



\$401,090,000

**New York State Environmental Facilities Corporation
State Clean Water and Drinking Water Revolving Funds Revenue Bonds
(New York City Municipal Water Finance Authority Projects –
Second Resolution Bonds) Series 2013 A
Subordinated SRF Bonds**

DATED: Date of Delivery

DUE: June 15, as shown on the inside cover

This cover page is only a brief general summary. You must read this entire official statement to obtain essential information for making an informed investment decision.

PURPOSES

We will use the proceeds of the State Clean Water and Drinking Water Revolving Funds Revenue Bonds (New York City Municipal Water Finance Authority Projects – Second Resolution Bonds) Series 2013 A Subordinated SRF Bonds (the "offered bonds") to provide financial assistance to the New York City Municipal Water Finance Authority (the "Authority") to refund certain bonds previously issued for water pollution control and drinking water projects.

THE OFFERED BONDS

Interest on the offered bonds is payable on June 15 and December 15 of each year commencing December 15, 2013. The offered bonds are issued in \$5,000 denominations. The DTC book-entry system will apply to all offered bonds, so you will not be registered as a bondowner. You will not receive physical delivery of certificates evidencing ownership of the offered bonds.

REDEMPTION

The offered bonds are subject to redemption prior to maturity as described herein.

SECURITY AND SOURCES OF PAYMENT

The offered bonds are our *special limited* obligations, payable *solely* from amounts pledged as security as described in this official statement. The offered bonds are issued as Subordinated SRF Bonds under the Master Trust Agreement. As security for the offered bonds, we have pledged: (i) repayments we receive on related bonds issued by the Authority; (ii) moneys and investments held in a Debt Service Reserve Fund to be established for the offered bonds; (iii) moneys available from time to time in the General Reserve Fund to be established under the 2006 Indenture (as defined herein); and (iv) on a subordinated basis, moneys available from time to time in the De-allocated Reserve Account and the Deficiency Reserve Account after such moneys are applied, to the extent necessary, in connection with all Senior SRF Bonds secured by the Master Trust Agreement, as described in this official statement. Amounts available from the De-allocated Reserve Account and Deficiency Reserve Account secure the offered bonds on a parity basis with all other subordinated NYCMWFA bonds issued and outstanding and to be issued in the future, all as described herein. The Debt Service Reserve Fund will secure only the offered bonds and the General Reserve Fund will secure all bonds issued under the 2006 Indenture including the offered bonds.

The offered bonds are not our general obligations and are not a charge against our general credit. The offered bonds are not a debt of the State of New York, The City of New York (the "City") or the Authority. We have no taxing power.

TAX EXEMPTION

In the opinion of Hawkins Delafield & Wood LLP and Gonzalez Saggio & Harlan LLP, acting as our Co-Bond Counsel, under existing statutes and court decisions, and relying on certain representations and assuming compliance with certain covenants, interest on the offered bonds is

- excluded from a bondholder's federal gross income under the Internal Revenue Code,
- not a preference item for a bondholder under the federal alternative minimum tax, and
- included in the adjusted current earnings of certain corporations under the federal corporate alternative minimum tax.

Also, in each Co-Bond Counsel's opinion, under existing statutes, interest on the offered bonds is exempt from personal income taxes imposed by the State of New York and its political subdivisions, including the City.

DELIVERY

The offered bonds are offered subject to prior sale, when, as and if issued and received by the Underwriters, subject to certain conditions. The offered bonds are expected to be delivered, through DTC's facilities, on or about July 11, 2013.

FURTHER INFORMATION

We have prepared an Annual Information Statement dated December 1, 2012, as it may be amended from time to time ("Annual Information Statement"), which describes our various financing programs. We have included by specific cross-reference in this official statement portions of our Annual Information Statement. We have filed copies of the Annual Information Statement with the MSRB as described in this official statement. You may obtain our Annual Information Statement from our website at www.efc.ny.gov or you may obtain a hard copy from us directly.

Citigroup

BofA Merrill Lynch
Blaylock Robert Van, LLC
Fidelity Capital Markets
Guggenheim Securities, LLC
Jefferies & Company
Loop Capital Markets, LLC
Prager & Co., LLC
RBC Capital Markets
Roosevelt & Cross Inc.
The Williams Capital Group, L.P.

Barclays

CastleOak Securities, L.P.
George K. Baum & Company
Janney Montgomery Scott
KeyBanc Capital Markets
Mesirow Financial, Inc.
Ramirez & Co., Inc.
Rice Financial Products Company
Siebert Brandford Shank & Co., L.L.C.

M.R. Beal & Company

BNY Mellon Capital Markets, LLC
Estrada Hinojosa & Company, Inc.
Goldman, Sachs & Co.
J.P. Morgan
Lebenthal & Co., LLC
Morgan Stanley
Raymond James
Rockfleet
Stifel Nicolaus & Company, Inc.
Wells Fargo Securities

MATURITIES, AMOUNTS, INTEREST RATES, AND PRICES OR YIELDS

\$401,090,000

**New York State Environmental Facilities Corporation
State Clean Water and Drinking Water Revolving Funds Revenue Bonds
(New York City Municipal Water Finance Authority Projects –
Second Resolution Bonds) Series 2013 A
Subordinated SRF Bonds**

Maturity Date	Principal Amount	Interest Rate	Yield	CUSIP⁽¹⁾	Maturity Date	Principal Amount	Interest Rate	Yield	CUSIP⁽¹⁾
June 15,					June 15,				
2014	\$17,660,000	3.00%	0.18%	64986AY47	2022	\$18,440,000	5.00%	3.01%	64986A2P5
2015	3,215,000	3.00	0.65	64986AY54	2023	3,950,000	4.00	3.15	64986AZ53
2015	13,135,000	5.00	0.65	64986A2G5	2023	17,190,000	5.00	3.15	64986A2Q3
2016	10,280,000	3.00	1.02	64986AY62	2024 ⁽²⁾	20,050,000	5.00	3.36	64986AZ61
2016	6,655,000	5.00	1.02	64986A2H3	2025 ⁽²⁾	20,705,000	5.00	3.56	64986AZ79
2017	3,460,000	4.00	1.40	64986AY70	2026 ⁽²⁾	21,380,000	5.00	3.70	64986AZ87
2017	13,930,000	5.00	1.40	64986A2J9	2027 ⁽²⁾	21,155,000	5.00	3.84	64986AZ95
2018	1,775,000	4.00	1.80	64986AY88	2028	20,760,000	4.00	4.12	64986A2A8
2018	16,250,000	5.00	1.80	64986A2K6	2028 ⁽²⁾	1,725,000	5.00	3.97	64986A2R1
2019	475,000	4.00	2.16	64986AY96	2029 ⁽²⁾	22,975,000	5.00	4.08	64986A2B6
2019	18,165,000	5.00	2.16	64986A2L4	2030 ⁽²⁾	23,690,000	5.00	4.17	64986A2C4
2020	975,000	4.00	2.48	64986AZ20	2031 ⁽²⁾	24,430,000	5.00	4.23	64986A2D2
2020	18,345,000	5.00	2.48	64986A2M2	2032 ⁽²⁾	25,170,000	5.00	4.29	64986A2E0
2021	1,780,000	4.00	2.75	64986AZ38	2033	8,415,000	4.375	4.46	64986A2F7
2021	18,220,000	5.00	2.75	64986A2N0	2033 ⁽²⁾	4,495,000	5.00	4.34	64986A2S9
2022	2,240,000	4.00	3.01	64986AZ46					

Optional Redemption

The offered bonds maturing after June 15, 2023 are subject to redemption prior to maturity at our option, in whole or in part at any time, on or after June 15, 2023.

⁽¹⁾ Copyright, American Bankers Association. CUSIP data herein are provided by Standard & Poor's, CUSIP Service Bureau, a division of The McGraw-Hill Companies, Inc. The CUSIP numbers listed above are being provided solely for the convenience of bondholders only at the time of issuance of the offered bonds and we do not make any representation with respect to such numbers or undertake any responsibility for their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the offered bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the offered bonds.

⁽²⁾ Priced at the stated yield to the June 15, 2023 optional redemption date at a redemption price of 100% of the principal amount of such offered bonds or portions thereof to be redeemed, plus interest accrued to the redemption date.

No Unlawful Offers. This official statement does not constitute an offer to sell, or the solicitation of an offer to buy, the offered bonds in any jurisdiction where that would be unlawful. We have not authorized any dealer, salesperson or anyone else to give any information or make any representation in connection with the offering of the offered bonds, except as set forth in this official statement. You should not rely on any such information or representation.

Not a Contract; Not Investment Advice. This official statement is not a contract, and provides no investment advice. You should consult your financial advisor and legal counsel with your questions about this official statement and the offered bonds, or anything else related to this issue of bonds.

No Guarantee of Information. We have provided this information or obtained it from other sources believed to be reliable. We do not, however, guarantee the accuracy or completeness of this information, nor has any one source guaranteed the information provided by any other source. Information and expressions of opinion are subject to change without notice, and you should not draw any implication that there have been no changes since the date of this official statement. Neither the delivery of, nor any sale made under, this official statement shall under any circumstances create any implication that there has been no change in our affairs or in any other matters described herein since the date on the cover page hereof.

Certain Prospective Information. The prospective financial information of the Authority included in Attachment 1 has been prepared by the consultant to the Authority. Neither KPMG LLP nor Deloitte & Touche LLP have examined nor compiled such prospective financial information and, accordingly, do not express any opinion or any other form of assurance with respect thereto. The KPMG LLP report included in our Annual Information Statement and incorporated herein by specific cross-reference, and the Deloitte & Touche LLP report included in Attachment 1 hereto, relate to historical financial information only and do not extend to any prospective financial information of EFC or the Authority, as applicable.

KPMG LLP, our independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein by specific cross-reference, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this official statement.

MSRB and EMMA. We file annual information about ourselves and the security structure and terms of our bond issues with the Municipal Securities Rulemaking Board ("MSRB") through its Electronic Municipal Market Access system ("EMMA"). The MSRB has committed to make the documents filed available to the public through EMMA. Although we make no representations with respect thereto, it is our understanding that EMMA can currently be accessed online at <http://emma.msrb.org/>.

Cross References. The information listed under the heading Cross References in the Table of Contents, as filed with the MSRB through EMMA to date, is "included by specific cross-reference" in this official statement. This means that important information is disclosed by referring to those documents, which are considered to be part of this official statement. You should read this official statement, which includes those filings (and may include filings to be made in the future), in its entirety in order to obtain essential information for making an informed decision in connection with the offered bonds. You may obtain copies of the Annual Information Statement and other filings by writing to us at our headquarters at 625 Broadway, Albany, NY 12207, Attention: Controller and Director of Corporate Operations.

Underwriter Transactions. The Underwriters may overallocate or effect transactions which stabilize and maintain the market price of the offered bonds at a level above that which might otherwise prevail in the open market. The Underwriters are not obligated to do this and are free to discontinue it at any time.

Forward-Looking Statements. Statements in this official statement, and the documents included by specific cross-reference, that are not historical facts are forward-looking statements, which are based on our beliefs, as well as assumptions made by, and information currently available to, our management and staff. Because the statements are based on expectations about future events and economic performance and are not statements of fact, actual results may differ materially from those projected. Important factors that could cause future results to differ include legislative and regulatory changes, changes in the economy, and other factors discussed in this and other documents that we file with the MSRB through EMMA. When used in our documents or oral presentations, the words "anticipate," "estimate," "expect," "objective," "projection," "forecast," "goal," or similar words are intended to identify forward-looking statements.

Our Website. We may place a copy of this official statement and our Annual Information Statement on our website at www.efc.ny.gov. Unless this official statement specifically indicates otherwise, no statement on our website is included by specific cross-reference or constitutes a part of this official statement. We have prepared our website information for your convenience, but you should not make any decision in reliance upon that information. Typographical or other errors may have occurred in converting original source documents to digital format, and we assume no liability or responsibility for errors or omissions on our website. Further, we disclaim any duty or obligation either to update or to maintain that information or any responsibility or liability for any damages caused by viruses in the electronic files on our website. We also assume no liability or responsibility for any errors or omissions or for any updates to dated website information.

**NEW YORK STATE
ENVIRONMENTAL FACILITIES CORPORATION
625 Broadway
Albany, New York 12207
www.efc.ny.gov
(518) 402-6924**

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Commissioner of Environmental Conservation of the State of New York..... Chair

Marc Gerstman, Esq., Executive Deputy Commissioner,
New York State Department of Environmental Conservation Designee

Nirav R. Shah, M.D., M.P.H., *ex officio*,
Commissioner of Health of the State of New York..... Member

Michael J. Cambridge, Director, Division of Environmental Health Protection
New York State Department of Health..... Designee

Roger C. Sokol, Ph.D., Director, Bureau of Water Supply Protection
New York State Department of Health..... Designee

Cesar A. Perales, *ex officio*,
Secretary of State of the State of New York..... Member

George R. Stafford, Deputy Secretary of State
New York State Department of State Designee

David G. Ashton III, Revitalization Specialist I, Division of Coastal Resources
New York State Department of State Designee

Charles Kruzansky, Voorheesville, New York..... Member

Francis T. Corcoran, Bedford Corners, New York..... Member

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James R. Levine, Esq..... Senior Vice President and General Counsel

Tracey Hitchen Boyd..... Deputy Director of Finance

Timothy P. Burns, P.E. Director of Engineering and Program Management

Michael D. Malinoski..... Controller and Director of Corporate Operations

Sandra L. Allen..... Director of Policy and Planning

Jon Sorensen..... Director of Public Information

OFFICIAL STATEMENT

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Cross References

The following portions of the **Annual Information Statement of New York State Environmental Facilities Corporation**, dated December 1, 2012, as it may be amended from time to time, and filed with the MSRB through EMMA, are included by specific cross-reference in this official statement.

