# New York City <br> Water and <br> Sewer System <br> A Component of the City of New York 



Comprehensive Annual Financial Report
for the Fiscal Year
Ended June 30th, 2007

## Contents

1 Letter of Transmittal
7 Clearing the Waters
13 Report of Independent C ertified Public Accountants
14-19 Management's Discussion and Analysis
Basic Financial Statements
20-23 Balance Sheets
24-25 Statements of Revenues, Expenses and Changes in Net A ssets
26-29 Statements of Cash Flows
30-42 Notes to Financial Statements

## 43-46 Statistics

## Letter of Transmittal

November 27, 2007

To:
Members of the Board of the New York City Municipal Water F inance Authority
Member of the Board of the New York City Water B oard
The Commissioner of the New York City Department of Environmental Protection

W
e are pleased to submit to you this Comprehensive Annual Financial Report (CAFR) of the New York City Water and Sewer System (the System) for the year ended June 30, 2007.

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

The reporting entity 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 B oard (the Water B oard). In addition, the New York City Department of Environmental Protection (DEP) operates the System. The passage of the New York City Municipal Finance Authority Act (the Act) of 1984 by the New York State Legislature authorized this operating and financing relationship. The System is a component unit of the City of New York (the City) for financial reporting purposes.

The Authority is authorized to issue bonds and other debt instruments for construction of and improvements to the System. The Authority also has the power to refund its bonds and notes and the general obligation bonds of the City issued for water or sewer purposes. The Authority is administered by a B oard of Directors composed of seven members, four of whom serve ex officio, two of whom are appointed by the Mayor of the City and one of whom is appointed by the Governor of the State of New York (the State). The staff of the Authority operates under the direction of an Executive Director.

The Water B oard leases the operating system from the City, sets rates, and collects System revenue. The Lease Agreement (the Lease), dated July 1, 1985, provides for a lease term of forty years or until such time as all the bonds of the Authority are paid in full, or provision for payment has been made. The Lease requires the Water Board to make a payment to the City, but only to the extent requested by the City, which is no more than the greater of: i) principal and interest for the fiscal year on City general obligation bonds issued for water and sewer purposes, or ii) fifteen percent of principal and interest on Authority debt for the fiscal year. The Water B oard is obligated to allocate the revenues of the System 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, in that order.

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

The operation and maintenance of the System is performed by DEP. DEP is managed by a Commissioner who is appointed by the Mayor and oversees a workforce of over 5,700 people. DEP works to protect the environmental welfare and health of the City's
residents and natural resources, manages the City's water supply, transmission and distribution system, and collects, treats, and disposes of sanitary sewage waste and storm water. DEP supplies water and sewer service to the Boroughs of the Bronx, Brooklyn, M anhattan, Queens and Staten Island, an area of over 300 square miles, and serves over eight million people. The City is also required by State law to sell water in counties where its water supply facilities are located and currently provides water to approximately one million people located in Westchester, Putnam, Orange and Ulster Counties.

The System provides an average of approximately 1,185 million gallons per day of water. In addition to a system of dams, reservoirs, aqueducts, and water tunnels, DE P maintains approximately 6,500 miles of water mains which distribute water throughout the five boroughs. DEP also maintains approximately 6,600 miles of sewers which collect and transport waste and storm water for treatment at the City's 14 water pollution control plants. The System collects and treats an average of approximately 1,300 million gallons per day of sewage. Sewer service is provided to virtually the entire City, except for significant parts of the B orough of Staten Island, the Borough of Queens communities of B reezy Point and Douglaston, and the B orough of Brooklyn community of Seagate. Sewer service is also provided to certain upstate communities in System watershed areas.

## Security

DEP continues to enhance and augment its security arrangements to protect the water system, including the structures, facilities and reservoirs. The size of the DEP police force is approximately 200 officers. The DEP police force functions under special legislation as police authority within the City as well as in the upstate watersheds. DEP secures its facilities through various physical barriers to prevent access by unauthorized persons, by restricting vehicular access at certain facilities and by monitoring of the water supply for contaminants. In addition, DEP consults other governmental agencies, including the Federal Bureau of Investigation and the US Army Corps of Engineers on longer-term plans to modernize and improve security systems.

## Credit Ratings

The Authority's First Resolution bonds continue to be highly rated by all three rating agencies. Standard and Poor's R atings Services carries the First Resolution debt rating at AA+, just one notch below their highest rating, AAA. Fitch R atings and Moody's Investor Service, rate the Authority's First Resolution debt AA and Aa2, respectively. The Authority does most of its borrowing through its Second Resolution. The Second Resolution bonds are rated by all three rating agencies in the double-A category one notch below or on par with the First Resolution debt. Fitch Ratings, Standard \& Poor's Ratings Services and Moody' Investor Service rate the Second Resolution bonds AA, AA and Aa3, respectively. The Authority's ratings reflect the credit strengths resulting from the strong legal protections provided to bondholders and structural features of the Authority, which provide a true gross pledge of revenue to bondholders for debt payments.

New York State Environmental Facilities Corporation (EFC) bonds issued for eligible Authority State Revolving Fund projects are rated AAA from all three rating agencies. B onds 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 and Budgetary Controls

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

DEP 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 Water Board and the Authority are subject to the City's internal auditors who periodically check the City's agencies' and component units' adherence to internal control policies and procedures.

The Water B oard and the Authority maintain separate control structures for their specific areas of responsibility. The Water B oard and the Authority establish separate operating budgets approved by their respective B oards of Directors.

Capital Improvement Program and Financing Program

## Capital Program Goals

The goals of the System's capital program are:

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

DEP's capital and operation and maintenance budgets are appropriated through the City's annual operating budget. The City also maintains an encumbrance accounting system as another technique of accomplishing budgetary control. The Authority and the B oard adopt their budgets coterminously with the City's operating budget cycle.
The City's Ten Year Capital Strategy, released in A pril 2007, and which is updated every two years, includes the projected capital improvements to the System for fiscal years 2008 through 2017. The City's Current Capital Plan is updated three times each Fiscal Year and supersedes the Ten Year Capital Strategy for Fiscal Years 2007 through 2011. The Ten Year Capital Strategy as modified by the Current Capital Plan comprises the System's Capital Improvement Program (CIP), with the most recent update released in October 2007. The CIP provides for the rebuilding of the System's infrastructure, including water and sewer facilities.
The CIP, which establishes long range programmatic goals for the System, reflects a review of the present condition and long-term needs of the plant and equipment constituting the System. The CIP incorporates the requirements of legal mandates, the present replacement cycle for these facilities, extensions to the present service area, and programs to enhance and optimize the operation of the System. Allowances are included in the CIP for emergency repair and replacement. An annual allowance for cost escalation due to inflation is also included. The total capital commitments projected to be provided from System funds, most of which will come from the proceeds of notes and bonds of the Authority, is $\$ 23$ billion for Fiscal Years 2007-2017. The table below reflects the CIP as of October 2007, and is the basis for the System's annual cash flow requirements. For a number of reasons, including unforeseen inflation and changes in plans, actual costs may vary from the estimates set forth below. The CIP is divided into five project types, each discussed below. The capital commitments shown in each year represent capital contracts authorized to be entered into in each year. Actual expenditures from such capital contracts and the issuance of Authority bonds to fund such expenditures occur in the year of commitment and subsequent year.

Capital Improvement Program

| (in thousands) | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply and Transmission | \$64,391 | \$64,122 | \$147,025 | \$112,513 | \$401,061 | \$19,310 | \$156,015 | \$190,340 | \$219,544 | \$26,370 | \$297,598 | \$1,698,289 |
| Water Distribution | 2,252,478 | 1,277,244 | 1,099,147 | 610,901 | 703,335 | 618,191 | 342,551 | 121,941 | 374,816 | 407,380 | 142,390 | \$7,950,374 |
| Water Polution Control | 1,077,447 | 1,591,651 | 1,278,204 | 1,002,997 | 995,856 | 586,133 | 602,719 | 583,524 | 503,689 | 587,028 | 363,183 | \$9,172,431 |
| Sewers | 183,134 | 257,002 | 295,358 | 301,890 | 289,753 | 270,688 | 283,323 | 222,679 | 257,552 | 245,184 | 254,347 | \$2,860,910 |
| Equipment | 79,692 | 278,386 | 286,262 | 113,156 | 110,649 | 73,812 | 127,418 | 67,134 | 75,834 | 67,629 | 66,425 | \$1,346,397 |
| Total | \$3,657,142 | \$3,468,405 | \$3,105,996 | \$2,141,457 | \$2,500,654 | \$1,568,134 | \$1,512,026 | \$1,185,618 | \$1,431,435 | \$1,333,59 | \$1,123,943 | \$23,028,401 |
| Projected Authority <br> Bond Issuance | \$1,634,313 ${ }^{(1)}$ | \$2,126,963 ${ }^{(2)}$ | \$2,388,883 | \$2,315,646 | \$2,305,338 | \$2,199,551 | \$2,098,646 | \$2,019,441 | \$1,927,216 | \$1,899,006 | \$1,686,346 | \$22,601,346 |

(1) Projections are as of November 30, 2007. Projections exclude refunding bonds. (2) Actual bonds issued.

- Water Supply and Transmission

This component of the CIP includes approximately $\$ 694.7$ million for Stages I and II of the City's Water Tunnel No. 3. Water Tunnel No. 3 will augment the transmission capacity from the watersheds into the City, permit the inspection and rehabilitation of Tunnels 1 and 2, and provide delivery alternatives to the City in the event of disruption in Tunnel 1 or 2. Stage I of Tunnel No. 3 commenced operation in July 1998. Construction of Stage II continues towards its expected operational date of 2015. The remaining section of the Stage II underground excavation includes the Manhattan leg, which stretches across Manhattan from the valve chamber at Central Park. When Stage II comes on line, DEP will have achieved full redundancy of Tunnels No. 1 and 2. This will allow DEP to inspect and repair these tunnels for the first time since they were put into operation in 1917 and 1936, respectively.

The DEP is planning to implement water supply and transmission redundancy projects to enhance the water system and ensure its long term viability. DEP is planning to construct the Kensico-City Tunnel, a 16 mile tunnel from Kensico Reservoir to the Van Cortlandt Park Valve Chamber, bypassing the Hillview Reservoir and providing redundancy for the sections of the Catskill and Delaware Aqueducts that run from the Kensico Reservoir to the City. The estimated cost of the design work on the KensicoCity tunnel is included in the CIP. DEP is also researching and developing other alternate conveyance conduits and water supplies for the City, to provide more dependability within the water system. The alternate water supplies could be used during drought situations to augment the City's daily water supply or during repairs and inspections of existing aqueducts and tunnels. The CIP includes $\$ 685.9$ million for these projects.

## - Water Distribution

The System's drinking water is rated among the best in the country. To ensure its continuing quality, and to comply with federal standards, DEP is pursuing a comprehensive program to halt further environmental deterioration in the increasingly urbanized Croton watershed, and to prevent similar problems in the still relatively pristine Catskill and Delaware watersheds. The CIP projects nearly $\$ 8$ billion for the protection, expansion, and distribution of the City's water supply. This includes approximately $\$ 1.7$ billion for the construction of a full-scale filtration plant for the treatment of water from the Croton watershed. The program also calls for $\$ 2.8$ billion to be committed to on-going water quality preservation programs to ensure the continued purity of the water supply. This includes ultraviolet disinfection of water from the Catskill and Delaware systems, the acquisition of environmentally sensitive property in the upstate watershed, and the ongoing projects associated with the Filtration Avoidance Determination (FAD) issued by the US Environmental Protection Agency (USEPA), allowing the City to avoid filtering water from the Catskill and Delaware Systems. For the first time, in July 2007 USE PA issued a new FAD with a term of 10 years. USEPA has issued a series of FADs to the City since 1993.

## - Water Pollution Control

To improve the quality of the City's estuaries and surrounding waterways and to implement long-range land based solutions to sludge disposal, an end-product of the sewage treatment process, $\$ 9.2$ billion is allocated to water pollution control programs in the CIP.

The CIP includes nearly $\$ 2.1$ billion to be used for the reconstruction and modernization of ten water pollution control plants in order for these plants to continue to meet strict guidelines contained in State operating permits. The CIP also allocates $\$ 3.1$ billion for the upgrade of five wastewater treatments plants discharging into the Long Island Sound or Jamaica Bay, and includes projected funds for biological nutrient removal at these plants which involves enhanced nitrogen removal processes at these plants.
DEP's CIP includes funding for the abatement of Combined Sewer Overflow (CSO). CSO is currently a source of pollution in the City's waters because many of the City's sanitary sewers are connected with stormwater drainage basins. CSO events occur during and after heavy rainstorms, when the flow of wastewater and storm water in the sewers exceeds the treatment capacity of a sewage treatment plant and therefore enters surrounding waterways. The City is also exploring alternative approaches to CSO problems that focus on cost effective means of protecting water quality.

