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THE LINED SEAHORSE IS THE ONLY SPECIES REGULARLY FOUND IN NEW YORK'S WATERS. IT INHABITS EEL GRASS BEDS AND CAN REACH EIGHT INCHES LONG.



# **LETTER OF TRANSMITTAL**

## December 12, 2014

Members of the Board of the New York City Municipal Water Finance Authority Members of the New York City Water Board The Commissioner of the New York City Department of Environmental Protection

We are pleased to submit to you this Comprehensive Annual Financial Report ("CAFR") of the New York City Water and Sewer System (the "System") for the year ended June 30, 2014. The financial section of this CAFR includes management's discussion and analysis, the general-purpose financial statements and the combining financial statements and schedules, as well as the independent auditors' report on these financial statements and schedules.

The System is responsible for the accuracy, completeness and fairness of the presentation, including all disclosures. The management's discussion and analysis provide an overview of the System's financial results.

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 Board (the "Water Board"). In addition, the New York City Department of Environmental Protection ("DEP") operates the System. The passage of the New York City Municipal Finance Authority Act of 1984 (the "Act") by the New York State Legislature authorized this financing and operating 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 Board of Directors composed of seven members, four of whom serve exofficio, 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 Board leases the System from The City, sets rates, and collects System revenue. The Lease Agreement dated July 1, 1985 (the "Lease") provides for a lease term until all the bonds of the Authority are paid in full, or provision for payment has been made. The Water Board is obligated to first allocate the revenues of the System to debt service on Authority bonds and to the Authority's expense budget, after which revenues are allocated to the Water Board's expenses, DEP's cost of NATIVE WETLAND PLANTS, LIKE CATTAILS, HELP FILTER STORM WATER IN STATEN ISLAND'S BLUEBELTS.





THERE ARE RED, WHITE AND BLUE SPECIES OF CRAYFISH FOUND IN NEW YORK WATERS. operating and maintaining the System, and to the rental payment to The City under the terms of the Lease. The Lease requires the Water Board to make the rental payment to The City which is no more than the greater of: i) principal and interest for the fiscal year on City general obligation bonds issued for water and sewer purposes, or ii) fifteen percent of principal and interest on Authority debt for the fiscal year. The Water Board consists of seven members who are appointed by the Mayor. The Act requires that at least one member have experience in the science of water resource development. Members of the Water Board cannot be members of the Board of Directors of the Authority. The Mayor appoints the Chairman. The staff of DEP supports the operations of the Water Board under the direction of the Board's Executive Director.

The operation and maintenance of the water and sewer system is performed by DEP. DEP is managed by a Commissioner who is appointed by the Mayor and oversees a workforce of over 5,500 people. DEP works to protect the environmental welfare and health of The City's residents and natural resources, manages The City's water supply, treatment, transmission and distribution system, and collects, treats, and disposes of waste and storm water. DEP supplies water and sewer service to the boroughs of the Bronx, Brooklyn, Manhattan, Queens and Staten Island, an area of over 300 square miles, and serves over 8.3 million people. The City is also required by the State law to sell water in counties where its water supply facilities are located. The System currently provides water to approximately one million people located in Westchester, Putnam, Orange, and Ulster Counties.

The System provides an average of approximately one billion gallons per day of water. DEP maintains a system of dams, reservoirs, aqueducts, and water tunnels in addition to approximately 6,800 miles of water mains. DEP also maintains approximately 7.500 miles of sewers that collect and transport waste and storm water for treatment at The Citv's 14 wastewater treatment plants. Additionally, the System operates four major combined sewer overflow retention facilities, wastewater pump stations, laboratories, sludge dewatering facilities and inner-harbor vessels which transport sludge between facilities. The System collects and treats an average of approximately 1.3 billion gallons per day of sewage. Sewer service is provided to virtually the entire City, except for parts of the Borough of Staten Island, and the Borough of Queens community of Breezy Point. Sewer service is also provided to certain upstate communities in the System's watershed areas.

#### **Credit Ratings**

The Authority's bonds continue to be highly rated by all three rating agencies. The Authority's ratings reflect the credit strengths resulting from the strong legal protections provided to bondholders and structural features, which provide a true gross pledge of System revenue to bondholders for debt payments. Standard and Poor's Ratings Services rates the Authority's first (general) resolution debt "AAA", their highest rating. The Authority's second general resolution debt is rated "AA+" by Standard and Poor's. Fitch Ratings rates both the Authority's first and second general resolution debt "AA+". Moody's Investors Service rates the first and second general resolution debt "Aa1" and "Aa2", respectively.

New York State Environmental Facilities Corporation ("EFC") Clean Water and Drinking Water Revolving Funds Revenue Bonds issued for eligible DEP projects are rated "AAA" from all three rating agencies. EFC's subordinated state revolving fund bonds are rated "AAA" by Standard & Poor's, "AAA" by Moody's and "AA+" by Fitch. The bonds that the Authority places with EFC are an element of security for EFC's bonds, but are unrated second general resolution bonds of the Authority.

#### **Internal Controls**

The managements of the Water Board and the Authority are responsible for establishing and maintaining an internal control structure designed to provide reasonable, but not absolute, assurance that the assets of the System are protected from loss, theft or misuse, and that accounting policies are complied with and the preparation of financial statements conforms with accounting principles generally accepted in the United States of America. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. Internal control cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control involves human diligence and compliance; it is subject to human failures and may be circumvented. Because of such limitations, the Authority and the Board have designed into the process safeguards to reduce, though not eliminate, this risk.

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, DEP is subject to audit by The City Comptroller's Office, whose auditors periodically audit The City's agencies' adherence to internal control policies and procedures.

#### **Budgetary Controls**

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

#### **Capital Program Goals**

The goals of the System's capital program are:

- To maintain the quality of the water in The City's watersheds and, where necessary, treat the supply to ensure its high quality and compliance with federal and State water quality standards;
- To maintain and improve the transmission and distribution capacity and the condition of The City's water supply system;
- To improve the quality of the surrounding waters by upgrading The City's wastewater treatment facilities by complying with federal and State standards for treatment and by reducing pollution caused by combined sewer overflows; and
- To maintain and improve the condition of the sewer system, prevent flooding by replacing failing sewers, and extend service to underserved areas of The City.

DEP's capital, operation and maintenance expenses are appropriated through The City's annual capital and operating budgets, respectively. The City also maintains an encumbrance accounting system as another technique of accomplishing budgetary control. The Authority and the Board adopt their budgets conterminously with The City's operating budget cycle.

### Capital Improvement Program and Financing Program

The City updates its Ten Year Capital Strategy (the "Strategy") every two years. The City released the Strategy in May 2013. The Strategy included the projected capital improvements to the System for Fiscal Years 2014 through 2023. The City's current capital plan, which covers Fiscal Years 2015 through 2018, was updated in October 2014. It is updated three times each fiscal year and the October 2014 release supersedes the Strategy for Fiscal Years 2015 through 2018. The Strategy, together with the current capital plan, comprises the capital improvement program (the "CIP").

The CIP is designed to maintain a satisfactory level of service and improve the operation of the System. The CIP establishes long-range programmatic goals for the System and reflects a review of the present condition and long-term needs of the plants and equipment constituting the System. The CIP also incorporates the System's requirements for meeting legal mandates, the present replacement cycle for System facilities, extensions to the present service area, and programs to enhance and optimize the operation and dependability of the System. Additionally, in October 2013, DEP released its NYC Wastewater Resiliency Plan which sets forth specific strategies to protect and strengthen wastewater treatment plants and pumping stations from the effects of climate change. Funding is included in the CIP for such improvements. Allowances are also included in the CIP for emergency repair and replacement and for cost escalations due to inflation. The total capital commitments projected to be provided from System funds is \$12.3 billion for Fiscal Years 2015 through 2023. The capital commitments shown in each year represent capital contracts authorized to be entered into in each year that will be paid from City funds and reimbursed by the Authority, largely from bond proceeds. Actual expenditures from such capital



# **CAPITAL IMPROVEMENT PROGRAM**

(in thousands):

	2015	2016	2017	2018	2019	2020	2021	2022	2023	TOTAL
Water Supply and Transmission	\$623,060	\$47,299	\$270,500	\$20,000	\$104,282	\$180,000	\$331,500	\$2,000	\$—	\$1,578,641
Water Distribution	695,398	781,167	352,822	487,290	207,039	537,421	99,706	159,390	189,298	3,509,531
Water Pollution Control	594,487	822,243	482,229	643,059	407,785	211,550	235,407	447,597	338,231	4,182,588
Sewers	574,809	461,192	350,484	315,440	233,480	72,466	161,995	247,224	81,700	2,498,790
Equipment	140,970	34,592	74,863	69,399	38,625	32,125	46,574	52,533	47,125	536,806
Total City Funds	\$2,628,724	\$2,146,493	\$1,530,898	\$1,535,188	\$991,211	\$1,033,562	\$875,182	\$908,744	\$656,354	\$12,306,356



BEAVERS WERE ONCE HUNTED ALMOST TO EXTINCTION FOR THEIR PELTS, BUT ARE NOW THRIVING IN NEW YORK CITY WATERWAYS. contracts and the issuance of Authority bonds to fund such expenditures occur in the current and subsequent years. The table above reflects the CIP as of October 2014. For a number of reasons, including unforeseen cost inflation and changes in plans, actual costs may vary from the CIP set forth in the table. The CIP is divided into five project types, each discussed below.

#### Water Supply & Transmission

This component of the CIP includes approximately \$719.3 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 Tunnels 1 or 2. Stage I of Tunnel No. 3 commenced operation in July 1998. The Manhattan leg of Stage II was completed and activated in October 2013. Construction of Stage II continues towards its expected operational date in the mid 2020s.

Stage II extends from the end of Stage I to supply Queens, Brooklyn and the Richmond Tunnel servicing Staten Island, and it extends from the valve chamber at Central Park into Lower Manhattan. When all of 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 CIP includes \$855.3 million for water conveyance projects. Funds included in the CIP for conveyance include DEP's Water for the Future program. Water for the Future includes water supply augmentation, including the rehabilitation of the Catskill Aqueduct and groundwater supplies in Queens, a water demand management program to reduce City water consumption, the construction of a threemile bypass tunnel around a portion of the Rondout-West Branch Tunnel section of the Delaware Aqueduct, and the repair of the lining in other sections of the tunnel. Shaft construction for the bypass tunnel is underway.

#### Water Distribution & Treatment

The System's drinking water is rated among the best in the country. The CIP includes approximately \$3.5 billion for the protection, expansion, and distribution of The City's water supply, including nearly \$1.5 billion for trunk and distribution water main replacements and extensions. Additionally, \$115.3 million is included for the completion of construction of a full-scale filtration plant for the treatment of water from the Croton watershed, which is expected to commence operations by May 2015, along with \$328.2 million for the dam safety program, including the reconstruction of Gilboa Dam.

The program also calls for \$1.3 billion to be committed to ongoing water quality preservation and protection. To ensure its continuing quality and to comply with federal and State standards, DEP is pursuing a comprehensive program to protect the relatively pristine Catskill and Delaware watersheds. Water quality preservation projects include an ultraviolet (UV) light disinfection facility for treatment of water from the Catskill and Delaware systems. The UV facility began operation in 2012 and is the largest facility of its kind in the world. DEP will also continue to acquire and manage environmentally sensitive property in the upstate watershed and undertake other ongoing projects in partnership with watershed residents as part of the Filtration Avoidance Determination ("FAD") issued by the US Environmental Protection Agency ("USEPA"). The FAD allows The City to avoid filtering water from the Catskill and Delaware Systems. In July 2007, USEPA issued, for the first time, a 10-year FAD to The City, extending to 2017. The New York State Department of Health issued a midterm revision of the FAD in May 2014. USEPA has previously issued a series of FADs to The City for shorter terms, since 1993.

#### Water Pollution Control

To improve the quality of The City's estuaries and surrounding waterways and to comply with federal Clean Water Act mandates, \$4.2 billion is included in the CIP for water pollution control programs. Investments in water pollution control are primarily responsible for the improvements to water quality in New York Harbor and the Jamaica Bay watershed.

The CIP allocates \$2.7 billion for the replacement or reconstruction of components at The City's wastewater treatment facilities to ensure their continuous and reliable operations including nitrogen removal upgrades at eight wastewater treatment plants, four of which discharge into the Upper East River and four of which discharge into Jamaica Bay. Additionally, the CIP includes funds to complete mandated projects at the System's largest treatment plant, Newtown Creek. As a result of the substantial capital investment in upgrades to Newtown Creek, it now meets the secondary treatment standards required under the Clean Water Act along with all of the System's other City water pollution control plants. DEP's CIP also includes \$1.1 billion for mandated projects, including those projects which will reduce combined sewer overflow ("CSO"). CSOs are currently a source of pollution in the waterways surrounding The City. 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 wastewater treatment plant and enters surrounding waterways untreated. In September 2010, DEP released a green infrastructure plan presenting an alternative approach to reducing CSOs. The plan uses a mix of green infrastructure to prevent storm water from reaching the sewers and cost-effective traditional infrastructure that will reduce sewer overflows into waterways. On March 8, 2012, DEP signed a groundbreaking agreement with the New York State Department of Environmental Conservation to reduce CSOs which incorporated the goals of this innovative plan. As part of the agreement, DEP will submit a series of CSO long-term control plans to ensure the water bodies comply with Clean Water Act requirements.

#### Sewers

Approximately \$2.5 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 water meter installation, automated meter reading systems, the procurement of vehicles and equipment, management information systems and utility relocation for sewers and water mains. A total of \$536.8 million is included in the CIP for these projects.

The automated meter reading system will transmit water usage information by radio signal to DEP. DEP has installed over 817,000 transmitters, covering 97% of all customers. Since 2010, DEP also has installed over 430,000 new water meters. All customers whose accounts have been upgraded for automated meter reading can now access details of their water usage through DEP's website.

#### Independent Audit

Section 6.11 (b) of the Financing Agreement by and among The City, the Authority, and the Water Board dated July 1, 1985, requires that the Authority shall submit to the Mayor, the Comptroller and the Director of Management and Budget of The City, audited annual financial statements of the Authority and the Water Board. The financial section of the 2014 Comprehensive Annual Financial Report begins with the report of our independent auditors, Deloitte & Touche LLP. This report expresses an unmodified opinion as to the fairness of the presentation of our financial statements.

Respectfully submitted,

Thomas G. Paolicelli Executive Director

#### Robert L. Balducci Comptroller

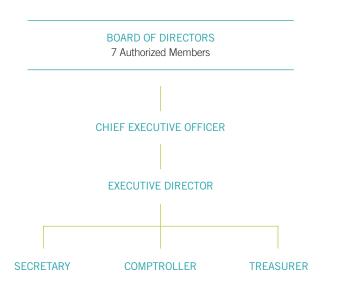


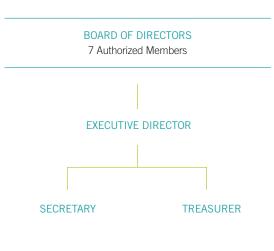
SILVER HAKE CAN BE FOUND ANYWHERE FROM CONEY ISLAND, DOWN TO 2400 FEET OUT IN THE BAY.

# **ORGANIZATIONAL CHART**

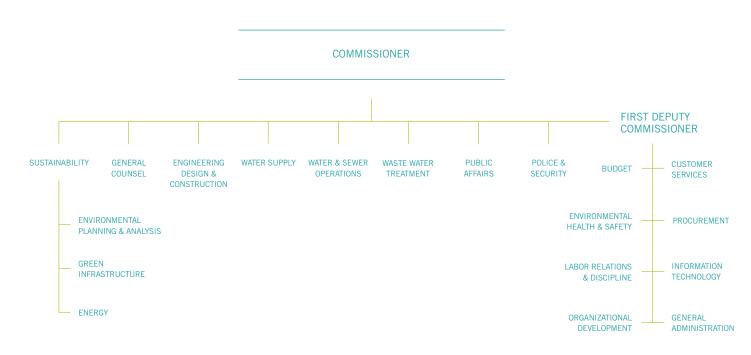
# NYC MUNICIPAL WATER FINANCE AUTHORITY







# NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION



# IN THE BRONX, SOUTH BROTHER ISLAND'S ABUNDANCE OF MARINE LIFE MAKES IT A PERFECT OASIS FOR HUNDREDS OF BREEDING EGRETS, HERONS, IBISES AND OTHER BIRDS.



Government Finance Officers Association

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> For its Comprehensive Annual Financial Report for the Fiscal Year Ended

> > June 30, 2013

hur R. Ener

Executive Director/CEO

# SEA TURTLES ARRIVE IN NEW YORK EVERY YEAR IN LATE JUNE AS WATER TEMPERATURES RISE.

# **SYSTEM OFFICIALS**

## NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY

#### **Board of Directors**

Dean A. Fuleihan, ex officio Member Jacques Jiha, ex officio Member Joseph J. Martens, ex officio Member Emily Lloyd, ex officio Member Max Von Hollweg, Member Marc V. Shaw, Member

#### Staff

Alan L. Anders, Chief Executive Officer Thomas G. Paolicelli, Executive Director Prescott D. Ulrey, Secretary Robert L. Balducci, Comptroller Jeffrey M. Werner, Assistant Secretary Albert M. Rodriguez, Assistant Secretary

# **NEW YORK CITY WATER BOARD**

#### Members

Alan M. Moss, Chairman Alfonso L. Carney Jr., Member Adam Freed, Member Jonathan E. Goldin, Member Arlene M. Shaw, Member

#### Staff

Steven W. Lawitts, Executive Director Mathilde O. McLean, Treasurer Greg L. Ascierto, Deputy Treasurer Albert M. Rodriguez, Secretary

## NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Emily Lloyd, Commissioner Steven W. Lawitts, First Deputy Commissioner

Customer Services Michael J. Moran, Acting Deputy Commissioner

Engineering Design and Construction Vincent S. Sapienza, P.E., Deputy Commissioner

Labor Relations and Discipline David M. Cohen, Deputy Commissioner

Legal Affairs John Rousakis, General Counsel

Organizational Development Diana Jones Ritter, Deputy Commissioner

Police and Security Kevin T. McBride, Deputy Commissioner

Sustainability Angela Licata, Deputy Commissioner

Wastewater Treatment John G. Petito, P.E., Acting Deputy Commissioner

Water and Sewer Operations James J. Roberts, P.E., Deputy Commissioner

Water Supply Paul V. Rush, P.E., Deputy Commissioner



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## **INDEPENDENT AUDITORS' REPORT**

To the Joint Audit Committee of New York Municipal Water Finance Authority and New York City Water Board

## **Report on the Combining Financial Statements**

We have audited the accompanying combining statements of net position 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, as of June 30, 2014 and 2013, and the related combining statements of revenues, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the combining financial statements, which collectively comprise the System's basic combining financial statements as listed in the table of contents.

