 300,300                     |
| 2003 Fiscal Series D — 2.0% to 5.25% Serial and Term Bonds maturing in varying installments through 2017                  | 244,545                     | —         | 1,720     | 242,825                     |
| 2003 Fiscal Series E — 5% Term Bonds maturing in 2034 and 2038  | 367,265                     | —         | —         | 367,265                     |
| 2003 Fiscal Series F — Adjustable Rate Bonds maturing in 2035   | 201,655                     | —         | —         | 201,655                     |
| 2003 Fiscal Series 1 — 4.23% to 4.375% Serial Bonds maturing in varying installments through 2032                         | 147,258                     | —         | 2,029     | 145,229                     |
| 2003 Fiscal Series 2 — 5.27% Serial Bonds maturing in varying installments through 2028                                   | 593,638                     | —         | 10,252    | 583,386                     |
| 2003 Fiscal Series 3 — 5.15% Serial Bonds maturing in varying installments through 2025                                   | 21,755                      | —         | 620       | 21,135                      |
| 2003 Fiscal Series 4 — 5.18% Serial Bonds maturing in varying installments through 2025                                   | 34,640                      | —         | 990       | 33,650                      |
| 2003 Fiscal Series 5 — 4.23% to 4.45% Serial Bonds maturing in varying installments through 2032                          | 295,157                     | —         | 2,388     | 292,769                     |
| 2004 Fiscal Series A — 5.0% Term Bonds maturing in 2027 and 2035  | —                           | 217,000   | —         | 217,000                     |
| 2004 Fiscal Series B — 2.00% to 5.00% Serial and Term Bonds maturing in varying installments through 2023                 | —                           | 347,615   | 5,665     | 341,950                     |
| 2004 Fiscal Series C — 2.00% to 5.00% Serial and Term Bonds maturing in Varying installments through 2035                 | —                           | 601,545   | 4,685     | 596,860                     |
| 2004 Fiscal Series 1 — 4.12% to 4.45% Serial Bonds maturing in 2033   | —                           | 301,008   | 1,829     | 299,179                     |
| 2004 Fiscal Series 2 — 4.46% Serial Bonds maturing in 2026  | —                           | 257,680   | 280       | 257,400                     |
| Total debt payable  | 12,658,151                  | 1,724,848 | 1,150,083 | 13,232,917                  |
| Current portion of bonds and notes payable  | 232,319                     | 217,099   | 244,778   | 204,640                     |
| Bonds and notes payable, less current portion   | \$12,425,832                | 1,507,749 | 905,305   | 13,028,277                  |



## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

**Derivatives**

In 2004, the Authority entered into a \$200 million interest rate exchange agreement under which the Authority receives a fixed rate in exchange for a floating rate based on the BMA Municipal Swap Index. This effectively converted a portion of the Authority's second resolution bonds issued through EFC to variable rate bonds. The terms of this agreement require the counterparty to pay the BMA index and the Authority to pay 3.567%.

In 2003, the Authority sold \$20 million of muni-CPI bonds in the 2013 maturity of its Fiscal 2003 Series A issue. In connection with the muni-CPI bonds the Authority entered into an interest rate exchange agreement under which the Authority receives a floating rate tied to the consumer price index, which matches the rate on the bonds, and pays a fixed interest rate. This allowed the Authority to achieve a yield 10 basis points lower than traditional fixed rate debt with a 2013 maturity. The terms of this transaction require the counterparty to pay the Authority the muni-CPI rate, which is set at 1.53% plus a floating rate CPI, with the CPI being equal to the change in the consumer price index for a given period.

In keeping with market standards, the Authority or the counterparty may terminate the swap agreements if the other party fails to perform under its terms as defined in the agreements. The Authority views termination risk to be remote at this time. Depending on the fair value at the time of termination, the Authority may have a liability to the counterparties.

Through the swap agreement the Authority is exposed to credit risk i.e., the risk that the counterparties fails to perform its contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swap. The fair value of the swaps at June 30, 2004 and June 30, 2003 respectively, was approximately \$3 and \$1 million, respectively, in favor of the counterparty. To mitigate credit risk, the agreement requires the counterparty to post collateral for the Authority's benefit if it is downgraded below a designated threshold, as defined in the agreement.