- Sewers

Approximately $\$ 2.9$ billion is projected in the CIP to be committed to replace existing sewers in areas requiring increased capacity, to extend sewers to unserved or underserved areas, and to replace failing, flawed, or collapsed sewer mains.

- Equipment

Programs in this category of the CIP include the installation of water meters, the procurement of vehicles and equipment, management information systems, and utility relocation for sewers and water mains. A total of $\$ 1.3$ billion of City funds is projected in the CIP for these projects.

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

## Cash Management

B oth the Authority and the Water B oard have funds which are invested. The Authority's investments must conform to the policies set forth in the Authority's Investment Guidelines, dated April 17, 1998. Specifically, the Authority may invest in any bonds or other obligations which constitute direct obligations of, or are guaranteed by, the federal government, including obligations of any agency, corporation or instrumentality thereof; direct obligations of, or obligations guaranteed by the State or direct obligations of any agency or public authority thereof, provided such obligations are rated in one of the two highest rating categories by a R ating Agency; bankers' acceptances or certificates of deposit issued by a commercial bank, with its principal place of business within the State and having capital or surplus in excess of $\$ 100$ million; corporate securities, including commercial paper and fixed income obligations, rated by a Rating Agency in its highest category for comparable types of obligations; or repurchase agreements collateralized by obligations of the federal government. The Authority employs various methods for the investment of its funds. The Authority's management is responsible for the investment of certain funds, and utilizes an investment manager for the active management of some funds; additionally, the Authority invests in forward purchase agreements and guaranteed investment contracts. The Water B oard makes its own investments through the City Comptroller's investment group.

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

## Independent Audit

Section 6.11 (b) of the Financing Agreement by and among the City, the Authority and the Water Board dated as of July 1,1985 requires that the Authority shall submit to the Mayor, the Comptroller and the Director of Management and Budget of the City audited annual financial statements of the Authority and the Water B oard. The financial section of the 2007 Comprehensive Annual Financial Report begins with the report of our independent auditors, Grant Thornton LLP. This report expresses an unqualified opinion as to the fairness of the presentation of our financial statements.

Respectfully submitted,

| Patrick J. McCoy | Lawrence R. Glantz |
| :--- | :--- |
| Executive Director | Comptroller |

# Clearing the Waters 

The native Lenni Lenape knew their island as "Land of many hills." A British map of northern M anhattan in 1777 is one of the earliest accurately detailed records of the island's complex natural topography. Over the four hundred years since Hudson first viewed it, nearly every inch has been altered, mostly beyond all recognition.

The many species of fish native to Hudson's estuary include menhaden, alewife, shad, eel, needlefish, bluefish, sturgeon, striped bass, white perch, herring, cod, mackerel, and butterfish. Native oysters, clams, mussels, and crabs were staples of the Indian diet. At one point it was estimated that the Hudson's oyster beds, thought at the time to be inexhaustible, held 50 percent of the world's available supply.

t is now almost 400 years since Henry Hudson and his small crew of Dutch and English sailors first sailed tentatively through what is now known as the Narrows, between Staten Island and Brooklyn, and laid eyes on the Island called by the native Lenni Lenape something that sounded to European ears like M annahatta. Its rolling green hills were "as pleasant with grasse and flowers, and goodly trees as ever they had seene, and very sweet smells came from them!" Deceived by the river's depth, volume of water, and ebbing and flowing tides, into believing that he might have found what he was looking for - a shortcut to the treasures of the Far East - Hudson sailed on until, approaching the present location of Albany, the encouraging clues had diminished enough to convince him that there would be no way through. (On a much earlier, but similar mission, in 1524, Giovanni da Verrazzano had ventured as far as the Narrows where a bridge now bears his name, but mistook the harbor before him for a lake and turned away to sail on along the coast of Long Island and north to New England.)

Hudson failed in his mission, but returned to Europe with tantalizing descriptions of the land he had seen. Those who were encouraged by his accounts to follow him, and to settle along the shorelines of the Upper New York Bay themselves became part of a fantastically rich and varied estuarine ecosystem thriving in all manner of habitats - tidal marshes, oak, chestnut, and hemlock forest, grassy meadows, rocky springs and streams. Again and again the earliest explorers, adventurers, and settlers remarked in their logs and journals, as had Hudson's crew, on sw eet gardenlike scents encountered as they approached the shore from the open sea. This promising environment nurtured millions of birds, gigantic seasonal runs of fish, vast oyster beds, vigorous populations of white-tailed deer, elk, black bear, wolf, and mountain lion as well as literally countless species of smaller mammals, reptiles, amphibians, and insects.

Though a sparse population of native humans had lived for thousands of years in cooperative harmony with these surroundings, Europeans and others who arrived and prospered in the follow ing years would overwhelm the original landscape with their own industriousness.

TNature Challenged he 1624 settlement the Dutch knew as Niew Amsterdam, at the southern tip of M anhattan Island, had grow n dramatic ally by the time it was aquired by the British in 1664 and renamed New York. By 1743 it was the third largest city in North America behind Boston and Philadelphia and had passed them by 1790. It's great natural deep-water port had become the busiest in the colonies. Water - navigable, potable, and plentiful - was the young city's most treasured resource. Wells and natural springs provided fresh water and, for more than 200 years, the netw ork of ponds, and streams feeding into surrounding waterways merged with tidal water sloshing back and forth through them created a net outflow of 23 billion gallons each day that seemed a logical and harmless repository for waste. Eventually, however, the city's unique attributes - deep and apparently abundant water, especially - continued to attract commerce, industry, and a steady flow of immigration. Until the City's first upstate reservoir system was developed in

1842, New Yorkers depended on well w ater - and enterprising street
vendors - for their drinking w ater.
As the population multiplied, the demand for fresh w ater grew. With no system for disposing of sewage and garbage, human and animal waste polluted the water supply, causing frequent epidemics of contagious waterborne diseases such as yellow fever and cholera. It soon became abundantly clear that something had to be done to rid the streets of contaminating waste and trash. Within four years of the 1842 opening of the Croton Aqueduct, 183 million gallons of fresh water per day were flow ing from upstate reservoirs, rushing through households, factories, pubs, and firehoses into gutters, sewers, and storm drains and, ultimately, into the harbor and waterways surrounding the city. It was inevitable that nature alone could not handle the volume of wastewater that New York City was producing. But it was not until late in the 19th Century that concern for the health of the population, for the habitats of wildlife, and for the overall quality of life began to gain urgency.


A hundred and fifty miles of twice-daily tidal swishing, along with sharp seasonal climatic changes made the tidal river, or estuary, a great food factory. From the pre-European Lenni Lenape centuries through the prosperous 1900s, as local clams, oysters, and other seafood were enjoyed at the tables of poor and rich alike, over-fishing and over-harvesting combined with an ever-increasing volume of human-generated waste to eliminate the river and estuary waters as a viable food resource.


New York's geography, climate, and the ocean's tides combine to provide a unique environment for wildlife and human commerce. M ore than 13 billion gallons of fresh water per day flow into the city's waterways from the Hudson, Raritan, and Passaic rivers to mix with 57 million gallons of tidal salt water entering and leaving the estuary each day from the Atlantic Ocean, and with another net flow southward from Long Island Sound via the East River. Experience has shown that the 2.3 billion gallons per day of wastewater (purple arrows) contributed by the City to this flow, if not first thoroughly restored, are more than enough to undermine the intricately balanced natural ecosystem of the estuary.


N
A Balance Distressed
ew York Harbor is an unusually complex estuary in which the fresh water flows of the Hudson, Passaic, Raritan and Hackensack Rivers (as well as several smaller rivers) mix with tidal currents in the Harbor's multiple bays, straights and channels. Water is continually entering and exiting the Harbor. The average amount of time that it spends in the Harbor has a strong influence on water quality. During periods of high tidal activity and/or high freshwater flows, the time decreases and water quality is generally better. How ever, during periods of low freshwater flow and low tidal cycles, water will remain in the Harbor longer, on average, and water quality can deteriorate.

W astew ater treatment began in New York City in the late 1890s and early 1900s at tw o locations in Brooklyn and one in Queens. Because of the popularity of public beaches, these three areas were considered a high priority. W astew ater treatment then consisted of chemical coagulation for settling and seasonal disinfection with chlorine. The goal was to keep the beaches clean and to protect the health of beach goers more than maintaining water quality.
As the population grew to 3.5 million, these plants became overburdened. When the link was made between waterborne bacteria and diseases in humans, it was recognized that a master plan was needed to study and protect the surrounding waterways. As a result, in 1904, the Metropolitan Sewerage commission was created. The commission undertook harbor surveys and water quality analysis, performed studies of the tides and the harbor's natural flushing action, and developed a City M aster Plan for wastew ater treatment plants. The plan included construction of treatment plants to meet the needs of the growing population and identified the optimum locations for future sites.

New York City is one of the most densely populated cities in the world. Although it has over 1,700 parks covering over 28,000 acres of land throughout the five boroughs, the City is home to over 8.25 million residents. Even those precious patches of green parkland are, in most cases, reconstituted nature. Though often beautiful, aesthetically gratifying, and attractive to the wildlife that can manage to find them, they are isolated and limited in their ability to process water and return it to the environment.

To Restore and M aintain etw een 1935 and 1945 three-new wastew ater treatment plants were con-structed- Wards Island in M anhattan and Bowery Bay and Tallman Island in Queens. The Wards Island plant, which came on line in 1936 was built to handle flows from the east side of $M$ anhattan and the lower part of the Bronx, and was soon follow ed by Bowery Bay and Tallman Island.

As the City's population approached 7.5 million, the Coney Island, 26th W ard and J amaica plants were upgraded. This brought the citywide capacity for treatment to 497 million gallons per day. Between 1945 and 1965 , five new plants were built to meet the needs of the continually expanding population, which was now nearing eight million. These were Hunts Point in the Bronx, Oakwood Beach and Port Richmond in Staten Island, and the Rockaw ay plant in Queens and the Owls Head plant in Brooklyn. During this period, the older Bowery Bay, Coney Island and Tallman Island plants underwent upgrades. With the addition of these five, there were eleven sewage treatment plants in the City and the cityw ide capacity for sewage treatment increased to more than a billion gallons per day. Between 1965 and 1979, the New town Creek wastew ater treatment plant, designed to treat 310 million gallons per day, was built in Brooklyn on a relatively small footprint of 30 acres. The Spring Creek auxiliary plant, a pilot combined sewer overflow facility with a 10 million gallon (1) holding tank for storm water, was also built, connecting to the 26th Ward plant. By 1968, 12 w astew ater treatment plants were operating in the area of New York City, removing an average of 65 percent of pollutants from New York City wastewater. In 1972, the federal government passed the Clean W ater Act requiring plants be upgraded to secondary treatment, which removed up to 85 percent of pollutants. Eight plants were upgraded, bringing the citywide capacity to 1.4 billion gallons per day. By 1979, three more plants were upgraded to full secondary treatment, and two more new treatment plants were completed- the Red Hook plant in Brooklyn and the North River plant, positioned on a platform in the Hudson River. Virtually all raw sewage generated in New York City was then being captured and treated. Today, the City's wastew ater treatment plants have the capacity to treat dry weather flows of 1.8 billion gallons daily.

A mature striped bass may weigh more than forty pounds. Long a favorite of sport and commercial fishermen as well as gourmets, they pass through the harbor each spring on the way to breeding grounds in the less saline waters of small tributaries as much as fifty miles up the Hudson. For 100 years they have been accumulating and retaining "PCBs", a class of persistent organic pollutants discarded by several industrial operations along the Hudson's banks as far north as Troy, affecting their own health as well as that of anything or anyone that might ingest them. Commercial harvest of striped bass has not been allowed in the Hudson since 1976 when the New York State Department of Environmental Conservation issued a health warning against eating them. Their numbers have increased due to this and another, perhaps even more significant factor- the return to the improv-
 Hudson through the mid-20th century was the appearance of stakes and nets stretching out from the riverbanks set to trap the spawning American shad, prized for their flesh and roe. They became scarce due to the combination of overfishing and undernourishment as the Hudson's ecosystem was degraded. But they too are returning in increasing numbers.

As the water quality of the salt marshes of Long Island and Staten Island have improved, fish and bird species have returned to hunt and breed within sight of the City's skyline.



A typical "PCB" molecule

A
A M ore Promising Future
positive change has occurred in the Hudson River system and for the first time in fifty years, we have a chance to observe a great recovery of a major estuary. In 1909, the City of New York began collecting water quality data in New York Harbor to be utilized by regulators, scientists, educators and citizens to assess impacts, trends and improvements in the water quality of New York Harbor. The Harbor Survey Program has been the responsibility of the DEP's M arine Sciences Section for the past 20 years. The initial effort has grown into a Survey that consists of 51 stations; 34 stations located throughout the open waters of the Harbor, and upwards of 17 stations located in smaller tributaries within the City. The number of $w$ ater quality parameters measured has also increased from five in 1909 to over 20 at present. Harbor water quality has improved dramatically since the initial surveys. During the last decade, w ater quality in NY harbor has improved to the point that the waters are now utilized for recreation and commerce throughout the year. These improvements have brought attention to areas within the harbor that remain impaired. The DEP's Long Term Control Program has begun to focus on those areas within the harbor that remain impacted. This project will look at 18 waterbodies and their drainage basins and will develop a comprehensive plan for each waterbody to attain its best use classification.