### Management's Responsibility for the Combining Financial Statements

Management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the combining financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these combining financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the combining financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the combining financial statements in order to design 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. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the net position of the New York Municipal Water Finance Authority and the New York City Water Board of the System as of June 30, 2014 and 2013, and the respective changes in net position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## **Emphasis of a Matter**

As discussed in Note 2 to the combining financial statements, in 2014, the System adopted Governmental Accounting Standards Board ("GASB") Statement No. 68, *Accounting and Financial Reporting for Pensions-an amendment of GASB Statement 27*. As a result of adopting this standard, the System has elected to restate its June 30, 2013 financial statements to reflect the adoption of this standard. Our opinion is not modified with respect to this matter.

## **Other Matters**

## Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 14 through 20, and the Schedule of Funding Progress for the Other Postemployment Benefit Plan, Schedule of the Authority's proportionate share of the Net Pension Liability and Schedule of the Authority's Contribution on page 53 be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic combining financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audits of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance

#### Other Supplementary Information

Our audits were conducted for the purpose of forming opinions on the combining financial statements that collectively comprise the System's basic combining financial statements. The Introductory Section and Statistical Section, as listed in the foregoing table of contents, are presented for purposes of additional analysis and are not a required part of the basic combining financial statements.

The Introductory Section and Statistical Section have not been subjected to the auditing procedures applied in the audit of the basic combining financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

elotte & Touche LLP

October 21, 2014

# 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, 2014 and 2013. 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 Board (the "Board"). The System is a component unit of The City of New York ("The City").

The financial statements consist of three parts—(1) management's discussion and analysis (this section), (2) basic financial statements and (3) the notes to the financial statements.

The basic financial statements of the System, which include the combining statements of net position, the combining statements of revenues, expenses and changes in net position and the combining statements of cash flows, are presented for the purposes of displaying entity-wide information in accordance with Governmental Accounting Standards Board ("GASB") Statements. These financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting.

In fiscal year 2014, the System implemented Governmental Accounting Standards Board Statement No. 68, Accounting and Financial Reporting for Pensions an amendment of GASB Statement No. 27 ("GASB Statement No. 68"). GASB Statement No. 68 establishes standards of accounting and financial reporting for defined benefit pensions and defined contribution pensions provided to employees of state and local governments. The System participates in a cost-sharing, multiple-employer pension system as defined by GASB Statement No. 68. The implementation of GASB Statement No. 68 resulted in the recognition of pension expense as well as the reporting of deferred outflows and inflows of resources and a net pension liability based on the System's proportionate share of those of the overall plan, calculated as specified in GASB Statement No. 68 (See Note 2 for cumulative change and Note 13 for details of GASB Statement No. 68).

# FINANCIAL ANALYSIS AND RESULTS OF OPERATIONS

The following summarizes the activities of the System for the fiscal years 2014, 2013 and 2012 (in thousands):

		Restated		Varia	ance
	2014	2013	2012	2014 v 2013	2013 v 2012
REVENUES:					
Water supply and distribution	\$1,351,550	\$1,278,646	\$1,238,352	\$72,904	\$40,294
Sewer collection and treatment	2,148,964	2,033,047	1,857,527	115,917	175,520
Bad debt expense	(26,979)	(16,983)	(28,541)	(9,996)	11,558
Other operating revenues	183,760	172,283	140,595	11,477	31,688
Total operating revenues	3,657,295	3,466,993	3,207,933	190,302	259,060
Subsidy income	174,606	174,862	196,241	(256)	(21,379)
Investment income	50,148	58,793	48,936	(8,645)	9,857
Legal settlement	83,236	_		83,236	—
Total revenues	3,965,285	3,700,648	3,453,110	264,637	247,538
EXPENSES:					
Operations and maintenance	1,490,550	1,361,055	1,373,038	129,495	(11,983)
Other non-operating expenses	27,874	14,685	73,814	13,189	(59,129)
Administration and general	68,936	56,738	47,402	12,198	9,336
Depreciation expense	740,879	677,560	692,296	63,319	(14,736)
Capital distribution	39,627	25,429	42,005	14,198	(16,576)
Net loss on retirement					
and impairment of capital assets	18,815	20,976	1,646	(2,161)	19,330
Interest expense	1,263,305	1,225,771	1,246,863	37,534	(21,092)
Total expenses	3,649,986	3,382,214	3,477,064	267,772	(94,850)
Net gain / (loss) before capital contributions	315,299	318,434	(23,954)	(3,135)	342,388
Capital contributions	9,799	7,699	26,903	2,100	(19,204)
Change in net position	325,098	326,133	2,949	(1,035)	323,184
Net position—beginning	(483,899)	(809,032)	(811,981)	325,133	2,949
Restatement of beginning net position		(1,000)		1,000	(1,000)
Net position (deficit)—ending	\$(158,801)	\$(483,899)	\$(809,032)	\$325,098	\$325,133

# **OPERATING REVENUE**

#### 2014-2013

Operating revenues increased by \$190.3 million or 5.5% predominantly due to a rate increase of 5.6%.

#### 2013-2012

Operating revenues increased by \$259.1 million or 8.1% predominantly due to a rate increase of 7.0%.

## **OTHER OPERATING REVENUE**

The following summarizes other operating revenues for fiscal years 2014, 2013 and 2012 (in thousands):

				Varia	ance
	2014	2013	2012	2014 v 2013	2013 v 2012
Upstate water fees	\$86,676	\$65,640	\$60,891	\$21,036	\$4,749
Late payment fees	50,427	47,580	44,069	2,847	3,511
Change in residual interest in sold liens	6,585	7,754	12,777	(1,169)	(5,023)
Release of escrow/trust	—	21,960	7,353	(21,960)	14,607
Federal funding	—	1,678	2,632	(1,678)	(954)
Connection fees and permits	13,449	11,840	12,873	1,609	(1,033)
Rental rebate	9,093	12,273		(3,180)	12,273
Service line protection program	17,530	3,558		13,972	3,558
Total other operating revenues	\$ 183,760	\$172,283	\$140,595	\$11,477	\$31,688

#### 2014-2013

Upstate water fees increased by \$21 million or 32.1% compared to fiscal year 2013. The increase was due to the combination of: 1) a 12.34% increase in the wholesale rate for the quantity of water the municipalities were entitled to by law, 2) a 5.6% rate increase for consumption in excess of the entitlement quantity, and 3) an inclusion of \$13.7 million of unbilled revenue.

Late payment fees increased by \$2.8 million or 6.0%. The increase is primarily due to the rate increase of 5.6%.

The change in residual interest in sold liens decreased by \$1.2 million or 15.1% compared to fiscal year 2013. This was due to fewer residual collections being transferred to the System from the lien sale trusts.

There was no federal funding in fiscal year 2014. The federal funding to support technical assistance in developing a Contamination Warning System Demonstration Pilot Program ended in fiscal year 2013.

Connection fees and permits increased by 1.6 million or 13.6%. This was due primarily to new construction activities.

The rental rebate, a portion of the base rental payment by The City, decreased by \$3.2 million or 25.9% compared to fiscal year 2013. This was due to the calculation of the rental rebate based on an intergovernmental agreement.

The amounts received for the Service Line Protection Program increased by \$14.0 million. The program was offered for the full fiscal year 2014 compared to only six months in fiscal year 2013. Also, the number of effective policies steadily increased from approximately 91,000 on July 1, 2013 to approximately 142,000 by the end of fiscal year 2014.

#### 2013-2012

Upstate water fees increased by \$4.7 million or 7.8% compared to fiscal year 2012. The increase was due largely to the combination of a 9.8% increase in the wholesale rate for the quantity of water the municipalities are entitled to by law and a 7.0% rate increase for consumption in excess of the entitlement quantity, which was billed at the in-City retail rate.

Late payment fees increased by \$3.5 million or 8.0%. This increase was due primarily to the rate increase and a decrease in billing adjustments. The substantial completion of the Department of Environmental Protection's ("DEP") installation of its wireless meter reading system had increased the number of actual readings and reduced the number of estimated readings that had previously resulted in billing adjustments and the cancellation of late payment fees.

The change in residual interest in sold liens decreased by \$5.0 million or 39.3% compared to fiscal year 2012.

In fiscal year 2013, New York State returned \$22.0 million of escrowed funds to the System to assist the System in Hurricane Sandy recovery. The escrow fund had been established in 2010

by DEP to cover the construction of Biological Nutrient Removal facilities to remove nitrogen from the wastewater in the Newtown Creek Wastewater Treatment Plant.

Federal funding of \$1.7 million was received by the Board in fiscal year 2013 to support technical assistance in developing a Contamination Warning System Demonstration Pilot Program.

Connection fees and permits decreased by \$1.0 million or 8.0%. The decrease in revenue from fiscal year 2013 compared to fiscal year 2012 was because fiscal year 2012 revenues were higher due to the System's special initiative in that year to bring buildings into compliance with the New York State Sanitary Code regarding backflow prevention.

A rental rebate of \$12.3 million was received by the System from The City in fiscal year 2013. This amount represents a rebate of a portion of the base rental payment expense for fiscal year 2012. The System has an agreement with The City to cap the rental expense for a three year period with overpayments being returned in the subsequent fiscal year.

The System has engaged American Water Resources ("AWR") to offer service line protection policies to customers. In fiscal year 2013, related customer fees totaled \$3.6 million. This amount is included in other operating revenues.

## **INVESTMENT INCOME**

## 2014-2013

Investment income decreased by \$8.6 million or 14.7% compared to fiscal year 2013. For fiscal year 2013, unrealized gains were higher due to a Guaranteed Investment Contract ("GIC") that had a one-time option to terminate but was not exercised by the counter party.

#### 2013-2012

The investment income increased by \$9.9 million or 20.1% due predominantly to a net increase on unrealized gains. The market value of a GIC increased by \$16.8 million from the prior year because the counter party did not elect to exercise a one-time option to terminate during fiscal year 2012.

# LEGAL SETTLEMENT

#### 2014-2013

In 2003, The City sued refiners and manufacturers of gasoline containing methyl tertiary butyl ether ("MTBE"), a gasoline additive that replaces lead and enables gasoline to burn more cleanly. The City's lawsuit claimed that the oil companies added MTBE to gasoline starting in the late 1970s, knowing that it would contaminate soil and groundwater when gasoline leaks or spills, and knowing that underground storage tanks at gas stations, many of which are owned by the same companies, regularly leak.

The City's drinking water system in southeast Queens has 68 wells—more than half of which were contaminated by MTBE. Since initiating the suit, The City had settled with all of the defendants except Exxon Mobil, until this fiscal year. After a trial that began in the summer of 2009 and subsequent appeals by Exxon Mobil, The City won the case and Exxon Mobil paid damages of \$83 million to the Board in fiscal year 2014.

# **OPERATING EXPENSES**

#### 2014-2013

Total operations and maintenance expenses increased by \$129.5 million or 9.5%. The personal services expense increased by approximately \$76 million due to wage accruals to cover the provision necessary for collective bargaining agreements and other open employee contracts. Also, other than personal services increased by \$32.7 million mainly due to the operational costs for the new facilities (Cat/ Del Ultraviolet Disinfection Facility and Croton Filtration Plant), increases in upstate property taxes, increases in Department of Investigation contract oversight and a new program to prevent sewer back-ups. The remaining increase was due to an increase in judgment and claims and a reversal of prior year accruals.

### 2013-2012

Total operations and maintenance expenses decreased by \$12.0 million or 0.9%. The operating expenses decreased by \$22.5 million mainly because certain non-personnel costs were offset by reduction of headcount.

Rental expense increased by \$11.4 million, primarily due to increased debt service. Other operating expenses decreased by \$59.1 million primarily due to the reversal of a reserve for legal expenses (see Note 8).

## **NON-OPERATING EXPENSES**

#### 2014-2013

Interest expense increased by \$37.5 million or 3.1% compared to fiscal year 2013. This was due primarily to the increase of bonds outstanding at the end of fiscal year 2014.

Other non-operating expenses increased by \$13.2 million compared to fiscal year 2013. In fiscal year 2013 the reversal of a \$44 million accrual caused the expense to be low.

Administrative and general expenses increased by \$12.2 million or 21.5% compared to fiscal year 2013. The Board expenses increased by \$13.2 million due to an increase of the Service Line Protection Program payments to AWR, which are pass-through payments based on the number of DEP customers enrolled in the program. Payments for a contract to evaluate the effectiveness of the operations and maintenance of the System also increased by \$2.3 million. Other Board expenses decreased by approximately \$1.4 million. Net loss on retirement and impairment of capital assets decreased by \$2.2 million. In fiscal year 2013, due to Hurricane Sandy, the impairment of capital assets was much higher.

#### 2013-2012

Hurricane Sandy caused \$17.3 million of impairment loss to the System's capital assets. The Board and the Authority anticipate that all of the costs relating to Hurricane Sandy will ultimately be recovered from the federal government.

Interest expense decreased by a \$21.1 million or 1.7% compared to fiscal year 2012. The fiscal year 2012 restatement increased interest expense previously reported. Bond issuance costs of \$21.9 million previously recorded as an asset and the amortization of unamortized deferred bond refunding costs of \$26.2 million were reclassified as interest expense.

General and administrative expenses increased by approximately \$9.3 million, largely due to 1) a \$2.1 million increase in expenses incurred under a new contract for the service line protection program and an existing contract to evaluate the effectiveness of the operations and maintenance of the System and 2) a \$7.2 million increase to cover the increase in remarketing and liquidity fees in connection with new variable rate debt and arbitrage rebate accrued expense.

## **CHANGES IN NET POSITION**

### 2014-2013

The change in net position represents the net total of operating income, non-operating revenues / expenses and capital contributions. Net position increased by \$325.1 million in fiscal year 2014.

#### 2013-2012

The change in net position represents the net total of operating income, nonoperating losses and capital contributions. Net position increased by \$325.1 million in fiscal year 2013. Following is a summary of the System's assets, liabilities and net position as of June 30 (in thousands):

		Restated		Varia	ance
	2014	2013	2012	2014 v 2013	2013 v 2012
Current assets	\$3,125,177	\$3,020,559	\$2,496,428	\$104,618	\$524,131
Residual interest in sold liens	66,116	59,531	51,777	6,585	7,754
Capital assets	28,392,330	27,460,482	26,474,776	931,848	985,706
Total assets	31,583,623	30,540,572	29,022,981	1,043,051	1,517,591
DEFERRED OUTFLOWS OF RESOURCES:					
Deferred outflows from hedging	86,502	81,108	134,752	5,394	(53,644)
Deferred outflows from pension	235	13	_	222	13
Unamortized deferred bond refunding costs	4,294	9,928	18,071	(5,633)	(8,143)
Total deferred outflows of resources	91,031	91,049	152,823	(17)	(61,774)
Total assets and deferred					
outflows of resources	\$31,674,654	\$30,631,621	\$29,175,804	\$1,043,034	\$1,455,817
Long-term liabilities	\$30,328,237	\$29,060,215	\$28,224,092	\$1,268,022	\$836,123
Current liabilities	1,504,946	2,055,241	1,760,744	(550,295)	294,497
Total liabilities	31,833,183	31,115,456	29,984,836	717,727	1,130,620
DEFERRED INFLOWS OF RESOURCES:					
Deferred inflows from pension	272	64	—	208	64
Total deferred inflows of resources	272	64	_	208	64
NET POSITION (DEFICIT):					
Net investment in capital assets	(771,165)	(945,890)	(840,201)	174,725	(105,689)
Restricted for debt service	1,145,505	918,229	687,656	227,276	230,573
Restricted for operations and maintenance	221,440	212,233	212,885	9,207	(652)
Unrestricted (deficit)	(754,581)	(668,471)	(869,372)	(86,110)	200,901
Total net position (deficit)	(158,801)	(483,899)	(809,032)	325,098	325,133
Total liabilities, deferred inflows	_		_	_	
of resources and net position	\$31,674,654	\$30,631,621	\$29,175,804	\$1,043,034	\$1,455,817

#### 2014-2013

Current assets increased by \$104.6 million or 3.4% due to an increase in revenue funds held by the Authority at June 30, 2014.

Residual interest in sold liens increased by \$6.6 million or 11.1% compared to fiscal year 2013.

Deferred outflows from hedging increased by \$5.4 million or 6.7% due to a decrease in the fair value of the hedging derivative instruments.

Long-term liabilities increased by 1.3 billion or 4.4%, primarily due to the increase in the bonds issued.

Current liabilities decreased by \$550.3 million or 26.8% compared to fiscal year 2013. This is primarily due to a decrease in the receivable from the City for operations and maintenance by \$129.5 million, a decrease in bond anticipation notes ("BAN") by \$217 million and a \$100 million decrease in commercial paper notes.

## 2013-2012

Current assets increased by \$524.1 million or 21.0%. The increase was primarily due to an increase in 1) revenue funds by \$249 million, 2) construction funds by \$58 million, 3) customer receivables by \$67 million, and 4) a receivable from The City for operations and maintenance by \$91 million.

Residual interest in sold liens increased by \$7.8 million or 15.0% compared to fiscal year 2012.

Deferred outflows from hedging decreased by \$53.6 million due to an increase in the fair value of the hedging derivative instruments.

Long-term liabilities increased by \$836.1 million or 3.0% primarily due to the increase in the long-term portion of bonds payable of \$798.1 million.

Current liabilities increased by \$294.5 million or 16.7%, primarily due to a BAN of \$217 million that matures in fiscal year 2014, an increase of \$100 million in commercial paper and also an increase of \$10.2 million in revenue received in advance. A reserve liability for legal expenses of \$44 million was deemed unnecessary (see Note 8).

# **CAPITAL ASSETS**

The System's capital assets include buildings, equipment, vehicles, water supply and distribution assets, and wastewater treatment and sewage collection assets.

Capital assets as of June 30 are detailed as follows (in thousands):

				Varia	ance
	2014	2013	2012	2014 v 2013	2013 v 2012
Non-depreciable assets — utility construction	\$6,812,608	\$9,063,048	\$8,422,470	\$(2,250,440)	\$640,578
UTILITY PLANT IN SERVICE:					
Buildings	34,877	34,877	34,877	—	—
Equipment	3,434,110	2,211,487	2,014,704	1,222,624	196,783
Vehicles	164,553	157,118	150,531	7,435	6,587
Water supply and distribution and wastewater	20,000,071	26 470 260		2 520 710	001 070
treatment and sewage collection systems	29,000,071	26,470,360	25,669,088	2,529,710	801,272
Total utility plant in service	32,633,611	28,873,842	27,869,200	3,759,769	1,004,642
LESS ACCUMULATED DEPRECIATION FOR:					
Buildings	(22,506)	(21,189)	(19,820)	(1,317)	(1,369)
Equipment	(1,169,222)	(927,797)	(790,180)	(241,425)	(137,617)
Vehicles	(110,510)	(104,798)	(98,639)	(5,711)	(6,159)
Water supply and distribution and wastewater					
treatment and sewage collection systems	(9,751,651)	(9,422,624)	(8,908,255)	(329,027)	(514,369)
Total accumulated depreciation	(11,053,889)	(10,476,408)	(9,816,894)	(577,480)	(659,514)
Total utility plant in service—net	21,579,722	18,397,434	18,052,306	3,182,289	345,128
Total capital assets—net	\$28,392,330	\$27,460,482	\$26,474,776	\$931,849	\$985,706

The increase in the System's capital assets, net of depreciation during fiscal year 2014, was \$931.8 million or 3.4%. Capital asset additions of non-depreciable assets for fiscal year 2014 were \$2.6 billion. The Water Tunnel No. 3 was placed into service in fiscal year 2014. The cost of \$1.2 billion was moved into depreciable assets. See Note 3 (Utility Plant) for further details.

