



## THE NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY

### THE NEW YORK CITY WATER AND SEWER SYSTEM A COMPONENT UNIT OF THE CITY OF NEW YORK Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2002

THE NEW YORK CITY WATER AND SEWER SYSTEM A COMPONENT UNIT OF THE CITY OF NEW YORK Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2002

> Prepared by the staff of The New York City Municipal Water Finance Authority

Alan Anders Marjorie E. Henning Thomas Paolicelli Treasurer Lawrence Glantz

Executive Director Secretary Comptroller



#### INTRODUCTORY SECTION

Letter of Transmittal	
Organizational Chart	
Principal Officials	

#### FINANCIAL SECTION

Report of Independent Auditors
Management's Discussion and Analysis
Balance Sheets, June 30, 2002 and 2001
Statements of Revenues, Expenses and Changes in Net Assets, Years Ended June 30, 2002 and 2001
Statements of Cash Flows, Years Ended June 30, 2002 and 2001
Notes to Financial Statements
Other Financial Information:
Schedule I - Combining Balance Sheet, June 30, 2002
Schedule II - Combining Balance Sheet, June 30, 2001
Schedule III - Combining Statement of Revenues, Expenses and Changes in Net Assets, Year ended June 30, 2002
Schedule IV - Combining Statement of Revenues, Expenses and Changes in Net Assets, Year ended June 30, 2001
Schedule V - Combining Statements of Cash Flows, Year ended June 30, 2002
Schedule VI - Combining Statements of Cash Flows, Year ended June 30, 2001

#### STATISTICAL SECTION

Revenues Last Ten Fiscal Years
Expenses Last Ten Fiscal Years
Revenue Bond Coverage Last Ten Fiscal Years
Population of New York City
Water and Sewer Rate Increases Last Ten Fiscal Years
Average Daily Water Consumption Last Ten Fiscal Years $\ldots$ .
Water System Tunnels and Aqueducts
Water Pollution Control Plants Daily Flow



## Table of Contents

Newtown Creek Sewage Treatment
Facility Piping and Meter in Digester

	Ļ
	•
	7
I§	)
	3
DI	ł
2001	5
	3
	5
and	
	2
and	
	3
	ł
	5
	5
	7
	7
	3
	3
	J

#### Letter of Transmittal / December 31, 2002

TO: MEMBERS OF THE BOARD OF THE FINANCE AUTHORITY, MEMBERS OF THE **BOARD OF THE NEW YORK CITY WATER** BOARD, AND 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 NEW YORK CITY MUNICIPAL WATER the year ended June 30, 2002. To the best of our knowledge, this report is accurate in all material respects and is reported in a manner designed to present fairly the financial condition of the System. All disclosures necessary to enable the reader to gain an understanding of the System's financial activities have been included. The information contained in this report is the responsibility of management.

> The CAFR is presented in three major sections: introductory, financial and statistical. The introductory section, which is unaudited, includes this letter of transmittal, an organizational chart and a list of the New York City Water and Sewer System's principal officials. The financial section includes management's discussion and analysis, the basic 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 unaudited, includes selected financial, system and demographic information, generally presented on a multi-year basis.

The reporting entity, the New York City Water and Sewer 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 "Board"). In addition, the New York City Department of Environmental Protection ("DEP") operates the City's water and sewer system. The passage of the New York City Municipal Water 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 for financial reporting purposes.

The Authority is authorized to issue bonds and various 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 general obligation bonds of the City issued for water or sewer purposes. The Authority is administered by a seven-member Board of Directors. Four members are designated as ex officio. Two members are appointed by the Mayor of New York City. One member is appointed by the Governor of the State of New York (the "State"). The appointed members have terms of two years. Pursuant to the Act, all members continue to hold office until their successors are appointed. The staff of the Authority operates under the direction of an Executive Director.

The Board leases the operating system from the City, sets rates, and collects the System revenue. The Lease Agreement (the "Lease") dated July I, 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 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 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 Board consists of seven members who are appointed by the Mayor for two year terms. The Act provides that at least one member will have experience in the science of water resource development and that no member of the Board will be a member of the Authority. The Chairman is appointed by the Mayor. Pursuant to the Act, all members continue to hold office until their successors are appointed. The staff of the 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 close to 5,700 people. DEP is divided into seven bureaus: Customer Services, Water and Sewer Operations, Water Supply, Environmental Engineering, Wastewater Treatment, Management and Budget, and Executive. DEP works to protect the environmental welfare and health of the City's residences and natural resources, manages the City's water supply, transmission and distribution system, and collects, treats, and disposes of waste and storm water. DEP manages over 2000 square miles of watershed in upstate New York from which the City and several upstate counties draw their supply of drinking water. In addition to a system of dams, reservoirs, aqueducts, and water tunnels, DEP maintains approximately 6,600 miles of water mains which distribute water throughout the five boroughs, and 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.

Newtown Creek





ge Treatment Facility Electrical Substation



## **ECONOMIC CONDITIONS AND OUTLOOK**

The City of New York is a vital center for government, business, financial, communications, higher education, cultural, medical and public services. The City also serves as a key transportation hub with important facilities linking the rest of North America with cities and countries through the world. The transportation infrastructure includes multiple air, rail, trucking and shipping facilities.

The City is a major seaport and focal point for international business. Many of the major corporations headquartered in the City are multinational in scope and have extensive foreign operations. Numerous foreign-owned companies in the United States are also headquartered in the City. These firms, which have increased substantially in number over the past decade, are found in all sectors of the City's economy, but s offices, tourism and finance.

Economic activity in the City has experienced periods of growth and recession. From 1993 to 2001, the City experienced significant private sector job growth, adding approximately 435,000 new private sector jobs (average growth rate of approximately 2%). However, as of August 2002, total employment declined by approximately 2.1% over August 2001 total employment.

#### SYSTEM CAPACITY

The Water and Sewer System saw a steadily increasing demand through the early 1990s. Water Conservation programs and other measures reduced demand and average daily water consumption has decreased significantly over the past ten years. The goal of such conservation programs is to operate the supply system within the dependable yield, which is the amount of water that can be safely drawn from the existing supply system during drought periods. Reduced demand also decreases the capital outlays needed for expansion of the system's water and wastewater treatment facilities. Demand in calendar year 2001 showed a marked decrease from 1990 levels.

#### UNIVERSAL METERING

DEP's Bureau of Customer Services collects the data used to generate customers' bills. It is responsible for reading water meters, checking their accuracy and replacing old or broken meters, as well as maintaining current information for those accounts remaining on the flat-rate system of billing. Meters eventually will completely replace the old system of flat-rate billing, which is based on numerous factors including the size of the property and the number of water using fixtures installed. Approximately 733,000 accounts are billed based on metered water usage, while 95,000 accounts remain on the flat rate system.

#### THE DROUGHT

During 2001 and 2002, the Northeast experienced an unusually dry fall and winter and as a result, DEP declared a stage I drought emergency for New York City in March 2002. The City remained in a drought emergency until November I, 2002, when DEP downgraded the drought emergency to a drought watch. The drought emergency was preceded by a drought watch declared in late December 2001 and a drought warning declared in late January 2002.

Since the water system relies upon a surface water supply, it is sensitive to major fluctuations in precipitation. While spring and fall rainfall was close to or above normal, summer precipitation was slightly less than average. The reservoirs were at 88.3% of capacity at the end of June 2002, compared to 96.1% normal capacity. Throughout even the worst droughts however, the water system has continued to supply sufficient amounts of water to the City. To ensure an adequate supply, DEP, in conjunction with other City, State and interstate agencies maintains a Drought Management Plan, and enforces restrictions on water use.

The last time the City declared a drought emergency was in 1989, when average consumption for the year was about 1.4 billion gallons per day. Consumption in 2001 has averaged approximately 1.18 billion gallons per day, the result of the implementation of water conservation measures and the metering program over the last several years, as well as increased publicity about the drought and water conservation and enforcement of water use restrictions.

## **BOYD'S CORNER EXPANSION OF THE CROTON SYSTEM**

1870 **CITY ADOPTS NEW CHARTER** 



Newtown Creek Sewage Treatment Facility

#### SECURITY

In recent years the 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. DEP obtained legislation authorizing the DEP

police force to function as police officers within the City as well as in the upstate watersheds and has also increased the size of its police force to a total of 122 officers, a substantial increase over 1998 staffing levels. Additionally DEP has

THE ULTIMATE GOAL OF THE WATER **AUTHORITY HAS BEEN TO PROVIDE** FUNDING THROUGH THE ISSUANCE OF BONDS, BOND ANTICIPATION NOTES AND **OTHER OBLIGATIONS TO FINANCE THE CAPITAL PROJECTS.** 

purchased additional police vehicles and surveillance equipment, and has been further securing facilities through additional locks, fencing and other physical barriers to prevent access by unauthorized persons.

The terrorist attack on September II, 2001 heightened the need for greater system security. As a result of the terrorist attacks, the DEP and law enforcement authorities immediately implemented additional security measures at the systems' reservoirs and other key locations, including increasing the frequency of patrols, restricting vehicular access to certain facilities and more frequent monitoring of the water supply for contaminants. The DEP has entered into a contract with the US Army Corps of Engineers to address long term plans to modernize and improve security. In addition, DEP has been consulting with other governmental agencies including the FBI on security issues.



Newtown Creek Sewage Treatment Facility Scale Models

#### LONG-TERM WATERSHED PROTECTION

The System is subject to Federal, State, interstate and municipal regulation. At the Federal level, regulatory jurisdiction is vested in the United States Environmental Protection Agency ("USEPA"); at the State level in the New York State Department of Environmental Conservation ("NYSDEC") and the New York State Department of Health ("NYSDOH"); at the interstate level in the Delaware River Basin Commission ("DRBC") and in the Interstate Sanitation Commission (the "ISC"); and at the municipal level in DEP, the New York City Department of Health ("NYC-DOH"), the Department of Buildings ("DOB"), and, to a limited degree, in municipalities and districts located in eight watershed counties north of the City.

Pursuant to the Federal Safe Drinking Water Act ("SDWA"), the USEPA has promulgated nationwide drinking water regulations which specify the maximum level of harmful contaminants allowed in drinking water and which govern the construction, operation, and maintenance of the water system.

On May 6, 1997, USEPA issued a filtration avoidance determination ("1997 FAD") waiving the City's requirement, as stated in the federal Surface Water Treatment Rule ("SWTR"), to filter water from its Catskill and Delaware Systems until a further determination is made, or April 15, 2002, whichever is earlier. The 1997 FAD was the third extension of a filtration avoidance determination first issued by USEPA in January 1993. The 1997 FAD contains a number of conditions which the City is required to satisfy in order to ensure continued relief from the filtration requirements. Conditions include requirements for land purchases by the City in sensitive areas of the watershed, revised watershed regulations, and upgrading of both City-owned and non-city water pollution control plants in the watersheds.

On January 21, 1997, the City and the State executed a Memorandum of Agreement with the communities in the Catskill, Delaware and Croton watersheds, the USEPA and several environmental groups. Under the Memorandum of Agreement, the City has supplemented its existing watershed protection program with approximately \$400 million in additional funding. This funding, at least \$290 million of which is expected to be provided through the issuance of Authority bonds, consists of approximately \$350 million for an economic-environmental partnership program with upstate communities which includes a water quality investment program, a regional economic development fund and a regional advisory forum for water quality initiatives and watershed concerns.