**11 RESTRICTED ASSETS**

Certain cash and investments, plus accrued interest and other receivables, of the System are restricted as follows:

| (In thousands)                                    | 2004               | 2003             |
|---|--------------------|------------------|
| <b>The Board</b>                                  |                    |                  |
| Operation and maintenance reserve account         | \$ 135,691         | 132,097          |
| Operation and maintenance reserve general account | 10                 | 10               |
|   | <u>135,701</u>     | <u>132,107</u>   |
| <b>The Authority</b>                              |                    |                  |
| Revenue fund                                      | 179,106            | 203,695          |
| Debt service reserve fund                         | 698,518            | 678,115          |
| Construction fund                                 | 289,540            | 556,314          |
| Escrow fund                                       | 661,990            | 702,317          |
|   | <u>1,829,154</u>   | <u>2,140,441</u> |
|   | <u>\$1,964,855</u> | <u>2,272,548</u> |

The operation and maintenance reserve account is established as a depository to hold the operations and maintenance reserve fund as required by the Resolution. It is required to hold one-sixth of the operating expenses as set forth in the annual budget. It is funded through the cash receipts of the Board. The operation and maintenance reserve general account is established as a depository to hold all excess funds of the Board after all legally mandated transfers have been made. It is available to meet any deficiencies in the flow of funds including debt service and alternatively can be used as a financing source for capital expenditures.

The revenue fund is established as a depository to fund the debt service, Authority expense, debt service reserve and escrow funds. It is funded through cash transfers from the Board. The debt service reserve fund is established as a depository to hold the maximum annual debt service requirement for the next current or any future fiscal year. It is funded through revenue bond proceeds and the revenue fund. The debt service fund is established as a depository to pay all principal and interest payments on the Authority's debt for the current fiscal year. It is funded through the revenue fund. The construction fund is established as a depository to pay all capital construction costs incurred by the City and reimbursed by the Authority. It is funded through the proceeds of bond and note sales. The escrow fund is established as a depository to refund debt in the future in future years. It is funded through bond proceeds.

**12 COMMITMENTS AND CONTINGENCIES****Construction**

The System has contractual commitments of approximately \$4,483 and \$4,197 million at June 30, 2004 and June 30, 2003, respectively, for water and sewer projects.

## Notes to Financial Statements, June 30, 2003 and 2004

(with summarized financial information for the year ended June 30, 2003)

### Claims and Litigation

In accordance with the Lease, the Board is required to reimburse the City for any judgment or settlement paid by the City arising out of a tort claim to the extent that the City's liability is related to capital improvements and the operation or maintenance of the System. However, in no event shall the payment made to the City, in any fiscal year, exceed an amount equal to 5% of the aggregate revenues shown on the prior year audited financial statements of the System. In addition, the System is required to reimburse the City, to the extent requested by the City, for the payment of any judgment or settlement arising out of a contract claim with respect to the construction of capital improvements. In addition, the City has agreed, subject to certain conditions, to indemnify the Authority, the Board and their staffs against any and all liability in connection with any act done or omitted in the exercise of their powers which is taken or omitted in good faith in pursuance of their purposes under the Act. Currently, the City is a defendant in a significant number of lawsuits pertaining to the System. The litigation includes, but is not limited to, actions commenced and claims asserted against the City arising out of alleged torts, alleged breaches of contract, condemnation proceedings and other alleged violations of law. As of June 30, 2004, the potential future liability attributable to the System for claims outstanding against the City was estimated to be \$131 million. This amount is included in the estimated liability for unsettled claims, which is reported in the City's balance sheet. The potential future liability is the City's best estimate based on available information. The estimate may be revised as further information is obtained and as pending cases are litigated.

### Arbitrage Rebate

To maintain the exemption from Federal income tax of interest on bonds issued subsequent to January 1, 1986, the System will fund amounts required to be rebated to the Federal Government pursuant to Section 148 of the Internal Revenue Code of 1986, as amended ("the Code"). The Code requires the payment to the United States Treasury of the excess of the amount earned on all non-purpose obligations over the amount that would have been earned if the gross proceeds of the issue were invested at a rate equal to the yield on the issue, together with any earnings attributable to such excess. Construction funds, debt service funds or any other funds or accounts funded with proceeds of such bonds, including earnings, or pledged to or expected to be used to pay interest on such bonds are subject to this requirement.