- Part 1. Introduction
 - Exhibit 1A – Additional Information Regarding the Corporation
 - Exhibit 1B – EFC Audited Annual Financial Statement*
 - Exhibit 1C – Book Entry Only System
- Part 2. State Revolving Funds Programs
 - Exhibit 2A – Certain Definitions and Summary of Master Trust Agreement
 - Exhibit 2B – Information Regarding Prior SRF Bonds And SRF Recipients
 - Exhibit 2C – SRF Recipient General Information
- Part 3. 1991 MFI Program
 - Exhibit 3A – Certain Definitions and Summary of Financing Indenture (1991 MFI Program)
- Part 4. New York City Municipal Water Finance Authority Projects (except for the information under the heading “SECURITY AND SOURCE OF PAYMENT FOR SUBORDINATED NYCMWFA BONDS,” which information is being replaced by the information under the heading “SECURITY AND SOURCES OF PAYMENT FOR THE OFFERED BONDS” as described herein)
 - Exhibit 4A – Certain Definitions and Summary of Financing Indenture (NYCMWFA Program)
- Part 5. 2010 MFI Program
 - Exhibit 5A – Certain Definitions and Summary of Financing Indenture (2010 MFI Program)

Copies of Official Statement

Copies of our official statement are filed with the MSRB for every series of bonds we issue. Further, from time to time, we may file information with the MSRB through EMMA to amend or update information previously filed.

* We expect to file an updated Exhibit 1B to our Annual Information Statement on or about July 1, 2013.

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OFFICIAL STATEMENT

\$401,090,000

**New York State Environmental Facilities Corporation
State Clean Water and Drinking Water Revolving Funds Revenue Bonds
(New York City Municipal Water Finance Authority Projects –
Second Resolution Bonds) Series 2013 A
Subordinated SRF Bonds
(the "offered bonds")**

INTRODUCTION

This official statement – which includes the main body and the Exhibits – provides you with information about the offered bonds, together with information about how we administer our State Revolving Fund ("SRF") financing programs.

We were created in 1970 as the "New York State Environmental Facilities Corporation," known as "EFC," by the EFC Act (as described below). We are a public benefit corporation of the State, which means that we are a corporate entity separate and apart from the State, without any power of taxation, and that the State is not obligated to pay our bonds.

The offered bonds are being issued as part of our New York City Municipal Water Finance Authority financing program (the "NYCMWFA" program) described in Part 4 of our Annual Information Statement. We are issuing the offered bonds for the purpose of refunding bonds we issued to provide financial assistance to the New York City Municipal Water Finance Authority (the "Authority") for water pollution control and drinking water projects. We will issue the offered bonds pursuant to the New York State Environmental Facilities Corporation Act, Title 12 of Article 5 of the Public Authorities Law of the State of New York, as amended, which we call the "EFC Act," and under the Financing Indenture dated as of June 1, 2006, as amended and supplemented (the "2006 Indenture"), between us and Manufacturers and Traders Trust Company, as trustee. The offered bonds constitute *subordinated* NYCMWFA bonds under the 2006 Indenture.

In connection with the issuance of the offered bonds, we are amending and supplementing the 2006 Indenture to provide for: (a) a Debt Service Reserve Fund which secures only the offered bonds, as well as the ability to establish additional debt service reserve funds in connection with the issuance of future series of bonds issued under the 2006 Indenture that would secure only such series; and (b) a General Reserve Fund which secures the offered bonds on a parity basis with all other subordinated NYCMWFA bonds issued under the 2006 Indenture.

A summary of the security and sources of payment for the offered bonds as amended and supplemented is contained herein under the heading "SECURITY AND SOURCES OF PAYMENT FOR THE OFFERED BONDS." That information replaces the information contained in Part 4 of our Annual Information Statement under the heading "SECURITY AND SOURCE OF PAYMENT FOR SUBORDINATED NYCMWFA BONDS" which information is *not* being included herein by specific cross-reference. In addition, a summary of the amended and supplemented 2006 Indenture is attached hereto as Exhibit D.

Another financing document that provides security for the offered bonds is called the Amended and Restated Master Trust Agreement dated as of July 1, 2005, as amended (as so amended, the "MTA"), between us and Manufacturers and Traders Trust Company, as trustee, or any successor thereto (the "MTA Trustee"), and the Project Finance Agreement dated as of June 1, 2006, as supplemented, among us, the Authority and The City of New York (the "City"), as supplemented and amended. We summarize the provisions of the MTA in Exhibit 2A to our Annual Information Statement.

In addition to being secured by the 2006 Indenture, pursuant to the terms of the MTA, subordinated NYCMWFA bonds (including the offered bonds) are secured on a subordinated basis by certain moneys expected to be released from time to time from the lien of the 1991 Master Financing Indenture, amended and restated as of July 1, 2005, originally dated as of May 15, 1991 (the "1991 MFI" and "1991 MFI program"), between us and Manufacturers and Traders Trust Company, as trustee, or any successor thereto, and the 2010 Master Financing Indenture dated as of June 1, 2010 (the "2010 MFI"), between us and Manufacturers and Traders Trust Company, as trustee, or any successor thereto as herein described.

The offered bonds are not our general obligations and are not a charge against our general credit. They are our special limited obligations, which means they are payable solely from the funds pledged or made available for such payment as described herein. The offered bonds are not a debt of the State of New York, the City or the Authority. We have no taxing power.

See **SECURITY AND SOURCES OF PAYMENT FOR THE OFFERED BONDS** in this official statement.

USE OF PROCEEDS

We will issue the offered bonds to refund bonds we previously issued to provide financial assistance to the Authority for financing water pollution control and drinking water projects. We expect to apply a portion of the proceeds of the offered bonds, together with other moneys, to redeem the bonds listed on Exhibit A hereto (the "EFC Refunded Bonds").

See **SOURCES AND USES OF FUNDS** in this official statement.

NEW YORK STATE ENVIRONMENTAL FACILITIES CORPORATION

We are governed by a board of directors, three of whom are required to be the following State officials: the Commissioner of the New York State Department of Environmental Conservation ("DEC") (who is also designated as the chair of the Corporation), the Commissioner of the New York State Department of Health ("DOH") and the Secretary of State. The four remaining directors are appointed by the Governor and confirmed by the State Senate.

Our main offices are located at 625 Broadway, Albany, New York 12207, and our telephone number is (518) 402-6924. Our website address is www.efc.ny.gov.

We are empowered by State law:

- to administer and finance the SRFs established by the State as set forth in the EFC Act pursuant to the federal Water Quality Act and the federal Safe Drinking Water Act, as well as to administer the State's Pipeline for Jobs Fund;

- to finance certain State Contributions to each of our SRFs, to the Pipeline for Jobs Fund and for certain environmental infrastructure projects;
- to finance, through the issuance of special obligation revenue bonds under our Industrial Finance Program, water management, solid waste disposal, sewage treatment and pollution control projects undertaken by or on behalf of private entities; and
- to render technical advice and assistance to private entities, state agencies and local government units on sewage treatment and collection, pollution control, recycling, hazardous waste abatement, solid waste disposal and other related subjects.

For additional information about us, see Exhibit 1A – **ADDITIONAL INFORMATION REGARDING THE CORPORATION** and Exhibit 1B – **EFC AUDITED ANNUAL FINANCIAL STATEMENT** in our Annual Information Statement.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The Department of Environmental Conservation was established under the Environmental Conservation Law of the State in 1970 as a State agency responsible for carrying out the environmental policy of the State, including conserving, improving and protecting the State's natural resources and environment and controlling water, land and air pollution. DEC has certain statutory responsibilities with respect to the clean water SRF program described herein. DEC has entered into a memorandum of understanding with us, which delineates the respective obligations of DEC and EFC concerning the operation of this program. See Part 1 to our Annual Information Statement under the heading **NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION** for more detail.

NEW YORK STATE DEPARTMENT OF HEALTH

The Department of Health was established under the Public Health Law of the State in 1909 as a State agency responsible for carrying out the public health policy of the State, including conserving, improving and protecting the State's drinking water. DOH has certain statutory responsibilities with respect to the drinking water SRF program described herein. DOH has entered into a memorandum of understanding with us, which delineates the respective obligations of DOH and EFC concerning the operation of this program. See Part 1 to our Annual Information Statement under the heading **NEW YORK STATE DEPARTMENT OF HEALTH** for more detail.

STATE REVOLVING FUNDS PROGRAMS

Establishment of SRFs

The federal Water Quality Act and the federal Safe Drinking Water Act each require that, as a condition for receipt of certain federal financial assistance, each state establish a clean water revolving fund and a drinking water revolving fund, respectively, administered by the state or an instrumentality of the state.

The purpose of our clean water SRF is to provide a financial resource for certain types of financial assistance to eligible recipients for the construction of publicly-owned wastewater treatment facilities, other eligible clean water projects, and certain facilities undertaken as part of an estuary conservation and management plan.

The purpose of our drinking water SRF is to provide a financial resource for certain types of financial assistance to various public drinking water systems (including systems owned by for-profit entities and not-for-profit entities) for expenditures for projects that will facilitate compliance with national and state drinking water regulations or otherwise advance the health protection objectives of the Safe Drinking Water Act.

The equity contributions to our SRFs are funded by federal capitalization grants and State matching funds. Financial assistance under either SRF program may be provided either from federal capitalization grants, State matching funds, recycled federal and State moneys, investment income or from proceeds of our bonds.

Since the inception of our SRF Financing Programs, we have been awarded \$4.3 billion in federal capitalization grants and State matching funds for the clean water SRF program and \$1.1 billion in federal capitalization grants and state matching funds for the drinking water SRF program. As of June 15, 2013, we have issued approximately \$15 billion in SRF bonds (including refunding bonds) under the clean water and drinking water SRF programs, of which approximately \$6 billion are currently outstanding. In addition to the offered bonds, we anticipate issuing \$500 million in bonds for the clean water SRF projects and \$150 million in bonds for drinking water SRF projects through September 30, 2014, excluding any bonds issued for refunding purposes.

Our SRF financing programs are called the state *revolving* fund programs because the payments from recipients and the releases from the required reserve funds, net of payments required for SRF bonds and other obligations, are re-used to provide financial assistance to recipients and to fund reserve deposits.

Sources of Funding SRFs

The SRFs are each funded through the following:

- federal capitalization grants awarded to the State and appropriated by the State to fund the applicable SRF;
- State matching funds appropriated by the State;
- SRF bond proceeds;
- recycled funds from de-allocated reserve accounts;
- interest earnings on SRF funds on deposit; and
- recycled recipient financing payments.

In order to receive federal capitalization grants, the State must appropriate its matching funds in a ratio of at least \$1 of State matching funds for every \$5 of federal capitalization grants.

SRF moneys relating to the clean water SRF and the drinking water SRF are applied and maintained separately. Separate accounts or subaccounts for each SRF are established and maintained in each of the funds and accounts created under the 2006 Indenture and the MTA, each of which is described in more detail in Parts 4 and 2 and Exhibits 4A and 2A, respectively, to our Annual Information Statement, and in Exhibit D attached hereto.

Uses of SRF Moneys

We use the terms "applicable SRF" to mean the clean water SRF or the drinking water SRF, as appropriate, and "applicable Commissioner" to mean the Commissioner of DEC or the Commissioner of DOH, as appropriate.

The EFC Act requires that we apply the moneys in the clean water SRF and the drinking water SRF at the direction of the applicable Commissioner to provide financial assistance to recipients for construction of eligible projects and certain other purposes permitted by the federal Water Quality Act and the federal Safe Drinking Water Act, respectively, including providing for the administrative and management costs of the applicable SRF. Under the EFC Act, upon consultation with the Director of the Budget of the State and the applicable Commissioner, we are also authorized to apply, and have applied, moneys in the clean water SRF and the drinking water SRF for other purposes permitted by the federal Water Quality Act and the federal Safe Drinking Water Act, respectively.

We are authorized to apply moneys in the applicable SRF for various types of financial assistance to eligible recipients in connection with eligible projects, including, but not limited to, the following: buying or refinancing certain debt obligations; making loans; guarantying or purchasing insurance for local obligations where such action would improve market access or reduce interest costs; and using funds in the SRF as a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by us if the proceeds thereof will be deposited in the SRF.

DEC and the U.S. Environmental Protection Agency ("EPA") have entered into an SRF Operating Agreement for the clean water SRF, which sets forth rules, procedures and activities governing EPA and the State in administering federal capitalization grants and the clean water SRF. DOH and EPA have similarly entered into an SRF Operating Agreement for the drinking water SRF which sets forth rules, procedures and activities governing EPA and the State in administering federal capitalization grants and the drinking water SRF.

SRF Financing Programs

We will issue revenue bonds under our NYCMWFA program and will continue to issue revenue bonds under our 2010 MFI program. The NYCMWFA program also authorizes us to enter into agreements with providers of credit and liquidity facilities that secure or support payment of NYCMWFA bonds issued under such program, which agreements may be secured on parity with such bonds. We are authorized to guarantee municipal obligations issued for the purpose of funding clean water or drinking water projects where such action would improve credit market access for or reduce interest rates on such obligations. We previously issued bonds under our 1991 MFI program to provide assistance to eligible recipients for clean water and drinking water purposes or to refund bonds previously issued for those purposes. We will no longer issue bonds under the 1991 MFI.

We refer to our NYCMWFA program, our 2010 MFI program and our 1991 MFI program as our "SRF financing programs" and to any bonds issued to fund any of our SRF financing programs as "SRF bonds".

We describe our 1991 MFI program, our NYCMWFA program and our 2010 MFI program in more detail in Parts 2, 3, 4 and 5 of our Annual Information Statement and summarize the provisions of our financing documents relating to our 1991 MFI program, our NYCMWFA program and our 2010 MFI program in Exhibits 2A, 3A, 4A, and 5A to our Annual Information Statement.

Legislative Appropriations

Before any federal capitalization grants or State matching funds deposited in the SRFs become available to fund recipient financings or to secure our bonds, such grants and funds must first be appropriated – *i.e.*, authorized to be spent – by the State Legislature. Although the Legislature has made, and we expect it to continue to make, the requisite appropriations each year, it is not bound by law to do so. Prior to issuing the offered bonds, we will, however, have available, from cash on hand or money already appropriated by the Legislature, the amount required to fund recipient financings that will not be funded from offered bond proceeds or to establish any required reserves related to the offered bonds.

Federal and State Legislation and Regulation

The administration of the SRFs and our financing programs may be impacted from time to time by the enactment of federal or state legislation and the adoption of regulations by the applicable federal and state regulatory agencies.

NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY (NYCMWFA) PROGRAM

We will issue the offered bonds under our NYCMWFA program and the 2006 Indenture. Our NYCMWFA program includes both clean water and drinking water components. We may issue both *senior* and *subordinated* bonds under our NYCMWFA Program. The offered bonds are *subordinated* NYCMWFA bonds. We refer to the provision of financial assistance to a qualified recipient, including the Authority, from the proceeds of our offered bonds, as a "leveraged financing."