The City, through its Land Acquisition and Stewardship Program, has made considerable progress in acquiring land or conservation easements in the watersheds as required by the determination. The city has closed on the acquisition of approximately 24,900 acres of land in the watersheds with an aggregate value of approximately \$74 million and is a party to contracts or option agreements for the purchase of approximately 13,700 acres of additional land in the watersheds with an aggregate value of approximately \$32.4 million.

The 1997 FAD also required, among other things, the City to proceed with the final design of a filtration facility for the Catskill and Delaware Systems, should it ever be required. However, on November 29, 2001, the USEPA granted the City relief from proceeding with final design work for the filtration facility, subject to certain conditions, including conducting a feasibility evaluation of Ultraviolet ("UV") treatment and, if found to be feasible, design and construction of a UV disinfection treatment facility for the Catskill and Delaware water supply.

On December 17, 2001, DEP submitted to USEPA an application to extend the 1997 FAD through at least April 15, 2007. On April 15, 2002, the day of expiration of the 1997 FAD, USEPA issued a letter stating the 1997 FAD remains in effect until USEPA provides a further determination on filtration avoidance for the Catskill and Delaware supplies. On May 23, 2002, UESPA released a draft of a new filtration avoidance determination for public comment. The proposed FAD would, subject to its terms and conditions, continue the filtration avoidance until USEPA makes a further determination (anticipated to be in April 2007). The draft is based in a large part on DEP's December 2001 proposal, with certain modifications required by USEPA. The public comment period ended on June 24, 2002, and the FAD was issued in December 2002.

supplement further requires the City to select its

### **CONSOLIDATION OF GREATER NEW YORK**

1898

**RAMAPO WATER COMPANY** PRESENTS PLAN TO NEW YORK CITY

#### **CROTON FILTRATION PROJECT**

Because of the high quality of the operating system's water and the long periods of retention in the reservoirs, it has not been necessary to filter water to reduce bacterial content and turbidity. Higher water quality standards led to a 1992 stipulation with NYSDOH which provided for the construction of a full-scale water treatment facility to filter Croton System water. The stipulation was superseded by a 1998 federal court Consent Decree which requires the City to design and construct such a facility and have it operational by March I, 2007.

In December 1998, after extensive study of several alternative sites, DEP identified the Mosholu Golf Course in the Bronx as the City's preferred site for the full scale water treatment facility to filter Croton System water. The selected site lies within the Van Cortlandt Park, a mapped public park. Actions brought against the City resulted in a February 2001 New York Court of Appeals decision that the construction of a water treatment facility at the Mosholu Golf Course site would constitute alienation of parkland by the City, requiring approval by the State legislature.

As a result of the ruling, USEPA, the State and the City negotiated a supplement to the Consent Decree requiring the City to simultaneously prepare preliminary designs for a Croton filtration facility at two alternate sites: a site in Bronx County, located along the Harlem River in the vicinity of Fordham Road, and a site in Westchester County, located on City-owned property in the Town of Mount Pleasant. The



preferred site by April 2003. The supplement sets forth a series of milestones, with associated stipulated penalties, including a milestone for having the filtration facility operational by 2010, if sited at the Westchester County site, or 2011, if sited at the Bronx county site.

#### WATER TUNNELS

The City's water is transported from its Croton, Catskill and Delaware reservoirs through an extensive system of tunnels and aqueducts. The 18-mile Tunnel I delivers water from the City's Hillview Reservoir through the West Bronx into Manhattan and Brooklyn. The 20-mile Tunnel 2 also delivers water from the Hillview Reservoir though the Bronx, under the East River and through Queens and Brooklyn, connecting to Tunnel 1 in Brooklyn. From Tunnel 2 water is delivered to Staten Island through the Richmond Tunnel.

A new water tunnel, Tunnel 3, connecting the reservoir system to the City is presently under construction to increase capacity to meet a growing demand in the eastern and southern areas of the City, permit inspection and rehabilitation of Tunnels I and 2 and provide redundancy in the event of disruption in Tunnels I or 2. The 13mile Stage I of Tunnel 3, which extends south from Hillview Reservoir to the Central Park Reservoir and east to Roosevelt Island and Long Island City in Queens was put into operation in 1998. Stage II is currently under construction, with

completion expected in 2008. Upon completion, Stage II will enable the system to maintain full service even if Tunnels I or 2 were shut down.

#### **CREDIT RATINGS**

The Authority's high credit rating continues to be stable, with the views of all three major rating agencies closely in line. The Authority is rated "AA" by Standard and Poor's and Fitch and Aa2 by Moody's Investor Service.

Standard and Poor's raised the rating on the New York State Environmental Facilities Corporation (EFC) bonds issued for eligible Authority State Revolving Fund (SRF) projects, to AAA in October 2001. All three rating agencies now view these bonds as the highest quality triple- A security. The 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 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 adequate accounting data are compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles.

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 Board and the Authority maintain separate control structures for their specific areas of responsibility. The Board and the Authority establish separate operating budgets approved by their respective Boards of Directors.

The capital budget for the System is appropriated through the City's capital budget, and the operation and maintenance budget of the System is appropriated through the City's annual operating budget. The City also maintains an encumbrance accounting system as another technique of accomplishing budgetary control.



Newtown Creek Sewage Treatment Facility Electrical Room

#### **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 estuarine 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 undeserved areas of the city.



#### **CURRENT CAPITAL PLAN**

SYSTEM FUNDS (IN THOUSANDS)	2003	2004	2005	2006	Total
Water Supply & Transmission	\$ 136,774	\$31,000	\$490,500	\$140,000	\$798,274
Water Distribution	627,241	336,394	464,339	434,348	1,862,322
Water Pollution Control	975,446	1,629,499	624,684	359,728	3,589,357
Sewers	281,489	188,661	104,429	79,826	654,405
Equipment	171,449	47,545	58,723	14,223	291,940
Total	\$ 2,192,399	\$2,233,099	\$2,042,675	\$1,028,125	\$7,196,298

#### **CURRENT CAPITAL PLAN**

The System's Capital Plan provides for the rebuilding of the System's infrastructure, including water and sewer facilities. The Capital Plan is based on a review of the present condition and long-term needs of the plant and equipment constituting the System. It 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 Capital Plan for emergency repair and replacement. An annual allowance for escalation in cost due to inflation are included.

The costs identified in the table above represent an aggregation of capital commitments for specific projects for Fiscal Years 2003-2006. This Current Capital Plan reflects the September 2002 expected expenditures 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 capital plan is divided into five project types, each discussed below.

#### WATER SUPPLY AND TRANSMISSION

This component of the current capital plan includes approximately \$470 million for Stage II of Water Tunnel No. 3, to augment transmission capacity from the watersheds into the City. Construction of Stage II of Tunnel No. 3 will continue towards its expected operational date of 2008. The remaining section of the Stage II underground excavation is the Manhattan leg, which stretches for seven miles through lower Manhattan. After Stage II comes on line and it begins to deliver water, DEP will have achieved full redundancy of Tunnels No. I and 2. This will allow the DEP to inspect and repair these tunnels for the first time since they were put into operation in 1917 and 1936, respectively.

#### 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 current capital plan contains \$1.9 billion for the protection, expansion, and distribution of the City's water supply. This includes funding for the construction of a full-scale filtration plant for the Croton watershed system, \$438 million of which is included in the current capital plan. The program also calls for \$741 million to be committed to on-going water quality preservation programs to ensure the continued purity of the water supply. This includes the reconstruction of a City-owned upstate water pollution control plant located in the watershed to meet the new proposed watershed regulations (the reconstruction of seven other City-owned plants in the watershed already having been completed) and the acquisition of environmentally sensitive property in the upstate watershed.

#### WATER POLLUTION CONTROL

To improve the quality of the City's estuaries and to implement long-range land based solutions to sludge disposal, an end-product of the sewage treatment process, \$3.6 billion is allocated to water pollution control programs. Combined Sewer Overflow (CSO) is currently a source of pollution in the City's waters. CSO occurs during and after

#### PASSAGE OF THE FEDERAL CLEAN WATER ACT

1972



## **PASSAGE OF THE FEDERAL** SAFE DRINKING WATER ACT

Newtown Creek Sewage Tre<u>atment Facility</u> Southeast View

heavy rainstorms, when the flow of waste water and storm water in the sewers exceeds the treatment capacity of a sewage treatment plant and therefore enters surrounding waterways. DEP's current capital plan includes approximately \$350 million for the abatement of CSO's. A part of the funds allocated to the abatement of CSO's are being used to explore various alternatives to the construction of retention tanks. Results from this and other projects and studies will drive future abatement efforts.

DEP has renegotiated a consent decree governing the City's long term sludge disposal plan. DEP does not have to construct sludge processing facilities, but will continue contracting with private firms to dispose of the City's sludge in a cost effective manner. Approximately \$1.1 billion has been allocated for the upgrade of the Newtown Creek Water Pollution Control Plant to full secondary treatment. Thirteen of the City's 14 in-City water pollution control plants have already been upgraded to meet the full secondary treatment requirements of the Clean Water Act. Another significant allocation included in the current capital plan is over \$400 million for the reconstruction and modernization of ten water pollution control plants in order for these plants continue to meet strict guidelines contained in State operating permits.

#### SEWERS

Approximately \$650 million will be committed through 2006 to replace existing sewers in areas requiring increased capacity, to extend sewers to unserved or undeserved areas, and to replace failing, flawed, or collapsed sewer mains.



Newtown Creek Sewage Treatment Facility

#### EQUIPMENT

Programs in this category of the capital plan 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 \$292 million has been committed to these projects in the current capital plan.

#### **RISK MANAGEMENT**

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 each fiscal year, exceed an amount equal 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. In addition, the City has agreed, subject to certain conditions, to indemnify the Authority and the Board 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.

#### CASH MANAGEMENT

Both the Authority and the 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 United States of America, including obligations of any agency, corporation or instrumentality thereof; direct obligations of, or obligations guaranteed by the State of New York 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 of New York 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 Board makes its own investments through the City Comptroller's investment group.

Funds are invested for periods of one day up to fifteen 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 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 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 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 Board dated as of July I, 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 Board. The financial section of the 2002 Comprehensive Annual Financial Report begins with the report of our independent auditors, KPMG LLP. This report expresses an unqualified opinion as to the fairness of the presentation of our financial statements.

#### AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the New York City Water and Sewer System for its comprehensive annual financial report (CAFR) for the fiscal years ended June 30, 1995 through 2001.

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.



#### ISSUANCE OF THE 2002 FILTRATION AVOIDANCE DETERMINATION

2002



from the Water-Works Exibition Index 2001



The preparation of this Comprehensive Annual Financial Report has been accomplished by the staff of the New York City Municipal Water Finance Authority. We wish to acknowledge the dedicated effort of the staff of the Authority, especially Raymond J. Orlando, Manager of Investor Relations, Thomas Paolicelli, Treasurer, Philip Wasserman, Deputy Treasurer, Valerie Mehallow, Finance Manager, Bruce Goodman, of the NYC Comptroller's Office, and William Kusterbeck and Carmelo Emilio of the NYC Water Board in bringing together information from numerous sources to produce this document. Their work ensures that this report presents fairly and accurately the financial position and the results of operations of the New York City Water and Sewer System.