Payment is to be made after the end of the fifth bond year and after every fifth bond year thereafter, and within 60 days after retirement of the bonds. During 2004 and 2003 the System paid \$1 million and \$477 thousand, respectively, in rebates. At June 30, 2004 the Authority had a liability of \$4.745 million and had no liability at June 30, 2003.

### 13 POST EMPLOYMENT BENEFITS AND PENSION PLANS

The employees of the System are covered under the pension plans of the City. The employer's cost for these plans has been allocated to the System under the Operations and Maintenance expense.

### 14 PRIOR PERIOD ADJUSTMENTS

The 2003 financial statements have been restated, from the amounts previously reported, to reflect adjustments to utility plant in service and utility plant construction. Certain amounts previously reported as utility plant construction were placed into service in prior years and should have been reclassified to utility plant in service and depreciated accordingly. In addition, certain amounts included in utility plant construction should have been expensed in 2003 and in prior years. The effects of these adjustments to the 2003 financial statements are as follows: Utility plant in service, net of accumulated depreciation was increased by \$658 million. Utility plant construction was reduced by \$1.49 billion. Net assets at the beginning of the year were reduced by \$785 million and net assets at the end of the year were reduced by \$836 million, which included an adjustment to increase 2003 operation and maintenance expense and depreciation expense by \$26 million and \$25 million respectively. Net income before capital contribution was reduced by \$51 million.

### 15 SUBSEQUENT EVENTS

On August 5, 2004, the Authority issued fiscal 2005 Series A First Resolution Bonds in the aggregate amount of \$150 million to reimburse outstanding commercial paper notes, to pay certain costs of issuance, and to fund certain reserves.

On August 11, 2004, the Authority issued Fiscal 2005 Series 1 Second Resolution Bonds in the aggregate amount of \$230.4 million, to reimburse outstanding commercial paper notes, and to pay certain costs of issuance.

## Statistics

**REVENUES LAST TEN FISCAL YEARS**

Years Ended June 30, 1995 – 2004 (in thousands)

| Year | Water Supply<br>and<br>Distribution | Sewer<br>Collection and<br>Treatment | Other<br>Operating<br>Revenues | Subsidy and<br>Investment<br>Income | Total     |
|------|-------------------------------------|--------------------------------------|--------------------------------|-------------------------------------|-----------|
| 1995 | 504,596                             | 717,533                              | 78,326                         | 57,511                              | 1,357,966 |
| 1996 | 532,171                             | 765,808                              | 72,251                         | 67,646                              | 1,437,876 |
| 1997 | 543,928                             | 789,516                              | 93,243                         | 68,192                              | 1,494,879 |
| 1998 | 560,956                             | 819,662                              | 102,540                        | 93,883                              | 1,577,041 |
| 1999 | 583,394                             | 857,204                              | 85,903                         | 81,465                              | 1,607,966 |
| 2000 | 610,949                             | 876,455                              | 93,194                         | 70,478                              | 1,651,076 |
| 2001 | 626,364                             | 898,568                              | 96,991                         | 84,534                              | 1,706,457 |
| 2002 | 648,319                             | 907,324                              | 116,512                        | 97,543                              | 1,769,698 |
| 2003 | 690,093                             | 952,985                              | 68,842                         | 162,052                             | 1,873,972 |
| 2004 | 713,097                             | 984,753                              | 75,283                         | 155,260                             | 1,928,393 |

**EXPENSES LAST TEN FISCAL YEARS**

Years Ended June 30, 1995 – 2004 (in thousands)