The increase in the System's capital assets, net of depreciation during fiscal year 2013 was \$985.7 million or 3.7%. Capital asset additions for non-depreciable assets for fiscal year 2013 were \$1.7 billion. See Note 3 (Utility Plant) for further details.

# **DEBT ADMINISTRATION**

The Authority issues debt to pay for the capital improvements to the System and certain related costs. Certain costs, including pollution remediation and some costs related to the filtration avoidance determination, including land acquisition in the upstate watersheds are financed with debt, but are not recorded as System assets on the balance sheet. These costs or distributions are reported as expenses in the System's combining statements of revenues, expenses and changes in net position (deficit) in the years incurred. Land purchased is granted to The City and becomes The City's capital asset because it is not subject to the capital lease under which the System reports water distribution and wastewater collection and treatment capital assets.

The debt program of the Authority includes commercial paper, long-term debt of the Authority, BANs, 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 issues long-term debt on its own or through EFC to retire outstanding commercial paper. The Authority also periodically issues refunding bonds to refinance higher-coupon debt. See Note 9 (Short-Term Debt) and Note 10 (Long-Term Debt) for further details.

At June 30, 2014, the total outstanding debt of the System was \$30.2 billion, of which \$500 million was commercial paper and \$338.6 million was outstanding against BANs issued to EFC maturing through 2017. The remaining \$29.3 billion consisted of adjustable and fixedrate bonds maturing in varying installments through 2050. The total outstanding long-term debt, including current portion at June 30, 2014, was as follows (in thousands):

ISSUE DATE	PRINCIPAL OUTSTANDING
2014	\$2,994,633
2013	2,289,205
2012	3,627,133
2011	4,432,685
2010	3,248,062
2009 and prior	13,082,164
Total long-term debt	\$29,673,882

In the summary above, bonds retired through refunding in fiscal year 2014 are removed from the year in which the refunded bonds were issued, and the refunding bonds are included in the fiscal year 2014 outstanding bonds.

In fiscal year 2014, the Authority issued \$1.9 billion of water and sewer revenue bonds directly to the public, including \$547.9 million of refunding bonds and \$1.4 billion of new money bonds. The Authority also issued \$962.3 million of Clean Water and Drinking Water State Revolving Fund ("SRF") bonds to EFC, of which \$752.9 million were refunding bonds and \$209.4 million were new money bonds. The Authority used new money bond proceeds to finance capital improvements to the System and to provide long-term financing of commercial paper notes and BANs, which had previously financed capital improvements to the system, and to pay for bond issuance costs.

On July 11, 2013, the Authority issued to EFC \$401.1 million and \$213.9 million of new money and refunding fixed-rate Second General Resolution Revenue bonds, Fiscal 2014 Series 1 and Fiscal 2014 Series 2, respectively. The source of funds to the Authority for the bonds was from tax-exempt bonds issued by EFC (2013 A). Proceeds from Series 1 were used to refund Fiscal 2003 Series 5 and Fiscal 2004 Series 1 and proceeds from Series 2 were used to retire commercial paper notes Series 6 and to pay costs of improvements to the System.

On September 17, 2013, the Authority issued \$650.9 million of new money, tax-exempt, adjustable rate Second General Resolution Revenue Bonds, Fiscal 2014 Series AA. The bonds are backed by standby bond purchase agreements from four banks. These bonds will mature in 2048, 2049 and 2050. The proceeds were used to refund the Authority's commercial paper notes, to pay the costs for the improvements to the System, to pay the principal and interest on BANs and to pay for bond issuance costs.

On October 21, 2013, the Authority issued Fiscal 2014 Series 3 BANs to EFC in the amount of \$320 million. The Authority has drawn \$109 million as of June 30, 2014. The BAN will mature on October 21, 2016.

On November 21, 2013, the Authority issued \$397.1 million of new money, tax-exempt, fixed rate Second General Resolution Revenue Bonds, Fiscal 2014 Series BB. This bond issue included term bonds maturing in 2046. The Authority used the proceeds to refund commercial paper notes and to pay bond issuance costs.

On February 6, 2014, the Authority issued \$351.2 million of new money, tax-exempt, fixed rate Second General Resolution Revenue Bonds, Fiscal 2014 Series CC. The bonds included term bonds maturing in 2047. The Authority used the proceeds to refund commercial paper notes and to pay bond issuance costs. The 2014 Series CC bond issue included two refundable principal installment bonds maturing in 2018 and 2019.

On March 27, 2013, the Authority issued to EFC \$347.4 million of refunding Second General Resolution Revenue Bonds, Fiscal 2014 Series 4. The Authority used the proceeds to refund the outstanding principal of its Fiscal 2005 Series 1 bonds, partially refund the outstanding principal of its Fiscal 2004 Series 2 and Fiscal 2005 Series 2 bonds and to pay bond issuance costs.

On April 3, 2014, the Authority issued \$547.9 million of refunding, tax-exempt, fixed-rate Second General Resolution Revenue Bonds, Fiscal 2014 Series DD. The bonds included serial and term bonds maturing in 2039. The Authority used the proceeds to refund the Authority's outstanding First Resolution Revenue Bonds, Fiscal 2004 Series B, Fiscal 2004 Series C and Fiscal 2005 Series A and to pay bond issuance costs.

During fiscal year 2014 the Authority issued \$1.4 billion of commercial paper notes to pay costs of improvements to the System. As of June 30, 2014, \$500 million of commercial paper notes were outstanding.

# ECONOMIC FACTORS AND NEXT YEAR'S RATES

In May of each year, the Board adopts rates for the following fiscal year. A rate increase of 3.35% for fiscal year 2015, based on projected revenues and costs, became effective July 1, 2014.

# **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 Investor Relations, New York City Municipal Water Finance Authority, 255 Greenwich Street, New York, New York 10007 or to NYWInvestors@ omb.nyc.gov.

June 30, 2014 (in thousands):

	Ne	ew York City		
ASSETS	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	TOTAL
CURRENT ASSETS:				
Unrestricted cash and cash equivalents	\$14,120	\$7	\$—	\$14,127
Restricted cash and cash equivalents	80,764	1,588,101	—	1,668,865
Restricted investments	140,676	507,566	_	648,242
Accrued interest and subsidy receivable	_	6,616	_	6,616
Accounts receivable: Billed—less allowance for uncollectable wate	r			
and sewer receivables of \$383,279	425,226	—	—	425,226
Unbilled	338,687	—	—	338,687
Receivable from The City of New York	23,414	_	—	23,414
Total current assets	1,022,887	2,102,290	_	3,125,177
depreciation of \$11,053,889 Utility plant construction <b>Total capital assets</b> Residual interest in sold liens Revenue required to be billed by and received from the Board	21,579,722 6,812,608 <b>28,392,330</b> 66,116	  15,334,172	 	21,579,722 6,812,608 <b>28,392,330</b> 66,116
Total non-current assets	28,458,446	15,334,172	(15,334,172)	28,458,446
<b>DEFERRED OUTFLOWS OF RESOURCES:</b> Deferred outflows from hedging	_	86,502	_	86,502
Unamortized deferred bond refunding costs	—	4,294	_	4,294
Deferred outflows from pension	—	235	—	235
Total deferred outflows of resources		91,031		91,031
Total assets and deferred outflows of resources	¢20 491 222	¢17 597 409	¢(15 224 172)	¢21 674 654
	\$29,481,333	\$17,527,493	\$(15,334,172)	\$31,674,654

See notes to combining financial statements.

(Continued)

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June 30, 2014 (in thousands):

	N	ew York City		
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	TOTAL
CURRENT LIABILITIES:				
Accounts payable and accrued expenses	\$4,222	\$56,332	\$—	\$60,554
Revenue received in advance	57,827	—	—	57,827
Commercial paper payable	—	500,000	—	500,000
Current portion of bonds and notes payable	—	291,955	—	291,955
Payable to The City of New York	—	522,036	—	522,036
Service credits on customer accounts	72,574	—	—	72,574
Total current liabilities	134,623	1,370,323		1,504,946
LONG-TERM LIABILITIES:				
Bonds and notes payable-net of current portion		29,381,928	_	29,381,928
Net premium on bonds and notes payable	_	762,827	_	762,827
Pollution remediation obligation	98,927	_	_	98,927
Interest rate swap agreement—net		79,997	_	79,997
Revenue requirements payable to the Authority	15,334,172	_	(15,334,172)	
Net pension liability	_	901	_	901
Other long-term liability		3,657	_	3,657
Total long-term liabilities	15,433,099	30,229,310	(15,334,172)	30,328,237
Total liabilities	15,567,722	31,599,633	(15,334,172)	31,833,183
DEFERRED INFLOWS OF RESOURCES:				
Deferred inflows from pension		272	_	272
Total liabilities and deferred inflows of resource	s 15,567,722	31,599,905		31,833,455
NET POSITION:				
Net investment in capital assets	28,392,330	(29,163,495)	_	(771,165
Restricted for debt service	—	1,145,505	_	1,145,505
Restricted for operations and maintenance	221,440	_	_	221,440
Unrestricted (deficit)	(14,700,159)	13,945,578	_	(754,581
Total net position	13,913,611	(14,072,412)		(158,801
Total liabilities, deferred inflows				
of resources and net position	\$29,481,333	\$17,527,493	\$(15,334,172)	\$31,674,654

See notes to combining financial statements.

(Concluded)

June 30, 2013 (RESTATED) (in thousands):

	Ne	ew York City		
ASSETS	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	TOTAL
CURRENT ASSETS:				
Unrestricted cash and cash equivalents	\$8,008	\$10	\$—	\$8,018
Restricted cash and cash equivalents	1,043	1,324,186	_	1,325,229
Restricted investments	211,190	590,742	_	801,932
Accrued interest and subsidy receivable		21	_	21
Accounts receivable: Billed—less allowance for uncollectable water				
and sewer receivables of \$356,300	414,019	_	_	414,019
Unbilled	318,461	_	_	318,461
Receivable from The City of New York	152,879	_	_	152,879
Total current assets	1,105,600	1,914,959	_	3,020,559
Utility plant in service—less accumulated depreciation of \$10,476,408 Utility plant construction <b>Total capital assets</b> Residual interest in sold liens Revenue required to be billed by and received from the Board <b>Total non-current assets</b>	18,397,434 9,063,048 <b>27,460,482</b> 59,531  <b>27,520,013</b>	  15,862,826 <b>15,862,826</b>		18,397,434 9,063,048 <b>27,460,482</b> 59,531  <b>27,520,013</b>
DEFERRED OUTFLOWS OF RESOURCES:				
Deferred outflows from hedging	—	81,108	—	81,108
Deferred outflows from pension	—	13	—	13
Unamortized deferred bond refunding costs	—	9,928	—	9,928
Total deferred outflows of resources		91,049	_	91,049
Total assets and deferred outflows of resources	\$28,625,613	\$17,868,834	\$(15,862,826)	\$30,631,621

See notes to combining financial statements.

(Continued)

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June 30, 2013 (RESTATED) (in thousands):

	Ne	ew York City		
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	ELIMINATIONS	TOTAL
CURRENT LIABILITIES:				
Accounts payable and accrued expenses	\$2,031	\$55,454	\$—	\$57,485
Revenue received in advance	61,560	—	—	61,560
Commercial paper payable	_	500,000	—	500,000
Current portion of bonds and notes payable	_	787,654	—	787,654
Payable to The City of New York	—	572,700		572,700
Service credits on customer accounts	75,842	—	—	75,842
Total current liabilities	139,433	1,915,808	_	2,055,241
LONG-TERM LIABILITIES:				
Bonds and notes payable-net of current portion	—	28,205,731	—	28,205,731
Net premium on bonds and notes payable		658,859	—	658,859
Pollution remediation obligation	116,858	—	—	116,858
Interest rate swap agreement—net		74,603	—	74,603
Revenue requirements payable to the Authority	15,862,826	_	(15,862,826)	
Net pension liability		923	_	923
Other long-term liability	_	3,241	_	3,241
Total long-term liabilities	15,979,684	28,943,357	(15,862,826)	29,060,215
Total liabilities	16,119,117	30,859,165	(15,862,826)	31,115,456
DEFERRED INFLOWS OF RESOURCES:				
Deferred inflows from pension	—	64	—	64
Total liabilities and deferred inflows of resource	s 16,119,117	30,859,229		31,115,520
NET POSITION:				
Net investment in capital assets	27,460,482	(28,406,372)	—	(945,890
Restricted for debt service	—	918,229	—	918,229
Restricted for operations and maintenance	212,233	_	_	212,233
Unrestricted (deficit)	(15,166,219)	14,497,748	_	(668,471
Total net position	12,506,496	(12,990,395)	_	(483,899
Total liabilities, deferred inflows of				
resources and net position	\$28,625,613	\$17,868,834	\$(15,862,826)	\$30,631,621

See notes to combining financial statements.

(Concluded)

# COMBINING STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

Year ended June 30, 2014 (in thousands):

	Nev	New York City	
	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	TOTAL
OPERATING REVENUES:	WATER DUARD		TOTAL
Water supply and distribution	\$1,351,550	\$—	\$1,351,550
Sewer collection and treatment	2,148,964	ψ—	2,148,964
Bad debt expense	(26,979)		(26,979)
Other operating revenues	183,760		183,760
Total operating revenues	3,657,295	_	<b>3,657,295</b>
OPERATING EXPENSES:			
Operation and maintenance	1,490,550	_	1,490,550
Administration and general	25,765	43,171	68,936
Other operating expenses	27,874	, 	27,874
Total operating expenses	1,544,189	43,171	1,587,360
Depreciation expense	740,879	_	740,879
Operating income / (loss)	1,372,227	(43,171)	1,329,056
NON-OPERATING REVENUE (EXPENSES):			
Interest expense	_	(1,244,459)	(1,244,459)
Cost of issuance	_	(18,846)	(18,846
Net loss on retirement and impairment of capital assets	(18,815)		(18,815
Subsidy income	_	174,606	174,606
Capital distribution	(39,627)	, 	(39,627)
Investment income	294	49,854	50,148
Legal settlement	83,236		83,236
Net income / (loss) before capital contributions	1,397,315	(1,082,016)	315,299
Capital contribution	9,799	_	9,799
Change in net position	1,407,114	(1,082,016)	325,098
Net position (deficit)—beginning of year	12,506,497	(12,990,396)	(483,899)
Net position (deficit)—end of year	\$13,913,611	\$(14,072,412)	\$(158,801)

See notes to combining financial statements.

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# COMBINING STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

Year ended June 30, 2013 (RESTATED) (in thousands):

	No	v York City	
	INEV	MUNICIPAL WATER	
	WATER BOARD	FINANCE AUTHORITY	TOTAL
OPERATING REVENUES:			
Water supply and distribution	\$1,278,646	\$—	\$1,278,646
Sewer collection and treatment	2,033,047	—	2,033,047
Other operating revenues	172,283	_	172,283
Total operating revenues	3,483,976	_	3,483,976
OPERATING EXPENSES:			
Operation and maintenance	1,361,055	—	1,361,055
Bad debt expense	16,983	—	16,983
Administration and general	11,594	45,144	56,738
Other operating expenses	14,685	—	14,685
Total operating expenses	1,404,317	45,144	1,449,461
Depreciation expense	677,560	_	677,560
Operating income / (loss)	1,402,099	(45,144)	1,356,955
NON-OPERATING REVENUE (EXPENSES):			
Interest expense	_	(1,225,771)	(1,225,771)
Loss on retirement of capital assets	(3,666)	_	(3,666)
Loss on impairment of capital assets	(17,310)	_	(17,310)
Subsidy income	_	174,862	174,862
Capital distribution	(25,429)	_	(25,429)
Investment income	278	58,515	58,793
Net income / (loss) before capital contributions	1,355,972	(1,037,538)	318,434
Capital contribution	7,699	_	7,699
Change in net position	1,363,671	(1,037,538)	326,133
Net position (deficit)—beginning of year	11,142,826	(11,951,858)	(809,032
Restatement of beginning net position		(1,000)	(1,000)
Net position (deficit)—end of year	\$12,506,497	\$(12,990,396)	\$(483,899)

See notes to combining financial statements.

Year ended June 30, 2014 (in thousands):

	New York City		
		MUNICIPAL WATER	
	WATER BOARD	FINANCE AUTHORITY	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:			
Receipts from customers	\$3,695,515	\$—	\$3,695,515
Payments for operations and maintenance	(1,361,085)	—	(1,361,085)
Payments for administration	(23,574)	(42,873)	(66,447)
Net cash and cash equivalent provided			
by (used in) operating activities	2,310,856	(42,873)	2,267,983
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIV	ITIES:		
Proceeds from issuing bonds, notes			
and other borrowings—net of issuance costs		4,570,035	4,570,035
Acquisition and construction of capital assets	292	(1,818,132)	(1,817,840)
Payments by the Board to the Authority	(2,296,121)	2,296,121	—
Repayments of bonds, notes and other borrowings		(3,778,345)	(3,778,345)
Interest paid on bonds, notes and other borrowings	—	(1,089,079)	(1,089,079)
Net cash and cash equivalent provided			
by (used in) capital and related financing activities	(2,295,829)	180,600	(2,115,229)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of investments	707,519	92,365	799,884
Purchase of investments	(637,031)	(3,806)	(640,837)
Interest on investments	318	37,626	37,944
Net cash and cash equivalent provided by investing activities	70,806	126,185	196,991
Net increase in cash and cash equivalents	85,833	263,912	349,745
Cash and cash equivalents—beginning of year	9,051	1,324,196	1,333,247
Cash and cash equivalents—end of year	\$94,884	\$1,588,108	\$1,682,992

See notes to combining financial statements.

(Continued)

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Year ended June 30, 2014 (in thousands):

	New York City		
	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	TOTAL
RECONCILIATION OF OPERATING INCOME / (LOSS)			
TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Operating income / (loss)	\$1,372,227	\$(43,171)	\$1,329,056
ADJUSTMENTS TO RECONCILE OPERATING INCOME / (LOSS)			
TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Depreciation	740,879	_	740,879
Legal settlement	83,236	_	83,236
Other operating expense paid for with bond proceeds	22,670	—	22,670
Pollution remediation expense	23,135	_	23,135
CHANGES IN ASSETS AND LIABILITIES—NET:			
Pollution remediation liability	(17,931)	_	(17,931)
Receivables—net	(31,432)	21	(31,411)
Prepaid expense	_	(211)	(211)
Receivable from The City of New York	129,465	_	129,465
Residual interest in sold liens	(6,585)	_	(6,585)
Accounts payable	2,192	488	2,680
Revenues received in advance	(3,732)	_	(3,732)
Refunds payable	(3,268)	_	(3,268)
Net cash provided by (used in) operating activities	\$2,310,856	\$(42,873)	\$2,267,983

The following are the noncash capital and related financing activities:

• Interest expense includes the amortization of net (premium) and discount in the amount of \$51,771 in 2014.