Respectfully submitted,

Ala Santa

Alan Anders Executive Director

Jawane & Stat

Lawrence R. Glantz Comptroller



Newtown Creek Sewage Treatment Facility Ground Breaking Ceremony

#### NEW YORK CITY WATER & SEWER SYSTEM ORGANIZATIONAL CHART



#### WATER SYSTEM

Collection reservoirs
Storage capacity
Watershed area
Average daily water consumption (calendar 2001)
Average daily water consumption (calendar 1991)
Miles of water mains
Miles of water tunnels and aqueducts
Fire hydrants in New York City
Water samples taken each year
Laboratory tests performed year on water samples

#### SEWER SYSTEM

Water pollution control plants
Wastewater pump stations
Design capacity per day
Percent of dry-weather sewage processed through this system
Dry-weather sewage treated per day (FY 2002)
Miles of sewage pipes
Biosolids produced each year
Percent of biosolids used beneficially

#### 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
James P. Stuckey	Member
Christopher O. Ward	ex officio Member

#### Staff

Alan Anders Marjorie E. Henning Thomas G. Paolicelli Lawrence R. Glantz

**Executive Director** Secretary Treasurer Comptroller

Member

Member Chairman

Member

Member

Member

Member

#### NEW YORK CITY WATER BOARD

#### Members

Susan Millington Cambell
Leroy Carmichael
Mark R. Hellerer
Amaziah Howell
Agustin Rivera
David B. Rosenauer
James T.B. Tripp

#### Staff

David Tweedy William Kusterbeck Albert F. Moncure, Jr.

**Executive Director** Treasurer Secretary

Commissioner

#### NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### Officers

Christopher O. Ward David Tweedy Alfonso Lopez, P.E.

Warren Kurtz, P.E.

Douglas F. Greeley, P.E.

Mohammed Hafeez

Michael A. Principe, Ph.D.

First Deputy Commissioner Deputy Commissioner Bureau of Wastewater Treatment Acting Deputy Commissioner Bureau of Environmental Engineering Deputy Commissioner, Bureau of Water and Sewer Operations Acting Deputy Commissioner Bureau of Customer Services Deputy Commissioner

Bureau of Water Supply

#### **REPORT OF INDEPENDENT AUDITORS**

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

We have audited the accompanying balance sheets of the New York City Water and Sewer System (the "System"), a component unit of The City of New York, as of and for the years ended June 30, 2002 and 2001, and the related statements of revenues, expenses and changes in net assets, and cash flows for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these basic financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the financial position of the New York City Water and Sewer System as of June 30, 2002 and 2001, and its results of operations and changes in net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The Management's Discussion and Analysis 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 the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements of the System. The supplementary information included in schedules I through VI is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly presented in all material respects in relation to the basic financial statements as a whole. We did not audit the data presented in the introductory and statistical sections as listed in the accompanying table of contents, which are not a required part of the combined financial statements and, therefore, express no opinion thereon.

KPMG LIP

October 25, 2002 New York, New York

#### NEW YORK CITY WATER AND SEWER SYSTEM

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, 2002 and 2001.

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.

#### FINANCIAL ANALYSIS AND RESULTS OF OPERATIONS

The following summarizes the activities of the System for the years 2002, 2001 and 2000:

IN THOUSANDS	2002	2001	2000
Revenues:			
Water supply and distribution	\$ 648,319	626,364	610,949
Sewer collection and treatment	907,324	898,568	876,455
Other operating revenues	116,512	96,991	93,194
Total operating revenues	1,672,155	1,621,923	1,580,598
Investment income	97,543	84,534	70,478
Total revenues	1,769,698	1,706,457	1,651,076
Expenses:			
Operations and maintenance	857,907	842,401	801,255
Bad debt expense	92,481	122,785	89,062
Administration and general	14,171	11,215	10,092
Depreciation and amortization	320,382	318,709	347,055
Interest expense	556,784	527,914	492,747
Total expenses	1,841,725	1,823,024	1,740,211
Capital contributions	12,303	1,748	5,637
Change in net assets	(59,724)	(114,819)	(83,498)
Net Assets - beginning	4,671,883	4,786,702	4,870,200
Net Assets – ending	\$ 4,612,159	4,671,883	4,786,702

#### 2002 - 2001

Total operating revenues increased by 3.1% compared with a rate increase of 3%. The surcharge on customers that did not allow the installation of water meters of about \$10 million offset a 5% decline in water consumption. The loss of revenue from the destruction of the World Trade Center complex was approximately \$1.2 million or less than 1% of total revenues. Investment income increased by \$13 million or over 15%. The System had \$570 million of additional investments in escrow from crossover refunding bonds issued during fiscal 2002, which was partially offset by decreases in interest rates.

Management's Discussion and Analysis CONTINUED

Total operations and maintenance expense increased by \$15 million or 1.8%. The expenses for operations of the system increased by \$45 million and the rental payment to the City for debt service decreased by \$30 million. Additional expenses relating to drought conditions were nearly \$12 million of the increase in operations. The largest component of expenses relating to the drought was electricity for pumping water from low level reservoirs. An additional \$10 million was incurred for payment of claims resulting from water main breaks. There were additional expenses for security as a result of the World Trade Center attacks, however, these costs were not large in relation to the total operations and maintenance expense and are difficult to identify. The rental payment represents actual debt service paid by the City for debt incurred prior to the inception of the System in 1985 and those payments were \$30 million less in 2002.

Bad debt expense decreased by \$30 million to reflect the effects of an increase in cash collections of previously reserved receivables. The increase in collections on these receivables was the result of a lien sale of water and sewer system receivables. The lien sale was the first to sell water receivables separately from New York City's property tax liens.

Interest expense increased by nearly \$28 million or 5%. The total debt of the System has increased by over \$1.5 billion from 2001 to 2002, or nearly 14%. The increase in interest expense has been offset by declining interest rates on new issues and existing variable rate issues.

#### 2001 - 2000

Total operating revenues increased by 2.6%, although water rates increased by 1% and water consumption decreased by 1.4%. Beginning in 2001, the System imposed a surcharge on certain customers that did not allow the installation of water meters. Surcharge collections of \$28 million were included in operating revenues in 2001. Investment income increased by \$14 million due to increased funds available for investment and the absence of an arbitrage rebate payment included in 2000 of \$3.7 million which is an offset against investment income.

Total operations and maintenance expenses increased by \$41.1 million or 5.1%. The System accrued a liability of \$7.5 million for possible Environmental Protection Agency penalties for failure to determine a site for a filtration plant for the Croton reservoir. The System has also incurred additional expenses for taxes on upstate properties acquired by the System to protect the watershed. Other increases in operations and maintenance expenses included additional costs for heat, light and power throughout the System, and costs for the purchase of chemicals for the treatment of nitrogen in sewage disposal. Also the rental payment to New York City by the New York City Water Board increased by nearly \$7 million due to increased debt service payments by the City.

Due to a decline in the cash collections from 2001 billings, bad debt expense increased by \$33 million or 38%. Depreciation and amortization decreased by \$29 million due to the inclusion of multiple years' catch-up depreciation in 2000 for certain utility plant. Interest expense increased by \$35 million or 7%. The timing of the closing of the 2000 series B issue in late 2000, plus the early year closing (July 2000) of 2001 Series A, resulted in additional interest expense for those issues alone of \$25 million.

#### NEW YORK CITY WATER AND SEWER SYSTEM

Management's Discussion and Analysis CONTINUED

On the balance sheet, the changes in assets, liabilities and

IN THOUSANDS	2002	2001	2000
Current unrestricted assets	\$ 461,810	522,969	483,425
Current restricted assets	1,865,530	1,017,852	974,660
Capital assets	14,119,680	13,375,790	12,823,646
Total assets	16,557,735	15,014,824	14,384,648
Long-term liabilities	10,748,833	9,345,805	8,875,569
Current liabilities	1,196,743	997,136	722,377
Total liabilities	11,945,576	10,342,941	9,597,946
Net assets:			
Invested in capital assets, net of related debt	4,171,982	4,232,648	4,424,161
Restricted for debt service	245,072	158,829	124,712
Restricted for operations & maintenance	118,848	120,084	118,206
Unrestricted	76,257	160,322	119,623
Total net assets	4,612,159	4,671,883	4,786,702
Total liabilities and net assets	\$ 16,557,735	15,014,824	14,384,648

#### 2002 - 2001

Current unrestricted assets decreased by \$61 million or 11%. In 2001, the System had prepaid construction of \$40 million and no prepaid construction in 2002. In addition, accounts receivable decreased by \$11 million or 3% due to increases in collections from customers.

Current restricted assets increased by \$847 million or 83%. Escrow deposits for 2002 crossover refunding issues comprised \$570 million of the increase. Other increases were in the proceeds held for construction, \$150 million, and the revenue fund, \$87 million. Construction proceeds available vary due to the timing of new issues. The revenue fund increase was a result of increased cash collections from customers.

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

In 2002, the System issued an additional \$200 million of commercial paper, which brought the total program to \$800 million and resulted in an increase in commercial paper outstanding and current liabilities of \$128 million.

Long-term liabilities increased by \$1.4 billion or 15%. A detailed discussion of the debt issued by the System follows in the Debt Administration section of this discussion.

#### 2001 – 2000

The increase in current liabilities is due to the issuance of \$300 million of commercial paper at the end of fiscal 2001. The New York City Municipal Water Finance Authority has a total commercial paper program of \$600 million. The commercial paper is issued, and periodically paid down out of the proceeds from the sale of long-term debt and is then reissued as needed. The decrease in net assets invested in capital assets, net of related debt, is also due to the increase in commercial paper outstanding at year end as well as an increase in long-term debt.

net	assets	are	summarized	as	follows:

Management's Discussion and Analysis CONTINUED

#### **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	2002	2001	2000
Utility plant construction	\$ 3,895,147	3,580,396	3,196,302
Buildings	21,615	21,615	5,677
Equipment	275,701	211,944	183,747
Water supply and wastewater treatment systems	8,344,136	7,786,471	7,601,659
Water distribution and sewage collection systems	6,443,819	6,349,065	6,138,968
Total utility plant in service	15,085,271	14,369,095	13,930,051
Less accumulated depreciation	4,860,738	4,573,701	4,302,707
Total, net utility plant in service	\$ 10,224,533	9,795,394	9,627,344

The net increase in the System's capital assets during fiscal year 2002 was \$744 million or 5.5%. The net increase in 2001 was \$552 million or 4.3%. Net capital asset additions for 2002 were \$1,039 million and in 2001 \$845 million.

#### 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, 2002, the total outstanding debt of the system was \$12.1 billion, of which \$628 million was commercial paper. The remaining \$11.5 billion consisted of variable and fixed rate bonds and notes maturing in varying installments through 2034. The total outstanding long-term debt at June 30, 2002 was as follows:

ISSUE DATE	IN THOUSANDS
2002	\$ 2,314,702
2001	1,071,915
2000	526,565
1999	794,556
1998 and prior	6,811,266
Total long-term debt	\$ 11,519,004

In the above, bonds retired through refundings in 2002 are removed from the year in which the refunded bonds were issued.

## NEW YORK CITY WATER AND SEWER SYSTEM

Management's Discussion and Analysis CONTINUED

In fiscal year 2002, the Authority issued \$1,011,945,000 of water and sewer revenue bonds directly to the public, including \$579,265,000 of advance and crossover refundings and \$432,680,000 in long-term financing. The Authority also issued \$1,329,905,431 in Clean and Drinking Water State Revolving Fund (SRF) bonds from EFC. These proceeds financed capital improvements to New York City's water and sewer system.