| Year | Operation<br>and<br>Maintenance | Provision<br>for<br>Uncollectibles | Administration<br>and<br>General | Depreciation<br>and<br>Amortization | Interest<br>Expense | Total     |
|------|---------------------------------|------------------------------------|----------------------------------|-------------------------------------|---------------------|-----------|
| 1995 | 738,561                         | 95,989                             | 15,047                           | 293,052                             | 328,364             | 1,471,013 |
| 1996 | 730,963                         | 317,051                            | 14,490                           | 240,949                             | 368,422             | 1,671,875 |
| 1997 | 775,318                         | 189,775                            | 13,374                           | 287,546                             | 407,997             | 1,674,010 |
| 1998 | 777,652                         | 149,748                            | 11,217                           | 281,943                             | 465,819             | 1,731,518 |
| 1999 | 777,652                         | 103,960                            | 10,879                           | 380,023                             | 476,675             | 1,749,189 |
| 2000 | 801,255                         | 89,062                             | 10,092                           | 347,055                             | 492,747             | 1,740,211 |
| 2001 | 842,401                         | 122,785                            | 11,215                           | 318,709                             | 527,914             | 1,823,024 |
| 2002 | 857,907                         | 92,481                             | 14,171                           | 320,382                             | 556,784             | 1,841,725 |
| 2003 | 875,762                         | 89,400                             | 15,181                           | 389,626                             | 584,347             | 1,954,316 |
| 2004 | 933,736                         | 116,108                            | 19,853                           | 451,585                             | 612,054             | 2,113,336 |

## Statistics

**REVENUE BOND COVERAGE LAST TEN FISCAL YEARS**

Years Ended June 30, 1995 – 2004 (in thousands)

| Fiscal Year | Cash <sup>1</sup><br>Receipts | Debt Service Requirements <sup>2</sup> |          | Total   | First Resolution<br>Debt Service<br>Coverage | Debt Service<br>Coverage |
|-------------|-------------------------------|--|----------|---------|--|--------------------------|
|             |                               | Principal                              | Interest |         |  |                          |
| 1995        | 1,069,725                     | 74,770                                 | 256,196  | 330,966 | 3.23   | –                        |
| 1996        | 1,167,038                     | 71,217                                 | 275,217  | 346,434 | 3.37   | –                        |
| 1997        | 1,216,503                     | 73,866                                 | 339,498  | 413,364 | 3.13   | 2.94                     |
| 1998        | 1,411,070                     | 128,555                                | 357,133  | 485,288 | 3.37   | 2.91                     |
| 1999        | 1,460,602                     | 136,767                                | 345,397  | 482,164 | 3.42   | 3.03                     |
| 2000        | 1,481,532                     | 201,133                                | 317,799  | 518,932 | 3.35   | 2.85                     |
| 2001        | 1,527,009                     | 164,843                                | 331,309  | 496,152 | 3.13   | 3.08                     |
| 2002        | 1,592,393                     | 90,648                                 | 405,745  | 496,393 | 3.21   | 3.21                     |
| 2003        | 1,653,733                     | 196,036                                | 300,688  | 496,724 | 3.33   | 3.33                     |
| 2004        | 1,754,336                     | 152,132                                | 338,216  | 490,348 | 3.58   | 3.58                     |

<sup>1</sup>Until 1998, cash receipts as defined in the Bond Resolution excludes interest received on debt service and revenue funds and subsidy payments.

<sup>2</sup>Debt service requirements include First Resolution debt service and a portion of Second Resolution debt service. Until 1997 all Second Resolution debt service was paid from carry forward amounts and subsidy payments from the New York State Environmental Facilities Corporation.

## Statistics

**WATER AND SEWER RATE INCREASES**

Last Ten Fiscal Years

| Effective Date | Changes in Flat-Rate Water | Change in Metered Water | Metered Water Rate (per ccf) <sup>1</sup> | Change in Sewer                  |
|----------------|----------------------------|-------------------------|---|----------------------------------|
| July 1, 1995   | Increased 5%               | Increased 5%            | \$1.06                                    | No change (159% of water change) |
| July 1, 1996   | Increased 6.5%             | Increased 6.5%          | \$1.13                                    | No change                        |
| July 1, 1997   | Increased 6.5%             | Increased 6.5%          | \$1.20                                    | No change                        |
| July 1, 1998   | Increased 4%               | Increased 4%            | \$1.25                                    | No change                        |
| July 1, 1999   | Increased 4%               | Increased 4%            | \$1.30                                    | No change                        |
| July 1, 2000   | Increased 1%               | Increased 1%            | \$1.31                                    | No change                        |
| July 1, 2001   | Increased 3%               | Increased 3%            | \$1.35                                    | No change                        |
| July 1, 2002   | Increased 6.5%             | Increased 6.5%          | \$1.44                                    | No change                        |
| July 1, 2003   | Increased 5.5%             | Increased 5.5%          | \$1.53                                    | No change                        |
| July 1, 2004   | Increased 5.5%             | Increased 5.5%          | \$1.60                                    | No change                        |