• Capital expenditures in the amount of \$522,036 had been incurred but not paid at June 30, 2014.

• The Board received capital assets of \$9,507 in 2014 which represented capital contributed by The City.

• The Board received capital assets of \$293 in 2014 which represented capital contributed by Westchester County.

See notes to combining financial statements.

(Concluded)

Year ended June 30, 2013 (in thousands):

	New York City		
		MUNICIPAL WATER	TOTAL
	WATER BOARD	FINANCE AUTHORITY	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:			
Receipts from customers	\$3,396,406	\$—	\$3,396,406
Payments for operations and maintenance	(1,451,563)	—	(1,451,563
Payments for administration	(9,401)	(42,072)	(51,473
Net cash and cash equivalent provided			
by (used in) operating activities	1,935,442	(42,072)	1,893,370
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIV	/ITIES:		
Proceeds from issuing bonds, notes			
and other borrowings—net of issuance costs	—	4,243,673	4,243,673
Acquisition and construction of capital assets	293	(1,857,581)	(1,857,288
Payments by the Board to the Authority	(1,934,111)	1,934,111	
Repayments of bonds, notes and other borrowings	_	(2,933,934)	(2,933,934
Interest paid on bonds, notes and other borrowings		(1,035,137)	(1,035,137
Net cash and cash equivalent provided			
by (used in) capital and related financing activities	(1,933,818)	351,133	(1,582,685)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of investments	234,774	68,881	303,655
Purchase of investments	(233,347)	(243,655)	(477,002
Interest on investments	498	31,551	32,049
Net cash and cash equivalent provided by investing activities	1,925	(143,223)	(141,298
Net increase in cash and cash equivalents	3,549	165,838	169,387
Cash and cash equivalents—beginning of year	5,502	1,158,358	1,163,860
Cash and cash equivalents—end of year	\$9,051	\$1,324,196	\$1,333,247

See notes to combining financial statements.

(Continued)

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Year ended June 30, 2013 (in thousands):

	New York City		
	WATER BOARD	MUNICIPAL WATER FINANCE AUTHORITY	TOTAL
RECONCILIATION OF OPERATING INCOME / (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Operating income / (loss)	\$1,402,099	\$(45,144)	\$1,356,955
ADJUSTMENTS TO RECONCILE OPERATING INCOME / (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Depreciation	677,560	—	677,560
Other operating expense paid for with bond proceeds	40,014	—	40,014
Pollution remediation expense	10,122	_	10,122
CHANGES IN ASSETS AND LIABILITIES—NET:			
Pollution remediation liability	8,557	—	8,557
Receivables—net	(66,983)	6	(66,977)
Prepaid expense	_	(25)	(25)
Receivable from The City of New York	(90,508)	_	(90,508)
Residual interest in sold liens	(7,754)	_	(7,754)
Accounts payable	(43,493)	3,091	(40,402)
Revenues received in advance	10,264	_	10,264
Refunds payable	(4,436)	_	(4,436)
Net cash provided by (used in) operating activities	\$1,935,442	\$(42,072)	\$1,893,370

The following are the noncash capital and related financing activities:

• Interest expense includes the amortization of net (premium) and discount in the amount of \$43,694 in 2013.

• Capital expenditures in the amount of \$572,700 had been incurred but not paid at June 30, 2013.

• The Board received capital assets of \$7,407 in 2013 which represented capital contributed by The City.

• The Board received capital assets of \$293 in 2013 which represented capital contributed by Westchester County.

See notes to combining financial statements.

(Concluded)

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED JUNE 30, 2014 AND 2013

# **1. ORGANIZATION**

The New York City Water and Sewer System (the "System") provides water supply, treatment and distribution, and sewage collection, treatment, and disposal for The City of New York ("The City"). The System, as presented in the accompanying combining 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 (the "State"), as amended by Chapter 514 of the laws of 1984 of the State of New York. The Board was created by Chapter 515 of the laws of 1984 of the State of New York. The Act empowers the Authority to issue bonds or notes to finance the cost of capital improvements to the System, and to refund any and all outstanding bonds and general obligation bonds of The City issued for water and sewer purposes. The Act empowers the Board to lease the System from The City and to fix and collect rates, fees, rents and other charges for the use of, or for services furnished, rendered, or made available by, the System to produce cash sufficient to pay debt service on the Authority's bonds and to place the System on a self-sustaining basis.

The Financing Agreement by and among The City of New York, New York City Municipal Water Finance Authority and New York City Water Board dated as of July 1, 1985 (the "Agreement") provides that the Authority will issue bonds to finance the cost of capital investment and related costs in the System serving The City. It also sets forth the funding priority for the debt service costs of the Authority, operating costs of the 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 ("DEP") subject to contractual agreements with the Authority and the Board.

In accordance with Governmental Accounting Standards Board ("GASB"), the Board and the Authority are considered to be part of the same reporting entity, the System, since they are fiscally interdependent. Accordingly, the accompanying combining financial statements for the System present the individual financial statements of the Board and the Authority as major funds. In addition, the accompanying combining 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 combining financial statements.

# 2.SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements of the System have been prepared on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred. Other significant accounting policies are:

**Component Unit**—The System is a component unit of The City. The System leases the water and sewer related capital assets from The City, which is responsible for the operations, maintenance and capital improvement of the System. The System reimburses The City for costs incurred for operations and maintenance and issues debt to pay for capital improvements.

**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 forward purchase agreements. All investments are carried at fair value with the exception of money market funds which are carried at cost plus accrued interest. For purposes of the statement of cash flows and statement of net position, the System generally considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents.

#### Restricted Assets-Net Position Classification-

Proceeds from the issuance of debt and monies set aside for the operation and maintenance of the System are classified as restricted based on the requirements of the applicable bond indentures in the net position classification.

Lien Sales and Residual Interest in Sold Liens—The City periodically sells tax liens secured by water and sewer rents and surcharges, for which the Board receives the applicable sale proceeds. At the time of sale, the Board recognizes the proceeds as operating revenue and removes the related receivables. The Board maintains a residual interest in the liens, which represents the amount estimated to be received by the Board if and when liens held by the purchasing trusts generate cash flows above the amounts needed by the trusts to pay their operating costs, bondholders and satisfy reserve requirements.

**Bond Discount and Premium**—Bond discount and premium are amortized over the life of the related bond issue, using the effective yield method of amortization for bond discount and premium.

Utility Plant—Utility plant acquired through purchase or internal construction is recorded at cost, net of retirements. It is the Board's policy to capitalize assets with a cost of \$35,000 or more and a useful life of five years or longer. Contributed utility plant is recorded net of depreciation at its estimated historical cost based on appraisals or other methods when historical cost information is not available.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Depreciation is computed using the straight-line method based upon estimated useful lives, as follows:

TYPE OF ASSET	YEARS
Buildings	40–50
Water supply and wastewater treatment systems	15–50
Water distribution and sewage collection systems	15–75
Equipment	5–35
Vehicles	10

Maintenance and repairs of property are charged to maintenance expense. Replacements and betterments are recorded as additions to utility plant. The System pays for some improvements for assets that are not owned by The City or the System, as well as certain pollution remediation activities, through bond proceeds. These costs are shown as other operating expenses in the combining statements of revenues, expenses and changes in net position.

#### 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 or, in some cases, characteristics of customer properties. The System records estimated unbilled revenue at year-end.

Operating expenses include, but are not limited to, administration, maintenance, repair, and operations of the System; administration costs of the Board and the Authority; rental payments to The City; and bad debt expense.

**Revenues Received in Advance**—Revenues received in advance of the period to which they relate are unearned and recorded as revenue when earned. Customer account credit balances are included in service credits on customer accounts, not in accounts receivable.

**Unamortized Deferred Bond Refunding Costs**—Deferred bond refunding costs represent the gains or losses 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.

**Use of Estimates**—The preparation of the combining 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.

**Pensions**—Pensions are required to be recognized and disclosed using the accrual

basis of accounting, regardless of the amount recognized as pension expense on the modified accrual basis of accounting. The Authority recognizes a net pension liability for the pension plan in which it participates, which represents the Authority's proportional share of excess total pension liability over the pension plan assets - actuarially calculated - of a costsharing multiple-employer plan, measured as of the fiscal year-end. Changes in the net pension liability during the period are recorded as pension expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the period incurred. Those changes in net pension liability that are recorded as deferred inflows of resources or deferred outflows of resources are amortized over the weighted average remaining service life of all participants in the qualified pension plan and recorded as a component of pension expense beginning with the period in which they are incurred. Projected earnings on qualified pension plan investments are recognized as a component (reduction) of pension expense. Differences between projected and actual investment earnings are reported as deferred inflows of resources or deferred outflows of resources and amortized as a component of pension expense on a closed basis over a fiveyear period beginning with the period in which the difference occurred.

The change in the Authority's proportion of the collective net pension liability and collective deferred outflow of resources and deferred inflow of resources related to pension since the prior measurement date is recognized in the current reporting period over a closed period that is equal to the average of the expected remaining service lives of all employees provided with pension through the pension plan. The amount not recognized in pension expense is reported as deferred outflow of resources or deferred inflow of resources related to pension.

For the contribution to the pension plan, the difference during the measurement period between the total amount of the Authority's contribution and the amount of the Authority's proportionate share of the total of such contributions from all employers and all nonemployee contributing entities is recognized in the Authority's pension expense, beginning in the current reporting period, over a closed period that is equal to the average of the expected remaining service lives of all employees provided

with pension through the plan. The amount not recognized in pension expense is reported as deferred outflow of resources or deferred inflow of resources related to the pension.

Changes in total pension liability arising from changes of benefit terms are required to be included in pension expense in the period the change is first reported in the net pension liability. It also requires that the changes in the total pension liability resulting from 1) differences between expected and actual experience with regard to economic and demographic factors and 2) changes of assumptions regarding the expected future behavior of economic and demographic factors or of other inputs be recognized as deferred outflow of resources or deferred inflow of resources related to pension and included in the pension expense over a period equal to the average of the expected remaining service lives of all employees that are provided with benefits through the plan.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

**Recent Accounting Pronouncements**—As a component unit of The City, the System implements new GASB in the same fiscal year as they are implemented by The City. The following are discussions of the standards requiring implementation in the current year and standards which may impact the System in future years.

In June 2012, GASB issued Statement No. 67, *Financial Reporting for Pension Plans* ("GASB 67"). GASB 67 established standards of financial reporting standards for defined benefit pension and defined contribution pensions that are administered through trusts or equivalent arrangements. The requirements of GASB 67 are effective for fiscal years beginning after June 15, 2013. As the System is not a pension plan, GASB Statement No. 67 is not applicable to it and will have no direct impact on its combining financial statements, other than the related implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, discussed below.

In June 2012, GASB issued Statement No. 68 Accounting and Financial Reporting for Pensions. GASB Statement No. 68 establishes standards of accounting and financial reporting for defined benefit pensions and defined contribution pensions provided to the employees of state and local governmental employers through pension plans that are administered through trusts or equivalent arrangements that meet the criteria detailed above in the description of Statement No. 67. This Statement replaces the requirements of Statement No. 27, Accounting for Pensions by State and Local Governmental Employers, as well as the requirements of Statement No. 50, Pension Disclosures, as they relate to pensions that are provided through pension plans within the scope of the Statement.

The requirements of GASB Statement No. 68 apply to the financial statements of all state and local governmental employers whose employees are provided with pensions through pension plans that are administered through trusts or equivalent arrangements as described above - and to the financial statements of state and local governmental nonemployer contributing entities that have a legal obligation to make contributions directly to such pension plans. GASB Statement No. 68 establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expense related to pensions. Note disclosure and required supplementary information requirements about pensions also are addressed. For defined benefit pensions. GASB Statement No. 68 also identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present

value to periods of employee service. The requirements of GASB Statement No. 68 are effective for fiscal year beginning after June 15, 2014. However, as recommended by the GASB Statement No. 68, the Authority implemented the requirements early.

The adoption of GASB Statement No. 68 resulted in the restatement of the Authority's fiscal year 2013 financial statements to reflect the reporting of net pension liabilities and deferred inflows of resources and deferred outflows of resources for its gualified pension plan and the recognition of pension expense in accordance with the provisions of GASB Statement No. 68. Net position as of July 1, 2012 was decreased by \$1.0 million to \$(11,953) million reflecting the cumulative retrospective effect of the adoption of GASB Statement No. 68. Net pension liability of \$923 thousand, and deferred inflows of resources and deferred outflows of resources of \$64 thousand and \$13 thousand, respectively, were reported at June 30, 2013. The Authority recognized aggregate pension expense of \$(26) thousand for the fiscal year ended June 30, 2013 and net position as of June 30, 2013 was increased by \$974 thousand to \$(483.9) million as a result of the adoption of GASB Statement No. 68. Refer to Note 13 for more information regarding the Authority's pensions.

In January 2013, GASB issued Statement No. 69, *Government Combinations and Disposals of Government Operations* ("GASB 69"). GASB 69 establishes accounting and financial reporting standards related to government combinations and disposals of government operations. GASB 69 is effective for financial statement periods beginning after December 15, 2013. The adoption GASB 69 did not have an impact on the System's combining financial statements as it has no disposals of operations.

In April 2013, GASB issued Statement No. 70, *Accounting and Financial Reporting for Nonexchange Financial Guarantees* ("GASB 70"). GASB 70 establishes accounting and financial reporting standards for financial guarantees that are nonexchange transactions (nonexchange financial guarantees) extended or received by a state or local government. GASB 70 is effective for financial statement periods beginning after June 15, 2013. The adoption of GASB 70 did not have an impact on the System's combining financial statements as it has no nonexchange transactions.

In November 2013, GASB issued Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date an amendment of GASB Statement No. 68* ("GASB 71"). The provisions of GASB 71 are effective for fiscal years beginning after June 15, 2014, but the Authority has already implemented the standard as recommended by GASB. Statement No. 71 amends Statement No. 68 to require that, at transition, a government recognize a beginning deferred outflow of resources for its pension contributions, if any, made subsequent to the measurement date of the beginning net pension liability. Adoption of this Statement had no effect on the Authority's financial statements as its measurement date for recognition of pensions is the same as the respective fiscal year-end.

# **3. UTILITY PLANT**

The following is a summary of utility plant activity for the fiscal years ended June 30, 2014 and 2013 (in thousands):

	BALANCE AT JUNE 30, 2012	ADDITIONS	DELETIONS*	BALANCE AT JUNE 30, 2013	ADDITIONS	DELETIONS	BALANCE AT JUNE 30, 2014
Nondepreciable assets—utility							
construction	\$8,422,470	\$1,684,242	\$1,043,664	\$9,063,048	\$2,560,425	\$4,810,865	\$6,812,608
Depreciable							
assets—utility							
plant in service							
Buildings	34,877			34,877	—		34,877
Equipment	2,014,704	197,385	602	2,211,487	1,222,623	_	3,434,110
Vehicles	150,531	6,587		157,118	7,453	18	164,553
Water supply and wastewater treatment systems and water distribution and							
sewage collection							
systems	25,669,088	839,693	38,421	26,470,360	2,719,695	189,984	29,000,071
Total depreciable	20,000,000	000,000	00,121	20, 170,000	2,713,030	100,001	23,000,071
assets	27,869,200	1,043,665	39,023	28,873,842	3,949,771	190,002	32,633,611
LESS ACCUMUL DEPRECIATION	FOR:	(1.200)		(21, 100)	(1 017)		(22 500)
Buildings	(19,820)	(1,369)	(202)	(21,189)	(1,317)		(22,506)
Equipment	(790,180)	(137,979)	(362)	(927,797)	(241,425)	(10)	(1,169,222)
Vehicles Water supply and wastewater treatment systems and water distribution and sewage collection	(98,639)	(6,159)	_	(104,798)	(5,730)	(18)	(110,510)
systems	(8,908,255)	(532,054)	(17,685)	(9,422,624)	(492,408)	(163,381)	(9,751,651)
Total accumulated depreciation	d (9,816,894)	(677,561)	(18,047)	(10,476,408)	(740,880)	(163,399)	(11,053,889)
Total utility plant in service—net	18,052,306	366,104	20,976	18,397,434	3,208,891	26,603	21,579,722
Total capital assets—net	\$26,474,776	\$2,050,346	\$1,064,640	\$27,460,482	\$5,769,316	\$4,837,468	\$28,392,330

\* Fiscal year 2013 deletions include \$25.1 million of impaired assets due to Hurricane Sandy consisting of \$17.3 million of impaired loss and \$7.8 million of accumulated depreciation.

#### **3. UTILITY PLANT (CONTINUED)**

On Monday, October 29, 2012, Hurricane Sandy made landfall in The City. The storm caused widespread damage to the System's facilities, including some of its water supply facilities outside The City. Extensive flooding also occurred at many System facilities in The City. The System has recognized a \$17.3 million asset impairment loss. As such the System anticipates that all of its costs relating to the storm will ultimately be paid by the federal government.

**Contributed Capital**—The System received federal, State and other capital contributions of \$9.8 million and \$7.7 million in fiscal year 2014 and fiscal year 2013, respectively. Westchester County makes semi-annual capital contributions to compensate the System for constructing a water conduit that provides treated water to the Westchester County.

# 4. INVESTMENTS AND CASH DEPOSITS

Investments-Pursuant to the Water and Sewer General Revenue Bond Resolution (the "Resolution") and the Authority's and the Board's investment guidelines, the Authority and the Board 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 other certain highly rated municipal obligations.

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 credit worthiness of each bank. The banking relationships are under constant operational and creditworthiness 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 \$750 thousand and \$1 million on deposit at June 30, 2014 and 2013 respectively, which was partially covered by Federal Depository Insurance ("FDI"), and the remaining balance was uncollateralized as of June 30, 2014 and 2013.

At June 30, 2014 and 2013, the cash deposit balances were \$912.3 million and \$373.2 million respectively. Of these cash deposits, only \$500 thousand was covered by FDI, and the remaining balance was uncollateralized as of June 30, 2014 and 2013.

Cash and cash equivalents, including restricted and unrestricted balances were comprised of the following at June 30, 2014 and 2013 (in thousands):

	2014	2013
RESTRICTED:		
Cash	\$898,141	\$365,235
Cash equivalents	770,724	959,993
Total restricted cash and cash equivalents	1,668,865	1,325,228
UNRESTRICTED:		
Cash	14,127	8,018
Total cash and cash equivalents	\$1,682,992	\$1,333,246

The System had the following investments at June 30, 2014 and 2013 (in thousands):

	Fair Value	
INVESTMENTS	2014	2013
U.S. Government Sponsored Entities	\$868,703	\$1,188,300
New York State Instrumentalities	330,717	416,851
Dreyfus Government Money Market	79,176	20,749
Guaranteed Investment Contracts	106,607	107,153
Forward Purchase Agreements		
Market Value Adjustment	33,763	28,872
Total investments including cash equivalents	1,418,966	1,761,925
Less amounts reported as cash equivalents	(770,724)	(959,993)
Total investments	\$648,242	\$801,932

The System invests funds which are not immediately required for operations, debt service or capital project expenses and funds that are held for debt service and operations and maintenance reserves. Each account of the Authority is held pursuant to the Water and Sewer General Revenue Bond Resolution adopted November 14, 1985 and may be invested in securities or categories of investments that are specifically enumerated as permitted investments for such account pursuant to the Resolution. All accounts held by the Board are invested as permitted by the Board's investment guidelines.