Improved water quality, combined with greater accessibility provided by the development of recreational piers, riverfront parks, and trails continues to attract more and more liesure-time activity to the harbor and its surrounding waterways. Pleasure craft of all shapes and sizes, pow erboats, sailboats, kayaks, and canoes have again become commonplace. Outrigger canoes with crews from around the world gather to race each year, and the annual New York City Triathlon starts with a plunge into the Hudson for a 1500 -meter swim.


The Harbor Survey's biochemical measurements evaluate the ecologi-

## Dissolved Oxygen

Inner Harbor Area (Summer Average)

 right during recent decades has indicated a continuing trend tow ard better water quality. cal health of the harbor and suitability for recreational and commercial uses. The level of oxygen dissolved in the water, for instance, signific antly effects the health of aquatic life, while the presence and possible impact of high levels of nutrients such as ammonia, nitrites, nitrates and phosphorous can result in major algae grow th, reducing water clarity, with subsequent reductions in dissolved oxygen as the algae decompose. While levels fluctuate from year to year, measurefluctuate from year to year, measure

# Certificate of Achicvement for Excellence in Financial Rcporting 

New York City<br>Water and Sewer System<br>New York<br><br>Finimacil Reper<br>[ur Clu Fitual Tell Enciud<br>Junc 30, 200̈







,



Pucsicker



## Report of Independent Certified Public Accountants

## Grant Thornton 8

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

W
e have audited the accompanying balance sheets and the related statements of revenues, expenses and changes in net assets, and cash flows of the business-type activities of the New York City Municipal Water Finance Authority and the New York City Water Board, which collectively comprise the New York City Water and Sewer System (the System), a component unit of the City of New York, New York, as of and for the years ended June 30, 2007 and 2006. These financial statements, which collectively comprise the basic financial statements of the System, are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America as established by the Auditing Standards Board of the American Institute of Certified Public Accountants. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinions.
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the New York City Municipal Water Finance Authority and the New York City Water Board of the System as of June 30, 2007 and 2006, and the respective changes in their net assets and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.
The accompanying management's discussion and analysis (M D\&A) is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding methods of measurement and presentation of the required supplementary information. However, we did not audit the information comprising the MD \&A and express no opinion on it.


New York, New York
October 30, 2007

## 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, 2007 and 2006. The System 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 B oard (the Board).

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 for the purposes of displaying entity-wide information, in accordance with Governmental Accounting Standards B oard (GASB) Statement No. 34, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments, as amended. These financial 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 2007, 2006 and 2005.

|  | 2007 | 2006 | 2005 |
| :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |
| Revenues |  |  |  |
| Water supply and distribution | \$ 796,404 | \$ 735,200 | \$ 755,693 |
| Sewer collection and treatment | 1,238,612 | 1,143,424 | 1,043,575 |
| Other operating revenues | 98,061 | 100,306 | 85,459 |
| Total operating revenues | 2,133,077 | 1,978,930 | 1,884,727 |
| Subsidy income | 90,601 | 88,447 | 78,834 |
| Investment income, net | 98,132 | 105,239 | 97,362 |
| Total revenues | 2,321,810 | 2,172,616 | 2,060,923 |
| Expenses |  |  |  |
| Operations and maintenance | 1,147,157 | 1,056,379 | 944,919 |
| Bad debt expense | 226,028 | 87,222 | 114,702 |
| Administration and general | 35,493 | 26,727 | 23,168 |
| Depreciation and amortization | 579,860 | 500,161 | 515,325 |
| L oss on retirement of fixed assets | 23,257 | 7,046 | 7,971 |
| Interest expense | 771,656 | 731,563 | 668,675 |
| Total expenses | 2,783,451 | 2,409,098 | 2,274,760 |
| Net loss before capital contributions (distributions) | $(461,641)$ | $(236,482)$ | $(213,837)$ |
| Capital (distributions) contributions, net | $(20,776)$ | $(19,241)$ | $(185,242)$ |
| Change in net assets | $(482,417)$ | $(255,723)$ | $(399,079)$ |
| Net assets - beginning | 2,899,381 | 3,155,104 | 3,554,183 |
| Net assets - ending | \$2,416,964 | \$2,899,381 | \$3,155,104 |

## Management's Discussion and Analysis (continued)

## Operating Revenue

2007-2006

Total operating revenues increased by $8 \%$, principally from a rate increase of $9.4 \%$.

2006-2005
Total operating revenues increased by $5 \%$, principally resulting from a rate increase of $3 \%$.
The following summarizes other operating revenues (in thousands):

|  | 2007 | 2006 | 2005 |
| :--- | ---: | ---: | ---: |
| Upstate water fees | $\$ 42,197$ | $\$ 42,693$ | $\$ 27,290$ |
| Late payment fees | 43,286 | 45,519 | 47,810 |
| Connection fees and permits | 12,578 | 12,094 | 10,359 |
| Total other operating revenues | $\$ 98,061$ | $\$ 100,306$ | $\$ 85,459$ |

2007-2006

Other operating revenues have remained relatively level for 2007.
Investment income decreased by $\$ 7$ million or $7 \%$ primarily due to reduced average balances in escrow investments, less unrealized gains on investments and swap payments.

2006-2005

The System has collected $\$ 15$ million of upstate water fees that had been in dispute for several years. These payments resulted in an increase in other fee revenue of nearly $17 \%$ or $\$ 15$ million.

## Investment Income

Investment income increased by $\$ 8$ million. Investment balances in construction and revenue and debt service funds increase from 2005. Interest rates earned on investments also increased.

## Operating Expenses

2007-2006

Total operations and maintenance expense increased by $\$ 91$ million or $9 \%$; Key components of the changes are increased operations and maintenance costs of $\$ 47$ million or $6 \%$; judgements and claims increased by $\$ 23$ million; and the rental payment increased by $\$ 13$ million.

## Management's Discussion and Analysis (continued)

Bad debt expense increased by $\$ 139$ million. The System has not collected current and past-due receivables.
Interest expense increased by $\$ 40$ million or $5 \%$. Total debt of the System has increased by $\$ 1.9$ billion or $12 \%$.

In 2007, the System granted back to the City land that had been purchased with bond proceeds. The total grant was $\$ 33$ million. The System also received capital grants from other sources of $\$ 12$ million.

## 2006-2005

Total operations and maintenance expense increased by $\$ 111$ million or $12 \%$. The rental payment to the City for debt service increased by $\$ 10$ million. Payments for watershed improvements increased by $\$ 21$ million. All other operations and maintenance costs increased by $\$ 80$ million or $10 \%$.

Bad debt expense decreased by $\$ 28$ million. Receivable balances have decreased, as the System has collected on past-due amounts.

Interest expense increased by $\$ 63$ million or $9 \%$. Total debt of the System has increased by $9 \%$ and interest expense has increased by about the same percentage.

In 2006, the System granted back to the City land that had been purchased with bond proceeds. The total grant was $\$ 33$ million. The System also received grants from other sources of $\$ 14$ million.

A summary of the System's assets, liabilities and net assets follows:

|  | 2007 | 2006 | 2005 |
| :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |
| Current assets | \$ 2,075,754 | \$ 1,954,277 | \$ 2,436,222 |
| Deferred bond and financing expenses | 134,673 | 130,728 | 125,582 |
| Capital assets | 18,435,696 | 17,155,603 | 16,008,960 |
| Total assets | 20,646,123 | 19,240,608 | 18,570,764 |
| Long-term liabilities | 16,691,440 | 15,306,834 | 13,955,495 |
| Current liabilities | 1,537,719 | 1,034,393 | 1,460,165 |
| Total liabilities | 18,229,159 | 16,341,227 | 15,415,660 |
| Net assets |  |  |  |
| Invested in capital assets, net of related debt | 2,130,364 | 2,556,766 | 2,803,031 |
| Restricted for debt service | 161,661 | 171,859 | 152,544 |
| Restricted for operations and maintenance | 175,161 | 157,806 | 145,693 |
| Unrestricted (deficit) | $(50,222)$ | 12,950 | 53,836 |
| Total net assets | 2,416,964 | 2,899,381 | 3,155,104 |
| Total liabilities and net assets | \$20,646,123 | \$19,240,608 | \$ 18,570,764 |

## Management's Discussion and Analysis (continued)

## 2007-2006

Current assets increased by $\$ 122$ million or $6 \%$. This increase was due to construction funds on deposit at June 30, 2007.

Total liabilities have increased by $\$ 1.9$ billion, which was due to the increase in debt payable.

2006-2005
Current assets decreased by $\$ 482$ million. This decrease was due primarily to escrow deposits, which decreased by $\$ 363$ million as bonds were paid off by the escrow amounts.

## Capital Assets

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

|  | 2007 | 2006 | 2005 |
| :---: | :---: | :---: | :---: |
|  | (in thousands) |  |  |
| Utility plant construction | \$ 4,766,145 | \$ 4,546,209 | \$ 4,010,861 |
| Buildings | 23,493 | 22,266 | 22,071 |
| Equipment | 629,384 | 472,034 | 424,673 |
| Water supply and wastewater treatment systems | 12,127,873 | 10,886,477 | 10,152,707 |
| Water distribution and sewage collection systems | 8,014,647 | 7,844,126 | 7,579,881 |
| Total utility plant in service | 20,795,397 | 19,224,903 | 18,179,332 |
| Less accumulated depreciation | 7,125,846 | 6,615,509 | 6,181,233 |
| Total, net utility plant in service | 13,669,551 | 12,609,394 | 11,998,099 |
| Total capital assets | \$18,435,696 | \$17,155,603 | \$16,008,960 |

Management's Discussion and Analysis (continued)

The net increase in the System's capital assets during fiscal year 2007 was $\$ 1,280$ million or $8 \%$. Net capital asset additions for 2007 were $\$ 1,790$ million.

The net increase in the System's capital assets during fiscal year 2006 was $\$ 1,147$ million or $7 \%$. Net capital asset additions for 2006 were $\$ 1,581$ million.

The capital assets of the System are detailed in footnotes $2-d$ and 3 of the notes to the accompanying financial statements.

## Debt Administration

The Authority issues debt to pay for the capital improvements to the System and certain related costs. 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 periodically issues refunding bonds to refinance higher coupon debt.

At June 30, 2007, the total outstanding debt of the System was $\$ 18.1$ billon, of which $\$ 800$ million was commercial paper. The remaining $\$ 17.3$ billion consisted of variable and fixed-rate bonds and notes maturing in varying installments through 2039. The total outstanding long-term debt at June 30, 2007 was as follows:
(In thousands)

| Issue date |  |
| :--- | ---: |
| 2007 | $\$ 2,214,873$ |
| 2006 | $2,588,192$ |
| 2005 | $2,790,956$ |
| 2004 | $1,669,095$ |
| 2003 | $2,770,818$ |
| 2002 and prior | $5,237,250$ |
| Total long-term debt | $\$ 17,271,184$ |

In the summary above, bonds retired through refundings in 2007 are removed from the year in which the refunded bonds were issued and the refunding bonds are included in the 2007 amount.

In fiscal year 2007, the Authority issued $\$ 1,527,745,000$ water and sewer revenue bonds directly to the public, including $\$ 411,860,000$ of refunding bonds and $\$ 1,115,885,000$ in new money financing. The Authority also issued $\$ 693,364,670$ of Clean Water and Drinking Water State Revolving Fund (SRF) bonds to EFC, $\$ 518,427,784$ of which were issued for new money purposes and $\$ 174,936,886$ refunded outstanding debt. The new money bond proceeds provided long-term financing of commercial paper notes which had previously financed capital improvements to New York City's Water and Sewer System.
In fiscal year 2007, the Authority continued to take advantage of historically low interest costs on fixed-rate borrowing by issuing predominantly fixed-rate bonds on the long end of the curve. In fiscal 2007, the Authority sold seven fixed-rate and one variable-rate demand bond issues. The First Resolution Fiscal 2007 Series A bonds and the Second Resolution Fiscal 2007 Series AA, B B, CC and DD bonds were sold directly to public. The Second Resolution Fiscal 2007 Series 1,2 and 3 were issued to EFC to secure bonds issued by EFC on behalf on the Authority.

## Management's Discussion and Analysis

On October 25, 2006, the Authority closed its first transaction of fiscal year 2007. The Second Resolution Fiscal 2007 Series AA and Series B B bonds were sold at a par amount of $\$ 199,910,000$ and $\$ 134,360,000$, respectively. The Fiscal 2007 Series AA bonds were comprised of term bonds maturing in 2037 and 2039. Proceeds from the sale of these bonds were used to defease a portion of the Authority's commercial paper Series 6 notes and to pay costs of issuance. The Fiscal 2007 Series BB bonds refunded on a current basis $\$ 29,045,000$ of the Fiscal 1996 Series C bonds and $\$ 105,045,000$ of the Fiscal 1997 Series A bonds. The Fiscal 2007 Series B B B onds were issued as serial bonds.