<sup>1</sup>ccf equals one hundred cubic feet or approximately 748 gallons.**AVERAGE DAILY WATER CONSUMPTION**

Last Ten Fiscal Years

| Fiscal Year | Total (mgd) <sup>1</sup> | Upstate Counties (mgd) <sup>1</sup> | City (mgd) <sup>1</sup> | Per Capita (gals/day) <sup>2</sup> |
|-------------|--------------------------|-------------------------------------|-------------------------|------------------------------------|
| 1995        | 1,426                    | 121                                 | 1,305                   | 178                                |
| 1996        | 1,445                    | 123                                 | 1,322                   | 183                                |
| 1997        | 1,334                    | 121                                 | 1,213                   | 164                                |
| 1998        | 1,294                    | 122                                 | 1,172                   | 160                                |
| 1999        | 1,342                    | 129                                 | 1,213                   | 163                                |
| 2000        | 1,359                    | 127                                 | 1,231                   | 166                                |
| 2001        | 1,340                    | 126                                 | 1,201                   | 166                                |
| 2002        | 1,281                    | 124                                 | 1,157                   | 144                                |
| 2003        | 1,232                    | 119                                 | 1,113                   | 139                                |
| 2004        | 1,213                    | 118                                 | 1,095                   | 138                                |

<sup>1</sup>mgd=millions of gallons per day<sup>2</sup>Population source: U.S. Department of Commerce, Bureau of the Census.

## Statistics

### WATER SYSTEM TUNNELS AND AQUEDUCTS

| Connections                           | Length<br>(miles)                      | Diameter<br>(feet)        | Transmission<br>Capacity (mgd) | In Service<br>Date |      |
|---------------------------------------|--|---------------------------|--------------------------------|--------------------|------|
| <b>Tunnels Upstate</b>                |  |                           |                                |                    |      |
| Shandaken Schoharie to Ashokan        | 18.1                                   | 11.5 x 10.25 <sup>1</sup> | 650                            | 1924               |      |
| West Delaware Cannonsville to Rondout | 44.0                                   | 11.33                     | 500                            | 1964               |      |
| East Delaware Pepacton to Rondout     | 25.0                                   | 11.33                     | 700                            | 1955               |      |
| Neversink Neversink to Rondout        | 6.0                                    | 10                        | 500                            | 1954               |      |
| <b>Aqueducts</b>                      |  |                           |                                |                    |      |
| New Croton                            | New Croton to Jerome Park              | 24.0                      | 3.5 x 13.6 <sup>1</sup>        | 300                | 1893 |
|                                       | Jerome Park to 135 St. Gatehouse       | 9.0                       | 12.25-10.5 <sup>2</sup>        | 250                | 1893 |
| Catskill                              | Ashokan to Kensico                     | 75.0                      | 17 x 17.5 <sup>1</sup>         | 610                | 1915 |
|                                       | Kensico to Hillview                    | 17.0                      | 17.5 x 18 <sup>1</sup>         | 800                | 1915 |
| Delaware                              | Rondout to West Branch                 | 44.2                      | 13.5                           | 890                | 1944 |
|                                       | West Branch to Kensico                 | 27.2                      | 15                             | 1,045              | 1943 |
|                                       | Kensico to Hillview                    | 13.6                      | 19.5                           | 1,450              | 1942 |
| <b>Tunnels Downstate</b>              |  |                           |                                |                    |      |
| Tunnel 1                              | Hillview to distribution system        | 18.0                      | 15-11 <sup>2</sup>             | 1,000              | 1917 |
| Tunnel 2                              | Hillview to distribution system        | 20.0                      | 17-15 <sup>2</sup>             | 1,000              | 1936 |
| Tunnel 3, Stage 1                     | Hillview to distribution system        | 13.0                      | 24-20 <sup>2</sup>             | 1,500              | 1998 |
| Richmond Tunnel                       | Tunnel 2 to Staten Island Uptake Shaft | 5.0                       | 10                             | 350                | 1970 |