Credit Risk—Both the Board and the Authority have Board approved investment guidelines and policies in place designed to protect principal by limiting credit risk. This is accomplished through ratings, collateral, and diversification requirements that vary according to the type of investment. Investments held by the System at June 30, 2014 and 2013 include obligations of, or guaranteed by, the United States of America, the Federal Home Loan Mortgage Corporation. Federal Home Loan Bank Discount, the Federal National Mortgage Association or the Federal Farm Credit System, and shares of a money market fund, which are not rated. Securities held by the money market fund are comprised of cash and highly rated municipal securities. However, the Authority's bond resolutions require money market funds to be rated in the highest

rating category. The Authority has since sold all of its shares in this money market fund. Also held by the Authority are direct obligations of, or obligations guaranteed by, the State of New York, or direct obligations of any agency or public authority thereof, which are rated at the time of purchase in one of the two highest rating categories. In addition, the Authority has entered into investment agreements and guaranteed investment contracts with financial institutions whose long-term debt obligations, or whose obligations under such an investment agreement or guaranteed investment contract, are guaranteed by a financial institution whose senior long-term debt obligations have a rating in one of the two highest rating categories for comparable types of obligations by each rating agency then maintaining a rating on the bonds, at the time such agreement or contract was entered into.

**Interest Rate Risk**—The System has no formal policy relating to interest rate risk. Approximately 21.7% of the System's investments are agreements to purchase securities or GICs with guaranteed fixed rates of return. The par value of the agreements to purchase securities and interest earned are held as cash on June 30, 2014. The fair value of the agreements to purchase securities to purchase securities are themselves susceptible to changes in market rates because of the interest rates.

# 4. INVESTMENTS AND CASH DEPOSITS (CONTINUED)

#### Segmented Time Distribution on Investments and Cash Equivalents

MATURITY DATE	FAIR VALUE AMOUNT (in thousands)
Under 6 months <sup>1</sup>	\$1,162,297
Over 6 months to 1 year	5,726
Over 1 year to 3 years	47,874
Over 3 years and beyond	62,699
Over 3 years and beyond (GIC and Forward	
Purchase Agreement adjustments) <sup>2</sup>	140,370
Total	\$1,418,966

<sup>1</sup> Includes variable rate demand obligations with maturities greater than 3 years which can be tendered weekly at par, as such these are considered to have a maturity of under 6 months.

<sup>2</sup> Includes the fair value adjustment of Forward Purchase Agreements of \$33,762,582 and \$106,606,517 of GIC.

**Custodial Credit Risk**—For an investment, custodial credit risk is the risk that, in the event of the failure of the custodian, the System may 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 are held by the Authority's Bond Trustee in the Trustee's name or in the Board's name by its custodian bank.

# **5. DERIVATIVE INSTRUMENTS**

As of June 30, 2014, the Authority had the following (in thousands):

ТҮРЕ	NOTIONAL AMOUNT	EFFECTIVE DATE	MATURITY DATE	TERMS	FAIR VALUE	COUNTERPARTY CREDIT RATING (MOODY'S/ S&P/FITCH)
HEDGING DERIVATIVES						
Synthetic fixed rate	\$240,600	10/24/07	6/15/36	Pay 3.439% receive 67% of 1-month LIBOR	\$(51,901)	Aa2/AAA/NR
Synthetic fixed rate	160.400	10/24/07	6/15/36	Pay 3.439% receive 67% of 1-month LIBOR	(34,601)	A2/A/A

Hedging Derivative Instruments—The Authority executed two interest rate exchange agreements (the "synthetic fixed rate agreements") effective October 24, 2007, in conjunction with its sale of \$401 million of Adjustable Rate Fiscal 2008 Series BB Second Resolution Bonds on October 24, 2007. Under these agreements, the Authority pays a fixed interest rate of 3.439% in exchange for a floating rate based on 67% of one month LIBOR on the combined notional amount of \$401 million. The agreements are with two separate counterparties; one agreement in the amount of \$240.6 million and the second agreement in the amount of \$160.4 million. These agreements allowed the Authority to achieve a fixed rate cost lower than conventional fixed rate debt at the time of issuance. The Authority's obligations under these

interest rate exchange agreements are payable on a parity with the related second resolution revenue bonds.

**Credit Risk**—The Authority is exposed to the risk that the counterparties (or their guarantors) will default under its agreement. Under the synthetic fixed rate agreements, the Authority has the right to terminate the swap, regardless of collateral posting, if a counterparty's ratings fall below both A3 by Moody's and A- by Standard & Poor's.

The counterparties under the interest rate exchange agreements must post collateral if their ratings fall below A3 by Moody's or A- by Standard and Poor's, and the amount a counterparty would owe the Authority upon termination exceeds specified threshold amounts. The Authority may exercise its right to assign the agreements to another counterparty, if necessary, in its judgment, to mitigate counterparty risk, even in the absence of a significant credit rating downgrade.

**Termination Risk**—The counterparties could terminate the agreements upon the occurrence of certain events, when the mark-to-market value is such that the Authority would owe a termination payment to the counterparty. The counterparties may terminate the agreement only upon the occurrence of certain events such as payment defaults by the Authority, other defaults which remain uncured for 30 days after notice, bankruptcy or insolvency of the Authority (or similar events) or a downgrade of the Authority's credit rating below BBB-/Baa3.

# 5. DERIVATIVE INSTRUMENTS (CONTINUED)

**Basis Risk**—The Authority is exposed to basis risk on its synthetic fixed rate agreements because the amount the Authority receives under the synthetic fixed rate interest rate exchange agreement may be lower than the average monthly variable interest paid on the bonds associated with the agreement, which would require the Authority to make up the shortfall.

**Interest Rate Risk**—The Authority is exposed to the risk that changes in interest rates will adversely affect the fair values of the Authority's financial instruments or cash flows. The fixed rate paid by the Authority on its synthetic fixed rate agreements may exceed the rate received (67% of LIBOR).

**Financial Statements Effect**—The market value of derivatives at June 30, 2014 and June 30, 2013 were negative \$86.5 million and negative \$74.6 million, respectively. The market value of hedge derivatives at June 30, 2014 and June 30, 2013 were negative \$86.5 million and negative \$81.1 million, respectively. These amounts are shown as deferred outflows in the combining statements of net position.

# **6. LEASE AGREEMENT**

The Board is party to a long-term lease (the "Lease") with The City, which transfers the water and sewer related property to the Board for the term of the Lease. The Lease term commenced on July 1, 1985, and continues until the latter 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 provision for such payment has 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 and rental expenses for the years ended June 30 is as follows (in thousands):

	2014	2013
Water supply, treatment, transmission and distribution	\$478,305	\$423,467
Sewer collection and treatment systems	507,986	483,382
City agency support cost	64,025	68,217
Fringe benefits	212,507	174,261
Judgments and claims	13,727	3,939
Operation and maintenance	1,276,550	1,153,266
Rental payments to The City	214,000	207,789
Total operations maintenance and rental payments	\$1,490,550	\$1,361,055

#### 7. PAYABLE TO AND RECEIVABLE FROM THE CITY

As of June 30, 2014 and 2013, all utility construction and other projects financed by Authority debt and recorded by the System, which have not been reimbursed to The City, have 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, 2014 and 2013, the System had a net payable of \$498.6 million and \$419.8 million, respectively to The City for payments of utility construction and for overpayment of operations and maintenance expense.

# 8. OTHER OPERATING EXPENSES

A summary of other operating expenses for the year ended June 30 is as follows (in thousands):

Total other operating expenses	\$27,874	\$14,685
Legal reserve	_	(44,008)
Payments for watershed improvements	22,670	40,014
Pollution remediation	\$5,204	\$18,679
	2014	2013

The City's DEP manages both the System's operations and its capital program, and it also manages other projects with long-term benefits to the System which do not result in capital assets of the System and which are paid for using Authority bond proceeds, similar to capital projects. Such long-term benefit projects include payment for environmental protection, related improvement in the watershed areas and pollution remediation projects throughout the System. In fiscal year 2013, a legal reserve of \$44 million established for pending litigation, was no longer required since all legal proceedings concerning the cases had concluded.

# 9. SHORT-TERM DEBT

In fiscal year 2014 and 2013, the changes in short-term debt were as follows (in thousands):

	BALANCE AT JUNE 30, 2012	ADDITIONS	DELETIONS	BALANCE AT JUNE 30, 2013	ADDITIONS	DELETIONS	BALANCE AT JUNE 30, 2014
Commercial paper <sup>1</sup>	\$400,000	\$1,400,000	\$1,300,000	\$500,000	\$1,375,000	\$1,375,000	\$ 500,000
Bond Anticipation Notes ("BAN") <sup>1</sup>	_	217,000	_	217,000	_	217,000	_
Total short-term payable	\$400,000	\$1,617,000	\$1,300,000	\$717,000	\$1,375,000	\$1,592,000	\$500,000

<sup>1</sup> Commercial paper and Bond Anticipation Notes are used to pay construction costs in advance of long-term bond financing.

Commercial paper activity is comprised of the following for the year ended June 30, 2014 (in thousands):

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED	BALANCE AT JUNE 30, 2014
Commercial Paper Series 1— Variable Rate, Short-term Rolling Maturity Backed by Line of Credit	\$200,000	\$375,000	\$375,000	\$200,000
Commercial Paper Series 6— Variable Rate, Short-term Rolling Maturity Backed	000.000		000 000	
by Line of Credit Commercial Paper Series 7—	200,000	_	200,000	_
Variable Rate, Short-term Rolling Maturity	_	700,000	600,000	100,000
Commercial Paper Series 8— Variable Rate, Short-term Rolling Maturity	100,000	300,000	200,000	200,000
Total commercial paper payable	\$500,000	\$1,375,000	\$1,375,000	\$500,000

#### **10. LONG-TERM DEBT**

In fiscal year 2014 and 2013, the changes in long-term debt were as follows (in thousands):

BONDS PAYABLE	BALANCE AT JUNE 30, 2013	ADDITIONS	DELETIONS	BALANCE AT JUNE 30, 2014
First resolution	\$7,321,055	\$—	\$711,785	\$6,609,270
Second resolution	21,455,330	2,921,009	1,432,784	22,943,555
Total bonds payable	28,776,385	2,921,009	2,144,569	29,552,825
Due within one year	(570,654)	_		(291,955)
Less premium—net	(658,883)	(172,117)	(68,173)	(762,827)
Less deferred refunding costs	9,928	(39)	(5,594)	4,295
Total long-term debt	\$28,854,686	\$2,748,853	\$2,081,990	\$30,019,402

BONDS PAYABLE	BALANCE AT JUNE 30, 2012	ADDITIONS	DELETIONS	BALANCE AT JUNE 30, 2013
First resolution	\$8,239,944	\$—	\$918,889	\$7,321,055
Second resolution	19,738,335	2,398,708	681,713	21,455,330
Total bonds payable	27,978,279	2,398,708	1,600,602	28,776,385
Due within one year	(451,409)			(570,654)
Less premium—net	(465,991)	(244,042)	(51,150)	(658,883)
Less deferred refunding costs	18,071	2,888	(11,031)	9,928
Total long-term debt	\$27,974,790	\$2,157,554	\$1,560,483	\$28,854,686

The debt program of the Authority includes commercial paper, long-term debt, BANs and subsidized bonds issued through 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 in the public market or through EFC to retire outstanding commercial paper. The Authority also periodically issues refunding bonds to refinance higher-coupon debt.

In the detailed listing of bonds payable, the bonds issued through EFC are differentiated by their numerical bond series designation.

With respect to all Authority debt, 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 of debt 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.

As part of the American Recovery and Reimbursement Act of 2009, the System received funding through EFC of \$217.5 million for certain projects. Each project included was tracked for spending, and funding was received from EFC after submission of required documentation. The funding is in the form of a BAN payable by the Authority. The total \$217.5 million note is expected to be forgiven by EFC after the note is fully drawn and the financed projects are completed. As of June 30, 2014, the Authority spent the entire amount of the BAN proceeds; however, the projects have not been completed. The note is a long-term liability.

In addition, the System will receive funding through EFC of \$320 million for certain projects. Each project included is tracked for spending, and funding is received from EFC after submission of required documentation. The funding is in the form of a BAN payable by the Authority. The total spent as of June 30, 2014 is \$109 million. Based on the maturity date, the note is a long-term liability.

The System will also receive funding through EFC of \$30 million for certain other projects. Each project is tracked for spending and funding is received from EFC after submission of required documentation. The funding is in the form of a BAN payable by the Authority. The entire \$30 million note is expected to be forgiven by EFC after the note is fully drawn and the financed projects are completed. The total spent as of June 30, 2014 is \$12 million. Based on the maturity date, the note is a long-term liability.

During fiscal year 2014, the Authority issued \$1.3 billion of bonds to refund \$1.4 billion of outstanding bonds. These refundings resulted in an accounting gain of \$3.7 million. The Authority in effect reduced its aggregate debt service for principal and interest by \$202.4 million and obtained an economic benefit (present value savings) of \$144.8 million.

During fiscal year 2014, the Authority legally defeased \$360.8 million of outstanding bonds using current revenue. This resulted in an accounting loss of \$14.2 million included in interest expense.

During fiscal year 2013, the Authority issued \$911.5 million of bonds to refund \$1.0 billion of outstanding bonds. These refundings resulted in an accounting loss of \$11.6 million. The Authority in effect reduced its aggregate debt service for principal and interest by \$213.4 million and obtained an economic benefit (present value savings) of \$148.9 million.

During fiscal year 2013, the Authority legally defeased \$249 million of outstanding bonds using current revenue. This resulted in an accounting loss of \$4.6 million included in interest expense.

During fiscal year 2013, the Authority economically defeased \$33.2 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.

The Authority has legally defeased cumulatively \$17.9 billion and \$16.1 billion of outstanding bonds as of June 30, 2014 and 2013, respectively, that had been issued in the public market and to EFC by placing proceeds of refunding bonds issued in an irrevocable escrow account to provide for all future debt service payments on defeased bonds or with EFC. 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 System's combining financial statements. As of June 30, 2014 and 2013, \$14.9 billion and \$13.9 billion of the Authority's defeased bonds, respectively, have been retired using the assets of the escrow accounts.

Debt service requirements to maturity, including amounts relating to commercial paper and the BAN, at June 30, 2014 are as follows (in thousands):

JUNE 30	PRINCIPAL	INTEREST <sup>2</sup>	TOTAL
2015	\$791,955 <sup>1</sup>	\$1,357,598	\$2,149,553
2016	610,442	1,399,821	2,010,263
2017	496,390	1,386,140	1,882,530
2018	466,891	1,369,662	1,836,553
2019	458,659	1,350,966	1,809,625
2020–2024	2,981,198	6,426,198	9,407,396
2025–2029	3,581,632	5,685,125	9,266,757
2030–2034	4,360,520	4,762,610	9,123,130
2035–2039	5,577,960	3,624,021	9,201,981
2040–2044	7,026,175	2,033,269	9,059,444
2045–2049	3,572,060	442,025	4,014,085
2050–2054	250,000	10,625	260,625
	\$30,173,882	\$29,848,060	\$60,021,942

<sup>1</sup> Includes \$500 million of commercial paper due in fiscal year 2015.

<sup>2</sup> Includes interest for variable rate bonds at 3% for fiscal year 2015 and 4.25% for fiscal year 2016 and thereafter. Variable rate bonds are remarketed daily or weekly, and interest rates are determined by the market on the day of sale.

Bonds, notes payable and commercial paper are comprised of the following for the year ended June 30, 2014 (in thousands):

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED/ DEFEASED	BALANCE AT JUNE 30, 2014
1992 Fiscal Series B—6.80% to 6.81% Serial				
and Term Bonds maturing in varying installments				
through 2014	\$90	\$—	\$90	\$—
1995 Fiscal Series 1—6.88% Serial Bonds				
maturing in varying installments through 2016	4,410		4,070	340
1997 Fiscal Series A—6.00% term Bonds				
maturing in 2021	25,000	_		25,000
1998 Fiscal Series D—Capital Appreciation Bonds				
maturing in varying installments through 2020	110,330	_	_	110,330
1998 Fiscal Series 1—5.25% to 5.35% Serial Bonds				
maturing in varying installments through 2017	13,235	_	3,040	10,195
1998 Fiscal Series 4—5.00% to 5.20% Serial Bonds				
maturing in varying installments through 2018	4,680	_	910	3,770
2000 Fiscal Series C—Adjustable Rate Term Bonds				
maturing in 2033	107,500	_	_	107,500
2000 Fiscal Series 2—5.60% to 5.96% Serial Bonds				
maturing in varying installments through 2019	5,250		760	4,490

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED/ DEFEASED	BALANCE AT JUNE 30, 2014
2001 Fiscal Series D—Capital Appreciation Bonds maturing in varying installments through 2021	\$79,845	\$—	\$—	\$79,845
2001 Fiscal Series F—Adjustable Rate Bonds maturing in varying installments through 2033	184,130	_	_	184,130
2003 Fiscal Series F—Adjustable Rate Bonds maturing in 2035	201,655	_	_	201,655
2003 Fiscal Series 2—4.97% to 5.24% Serial Bonds maturing in varying installments through 2028	130,835	_	30,910	99,925
2003 Fiscal Series 3—0.48% to 5.75% Serial Bonds maturing in varying installments through 2025	14,370	_	920	13,450
2003 Fiscal Series 4—0.35% to 5.80% Serial Bonds maturing in varying installments through 2025	22,810	_	1,475	21,335
2003 Fiscal Series 5—3.36% to 5.00% Serial Bonds maturing in varying installments through 2032	212,355	_	212,355	
2004 Fiscal Series B—3.40% to 5.00% Serial Bonds maturing in varying installments through 2023	57,835	_	57,835	_
2004 Fiscal Series C—3.10% to 5.00% Serial and Term Bonds maturing in varying installments	,		,	
through 2035 2004 Fiscal Series 1—3.58% to 5.00% Serial Bonds	412,740	—	412,740	—
maturing in varying installments through 2033 2004 Fiscal Series 2—1.70% to 4.84% Serial Bonds	222,800	—	222,800	—
maturing in varying installments through 2026 2005 Fiscal Series A—5.00% Term Bonds	192,163	_	93,919	98,245
maturing in 2039 2005 Fiscal Series B—3.38% to 5.00% Serial	150,000	_	150,000	_
and Term Bonds maturing in varying installments through 2036	720,325	_	6,585	713,740
2005 Fiscal Series C—3.50% to 5.00% Serial Bonds maturing in varying installments through 2031	570,135	_	905	569,230
2005 Fiscal Series D—5.00% Serial Bonds maturing in varying installments through 2039	559,205	_		559,205
2005 Fiscal Series 1—3.98% to 5.00% Serial Bonds maturing in varying installments through 2034	175,683		175,683	_
2005 Fiscal Series 2—2.58% to 5.00% Serial Bonds maturing in varying installments through 2034	296,466	_	156,216	140,250
2006 Fiscal Series A—3.63% to 5.00% Serial Bonds maturing in varying installments through 2039	516,495	_	450	516,045
2006 Fiscal Series B—5.00% Term Bonds maturing in 2036	150,000	_	_	150,000
2006 Fiscal Series C—4.50% to 4.75% Serial Bonds maturing in varying installments through 2033	350,345	_	_	350,345
2006 Fiscal Series D—4.50% to 5.00% Serial Bonds 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—3.60% to 5.00% Serial Bonds maturing in varying installments through 2016	30,000	_	10,000	20,000