Leveraged Financing Administration

To obtain a leveraged financing, we require the Authority, in conjunction with the City, to complete an application form, which includes general information, financial information, terms of the financial assistance requested, and, if applicable, demographic and system information. We review the application and related documents to determine whether a project proposed to be financed meets the eligibility criteria for the NYCMWFA program. NYCMWFA leveraged financings are further reviewed and approved by the State's Public Authorities Control Board.

NYCMWFA leveraged financing payments are scheduled to be paid by the Authority no later than the date payment is due on the related NYCMWFA bonds. The Authority has not missed a principal or interest payment, and we have never drawn on any reserve allocation to cover a default relating to any NYCMWFA leveraged financing.

The Authority, the Water Board and the System

The Authority, the New York City Water Board (the "Water Board"), and the City, acting by and through DEP, have certain responsibilities with respect to one or more of constructing, financing, operating and maintaining the System (defined below) and setting the rates and charges for the use of the System. The System is comprised of and includes all of the public facilities for the collection, transmission and distribution of water to the City (the "Water System") and all of the public facilities for collection, treatment and disposal of sewage generated within the City (the "Sewer System," and together with the Water System, the "System"). We have no responsibility for the maintenance and operation of the System or the setting or collection of rates and charges for the services of the System. See **Attachment 1** "*Certain Information Relating to the New York City Municipal Water Finance Authority and to the System*" hereto for more detail.

SECURITY AND SOURCES OF PAYMENT FOR THE OFFERED BONDS

The revenue bonds issued in our NYCMWFA program, which include the offered bonds, are our *special limited* obligations, which means they are payable *solely* from specific sources of money that we have pledged or made available under particular financing documents. **The offered bonds are not our general obligations and are not a charge against our general credit. The offered bonds are not a debt of the State, the City or the Authority and none of the State, the Authority or the City shall have any liability with respect to the offered bonds.**

NYCMWFA bonds may be issued on a *senior* or *subordinated* basis for the purpose of financing the Authority's clean water and drinking water projects. Senior NYCMWFA bonds and subordinated NYCMWFA bonds also may be issued to refund outstanding NYCMWFA bonds. The offered bonds will be issued on a *subordinated* basis and we refer to those bonds as "subordinated NYCMWFA bonds."

Security for Subordinated NYCMWFA Bonds, including the offered bonds

Payment on the offered bonds will be secured as follows:

- **Authority Payments.** Under our NYCMWFA program, the Authority's payments to us on NYCMWFA Second Resolution Bonds issued by the Authority in connection with our issuance of subordinated NYCMWFA bonds are pledged to the payment of the NYCMWFA bonds. Such pledged Authority payments are expected to be the primary source of payment for debt service on the NYCMWFA bonds. Each series of subordinated NYCMWFA bonds is secured separate and apart from any other series of subordinated NYCMWFA bonds by payments required to be made by the Authority on the related NYCMWFA Second Resolution Bonds. Each series of NYCMWFA Second Resolution Bonds issued in connection with the issuance of subordinated NYCMWFA bonds will be on a parity, as to security and source of payment, with all other NYCMWFA Second Resolution Bonds issued from time to time. Since a portion of certain leveraged financings will be funded with a combination of subordinated NYCMWFA bond proceeds and amounts available in the clean water SRF and drinking water SRF equity accounts, pledged Authority payments due in respect of such financings will, in the aggregate, be in excess of the debt service on such subordinated NYCMWFA bonds.
- **Series 2013 A Debt Service Reserve Fund.** The offered bonds are also secured by a Series 2013 A Debt Service Reserve Fund to be established under the 2006 Indenture in connection with the issuance of the offered bonds. Such fund does not directly secure any of our other bonds.
 - We will deposit bonds issued by the Tennessee Valley Authority in an aggregate principal amount of approximately \$104 million in such fund.
 - On any debt service payment date on which any payment of interest on the offered bonds is due, the Trustee will transfer from the Series 2013 A Debt Service Reserve Fund and deposit in the Debt Service Fund the moneys held in the Series 2013 A Debt Service Reserve Fund constituting all or a portion of the Committed Subsidy Amount then available to the Recipient, determined in accordance with our agreement with the Authority.
 - On any debt service payment date for the offered bonds, the Trustee shall transfer from the Series 2013 A Debt Service Reserve Fund and deposit in the Debt Service

Fund, any amounts due on the offered bonds on such Debt Service Payment Date not yet available in the Debt Service Fund for such payment. Any amount so transferred will be used solely to pay debt service on the offered bonds.

- The amount required to be held in the Series 2013 A Debt Service Reserve Fund will be reduced as the principal balance of the NYCMWFA Second Resolution Bonds issued in connection with the offered bonds is paid down. Series 2013 A Debt Service Reserve Fund balances will range from 27.367% of outstanding offered bonds in 2013 to 18.343% of outstanding offered bonds in 2032 one year prior to the final maturity of the offered bonds; no funds are expected to remain in this Series 2013 A Debt Service Reserve Fund after June 15, 2032.
- We will transfer moneys released from the Series 2013 A Debt Service Reserve Fund as a result of reductions in such principal balance to the General Reserve Fund next described. If the Series 2013 A Debt Service Reserve Fund is drawn upon to pay debt service on the offered bonds, there is no obligation to replenish the Series 2013 A Debt Service Reserve Fund in the amount so drawn except as it relates to the General Reserve Fund Requirement as described below. The 2006 Indenture authorizes us to establish a debt service reserve fund for other series of subordinated NYCMWFA bonds, but we are not required to do so.
- **General Reserve Fund.** Our subordinated NYCMWFA bonds are also secured by moneys, if any, available from time to time in a General Reserve Fund to be established in connection with the issuance of the offered bonds. We will use any available moneys in this fund to cure or prevent defaults *not only* on the offered bonds, but *also* on other subordinated NYCMWFA bonds.
 - We will deposit payments of principal and interest (the “Pledged DF Recipient Bond Payments”) we receive on NYCMWFA Second Resolution Bonds that we will acquire from the Authority with approximately \$213 million from a direct equity-funded financing made by us to the Authority in the General Reserve Fund. **To the extent that the Authority defaults on its payment obligation on the NYCMWFA Second Resolution Bonds acquired with the proceeds of our subordinated NYCMWFA bonds referred to above under “Authority Payments”, it will have similarly defaulted on the NYCMWFA Second Resolution Bonds which are the source of the Pledged DF Recipient Bond Payments.** Such a default will reduce and could end amounts available for the committed subsidy for the offered bonds as described below under “Committed Subsidies Relating to the offered bonds.” We may substitute payments on bonds issued by other recipients of SRF financial assistance as Pledged DF Recipient Bond Payments, but we are not required to do so.
 - We will also deposit in the General Reserve Fund any amounts released and transferred from the Series 2013 A Debt Service Reserve Fund as described above.
 - On any debt service payment date on which any payment of interest on NYCMWFA bonds is due, the Trustee will transfer from the General Reserve Fund and deposit in the Debt Service Fund the moneys held in the General Reserve Fund constituting all or a portion of the Committed Subsidy Amount then available to the Recipient, determined in accordance with our agreement with the Authority.

- On any debt service payment date for subordinated NYCMWFA bonds, the Trustee after application of any moneys in the Series 2013 A Debt Service Reserve Fund or any other debt service reserve fund established under the 2006 Indenture, the Trustee will transfer from any amounts held in the General Reserve Fund to the Debt Service Fund, any amounts due on such debt service payment date but not yet available in the Debt Service Fund for such payment. Amounts so transferred from the General Reserve Fund would be applied to pay all subordinated NYCMWFA bonds.
- After making any transfers described above, we will direct the Trustee to transfer amounts, if any, held within the General Reserve Fund in excess of the “General Reserve Fund Requirement” to the Trustee under the Master Trust Agreement for deposit in the De-Allocated Reserve Account in an amount equal to the amount released and transferred from the Series 2013 A Debt Service Reserve Fund to the General Reserve Fund as described above, with the balance, if any to be deposited in our Equity Fund. The General Reserve Fund Requirement on the date of issue of the offered bonds will be zero, so we do not expect to maintain a balance in the General Reserve Fund. The “General Reserve Fund Requirement”, as of any date of determination, will be the total of (a) the sum of all deficiencies in all debt service reserve funds established to secure those series of subordinated NYCMWFA bonds for which a debt service reserve fund has been established, and (b) the amount if any, required to be retained in the General Reserve Fund in order to satisfy a “General Reserve Fund Release Test” established under the 2006 Indenture. The “General Reserve Fund Release Test” is based upon a calculation by us demonstrating that the projected cash flow we expect to be available to pay the subordinated NYCMWFA bonds in each bond year from (i) pledged Recipient Bond payments, (ii) Pledged DF Recipient Bond Payments, (iii) payments of principal and interest we receive on any investments held in the Debt Service Fund, the Series 2013 A Debt Service Reserve Fund and the General Reserve Fund, (iv) any moneys held in the General Reserve Fund, the Series 2013 A Debt Service Reserve Fund and the Debt Service Fund and (v) moneys expected to be available, if needed, as “Available De-allocated Reserve Account Release Moneys” as described below will equal at least 120% of the amount necessary to pay all scheduled debt service on all subordinated NYCMWFA bonds in such bond year. We have no obligation to deposit moneys in the General Reserve Fund from any sources other than those described above.
- **Available De-allocated Reserve Account Release Moneys.** Our subordinated NYCMWFA bonds are also secured by moneys available from time to time in the De-allocated Reserve Account and the Deficiency Reserve Account, but only after that money has been used, to the extent necessary, to pay debt service on or replenish reserve requirements for senior NYCMWFA bonds, as well as senior and subordinated 1991 MFI bonds. See below in this official statement under **Available De-allocated Reserve Account Release Payments** for more information about the availability of money released from the De-allocated Reserve Account.
- **Prior Indenture Support Account Moneys.** Our subordinated NYCMWFA bonds are also secured by moneys, if any, available from time to time in the Prior Indenture Support Account created pursuant to our MTA, but only after such moneys have been used, to the extent necessary, to pay debt service on bonds issued under the 1991 MFI and senior NYCMWFA bonds and to replenish any reserve fund for such bonds. See Part 5 to our Annual Information Statement under the heading **SECURITY FOR PRIOR INDENTURE BONDS**, and Exhibit 5A – “**CERTAIN DEFINITIONS AND SUMMARY OF 2010 MFI**

(2010 MFI PROGRAM) -- SUMMARY OF THE 2010 MFI – Pledge of Funds Created under the 2010 MFI - *Application of Pledged Revenues*" and Exhibit 2A – "CERTAIN DEFINITIONS AND SUMMARY OF MASTER TRUST AGREEMENT - SUMMARY OF CERTAIN PROVISIONS OF THE MASTER TRUST AGREEMENT – Establishment of Funds and Accounts and Application Thereof – *Creation and Custody of Prior Indenture Support Account*" in our Annual Information Statement for more detail.

Committed Subsidies Relating to the offered bonds

We have agreed with the Authority that, subject to certain conditions, including compliance by the Authority with SRF program eligibility requirements relating to the financed projects, we will provide a "committed subsidy" which will reduce the interest that would otherwise be payable by the Authority with respect to the leveraged financing they receive. We expect that the moneys we use for such committed subsidy will be derived from earnings on investments in the Series 2013 A Debt Service Reserve Fund and from the Pledged DF Recipient Bond Payments. We reserve the right to identify other sources of committed subsidy in the future in lieu of such sources.

Amounts made available as committed subsidy will reduce the effective interest rate paid by the Authority. Under the terms of our financing agreement with the Authority, to the extent that such committed subsidy is not available to reduce the interest payable by the Authority on the leveraged financing, the Authority is obligated to make payments of principal and interest, together with any other moneys available under the financing indenture pursuant to which the offered bonds were issued, sufficient to pay principal and interest on the offered bonds. We would continue to be obligated to the Authority to make any committed subsidy available to the Authority to the extent required by our agreement with the Authority.

Reserve Allocations for 1991 MFI Bonds and Senior NYCMWFA Bonds

The amounts pledged under the MTA for each series of NYCMWFA bonds and 1991 MFI bonds include moneys available from time to time in the De-allocated Reserve Account and the Deficiency Reserve Account established for such series of SRF bonds.

The De-allocated Reserve Account and the Deficiency Reserve Account are funded solely from excess amounts released from the Debt Service Reserve Funds securing senior NYCMWFA bonds and 1991 MFI bonds. As principal on a recipient bond is repaid, we release an amount from the related Debt Service Reserve Fund so that the amount remaining in the related subaccount of the Debt Service Reserve Fund, together with the remaining amounts available to be drawn under the Capitalization Grant Agreement and from State matching funds and allocated as reserve allocation for that leveraged financing, *is equal to* the reserve allocation for the leveraged financing.

Currently, the scheduled final release of reserves under our 1991 MFI program and our NYCMWFA program is the final maturity date of the outstanding 1991 MFI bonds and senior NYCMWFA bonds – which is before the final maturity date of the offered bonds. We expect to issue additional subordinated NYCMWFA bonds to refund senior NYCMWFA bonds, which will result in the earlier release of reserves under our NYCMWFA program. We also expect to issue additional 2010 MFI bonds to refund 1991 MFI bonds, which will result in the earlier release of reserves under our 1991 MFI program.

A significant portion of our SRF reserve funds is invested in investment contracts with financial institutions. For a description of those investment contracts and other investments of SRF reserve funds, see Part 3 under the heading **Investment of Reserve Allocations**, Part 4 under the heading **Investment of Reserve Allocations**, and Exhibit 2B in our Annual Information Statement.

Available De-allocated Reserve Account Release Payments

De-allocated Reserve Account. We release those amounts not necessary to satisfy the Debt Service Reserve Fund Requirement for each series of 1991 MFI bonds and NYCMWFA bonds into the *De-allocated Reserve Account*.