Highlights of the financing program in 2002 included historically low interest costs on fixed-rate borrowing and the largest number of bonds issued in the Authority's history. The sizable issuance in fiscal 2002 was largely the result of refunding opportunities created by the low interest rate environment and the restructuring of existing debt through the EFC using 30 year amortizations now available for Clean Water SRF projects. In fiscal 2002, the Authority also maximized its debt issued through EFC, issuing its largest amount of new money bonds through the SRF program since 1994. The Authority also expanded its commercial paper program by \$200,000,000, with the addition of Commercial Paper Series 6.

The Authority's first debt issuance in Fiscal 2002 closed on July 2, 2001 and included \$216,305,000 of Series A new money bonds issued in a common plan of finance with \$204,131,705 of Series I new money bonds issued through the EFC Clean Water SRF. Interest rates on the Series A issue were at or near historic lows relative to other comparable issues.

The Series I bonds, delivered on July 12, benefited from an interest rate subsidy from EFC available for qualifying projects, helping to minimize the overall costs of the Authority's long term debt. This sale was the first to incorporate the longer 30-year amortization now allowed under New York State's Clean Water SRF program by the United States Environmental Protection Agency.

Following the July financings, the Authority issued five series of crossover refunding bonds. On August 15, the Authority closed \$171,455,000 of 2002 Series B and \$46,580,000 of 2002 Series C crossover refunding bonds. In the following month, on September II, the Authority closed \$41,745,000 of 2002 Series D, \$213,850,000 of 2002 Series E and \$105,635,000 of 2002 Series F crossover refunding bonds.

The proceeds from the Series B and C crossover refunding bonds were placed in escrow and invested in guaranteed investment contracts (GIC). Proceeds from the GIC will pay interest on the crossover refunding bonds prior to the crossover dates and will refund \$165,960,000 of 1996 B term bonds on a crossover date in 2006 and \$44,360,000 of 2000 B term bonds on a crossover date in 2010.

The proceeds from the D, E & F Series crossover refunding bonds were also placed in escrow and invested in GICs. Proceeds from the GICs will pay interest on the crossover refunding bonds prior to the crossover dates and will refund \$40,000,000 of 1994 F term bonds on a crossover date in 2004, \$210,600,000 of 1996 B term bonds in 2006 and \$100,000,000 of 1997 B term bonds in 2007.

In October, the Authority closed two additional new money bond issues. On October 17, \$216,375,000 2002 Series G bonds were delivered followed on October 18 with the delivery of \$72,082,983 of 2002 Series 2 bonds, issued by competitive sale through the EFC Clean and Drinking Water SRF.

On January 31, 2002, the Authority issued \$519,405,711 2002 Series 3 bonds through the EFC Clean and Drinking Water program. This issuance included \$129,215,128 of new money bonds used to defease Authority commercial paper, and \$390,190,583 of refunding bonds.

Management's Discussion and Analysis CONTINUED

On May 14, the Authority issued four series of bonds through the EFC. The \$235,077,404 2002 Series 4 refunded a portion of the Authority's 1994 Series 1 Clean Water SRF bonds, also issued through the EFC. The Series 4 bonds included serial bonds maturing from 2002 through 2023. The Series 5 new money bonds included \$180,382,628 of Clean and Drinking Water SRF bonds. The structure included serial bonds maturing from 2002 through 2023 and term bonds maturing in 2027 and 2031.

The \$98,565,000 Series 6 refunded a portion of the Authority's Fiscal 1990 Series B bonds issued through the EFC. The refunded bonds were part of the Authority's General Resolution debt, but were refunded under its Second General resolution. The Series 7 bond issuance was an exchange of the remaining \$20,260,000 portion of the General Resolution Fiscal 1990 Series B bonds for Second General Resolution bonds.

In April of 2002 the Authority increased its commercial paper program to \$800,000,000 from \$600,000,000, with the issuance of \$200,000,000 of Commercial Paper Series 6. The commercial paper program, the Authority's primary source of short-term financing, is used to reimburse the City of New York for spending on water and sewer related projects. Throughout the year, the Authority issues long-term debt to retire the outstanding commercial paper. This additional capacity in the commercial paper program will provide flexibility to the Authority's long term borrowing program as capital spending grows.

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

#### 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 6.5% for fiscal 2003 became effective July I, 2002 based on projected revenues and costs. The 2003 rate increase reflected expected reduced consumption due to the drought.

#### **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.

#### **NEW YORK CITY WATER AND SEWER SYSTEM** Balance Sheets

June 30, 2002 and 2001

#### IN THOUSANDS

#### Assets

Utility plant in service, less accumulated depreciation of \$4,860, in 2002 and \$4,573,701 in 2001 (notes 2,4 and 7) Utility plant construction

#### Current assets:

Unrestricted cash and cash equivalents (note 6) Accounts receivable: Billed, less allowance for uncollectible water and sewer receivables of \$298,878 in 2002 and \$313,318 in 2001 Unbilled Receivable from the City (note 8) Prepaid construction Accrued interest receivable Other Total current unrestricted assets Restricted assets (notes 6 and 11): Cash and cash equivalents Investments Accrued interest receivable Other receivable Total current restricted assets Total current assets Long-term deferred bond and financing expenses Total assets

#### LIABILITIES AND NET ASSETS

Long-term liabilities:
Bonds and notes payable, less current portion (note IO)
Net discount on bonds and notes payable
Deferred bond refunding costs (note 2)
Total long-term liabilities
Current liabilities:
Accounts payable and accrued expenses
Revenues received in advance
Current portion of bonds and notes payable (notes 9 and IO)
Payable to the City (note 8)

Refunds payable to customers Total current liabilities Total liabilities

#### Net Assets:

Invested in capital assets, net of related debt Restricted for debt service Restricted for operations & maintenance Unrestricted Total net assets Total liabilities and net assets

See accompanying notes to financial statements.

	2002	2001
9,738	¢	
	\$ 10,224,533	9,795,394
	3,895,147	3,580,396
	14,119,680	13,375,790
	5,274	7,419
	220 482	941 417
	330,482 110,000	341,417 106,600
	243	23,458
	- 443	40,000
	I	40,000
	15,810	4,071
	461,810	522,969
	1 - 7	<u> </u>
	1,177,379	894,143
	684,530	123,377
	2,383	332
	1,238	-
	1,865,530	1,017,852
	2,327,340	1,540,821
	110,715	98,213
	\$ 16,557,735	15,014,824
	\$ 11,329,246	9,947,359
	(371,892)	(372,409)
	(208,521)	(229,145)
	10,748,833	9,345,805
		3,010, 0
	26,851	24,216
	76,031	76,562
	817,758	674,489
	262,702	205,456
	13,401	16,413
	1,196,743	997,136
	11,945,576	10,342,941
	4,171,982	4,232,648
	245,072	158,829
	118,848	120,084
	76,257	160,322
	4,612,159	4,671,883
	\$ 16,557,735	15,014,824

25

Statements of Revenues, Expenses and Changes in Net Assets Years ended June 30, 2002 and 2001

Net assets at end of year	\$ 4,612,159	4,671,883
Net assets at beginning of year	4,671,883	4,786,702
Change in net assets	(59,724)	(114,819)
Capital contributions	12,303	1,748
Net loss before capital contributions	(72,027)	(116,567)
Investment income	97,543	84,534
Interest expense	(556,784)	(527,914
Nonoperating revenues (expenses):		
Operating income	387,214	326,81
Depreciation and amortization	320,382	318,709
expenses before depreciation and amortization	707,596	645,522
Excess of operating revenues over operating	964,559	970,40
Administration and general Total operating expenses	14,171	976,40
Bad debt expense	92,481	122,78
Operation and maintenance (notes 3 and 7)	857,907	842,40
Operating expenses:		_
Total operating revenues	1,672,155	1,621,923
Other operating revenues	116,512	96,99
Sewer collection and treatment	907,324	898,568
Operating revenues: Water supply and distribution	\$ 648,319	626,364
N THOUSANDS	2002	200

See accompanying notes to financial statements.

#### NEW YORK CITY WATER AND SEWER SYSTEM

Statements of Cash Flows Years ended June 30, 2002 and 2001

# $\mathbf{C}_{i}$ $\mathbf{C}_{i}$ Ca C C \_ RE PR Ο

IN THOUSANDS		2002	200
Cash flows from operating activities:			
Receipts from customers	\$	1,584,081	1,483,020
Payments for operations & maintenance		(825,859)	(819,015
Payments for administration		(13,026)	(14,764)
Net cash provided by operating activities		745,196	649,24
Cash flows from capital and related financing activities:			
Proceeds from issuing bonds, notes and other			
borrowings, net of issuance costs		3,423,787	1,909,079
Acquisition and construction of capital assets		(938,218)	(930,623)
Repayments of bonds, notes and other borrowings		(1,914,695)	(1,167,056)
Interest paid on bonds, notes and other borrowings		(540,753)	(503,344)
Net cash provided by (used by) capital and		(31-7733)	(3-3/311/
related financing activities		30,121	(691,944)
Cash flows from investing activities: Proceeds from sales and maturities of investments		41,166	98,333
Purchases of investments		(630,593)	(123,377)
Interest on investments		95,201	85,724
Net cash (used by) provided by investing activities		(494,226)	60,680
Net increase in cash and cash equivalents		281,091	17,977
Cash and cash equivalents, beginning of year		901,562	883,585
Cash and cash equivalents, end of year	\$	1,182,653	901,562
······································			<u>_</u>
RECONCILIATION OF OPERATING INCOME TO NET CASH			
PROVIDED BY OPERATING ACTIVITIES:			
Operating income	\$	387,214	326,813
Adjustments to reconcile operating income to			
net cash provided by operating activities:			
Depreciation and amortization		320,382	318,709
Bad debt expense		92,481	122,785
Changes in net assets and liabilities:			
Receivables, net		(84,946)	(149,002)
Accounts payable		1,144	(3,548)
Receivable from the City		32,464	23,682
Refunds payable		(3,012)	1,038
Revenues received in advance		(531)	8,764
Net cash provided by operating activities	\$	745,196	649,241
	,	Assets	
	UNRESTRICTED	RESTRICTED	Τοται
Cash and cash equivalents - beginning	\$ 7,419	894,143	901,562
Net (decrease) increase	(2,145)	283,236	281,091

The following are the noncash capital and related financing activities:

• Interest expense includes the amortization of premium and discount in the amount of \$14,170 in 2002 and \$12,672 in 2001.

See accompanying notes to financial statements.

Capital expenditures in the amount of \$253,456 and \$205,456 had been incurred but not paid at June 30, 2002 and 2001.
The Board received capital assets of \$12,303 in 2002 and \$1,748 in 2001 which represent capital contributed by the City.

Notes to Financial Statements June 30, 2001 and 2002

#### (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 I, 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 the Governmental Accounting Standards Board (GASB), the Board and the Authority are combined for general purpose external reporting purposes since the Board and the Authority are fiscally interdependent. The System, in turn, is included for reporting purposes as a discretely presented component unit in the City's 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 combined 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.

## NEW YORK CITY WATER AND SEWER SYSTEM

Notes to Financial Statements CONTINUED

#### (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 Water distribution and	15-50	)   
sewage collection systems	15-75	
Equipment	5-35	,

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 its 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.

28

#### liabil and lia and t expen amou (3) FII The H provid finance

#### (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) RECLASSIFICATIONS

Certain reclassifications to the 2001 figures have been made in order to conform to the 2002 financial statement presentation.