On November 30, 2006, the Authority closed on its variable-rate demand bonds. The Fiscal 2007 Series CC bonds were sold in two sub-series at a total par amount of $\$ 210,500,000$. Both sub-series were offered in the daily reset mode. Proceeds from the sale were used to defease all of the Authority's commercial paper Series 1 and a portion of Series 5 L ot A notes, to fund a portion of the Authority's capital program and to pay certain costs of issuance.

On M arch 27, 2007, the Authority closed its first transaction with EFC in fiscal year 2007. The Fiscal 2007 Series 1 and Series 2 bonds were issued to EFC in the respective amounts of $\$ 228,112,917$ and $\$ 290,314,867$. Proceeds of these borrowings were used to defease all of the Authority's commercial paper Series 5 and 7 and a portion of commercial paper Series 1 notes. Proceeds were also used to fund a portion of the Authority's capital program and to pay the costs of issuance of the bonds. Both series were comprised of serial bonds in years 2007 through 2036.

On March 29, 2007, in a common plan of finance with the Fiscal 2007 Series 1 and Series 2 bonds, the Authority issued the Fiscal 2007 Series A bonds directly to the public. The bonds were sold at a par amount of $\$ 587,975,000$. Proceeds from the sale were used to refund all of the then outstanding Fiscal 1998 Series B bonds and a portion of the Fiscal 2002 Series A bonds, defease a portion of the Authority's commercial paper Series 1 notes and all of commercial paper Series 6 notes, pay certain costs of issuance and fund a portion of the debt service reserve fund. This issue consisted of four term bonds maturing in years 2030, 2033, 2037 and 2039. The 2039 maturity was insured by Financial Security Assurance Inc.

On May 15, 2007, $\$ 174,936,886$ of Fiscal 2007 Series 3 bonds were issued to EFC to partially refund the Authority's Fiscal 1998 Series 3 bonds. The Fiscal 2007 Series 3 bonds extended the maturity date to 30 years from the original issuance date of the refunded bonds and paid certain costs of issuance.
On May 31, 2007, the Authority sold $\$ 395,000,000$ of the Fiscal 2007 Series DD bonds. Proceeds from the sale were applied to defease all of the Authority's commercial paper Series 1 and 6 notes, to fund a portion of the Authority's capital program and pay costs of issuance. The issue included term bonds that mature in years 2035, 2036, 2038 and 2036.

The total of bonds and notes payable are detailed in footnote numbers 7 and 8 of the notes to the financial statements.

## Economic Factors and Next Year's Rates

Rates are adopted each year by the B oard in May for the following fiscal year. A rate increase of $9.4 \%$ for fiscal 2007 became effective July 1, 2006 based on projected revenues and costs.

## Request for Information

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

## B alance Sheets

Year ended June 30, 2007
(in thousands)

| Assets | New York City |  | Eliminations | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Water Board | Municipa Finance Authority |  |  |
|  |  |  |  |  |
| accumulated depreciation |  |  |  |  |
| of \$7,125,846 | \$13,669,551 | \$ - | \$ - | \$ 13,669,551 |
| Utility plant construction | 4,766,145 | - | - | 4,766,145 |
| Total capital assets | 18,435,696 | - | - | 18,435,696 |
| Current assets |  |  |  |  |
| Cash and cash equivalents | 104,932 | 1,070,154 | - | 1,175,086 |
| Investments | 83,406 | 350,944 | - | 434,350 |
| Accrued interest receivable | 145 | 2,969 | - | 3,114 |
| Accounts receivable |  |  |  |  |
| Billed, less allowance for uncollectible receivables |  |  |  |  |
| of \$213,840 | 278,176 | - | - | 278,176 |
| Unbilled | 169,310 | - | - | 169,310 |
| Receivable from the City | 15,718 | - | - | 15,718 |
| Total current assets | 651,687 | 1,424,067 | - | 2,075,754 |
| Revenue requirement due from the Board | - | 9,479,193 | $(9,479,193)$ |  |
| Long-term deferred bond and financing expenses | - | 134,673 | - | 134,673 |
| Total assets | \$ 19,087,383 | \$ 11,037,933 | \$ $9,479,193)$ | \$20,646,123 |

B alance Sheets (continued)

Year ended June 30, 2007
(in thousands)

|  | New York City |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | Municipal |  |
| Liabilities and Net Assets | Water | Finance |  |


| Long-term liabilities |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Bonds and notes payable, less current portion | \$ | \$17,060,213 | \$ - | \$17,060,213 |
| Net discount on bonds and notes payable |  | $(13,838)$ | - | $(13,838)$ |
| Deferred bond refunding costs |  | $(354,935)$ | - | $(354,935)$ |
| Revenue requirement payable to the Authority | 9,479,193 | - | $(9,479,193)$ | - |
| Total long-term liabilities | 9,479,193 | 16,691,440 | $(9,479,193)$ | 16,691,440 |
| Current liabilities |  |  |  |  |
| Accounts payable and accrued expenses | 34,110 | 43,397 | - | 77,507 |
| Revenues received in advance | 73,727 | - | - | 73,727 |
| Current portion of bonds and notes payable | - | 1,010,971 | - | 1,010,971 |
| Payable to the City |  | 361,860 | - | 361,860 |
| Refunds payable to customers | 13,654 | - | - | 13,654 |
| Total current liabilities | 121,491 | 1,416,228 | - | 1,537,719 |
| Total liabilities | 9,600,684 | 18,107,668 | $(9,479,193)$ | 18,229,159 |

Net assets

| Invested in capital assets, net of related debt | 18,435,696 | (16,305,332) | - | 2,130,364 |
| :---: | :---: | :---: | :---: | :---: |
| Restricted for debt service | - | 161,661 |  | 161,661 |
| Restricted for operations and maintenance | 175,161 |  |  | 175,161 |
| Unrestricted (deficit) | $(9,124,158)$ | 9,073,936 | - | $(50,222)$ |
| Total net assets (deficit) | 9,486,699 | $(7,069,735)$ | - | 2,416,964 |
| Total liabilities and net assets | \$19,087,383 | \$11,037,933 | \$ $(9,479,193)$ | \$20,646,123 |

## Balance Sheets

Year ended June 30, 2006
(in thousands)

|  | New York City |  | Eliminations | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Water Board | Municipal Water Finance Authority |  |  |
| Assets |  |  |  |  |
| Utility plant in service, less accumulated depreciation of $\$ 6,615,509$ | \$12,609,394 | \$ - | \$ - | \$ 2,609,394 |
| Utility plant construction | 4,546,209 | - | - | 4,546,209 |
| Total capital assets | 17,155,603 | - | - | 17,155,603 |
| Current assets |  |  |  |  |
| Cash and cash equivalents | 87,723 | 879,236 | - | 966,959 |
| Investments | 78,753 | 433,725 | - | 512,478 |
| Accrued interest receivable | 611 | 2,228 | - | 2,839 |
| Accounts receivable <br> Billed, less allowance for uncollectible receivables of $\$ 143,696$ | 308,165 | - | - | 308,165 |
| Unbilled | 155,330 | - |  | 155,330 |
| Receivable from the City | 8,506 | - | - | 8,506 |
| Total current assets | 639,088 | 1,315,189 | - | 1,954,277 |
| Revenue requirement due from the Board | - | 8,376,317 | (8,376,317) | - |
| Long-term deferred bond and financing expenses | - | 130,728 | - | 130,728 |
| Total assets | \$ 17,794,691 | \$9,822,234 | \$(8,376,317) | \$19,240,608 |

## B alance Sheets (continued)

Year ended June 30, 2006
(in thousands)

| Liabilities and Net Assets | New York City |  | Eliminations | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Water Board | Municipal Water Finance Authority |  |  |
| Long-term liabilities |  |  |  |  |
| Bonds and notes payable, less current portion | \$ | \$ 15,719,290 | \$ - | \$15,719,290 |
| Net discount on bonds and notes payable | - | $(42,007)$ | - | $(42,007)$ |
| Deferred bond refunding costs |  | $(370,449)$ | - | $(370,449)$ |
| Revenue requirement payable to the Authority | 8,376,317 | - | $(8,376,317)$ | - |
| Total Iong-term liabilities | 8,376,317 | 15,306,834 | $(8,376,317)$ | 15,306,834 |
| Current liabilities |  |  |  |  |
| Accounts payable and accrued expenses | 6,099 | 42,820 | - | 48,919 |
| Revenues received in advance | 78,480 | - | - | 78,480 |
| Current portion of bonds and notes payable |  | 566,061 | - | 566,061 |
| Payable to the City | - | 326,124 | - | 326,124 |
| Refunds payable to customers | 14,809 | - | - | 14,809 |
| Total current liabilities | 99,388 | 935,005 | - | 1,034,393 |
| Total liabilities | 8,475,705 | 16,241,839 | $(8,376,317)$ | 16,341,227 |

## Net assets

Invested in capital assets, net of related debt
Restricted for operations and maintenance
Unrestricted (deficit)
Total net assets (deficit)

Total liabilities and net assets

| $17,155,603$ | $(14,598,837)$ | - | $2,556,766$ |
| ---: | ---: | ---: | ---: |
| - | 171,859 | - | 171,859 |
|  |  | - | 157,806 |
| 157,806 | - | - | 12,950 |
| $(7,994,423)$ | $8,007,373$ |  |  |
| $9,318,986$ | $(6,419,605)$ | - | $2,899,381$ |
|  |  |  |  |
| $17,794,691$ | $\$ 9,822,234$ | $\$(8,376,317)$ | $\$ 19,240,608$ |

## Statements of Revenues, Expenses and Changes in Net Assets

Year ended June 30, 2007
(in thousands)

|  | New York City |  | Total |
| :---: | :---: | :---: | :---: |
|  | Water Board | Municipal Water Finance Authority |  |
| Operating revenues |  |  |  |
| Water supply and distribution | \$ 796,404 | \$ - | \$ 796,404 |
| Sewer collection and treatment | 1,238,612 | - | 1,238,612 |
| Other operating revenues | 98,061 | - | 98,061 |
| Total operating revenues | 2,133,077 | - | 2,133,077 |
| Operating expenses |  |  |  |
| Operations and maintenance | 1,147,157 | - | 1,147,157 |
| Bad debt expense | 226,028 | - | 226,028 |
| Administration and general | 16,996 | 18,497 | 35,493 |
| Total operating expenses | 1,390,181 | 18,497 | 1,408,678 |
| Depreciation and amortization | 535,530 | 44,330 | 579,860 |
| Operating income (loss) | 207,366 | $(62,827)$ | 144,539 |
| Nonoperating revenue (expense) |  |  |  |
| Interest expense | - | $(771,656)$ | $(771,656)$ |
| L oss on retirement of fixed assets | $(23,257)$ | - | $(23,257)$ |
| Subsidy income |  | 90,601 | 90,601 |
| Investment income, net | 4,380 | 93,752 | 98,132 |
| Net income (loss) before capital contributions (distributions) | 188,489 | $(650,130)$ | $(461,641)$ |
| Capital distributions - net | $(20,776)$ | - | $(20,776)$ |
| Change in net assets | 167,713 | $(650,130)$ | $(482,417)$ |
| Net assets (deficit) at beginning of year | 9,318,986 | $(6,419,605)$ | 2,899,381 |
| Net assets (deficit) at end of year | \$9,486,699 | \$ $(7,069,735)$ | \$2,416,964 |

## Statements of Revenues, Expenses and Changes in Net Assets

Year ended June 30, 2006
(in thousands)

|  | New York City |  | Total |
| :---: | :---: | :---: | :---: |
|  | Water Board | Municipal Water Finance Authority |  |
| Operating revenues |  |  |  |
| Water supply and distribution | \$ 735,200 | \$ - | \$ 735,200 |
| Sewer collection and treatment | 1,143,424 | - | 1,143,424 |
| Other operating revenues | 100,306 | - | 100,306 |
| Total operating revenues | 1,978,930 | - | 1,978,930 |
| Operating expenses |  |  |  |
| Operations and maintenance | 1,056,379 | - | 1,056,379 |
| Bad debt expense | 87,222 | - | 87,222 |
| Administration and general | 8,670 | 18,057 | 26,727 |
| Total operating expenses | 1,152,271 | 18,057 | 1,170,328 |
| Depreciation and amortization | 450,860 | 49,301 | 500,161 |
| Operating income (loss) | 375,799 | $(67,358)$ | 308,441 |
| Nonoperating revenue (expense) |  |  |  |
| Interest expense | - | $(731,563)$ | $(731,563)$ |
| Loss on retirement of fixed assets | $(7,046)$ | - | $(7,046)$ |
| Subsidy income | - | 88,447 | 88,447 |
| Investment income, net | 3,092 | 102,147 | 105,239 |
| Net income (loss) before capital contributions (distributions) | 371,845 | $(608,327)$ | $(236,482)$ |
| Capital distributions - net | $(19,241)$ | - | $(19,241)$ |
| Change in net assets | 352,604 | $(608,327)$ | $(255,723)$ |
| Net assets (deficit) at beginning of year | 8,966,382 | $(5,811,278)$ | 3,155,104 |
| Net assets (deficit) at end of year | \$9,318,986 | \$(6,419,605) | \$2,899,381 |