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED/ DEFEASED	BALANCE AT JUNE 30, 2014
2006 Fiscal Series 1—Adjustable Rate Bonds				
maturing in varying installments through 2035	\$177,469	\$—	\$7,688	\$169,781
2006 Fiscal Series 2—Adjustable Rate Bonds				
maturing in varying installments through 2036	166,590	—	5,973	160,617
2006 Fiscal Series 3—Adjustable Rate Bonds				
maturing in varying installments through 2036	212,975	—	7,550	205,425
2007 Fiscal Series A—4.25% to 4.75% Serial Bonds maturing in varying installments through 2039	587,975		_	587,975
2007 Fiscal Series AA—4.50% to 5.00% Term Bonds	007,070			007,070
maturing in 2037	199,910		_	199,910
2007 Fiscal Series BB—3.75% to 5.00% Serial Bonds	100,010			100,010
maturing in varying installments through 2021	130,045	_	72,655	57,390
2007 Fiscal Series CC—Adjustable Rate Bonds	)		,	- ,
maturing in 2038	210,500		_	210,500
2007 Fiscal Series DD—4.75% to 5.00% Serial Bonds				
maturing in varying installments through 2038	270,000	_	_	270,000
2007 Fiscal Series 1—2.55% to 5.00% Serial Bonds				
maturing in varying installments through 2036	189,343	_	7,188	182,155
2007 Fiscal Series 2—2.60% to 4.80% Serial Bonds				
maturing in varying installments through 2036	241,871		9,062	232,809
2007 Fiscal Series 3—4.17% to 6.42% Serial Bonds				
maturing in varying installments through 2024	135,680		14,240	121,440
2008 Fiscal Series A—5.00% Term Bonds				
maturing in 2037 and 2038	446,245	—	_	446,245
2008 Fiscal Series B—Adjustable Rate Bonds				
maturing in varying installments through 2025	535,000	—	—	535,000
2008 Fiscal Series C—3.00% to 5.25% Serial Bonds				
maturing in varying installments through 2021	88,970		53,180	35,790
2008 Fiscal Series AA—4.50% to 5.00% Serial Bonds				
maturing in varying installments through 2039	400,000	—	—	400,000
2008 Fiscal Series BB—Adjustable Rate Bonds	401.000			101.000
maturing in varying installments through 2036	401,000		—	401,000
2008 Fiscal Series DD—4.50% to 5.00% Serial Bonds	504.005			504.005
maturing in varying installments through 2039	504,905			504,905
2008 Fiscal Series 1—3.00% to 5.00% Serial Bonds	011 505		12,000	107 500
maturing in varying installments through 2037	211,565	_	13,996	197,569
2008 Fiscal Series 2—3.04% to 5.00% Serial Bonds	105 206		7 410	107 704
maturing in varying installments through 2037	195,206		7,412	187,794
2009 Fiscal Series AA—3.25% to 5.00% Serial Bonds maturing in varying installments through 2022	332,025		67,135	264,890
	552,025		07,135	204,890
2009 Fiscal Series BB—Adjustable Rate Bonds maturing in varying installments through 2039	200,870		_	200,870
2009 Fiscal Series CC—4.75% to 5.25% Serial Bonds	200,070			200,070
maturing in varying installments through 2034	150,100	_		150,100
2009 Fiscal Series A $-$ 5.00% to 5.75% Serial Bonds	100,100			100,100
maturing in varying installments through 2040	536,030	_	30,000	506,030
2009 Fiscal Series DD—5.25% to 6.00% Serial Bonds	200,000		20,000	000,000
maturing in varying installments through 2040	325,580	_		325,580
	,000			0,000

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED/ DEFEASED	BALANCE AT JUNE 30, 2014
2009 Fiscal Series EE—2.50% to 5.50% Serial Bonds maturing in varying installments through 2040	\$645,455	\$—	\$150,455	\$495,000
2009 Fiscal Series FF—3.00% to 5.50% Serial Bonds maturing in varying installments through 2040	362,830	_	13,435	349,395
2009 Fiscal Series 1—3.86% to 5.16% Serial Bonds maturing in varying installments through 2038	345,641	_	9,340	336,301
2009 Fiscal Series 2—4.87% Serial Bonds maturing in varying installments through 2038	66,886	_	4,422	62,464
2009 Fiscal Series GG—4.13% to 5.25% Serial Bonds maturing in varying installments through 2040	500,000	_	_	500,000
2010 Fiscal Series AA—5.75% to 6.25% Term Bonds maturing in 2041	504,240	_	_	504,240
2010 Fiscal Series BB—2.50% to 5.00% Serial Bonds maturing in varying installments through 2027	184,285	_	25,395	158,890
2010 Fiscal Series CC—Adjustable Rate Bonds maturing in 2041	200,000	_	_	200,000
2010 Fiscal Series DD—5.95% to 6.45% Term Bonds maturing in 2041 and 2042	400,000	_	_	400,000
2010 Fiscal Series EE—6.01% to 6.49% Term Bonds maturing in 2041 and 2042	500,000	_	_	500,000
2010 Fiscal Series FF—3.00% to 5.00% Serial Bonds maturing in varying installments through 2031	359,110	_	_	359,110
2010 Fiscal Series 2—0.13% to 5.00% Serial Bonds maturing in varying installments through 2039	112,444	_	9,752	102,692
2010 Fiscal Series 3—3.61% Serial Bonds maturing in varying installments through 2039	58,925	_	3,820	55,105
2010 Fiscal Series 4—4.98% to 5.81% Serial Bonds maturing in varying installments through 2039	196,460	_	_	196,460
2010 Fiscal Series GG—5.72% to 6.12% Term Bonds maturing in 2042	554,045	_	_	554,045
2010 Fiscal Series 1 Bond Anticipation Note	205,885	11,636	—	217,520
2011 Fiscal Series AA—5.44% to 5.79% Term Bonds maturing in 2041 and 2043	750,000	_		750,000
2011 Fiscal Series BB—3.00% to 5.00% Serial Bonds maturing in varying installments through 2031	209,510	_	995	208,515
2011 Fiscal Series CC—5.88% to 6.28% Term Bonds maturing in 2042 through 2044	750,000	_	_	750,000
2011 Fiscal Series DD—Adjustable Rate Bonds maturing in 2043	275,000	_	—	275,000
2011 Fiscal Series EE—5.38% to 5.50% Term Bonds maturing in 2040 through 2043	450,000	_		450,000
2011 Fiscal Series FF—Adjustable Rate Bonds maturing in 2044	200,000		_	200,000
2011 Fiscal Series GG—3.13% to 5.00% Serial Bonds maturing in varying installments through 2043	537,665		_	537,665
2011 Fiscal Series HH — 4.00% to 5.00% Serial Bonds maturing in 2026 through 2032	662,245	_	_	662,245

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED/ DEFEASED	BALANCE AT JUNE 30, 2014
2011 Fiscal Series 1 and 2–3.58% Serial Bonds				
maturing in varying installments through 2041	\$625,864	\$—	\$26,604	\$599,260
2012 Fiscal Series A—Adjustable Rate Bonds				
maturing in 2044	200,000	—	—	200,000
2012 Fiscal Series B — Adjustable Rate Bonds				
maturing in 2045	325,000	—	—	325,000
2012 Fiscal Series 1 Bond Anticipation Note	—	12,018	—	12,018
2012 Fiscal Series 2 and 3—2.00% to 5.00%				
Serial Bonds maturing in varying installments				
through 2029	637,950	—	32,985	604,965
2012 Fiscal Series AA—5.00% Serial Bonds				
maturing in varying installments through 2034;				
5.00% Term Bond maturing in 2044	450,900	—	—	450,900
2012 Fiscal Series BB—4.13% to 5.25%				
Term Bonds maturing in 2039 and 2044	450,000			450,000
2012 Fiscal Series CC—5.00% Term Bonds				
maturing in 2045	350,000			350,000
2012 Fiscal Series DD—3.00% to 4.00%				
Refundable Principal Installment due in 2018;	50.000			50.000
5.00% Refundable Principal Installment due in 2027	50,000	_	_	50,000
2012 Fiscal Series EE—3.00% to 5.25% Serial Bonds				
maturing in varying installments through 2039;	522,505			500 505
4.00% Term Bond maturing in 2045	522,505			522,505
2012 Fiscal Series FF—3.25% to 5.00% Serial Bonds maturing in varying installments between 2020 and 2033;				
3.75% to 5.00% Term Bond maturing in 2034 and 2045	611,745			611,745
2012 Fiscal Series GG—5.00% Refundable Principal	011,7 10			011,7 10
Installments maturing in 2017 and 2019	50,000			50,000
2013 Fiscal Series 1—2.00% to 5.00% Serial Bonds	00,000			30,000
maturing in varying installments through 2028	310,950		5,845	305,105
2013 Fiscal Series AA—Adjustable Rate Bonds	010,000		0,010	000,100
maturing in varying installments through 2046	200,000	_	_	200,000
2013 Fiscal Series BB—3.25% to 5.00% Term Bonds				;
maturing in 2047	440,510	_	_	440,510
2013 Fiscal Series CC—3.75% to 5.00% Term Bonds	,			,
maturing in 2047	455,955			455,955
2013 Fiscal Series DD—3.13% to 5.00% Serial Bonds	,			,
maturing in varying installments through 2038	543,300			543,300
2013 Fiscal Series EE 4.13% to 5.00% Serial Bonds	,			,
maturing in varying installments through 2047	344,335			344,335
2014 Fiscal Series AA Adjustable Rate Bonds	,			,
maturing in installments from 2048 to 2050	_	650,870	_	650,870
2014 Fiscal Series 1—3.00% to 5.00% Serial Bonds				
maturing in varying installments through 2033	_	401,090	17,660	383,430
2014 Fiscal Series 2—0.18% to 4.61% Serial Bonds				
maturing in varying installments through 2043	_	213,853	6,120	207,733
2014 Fiscal Series BB 4.62% to 5.00% Serial Bonds				
maturing in varying installments through 2046	_	397,085	_	397,085

	BALANCE AT JUNE 30, 2013	ISSUED	RETIRED/ DEFEASED	BALANCE AT JUNE 30, 2014
2014 Fiscal Series CC 4.25% to 5.00% Serial Bonds				
maturing in varying installments through 2047	\$—	\$351,240	\$—	\$351,240
2014 Fiscal Series DD 3.00% to 5.00% Serial Bonds		E 47 0E0		E 47 0E0
maturing in varying installments through 2039	—	547,850	—	547,850
2014 Fiscal Series 3 Bond Anticipation Note	—	109,040	—	109,040
2014 Fiscal Series 4 — 2.00% to 5.00% Serial Bonds				
maturing in varying installments through 2034	—	347,385	—	347,385
Total bonds and notes payable	28,776,386	\$3,042,066	\$2,144,569	29,673,882
Current portion of bonds and notes payable	451,409			570,654
Bonds and notes payable, less current portion	\$28,324,977			\$29,103,228

(Concluded)

#### **11. RESTRICTED ASSETS**

As of June 30, 2014 and 2013, certain cash, investments and accrued interest of the System are restricted as follows (in thousands):

	2014	2013
THE BOARD:		
Operation and maintenance reserve fund	\$221,440	\$212,233
THE AUTHORITY:		
Revenue fund	970,959	740,991
Debt service reserve fund	895,661	907,917
Construction fund	192,567	228,154
Escrow fund	36,480	37,866
Subtotal—Authority	2,095,667	1,914,928
Total restricted assets	\$2,317,107	\$2,127,161

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

The revenue fund is established as a depository to fund the debt service, Authority expenses, debt service reserve and certain escrow funds. It is funded through cash transfers from the Board. The debt service reserve fund is established as a depository to hold the First Resolution Bond maximum annual debt service requirement for the next 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 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 or revenue fund.

### 12. COMMITMENTS AND CONTINGENCIES

**Construction**—The System has contractual commitments of approximately \$4.3 billion and \$4.1 billion at June 30, 2014 and 2013, respectively, for water and sewer projects.

**Risk Financing Activities**—The System is self-insured and carries no commercial or insurance policies other than Directors and Officers insurance for the Authority. Any claims made against the System are resolved through The City's legal support, and the amounts of the maximum liability for such judgments are described in (c) below. The System is subject to claims for construction delays, property damage, personal injury and judgments related to delays in construction deadlines under consent agreements.

#### 12. COMMITMENTS AND CONTINGENCIES (CONTINUED)

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 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 of the System. In addition, The City has agreed, subject to certain conditions, to indemnify the Authority, the Board and their staffs against any and all liability in connection with any act done or omitted in the exercise of their powers, which is taken or omitted in good faith in pursuance of their purposes under the Act. Currently, The City is a defendant in a significant number of lawsuits pertaining to the System. The litigation includes, but is not limited to, actions commenced and claims asserted against The City arising out of alleged torts, alleged breaches of contract, condemnation proceedings, and other alleged violations of law. As of June 30, 2014, the potential future liability attributable to the System for claims outstanding against The City was estimated to be \$737.8 million. This amount is included in the estimated liability for unsettled claims, which is reported in The City's statement of net position. The potential future liability is The City's best estimate based on available information. The estimate may be revised as further information is obtained and as pending cases are litigated.

Arbitrage Rebate — To maintain the exemption from federal income tax of interest on bonds issued subsequent to January 1, 1986, the System will fund amounts required to be rebated to the Federal Government pursuant to Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"). The Code requires the payment to the United States Treasury of the excess of the amount earned on all nonpurpose obligations over the amount that would have been earned if the gross proceeds of the issue were invested at a rate equal to the yield on the issue, together with any earnings attributable to such excess. Construction funds, debt service funds or any other funds or accounts funded with proceeds of such bonds, including earnings, or pledged to or expected to be used to pay interest on such bonds are subject to this requirement. Payment is to be made after the end of the fifth bond year and after every fifth bond year thereafter, and within 60 days after retirement of the bonds. During fiscal 2014 and 2013, the System paid \$197 thousand and \$1.1 million, respectively, in arbitrage rebates. At June 30, 2014 and 2013,

the Authority had a liability of \$2.7 million and \$2.3 million, respectively. These amounts are included in accrued payable expense in the combining statements of net position.

### **13. PENSION PLANS**

# General Information about the Pension Plan

**Plan Description**—The Authority's eligible employees are provided with pension benefits through New York City Employee Retirement System Qualified Pension Plan ("NYCERS QPP" - "Pension Plan"). The Pension Plan is a cost-sharing, multiple-employer defined pension plan administered by NYCERS. The Pension Plan functions in accordance with existing State statutes and City laws which are the basis by which benefit terms and the Authority's and its member's contribution requirements are established and amended. NYCERS issues a publicly available financial report that can be obtained at www.nycers.org.

Benefits Provided—The Pension Plan provides pension benefits to retired employees generally based on the salary, length of service, member contributions and Tier. For certain members, voluntary member contributions also impact pension benefits provided. In addition, the Pension Plan provides automatic cost-of-living adjustments (COLA) and other supplemental pension benefits to certain retirees and beneficiaries. Subject to certain conditions, members become fully vested as to benefits upon the completion of five years of service. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions, including accumulated interest, less any outstanding loan balances. In the event of disability during employment, participants may receive retirement allowances based on satisfaction of certain service requirements and other provisions. The Pension Plan also provides death benefits.

The State Constitution provides that pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, 1976, 1983 and 2012, significant amendments made to the State Retirement and Social Security Law (RSSL) modified certain benefits for employees joining the Pension Plan on or after the effective date of such amendments, creating membership tiers. Currently there are several Tiers, referred to as Tier I, Tier II, Tier III, Tier IV and Tier VI. Members are assigned a Tier based on membership date. Chapter 18 of the Laws of 2012 (Chapter 18/12) amended the retirement benefits of public employees who established membership in the Pension Plan on or after April 1, 2012. Chapter 18/12 is commonly referred to as Tier VI. Tier VI is expected to reduce future employer pension contributions.

Certain members of Tier I and Tier II of the NYCERS QPP have the right to make Volunteer Excess Contributions, which are supplemental voluntary contributions. Members can elect to direct these contributions are credited with Statutory Rates, which are interest at rates set by the statute. The Authority does not have any Tier I or Tier II members.

**Contributions and Funding Policy**—Contribution requirements of participating employers and active members are determined in accordance with State statutes and City laws and are generally funded within the appropriate fiscal year. Effective with fiscal year 2006, employer contributions are actuarially determined under the One Year Lag Methodology ("OYLM"). Under OYLM, the actuarial valuation date is used for calculating the employer contributions for the second following fiscal year. For example, the June 30, 2012 actuarial valuation was used for determining the Fiscal Year 2014 statutory contributions.

Member contributions vary by class. In general, Tier III and Tier IV members make basic contributions of 3.0% of salary regardless of age at membership. Effective October 1, 2000, in accordance with Chapter 126 of the Laws of 2000, Tier III and Tier IV members are not required to make any contributions after the 10th anniversary of their membership date or completion of ten years of credited service, whichever is earlier. Tier VI members who joined between April 1, 2012 and March 31, 2013 contribute 3% of salary. Beginning April 1, 2013, when Tier VI took effect, joining members contribute between 3.0% and 6.0% of salary, depending on their salary level.

Employer contributions are determined annually to be an amount that, together with member contributions and investment income, provides for Pension Plan assets to be sufficient to pay benefits when due. The aggregate Statuary Contribution due to NYCERS from all participating employers for fiscal years 2014 and 2013 was \$3.0 billion and \$3.1 billion, respectively and the amount of the Authority's contribution to the Pension Plan for such fiscal years 2014 and 2013 was \$141 thousand and \$136 thousand.

#### Information on the Employer's Proportionate Share of the Collective Net Pension Liability

The Authority's net pension liabilities reported at June 30, 2014 and 2013 were measured as of those fiscal year-end dates. The total pension liability used to calculate those net pension liabilities were determined by actuarial valuations as of June 30, 2012 and June 30, 2011, respectively, based on the OYLM described above, and rolled forward to the respective fiscal year-end measurement dates. Information about the Authority net position and additions to and deductions from NYCERS fiduciary net position has been determined on the same basis as they are reported by NYCERS QPP. For this purpose, benefits and refunds are recognized when due and payable in accordance with the terms of the respective gualified pension plan and investments are reported at fair value.