#### (I) USE OF ESTIMATES

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and 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.

Notes to Financial Statements CONTINUED

#### (4) UTILITY PLANT

The following is a summary of utility plant activity for the fiscal years ended June 30, 2002 and 2001:

IN THOUSANDS	balance june 30, 2000	ADDITIONS	DELETIONS	balance june 30, 2001	ADDITIONS	DELETIONS	BALANCE JUNE 30, 2002
Utility construction \$	3,196,302	1,097,827	713,733	3,580,396	1,038,520	723,769	3,895,147
Buildings	5,677	15,938	-	21,615	-	-	21,615
Equipment	183,747	36,880	8,683	211,944	63,757	-	275,701
Water supply & wastewate treatment systems Water distribution &	er 7,601,659	186,122	1,310	7,786,471	558,122	457	8,344,136
sewage collection systems	6,138,968	221,882	11,785	6,349,065	101,890	7,136	6,443,819
Total	17,126,353	1,558,649	735,511	17,949,491	1,762,289	731,362	18,980,418
Less accumulated depreciation	4,302,707	292,772	21,778	4,573,701	294,630	7,593	4,860,738
Total \$	12,823,646	1,265,877	713,733	13,375,790	1,467,659	723,769	14,119,680

#### (5) NET ASSETS

At June 30, 2002 and 2001, the Authority had a net asset deficit of \$4,250 million and \$3,806 million, respectively, which amount is less than the \$8,862 million and \$8,478 million total net assets of the Board at June 30, 2002 and 2001, respectively.

#### (6) INVESTMENTS, CASH EQUIVALENTS AND CASH DEPOSITS

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, 2002, and 2001 comprised:

			1
IN THOUSANDS		2002	2001
Unrestricted cash, cash equivalents (plus accrued interest)	\$	5,275	7,423
Restricted cash, cash equivalents and investments (plus accrued interest)		1,864,292	1,017,852
This amount is comprised of:	\$	1,869,567	1,025,275
Carrying amount of deposits (including CDs)	ŝ	44,838	6,255
Investments (plus accrued interest)	Ψ	1,824,729	1,019,020
	\$	1,869,567	1,025,275

#### **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, 2002 and 2001, which were covered by Federal depository insurance.

#### **NEW YORK CITY WATER AND SEWER SYSTEM**

Notes to Financial Statements CONTINUED

#### INVESTMENTS

The System's investments, which are evidenced by securities that exist in physical or book entry form, are categorized to give an indication of the level of risk assumed by the System at year end. Category I, the lowest risk, includes investments that are insured or registered, or for which the securities are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the System's name. Category 3, the highest risk, includes uninsured and unregistered investments for which the securities are held by the counterparty, or by its trust department or agent but not in the System's name.

Investments (inclusive of certain investments reported as cash equivalents) held by the System at June 30, 2002 and 2001 were classified as Category I investments and non-categorized investments, and are comprised of:

		2002*	2001*		
IN THOUSANDS	COST	FAIR VALUE	COST	FAIR VALUE	
Categorized:					
U.S. Treasury securities	\$ 92,902	93,304	49,318	49.360	
Federal agency issues	1,035,051	1,035,281	722.793	722.998	
NY State issues	5,756	5,901	-	-	
Money market instruments	2,330	2,330	-	-	
Repurchase agreements	67,718	67,729	123.559	123.598	
	1,203,757	1,204,545	895.670	895,956	
Non-categorized:**					
Guaranteed investment contracts	618,588	620,184	123,013	123,064	
	\$ 1,822,345	1,824,729	1,018,683	1,019,020	

\* Includes \$1,137,815 at cost and \$1,138,080 at fair value (2002) and \$895,307 at cost and \$895,579 at fair value (2001) of investments reported as cash equivalents.

\*\* These investments are not categorized because they are not evidenced by securities that exist in physical or book entry form.

#### (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 I, 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.

Notes to Financial Statements CONTINUED

A summary of operation and maintenance expenses at June 30, 2002 and 2001 is as follows:

		1
IN THOUSANDS	2002	2001
Water transmission and distribution	\$ 279,321	260,478
Sewer collection systems	325,591	318,502
City agency support cost	35,195	33,508
Fringe benefits	72,484	65,048
Judgments and claims	18,166	7,687
	730,757	685,223
Rental payments to the City	127,150	157,178
	\$ 857,907	842,401

#### (8) PAYABLE TO AND RECEIVABLE FROM THE CITY

As of June 30, 2002 and 2001, 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, 2002 the System had a payable to the City for underpayment of operations and maintenance expense. As of June 30, 2001, the System had a receivable from the City for overpayment of operations and maintenance expense.

#### (9) SHORT-TERM LIABILITIES

In fiscal years 2001 and 2002 the changes in short-term liabilities were as follows:

	BALANCE JUNE 30,			BALANCE JUNE 30,			BALANCE JUNE 30,
IN THOUSANDS Commercial paper <sup>(1)</sup>	\$ 2000	ADDITIONS	498,300	2001 500,000	ADDITIONS	970,000	2002 628,000

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

#### Commercial paper comprise the following for the year ended June 30, 2002:

IN THOUSANDS	BALANCE AT JUNE 30, 2001	ISSUED	RETIRED	BALANCE AT JUNE 30, 2002
Commercial Paper Series I – Variable Rate,				
Short-term Rolling Maturity, Backed by L.O.C	100,000	100,000	-	200,000
Commercial Paper Series 3 – Variable Rate,				
Short-term Rolling Maturity, Backed by L.O.C.	75,000	150,000	225,000	-
Commercial Paper Series 4 – Variable Rate,				
Short-term Rolling Maturity, Backed by L.O.C.	125,000	248,000	345,000	28,000
Commercial Paper Series 5 – Variable Rate,				
Short-term Rolling Maturity, Backed by L.O.C.	200,000	400,000	400,000	200,000
Commercial Paper Series 6 – Variable Rate,				
Short-term Rolling Maturity, Backed by L.O.C.	-	200,000	-	200,000
Total commercial paper payable	500,000	1,098,000	970,000	628,000

#### **NEW YORK CITY WATER AND SEWER SYSTEM**

Notes to Financial Statements CONTINUED

#### (10) LONG-TERM LIABILITIES

In fiscal years 2001 and 2002, the changes in long-term liabilities were as follows:

IN THOUSANDS		BALANCE			BALANCE			BALANCE	DUE WITHIN
BONDS PAYABLE:	J	une 30, 2000	ADDITIONS	DELETIONS	june 30, 2001	ADDITIONS	DELETIONS	june 30, 2002	ONE YEAR
First resolution	\$	7,621,346	1,084,280	614,434	8,091,192	1,011,945	247,123	8,856,014	103,379
Second resolution	\$	1,955,026	137,546	61,916	2,030,656	1,329,905	697,571	2,662,990	86,379
Total bonds payable	\$	9,576,372	1,221,826	676,350	10,121,848	2,341,850	944,694	11,519,004	189,758
Less discounts (net)	\$	331,840	65,210	24,641	372,409	14,622	15,139	371,892	-
Less deferred refunding costs	\$	210,338	62,854	44,047	229,145	1,241	21,865	208,521	-
Total long-term liabilities	\$	9,034,194	1,093,762	607,662	9,520,294	2,325,987	907,690	10,938,591	189,758

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 2002, the Authority defeased \$37.6 million of outstanding bonds with \$40 million of current revenue which resulted in an accounting loss of \$3.4 million.

During 2001, the Authority issued \$550 million of bonds to advance refund \$474.1 million of outstanding bonds. The advance refundings resulted in an accounting loss of \$37.2 million. The Authority in effect reduced its aggregate debt service by \$13.3 million and obtained an economic gain of \$28.4 million.

During 2002 and 2001 the Authority issued \$579.3 million and \$86.1 million, respectively, of bonds that will refund outstanding bonds at a future call date. The Authority will reduce debt service by \$63.5 million and \$36.4 million respectively and obtain an economic benefit of \$30.5 and \$7.2 million, respectively.

During 2002 the Authority renegotiated the terms of \$614.5 million of its notes with the New York State Environmental Facilities Corporation. The Authority in effect increased its aggregate debt service by \$43.1 million and obtained an economic benefit of \$38.6 million.

The Authority has defeased cumulatively \$4.640 billion and \$4.603 billion of outstanding bonds as of June 30, 2002 and 2001, 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 liability for the defeased bonds are not included in the Authority's financial statements.

As of June 30, 2002 and 2001, \$3.841 billion and \$3.615 billion of the defeased bonds respectively had been retired from the assets of the escrow accounts.

Notes to Financial Statements CONTINUED

Debt service requirements to maturity including amounts relating to commercial paper at June 30, 2002 are as follows:

YEAR ENDING JUNE 30 in thousands	PRINCIPAL	INTEREST <sup>(1)</sup>	TOTAL
IN THOUSANDS	PRINCIPAL	INTEREST	TOTAL
2003	\$ 817,758	496,174	1,313,932
2004	204,719	492,071	696,790
2005	217,958	483,514	701,472
2006	215,757	475,060	690,817
2007	191,220	467,122	658,342
2008-2012	1,507,229	2,203,916	3,711,145
2013-2017	1,692,438	1,873,696	3,566,134
2018-2022	1,942,655	1,486,180	3,428,835
2023-2027	2,384,345	1,073,946	3,458,291
2028-2032	2,371,085	498,693	2,869,778
2033-2034	601,840	27,295	629,135
Total	\$ 12,147,004	9,577,667	21,724,671

 $^{(i)}$  Includes interest for variable rate bonds estimated at 1.45% 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.

Bonds, notes payable, and commercial paper comprise the following for the year ended June 30, 2002:

IN THOUSANDS	BALANCE AT JUNE 30, 2001	ISSUED	RETIRED	balance at june 30, 2002
1987 Fiscal Series A - 5.00% Serial and Term Bonds				
maturing in varying installments through 2017	\$ 69,690	-	-	69,690
1987 Fiscal Series B - 5.00% Serial Bonds maturing in 2017	13,275	-	-	13,275
1990 Fiscal Series B - 7.30% to 7.50% Serial and Term Bonds				
maturing in varying installments through 2012	118,825	-	118,825	-
1991 Fiscal Series B - 6.00% to 7.25% Serial and Term Bonds				
maturing in varying installments though 2012	25,915	-	3,380	22,535
1992 Fiscal Series B - 6.66% to 6.86% Serial and Term Bonds				
maturing in varying installments through 2014	29,657	-	4,048	25,609
1993 Fiscal Series A - 5.70% to 6.15%				
Serial, Term, and Capital Appreciation Bonds				
maturing in varying installments through 2020	1,022,220	-	22,350	999,870
1993 Fiscal Series C - Adjustable Rate				
Term Bonds maturing 2022	100,000	-	-	100,000

CONTINUED ON NEXT PAGE

#### **NEW YORK CITY WATER AND SEWER SYSTEM** Notes to Financial Statements CONTINUED

#### IN THOUSANDS

1994 Fiscal Series 1 - 3.00% to 6.00% Serial and Term Bonds maturing in varying installments through 2015

1994 Fiscal Series B - 4.875% to 5.625% Fixed Rate Bonds maturing in varying installments through 2019

1994 Fiscal Series C - Adjustable Rate term bonds maturing in 2023

1994 Fiscal Series D - Auction Rate Bonds maturing in varying Installments through 2013

1994 Fiscal Series E - Inverse Rate Bonds maturing in varying installments through 2013

1994 Fiscal Series F - 5.20% to 5.75% Serial Bonds maturing in varying installments through 2023

1994 Fiscal Series G - Adjustable, Auction and Leveraged Reverse Rate Bonds maturing in varying installments through 2024