## Statements of Cash Flows

Year ended June 30, 2007
(in thousands)

|  | New York City |  | Total |
| :---: | :---: | :---: | :---: |
|  | Water Board | Municipal <br> Finance Authority |  |
| Cash flows from operating activities |  |  |  |
| Receipts from customers | \$ 1,917,152 | \$ - | \$ 1,917,152 |
| Payments for operations and maintenance | $(1,071,086)$ |  | $(1,071,086)$ |
| Payments for administration | $(10,291)$ | $(19,204)$ | $(29,495)$ |
| Net cash provided by (used in) operating activities | 835,775 | $(19,204)$ | 816,571 |
| Cash flows from capital and related financing activities |  |  |  |
| Proceeds from issuing bonds, notes and other borrowings, net of issuance costs | - | 4,103,578 | 4,103,578 |
| Acquisition and construction of capital assets | $(20,000)$ | $(1,865,902)$ | $(1,885,902)$ |
| Payments by the Board to the Authority | $(798,763)$ | 798,763 | - |
| Repayments of bonds, notes and other borrowings |  | $(2,329,510)$ | (2,329,510) |
| Interest paid on bonds, notes and other borrowings | - | $(671,831)$ | $(671,831)$ |
| Net cash (used in) provided by capital and related financing activities | $(818,763)$ | 35,098 | (783,665) |
| Cash flows from investing activities |  |  |  |
| Proceeds from sales and maturities of investments | 78,655 | 147,644 | 226,299 |
| Purchases of investments | $(83,303)$ | $(66,303)$ | $(149,606)$ |
| Interest on investments | 4,845 | 93,683 | 98,528 |
| Net cash provided by investing activities | 197 | 175,024 | 175,221 |
| Net increase in cash and cash equivalents | 17,209 | 190,918 | 208,127 |
| Cash and cash equivalents, beginning of year | 87,723 | 879,236 | 966,959 |
| Cash and cash equivalents, end of year | \$ 104,932 | \$ 1,070,154 | \$ 1,175,086 |

## Statements of Cash Flows (continued)

Year ended June 30, 2007
(in thousands)

|  | New York City |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Water Board |  |  |  |  |  |
| Reconciliation of operating income (loss) to net cash provided by (used in) operating activities |  |  |  |  |  |  |
| Operating income (loss) | \$ | 207,366 | \$ | $(62,827)$ | \$ | 144,539 |
| Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities |  |  |  |  |  |  |
| Depreciation and amortization |  | 535,530 |  | 44,330 |  | 579,860 |
| Bad debt expense |  | 226,028 |  | - |  | 226,028 |
| Operations and maintenance expense paid with bond proceeds |  | 61,983 |  | - |  | 61,983 |
| Changes in net assets and liabilities |  |  |  |  |  |  |
| Receivables, net |  | $(210,020)$ |  | - |  | $(210,020)$ |
| Receivable from the City |  | $(7,212)$ |  | - |  | $(7,212)$ |
| Accounts payable and accrued expenses |  | 28,008 |  | 328 |  | 28,336 |
| Revenues received in advance |  | $(4,753)$ |  | - |  | $(4,753)$ |
| Refunds payable to customers |  | $(1,155)$ |  | - |  | $(1,155)$ |
| Net cash provided by (used in) operating activities | \$ | 835,775 | \$ | $(18,169)$ | \$ | 817,606 |

The following are the noncash capital and related financing activities:

- Interest expense includes the amortization of premium and discount in the amount of $\$(3,106)$ in 2007.
- Capital expenditures in the amount of $\$ 361,860$ had been incurred but not paid at June 30, 2007 .
- The Board received capital assets of $\$ 12,357$ in 2007 , which represented capital contributed by the City.


## Statements of Cash Flows

| Year ended June 30, 2006 (in thousands) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | New York City |  | Total |
|  | Wate <br> Board | Municipal Water Finance Authority |  |
| Cash flows from operating activities |  |  |  |
| Receipts from customers | \$1,866,240 | \$ - | \$ 1,866,240 |
| Payments for operations and maintenance | $(966,661)$ | - | $(966,661)$ |
| Payments for administration | $(9,081)$ | $(17,961)$ | $(27,042)$ |
| Net cash provided by (used in) operating activities | 890,498 | $(17,961)$ | 872,537 |
| Cash flows from capital and related financing activities |  |  |  |
| Proceeds from issuing bonds, notes and other borrowings, net of issuance costs | - | 4,018,669 | 4,018,669 |
| Acquisition and construction of capital assets | - | $(1,652,636)$ | $(1,652,636)$ |
| Payments by the Board to the Authority | $(882,898)$ | 882,898 |  |
| Repayments of bonds, notes and other borrowings | - | $(3,190,094)$ | $(3,190,094)$ |
| Interest paid on bonds, notes and other borrowings | - | $(644,464)$ | $(644,464)$ |
| Net cash used in capital and related financing activities | $(882,898)$ | $(585,627)$ | $(1,468,525)$ |
| Cash flows from investing activities |  |  |  |
| Proceeds from sales and maturities of investments | 52,334 | 418,596 | 470,930 |
| Purchases of investments | $(58,660)$ | $(59,289)$ | $(117,949)$ |
| Interest on investments | 2,783 | 108,130 | 110,913 |
| Net cash (used in) provided by investing activities | $(3,543)$ | 467,437 | 463,894 |
| Net increase (decrease) in cash and cash equivalents | 4,057 | $(136,151)$ | $(132,094)$ |
| Cash and cash equivalents, beginning of year | 83,666 | 1,015,387 | 1,099,053 |
| Cash and cash equivalents, end of year | \$ 87,723 | \$ 879,236 | \$ 966,959 |

## Statements of Cash Flows (continued)

Year ended J une 30, 2006
(in thousands)

|  | New York City |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Water Board | Municipal <br> Finance Authority |  |  |  |
| Reconciliation of operating income (loss) to net cash provided by (used in) operating activities |  |  |  |  |  |  |
| Operating income (loss) | \$ | 375,799 | \$ | $(67,358)$ | \$ | 308,441 |
| Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities |  |  |  |  |  |  |
| Depreciation and amortization |  | 450,860 |  | 49,301 |  | 500,161 |
| Bad debt expense |  | 87,222 |  | - |  | 87,222 |
| Operations and maintenance expense paid with bond proceeds |  | 66,833 |  | - |  | 66,833 |
| Changes in net assets and liabilities |  |  |  |  |  |  |
| Receivables, net |  | $(116,768)$ |  | - |  | $(116,768)$ |
| Receivable from the City |  | 22,884 |  | - |  | 22,884 |
| Other |  |  |  | (71) |  | (71) |
| Accounts payable and accrued expenses |  | (411) |  | 167 |  | (244) |
| Revenues received in advance |  | 7,998 |  |  |  | 7,998 |
| Refunds payable to customers |  | $(3,919)$ |  | - |  | $(3,919)$ |
| Net cash provided by (used in) operating activities | \$ | 890,498 | \$ | $(17,961)$ | \$ | 872,537 |

The following are the noncash capital and related financing activities:

- Interest expense includes the amortization of premium and discount in the amount of $\$ 3,606$ in 2006.
- Capital expenditures in the amount of \$326,124 had been incurred but not paid at June 30, 2006 .
- The Board received capital assets of $\$ 13,700$ in 2006 , which represented capital contributed by the City.


## Notes to Financial Statements

June 30, 2007 and 2006

## Note 1-Organization

The New York City Water and Sewer System (the System) provides water supply and distribution, sewage collection, treatment, and disposal for The City of New York (the City). The System, as presented in the accompanying financial statements, began operations on July 1,1985 and is a joint operation consisting of two legally separate and independent entities, the New York City Municipal Water Finance Authority (the Authority) and the New York City Water Board (the Board). The Authority is a public benefit corporation created in accordance with the New York City Municipal Water Finance Act (the Act), duly enacted into law as Chapter 513 of the laws of 1984 of the State of New York, as amended by Chapter 514 of the laws of 1984 of the State of New York. The B oard 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 B oard 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 Financing Agreement (the Agreement) provides that the Authority will issue bonds to finance the cost of capital investment and related costs 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.

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 the Board.

In accordance with Statement No. 14 of the Governmental Accounting Standards B oard (GASB), the B oard and the Authority are considered to be part of the same reporting entity (the System) since they are fiscally interdependent. Accordingly, the accompanying financial statements for the System present the individual financial statements of the Board and the Authority as major funds. In addition, the accompanying financial statements present a total column which represents the entity-wide financial statements of the System. Transactions and balances between the Board and the Authority are eliminated in the entity-wide financial statements.

## Note 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 are 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, guaranteed investment contracts, and repurchase agreements. Investments with maturity periods of greater than one year are carried at market value. Investments with maturities less than one year are carried at cost which approximates fair value. For purposes of the statements of cash flows, the System generally considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.
b. Restricted Assets

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

## Notes to Financial Statements <br> (continued)

June 30, 2007 and 2006

## Note 2 (continued)

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 bond issuance costs.
d. Utility Plant

Utility plant acquired through purchase or internal construction is recorded at cost, net of retirements. It is the B oard's policy to capitalize assets over $\$ 35,000$. 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 <br> Water supply and wastewater <br> treatment systems | $40-50$ |
| Water distribution and sewage <br> $\quad$ collection systems | $15-50$ |
| Equipment |  |

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

Operating revenues consist of customer payments for services of the System. Revenues are based on billing rates imposed by the Board and upon customers' water and sewer usage. The System records estimated unbilled revenue at year-end. Operating expenses consist of administration, maintenance, repair and operations of the System, administration costs of the B oard and the Authority, rental payments to the City, and bad debt expense.

## f. Deferred Revenues

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

## g. Deferred Bond Refunding Costs

Deferred bond refunding costs represent the accounting loss incurred in advance refundings of outstanding bonds. 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. Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions in determining the amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## Notes to Financial Statements <br> continued)

June 30, 2007 and 2006

## Note 3 - Utility Plant

The following is a summary of utility plant activity for the fiscal years ended June 30, 2007 and 2006 (in thousands):

|  | Balance at June 30, 2005 | Additions | Deletions | Balance at June 30, 2006 | Additions | Deletions | Balance at June 30, 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nondepreciable assets |  |  |  |  |  |  |  |
| Utility construction | \$ 4,010,861 | \$1,704,324 | \$1,168,976 | \$ 4,546,209 | \$1,933,996 | \$1,714,060 | \$4,766,145 |
| Land | - |  | - |  |  | - |  |
| Depreciable assets |  |  |  |  |  |  |  |
| Buildings | 22,071 | 195 | - | 22,266 | 1,227 | - | 23,493 |
| Equipment | 424,673 | 49,430 | 2,069 | 472,034 | 162,341 | 4,991 | 629,384 |
| Water supply and wastewater treatment systems | 10,152,707 | 733,770 | - | 10,886,477 | 1,241,396 | - | 12,127,873 |
| Water distribution and sewage collection systems | 7,579,881 | 285,806 | 21,561 | 7,844,126 | 213,980 | 43,459 | 8,014,647 |
|  | 22,190,193 | 2,773,525 | 1,192,606 | 23,771,112 | 3,552,940 | 1,762,510 | 25,561,542 |
| Less accumulated |  |  |  |  |  |  |  |
|  | \$16,008,960 | \$2,322,665 | \$1,176,022 | \$17,155,603 | \$3,017,410 | \$1,737,317 | \$18,435,696 |

## Note 4 - Investments and Cash Deposits

a. Investments

Pursuant to the Water and Sewer General Revenue Bond Resolution and the Authority's and the Board's investment guidelines, the Authority and the B oard may generally invest in obligations of, or guaranteed by, the U.S. government, certain highly rated obligations of the State of New York or any subdivision or instrumentality thereof, certain certificates of deposit and similar instruments issued by highly rated commercial banks; certain highly rated corporate securities or commercial paper securities, certain repurchase agreements with highly rated institutions; certain investment agreements with highly rated institutions; certain highly rated money market funds; and certain highly rated municipal obligations.

## b. 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, 2007 and 2006, which was covered by Federal depository insurance and the remaining balance was uncollateralized.