<sup>1</sup>Tunnels are not round

<sup>2</sup>Variable diameter tunnels

### WATER POLLUTION CONTROL PLANTS DAILY FLOW

| Plant           | Design Flow (mgd) <sup>1</sup> | 12 month avg. (mgd) <sup>1</sup><br>July 02–June 03 | 12 month avg. (mgd) <sup>1</sup><br>July 03–June 04 |
|-----------------|--------------------------------|---|---|
| Wards Island    | 275                            | 193   | 196   |
| North River     | 170                            | 133   | 126   |
| Hunts Point     | 200                            | 114   | 100   |
| 26th Ward       | 85                             | 65  | 59  |
| Coney Island    | 110                            | 97  | 88  |
| Owls Head       | 120                            | 104   | 101   |
| Newtown Creek   | 310                            | 238   | 229   |
| Red Hook        | 60                             | 32  | 30  |
| Jamaica         | 100                            | 85  | 78  |
| Tallmans Island | 80                             | 58  | 57  |
| Bowery Bay      | 150                            | 112   | 111   |
| Rockaway        | 45                             | 20  | 19  |
| Oakwood Beach   | 40                             | 31  | 30  |
| Port Richmond   | 60                             | 39  | 35  |
| <b>Total</b>    | <b>1,805</b>                   | <b>1,321</b>  | <b>1,269</b>  |

<sup>1</sup>mgd=millions of gallons per day

## Organizational Chart

### NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY

#### Board of Directors

|                       |                   |
|-----------------------|-------------------|
| Mark Page             | ex officio Member |
| Erin M. Crotty        | ex officio Member |
| Charles E. Dorkey III | Member            |
| Arthur B. Hill        | Member            |
| Martha E. Stark       | ex officio Member |
| David Tweedy          | ex officio Member |

#### Staff

|                      |                     |
|----------------------|---------------------|
| Alan Anders          | Executive Director  |
| Marjorie E. Henning  | Secretary           |
| Thomas G. Paolicelli | Treasurer           |
| Lawrence R. Glantz   | Comptroller         |
| Prescott D. Ulrey    | Assistant Secretary |
| Philip Wasserman     | Deputy Treasurer    |
| Jeffrey M. Werner    | Assistant Secretary |

### NEW YORK CITY WATER BOARD

#### Members

|                       |          |
|-----------------------|----------|
| James T.B. Tripp      | Chairman |
| Lilyan H. Affinito    | Member   |
| Dawn S. Davis         | Member   |
| Amaziah Howell        | Member   |
| Stacey Coleman Morse  | Member   |
| Maria Santos Valentin | Member   |

#### Staff

|                        |                    |
|------------------------|--------------------|
| David Tweedy           | Executive Director |
| William Kusterbeck     | Treasurer          |
| Carmelo Emilio         | Deputy Treasurer   |
| Albert F. Moncure, Jr. | Secretary          |

### NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### Officers

|              |                     |
|--------------|---------------------|
| David Tweedy | Acting Commissioner |
|--------------|---------------------|

### BUREAU OF WATER AND SEWER OPERATIONS

|                          |                     |
|--------------------------|---------------------|
| Douglas S. Greeley, P.E. | Deputy Commissioner |
|--------------------------|---------------------|

### BUREAU OF ENVIRONMENTAL ENGINEERING

|                    |                     |
|--------------------|---------------------|
| Warren Kurtz, P.E. | Deputy Commissioner |
|--------------------|---------------------|

### BUREAU OF WASTEWATER TREATMENT

|                        |                     |
|------------------------|---------------------|
| Alfonso R. Lopez, P.E. | Deputy Commissioner |
|------------------------|---------------------|

### BUREAU OF WATER SUPPLY

|                            |                     |
|----------------------------|---------------------|
| Michael A. Principe, Ph.D. | Deputy Commissioner |
|----------------------------|---------------------|

### BUREAU OF CUSTOMER SERVICES

|                      |                     |
|----------------------|---------------------|
| Denise M. Richardson | Deputy Commissioner |
|----------------------|---------------------|

### BUREAU OF HUMAN RESOURCES

#### AND ADMINISTRATION

|              |                     |
|--------------|---------------------|
| Dana K. Reed | Deputy Commissioner |
|--------------|---------------------|