After any release of amounts to the De-allocated Reserve Account, we apply that money:

- *first*, to make up any past due payments of principal or interest on any series of 1991 MFI bonds (including for this purpose subordinated 1991 MFI bonds) and senior NYCMWFA bonds;
- *second*, to the extent of any deficiency in any Debt Service Reserve Fund securing 1991 MFI bonds and NYCMWFA bonds, to the Deficiency Reserve Account created for SRF bonds in an amount equal to such deficiency, to be applied pro rata to 1991 MFI bonds (including for this purpose subordinated 1991 MFI bonds) and senior NYCMWFA bonds, prior to subordinated NYCMWFA bonds and obligations (collectively, "subordinated NYCMWFA obligations"), including the offered bonds;
- *third*, to make up any past due payments of principal or interest on any 2010 MFI bonds, to be applied first to pay any senior 2010 MFI obligations and then to pay any subordinated 2010 MFI obligations; and
- *fourth*, to make any past due payments of principal or interest on the commercial paper program that we may establish.

Any remaining amounts in the De-allocated Reserve Account are then released to the *Unallocated Corpus Subaccounts* of the equity accounts of the clean water SRF and drinking water SRF and no longer secure any NYCMWFA bonds or 1991 MFI bonds. No amounts representing proceeds of any NYCMWFA bonds or 1991 MFI bonds are deposited in the Deficiency Reserve Account or the De-allocated Reserve Account.

We describe the allocation of reserves and the release of such reserves in our 1991 MFI program and NYCMWFA program in more detail in Parts 3 and 4 of our Annual Information Statement and summarize the provisions of our financing documents relating to such reserves in Exhibits 3A and 4A to the Annual Information Statement and in Exhibit D attached hereto.

Deficiency Reserve Account. We will use money in this account to make payments to cure or prevent defaults, *first*, on bonds issued to fund our 1991 MFI program and NYCMWFA program – in an amount equal to the aggregate of *all* deficiencies in *all* reserves established for *all* those 1991 MFI bonds and senior NYCMWFA bonds, *then* to pay any debt service or reserve deficiencies on subordinated NYCMWFA obligations, including the offered bonds, *then* to pay any debt service on senior obligations issued or incurred under our 2010 MFI program, and *then* to pay debt service on subordinated obligations issued or incurred under our 2010 MFI program.

Aggregate Historical Cash Flow and Reserves. The tables below set forth, for the NYCMWFA program and the 1991 MFI program, respectively, the amount of debt service (principal and interest) on the outstanding bonds, the amount of interest subsidies paid from program equity and investment income from reserves, the net amount of recipient payments (principal and interest less subsidy), the amount of reserve funds freed up during each year, and the amount available in our debt service reserve funds. The tables below indicate historical performance and, with respect to the NYCMWFA program, includes debt

service on the EFC Refunded Bonds that are proposed to be refunded with the proceeds of the offered bonds. You should not use these tables to predict future results.

NYCMWFA Program

(Amounts in thousands)

NYCMWFA Debt Service							
Year Ending Sep. 30	Senior	Subordinated	Total	Interest Subsidies	Net Recipient Financing Payments	De-allocations to De-allocated Reserve Account	Balance in Reserves
2008	\$313,652	\$ 72,182	\$385,834	\$101,823	\$284,011	\$76,881	\$1,943,995
2009	322,741	87,283	410,024	106,546	303,478	81,113	1,875,891
2010	327,181	139,313	466,494	112,794	353,700	87,017	1,797,351
2011	326,365	162,840	489,205	115,086	374,119	90,930	1,616,259
2012	294,698	196,557	491,255	111,112	380,143	72,463	1,180,741

1991 MFI Program

(Amounts in thousands)

1991 MFI Debt Service							
Year Ending Sep. 30	Senior	Subordinated	Total	Interest Subsidies	Net Recipient Financing Payments	De-allocations to De-allocated Reserve Account	Balance in Reserves
2008	\$205,836	\$38,679	\$244,515	\$44,826	\$199,689	\$59,064	\$811,310
2009	203,142	36,368	239,510	42,048	197,462	59,511	753,415
2010	200,225	35,874	236,099	39,005	197,094	60,486	654,815
2011	149,612	31,884	181,496	31,362	150,134	45,010	440,103
2012	108,776	27,765	136,541	23,937	112,604	33,386	341,801

Projected Cash Flow and Reserves. The tables below set forth, for the NYCMWFA program (both senior and subordinate) and the 1991 MFI program, respectively, the aggregate amount of debt service (principal and interest) on the outstanding bonds, the aggregate net amount of recipient payments (principal and interest), investment income from reserves applied to subsidize recipient payments, the aggregate amount of committed subsidies, the aggregate amount of reserve funds freed up during each year, and the aggregate amount available in our debt service reserve funds. The tables project future performance based on scheduled debt service. We anticipate that, from time to time, we will issue 2010 MFI bonds to refund certain additional 1991 MFI bonds, which will accelerate the amount of 1991 MFI reserve funds that are freed up and become available to pay the 2010 MFI obligations and the time such amounts are available.

NYCMWFA Program (Senior)

(Amounts in thousands)

Bonds Outstanding, Scheduled Debt Service and Projected Reserve De-Allocations⁽¹⁾⁽²⁾

Year Ending Sep. 30	Senior Bonds			Net Senior Authority Payments	De-allocated Reserve Account Release Payments	Balance in Reserves ⁽³⁾
	Bonds Outstanding	Scheduled Debt Service	Interest Subsidies			
2013	\$ 1,840,960	\$ 241,022	\$ 53,583	\$ 187,439	\$ 60,895	\$ 862,381
2014	1,743,110	187,091	40,213	146,878	48,298	814,083
2015	1,646,490	181,244	37,846	143,398	42,689	771,394
2016	1,546,970	179,565	35,852	143,713	43,519	727,875
2017	1,444,170	177,910	33,824	144,086	44,134	683,742
2018	1,341,610	172,589	31,767	140,822	45,543	638,198
2019	1,237,920	168,677	29,751	138,926	46,016	592,182
2020	1,138,095	159,643	27,718	131,925	44,749	547,433
2021	1,043,200	149,755	25,724	124,031	43,473	503,960
2022	945,260	148,071	23,782	124,289	44,876	459,084
2023	844,215	146,332	21,778	124,554	46,294	412,790
2024	762,280	122,222	19,711	102,511	40,282	372,507
2025	680,730	117,845	17,861	99,984	40,533	331,974
2026	604,585	108,411	16,004	92,407	38,617	293,357
2027	527,010	106,103	14,217	91,886	39,494	253,862
2028	457,110	94,700	12,389	82,311	34,889	218,973
2029	391,685	87,018	10,732	76,286	31,316	187,657
2030	325,380	84,796	9,202	75,594	31,866	155,792
2031	259,770	80,983	7,644	73,339	31,901	123,891
2032	192,380	79,676	6,079	73,597	32,766	91,125
2033	123,155	78,340	4,470	73,870	33,657	57,467
2034	63,775	65,225	2,819	62,406	28,709	28,758
2035	31,250	35,510	1,406	34,104	15,251	13,507
2036	6,450	26,270	681	25,589	11,357	2,150
2037	-	6,773	138	6,635	2,150	-
Total	\$ 3,005,771	\$ 485,191	\$ 2,520,580	\$ 923,274		

(1) Column totals do not add due to rounding of yearly amounts.

(2) This table reflects the refunding of the EFC Refunded Bonds.

(3) Recipient reserves associated with NYCMWFA bonds secure only such bonds and are only available as security for the payment of other SRF bonds to the extent released to the De-allocated Reserve Account in accordance with the applicable indenture.

NYCMWFA Program (Subordinated)

(Amounts in thousands)

Bonds Outstanding, Scheduled Debt Service, Pledged Cash Flows and Projected Coverage ^{(1) (2)}

	A	B	C	D	E	F	G	H	I	J	K
	<u>Subordinated Bonds</u>										
Year Ending Sep. 30	Bonds Outstanding	Scheduled Debt Service	Subordinated Authority Payments	De-Allocated Reserve Account Release Payments ⁽³⁾	Series 2007 C Subordinated Reserve Fund Payments ⁽⁴⁾	General Reserve Fund Payments ⁽⁵⁾	Series 2013 A Debt Service Reserve Fund Payments ⁽⁶⁾	Prior Indenture Support Account Payments ⁽⁷⁾	Total Available Security for Bonds (C thru H)	Excess Coverage: I-B	Coverage %: I/B ⁽⁸⁾
2013	\$2,781,345	\$216,540	\$216,540	\$84,510	\$3,746	\$ -	\$ -	\$33,329	\$338,125	\$121,585	156
2014	2,661,810	251,256	251,256	70,860	4,323	13,260	8,006	36,052	383,757	132,501	153
2015	2,540,795	250,072	250,072	63,335	6,667	13,501	8,250	36,424	378,249	128,177	151
2016	2,415,045	249,506	249,506	59,829	6,750	13,512	8,219	38,888	376,704	127,198	151
2017	2,284,375	248,883	248,883	57,941	6,831	13,507	8,140	38,280	373,582	124,699	150
2018	2,148,800	247,544	247,544	59,628	6,859	13,492	8,102	34,987	370,612	123,068	150
2019	2,012,690	241,560	241,560	60,282	6,884	13,458	8,060	32,670	362,914	121,354	150
2020	1,871,045	240,509	240,509	59,258	6,912	13,419	8,024	30,158	358,280	117,771	149
2021	1,747,505	215,624	215,624	58,022	4,362	13,371	7,990	26,781	326,150	110,526	151
2022	1,625,355	208,318	208,318	58,868	1,502	13,306	7,951	24,205	314,150	105,832	151
2023	1,499,170	206,474	206,474	59,943	1,505	13,234	7,834	21,956	310,946	104,472	151
2024	1,369,250	204,007	204,007	50,957	1,506	12,730	7,485	20,879	297,564	93,557	146
2025	1,237,275	199,651	199,651	49,956	-	12,645	7,446	18,990	288,688	89,037	145
2026	1,099,790	198,754	198,754	47,347	-	12,549	7,406	15,059	281,115	82,361	141
2027	972,960	181,578	181,578	47,853	-	12,359	7,249	14,362	263,401	81,823	145
2028	853,270	168,271	168,271	42,478	-	12,250	7,212	14,190	244,401	76,130	145
2029	733,765	162,308	162,308	38,686	-	12,137	7,163	14,101	234,395	72,087	144
2030	620,295	150,346	150,346	39,023	-	12,016	7,115	13,414	221,914	71,568	148
2031	510,170	141,296	141,296	39,146	-	11,887	7,065	12,593	211,987	70,691	150
2032	425,430	110,442	110,442	40,031	-	11,757	7,012	10,083	179,325	68,883	162
2033	350,385	96,521	96,521	40,975	-	11,620	-	8,765	157,881	61,360	164
2034	285,630	82,569	82,569	33,557	-	11,478	-	8,506	136,110	53,541	165
2035	218,105	82,137	82,137	17,326	-	11,328	-	8,074	118,865	36,728	145
2036	146,500	82,853	82,853	12,947	-	11,178	-	8,212	115,190	32,337	139
2037	95,135	59,040	59,040	11,724	-	11,016	-	8,351	90,131	31,091	153
2038	49,825	50,298	50,298	-	-	10,857	-	8,348	69,503	19,205	138
2039	25,165	27,256	27,256	-	-	10,686	-	6,912	44,854	17,598	165
2040	12,905	13,518	13,518	-	-	10,510	-	6,460	30,488	16,970	226
2041	-	13,550	13,550	-	-	10,331	-	4,370	28,251	14,701	208
2042	-	-	-	-	-	10,151	-	5,093	15,244	15,244	-
2043	-	-	-	-	-	9,959	-	1,190	11,149	11,149	-
Total		<u>\$4,600,681</u>	<u>\$4,600,681</u>	<u>\$1,204,482</u>	<u>\$57,847</u>	<u>\$363,504</u>	<u>\$145,729</u>	<u>\$561,682</u>	<u>\$6,933,925</u>	<u>\$2,333,244</u>	

(1) Column totals do not add due to rounding of yearly amounts.

(2) This table reflects the issuance of the offered bonds.

(3) The De-allocated Reserve Account and Deficiency Reserve Account are available to secure subordinated NYCMWFA bonds only after being used to pay debt service on or to replenish reserve requirements for 1991 MFI bonds and senior NYCMWFA bonds.

(4) This reserve is for bonds expected to become senior bonds on June 15, 2014 when this reserve equals at least one-third of the recipient principal balance.

(5) The General Reserve will be established with the issuance of the offered bonds and funded with a direct financing made by the Corporation to the Authority.

(6) The Series 2013 A Debt Service Reserve Fund will be established with the issuance of the offered bonds and funded with an existing investment of Tennessee Valley Authority bonds.

(7) The Prior Indenture Support Account is available to secure subordinated NYCMWFA bonds only after being used to pay debt service on or replenish reserve requirements for 1991 MFI bonds and senior NYCMWFA bonds.

(8) Projected coverage will vary as additional NYCMWFA subordinated bonds are issued and as available security changes.

1991 MFI Program
(Amounts in thousands)

Scheduled Debt Service and Projected Reserve De-Allocations ⁽¹⁾

Year Ending Sep. 30	1991 MFI Debt Service				Net Recipient Financing Payments	De-allocations to De-allocated Reserve Account	Balance in Reserves ⁽²⁾⁽³⁾
	Senior	Subordinated	Total	Interest Subsidies			
2013	\$79,680	\$21,866	\$101,546	\$19,467	\$82,079	\$23,615	\$ 257,593
2014	72,277	21,627	93,904	16,737	77,167	22,562	235,031
2015	66,638	21,291	87,929	15,548	72,381	20,646	214,385
2016	54,750	20,739	75,489	13,506	61,983	16,310	198,075
2017	48,271	20,490	68,761	11,731	57,030	13,807	184,267
2018	47,620	19,895	67,515	10,917	56,598	14,085	170,182
2019	46,942	19,658	66,600	10,094	56,506	14,267	155,915
2020	46,645	19,370	66,015	9,255	56,760	14,509	141,406
2021	45,345	19,086	64,431	8,401	56,030	14,548	126,858
2022	42,779	18,767	61,546	7,550	53,996	13,993	112,865
2023	43,165	18,063	61,228	6,706	54,522	13,649	99,216
2024	33,223	17,700	50,923	5,891	45,032	10,674	88,542
2025	28,593	16,970	45,563	5,188	40,375	9,423	79,120
2026	25,632	20,043	45,675	4,553	41,122	8,730	70,390
2027	23,969	12,551	36,520	3,947	32,573	8,359	62,030
2028	21,638	12,109	33,747	3,425	30,322	7,589	54,441
2029	20,199	10,680	30,879	2,934	27,945	7,370	47,071
2030	19,074	8,370	27,444	2,471	24,973	7,158	39,914
2031	18,559	8,181	26,740	2,027	24,713	7,245	32,669
2032	17,898	7,975	25,873	1,577	24,296	7,265	25,404
2033	17,772	7,813	25,585	1,123	24,462	7,318	18,086
2034	12,886	7,483	20,369	686	19,683	4,848	13,239
2035	5,681	7,179	12,860	371	12,489	2,075	11,164
2036	4,544	5,101	9,645	173	9,472	1,590	9,574
2037	1,842	-	1,842	20	1,822	9,574	-
Total	\$ 845,622	\$ 363,007	\$ 1,208,629	\$ 164,298	\$ 1,044,331	\$ 281,209	

(1) Column totals do not add due to rounding of yearly amounts.