# **13. PENSION PLANS (CONTINUED)**

Actuarial Assumptions—Measurement of the total net pension liability, on which the net pension liability is based, requires the use of assumptions about numerous future events that affect the benefit payments that will be made to employees in retirement. The following table provides a brief description of the significant assumptions used in the June 30, 2012 actuarial valuation to determine the fiscal year 2014 Authority contributions:

Actuarial assumptions used for determining final fiscal year 2014 Authority contribution:

ITEM	FINAL FISCAL YEAR 2014 EMPLOYER CONTRIBUTIONS <sup>1</sup>
Valuation Date	June 30, 2012
Assumed Rate of Return on Investment <sup>2</sup>	7.0% per annum, net of Investment Expense
Post-Retirement Mortality	Tables adopted by the Boards of Trustee during Fiscal Year 2012 <sup>3</sup>
Active Service: Withdrawal, Death, Disability	Tables adopted by the Boards of Trustee during Fiscal Year 2012 <sup>3</sup>
Retirement	Tables adopted by the Boards of Trustee during Fiscal Year 2013 <sup>3</sup>
World Trade Center Benefit	Estimates of Certain Obligations
Salary increases <sup>2</sup>	Tables adopted by the Boards of Trustee during Fiscal Year 2012 <sup>3</sup> In general, Merit and Promotion Increases plus assumed General Wage Increase of 3.0% per year
Assumed Cost-of-Living Adjustments <sup>2</sup>	1.5% per year for Tier I, Tier 11, Tier IV and certain Tier III and Tier VI retirees. 2.5% per year for certain Tier III and Tier VI retirees.

<sup>1</sup>Based on actuarial assumptions and methods proposed by the Actuary during Fiscal Year 2012 adopted by the Boards of Trustee and enacted into law as Chapter 3/13. <sup>2</sup>Developed using a long-term Customer Price Inflation ("CPI") assumption of 2.5% per year.

<sup>3</sup>See the Reports entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July, 2011" dated February 10, 2012 (the "Silver Books").

In accordance with the Administrative Code of The City of New York and with appropriate practice, the NYCERS Board of Trustees of the actuarially-funded Pension Plan is to periodically review and adopt certain actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions, which are also generally used to determine the total pension liability, as applicable. Based, in part, upon a review of the then two most recent experience studies, the Actuary issued reports for the Pension Plan proposing changes in actuarial assumptions and methods for fiscal years beginning on and after July 1, 2011 (February 2012 Reports). Where required, the Board of Trustees of the NYCERS adopted those changes to actuarial assumptions that required NYCERS Board of Trustees' approval. The State Legislature and the Governor enacted Chapter 3/13 to provide for those changes to the actuarial assumptions and methods that require legislation, including the Actuarial Interest Rate (AIR) assumption of 7.0% per annum, net of expenses.

The long-term expected rate of return of 7.0% was determined using a building-block method in which best-estimate ranges of expected future

real rates of return (expected returns, net of Pension Plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class included in the target asset allocations of the Pension Plan as of the June 30, 2012 and 2011 actuarial valuations are summarized in the following table:

ASSET CLASS	TARGET ALLOCATION	REAL RETURN ARITHMETIC BASIS	EXPECTED REAL RATE OF RETURN
U.S. equity	46.00%	5.75%	2.65%
U.S. fixed income	26.00	1.50	0.39
International equity	21.00	5.75	1.21
Other	7.00	4.00	0.28
Total	100.00%		4.53%
Inflation			2.50
Expected arithmetic nominal return			7.03%

**Discount Rate**—The discount rate used to measure the total pension liability of the Pension Plan as of June 30, 2014 and 2013 was 7.0%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the rates applicable to the current Tier for each member and that employer contributions will be made based on rates determined by the Actuary. Based on those assumptions, the Pension Plan net position was projected to be available to make all projected future benefit payments of current active and non-active Pension Plan members. Therefore, the long-term expected rate of return on Pension Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

# **13. PENSION PLANS (CONTINUED)**

Sensitivity of the Authority's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate—The following present the Authority's proportionate share of the net pension liability using the discount rate of 7.0%, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.0%) or one percentage point higher (8.0%) than the current rate:

	F	ISCAL YEAR 2014 (in thousands)	
	1% DECREASE (6.0%)	<b>CURRENT DISCOUNT RATE (7.0%)</b>	1% INCREASE (8.0%)
Net Pension Liability	1,300	901	531

# Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

**Pension Liability**—At June 30, 2014 and 2013, the Authority reported a liability of \$901 thousand and \$923 thousand for its proportionate share of the net pension liability. The Authority's proportion of the net pension liability was based on projection of the Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating City governments and their component units, actuarially determined. At June 30, 2014 and 2013, the Authority's proportion was 0.005% and 0.004%, respectively, which was an increase of 0.001%.

**Pension Expense**—For the year ended June 30, 2014 and 2013, the Authority recognized a pension expense of \$105 thousand and \$110 thousand, respectively.

**Deferred Outflows and Inflows of Resources**—At June 2014, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (in thousands):

	DEFERRED OUTFLOWS OF RESOURCES	DEFERRED INFLOWS OF RESOURCES
Difference between expected and actual experience	\$0	\$0
Changes of assumptions	_	—
Net difference between projected and actual earnings on pension plan investments	_	259
Changes in proportion and difference between Authority contributions		
and proportionate share of contributions	235	14
Authority contributions subsequent to the measurement date	_	—
Total	\$235	\$273

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at June 30, 2014 will be recognized in pension expense as follows (in thousands):

YEAR END JUNE 30	
2015	\$(29.7)
2016	(29.7)
2017	(29.7)
2018	(29.7)
2019	(29.7)
Thereafter	110.2

#### **14. OTHER POST-EMPLOYMENT BENEFITS**

**Plan Description**—The Authority's policy is to provide certain health and related benefits to eligible retirees of the Authority, which constitutes an other postemployment benefit ("OPEB") plan (the "Plan") in accordance with GASB Statement No. 45, ("GASB 45") *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions.* OPEB is provided under the New York City Health Benefit Program, which is a single employer defined benefit healthcare plan to eligible retirees and beneficiaries. 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. OPEBs include health insurance, Medicare Part B premium reimbursements and employee welfare fund contributions. There are three classes of employees—active, inactive and retirees.

The following presents a summary of the Authority census data used in the June 30, 2013 and June 30, 2012, OPEB actuarial valuations:

GROUP	JUNE 30, 2013	JUNE 30, 2012
Active	13	13
Inactive	1	2
Deferred vested	—	_
Retired	3	3
Total	17	18

Funding Policy-The Authority is not required to provide funding for OPEB, other than the payas-you-go amount necessary to provide current benefits to retirees and eligible beneficiaries / dependents. For the years ended June 30, 2014 and 2013, the Authority had three retirees and made contributions of \$11.3 thousand and \$13.7 thousand, respectively. Members are not required to contribute; although, retirees may elect basic health insurance programs and / or optional coverage that require contributions. Plan retiree participants who opt for other basic or enhanced coverage must contribute 100% of the incremental costs above the premiums for the benchmark plan. The Plan also reimburses covered employees 100% of the Medicare Part B Premium rate applicable to a given year, and there is no retiree contribution to the Welfare Fund, which covers retirees for various health care benefits not provided through the basic coverage.

#### Annual OPEB Cost and Net OPEB Obligation-

The Authority's annual OPEB cost (expense) is calculated based on the actuarial annual required contribution of the employer ("ARC"), an amount that was actuarially determined in accordance with the parameters of GASB 45. Actuarial valuations involve estimates and assumptions about the probability of events far into the future. The Entry Age Actuarial Cost Method was used in the actuarial valuation prepared as of June 30, 2013, which was the basis for the fiscal year 2014 ARC calculation. Under this method, as used in this OPEB actuarial valuation, the Actuarial Present Value of Benefits ("APVB") of each individual included in actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The employer portion of this APVB allocated to valuation year is the Employer Normal Cost. The portion of this APVB not provided for a valuation date by the Actuarial Present Value of Future Employer Normal Cost or future member contributions is the Actuarial Accrued

Liability ("AAL"). The excess of the AAL over the Actuarial Asset Value ("AAV"), if any, is the Unfunded Actuarial Accrued Liability ("UAAL").

All changes in the UAAL as of June 30, 2013 are being amortized over a one-year period for purposes of calculating the ARC, except for the amount of change in UAAL attributable to the change in the Actuarial Cost Method, which is being amortized over a closed 10-year period using level-dollar amortization. This is the minimum period permitted in cases where there is a significant reduction in the UAAL in accordance with GASB 45.

The following table shows the elements of the Authority's annual OPEB cost, the amounts actually contributed, and changes in the Authority's net OPEB obligation for the fiscal years ended June 30, 2014 and 2013 (in thousands):

Net OPEB obligation—beginning of year Net OPEB obligation—end of year	921	790 <b>\$921</b>
Payments	(11)	(14)
Annual OPEB cost	41	145
Adjustment to annual required contribution	(958)	(821)
Interest on net OPEB obligations	37	32
Annual required contribution	\$962	\$934
	2014	2013

# 14. OTHER POST-EMPLOYMENT BENEFITS (CONTINUED)

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, 2012 through 2014 were as follows (in thousands):

	ANNUAL OPEB COST	PERCENTAGE OF ANNUAL OPEB COST CONTRIBUTED	NET OPEB OBLIGATION
June 30, 2014	\$41	27.3%	\$951
June 30, 2013	145	9.5	921
June 30, 2012	100	8.8	790

Funded Status and Funding Progress—As of June 30, 2013, the most recent actuarial valuation date, the cost was 0% funded. The actuarial accrued liability for benefits was \$819.4 thousand, and the actuarial value of assets was \$0, resulting in an UAAL of \$819.4 thousand. The covered payroll (annual payroll of active employees covered by the Plan) was \$1.1 million, and the ratio of the UAAL to the covered payroll was 74.0%. The schedule of funding progress, which is presented in the Required Supplementary Information following the Notes to Financial Statements, presents the results of OPEB valuation as of June 30, 2014, 2013 and 2012. This schedule provides a three-year information trend about increases or decreases of the actuarial value of assets over time relative to the actuarial accrued liabilities for benefits.

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, demographic, salary increase, 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 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 OPEB-specific actuarial assumption used in the June 30, 2013 actuarial valuation of the Plan are as follows:

- Valuation date—June 30, 2013
- Discount Rate—4.0% per annum (1.5% real rate on short- term investment return).
- Actuarial Cost Method: Entry Age calculated on an individual basis with Actuarial Value of Projected Benefits allocated on a level basis over earnings from hire though age of exit.
- Consumer Price Inflation—2.5% per year
- Salary Increases: In general, Merit and Promotion Increases plus assumed General Wage Increases of 3.0% per year.
- Per Capita Claims Costs: HIP HMO and GHI/ EBCBS benefit costs reflect age-adjusted premiums. Age adjustments based on assumed average age distribution of covered population used for non-Medicare retirees and HIP HMO Medicare retirees.

Age adjustment based on actual age distribution of the GHI/EBCBS Medicare covered population.

Insured premiums are without age adjustments for other coverage. Premiums are assumed to include administrative costs.

- Employer premium contribution schedule for the months of July 2013 and January 2014 were reported by the New York City Office of Labor Relations. In most cases, the premium contributions remained the same throughout the year. HIP HMO Medicare rates varied by date and by specific Plan option. These variations are the result of different Medicare Advantage reimbursements. The various monthly rates were blended by proportion of enrollment. For other rates, where the January 2014 premium rate was different than the July 2013 premium rate, the valuation assumed that the January 2014 rate was more representative of the longrange cost of the arrangement.
- Welfare Fund contributions reflect a threeyear trended average of reported annual contribution amounts for current retirees. The Welfare Fund rates reported for the previous two valuations were trended to the current level based on the historic increase rates of 1.64% for fiscal year 2013 and 2.33% for fiscal year 2012, approximating the overall growth of the Welfare Fund contribution.

Initial monthly premium rates used in valuation are shown in the following table:

	Montl	nthly Rate	
PLAN	<b>FY 2014</b> <sup>1</sup>	FY 2013 <sup>2</sup>	
НІР НМО			
Non-Medicare Single	\$579.04	\$550.50	
Non-Medicare Family	1,418.66	1,348.75	
Medicare	149.42	140.37	
GHI/EBCBS			
Non-Medicare Single	459.63	459.68	
Non-Medicare Family	1,194.24	1,194.29	
Medicare	159.69	159.69	
OTHERS			
Non-Medicare Single	579.04	550.50	
Non-Medicare Family	1,418.66	1,348.75	
Medicare	149.42	159.59	

<sup>1</sup> Used in June 30, 2013 OPEB actuarial valuation. <sup>2</sup> Used in June 30, 2012 OPEB actuarial valuation.

# 14. OTHER POST-EMPLOYMENT BENEFITS (CONTINUED)

For the June 30, 2013 and June 30, 2012 OPEB actuarial valuations used for fiscal years 2014 and 2013, respectively, certain lump-sum amounts have been included in calculating the three-year trended average. Furthermore, retroactive adjustments to Welfare Fund contribution rates were used in the trended average as of the dates they were effective (i.e., using the retroactive date).

Weighted average annual contribution rates used for future retirees:

FY 2014	FY 2013
\$1,700	\$1,703
	112014

Contributions were assumed to increase by Medicare Plans trend rates.

Welfare rate contributions have been updated to reflect recent contribution rates.

In addition to age adjustment, the premium for HIP HMO Medicare-eligible retirees was multiplied by the following factors for the June 30, 2013 OPEB actuarial valuation to reflect actual 2014 HIP premiums and anticipated in Medicare Advantage reimbursement rates. The adjustment rates used as of June 30, 2012 are shown for comparative purposes:

		e Advantage ent Factors*
FISCAL YEAR	JUNE 30, 2013 VALUATION	JUNE 30, 2012 VALUATION
2014	1.00	1.03
2015	1.03	1.08
2016	1.04	1.11
Thereafter	1.04	1.11

\* Includes anticipated impact of National Health Care Reform.

#### • Medicare Part B Premiums:

CALENDAR YEAR	MONTHLY PREMIUM
2012	\$99.90
2013	104.90
2014	104.90*

\* Reflected only in June 30, 2013 OPEB actuarial valuation.

Medicare Part B Premium reimbursement amounts have been updated to reflect actual premium rates announced for calendar years through 2014. The actual 2015 Medicare Part B Premium was not announced at the time these calculations were prepared and, thus, was not reflected in the valuation.

For the June 30, 2012 OPEB actuarial valuation (i.e., fiscal year 2013), the annual premium used (i.e., \$1,228.80) equaled six months of the calendar year 2012 premium (\$99.90) plus six months of the calendar year 2013 premium (\$104.90).

For the June 30, 2013 OPEB actuarial valuation (i.e., fiscal year 2014), the annual premium used (i.e., \$1,258.80) equaled six months of the calendar year 2013 premium (\$104.90) plus six months of the calendar year 2014 premium (\$104.90).

Future calendar year Medicare Part B premium rates are projected from the calendar year 2014 rate of \$104.90 using the assumed Medicare Part B Premium trend.

#### 14. OTHER POST-EMPLOYMENT BENEFITS (CONTINUED)

Overall Medicare Part B Premium amounts are assumed to increase by the following percentages to reflect the income-related increases in Medicare Part B Premiums for high income individuals.

		Income-Related Medicare Part B Increase		
FISCAL YEAR	JUNE 30, 2013 VALUATION	JUNE 30, 2012 VALUATION		
2013	NA9	6 3.60%		
2014	3.70	3.70		
2015	3.80	3.80		
2016 and later	Increasing by 0.1% per year to a maximum of 5.0%	Increasing by 0.1% per year to maximum of 5.0%		

• Medicare Part B Premium Reimbursement Assumption: For the June 30, 2013 OPEB actuarial valuation, 90% of Medicare participants are assumed to claim reimbursement (unchanged from last year).

 Health Care Cost Trend Rate (HCCTR)—Covered medical expense are assumed to increase by the following percentages (unchanged from last valuation):

YEAR ENDING <sup>1</sup>	PRE-MEDICARE PLANS	MEDICARE PLANS	MEDICARE PART B PREMIUM
2014 <sup>2</sup>	9.5%	5.0%	6.5%
2015	9.0	5.0	6.0
2016	8.5	5.0	5.5
2017	8.0	5.0	5.0
2018	7.5	5.0	5.0
2019	7.0	5.0	5.0
2020	6.5	5.0	5.0
2021	6.0	5.0	5.0
2022	5.5	5.0	5.0
2023 and later	5.0	5.0	5.0

1 Fiscal year for Pre-Medicare Plans and Medicare Plans and calendar year for Medicare Part B Premiums.

2 For the June 30, 2013 OPEB actuarial valuation, rates shown for 2014 were not reflected since actual values for the fiscal year 2014 per capita costs, fiscal year 2014 Welfare Fund contributions and calendar year 2014 Medicare Part B Premium amounts were used.

#### **15. POLLUTION REMEDIATION OBLIGATIONS**

The System reports pollution remediation obligations ("PROs") as required by the GASB. The System's PROs may arise as a result of: (1) federal, state and local laws and regulations. (2) violations of pollution-related permits or licenses, (3) a determination by the System that there is an imminent endangerment to public health and safety as a result of an existing pollution condition, 4) the System being named in a lawsuit to compel remediation or being identified by a regulator as a party responsible or potentially responsible for remediation, and / or (5) the System's voluntary commencement of remediation. As of June 30, 2014 and 2013, the System reported \$98.9 million and \$116.9 million of liabilities for known PROs, respectively.

The System has estimated these amounts based on the current value of outlays expected to be incurred for pollution remediation, which it is currently obligated to perform. Actual future outlays will differ from the estimated amounts if the prices or techniques for remediation measures change or differ from estimates, if and when additional information about existing pollution conditions becomes known to the System in the future and/or if applicable laws or regulations change.

Remediation outlays for certain pollution conditions currently known to the System are not included in the reported liabilities because they are not yet reasonably estimable. These include certain locations that the System has been informed may be designated under federal law as Superfund sites to address hazardous substances, pollutants or contaminants at these sites and for which the System may be named as a potentially responsible party for the remediation because there are System facilities operated at these locations.

#### **16. SUBSEQUENT EVENTS**

On July 10, 2014, the Authority issued \$200 million of new money, tax-exempt, fixed-rate Second General Resolution Revenue Bonds, Fiscal 2015 Series AA. These bonds will mature in 2044. The proceeds were used to refund the Authority's commercial paper notes Series 1, pay the costs of improvements to the System and pay bond issuance costs.

On July 10, 2014, the Authority issued \$400 million of new money, tax-exempt, adjustable Second General Resolution Revenue Bonds, Fiscal 2015 Series BB. The bonds are backed by liquidity facilities from four banks. These bonds will mature in 2049 and 2050. The proceeds were used to refund the Authority's commercial paper notes Series 7 and Series 8, pay the costs of improvements to the System and pay bond issuance costs.

On July 17, 2014, the Authority drew down \$9.4 million of Fiscal 2014 Series 3 BANs.

On August 14, 2014, the Authority issued \$200 million of commercial paper notes, Series 7 and Series 8, to pay the costs of improvements to the System.