At J une 30, 2007 and 2006, the carrying amounts of bank deposits were $\$ 20.7$ million and $\$ 5.9$ million, respectively, and the bank balances were $\$ 21.9$ million and $\$ 7$ million, respectively.
The System had the following investments and maturities (in thousands):

|  |  |  | Investment <br> Investment type | 2007 |
| :--- | ---: | ---: | :--- | :--- |
| maturity |  |  |  |  |

## Notes to Financial Statements (continued)

June 30, 2007 and 2006

## Note 4 (continued)

All of the System's investments in U.S. agencies carry the explicit guarantee of the U.S. Government. At J une 30, 2007 and 2006, the System's investment in New York State securities was rated AAA by Standard \& Poor's and Aaa by Moody's investment services. The System's investments in guaranteed investment contracts are not rated.

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. The System's investments, other than repurchase agreements, are not collateralized. All investments and collateral are held in the Authority's name by the trustee or in the Board's name by the agent.

## Note 5 - 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 B oard for the term of the lease. The Lease term commenced on July 1,1985 , and continues until the later of the fortieth anniversary of the commencement of the lease, or the date on which all bonds, notes or other obligations of the Authority are paid in full, or provisions for such payment have been made pursuant to the applicable debt instrument. The Lease provides for payments to the City to cover the following:
(a) an amount sufficient to pay the cost of administration, maintenance, repair and operation of the leased property, which includes overhead costs incurred by the City attributable to the leased property, net of the amount of any Federal, State, or other operating grants received by the City;
(b) an amount sufficient to reimburse the City for capital costs incurred by the City for the construction of capital improvements to the leased property which are not paid or reimbursed from any other source.

In addition to the payments described above, the Board pays rent to the City in each fiscal year in an amount not to exceed the greater of (a) the principal and interest payable on general obligation bonds issued by the City for water and sewer purposes certified by the City to be paid within such fiscal year or (b) $15 \%$ of principal and interest payable on the bonds of the Authority to be paid within such fiscal year.

A summary of operation and maintenance expenses for the years ended June 30, 2007 and 2006 is as follows (in thousands)

|  | 2007 | 2006 |
| :--- | ---: | ---: |
| Water transmission and distribution | $\$ 339,854$ | $\$ 332,174$ |
| Sewer collection systems | 413,837 | 392,071 |
| City agency support cost | 57,304 | 54,387 |
| Fringe benefits | 110,687 | 83,212 |
| Payments for watershed improvements | 61,983 | 66,833 |
| Judgments and claims | 31,232 | 8,241 |
|  | $1,014,897$ | 936,918 |
| Rental payments to the City | 132,260 | 119,461 |

## Note 6 - Payable to and receivable from the City

As of June 30, 2007 and 2006, 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, 2007 and 2006, the System had a net payable of $\$ 346.1$ million and $\$ 317.6$ million, respectively, from the City for payments of utility construction and for overpayment of operations and maintenance expense.

## Note7 - Short-Term Liabilities

In fiscal years 2007 and 2006, the changes in short-term liabilities were as follows (in thousands):

|  | Balance at June 30, 2005 | Additions | Deletions | Balance at June 30, 2006 | Additions | Deletions | Balance at June 30, 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial paper (1) | \$800,000 | \$1,392,800 | \$1,841,800 | \$351,000 | \$2,059,000 | \$1,610,000 | \$ 800,000 |

(1) Commercial paper is used to pay construction costs in advance of long-term bond financing. It is reported as part of the current portion of bonds and notes payable on the System's balance sheets.

Commercial paper activity comprises the following for the year ended June 30, 2007 (in thousands):

|  | Balance at June 30, 2006 |  | Issued |  | Retired | Balance at June 30, 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial Paper Series 1 - Variable Rate, |  |  |  |  |  |  |
| Short-term Rolling M aturity Backed by Letter of Credit | \$200,000 | \$ | 600,000 | \$ | 600,000 | \$200,000 |
| Commercial Paper Series 5 - Variable Rate, |  |  |  |  |  |  |
| Short-term Rolling Maturity Backed by Line of Credit | 140,000 |  | 270,000 |  | 210,000 | 200,000 |
| Commercial Paper Series 6 - Variable Rate, |  |  |  |  |  |  |
| Short-term Rolling Maturity Backed by Line of Credit | 11,000 |  | 789,000 |  | 600,000 | 200,000 |
| Commercial Paper Series 7 - Variable Rate, |  |  |  |  |  |  |
| Short-term Rolling M aturity | - |  | 400,000 |  | 200,000 | 200,000 |
| Total commercial paper payable | \$351,000 |  | 2,059,000 |  | 1,610,000 | \$800,000 |

## Note 8 - Long-Term Liabilities

In fiscal years 2007 and 2006, the changes in long-term liabilities were as follows (in thousands):

| B onds payable | Balance at June 30, 2005 | Additions | Deletions | Balance at June 30, 2006 | Additions | Deletions | Balance at June 30, 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First resolution | \$10,634,596 | \$1,431,080 | \$1,171,123 | \$10,894,553 | \$ 587,975 | \$549,068 | \$10,933,460 | \$ 42,943 |
| Second resolution | 3,999,455 | 1,186,847 | 146,504 | 5,039,798 | 1,633,132 | 335,206 | 6,337,724 | 168,028 |
| Total bonds payable | 14,634,051 | 2,617,927 | 1,317,627 | 15,934,351 | 2,221,107 | 884,274 | 17,271,184 | \$210,971 |
| Less discounts (net) | 100,304 | $(31,866)$ | 26,431 | 42,007 | $(15,838)$ | 12,331 | 13,838 |  |
| Less deferred refunding costs | 340,268 | 66,222 | 36,041 | 370,449 | 21,575 | 37,089 | 354,935 |  |
| Total long-term liabilities | \$14,193,479 | \$2,583,571 | \$1,255,155 | \$15,521,895 | \$2,215,370 | \$834,854 | \$16,902,411 |  |

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.

During 2007 and 2006, the Authority issued $\$ 586.8$ and $\$ 720.7$ million, respectively, of bonds to refund $\$ 683.5$ and $\$ 683.3$ million, respectively, of outstanding bonds. The advance refundings resulted in an accounting loss of $\$ 21.6$ and $\$ 66.2$ million, respectively. The Authority in effect reduced its aggregate debt service by $\$ 17.3$ and $\$ 56.3$ million, respectively, and obtained an economic benefit of $\$ 46.3$ and $\$ 37.3$ million, respectively.

During 2006, the Authority economically defeased $\$ 70.4$ million of bonds with current revenue. Bonds economically defeased remain a liability, and the escrow deposited with the Authority's trustee is an asset on the Authority's records.

Notes to Financial Statements (continued)

June 30, 2007 and 2006

## Note 8 (continued)

During 2006, the Authority defeased $\$ 60.1$ million of outstanding bonds with $\$ 60.1$ million of current revenue, which resulted in an accounting loss of $\$ 1.0$ million.

The Authority has defeased cumulatively $\$ 9.740$ billion and $\$ 9.056$ billion of outstanding bonds as of June 30, 2007 and 2006, respectively, by placing proceeds of refunding bonds issued in an irrevocable escrow account to provide for all future debt service payments on defeased bonds. Proceeds were used to purchase U.S. Government securities that were placed in the irrevocable escrow account. Accordingly, the escrow account assets and liabilities for the defeased bonds are not included in the Authority's financial statements.

As of June 30, 2007 and 2006, $\$ 8.081$ billion and $\$ 6.883$ billion of the defeased bonds, respectively, had been retired from the assets of the escrow accounts.

Debt service requirements to maturity including amounts relating to commercial paper at J une 30, 2007 are as follows (in thousands):

| Year ending June 30, | Principal | Interest (1) | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| 2008 | $\$ 210,970$ | $\$$ | 647,046 | $\$$ |
| 2009 | 2278,163 | 636,656 | 863,819 |  |
| 2010 | 247,686 | 630,870 | 878,556 |  |
| 2011 | 332,263 | 622,230 | 954,493 |  |
| 2012 | 320,280 | 611,722 | 932,002 |  |
| $2013-2017$ | $2,053,174$ | $2,880,881$ | $4,934,055$ |  |
| $2018-2022$ | $2,588,943$ | $2,513,995$ | $5,102,938$ |  |
| $2023-2027$ | $2,814,390$ | $2,009,096$ | $4,823,486$ |  |
| $2028-2032$ | $3,524,825$ | $1,406,868$ | $4,931,693$ |  |
| $2033-2037$ | $3,390,315$ | 767,661 | $4,157,976$ |  |
| $2038-2042$ | $1,561,175$ | 103,644 | $1,664,819$ |  |
|  | $\$ 17,271,184$ | $\$ 12,830,669$ | $\$ 30,101,853$ |  |

(1) Includes interest for variable rate bonds estimated at $3.8 \%$, 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. B onds, notes payable, and commercial paper comprise the following for the year ended June 30, 2007 (in thousands):


Notes to Financial Statements (continued)

June 30, 2007 and 2006


# Notes to Financial Statements (continued) 

June 30, 2007 and 2006

| Note 8 (continued) | Balance at June 30, 2006 | Issued | Retired/ defeased | Balance at June 30, 2007 |
| :---: | :---: | :---: | :---: | :---: |
| 2002 Fiscal Series G-5.00\% to 5.125\% Term Bonds maturing in varying installments through 2034 | \$ 216,375 | \$ - | \$ | \$ 216,375 |
| 2002 Fiscal Series 1-4.82\% to $5.25 \%$ Serial Bonds maturing in varying installments through 2031 | 180,638 | - | 5,685 | 174,953 |
| 2002 Fiscal Series $2-4.22 \%$ to $5.00 \%$ Serial Bonds maturing in varying installments through 2031 | 61,835 | - | 2,501 | 59,334 |
| 2002 Fiscal Series 3-4.65\% to 5.00\% Serial Bonds maturing in varying installments through 2031 | 463,310 | - | 14,273 | 449,037 |
| 2002 Fiscal Series 4-5.13\% to 6.74\% Serial Bonds maturing in varying installments through 2023 | 200,533 | - | 8,005 | 192,528 |
| 2002 Fiscal Series $5-3.82 \%$ to $5.21 \%$ Serial Bonds maturing in varying installments through 2031 | 163,882 | - | 5,434 | 158,448 |
| 2002 Fiscal Series $6-3.82 \%$ to $5.21 \%$ Serial Bonds maturing in varying installments through 2019 | 81,319 | - | 4,872 | 76,447 |
| 2002 Fiscal Series $7-7.4 \%$ to $7.5 \%$ Serial B onds maturing in varying installments through 2012 | 5,925 | - | 1,490 | 4,435 |
| 2003 Fiscal Series A - 4.0\% to 6.0\% Serial, Term and Muni-CP1 B onds maturing in varying installments through 2034 | 689,180 | - | 3,335 | 685,845 |
| 2003 Fiscal Series C Adjustable Rate B onds maturing in 2018 | 300,300 | - | - | 300,300 |
| 2003 Fiscal Series D-2.0\% to 5.25\% Serial and Term B onds maturing in varying installments through 2017 | 216,355 | - | 1,830 | 214,525 |
| 2003 Fiscal Series E - 5\% Term B onds maturing in 2034 and 2038 | 367,265 | - | - | 367,265 |
| 2003 Fiscal Series F - Adjustable Rate B onds maturing in 2035 | 201,655 | - | - | 201,655 |
| 2003 Fiscal Series $1-4.23 \%$ to $4.375 \%$ Serial B onds maturing in varying installments through 2032 | 137,413 | - | 4,726 | 132,687 |
| 2003 Fiscal Series 2-5.27\% Serial B onds maturing in varying installments through 2028 | 561,664 | - | 11,590 | 550,074 |
| 2003 Fiscal Series 3-5.15\% Serial B onds maturing in varying installments through 2025 | 19,825 | - | 695 | 19,130 |
| 2003 Fiscal Series 4-5.18\% Serial Bonds maturing in varying installments through 2025 | 31,545 | - | 1,110 | 30,435 |
| 2003 Fiscal Series 5-4.23\% to 4.45\% Serial Bonds maturing in varying installments through 2032 | 277,930 | - | 9,028 | 268,902 |
| 2004 Fiscal Series A - 5.0\% Term Bonds maturing in 2027 and 2035 | 217,000 | - | - | 217,000 |
| 2004 Fiscal Series B - $2.00 \%$ - $5.00 \%$ Serial and Term Bonds maturing in varying installments through 2023 | 338,500 | - | 1,780 | 336,720 |
| 2004 Fiscal Series C-2.00\% - 5.00\% Serial and Term Bonds maturing in varying installments through 2035 | 595,745 | - | 575 | 595,170 |
| 2004 Fiscal Series 1-4.12\%-4.45\% Serial B onds maturing in varying installments through 2033 | 287,567 | - | 8,712 | 278,855 |
| 2004 Fiscal Series 2-4.46\% Serial B onds maturing in varying installments through 2026 | 249,063 | - | 7,713 | 241,350 |
| 2005 Fiscal Series A-5.00\% Serial Bonds maturing in varying installments through 2039 | 150,000 | - | - | 150,000 |
| 2005 Fiscal Series B - 2.125\% - 5.00\% Serial Bonds maturing in varying installments through 2036 | 921,005 | - | 1,045 | 919,960 |
| 2005 Fiscal Series C-3.00\% - 5.00\% Serial Bonds maturing in varying installments through 2036 | 575,735 | - | 730 | 575,005 |
| 2005 Series D - 5.00\% Serial Bonds maturing in varying installments through 2039 | 559,205 | - | - | 559,205 |
| 2005 Fiscal Series 1-3.95\%-5.00\% Bonds maturing in varying installments through 2034 | 223,946 | - | 6,783 | 217,163 |