(2) Recipient Reserves associated with 1991 MFI bonds secure only such bonds and are only available as security for the payment of other SRF bonds to the extent released to the De-allocated Reserve Account in accordance with the 1991 MFI.

(3) Balance includes \$8,673,676 deposited to the General Reserve.

Remedies

In the event of a default, except as otherwise provided in the financing indenture, neither the Trustee nor the owners of the offered bonds will have the right to declare the offered bonds immediately due and payable.

Additional NYCMWFA Obligations

We are permitted to issue additional senior NYCMWFA bonds on a parity with other senior NYCMWFA bonds and senior to the offered bonds; provided that we make a reserve allocation of at least 33 1/3% of the principal amount of the leveraged financings provided by such series of additional senior NYCMWFA bonds and the Authority delivers its related Second Resolution Bonds to us. We are permitted to issue additional subordinated NYCMWFA bonds on a parity with the offered bonds.

Additional Information

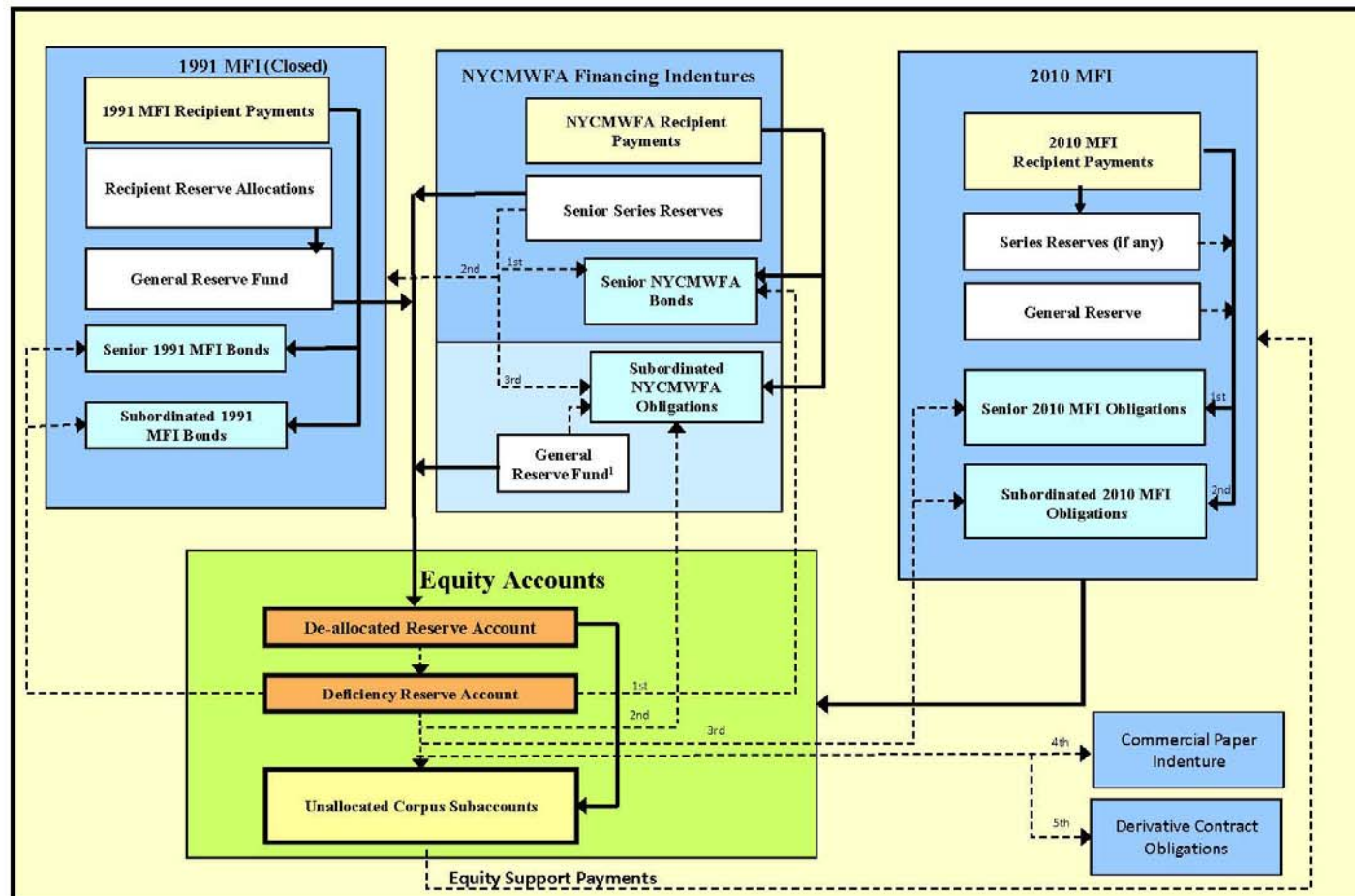
For additional information relating to matters such as the security for SRF bonds, including our NYCMWFA bonds, leveraged financing repayments, issuance of additional NYCMWFA bonds and separation of clean water SRF and drinking water SRF moneys, see Exhibit 4A and Exhibit 2A to our Annual Information Statement.

The chart on the following page provides an overview of our SRF financing programs and is qualified by reference to the detailed summaries in our Annual Information Statement.

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New York State Environmental Facilities Corporation

SRF Bond Financing Programs*



1. Pursuant to the NYCMWFA Subordinate Indenture, assets held in the individual DSRFs are pledged to specific series of bonds until released.

* Simplified for graphic presentation purposes

— Planned Flows

- - - - - Contingent Cash Flows

SOURCES AND USES OF FUNDS

We anticipate that the proceeds of the offered bonds (including net original issue premium/discount) will be used as follows:

Sources

Par Amount of the offered bonds	\$401,090,000.00
Net Original Issue Premium	38,687,645.35
SRF Direct financing proceeds	4,473,333.00
Released Reserves	<u>208,797,500.01</u>
Total Sources	<u>\$653,048,478.36</u>

Uses

Deposit to Escrow Account	\$438,543,280.10
Underwriters' Discount	1,898,810.64
Costs of Issuance*	467,796.61
State Bond Issuance Charge	3,341,091.00
Deposit to Series 2013 A Debt Service Reserve Fund	104,107,500.01
Recipient Direct Financing Costs	<u>104,690,000.00</u>
Total Uses	<u>\$653,048,478.36</u>

* Includes Additional Proceeds of \$3,546.61

We expect to apply a portion of the proceeds of the offered bonds, together with other moneys, to redeem the EFC Refunded Bonds. There is no assurance that all the EFC Refunded Bonds, which were issued under the NYCMWFA program, will be refunded. Under an escrow agreement between us and the Trustee, as Escrow Agent, we will irrevocably deposit investment obligations under the indenture pursuant to which the EFC Refunded Bonds were issued. We will direct the Trustee to redeem or pay the EFC Refunded Bonds upon the issuance of the offered bonds. AMTEC Corporation of Avon, Connecticut and Ross & Company, PLLC (an independent Certified Public Accountant), the Verification Agent, will verify the arithmetical accuracy of the mathematical computations of the adequacy of the investment securities and available money deposited in escrow to pay the maturing amounts or redemption prices of the EFC Refunded Bonds, together with interest on those bonds. A description of the EFC Refunded Bonds can be found in **Exhibit A** to this official statement. In connection with the refunding, Tennessee Valley Authority bonds currently held in the debt service reserve fund for the EFC Refunded Bonds will be transferred to the Series 2013 A Debt Service Reserve Fund for the offered bonds. See Exhibit 2B to our Annual Information Statement.

DESCRIPTION OF THE OFFERED BONDS

General

The offered bonds are being issued pursuant to the EFC Act, the 2006 Indenture and a Supplemental Indenture dated as of July 1, 2013 between us and the 2006 Indenture Trustee.

Rates, Maturities, and Denominations. The offered bonds will bear interest at the rates and mature in the amounts and on the dates shown on the inside cover of this official statement. All offered bonds are fully registered in denominations of \$5,000 each or whole multiples of \$5,000.

Book-Entry Only. The DTC Book-Entry Only System will apply to all offered bonds. Bond payments will go to DTC, and DTC will then be responsible to remit the payments to its participants for payment to bondowners. For more detailed information regarding DTC and the Book-Entry Only System see Exhibit 1C – **BOOK-ENTRY ONLY SYSTEM** to the Annual Information Statement.

Interest Payment Dates. Each offered bond will be dated the date of delivery, and will bear interest from that date payable as shown on the inside cover of this official statement. While the Book-Entry Only System applies to the offered bonds, Cede & Co. (DTC's nominee) will be the sole registered owner of all of the offered bonds, all interest payments will go to DTC by wire transfer of immediately available funds and DTC's Participants will be responsible for payment of interest to bondowners.

Transfers and Exchanges. While DTC is the securities depository for the offered bonds, transfers of ownership interests in the offered bonds will occur through the Book-Entry Only System. If the offered bonds are not held by a securities depository, registered bondowners may surrender and transfer their bonds in person or by a duly authorized attorney, at the principal corporate trust office of the Trustee. In this instance, registered bondowners must complete an approved transfer form and pay any taxes or governmental charges which apply to the transfer.

Redemption Prior to Maturity

Optional Redemption

The offered bonds maturing after June 15, 2023 are subject to redemption prior to maturity at our option in whole or in part at any time on or after June 15, 2023 at par.

Redemption Notices. So long as the offered bonds remain under the Book-Entry Only System the Trustee must mail redemption notices to DTC during a 30-to-60-day period before the redemption date. At our election, the redemption notice may state that such redemption will be conditioned upon the availability of funds sufficient to pay the redemption price of the affected offered bonds, and such notice will be of no further force and effect unless sufficient funds for that purpose are available. A redemption of the offered bonds is valid and effective even if DTC's procedures for notice fail to give you notice directly. You should consider arranging to receive redemption notices or other communications to DTC affecting you, including notice of interest payments through DTC participants. **Please note that all redemptions are final - even if you did not receive your notice, and even if your notice had a defect.**

Redemption Process. If the Trustee gives a redemption notice and holds money to pay the redemption price of the affected offered bonds, then on the redemption date the bonds called for redemption will become due and payable and you must cash them in with the Trustee. Thereafter, no interest will accrue on those bonds, and your only right as a bondowner will be to receive payment of the redemption price upon surrender of the offered bonds.

TAX MATTERS

Federal Tax Status

In the opinion of Co-Bond Counsel, under existing statutes and court decisions and relying on certain representations and assuming compliance with certain covenants, interest on the offered bonds is

- excluded from a bondholder's federal gross income under the Internal Revenue Code,
- not a preference item for a bondholder under the federal alternative minimum tax, and

- included in the adjusted current earnings of certain corporations under the federal corporate alternative minimum tax.

The Internal Revenue Code imposes requirements on the offered bonds that must continue to be met after the offered bonds are issued. These requirements generally involve restrictions on the way that proceeds of the offered bonds must be used and invested. If these requirements are not met, it is possible that a bondholder may have to include interest on the offered bonds in its federal gross income on a retroactive basis to the date of issue. We, the Authority and the Water Board have covenanted to take actions necessary to meet the requirements of the Internal Revenue Code.

A bondholder who is a particular kind of taxpayer may also have additional tax consequences from owning the offered bonds. This is possible if a bondholder is in any of the following categories, in which case the bondholder should consult its tax advisor:

- an S corporation,
- a United States branch of a foreign corporation,
- a financial institution,
- a property and casualty or a life insurance company,
- an individual receiving Social Security or railroad retirement benefits,
- an individual claiming the earned income credit or a borrower of money to purchase or carry the offered bonds.

Original Issue Discount

Each maturity of the offered bonds will have "original issue discount" if the price paid by a bondholder is less than the principal amount of those bonds. Each Co-Bond Counsel's opinion is that the original issue discount on the offered bonds as it accrues is not included in a bondholder's federal gross income under the Internal Revenue Code. The tax accounting treatment of original issue discount is complex. It accrues on an actuarial basis and as it accrues a bondholder's tax basis in those bonds will be increased. Each Co-Bond Counsel's opinion is also that the original issue discount on these offered bonds as it accrues is exempt from personal income taxes imposed by New York State and its political subdivisions. If a bondholder owns one of those bonds, it should consult its tax advisor regarding the tax treatment of original issue discount.

Bond Premium

If a bondholder purchases a bond being offered for a price that is more than the principal amount, generally the excess is "bond premium" on that bond. The tax accounting treatment of bond premium is complex. It is amortized over time and as it is amortized a bondholder's tax basis in that bond will be reduced. A bondholder in certain circumstances may realize a taxable gain upon the sale of an offered bond with bond premium, even though that bond is sold for an amount less than or equal to the bondholder's original cost. If a bondholder owns any offered bond with bond premium, it should consult its tax advisor regarding the tax accounting treatment of bond premium.

State Tax Status

In each Co-Bond Counsel's opinion, under existing statutes interest on the offered bonds is exempt from personal income taxes imposed by the State of New York and its political subdivisions, including The City of New York.