On August 21, 2014, the Authority drew down \$22.6 million of Fiscal 2014 Series 3 BANs.

On September 18, 2014, the Authority drew down \$5.9 million of Fiscal 2014 Series 3 BANs.

On September 24, 2014, the Authority issued \$200 million of new money, tax-exempt, fixed-rate Second General Resolution Revenue Bonds, Fiscal 2015 Series CC. These bonds will mature in 2045. The proceeds were used to refund commercial paper notes Series 7, pay the costs of improvements to the System and pay bond issuance costs.

On September 24, 2014, the Authority issued \$300 million of refunding, tax-exempt, fixed-rate Second General Resolution Revenue Bonds, Fiscal 2015 Series DD. These bonds will mature in 2028, 2029, and 2036. The proceeds were used to refund Fiscal 2005 Series B bonds and pay bond issuance costs.

On September 24, 2014, the Authority issued Fiscal 2015 Series 1 BANs to EFC in the amount of \$370 million to pay the costs of improvements to the System. As of September 24, 2014, the Authority has not drawn any funds on Fiscal 2015 Series 1 BANs.

# **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF FUNDING PROGRESS FOR THE OTHER POST-EMPLOYMENT BENEFIT PLAN (UNAUDITED)

June 30, 2014, 2013 and 2012 (in thousands):

YEAR ENDED	ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITY (AAL) ENTRY AGE	UNFUNDED ALL (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A PERCENTAGE OF COVERED PAYROLL
June 30, 2014	June 30, 2013	\$—	\$819	\$819	_	\$1,107	74.0%
June 30, 2013	June 30, 2012	_	793	793	—	1,064	74.6
June 30, 2012	June 30, 2011	—	662	662	—	919	72.0

# SCHEDULE OF THE AUTHORITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

Last 10 Fiscal Years\* (in thousands):

	JUNE 30, 2014	JUNE 30, 2013
Authority's proportion of the net pension liability	0.005%	0.004%
Authority's proportionate share of the net pension liability	\$901	\$923
Authority's covered-employee payroll	\$1,107	\$1,064
Authority's proportionate share of the net pension liability		
as a percentage of its covered employee payroll	81.4%	86.7%
Plan fiduciary net position as a percentage of the total pension liability	75.3%	67.2%

\*This data is presented for those years for which information is available.

# SCHEDULE OF THE AUTHORITY'S CONTRIBUTION

Last 10 Fiscal Years\* (in thousands):

	JUNE 30, 2014	JUNE 30, 2013
Actuarially required contribution	\$156	\$122
Contribution in relation to the actuarially required contribution	(156)	(122)
Contribution deficiency (excess)	\$—	\$—
Authority's covered-employee payroll	\$1,107	\$1,064
Contribution as a percentage of covered-employee payroll	14.1%	11.5%

\*This data is presented for those years for which information is available.

# **STATISTICAL SECTION**

This part of the New York City Water and Sewer System's Comprehensive Annual Financial Report presents detailed information to provide context to the information in the financial statements, note disclosures and required supplementary information.

# CONTENTS

#### **Financial Trends**

These schedules contain trend information to help the reader understand how the System's financial performance and well-being have changed over time.

#### **Revenue Capacity**

These schedules contain information to help the reader assess the System's primary revenue source and customer's utility payments.

#### **Debt Capacity**

These schedules present information to help the reader assess the affordability of the System's current level of outstanding debt and the System's ability to issue additional debt in the future.

# Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the System's financial activities take place.

#### **Operating Information**

These schedules contain service and infrastructure data to help the reader understand how the information in the System's financial report relates to the services the System provides.

# SCHEDULES OF FINANCIAL TRENDS INFORMATION (in thousands):

# Net Position by Category—Ten Year Trend

	2014	2013 RESTATED	2012 RESTATED	2011	2010	2009	2008	2007	2006	2005
Invested in capital assets net of related debt	(\$771,165)	(\$945,890)	(\$840,201)	(\$215,322)	\$920,728	\$1,253,882	\$1,737,181	\$2,056,879	\$2,556,766	\$2,803,031
RESTRICTED FOR: Debt service	1,145,505	918,229	687.656	573,461	239,192	285,348	209,130	161,661	171,859	152,544
Operations and maintenance	221,440	212,233	212,885	199,636	191,772	195,844	200,438	175,161	157,806	145,693
Unrestricted (deficit) Total net position	(754,581) <b>(\$158,801)</b>	(668,471) <b>(\$483,899)</b>	(869,372) <b>(\$809,032)</b>	(910,633) <b>(\$352,858)</b>	(1,632,209) <b>(\$280,517)</b>	(1,474,823) <b>\$260,251</b>	(980,858) <b>\$1,165,891</b>	(667,418) <b>\$1,726,283</b>	12,950 <b>\$2,899,381</b>	53,836 <b>\$3,155,104</b>

# Changes in Net Position—Ten Year Trend

		0010	0010							
	2014	2013 RESTATED	2012 RESTATED	2011	2010	2009	2008	2007	2006	2005
OPERATING REVENU	IES:									
Water Supply										
and distribution	\$1,351,550	\$1,278,646	\$1,238,352	\$1,158,977	\$1,005,045	\$920,033	\$784,856	\$796,404	\$735,200	\$755,693
Sewer collection										
and treatment	2,148,964	2,033,047	1,857,527	1,797,777	1,562,777	1,430,588	1,220,653	1,238,612	1,143,424	1,043,575
Bad debt expense	(26,979)	(16,983)	(28,541)	(76,799)	(14,032)	(36,060)	-	(226,028)	(87,222)	(114,702)
Other operating	000 000	170.000	1 40 505	111 550	100.051	07.046	07 770	00.001	100.000	05 450
revenues	266,996	172,283	140,595	111,552	190,251	97,946	97,778	98,061	100,306	85,459
Total operating revenues	3.740.531	3,466,993	3,207,933	2,991,507	2.744.041	2.412.507	2.103.287	1,907,049	1,891,708	1,770,025
Terendes	0,7 10,001	0,100,000	0,207,500	2,001,007	2,7 1 1,0 11	2,112,007	2,100,207	1,507,015	1,051,700	1,770,020
OPERATING EXPENSI	ES:									
Operation and										
maintenance	1,518,424	1,375,740	1,446,852	1,397,867	1,829,835	1,448,268	1,320,439	1,147,157	1,056,379	944,919
Administration and general	68,936	56,738	47,402	40,424	40,257	50,581	44,027	35,493	26,727	23,168
Total operating										
expenses	1,587,360	1,432,478	1,494,254	1,438,291	1,870,092	1,498,849	1,364,466	1,182,650	1,083,106	968,087
Depreciation	740.070	677 560	coo ooc	coo 000	574 400	606 345	646 277	570.000	500 1 61	515 205
and amortization	740,879	677,560	692,296	628,339	574,483	696,345	646,377	579,860	500,161	515,325
Operating income	1,412,292	1,356,955	1,021,383	924,877	299,466	217,313	92,444	144,539	308,441	286,613
NONOPERATING REV										
Interest expense	(1,263,305)	(1,225,771)	(1,246,863)	(1,178,226)	(1,019,633)	(929,333)	(834,085)	(771,656)	(731,563)	(668,675)
Loss on retirement/										
impairment of										
fixed assets	(18,815)	(20,976)	(1,646)	(3,426)	(23,254)	(299,450)	(14,598)	(23,257)	(7,046)	(7,971)
Subsidy income	174,606	174,862	196,241	180,986	128,110	108,708	104,234	90,601	88,447	78,834
Capital distribution	(39,627)	(25,429)	(42,005)	(53,591)	(32,580)	(51,921)	(24,619)	(33,133)		
Investment income	50,148	58,793	48,936	38,313	65,760	99,122	108,892	98,132	105,239	97,362
Net income / (loss)										
before capital	215 200	210 424	(22.054)	(01.067)	(502 121)	(955 561)	(567 722)	(404 774)	(226 482)	(212 027)
contributions	315,299	318,434	(23,954)	(91,067)	(582,131)	(855,561)	(567,732)	(494,774)	(236,482)	(213,837)
Capital contributions	9,799	7,699	26,903	18,696	30,424	11,529	7,340	12,357	(19,241)	(185,242)
Change in net position	325,098	326,133	2,949	(72,371)	(551,707)	(844,032)	(560,392)	(482,417)	(255,723)	(399,079)
Net position— beginning of year	(483,899)	(809,032)	(352,888)	(280,517)	260,251	1,165,891	1,726,283	2,899,381	3,155,104	3,554,183
beginning of year	(100,000)									
Restatement of	(100,000)	(1.000)	(459,093)	_	10.939	(61.608)	_	(690.681)	_	
• • •		(1,000)	(459,093)	_	10,939	(61,608)	_	(690,681)	_	_

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# **REVENUE CAPACITY INFORMATION**

# Water and Sewer Rate Increases—Ten Year Trend

EFFECTIVE DATE	INCREASE IN FLAT-RATE WATER/ METERED WATER	METERED WATER RATE (PER CCF) <sup>1</sup>	SEWER RATE
July 1, 2005	Increased 3.0%	1.65	159% of water charge
July 1, 2006	Increased 9.4%	1.81	159% of water charge
July 1, 2007	Increased 11.5%	2.02	159% of water charge
July 1, 2008	Increased 14.5%	2.31	159% of water charge
July 1, 2009	Increased 12.9%	2.61	159% of water charge
July 1, 2010	Increased 12.9%	2.95	159% of water charge
July 1, 2011	Increased 7.5%	3.17	159% of water charge
July 1, 2012	Increased 7.0%	3.39	159% of water charge
July 1, 2013	Increased 5.6%	3.58	159% of water charge
July 1, 2014	Increased 3.4%	3.70	159% of water charge

<sup>1</sup> CCF equals 100 cubic feet or approximately 748 gallons.

# Average Daily Water Consumption—Ten Year Trend

FISCAL YEAR	TOTAL (MGD) <sup>1</sup>	UPSTATE COUNTIES (MGD) <sup>1</sup>	CITY (MGD) <sup>1</sup>	PER CAPITA (GALS/DAY) <sup>2</sup>
2005	1,215	118	1,097	136
2006	1,210	122	1,088	136
2007	1,218	120	1,098	137
2008	1,235	119	1,116	139
2009	1,152	114	1,038	129
2010	1,127	112	1,016	126
2011	1,152	117	1,035	127
2012	1,117	109	1,009	123
2013	1,123	110	1,013	124
2014	1,116	111	1,005	123

<sup>1</sup> MGD = millions of gallons used per day.

<sup>2</sup> Population source: U.S. Department of Commerce, Bureau of the Census.

# SCHEDULES OF DEBT CAPACITY INFORMATION

**Revenue Bond Coverage Last Ten Fiscal Years** 

Years Ended June 30, 2005–2014 (in thousands):

			quirements1	Debt Service Re		
SECOND RESOLUTION DEBT SERVICE COVERAGE <sup>2</sup>	FIRST RESOLUTION DEBT SERVICE COVERAGE	TOTAL	INTEREST	PRINCIPAL	CASH RECEIPTS	YEAR
3.55	3.91	\$511,137	\$335,408	\$175,729	\$1,829,806	2005
3.01	3.76	637,441	439,839	197,602	1,931,927	2006
2.89	3.83	684,441	483,661	200,780	1,994,909	2007
2.92	4.23	758,418	556,627	201,791	2,236,541	2008
3.05	4.67	780,006	575,476	204,530	2,400,849	2009
3.09	5.24	841,287	592,194	249,093	2,622,290	2010
2.67	5.77	1,123,826	778,235	345,591	3,039,374	2011
2.98	7.41	1,078,700	700,658	378,042	3,270,827	2012
3.61	10.32	960,476	617,189	343,287	3,512,710	2013
4.76	12.62	774,870	415,611	359,259	3,728,823	2014

<sup>1</sup> Debt service requirements include First Resolution debt service and Second Resolution debt service, net of subsidy from the NYS Environmental Facilities Corporation and surplus revenues carried forward from the prior fiscal year.

<sup>2</sup> Revenue for coverage purposes for Second Resolution is net of Authority expenses.

#### **Ratio of Debt Outstanding Ten Year Trend**

Years Ended June 30, 2005—2014 (in thousands):

YEAR	TOTAL DEBT OUSTANDING*	DEBT PER CAPITA
2005	\$15,434,051	1.88
2006	16,285,351	1.97
2007	18,071,184	2.17
2008	20,018,937	2.40
2009	22,534,797	2.69
2010	24,577,715	3.01
2011	26,908,869	3.26
2012	28,378,279	3.40
2013	29,493,385	3.51
2014	30,173,882	N/A

N/A = data not available.

\* Includes both short and long term debt outstanding.

# SCHEDULES OF DEBT CAPACITY INFORMATION (CONTINUED)

#### **Ten Largest Customers**

(in thousands):

NAME	FISCAL 2014 BILLED
New York City Housing Authority	\$178,711
The City of New York	102,592
River Bay Corporation (Co-op City)	18,200
Port Authority of New York and New Jersey	14,193
New York City Health and Hospital Corporation	12,679
Consolidated Edison, Inc.	11,976
Peter Cooper Village / Stuyvesant Town	7,838
New York Presbyterian Hospital	7,226
Starrett City, Inc	7,141
New York City Transit	6,262

# **DEMOGRAPHIC AND ECONOMIC INFORMATION**

# Population—Ten Year Trend

Years Ended June 30, 2004—2013 (in thousands):

YEAR	UNITED STATES	PERCENTAGE CHANGE FROM PRIOR PERIOD	CITY OF NEW YORK	PERCENTAGE CHANGE FROM PRIOR PERIOD
2004	292,805,298	0.93%	8,169,940	0.53%
2005	295,516,599	0.93	8,213,839	0.54
2006	298,379,912	0.97	8,250,567	0.45
2007	301,231,207	0.96	8,310,212	0.72
2008	304,093,966	0.95	8,346,794	0.44
2009	306,771,529	0.88	8,391,881	0.54
2010	308,745,538	0.64	8,175,133	-2.58
2011	311,591,917	0.73	8,244,910	0.71
2012	313,914,040	0.75	8,336,697	1.11
2013	316,128,839	0.71	8,405,837	0.74

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

# **DEMOGRAPHIC AND ECONOMIC INFORMATION (CONTINUED)**

#### Personal Income—Ten Year Trend

		Personal Income			Per Capi	ta
YEAR	UNITED STATES (\$ BILLIONS)	CITY OF NEW YORK (\$ BILLIONS)	NEW YORK CITY AS A PERCENTAGE OF THE UNITED STATES	UNITED STATES	CITY OF NEW YORK	NEW YORK CITY AS A PERCENTAGE OF THE UNITED STATES
2004	10,043	329.0	3.3	34,300	40,904	119.3%
2005	10,606	345.5	3.3	35,888	43,120	120.2
2006	11,376	377.7	3.3	38,127	47,253	123.9
2007	11,990	415.4	3.5	39,804	51,842	130.2
2008	12,429	419.7	3.4	40,873	52,015	127.3
2009	12,080	408.7	3.4	39,379	50,263	127.6
2010	12,418	432.1	3.5	40,144	52,758	131.4
2011	13,190	458.2	3.5	42,332	55,412	130.9
2012	13,873	472.3	3.4	44,200	56,652	128.2
2013	14,151	481.6	3.4	44,765	57,290	128.0

N/A = data not available.

Source: Us Department of Commerce, Bureau of Economic Analysis, and the Bureau of the Census. Amounts as of November 20, 2014.

# Unemployment Rate—Ten Year Trend

YEAR	CITY OF NEW YORK	CHANGE FROM PRIOR PERIOD
2004	7.05%	-1.23%
2005	5.78	-1.27
2006	4.96	-0.82
2007	4.93	-0.03
2008	5.47	0.53
2009	9.23	3.76
2010	9.57	0.35
2011	9.09	-0.48
2012	9.35	0.26
2013	8.65	-0.70

Source: NY State, Department of Labor.

#### **Ten Largest Employers**

NAME	NUMBER OF EMPLOYEES, 2013
City of New York	151,678
New York City Department of Education	119,618
United States Government	80,900
State of New York	69,926
Metropolitan Transportation Authority	67,381
North Shore-LIJ Health System	48,650
JPMorgan Chase & Co.	37,363
New York City Health and Hospitals Corp.	35,044
Mount Sinai Health System	32,056
Macy's Inc.	31,200

Source: Crain's New York Business-March 24-30, 2014.

# **OPERATING INFORMATION**

# Water Pollution Control Plants Daily Flow

		12 month	avg. (mgd) <sup>1</sup>
PLANT	DESIGN FLOW (MGD) <sup>1</sup>	JULY '12—JULY '13	JULY '13—JULY '14
Wards Island	275	200	204
North River	170	113	113
Hunts Point	200	130	125
26th Ward	85	48	45
Coney Island	110	90	88
Owls Head	120	95	93
Newtown Creek	310	222	215
Red Hook	60	30	28
Jamaica	100	78	78
Tallmans Island	80	59	56
Bowery Bay	150	110	106
Rockaway	45	16	15
Oakwood Beach	40	30	29
Port Richmond	60	28	28
Total	1,805	1,249	1,223

<sup>1</sup> MGD=million of gallons of water per day.

# Water System Tunnels and Aqueducts Length Diameter Transmission In Service

	CONNECTIONS	LENGTH (MILES)	DIAMETER (FEET) <sup>1</sup>	IN SERVICE DATE
TUNNELS UPSTATE				
Shandanken		18.1	11.5 x 10.25 <sup>1</sup>	1924
West Delaware		44.0	11.33	1964
East Delaware		25.0	11.33	1955
Neversink		6.0	10	1954
AQUEDUCTS				
New Croton	New Croton to Jerome Park	24.0	3.5 x 13.6 <sup>1</sup>	1893
	Jerome Park to 135 St. Gatehouse	9.0	$12.25 - 10.5^2$	1893
Catskill	Ashokan to Kensico	75.0	17 x 17.5 <sup>1</sup>	1915
	Kensico to Hillview	17.0	17 x 18 <sup>1</sup>	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	15-11 <sup>2</sup>	1917
Tunnel 2	Hillview to distribution system	20.0	17-15 <sup>2</sup>	1936
Tunnel 3, Stage 1	Hillview to distribution system	13.0	24-20 <sup>2</sup>	1998
Tunnel 3, Stage 2	Shaft 13B to distribution system	8.5	10	2013
Richmond Tunnel	Tunnel 2 to Staten Island Uptake Shaft	5.0	10	1970

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

<sup>2</sup> Variable diameter tunnels.

# **OPERATING INFORMATION (CONTINUED)**

# Number of Employees—Department of Environmental Protection—Ten Year Trend

YEAR	NUMBER OF EMPLOYEES	PERCENTAGE CHANGE FROM PRIOR PERIOD	
2005	5,644	-2.37%	
2006	5,675	0.55	
2007	5,844	2.98	
2008	5,895	0.87	
2009	5,785	-1.87	
2010	5,749	-0.62	
2011	5,653	-1.67	
2012	5,564	-1.57	
2013	5,567	0.05	
2014	5,547	-0.36	

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