## Notes to Financial Statements (continued)

June 30, 2007 and 2006

| Note 8 (continued) | $\begin{array}{r} \text { June } 30, \\ 2006 \end{array}$ | Issued | Balance at Retired/ defeased | Balance at June 30, 2007 |
| :---: | :---: | :---: | :---: | :---: |
| 2005 Fiscal Series 2-2.567\%-5.00\% B onds maturing in varying installments through 2026 | 381,274 | \$ - | \$11,651 | \$ 369,623 |
| 2006 Series A - 3.50\% - 5.00\% Serial Bonds maturing in varying installments through 2039 | 519,245 | - | 355 | 518,890 |
| 2006 Series B - 5.00\% Term B ond maturing in 2036 | 150,000 |  |  | 150,000 |
| 2006 Series C-4.50\%-4.75\% Term B onds maturing in 2033 | 350,345 | - |  | 350,345 |
| 2006 Fiscal Series D - 4.5\% - 5.00\% Serial B onds maturing in varying installments through 2038 | 406,205 | - | - | 406,205 |
| 2006 Fiscal Series AA - Adjustable rate bonds maturing in varying installments through 2032 | 400,000 | - | - | 400,000 |
| 2006 Fiscal Series BB - 3.25\%-5.00\% Serial Bonds maturing in varying installments through 2016 | 100,000 | - | 10,000 | 90,000 |
| 2006 Fiscal Series 1 - Adjustable rate bonds maturing in varying installments through 2036 | 224,684 | - | 4,423 | 220,261 |
| 2006 Fiscal Series 2 - Adjustable rate bonds maturing in varying installments through 2036 | 201,441 | - | 2,428 | 199,013 |
| 2006 Fiscal Series 3 - Adjustable rate bonds maturing in varying installments through 2036 | 256,388 | - | 2,910 | 253,478 |
| 2007 Fiscal Series A-4.25\%-4.75\% Serial Bonds maturing in varying installments through 2039 | - | 587,975 | - | 587,975 |
| 2007 Fiscal Series AA - 4.50\% - 5.00\% Serial <br> Bonds maturing in varying installments through 2037 | - | 199,910 | - | 199,910 |
| 2007 Fiscal Series BB - 3.75\% - 5.00\% Serial Bonds maturing in varying installments through 2021 | - | 134,360 | 2,615 | 131,745 |
| 2007 Fiscal Series CC - Adjustable rate bonds maturing in varying installments through 2038 | - | 210,500 | - | 210,500 |
| 2007 Fiscal Series DD $-4.75 \%-5.00 \%$ Serial B onds maturing in varying installments through 2039 | - | 395,000 | - | 395,000 |
| 2007 Fiscal Series 1-4.35\%-4.40\% Serial Bonds maturing in varying installments through 2036 | - | 228,112 | 1,578 | 226,534 |
| 2007 Fiscal Series 2-4.45\%-4.50\% Serial Bonds maturing in varying installments through 2036 | - | 290,314 | 2,042 | 288,272 |
| 2007 Fiscal Series 3-4.90\% Serial B onds maturing in varying installments through 2024 | - | 174,936 | - | 174,936 |
| Total debt payable | 15,934,351 | 2,221,107 | 884,274 | 17,271,184 |
| Current portion of bonds and notes payable | 215,061 |  |  | 210,971 |
| B onds and notes payable, less current portion | \$15,719,290 |  |  | \$17,060,213 |

## Derivatives

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

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

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

## Notes to Financial Statements (continued)

June 30, 2007 and 2006

Note 8 (continued)
Through the swap agreements the Authority is exposed to credit risk, i.e., the risk that the counterparties fail to perform their contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swap. The fair value of the swaps at June 30,2007 and 2006 was approximately $\$ 3.1$ million and $\$ 5.8$ million in favor of the counterparty, respectively. To mitigate credit risk, the agreement requires the counterparty to post collateral for the Authority's benefit if it is downgraded below a designated threshold, as defined in the agreement.

Note 9 - Restricted Assets
Certain cash and investments, plus accrued interest and other receivables, of the System are restricted as follows (in thousands):
20072006

The Board
Operation and maintenance reserve account
Operation and maintenance reserve general account

The Authority
Revenue fund
Debt service reserve fund

| 161,863 | 171,859 |
| ---: | ---: |
| 801,226 | 787,808 |
| 259,708 | 62,097 |
| 6,519 | - |
| 194,713 | 293,394 |
| $1,424,029$ | $1,315,158$ |
| $\$ 1,599,190$ | $\$ 1,472,965$ |

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

The revenue fund is established as a depository to fund the debt service, Authority expense, debt service reserve and escrow funds. It is funded through cash transfers from the B oard. The debt service reserve fund is established as a depository to hold the maximum annual debt service requirement for the next current or any future fiscal year. It is funded through revenue bond proceeds and the revenue fund.

The debt service fund is established as a depository to pay all principal and interest payments on the Authority's debt for the current fiscal year. It is funded through the revenue fund. The construction fund is established as a depository to pay all capital construction costs incurred by the City and reimbursed by the Authority. It is funded through the proceeds of commercial papers, bond and note sales. The escrow fund is established as a depository to refund debt in future years. It is funded through bond proceeds.

## Note 10 - Commitments and Contingencies

## a. Construction

The System has contractual commitments of approximately $\$ 7$ billion and $\$ 5.1$ billion at June 30, 2007 and 2006, respectively, for water and sewer projects.

## b. Claims and Litigation

In accordance with the Lease, the Board is required to reimburse the City for any judgment or settlement paid by the City arising out of a tort claim to the extent that the City's liability is related to capital improvements and the operation or maintenance of the System. However, in no event shall the payment made to the City, in any fiscal year, exceed an amount equal to $5 \%$ of the aggregate revenues shown on the prior year's audited financial statements of the System. In addition, the System is required to reimburse the City, to the extent

## Notes to Financial Statements (continued)

June 30, 2007 and 2006

Note 10 (continued)
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 J une 30, 2007, the potential future liability attributable to the System for claims outstanding against the City was estimated to be $\$ 255.3$ million. This amount is included in the estimated liability for unsettled claims, which is reported in the City's balance sheet. The potential future liability is the City's best estimate based on available information. The estimate may be revised as further information is obtained and as pending cases are litigated.

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 commercial paper, bond and note sales. The escrow fund is established as a depository to refund debt in future years. It is funded through bond proceeds.

## Note 11 - Pension Plans

During 2007, the System employed four individuals at the Water Authority. Pension expense for these employees totaled $\$ 239,000$. All other personnel are employees of the City and are covered under the City's pension plan. The System pays the costs of the City employees' pension through an allocation of fringe benefit costs, which are included principally within operations and maintenance expenses in the accompanying financial statements.

## Note 12 - Other Post-E mployment Benefits

Plan Description
The Authority's policy is to provide certain health and related benefits to eligible retirees of the Authority, which constitute another post-employment benefit (OPEB) plan (the Plan) in accordance with GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions.

The Authority's policy is to follow the eligibility criteria applicable to retirees of the City and to provide benefits substantially the same as those provided to City retirees and eligible beneficiaries/dependents. OPEB benefits include health insurance, Medicare Part B reimbursements, and welfare fund contributions.

## Funding Policy

The Authority is not required to provide funding for OPE B, other than the pay-as-you-go amount necessary to provide current benefits to retirees and eligible beneficiaries/dependents. For the fiscal years ended June 30,2007 and 2006, the Authority had no retirees, and thus made no contribution. Members are not required to contribute, although retirees may elect basic health insurance programs and/or optional coverage that requires contributions.

## Annual OPEB Cost and Net OPEB Obligation

The Authority's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer (ARC), an amount that was actuarially determined in accordance with the parameters of GASB Statement No. 45. The frozen entry age cost method was used in the actuarial valuation prepared as of June 30,2006 , which was the basis for the 2007 ARC calculation.

## Notes to Financial Statements (continued)

June 30, 2007 and 20062005

Note 12 (continued)
The following table shows the elements of the Authority's annual OPE B cost for the years, the amounts actually contributed, and changes in the Authority's net OPEB obligation for the years ended June 30, 2007:

| Annual required contribution | 2007 |
| :--- | ---: |
| Interest on net OPEB obligations | $\$ 229,398$ |
| Adjustment to annual required contribution | 15,920 |
| Annual OPEB cost (reduction in liability) | $(413,930)$ |
| Payments | $(168,612)$ |
| Decrease in net OPE B obligation | $(168,612)$ |
| Net OPEB obligation - beginning of year | 398,010 |
| Net OPEB obligation - end of year | $\$ 229,398$ |

The Authority's annual OPEB cost, the percentage of annual OPEB cost contributed, and the net OPEB obligation for the fiscal years ended June 30, 2007 and June 30, 2006 were as follows:

| Fiscal year |  |  |  |
| :--- | ---: | ---: | ---: |
| ended | Annual <br> OPEB Cost | Percentage of <br> annual OPEB <br> cost contributed | Net <br> OPE |
| June 30, 2007 | $\$(168,010)$ | $0 \%$ | $\$ 229,398$ |
| June 30, 2006 | $\$ 398,010$ | $0 \%$ | $\$ 398,010$ |

The OPEB cost for fiscal 2007 was negative to reflect the reduction of the Authority's OPEB liability that resulted from the transfer of a large portion of the Authority's administrative staff members to the City, which assumed the OPEB obligations for the transferred staff members.

## Funded Status and Funding Progress

As of June 30,2006, the most recent actuarial valuation date, the cost was $0.0 \%$ funded. The actuarial accrued liability for benefits was $\$ 173,000$, and the actuarial value of assets was $\$ 0$, resulting in an unfunded actuarial accrued liability (UAAL) of $\$ 173,000$. The covered payroll (annual payroll of active employees covered by the Plan) was $\$ 306,000$, and the ratio of the UAAL to the covered payroll was $57 \%$.

## Actuarial Methods and Assumptions

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future, such as assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the Plan and the annual required contributions of the Authority are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for

## Notes to Financial Statements (continued)

June 30, 2007 and 2006


#### Abstract

Note 12 (continued) financial reporting purposes are based on the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and employees to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities, consistent with the long-term perspective of the calculations.

The schedule of funding progress, shown as required supplementary information below presents the results of OPEB valuations as of June 30, 2005, and looking forward, the schedule will eventually provide multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Required Supplementary Information (unaudited) | Schedule of Funding Progress |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Actuarial <br> accrued |  |  |  | UAAL as a |
| percentage |  |  |  |  |  |  |


## Note 13-Subsequent Events

On October 10, 2007, the Authority issued fiscal 2007 Series AA Second Resolution Bonds in the aggregate amount of $\$ 400.0$ million to reimburse outstanding commercial paper notes and to pay certain costs of issuance.

On October 24, 2007, the Authority issued the Adjustable Rate Fiscal 2007 Series BB Second Resolution Bonds in the aggregate amount of $\$ 401.0$ million to refund outstanding commercial paper notes and to pay for certain costs of issuance.

On October 24, 2007, the Authority issued fiscal 2007 Series CC Second Resolution Bonds in the aggregate amount of $\$ 352.2$ million to refund outstanding bonds and to pay for certain costs of issuance.