Backup Withholding

Under the Internal Revenue Code, interest on the offered bonds is subject to "backup withholding" if the recipient of the interest does not complete a Form W-9, Request for Taxpayer Identification Number and Certification, or otherwise provide to the payor a taxpayer identification number. "Backup withholding" means that the payor is required to deduct and withhold a tax from the interest payment, calculated in the manner set forth in the Code. For the foregoing purpose, a "payor" generally refers to the person or entity from whom a recipient of interest receives its payments of interest or who collects such payments on behalf of such recipient. In general, it is expected that bondowners purchasing the offered bonds through a brokerage account will have executed a W-9 in connection with the establishment of such account so that no backup withholding will occur. The backup withholding requirement does not affect the excludability of the interest on the offered bonds from gross income for federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the bondowner's federal income tax once the required information is furnished to the Internal Revenue Service.

Opinion of Co-Bond Counsel

See *Exhibit B* to this official statement for the form of opinion that each Co-Bond Counsel expects to deliver when the offered bonds are delivered. Each Co-Bond Counsel is not responsible for updating its opinion in the future.

Miscellaneous

Tax legislation, administrative actions taken by tax authorities, or court decisions, whether at the Federal or state level, may adversely affect the tax-exempt status of interest on the offered bonds under Federal or state law or otherwise prevent beneficial owners of the offered bonds from realizing the full current benefit of the tax status of such interest. In addition, such legislation or actions (whether currently proposed, proposed in the future, or enacted) and such decisions could affect the market price or marketability of the offered bonds. For example, the Fiscal Year 2014 Budget proposed on April 10, 2013, by the Obama Administration recommends a 28% limitation on itemized deductions and "tax preferences," including "tax-exempt interest." The net effect of such proposal, if enacted into law, would be that an owner of an offered bond with a marginal tax rate in excess of 28% would pay some amount of federal income tax with respect to the interest on such offered bond.

Prospective purchasers of the offered bonds should consult their own tax advisors regarding the foregoing matters.

LEGALITY FOR INVESTMENT

The EFC Act provides that the offered bonds are securities in which the following investors may properly and legally invest funds, including capital in their control or belonging to them:

- all public officers and bodies of the State and all municipalities and political subdivisions in the State,

- all insurance companies and associations and other persons carrying on an insurance business, all banks, bankers, trust companies, savings banks and savings associations, including savings and loan associations, building and loan associations, investment companies and other persons carrying on a banking business,
- all administrators, guardians, executors, trustees and other fiduciaries, and
- all other persons whatsoever who are now or who may hereafter be authorized to invest in bonds or other obligations of the State.

Certain of those investors, however, may be subject to separate restrictions which limit or prevent their investment in the offered bonds.

RATINGS

Standard & Poor's Rating Service, Moody's Investors Service Inc. and Fitch Ratings have assigned their ratings, specified on the cover, to the offered bonds. Those ratings reflect only the views of the organizations assigning them. You may obtain an explanation of the significance of the ratings from each agency, identified as follows:

Standard & Poor's Rating Service	Moody's Investors Service	Fitch Ratings
55 Water Street	7 World Trade Center	One State Street Plaza
New York, New York 10041	250 Greenwich Street	New York, New York
(212) 438-2400	New York, New York 10007	10004
www.standardandpoors.com	(212) 553-0377	(212) 908-0500
	www.moodys.com	www.fitchratings.com

We have furnished to each rating agency information about ourselves, our recipients, and the offered bonds. Generally, each rating agency bases its ratings on that information and on independent investigations, studies, and assumptions made by that rating agency. You have no assurance that ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by a rating agency if, in the judgment of that rating agency, circumstances warrant the revision or withdrawal. Those circumstances may include, among other things, changes in or unavailability of information relating to us or the offered bonds. Any downward revision or withdrawal of a rating may have an adverse effect on the market price of the offered bonds.

LITIGATION

There is no pending litigation challenging the validity or enforceability of the offered bonds or seeking to restrain or enjoin the issuance, sale or delivery of the offered bonds, and there is no pending litigation challenging any financing made from the proceeds of any previously issued SRF bonds. In addition, each recipient described has represented to us that, to its knowledge, there is no pending or threatened litigation contesting the enforceability of that recipient's obligation to us.

FINANCIAL ADVISOR

In their role as our financial advisor, Public Financial Management, Inc. and TKG & Associates LLC have provided advice on the plan of financing and structure of the offered bonds, reviewed certain legal and disclosure documents – including this official statement for financial matters relating to the offered bonds – and reviewed the pricing of the offered bonds. Neither Public Financial Management,

Inc. nor TKG & Associates LLC has independently verified the factual information contained in this official statement, but each has relied on the information supplied by us and other sources.

UNDERWRITING

The Underwriters have jointly and severally agreed, subject to certain conditions, to purchase from us the offered bonds at an aggregate underwriters' discount from the initial public offering prices corresponding to the yields set forth on the inside cover page equal to the amount shown above as a line item in the table under **SOURCES AND USES OF FUNDS** in this official statement, and to reoffer the offered bonds at the public offering prices corresponding to the yields set forth on the inside cover page. The offered bonds may be offered and sold to certain dealers (including dealers depositing the offered bonds into investment trusts) at prices lower than those public offering prices, and those prices may be changed, from time to time, by the Underwriters. The Underwriters' obligations are subject to certain conditions precedent, and they will be obligated to purchase *all* the offered bonds if *any* offered bonds are purchased. Citigroup Global Markets, Inc. is the representative designated by the Underwriters.

In addition, certain of the Underwriters may have entered into distribution agreements with other broker-dealers (that have not been designated by EFC as Underwriters) for the distribution of the offered bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers.

The Underwriters have requested the addition of the following: The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the EFC, for which they received or will receive customary fees and expenses. In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the EFC. Certain of the Underwriters, or affiliates thereof, may hold EFC Refunded Bonds being refunded and, as a result, will receive a portion of the proceeds from this offering in connection with the redemption of such EFC Refunded Bonds.

LEGAL MATTERS

All legal proceedings in connection with the issuance of the offered bonds are subject to the approval of Hawkins Delafield & Wood LLP and Gonzalez Saggio & Harlan LLP, Co-Bond Counsel. Each Co-Bond Counsel has advised us that it assumes no responsibility for the accuracy, completeness or fairness of this official statement. The proposed form of the opinion of each co-Bond Counsel is set forth in **Exhibit B** to this official statement.

Certain legal matters will be passed upon for us by James R. Levine, Esq., Senior Vice President and General Counsel. Certain legal matters will be passed upon for the Underwriters by Winston & Strawn LLP and Law Offices of Joseph C. Reid, P.A., Co-Counsel to the Underwriters.

Co-Bond Counsel and Co-Counsel to the Underwriters from time to time may serve as bond counsel to certain of the recipients of financial assistance from our SRF programs.

CONTINUING DISCLOSURE

The offered bonds will be subject to the continuing secondary market disclosure requirements of Rule 15c2-12 of the Securities and Exchange Commission (the "Rule"). For a copy of the form of our Continuing Disclosure Agreement, with respect to the offered bonds, please see *Exhibit C*. The Continuing Disclosure Agreement, however, may be amended or modified without the consent of the owners of the offered bonds under certain circumstances. Pursuant to the Continuing Disclosure Agreement, we have agreed to provide certain financial information and operating data by no later than nine months following the end of the our fiscal year (March 31) commencing with our 2012/2013 fiscal year and certain notices. That annual information is to include, among other things, portions of the information contained herein and information of the type included in Exhibit 2B to our Annual Information Statement. Our annual audited financial statements prepared in accordance with generally accepted accounting principles will be delivered, or if unavailable, unaudited financial statements will be delivered until audited statements become available. We have undertaken to file that information with EMMA. We have not in the previous five years failed to comply, in all material respects, with any previous undertakings pursuant to the Rule.

NEW YORK STATE ENVIRONMENTAL
FACILITIES CORPORATION

By: /s/ Matthew J. Driscoll
President and Chief Executive Officer

EXHIBIT A

BONDS TO BE REFUNDED

WITH PROCEEDS OF THE OFFERED BONDS

<u>Bonds</u>	<u>Maturity</u>	<u>Principal Amount</u>	<u>Coupon</u>	<u>Redemption Price</u>	<u>Redemption Date</u>	<u>CUSIP</u>
2003E	6/15/2014	\$ 440,000	3.750%	100%	8/12/2013	64985WK86
2003E	6/15/2014	8,625,000	5.000%	100%	8/12/2013	64985WK94
2003E	6/15/2015	350,000	3.875%	100%	8/12/2013	64985WL28
2003E	6/15/2015	8,975,000	5.000%	100%	8/12/2013	64985WL36
2003E	6/15/2016	9,615,000	4.000%	100%	8/12/2013	64985WL44
2003E	6/15/2017	1,475,000	4.100%	100%	8/12/2013	64985WL51
2003E	6/15/2017	8,340,000	5.000%	100%	8/12/2013	64985WL69
2003E	6/15/2018	720,000	4.200%	100%	8/12/2013	64985WL77
2003E	6/15/2018	9,390,000	5.000%	100%	8/12/2013	64985WL85
2003E	6/15/2019	370,000	4.300%	100%	8/12/2013	64985WL93
2003E	6/15/2019	10,035,000	5.000%	100%	8/12/2013	64985WM27
2003E	6/15/2020	10,725,000	5.000%	100%	8/12/2013	64985WM35
2003E	6/15/2021	725,000	4.500%	100%	8/12/2013	64985WM43
2003E	6/15/2021	10,335,000	5.000%	100%	8/12/2013	64985WM50
2003E	6/15/2022	1,660,000	4.500%	100%	8/12/2013	64985WM68
2003E	6/15/2022	9,740,000	5.000%	100%	8/12/2013	64985WM76
2003E	6/15/2023	3,000,000	4.625%	100%	8/12/2013	64985WM84
2003E	6/15/2023	8,520,000	5.000%	100%	8/12/2013	64985WM92
2003E	6/15/2025	22,245,000	5.000%	100%	8/12/2013	64985WN26
2003E	6/15/2028	35,310,000	5.000%	100%	8/12/2013	64985WN34
2003E	6/15/2032	8,130,000	4.750%	100%	8/12/2013	64985WN42
2003E	6/15/2032	43,630,000	5.000%	100%	8/12/2013	64985WN59
2003I	6/15/2014	1,355,000	3.750%	100%	8/12/2013	64985W4L5
2003I	6/15/2014	7,755,000	5.000%	100%	8/12/2013	64985W4M3
2003I	6/15/2015	1,495,000	3.800%	100%	8/12/2013	64985W4N1
2003I	6/15/2015	7,860,000	5.000%	100%	8/12/2013	64985W4P6
2003I	6/15/2016	1,045,000	3.900%	100%	8/12/2013	64985W4Q4
2003I	6/15/2016	8,575,000	5.000%	100%	8/12/2013	64985W4R2
2003I	6/15/2017	4,410,000	4.000%	100%	8/12/2013	64985W4S0
2003I	6/15/2017	5,485,000	5.000%	100%	8/12/2013	64985W4T8
2003I	6/15/2018	2,155,000	4.125%	100%	8/12/2013	64985W4U5
2003I	6/15/2018	7,990,000	5.000%	100%	8/12/2013	64985W4V3
2003I	6/15/2019	10,410,000	5.000%	100%	8/12/2013	64985W4W1
2003I	6/15/2020	10,725,000	5.000%	100%	8/12/2013	64985W4X9
2003I	6/15/2021	11,050,000	5.000%	100%	8/12/2013	64985W4Y7
2003I	6/15/2022	2,550,000	4.500%	100%	8/12/2013	64985W4Z4
2003I	6/15/2022	8,820,000	5.000%	100%	8/12/2013	64985W5A8
2003I	6/15/2023	2,930,000	4.600%	100%	8/12/2013	64985W5B6
2003I	6/15/2023	8,765,000	5.000%	100%	8/12/2013	64985W5C4
2003I	6/15/2024	10,750,000	5.000%	100%	8/12/2013	64985W5D2
2003I	6/15/2025	11,050,000	5.000%	100%	8/12/2013	64985W5E0
2003I	6/15/2026	11,370,000	5.000%	100%	8/12/2013	64985W5F7
2003I	6/15/2027	5,060,000	5.000%	100%	8/12/2013	64985W5G5
2003I	6/15/2028	17,475,000	4.750%	100%	8/12/2013	64985W5H3
2003I	6/15/2030	7,910,000	4.875%	100%	8/12/2013	64985W5J9
2003I	6/15/2033	55,810,000	5.000%	100%	8/12/2013	64985W5K6

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EXHIBIT B
FORM OF BOND COUNSEL OPINION

July __, 2013

New York State Environmental
Facilities Corporation
625 Broadway
Albany, New York 12207-2997

Ladies and Gentlemen:

In our capacity as Bond Counsel to New York State Environmental Facilities Corporation (the "Corporation"), we have examined a record of proceedings relating to the sale and issuance of \$401,090,000.00 aggregate principal amount of State Clean Water and Drinking Water Revolving Funds Revenue Bonds (New York City Municipal Water Finance Authority Projects - Second Resolution Bonds) Series 2013 A Subordinated SRF Bonds (the "Series 2013 A Bonds") of the Corporation.

The Series 2013 A Bonds are issued under and pursuant to the Constitution and laws of the State of New York, particularly the New York State Environmental Facilities Corporation Act, as amended, being Chapter 744 of the Laws of 1970, as amended, and constituting Title 12 of Article 5 of the Public Authorities Law and Chapter 43 A of the Consolidated Laws of the State of New York (the "Act") and under and in accordance with a Financing Indenture of Trust dated as of June 1, 2006, as heretofore supplemented and as supplemented and amended by the Eighth Supplemental Series Indenture of Trust, dated as of July 1, 2013 (collectively referred to herein as the "Financing Indenture"), between the Corporation and Manufacturers and Traders Trust Company, as trustee (the "Trustee"). The Series 2013 A Bonds are also secured by an Amended and Restated Master Trust Agreement (the "Master Trust Agreement"), dated as of July 1, 2005, as heretofore amended and supplemented, between the Corporation and Manufacturers and Traders Trust Company, as trustee (the "Master Trustee") and as custodian thereunder.

The Series 2013 A Bonds are dated the date hereof (except as otherwise provided in the Financing Indenture with respect to the Series 2013 A Bonds issued in exchange for other Series 2013 A Bonds). The Series 2013 A Bonds bear interest payable on June 15 and December 15 in each year, commencing December 15, 2013. The Series 2013 A Bonds will mature on the dates and in the principal amounts, and will bear interest at the respective rates per annum, set forth in the Financing Indenture.