1995 Fiscal Series A - Adjustable Rate Term Bonds maturing in varying installments through 2025

1995 Fiscal Series 1 - 5.25% to 6.875% Serial and Term Bonds maturing in varying installments through 2016

1996 Fiscal Series I - 4.3% to 6.00% Serial Bonds maturing in varying installments through 2017

1996 Fiscal Series 2 - 2.95% to 5.20% Serial Bonds maturing in varying installments through 2017

1996 Fiscal Series 3 - 3.60% to 5.85% Serial Bonds maturing in varying installments through 2017

1996 Fiscal Series A - 4.90% to 5.75% Serial Bonds maturing in varying installments through 2023

1996 Fiscal Series B - 5.75% to 5.875% Serial Bonds maturing in varying installments through 2026

1996 Fiscal Series C - 4.70% to 5.75% Serial Bonds maturing in varying installments through 2017

1997 Fiscal Series A - 4.85% to 5.75% Serial Bonds maturing in varying installments through 2026

CONTINUED ON NEXT PAGE

balance at june 30, 2001	ISSUED	RETIRED	BALANCE AT JUNE 30, 2002
473,887	-	237,037	236,850
573,005	-	79,770	493,235
200,000	-	-	200,000
83,500	-	-	83,500
83,500	-	-	83,500
211,565	-	745	210,820
205,000	-	-	205,000
216,700	-	-	216,700
46,445	-	4,778	41,667
93,380	-	4,550	88,830
23,580	-	1,215	22,365
37,205	-	1,600	35,605
154,105	-	3,365	150,740
491,025	-	-	491,025
77,300	-	320	76,980
365,125	-	-	365,125

Notes to Financial Statements CONTINUED

N THOUSANDS	balance at june 30, 2001	ISSUED	RETIRED	balance at june 30, 2002
1997 Fiscal Series B - 5.50% to 5.80% Serial Bonds				
maturing in varying installments through 2029	700,000	-	-	700,000
1998 Fiscal Series 1 - 4.00% to 5.35% Serial Bonds				
maturing in varying installments through 2017	39,435	-	1,625	37,810
1998 Fiscal Series 2 - 4.00% to 6.00% Serial Bonds				
maturing in varying installments through 2019	101,188	-	4,028	97,160
1998 Fiscal Series 3 - 4.30% to 6.00% Serial Bonds				
maturing in varying installments through 2016	450,035	-	21,184	428,851
1998 Fiscal Series 4 - 3.60% to 5.20% Serial Bonds				
maturing in varying installments through 2018	13,880	-	670	13,210
1998 Fiscal Series 5 - 4.61% to 5.10% Serial Bonds				
maturing in varying installments through 2019	79,385	-	3,230	76,155
1998 Fiscal Series 6 - 4.827% to 5.125% Serial Bonds				
maturing in varying installments through 2019	17,363	-	684	16,679
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 - 4.10% to 5.125% Serial Bonds				
maturing in varying installments through 2021	87,585	-	260	87,325
1998 Fiscal Series D - 4.25% to 5.00% Serial Bonds				
maturing in varying installments through 2025	391,025	-	3,245	387,780
1999 Fiscal Series I - 4.00% to 5.25% Serial Bonds	2		0	-
maturing in varying installments through 2020	147,469	-	6,004	141,465
1999 Fiscal Series 2 - 4.00% to 5.25% Serial Bonds				
maturing in varying installments through 2020	116,061	-	3,940	112,121
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 - 3.80% to 5.25% Serial and				
Capital Appreciation Bonds maturing in varying installments through 2020	245,865	_	6,365	239,500
	~+5,005		0,309	-39,900
2000 Fiscal Series A - 5.50% to 5.75% Serial Bonds maturing in varying installments through 2032	275,735	_	_	275,735
	4/0,/00			-70,730
2000 Fiscal Series B - 6.00% to 6.10% Serial Bonds	101 86r			131,865
maturing in varying installments through 2033	131,865			131,005

NEW YORK CITY WATER AND SEWER SYSTEM

Notes to Financial Statements CONTINUED

N THOUSANDS	balance at june 30, 2001	ISSUED	RETIRED	BALANCE A JUNE 30, 200
2000 Fiscal Series C - Adjustable				
Rate Term Bonds maturing in 2033	107,500	-	-	107,50
2000 Fiscal Series 1 - 2.56%				
Direct Loan maturing in 2023	280,846	-	280,846	
2000 Fiscal Series 2 - 3.80% to 5.96% Serial Bonds naturing in varying installments through 2019	11,884	-	419	11,46
2001 Fiscal Series A - 5.50% Term Bonds				
naturing in varying Installments through 2033	328,225	-	-	328,22
2001 Fiscal Series B - 4.5% to 5.125% Serial and Term Bonds naturing in varying installments though 2031	68,675	-	135	68,54
2001 Fiscal Series C - 5.125% Term Bonds naturing in varying installments through 2033	112,040	-	-	112,04
2001 Fiscal Series D $-$ 4.0% to 5.5% Serial and term Bonds naturing in varying installments through 2031	297,190	-	4,315	292,87
2001 Fiscal Series E - 4.5% to 5.25% Serial and Term Bonds				
naturing in varying installments through 2031	86,105	-	-	86,10
2001 Fiscal Series F -Adjustable Rate Bonds				
naturing in varying Installments through 2033through 2033	184,130	-	-	184,13
2001 Fiscal Series 1–2.74% Serial and Term Bonds naturing in varying installments through 2022	98,611	-	98,611	
2002 Fiscal Series A – 5.00% to 5.75% Serial and Term Bonds naturing in varying installments through 2033	-	216,305	-	216,30
2002 Fiscal Series B – 3.625% to 5.00% Serial and Term Bonds naturing in varying installments through 2024	-	171,455	-	171,45
2002 Fiscal Series C – 4.1% to 5.00% Serial and Term Bonds naturing in varying installments through 2029	-	46,580	-	46,58
2002 Fiscal Series D – 3.08% to 4.30% Serial and Term Bonds naturing in varying installments through 2013	-	41,745	-	41,74
2002 Fiscal Series E – 3.43 to 4.62% Serial and Term Bonds naturing in varying installments through 2016	-	213,850	-	213,85
2002 Fiscal Series F – 3.6% to 4.80% Serial and Term Bonds naturing in varying installments through 2018	-	105,635	-	105,63
2002 Fiscal Series G – 5.00% – 5.125 % Term Bonds naturing in varying installments through 2034		216,375		216,37

CONTINUED ON NEXT PAGE

37

Notes to Financial Statements CONTINUED

IN THOUSANDS	BALANCE AT JUNE 30, 2001	ISSUED	RETIRED	BALANCE A
2002 Fiscal Series 1 – 4.82% to 5.25% Serial and Term Bonds				
maturing in varying installments through 2031	-	204,132	3,286	200,846
2002 Fiscal Series 2 – 4.22% to 5.00% Serial and Term Bonds				
maturing in varying installments through 2031	-	72,083	1,188	70,895
2002 Fiscal Series 3 – 4.65% to 5.00% Serial and Term Bonds				
maturing in varying installments through 2031	-	519,406	7,409	511,997
2002 Fiscal Series 4 – 5.13% to 6.74% Serial and Term Bonds				
maturing in varying installments through 2023		235,077	7,749	227,328
2002 Fiscal Series 5 – 3.82% to 5.21% Serial and Term Bonds				
maturing in varying installments through 2031	-	180,383	161	180,222
2002 Fiscal Series 6 – 3.82% to 5.21% Serial and Term Bonds				
maturing in varying installments through 2019	-	98,565	-	98,565
2002 Fiscal Series 7 – 7.4% to 7.5% Serial and Term Bonds				
maturing in varying installments through 2012	-	20,260	7,355	12,905
Total debt payable	10,121,848	2,341,850	944,694	11,519,004
Current portion of bonds and notes payable	174,489			189,758
Bonds and notes payable, less current portion	\$9,947,359			п,329,246

#### (11) RESTRICTED ASSETS

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

IN THOUSANDS	2002	2001
The Board		
Operation and maintenance reserve account	\$ 128,084	120,074
Operation and maintenance reserve general account	IO	10
	128,094	120,084
The Authority		
Revenue fund	245,072	158,829
Debt service reserve fund	631,248	607,360
Construction fund	208,822	49,018
Arbitrage rebate fund	-	300
Escrow fund	652,294	82,261
	1,737,436	897,768
	\$ 1,865,530	1,017,852

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 onesixth 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 arbitrage 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

#### **NEW YORK CITY WATER AND SEWER SYSTEM**

Notes to Financial Statements CONTINUED

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 arbitrage rebate fund is established to provide for arbitrage rebate payments to the U.S. Department of the Treasury. It is funded through the revenue fund.

#### (12) COMMITMENTS AND CONTINGENCIES

#### Construction

The System has contractual commitments of approximately \$4,230 and \$3,365 million at June 30, 2002 and June 30, 2001, respectively, for water and sewer projects.

#### 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 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. 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, 2002, the potential future liability attributable to the System for claims outstanding against the City was estimated

To maintain the exemption from Federal income tax of interest on bonds issued subsequent to January I, 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. Issues with respect to which all gross proceeds are expended for the governmental purpose of the issue within six months after the date of issue. 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. At June 30, 2002 and 2001, the System has accrued \$406 and \$143 thousand respectively, for such liability.

to be \$79.3 million. This amount is included in the estimated liability for unsettled claims, which is reported in the City's statement of net assets. 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

#### (13) SUBSEQUENT EVENTS

On July 9, 2002, the Authority issued fiscal 2003 Series A, B, and C First Resolution Bonds in the aggregate amounts of \$741.1 million, \$150.0 million, and \$300.3 million, respectively, to reimburse outstanding commercial paper notes, to refund outstanding bonds, to pay certain costs of issuance, and to fund certain reserves.

On October 10, 2002, the Authority issued Fiscal 2003 Series D First Resolution Bonds and Series I Second Resolution Bonds in the aggregate amounts of \$250.0 million and 148.0 million, respectively, to reimburse outstanding commercial paper notes, to refund outstanding bonds, and to pay certain costs of issuance.