## Statistics

## Revenues Last Ten Fiscal Years

Years Ended J une 30, 1998-2007 (in thousands)

|  | Water <br> Supply and <br> Distribution | Sewer <br> Collection and <br> Treatment | Other <br> Operating <br> Revenues | Subsidy and <br> Investment <br> Income | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Year | 560,956 | 819,662 | 102,540 | 93,883 | $1,577,041$ |
| 1998 | 583,394 | 857,204 | 85,903 | 81,465 | $1,607,966$ |
| 1999 | 610,949 | 876,455 | 93,194 | 70,478 | $1,651,076$ |
| 2000 | 626,364 | 898,568 | 96,991 | 84,534 | $1,706,457$ |
| 2001 | 648,319 | 907,324 | 116,512 | 97,543 | $1,769,698$ |
| 2002 | 690,093 | 952,985 | 68,842 | 162,052 | $1,873,972$ |
| 2003 | 713,097 | 984,753 | 75,283 | 155,260 | $1,928,393$ |
| 2004 | 755,693 | $1,043,575$ | 85,459 | 176,196 | $2,060,923$ |
| 2005 | 735,200 | $1,143,424$ | 100,306 | 193,686 | $2,172,616$ |
| 2006 | 796,404 | $1,238,612$ | 98,061 | 188,733 | $2,321,810$ |
| 2007 |  |  |  |  |  |

## Expenses Last Ten Fiscal Years

Years Ended June 30, 1998-2007 (in thousands)

| Year | Operation and <br> Maintenance | Provision for <br> Uncollectibles | Administration and <br> General | Depreciaiton and <br> Amortization | Interest <br> Expense | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1998 | 822,791 | 149,748 | 11,217 | 281,943 | 465,819 | $1,731,518$ |
| 1999 | 777,652 | 103,960 | 10,879 | 380,023 | 476,675 | $1,749,189$ |
| 2000 | 801,255 | 89,062 | 10,092 | 347,055 | 492,747 | $1,740,211$ |
| 2001 | 842,401 | 122,784 | 11,215 | 318,709 | 527,914 | $1,823,023$ |
| 2002 | 857,907 | 92,481 | 14,171 | 320,382 | 556,784 | $1,841,725$ |
| 2003 | 875,762 | 89,400 | 15,181 | 389,626 | 584,347 | $1,954,316$ |
| 2004 | 933,736 | 116,108 | 19,853 | 451,585 | 612,054 | $2,133,336$ |
| 2005 | 944,919 | 114,702 | 23,168 | 515,325 | 668,675 | $2,266,789$ |
| 2006 | $1,056,378$ | 87,222 | 26,727 | 500,161 | 731,563 | $2,402,051$ |
| 2007 | $1,147,157$ | 226,028 | 35,493 | 579,860 | 771,656 | $2,760,194$ |

## Revenue Bond Coverage Last Ten Fiscal Years

Years Ended J une 30, 1998-2007 (in thousands)

| Year | Cash (1) <br> Receipts | Debt Service Requiements (2) <br> Principal | Interest | Total | First Resolution <br> Debt Service <br> Coverage | Second Resolution <br> Debt Service <br> Coverage |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1998 | $1,411,070$ | 128,555 | 357,133 | 485,688 | 3.37 | 2.98 |
| 1999 | $1,460,602$ | 136,767 | 345,397 | 482,164 | 3.42 | 3.03 |
| 2000 | $1,481,532$ | 201,133 | 317,799 | 518,932 | 3.35 | 2.85 |
| 2001 | $1,527,009$ | 164,843 | 331,309 | 496,152 | 3.13 | 3.08 |
| 2002 | $1,592,393$ | 90,648 | 405,745 | 496,393 | 3.21 | 3.21 |
| 2003 | $1,653,733$ | 196,036 | 300,688 | 496,724 | 3.33 | 3.33 |
| 2004 | $1,754,336$ | 152,132 | 338,216 | 490,348 | 3.58 | 3.58 |
| 2005 | $1,829,806$ | 175,729 | 353,408 | 511,137 | 3.91 | 3.58 |
| 2006 | $1,931,927$ | 197,602 | 439,839 | 637,441 | 3.76 | 3.03 |
| 2007 | $1,994,909$ | 200,780 | 483,661 | 684,441 | 3.83 | 2.91 |

(1) Until 1998, cash receipts as defined in the bond resolution excludes interest received on debt servie and revenue funds and subsidy payments
(2) 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 Facilites Corporation.

## Statistics

| Population |  | Percentage <br> Change from <br> Prior Period | City of New York | Percentage <br> Change from <br> Prior Period |
| :--- | ---: | ---: | ---: | ---: |
| 1997 | United States | $272,646,925$ | $1.21 \%$ | $7,773,443$ |
| 1998 | $275,854,104$ | 1.18 | $7,858,259$ | $0.98 \%$ |
| 1999 | $279,040,168$ | 1.15 | $7,947,660$ | 1.09 |
| 2000 | $282,216,952$ | 1.14 | $8,018,350$ | 1.14 |
| 2001 | $285,226,284$ | 1.07 | $8,076,374$ | 0.89 |
| 2002 | $288,125,973$ | 1.02 | $8,106,876$ | 0.72 |
| 2003 | $290,796,023$ | 0.93 | $8,143,998$ | 0.38 |
| 2004 | $293,638,158$ | 0.98 | $8,178,201$ | 0.46 |
| 2005 | $296,507,061$ | 0.98 | $8,213,839$ | 0.44 |
| 2006 | $299,398,484$ | 0.98 | $8,214,426$ | 0.01 |

Population of New York City by Borough

|  | $2006^{*}$ | 2000 | 1990 | 1980 | 1970 | 1960 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Bronx | $1,361,473$ | $1,334,381$ | $1,203,789$ | $1,168,972$ | $1,471,701$ | $1,424,815$ |
| Brooklyn | $2,508,820$ | $2,466,952$ | $2,300,664$ | $2,230,936$ | $2,602,012$ | $2,627,319$ |
| Manhattan | $1,611,581$ | $1,539,610$ | $1,487,536$ | $1,428,285$ | $1,539,233$ | $1,698,281$ |
| Queens | $2,255,175$ | $2,231,845$ | $1,951,598$ | $1,891,325$ | $1,987,174$ | $1,809,578$ |
| Staten Island | 477,377 | 445,562 | 378,977 | 352,121 | 295,443 | 221,991 |
| Total | $8,214,426$ | $8,018,350$ | $7,322,564$ | $7,071,639$ | $7,895,563$ | $7,781,984$ |


| Percentage Increase <br> (Decrease) from <br> Prior Decade | $2.4 \%$ | $9.5 \%$ | $3.5 \%$ | $(10.4 \%)$ | $1.5 \%$ | $(1.4 \%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

* Population estimates available as of March 2007.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Average Daily Water Consumption

| Fiscal Year | Total(mgd)(1)Upstate Counties <br> $(\mathrm{mgd})$ | City (mgd) $)$ | Per capita <br> $(\text { gals/day })^{(2)}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| 1997 | 1,334 | 121 | 1,213 | 164 |
| 1998 | 1,294 | 122 | 1,172 | 160 |
| 1999 | 1,342 | 129 | 1,213 | 163 |
| 2000 | 1,359 | 127 | 1,231 | 166 |
| 2001 | 1,340 | 126 | 1,201 | 166 |
| 2002 | 1,281 | 124 | 1,157 | 144 |
| 2003 | 1,232 | 119 | 1,113 | 139 |
| 2004 | 1,213 | 118 | 1,095 | 138 |
| 2005 | 1,211 | 118 | 1,093 | 138 |
| 2006 | 1,088 | 122 | 966 | 121 |
| 2007 | 1,218 | 120 | 1,098 | 137 |

(1) mgd = millions of gallons used per day
(2) Population source: U.S. Deparment of Commerce, Bureau of the Census.

## Statistics

## Water and Sewer Rate Increases

| Effective Date | Changes in Flat-Rate Water | Changes in Metered Water | M etered Water Rate (per ccf) (1) | Change in Sewer |
| :---: | :---: | :---: | :---: | :---: |
| July 1, 1997 | Increased 6.5\% | Increased 6.5\% | 1.13 | 159\% of water charge |
| July 1, 1998 | Increased 6.5\% | Increased 6.5\% | 1.20 | No change |
| July 1, 1999 | Increased 4.0\% | Increased 4.0\% | 1.25 | No change |
| July 1, 2000 | Increased 4.0\% | Increased 4.0\% | 1.30 | No change |
| July 1, 2001 | Increased 1.0\% | Increased 1.0\% | 1.31 | No change |
| July 1, 2002 | Increased 3.0\% | Increased 3.0\% | 1.35 | No change |
| July 1, 2003 | Increased 6.5\% | Increased 6.5\% | 1.44 | No change |
| July 1, 2004 | Increased 5.5\% | Increased 5.5\% | 1.53 | No change |
| July 1, 2005 | Increased 5.5\% | Increased 5.5\% | 1.60 | No change |
| July 1, 2006 | Increased 3.0\% | Increased 3.0\% | 1.65 | No change |
| July 1, 2007 | Increased 9.4\% | Increased 9.4\% | 1.81 | No change |

(1) ccf equals 100 cubic feet or approximately 748 gallons

Water System Tunnels and Aqueducts

|  | Connections | Length (miles) | Diameter (feet) (1) | $\begin{array}{r} \text { In Service } \\ \text { Date } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| Tunnels Upstate |  |  |  |  |
| Shandanken |  | 18.1 | $11.5 \times 10.251$ | 1924 |
| West Delaware |  | 44.0 | 11.33 | 1964 |
| E ast Delaware |  | 25.0 | 11.33 | 1955 |
| Neversink |  | 6.0 | 10 | 1954 |
| Aqueducts |  |  |  |  |
| New Croton | New Croton to Jerome Park | 24.0 | $3.5 \times 13.61$ | 1893 |
|  | Jerome Park to 135 St. Gatehouse | 9.0 | 12.25-10.52 | 1893 |
| Catskill | Ashokan to Kensico | 75.0 | $17 \times 17.51$ | 1915 |
|  | Kensico to Hillview | 17.0 | $17 \times 18.1$ | 1915 |
| Delaware | Rondout to West Branch | 44.2 | 13.5 | 1944 |
|  | West Branch to Kensico | 27.2 | 15 | 1943 |
|  | Kensico to Hillview | 13.6 | 19.5 | 1942 |
| Tunnels Downstate |  |  |  |  |
| Tunnel 1 | Hillview to distribution system | 18.0 | 15-112 | 1917 |
| Tunnel 2 | Hillview to distribution system | 20.0 | 17-152 | 1936 |
| Tunnel 3, Stage 1 | Hillview to distribution system | 13.0 | 24-202 | 1998 |
| Richmond Tunnel | Tunnel 2 to Staen Island Uptake Shaft | 5.0 | 10 | 1970 |

(1) Tunnels are not round
(2) Variable diameter tunnels

## Statistics

## Water Pollution control Plants Daily Flow

| Plant | Design Flow (mgd) (1) | 12 month avg. (mgd) (1) <br> July $05-J$ uly 06 | 12 month avg. (mgd) (1) <br> July $06-J u l y ~ 07$ |
| :--- | ---: | ---: | ---: |
| Wards Island | 275 | 215 | 222 |
| North River | 170 | 129 | 127 |
| Hunts Point | 200 | 132 | 130 |
| 26th Ward | 85 | 58 | 56 |
| Coney I sland | 110 | 92 | 87 |
| Owls Head | 120 | 102 | 103 |
| Newtown Creek | 310 | 231 | 241 |
| Red Hook | 60 | 33 | 34 |
| Jamaica | 100 | 87 | 88 |
| Tallmans Island | 80 | 62 | 55 |
| Bowery Bay | 150 | 108 | 108 |
| Rockaway | 45 | 22 | 24 |
| Oakwood Beach | 40 | 30 | 31 |
| Port Richmond | 60 | 31 | 31 |
| Total | 1,805 | 1,332 | 1,337 |

(1) $\mathrm{mgd}=$ millions of gallons of water

## Organizational Chart

## New York City Municipal Water Finance Authority

B oard of Directors

| Mark Page | ex officio Member |
| :--- | :--- |
| Charles E. Dorkey III | Member |
| Arthur B. Hill | Member |
| Peter J. Kenny | Member |
| Emily Lloyd | ex officio Member |
| Denise Sheehan | ex officio Member |
| Martha E. Stark | ex officio Member |

Staff
Alan Anders
Patrick J. McCoy
Marjorie E. Henning
Lawrence R. Glantz
Prescott D. Ulrey
Olga Chernat
J effrey M. Werner
Valerie M ehallow

Chief Executive Officer
Executive Director Secretary
Comptroller Assistant Secretary Deputy Treasurer Assistant Secretary Finance Director

## New York City Water Board

Members

| James T. B. Tripp | Chairman |
| :--- | :--- |
| Donald Capoccia | Member |
| Dawn S. Davis | Member |
| Marilyn Gelber | Member |
| Amaziah Howell | Member |
| Alan M. Moss | Member |
| Maria Santos Valentin | Member |

Staff
Steven Lawitts William Kusterbeck Carmelo Emilio Albert F. Moncure, Jr.

New York City Department of Evironmental Protection

| Emily Lloyd | Commissioner |
| :--- | :--- |
| Steven Lawitts | First Deputy Commissioner |

Bureau of Water and Sewer Operations
James Roberts Deputy Commissioner

## Bureau of Engineering Design and Construction

Steven Lawitts Acting Deputy Commissioner

## B ureau of Wastewater Treatment

Douglas S. Greeley, P. E. Deputy Commissioner
Bureau of Water Supply
Paul Rush, P. E. Deputy Commissioner
Bureau of Customer Services
Joseph Singleton Deputy Commissioner
Bureau of Human Resources and Administration
Zoeann Campbell Acting Deputy Commissioner

## Bureau of Environmental Planning

Angela Licata Deputy Commissioner

## Investor Relations Contact

Raymond J. Orlando
Director of Media and Investor Relations New York City Municipal Water Finance Authority
email: orlandor@omb.nyc.gov
www.nyc.gov/nyw

## Acknow ledgements

Fish watercolors by Duane Raver, courtesy U. S. Fish \& Wildlife Service

## Design

Elton Robinson

Printing
Paul J. Weinstein Quality Printing, New York City and Jersey City, NJ