The Series 2013 A Bonds are issuable in fully registered form without coupons in denominations of \$5,000 or any integral multiple thereof and are subject to optional redemption prior to maturity in the manner, to the extent and upon the terms and conditions set forth in the Series 2013 A Bonds and the Financing Indenture. The Financing Indenture provides that the principal of and premium, if any, on each Series 2013 A Bond shall be payable to the Registered Owner (as defined in the Financing Indenture) of such Series 2013 A Bond upon presentation and surrender thereof when due at the corporate

trust office of the Trustee. The interest on each Series 2013 A Bond is payable to the Registered Owner thereof as of the close of business on the Record Date (as defined in the Financing Indenture) for each interest payment date as the same becomes due by check, mailed to such Registered Owner thereof at the address appearing on the Bond Register (as defined in the Financing Indenture) as of the close of business on such Record Date or, under certain circumstances, by wire transfer as described in the Financing Indenture.

The Financing Indenture provides that the Corporation may issue additional bonds from time to time on the terms and conditions and for the purposes stated in the Financing Indenture, and said additional bonds, if issued, will be equally and ratably secured under the Financing Indenture with the Series 2013 A Bonds and all bonds heretofore issued under the Financing Indenture, except as otherwise provided in the Financing Indenture. Without limiting the generality of the foregoing, no bonds other than the Series 2013 A Bonds are secured by the Series 2013 A Debt Service Reserve Fund established under the Financing Indenture.

The Series 2013 A Bonds constitute "Subordinated Bonds" as defined in the Master Trust Agreement. The Master Trust Agreement provides that senior lien Bonds (as defined in the Master Trust Agreement) are entitled to a prior lien on the moneys held under the Master Trust Agreement which are pledged as security for Subordinated Bonds under the Master Trust Agreement. Several outstanding series of Subordinated Bonds have previously been issued, and the Master Trust Agreement provides that the Corporation may issue additional Subordinated Bonds for the purposes stated therein. All Subordinated Bonds are equally and ratably secured by funds pledged and available therefor under the Master Trust Agreement.

We have also examined one of the Series 2013 A Bonds as executed and authenticated.

We have also examined executed copies of the Financing Indenture, the Master Trust Agreement, and the Project Finance Agreement dated as of June 1, 2006, as supplemented by the Eighth Supplemental Project Finance Agreement, dated as of July 1, 2013 (collectively referred to herein as the "Project Finance Agreement") among the Corporation, the New York City Municipal Water Finance Authority (the "Recipient") and The City of New York (the "City"), whereby the Corporation has agreed to use a portion of the proceeds of the Series 2013 A Bonds to refund certain bonds of the Corporation in order to refinance the costs of the 2013 A Projects (as defined in the Project Finance Agreement). Under the Project Finance Agreement, the Recipient has agreed to execute and deliver to the Trustee certain obligations of the Recipient (the "Series 2013 A Recipient Bonds") issued under the Recipient's Water and Sewer System Second General Revenue Bond Resolution adopted March 30, 1994, as amended and supplemented (the "Recipient Second Resolution"). Such bonds of the Recipient together with all other bonds of the Recipient heretofore and hereafter issued to the Corporation by the Recipient under the Project Finance Agreement are collectively hereinafter referred to as "Recipient Bonds." We have also examined an executed copy of a Project Finance Agreement dated the date hereof (referred to herein as the "DF Project Finance Agreement") among the Corporation, the Recipient and the City, whereby the Corporation has agreed to use certain moneys other than bond proceeds to purchase certain obligations of the Recipient (the "Pledged DF Recipient Bonds") issued under the Recipient Second Resolution in order to finance or refinance the costs of certain projects described in the DF Project Finance Agreement. Under the DF Project Finance Agreement, the Recipient has agreed to execute and deliver to the Trustee the Pledged DF Recipient Bonds. The City is not liable with respect to the Recipient Bonds or the Pledged DF Recipient Bonds.

The Internal Revenue Code of 1986, as amended (the "Code"), establishes certain requirements that must be met subsequent to the issuance and delivery of the Series 2013 A Bonds in order that interest on the Series 2013 A Bonds be and remain excluded from gross income pursuant to

Section 103 of the Code. We have examined the Tax Regulatory Agreement, dated the date hereof, among the Recipient, the Corporation and the Trustee (the "Tax Regulatory Agreement"), in which the Recipient, the New York City Water Board (the "Water Board") and the Corporation have made representations, warranties and covenants relating to the exclusion of interest on the Series 2013 A Bonds from gross income for federal income tax purposes, including, but not limited to, certain representations with respect to the use of the proceeds of the Series 2013 A Bonds and to the investment of certain funds. The Tax Regulatory Agreement obligates the Recipient, the Water Board and the Corporation to take certain actions within their respective control to cause interest on the Series 2013 A Bonds to be excluded from gross income pursuant to Section 103 of the Code. Noncompliance with the requirements of the Code could cause interest on the Series 2013 A Bonds to become subject to federal income taxes retroactive to the issue date of the Series 2013 A Bonds, irrespective of the date on which such noncompliance occurs or is ascertained.

We are of the opinion that:

1. The Corporation is a body corporate and politic constituting a public benefit corporation, and is duly created and validly existing under the Constitution and laws of the State of New York, including particularly the Act, and has the right and lawful authority to issue the Series 2013 A Bonds and purchase the Series 2013 A Recipient Bonds from the Recipient with proceeds of the Series 2013 A Bonds for the purposes described above and as contemplated by the Project Finance Agreement and the Financing Indenture, to receive and pledge the revenues and receipts derived pursuant to the Recipient Bonds and the Pledged DF Recipient Bonds in accordance with the terms of the Project Finance Agreement and the DF Project Finance Agreement and as provided in the Financing Indenture and to secure the Series 2013 A Bonds in the manner contemplated by the Financing Indenture and the Master Trust Agreement.

2. The Corporation has the right and power pursuant to the Act to enter into and perform its obligations under the Financing Indenture, and the Financing Indenture has been duly authorized, executed and delivered by the Corporation, is in full force and effect and constitutes a legal, valid and binding obligation of the Corporation enforceable in accordance with its terms.

3. The Corporation has the right and power pursuant to the Act to enter into and perform its obligations under the Master Trust Agreement, and the Master Trust Agreement has been duly authorized, executed and delivered by the Corporation, is in full force and effect and constitutes a legal, valid and binding obligation of the Corporation enforceable in accordance with its terms.

4. The Corporation has the right and power pursuant to the Act to enter into and perform its obligations under the Project Finance Agreement and the DF Project Finance Agreement, and the Project Finance Agreement and the DF Project Finance Agreement have each been duly authorized, executed and delivered by the Corporation, and each is in full force and effect and constitutes a legal, valid and binding agreement of the Corporation enforceable in accordance with its terms.

5. The Corporation has the right and power pursuant to the Act to enter into and perform its obligations under the Tax Regulatory Agreement, and the Tax Regulatory Agreement has been duly authorized, executed and delivered by the Corporation, is in full force and effect and constitutes a legal, valid and binding agreement of the Corporation enforceable in accordance with its terms. Those rights and interests of the Corporation under the Tax Regulatory Agreement assigned by the Corporation to the Trustee for the benefit of the Series 2013 A Bondowners have been duly and legally assigned.

6. The Series 2013 A Bonds have been duly authorized, executed and delivered and issued by the Corporation in accordance with the Financing Indenture and the Constitution and the laws of the State of New York, including the Act. The Series 2013 A Bonds are valid and legally binding special obligations of the Corporation, secured by the Financing Indenture and the Master Trust Agreement (to the extent provided therein), and are payable as to principal, premium, if any, and interest from, and are secured by a valid lien on and pledge of, the Recipient Bonds and the Pledged DF Recipient Bonds and the payments by the Recipient of principal, premium, if any, and interest thereon and other moneys held by the Trustee under the Financing Indenture and available therefor and, subject to a prior lien in favor of senior lien Bonds (as defined in the Master Trust Agreement), moneys held by the Master Trustee under the Master Trust Agreement and pledged and available therefor, all in the manner provided in the Financing Indenture and the Master Trust Agreement, respectively. The Series 2013 A Bonds are enforceable in accordance with their terms and the terms of the Financing Indenture and are entitled to the benefits of the Act, the Financing Indenture and the Master Trust Agreement. All conditions precedent to the delivery of the Series 2013 A Bonds have been fulfilled.

7. Under existing statutes and court decisions, (i) interest on the Series 2013 A Bonds is excluded from gross income for Federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and (ii) interest on the Series 2013 A Bonds is not treated as a preference item in calculating the alternative minimum tax imposed on individuals and corporations under the Code and is included in the adjusted current earnings of certain corporations for purposes of calculating the alternative minimum tax. In rendering this opinion, we have relied on certain representations, certifications of fact, and statements of reasonable expectations made by the Corporation, the Recipient and the Water Board in connection with the Series 2013 A Bonds, and we have assumed compliance by the Corporation, the Recipient and the Water Board with certain ongoing covenants to comply with applicable requirements of the Code to assure the exclusion of interest on the Series 2013 A Bonds from gross income for Federal income tax purposes pursuant to Section 103 of the Code.

8. Under existing statutes, interest on the Series 2013 A Bonds is exempt from personal income taxes imposed by the State of New York and its political subdivisions, including The City of New York.

Except as stated in paragraphs 7 and 8 above, we express no opinion regarding any Federal, state or local tax consequences arising with respect to the Series 2013 A Bonds or the ownership or disposition thereof. We express no opinion on the effect of any action hereafter taken or not taken in reliance upon an opinion of other counsel on the exclusion from gross income for Federal income tax purposes of interest on the Series 2013 A Bonds, or under state and local tax law.

The opinions set forth in paragraphs 2 through 6 above are qualified only to the extent that the enforceability of the Series 2013 A Bonds, the Financing Indenture, the Master Trust Agreement, the Tax Regulatory Agreement, the Recipient Bonds, the Pledged DF Recipient Bonds, the Project Finance Agreement and the DF Project Finance Agreement may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or other laws or judicial decisions or principles of equity relating to or affecting the enforcement of creditors' rights or contractual obligations generally.

In rendering the opinions set forth in paragraphs 4 through 6 above, we have relied with your approval upon the opinion of Orrick, Herrington & Sutcliffe LLP, bond counsel to the Recipient, dated as of the date hereof, with respect to the due authorization, execution and delivery of the Project Finance Agreement, the DF Project Finance Agreement, the Tax Regulatory Agreement, the Recipient

Second Resolution, the Series 2013 A Recipient Bonds and the Pledged DF Recipient Bonds by the Recipient.

In rendering the foregoing opinions we have made a review of such legal proceedings as we have deemed necessary to approve the legality and validity of the Series 2013 A Bonds. In rendering the foregoing opinions we have not been requested to examine any document or financial or other information concerning the Corporation, the Recipient or the projects financed with the Series 2013 A Bonds and the Pledged DF Recipient Bonds other than the record of proceedings referred to above, and we express no opinion as to the accuracy, adequacy or sufficiency of any financial or other information which has been or will be supplied to purchasers of the Series 2013 A Bonds.

This opinion is rendered as of the date hereof and we assume no obligation to update, revise or supplement our opinion to reflect any action hereafter taken or not taken, or any facts or circumstances, or any changes in law or interpretations thereof, that may hereafter arise or occur, or for any other reason.

Very truly yours,

EXHIBIT C

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the "Agreement") dated _____, 2013 by and between New York State Environmental Facilities Corporation (the "Issuer") and Manufacturers and Traders Trust Company, as trustee (the "Trustee") under a Financing Indenture of Trust dated as of June 1, 2006, as heretofore supplemented and as supplemented and amended by an Eighth Supplemental Series Indenture of Trust dated as of July 1, 2013 (the "Indenture"), is executed and delivered in connection with the issuance of the Issuer's State Clean Water and Drinking Water Revolving Funds Revenue Bonds (New York City Municipal Water Finance Authority Projects - Second Resolution Bonds) Series 2013 A Subordinated SRF Bonds (the "Bonds") in the amount of \$401,090,000.00 (the "Bonds"). The proceeds of the Bonds are being advanced by the Issuer to New York City Municipal Water Finance Authority (the "Recipient") pursuant to a Project Finance Agreement, dated as of June 1, 2006, as supplemented by an Eighth Supplemental Project Finance Agreement, dated as of July 1, 2013 (the "Project Finance Agreement"). Capitalized terms used in this Agreement which are not otherwise defined in the Indenture shall have the respective meanings specified above or in Article IV hereof.

In order to permit the Underwriter to comply with the provisions of Rule 15c2-12 in connection with the public offering of the Bonds, the parties hereto, in consideration of the mutual covenants herein contained and other good and lawful consideration, hereby agree as follows:

ARTICLE I **The Undertaking**

Section 1.1. Purpose. This Agreement shall constitute a written undertaking for the benefit of the owners of the Bonds, and is being executed and delivered solely to assist the Underwriter in complying with subsection (b)(5) of the Rule.

Section 1.2. Annual Financial Information. (a) The Issuer shall provide Annual Financial Information with respect to each fiscal year of the Issuer, commencing with fiscal year ended March 31, 2013 by no later than 9 months after the end of the respective fiscal year, to the MSRB.

(b) The Issuer shall provide, in a timely manner, notice of any failure of the Issuer to provide the Annual Financial Information by the date specified in subsection (a) above to the MSRB.

Section 1.3. Audited Financial Statements. If not provided as part of Annual Financial Information by the date required by Section 1.2(a) hereof, the Issuer shall provide Audited Financial Statements, when and if available, to the MSRB.

Section 1.4. Event Notices. The Issuer shall provide to the MSRB and the Trustee, in a timely manner, notice of any of the following events, not in excess of ten (10) business days after the occurrence of such event, with respect to the Bonds (such notice hereinafter referred to as an "Event Notice"):

- (1) principal and interest payment delinquencies;
- (2) non-payment related defaults, if material;
- (3) unscheduled draws on debt service reserves reflecting financial difficulties;

- (4) unscheduled draws on credit enhancements reflecting financial difficulties;
- (5) substitution of credit or liquidity providers, or their failure to perform;
- (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB), or other material notices of determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- (7) modifications to the rights of holders of the Bonds, if material;
- (8) bond calls, if material, and tender offers;
- (9) defeasances;
- (10) release, substitution, or sale of property securing repayment of the Bonds, if material;
- (11) rating changes;
- (12) bankruptcy, insolvency, receivership or similar event of the Issuer;
- (13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
- (14) appointment of a successor or additional trustee or the change of name of a trustee, if material.