Utility plant in service, less accumulated

Unrestricted cash and cash equivalents

Total current unrestricted assets

Billed, less allowance for uncollectible water and sewer receivables of \$298,878

depreciation of \$4,860,738

Utility plant construction

Accounts receivable:

Receivable from the City

Accrued interest receivable

Cash and cash equivalents

Accrued interest receivable

Total current restricted assets

Revenue requirement to be billed by and received

Long-term Deferred bond and financing expenses

Bonds and notes payable, less current portion

Revenue requirements payable to the Authority

Net discount on bonds and notes payable

Total current assets

Current assets:

Unbilled

Restricted assets:

Investments

Other receivable

from the Board

Current liabilities:

Payable to the City

Net Assets:

Total assets

LIABILITIES AND NET ASSETS Long-term liabilities:

Deferred bond refunding costs

Revenues received in advance

Refunds payable to customers

Total liabilities

Restricted for debt service

Total net assets

Unrestricted (deficit)

Total current liabilities

Total long-term liabilities

Accounts payable and accrued expenses

Current portion of bonds and notes payable

Invested in capital assets, net of related debt

Restricted for operations & maintenance

Other

Combining Balance Sheet

June 30, 2002

IN THOUSANDS

ASSETS

SCHEDULE I

τοται

- 10,224,533

- 14,119,680

-

-

-

\_

-

-

-

-

-

-

- (5,732,433)

5,732,433 10,748,833 (5,732,433) 10,748,833

5,831,434 11,846,575 (5,732,433) 11,945,576

**\$ 14,693,770** 7,596,398 (5,732,433) 16,557,735

3,895,147

5,274

330,482

110,000

243

15,810

461,810

1,177,379

1,865,530

2,327,340

- 11,329,246

- (371,892)

(208,521)

26,851

76,031

817,758

262,702

1,196,743

4,171,982

245,072

118,848

4,612,159

76,257

13,401

684,530

2,383

1,238

110,715

I

NEW YORK CITY

4

15,810

15,814

1,110,914

624,527

1,737,436

1,753,250

110,715

- 11,329,246

(371,892)

(208,521)

26,528

817,758

253,456

1,097,742

245,072

-

323

76,031

9,246

13,401

99,001

14,119,680 (9,947,698)

(5,<u>376,19</u>2) 5,452,449

8,862,336 (4,250,177)

-

118,848

5,732,433

1,995

5,732,433 (5,732,433)

**\$ 14,693,770** 7,596,398 (5,732,433) 16,557,735

FLIMINATIONS

NEW YORK CITY MUNICIPAL WATER WATER BOARD FINANCE AUTHORITY

\$ 10,224,533

3,895,147

14,119,680

5,270

330,482

110,000

445,996

66,465

60,003

388

1,238

128,094

574,090

\$

243

I

#### NEW YORK CITY WATER AND SEWER SYSTEM

Combining Balance Sheet June 30, 2001

N THOUSANDS			NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	τοται
1007770					
ASSETS					
Utility plant in service, less accumulated	¢				
depreciation of \$4,573,701	\$	9,795,394	-	-	9,795,394
Utility plant construction		3,580,396	-	-	3,580,396
Current assets:		13,375,790			13,375,790
Unrestricted cash and cash equivalents		7,416	3	_	7,419
Accounts receivable:		7,410	5		7,415
Billed, less allowance for uncollectible water					
and sewer receivables of \$313,318		341,417	_	_	341,417
Unbilled		106,600	_	_	106,600
Receivable from the City		23,458	_	_	23,458
Prepaid construction		40,000	_		40,000
Accrued interest receivable			_		-
Other		4	4 071		4
Total current unrestricted assets		518,895	4,071		4,071
Total current unrestricted assets		510,095	4,074	-	522,969
Restricted assets:					
Cash and cash equivalents		120,048	774,095	_	894,143
Investments		-	123,377	_	123,377
Accrued interest receivable		36	296	_	332
Total current restricted assets		120,084	897,768	-	1,017,852
Total current assets		638,979	901,842	_	1,540,821
Revenue requirement to be billed by and received		- 3 - / 5 / 5	5-7-11		/31-/- (
from the Board		-	5,443,374	(5,443,374)	-
Long-term deferred bond and financing expenses		-	98,213		98,213
Total assets	\$	14,014,769		(5,443,374)	15,014,824
LIABILITIES AND NET ASSETS					
Long-term liabilities.					
Long-term liabilities: Bonds and notes payable, less current portion	\$	_	0.047.250	_	0.047.950
Net discount on bonds and notes payable	Ψ	_	9,947,359 (372,409)	_	9,947,359 (372,409)
Deferred bond refunding costs				_	(229,145)
Deletted bolid ferunding costs			(220 145)		
Revenue requirements payable to the Authority		-	(229,145)	- (E 449 974)	(44),140/
Revenue requirements payable to the Authority		- <u>5,443,374</u> 5 442 274	-	(5,443,374)	
Total long-term liabilities		- 5,443,374 5,443,374	(229,145) - 9,345,805		9,345,805
Total long-term liabilities Current liabilities:		5,443,374	-		9,345,805
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses		5,443,374 267	-		9,345,805 24,216
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance		5,443,374	9,345,805 23,949 		9,345,805 24,216 76,562
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable		5,443,374 267	- 9,345,805 23,949 - 674,489		9,345,805 24,216 76,562 674,489
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City		5,443,374 267 76,562 -	9,345,805 23,949 		9,345,805 24,216 76,562 674,489 205,456
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers		5,443,374 267 76,562 - 16,413	- 9,345,805 23,949 - 674,489 205,456		9.345.805 24,216 76.562 674.489 205.456 16,413
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities		5,443,374 267 76,562 - 16,413 93,242	- 9,345,805 23,949 - 674,489 205,456 - 903,894	(5,443,374) - - - - - - - - - -	9.345.805 24,216 76.562 674.489 205.456 16,413 997.136
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers		5,443,374 267 76,562 - 16,413	- 9,345,805 23,949 - 674,489 205,456 - 903,894		9.345.805 24,216 76.562 674.489 205.456 16,413
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities Total liabilities		5,443,374 267 76,562 - 16,413 93,242	- 9,345,805 23,949 - 674,489 205,456 - 903,894 10,249,699	(5,443,374) - - - - - - - - - -	9,345,805 24,216 76,562 674,485 205,456 16,413 997,136
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities		5,443,374 267 76,562 - 16,413 93,242	- 9,345,805 23,949 - 674,489 205,456 - 903,894	(5,443,374) - - - - - - - - - -	9,345,805 24,216 76,562 674,489 205,456 16,413 997,136
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities Total liabilities Net Assets:		5,443,374 267 76,562 - 16,413 93,242 5,536,616	- 9,345,805 23,949 - 674,489 205,456 - 903,894 10,249,699	(5,443,374) - - - - - - - - - -	9,345,805 24,216 76,562 674,489 205,456 16,413 997,136 10,342,941
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities Total liabilities Net Assets: Invested in capital assets, net of related debt		5,443,374 267 76,562 - 16,413 93,242 5,536,616 13,415,790	- 9,345,805 23,949 - 674,489 205,456 - 903,894 10,249,699	(5,443,374) - - - - - - - - - -	9,345,805 24,216 76,562 674,489 205,456 16,413 997,136 10,342,941 4,232,648 158,829
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities Total liabilities Net Assets: Invested in capital assets, net of related debt Restricted for debt service		5,443,374 267 76,562 - 16,413 93,242 5,536,616 13,415,790 158,829	- 9,345,805 23,949 - 674,489 205,456 - 903,894 10,249,699	(5,443,374) - - - - - - - - - -	9,345,805 24,216 76,562 674,489 205,456 16,413 997,136 10,342,941 4,232,648 158,829 120,084
Total long-term liabilities Current liabilities: Accounts payable and accrued expenses Revenues received in advance Current portion of bonds and notes payable Payable to the City Refunds payable to customers Total current liabilities Total liabilities Net Assets: Invested in capital assets, net of related debt Restricted for debt service Restricted for operations & maintenance		5,443,374 267 76,562 - 16,413 93,242 5,536,616 13,415,790 158,829 120,084 (5,057,721)	- 9,345,805 23,949 - 674,489 205,456 - 903,894 10,249,699 (9,183,142) -	(5,443,374) - - - - - - - - - -	9,345,805 24,216 76,562 674,489 205,456 16,413 997,136 10,342,941 4,232,648

See accompanying independent auditors' report.

See accompanying independent auditors' report.

Total liabilities and net assets

40

#### SCHEDULE II

Combining Statement of Revenues, Expenses and Changes in Net Assets Year Ended June 30, 2002 SCHEDULE III

#### NEW YORK CITY WATER AND SEWER SYSTEM

Combining Statement of Revenues, Expenses and Changes in Net Assets Year Ended June 30, 2001

IN THOUSANDS	NEW YORK CITY WATER BOARD	NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	TOTAL
Operating revenues:				
Water supply and distribution	\$ 648,319	-	-	648,319
Sewer collection and treatment	907,324	-	-	907,324
Other operating revenues	62,930	53,582	-	116,512
Total operating revenues	 1,618,573	53,582	-	1,672,155
Operating expenses:				
Operation and maintenance	857,907	-	-	857,907
Bad debt expense	92,481	-	-	92,481
Administration and general	3,343	10,828	-	14,171
Total operating expenses	 953,731	10,828	-	964,559
Excess of operating revenues over				
operating expenses before				
depreciation and amortization	664,842	42,754	-	707,596
Depreciation and amortization	294,630	25,752	-	320,382
Operating income	370,212	17,002	-	387,214
Nonoperating revenue (expense):				
Interest expense	-	(556,784)	-	(556,784)
Investment income	1,668	95,875	-	97,543
Net income (loss) before capital contributions	 371,880	(443,907)	-	(72,027)
Capital contributions	12,303	-	-	12,303
Change in net assets	384,183	(443,907)	-	(59,724)
Net assets at beginning of year	8,478,153	(3,806,270)	-	4,671,883
Net assets at end of year	\$ 8,862,336	(4,250,177)	-	4,612,159

IN THOUSANDS	NEW YORK CITY WATER BOARD	NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	TOTAL
Operating revenues:				
Water supply and distribution	\$ 626,364	-	-	626,364
Sewer collection and treatment	898,568	-	-	898,568
Other operating revenues	51,952	45,039	-	96,991
Total operating revenues	1,576,884	45,039	-	1,621,923
Operating expenses:				
Operation and maintenance	842,401	-	-	842,401
Bad debt expense	122,785	-	-	122,785
Administration and general	1,831	9,384	-	11,215
Total operating expenses	 967,017	9,384	-	976,401
Excess of operating revenues over				
operating expenses before				
depreciation and amortization	609,867	35,655	-	645,522
Depreciation and amortization	292,772	25,937	-	318,709
Operating income	 317,095	9,718	-	326,813
Nonoperating revenue (expenses):				
Interest expense	-	(527,914)	-	(527,914)
Investment income	3,909	80,625	-	84,534
Net income (loss) before capital contributions	 321,004	(437,571)	-	(116,567)
Capital contributions	1,748	-	-	1,748
Change in net assets	 322,752	(437,571)	-	(114,819)
Net assets at beginning of year	 8,155,401	(3,368,699)	-	4,786,702
Net assets at end of year	\$	(3,806,270)	-	4,671,883

See accompanying independent auditors' report.

See accompanying independent auditors' report.

#### SCHEDULE IV

Combining Statement of Cash Flows Year Ended June 30, 2002

SCHEDULE V

#### NEW YORK CITY WATER AND SEWER SYSTEM

Combining Statement of Cash Flows Year Ended June 30, 2001

R	NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY		IN THOUSANDS
		T TOO 100	\$ Cash flows from operating activities:
	53,582	1,530,499	\$ Receipts from customers
- (825,859)	-	(825, 859)	Payments for operations & maintenance
	(9,740)	(3,286)	 Payments for administration
2 745,196	43,842	701,354	 Net cash provided by operating activities
			Cash flows from capital and related financing activities:
			Proceeds from issuing bonds, notes and other
	3,423,787	-	borrowings, net of issuance costs
	(938,218)	-	Acquisition and construction of capital assets
*	697,159	(697,159)	Payments by the Board to the Authority (net)
(1,914,695)	(1,914,695)	-	Repayments of bonds, notes and other borrowings
) (540,753)	(540,753)	-	 Interest paid on bonds, notes and other borrowings
			Net cash (used by) provided by capital and
0 30,121	727,280	(697,159)	 related financing activities
			Cash flows from investing activities:
6 41,166	41,166	-	Proceeds from sales and maturities of investments
-	(569,350)	(61,243)	Purchases of investments
	93,882	1,319	Interest on investments
	(434,302)	(59,924)	 Net cash used by investing activities
	336,820	(55,729)	 Net (decrease) increase in cash and cash equivalents
•	774,098	127,464	Cash and cash equivalents, beginning of year
	1,110,918	71,735	\$ Cash and cash equivalents, end of year
			RECONCILIATION OF OPERATING INCOME TO NET CASH
			BY OPERATING ACTIVITIES:
2 387,214	17,002	370,212	\$ Operating income
			Adjustments to reconcile operating income to net cash
			provided by operating activities:
2 320,382	25,752	294,630	Depreciation and amortization
- 92,481	-	92,481	Bad debt expense
			Changes in net assets and liabilities:
- (84,946)	-	(84,946)	Receivables, net
	1,088	56	Accounts payable
8 1,144		32,464	Receivable from the City
8 1,144 - 32,464	-	32,404	
, 11	-	(3,012)	Refunds payable
- 32,464		•	Refunds payable Revenues received in advance

	ASSETS			
		UNRESTRICTED	RESTRICTED	TOTAL
Cash and cash equivalents - beginning	\$	7,419	894,143	901,562
Net (decrease) increase		(2,145)	283,236	281,091
Cash and cash equivalents - ending	\$	5,274	1,177,379	1,182,653

The following are the noncash capital and related financing activities:

 $\cdot$  Interest expense includes the amortization of premium and discount in the amount of \$14,170

 $\cdot$  Capital expenditures in the amount of \$253,456 had been incurred but not paid at June 30, 2002.

• The Board received capital assets of \$12,303 in 2002, which represent capital contributed by the City.

See accompanying independent auditors' report.

IN THOUSA	INDS
Cash fl	ows from operating activities:
	ots from customers
	ents for operations & maintenance
'	ents for administration
'	cash provided by operating activities
Cash fl	ows from capital and related financing activities:
Proce	eds from issuing bonds, notes and other
bor	rowings, net of issuance costs
Acqui	sition and construction of capital assets
Payme	ents by the Board to the Authority (net)
Repay	ments of bonds, notes and other borrowings
Intere	st paid on bonds, notes and other borrowings
Net	cash used by capital and
r	elated financing activities
Cash fl	ows from investing activities:
Proce	eds from sales and maturities of investments
Purch	ases of investments
Intere	est on investments
Net	cash provided by investing activities
Ν	Net increase in cash and cash equivalents
Cash ar	nd cash equivalents, beginning of year
Cash a	nd cash equivalents, end of year
RECON	CILIATION OF OPERATING INCOME TO NET CASH
BY OPE	RATING ACTIVITIES:
Operat	ing income
Adjus	tments to reconcile operating income to net cash
pro	vided by operating activities:
Dep	preciation and amortization
Bad	l debt expense
Cha	anges in net assets and liabilities:
F	Receivables, net
A	Accounts payable
F	Receivable from the City

Refunds payable

Revenues received in advance

Net cash provided by operating activities

Cash and cash equivalents - beginning Net (decrease) increase Cash and cash equivalents - ending

The following are the noncash capital and related financing activities:

• Interest expense includes the amortization of premium and discount in the amount of \$12,672.

• Capital expenditures in the amount of \$205,456 had been incurred but not paid at June 30, 2001.

• The Board received capital assets of \$1,748 in 2001, which represent capital contributed by the City.

See accompanying independent auditors' report.

#### SCHEDULE VI

		NEW YORK CITY	
	NEW YORK CITY WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	TOTAL
	WATER BOARD	HINANCE AUTHORITI	TOTAL
:	\$ 1,437,981	45,039	1,483,020
	(819,015)		(819,015)
	(1,803)	(12,961)	(14,764)
-	617,163	32,078	649,241
-		34,270	-13,-1-
		1 000 070	1 000 070
	- (40,000)	1,909,079 (800,600)	1,909,079 (930,623)
		(890,623)	(930,623)
	(580,504)	580,504	-
	-	(1,167,056)	(1,167,056)
-	-	(503,344)	(503,344)
	(600 504)		(601.044)
	(620,504)	(71,440)	(691,944)
	-	98,333	98,333
	-	(123,377)	(123,377)
	4,090	81,634	85,724
-	4,090	56,590	60,680
	749	17,228	17,977
	126,715	756,870	883,585
	127,464	774,098	901,562
		_	
	317,095	9,718	326,813
			0
	292,772	25,937	318,709
	122,785	-	122,785
	(149,002)	-	(149,002)
	29	(3,577)	(3,548)
	23,682	-	23,682
	1,038	-	1,038
	8,764	-	8,764
	\$ 617,163	32,078	649,241
		ASSETS	
	UNRESTRICTED	RESTRICTED	TOTAL
\$	8,734	874,851	883,585
	(1,315)	19,292	17,977
\$	7,419	894,143	901,562

#### **NEW YORK CITY WATER AND SEWER SYSTEM** Statistics

#### REVENUES LAST TEN FISCAL YEARS YEARS ENDED JUNE 30, 1993 – 2002 (IN THOUSANDS)

Year	WATER SUPPLY AND DISTRIBUTION	SEWER COLLECTION & TREATMENT	OTHER OPERATING REVENUES	INVESTMENT INCOME	TOTAL
1993	444,764	591,978	50,627	45,433	1,132,802
1994	468,957	676,924	58,542	32,955	1,237,378
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

#### EXPENSES LAST TEN FISCAL YEARS YEARS ENDED JUNE 30, 1993 – 2002 (IN THOUSANDS)

Year	OPERATION AND MAINTENANCE	PROVISION FOR UNCOLLECTIBLES	ADMINISTRATION AND GENERAL	DEPRECIATION AND AMORTIZATION	INTEREST EXPENSE	LOSS FR. EARLY EXTINGUISHMENT OF DEBT	тота
1993	709,360	(28,580)	9,811	166,080	281,226	109,423	1,247,320
1994	718,650	51,586	17,290	208,078	296,083		1,291,682
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		1,671,87
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		1,731,51
1999	777,652	103,960	10,879	380,023	476,675		1,749,18
2000	801,255	89,062	10,092	347,055	492,747		1,740,21
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		1,521,343

#### **NEW YORK CITY WATER AND SEWER SYSTEM** Statistics CONTINUED

#### REVENUE BOND COVERAGE LAST TEN FISCAL YEARS YEARS ENDED JUNE 30, 1993 – 2002 (IN THOUSANDS)

SCAL EAR	CASH <sup>(1)</sup> RECEIPTS	PRINCIPAL	DEBT SERVICE <sup>(2)</sup> REQUIREMENTS INTEREST	TOTAL	FIRST RESOLUTION DEBT SERVICE COVERAGE	DEBT SERVICE COVERAGE
993	1,009,044	79,699	251,932	331,631	3.04	
994	1,137,886	77,018	234,297	311,315	3.66	
995	1,069,725	74,770	256,196	330,966	3.23	
996	1,167,038	71,217	275,217	346,434	3.37	
997	1,216,503	73,866	339,498	413,364	3.13	2.96
998	1,411,070	128,555	357,133	485,288	3.37	2.91
999	1,460,602	136,767	345,397	482,164	3.42	3.03
000	1,481,532	201,133	317,799	518,932	3.35	2.85
001	1,527,009	164,843	331,309	496,152	3.13	3.06
002	1,592,393	90,648	405,745	496,393	3.21	3.21

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

<sup>(a)</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.

#### **POPULATION OF NEW YORK CITY**



Statistics CONTINUED

\_

EFFECTIVE DATE	CHANGES IN FLAT-RATE WATER	CHANGE IN METERED WATER	METERED WATER RATE	CHANGE IN SEWER
July 1, 1993	No change	No change	\$1.01 per ccf	159% of water charge
July 1, 1994	No change	No change	\$1.01 per ccf	No change
July 1, 1995	Increased 5%	Increased 5%	\$1.06 per ccf	No change
July 1, 1996	Increased 6.5%	Increased 6.5%	\$1.13 per ccf	No change
July 1, 1997	Increased 6.5%	Increased 6.5%	\$1.20 per ccf	No change
July 1, 1998	Increased 4%	Increased 4%	\$1.25 per ccf	No change
July 1, 1999	Increased 4%	Increased 4%	\$1.30 per ccf	No change
July 1, 2000	Increased 1%	Increased 1%	\$1.31 per ccf	No change
July 1, 2001	Increased 3%	Increased 3%	\$1.35 per ccf	No change
July 1, 2002	Increased 6.5%	Increased 6.5%	\$1.44 per ccf	No change

#### WATER AND SEWER RATE INCREASES LAST TEN FISCAL YEARS

<sup>(1)</sup> ccf, one hundred cubic feet, approximately 748 gallons.

#### AVERAGE DAILY WATER CONSUMPTION, LAST TEN FISCAL YEARS

FISCAL YEAR	TOTAL (MGD)	UPSTATE COUNTRIES (MGD)	CITY (MGD)	PER CAPITAL (GALS/DAY)
1993	1,457	115	1,342	183
1994	1,476	119	1,357	185
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

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

(2) Population source: U.S. Department of Commerce, Bureau of the Census. Water system tunnels and Aqueducts

#### NEW YORK CITY WATER AND SEWER SYSTEM Statistics CONTINUED

#### WATER SYSTEM TUNNELS AND AQUEDUCTS

TUNNELS AND AQUEDUCTS	CONNECTIONS	LENGTH (MILES)	DIAMETER (FEET)	TRANSMISSION CAPACITY (MGD)	IN SERVICE DATE
TUNNELS UPSTATE					
Shandaken	Schoharie to Ashokan	18.1	11.5 x 10.25 <sup>(i)</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	IO	500	1954
AQUEDUCTS					
New Croton	New Croton to Jerome Park	24.0	13.5 x 13.6 <sup>(1)</sup>	300	1893
J	erome 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
TUNNELS DOWNSTATE					
Tunnel 1	Hillview to distribution system	18.0	15-11(2)	1,000	1917
Tunnel 2	Hillview to distribution system	20.0	17-15	1,000	1936
Tunnel 3-stage I	Hillview to distribution system	13.0	24-20(2)	1,500	1998
Richmond Tunnel	Tunnel 2 to Staten Island Uptake Shaft	5.0	IO	350	1970

<sup>(1)</sup> Tunnels are not round.

(2) Variable diameter tunnels

49

#### WATER POLLUTION CONTROL PLANTS DRY FLOW

PLANT	DESIGN FLOW (MGD)	12 month avg. july 2000-june 01	12 month avg. july 01-june 02
Wards Island	250	184	175
North River	170	125	123
Hunts Point	200	III	99
26th Ward	85	57	54
Coney Island	IOO	94	89
Owls Head	120	IOI	96
Newtown Creek	310	230	216
Red Hook	60	30	28
Jamaica	100	79	68
Tallmans Island	80	54	49
Bowery Bay	150	105	99
Rockaway	45	20	18
Oakwood Beach	40	27	25
Port Richmond	60	32	30
Total	1,770	1,249	1,169

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

# Certificate of Achievement for Excellence in Financial Reporting

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2001 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.



Presented to

# New York City Water and Sewer System

Wellen Fatrit Vator President Affrey L. Esser