Section 1.5. Additional Information. Nothing in this Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Agreement or any other means of communication, or including any other information in any Annual Financial Information or Event Notice, in addition to that which is required by this Agreement. If the Issuer chooses to include any information in any Annual Financial Information or Event Notice in addition to that which is specifically required by this Agreement, the Issuer shall have no obligation under this Agreement to update such information or include it in any future Annual Financial Information or Event Notice.

Section 1.6. No Previous Non-Compliance. The Issuer represents that since July 3, 1995, it has not failed to comply in any material respect with any previous undertaking in a written contract or agreement specified in paragraph (b)(5)(i) of the Rule.

ARTICLE II

Operating Rules

Section 2.1. Reference to Other Documents. It shall be sufficient for purposes of Section 1.2 hereof if the Issuer provides Annual Financial Information by specific reference to documents (i) available to the public on the MSRB Internet Web site (currently, <http://emma.msrb.org>) or (ii) filed with the SEC. If such a document is the Official Statement, it also must be available from the MSRB.

Section 2.2. Submission of Information. Annual Financial Information may be provided in one document or multiple documents, and at one time or in part from time to time, and may be provided by delivery of an official statement which includes such information.

Section 2.3. Event Notices. Each Event Notice shall be so captioned and shall prominently state the title, date and series of the Bonds.

Section 2.4. Transmission of Information and Notices. (a) Unless otherwise required by the MSRB, all notices, documents and information provided to the MSRB shall be provided to the MSRB's Electronic Municipal Markets Access (EMMA) system, the current Internet Web address of which is <http://emma.msrb.org>.

(b) All notices, documents and information provided to the MSRB shall be provided in an electronic format as prescribed by the MSRB and shall be accompanied by identifying information as prescribed by the MSRB.

Section 2.5. Fiscal Year. Annual Financial Information shall be provided at least annually notwithstanding any fiscal year longer than 12 calendar months. The Issuer's current fiscal year is April 1, 2013 - March 31, 2014, and the Issuer shall promptly notify (i) the MSRB and (ii) the Trustee of each change in its fiscal year.

ARTICLE III

Termination, Amendment and Enforcement

Section 3.1. Termination. (a) With respect to any Series 2013 A Bonds, the Issuer's and the Trustee's obligations under this Agreement shall terminate upon a legal defeasance pursuant to Section XIV of the Indenture, prior redemption or payment in full of such Series 2013 A Bonds.

(b) This Agreement, or any provision hereof, shall be null and void in the event that the Issuer (1) delivers to the Trustee an opinion of Counsel, addressed to the Issuer and the Trustee, to the effect that those portions of the Rule which require the provisions of this Agreement, or any of such provisions, do not or no longer apply to the Bonds, whether because such portions of the Rule are invalid, have been repealed, or otherwise, as shall be specified in such opinion, and (2) delivers copies of such opinion to the MSRB.

Section 3.2. Amendment. (a) This Agreement may be amended, by written agreement of the parties, without the consent of the owners of the Bonds (except to the extent required under clause (4)(ii) below), if all of the following conditions are satisfied: (1) such amendment is made in connection with a change in circumstances that arises from a change in legal (including regulatory) requirements, a change in law (including rules or regulations) or in interpretations thereof, or a change in the identity, nature or status of the Issuer or the type of business conducted thereby, (2) this Agreement as so amended would have complied with the requirements of the Rule as of the date of this Agreement, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances, (3) the Issuer shall have delivered to the Trustee an opinion of Counsel, addressed to the Issuer and the Trustee, to the same effect as set forth in clause (2) above, (4) either (i) the Issuer shall have delivered to the Trustee an opinion of Counsel or a determination by a person unaffiliated with the Issuer (such as the Trustee), acceptable to the Issuer, addressed to the Issuer and the Trustee, to the effect that the amendment does not materially impair the interests of the owners of the Bonds or (ii) the owners of the Bonds consent to the amendment to this Agreement pursuant to the same procedures as are required for

amendments to the Indenture with consent of owners of Bonds pursuant to Section 13.02 of the Indenture as in effect on the date of this Agreement, and (5) the Issuer shall have delivered copies of such opinion(s) and amendment to the MSRB.

(b) In addition to subsection (a) above, this Agreement may be amended and any provision of this Agreement may be waived, by written agreement of the parties, without the consent of the owners of the Bonds, if all of the following conditions are satisfied: (1) an amendment to the Rule is adopted, or a new or modified official interpretation of the Rule is issued, after the effective date of this Agreement which is applicable to this Agreement, (2) the Issuer shall have delivered to the Trustee an opinion of Counsel, addressed to the Issuer and the Trustee, to the effect that performance by the Issuer and Trustee under this Agreement as so amended or giving effect to such waiver, as the case may be, will not result in a violation of the Rule and (3) the Issuer shall have delivered copies of such opinion and amendment to the MSRB.

(c) To the extent any amendment to this Agreement results in a change in the type of financial information or operating data provided pursuant to this Agreement, the first Annual Financial Information provided thereafter shall include a narrative explanation of the reasons for the amendment and the impact of the change.

(d) If an amendment is made to the basis on which financial statements are prepared, the Annual Financial Information for the year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. Such comparison shall include a quantitative and, to the extent reasonably feasible, qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information.

Section 3.3. Benefit; Third-Party Beneficiaries; Enforcement. (a) The provisions of this Agreement shall inure solely to the benefit of the owners from time to time of the Bonds, except that beneficial owners of Bonds shall be third-party beneficiaries of this Agreement.

(b) Except as provided in this subsection (b), the provisions of this Agreement shall create no rights in any person or entity. The obligations of the Issuer to comply with the provisions of this Agreement shall be enforceable (i) in the case of enforcement of obligations to provide financial statements, financial information, operating data and notices, by any owner of Outstanding Bonds, or by the Trustee on behalf of the owners of Outstanding Bonds, or (ii), in the case of challenges to the adequacy of the financial statements, financial information and operating data so provided, by the Trustee on behalf of the owners of Outstanding Bonds; provided, however, that the Trustee shall not be required to take any enforcement action except at the direction of the owners of not less than a majority in aggregate principal amount of the Bonds at the time Outstanding who shall have provided the Trustee with adequate security and indemnity. Neither the Issuer, its directors, officers or employees shall have any liability hereunder for any act or failure to act hereunder; the owners' and Trustee's sole remedy with respect to enforcement of the provisions of this Agreement shall be a right, by action in mandamus or for specific performance, to compel performance of the Issuer's obligations under this Agreement. In consideration of the third-party beneficiary status of beneficial owners of Bonds pursuant to subsection (a) of this Section, beneficial owners shall be deemed to be owners of Bonds for purposes of this subsection (b).

(c) Any failure by the Issuer or the Trustee to perform in accordance with this Agreement shall not constitute a default or an Event of Default under the Indenture, and the rights and

remedies provided by the Indenture upon the occurrence of a default or an Event of Default shall not apply to any such failure.

(d) This Agreement shall be construed and interpreted in accordance with the laws of the State, and any suits and actions arising out of this Agreement shall be instituted in a court of competent jurisdiction in the State; provided, however, that to the extent this Agreement addresses matters of federal securities laws, including the Rule, this Agreement shall be construed in accordance with such federal securities laws and official interpretations thereof.

ARTICLE IV

Definitions

Section 4.1. Definitions. The following terms used in this Agreement shall have the following respective meanings:

(1) "Annual Financial Information" means, collectively, (i) the financial information or operating data with respect to the Issuer, for each fiscal year of the Issuer, as follows:

(y) included in the Official Statement under the captions STATE REVOLVING FUNDS PROGRAMS – Establishment of SRFs (fifth paragraph only), NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY (NYCMWFA) PROGRAM – Leveraged Financing Administration (second paragraph only) and SECURITY AND SOURCES OF PAYMENT FOR THE OFFERED BONDS – De-allocated Reserve Account and Deficiency Reserve Account – *Aggregate Historical Cash Flow and Reserves* and – *Projected Cash Flow and Reserves*";

(z) concerning the State Revolving Funds programs of the type appearing in Exhibit 2B to the Corporation's Annual Information Statement, dated December 1, 2012 (the "Annual Information Statement"), and incorporated by reference in the Official Statement;

and (ii) the information regarding amendments to this Agreement required pursuant to Sections 3.2(c) and (d) of this Agreement. Annual Financial Information shall also include Audited Financial Statements, if then available, or Unaudited Financial Statements.

The descriptions contained in clause (i) above of financial information and operating data constituting Annual Financial Information are of general categories of financial information and operating data. When such descriptions include information that no longer can be generated because the operations to which it related have been materially changed or discontinued, a statement to that effect shall be provided in lieu of such information.

(2) "Audited Financial Statements" means the annual financial statements, if any, of the Issuer, audited by such auditor as shall then be required or permitted by State law or the Indenture. Audited Financial Statements shall be prepared in accordance with GAAP; provided, however, that the Issuer may from time to time, if required by federal or State legal requirements, modify the basis upon which its financial statements are prepared. Notice of any such modification shall include a reference to the specific federal or State law or regulation describing such accounting basis and shall be provided by the Issuer to the MSRB.

(3) "Recipient Undertaking" means the separate agreement of the Recipient, dated _____, 2013, to provide continuing disclosure relating to (i) certain financial and operating data relating to its affairs and (ii) notice of certain events with respect to the Recipient's Second Resolution Bonds, Series 2013 A Bonds.

(4) "Counsel" means Hawkins Delafield & Wood LLP or other nationally recognized bond counsel or counsel expert in federal securities laws as they relate to municipal securities.

(5) "GAAP" means generally accepted accounting principles as prescribed from time to time for governmental units by the Governmental Accounting Standards Board, the Financial Accounting Standards Board, or any successor to the duties and responsibilities of either of them.

(6) "MSRB" means the Municipal Securities Rulemaking Board established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934.

(7) "Official Statement" means the "final official statement", as defined in paragraph (f)(3) of the Rule, relating to the Bonds.

(8) "Rule" means Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934 (17 CFR Part 240, §240.15c2-12), as in effect on the date of this Agreement, including any official interpretations thereof issued either before or after the effective date of this Agreement which are applicable to this Agreement.

(9) "SEC" means the United States Securities and Exchange Commission.

(10) "Unaudited Financial Statements" means the same as Audited Financial Statements, except that they shall not have been audited.

(11) "Underwriter" means the underwriter, underwriters or other purchasers that have contracted to purchase the Bonds upon initial issuance.

ARTICLE V

Miscellaneous

Section 5.1. Duties, Immunities and Liabilities of Trustee. Article XI of the Indenture is hereby made applicable to this Agreement as if this Agreement were (solely for this purpose) contained in the Indenture. Without limiting the generality of the foregoing, the Trustee shall have only those duties hereunder which are specifically set forth in this Agreement whether or not a default or event of default has occurred hereunder, under the Indenture, Project Finance Agreement or any document expected in connection herewith. The Trustee, its officers, directors, employees and agents, shall be held harmless against any loss, expense or liability which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys fees) of defending against any claim of liability, but excluding liabilities due to the Trustee's negligence or willful misconduct in the performance of its duties hereunder to the same extent and from the same sources as shall be available to the Trustee and such persons in connection with actions taken under the Indenture. The obligations of the Issuer under this Section shall survive the termination of this Agreement and the payment of the Bonds.

The Trustee shall have no liability, duty or obligation under this Agreement for, with respect to or arising out of: (i) the selection of Counsel or the determination whether such counsel is a recognized expert in federal securities law; (ii) the adequacy, completeness or sufficiency, for any purpose, of the Annual Information; (iii) the determination of whether an event requiring an Event Notice pursuant to Section 1.04 has occurred or communicating to any party or persons whether such event has occurred; and (iv) the providing of Annual Financial Information to any party or persons.

Section 5.2. No Issuer Responsibility or Liability with Respect to Recipient Undertaking. The Trustee acknowledges that the Issuer has undertaken no responsibility, and shall not be required to undertake any responsibility, with respect to any reports, notices or disclosures required by or provided pursuant to the Recipient Undertaking, and neither the Issuer, its directors, officers, nor employees have any responsibility or liability to any person, including any holder of the Bonds, with respect to any such reports, notices or disclosures or for the sufficiency, performance, or enforcement of the Recipient Undertaking.

Section 5.3. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the parties have each caused this Agreement to be executed by their duly authorized representatives, all as of the date first above written.

NEW YORK STATE ENVIRONMENTAL
FACILITIES CORPORATION

By:_____

MANUFACTURERS AND TRADERS TRUST
COMPANY, as Trustee

By:_____

EXHIBIT D

CERTAIN DEFINITIONS AND SUMMARY OF CERTAIN BASIC AGREEMENTS (NYCMWFA SUBORDINATED FINANCING PROGRAM)

[Reflecting amendments to be made in connection with the issuance of the offered bonds]

DEFINITIONS OF CERTAIN TERMS

The following definitions apply to the summaries of the Project Finance Agreement and the Financing Indenture relating to the Subordinated NYCMWFA Bonds.

Act shall mean the New York State Environmental Facilities Corporation Act, constituting Title 12 of Article 5 of the Public Authorities Law and Chapter 43-A of the Consolidated Laws of the State of New York, as from time to time amended and supplemented.

Additional Subordinated NYCMWFA Bonds shall mean any additional series of NYCMWFA Bonds hereafter issued, duly authenticated and delivered in accordance with the provisions of the Subordinated NYCMWFA Indenture.

Additional Project shall mean water pollution control facilities or water supply facilities described in the Project Finance Agreement financed through the issuance of a series of Additional Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture.

Authorized Officer shall mean the Chairman, President, Executive Vice President, Chief Financial Officer, Director of Corporate Operations or Secretary of the Corporation and any other officer of the Corporation designated to act as an Authorized Officer for purposes of the Subordinated NYCMWFA Indenture by resolution of the Board of Directors of the Corporation.

Bond Counsel shall mean Hawkins Delafield & Wood LLP or other counsel selected by the Corporation and satisfactory to the Trustee and nationally recognized as experienced in matters relating to bonds issued by states and their political subdivisions.

Business Day shall mean a day on which banks located in (i) The City of New York, New York, (ii) the city in which the principal office of the Trustee is located and (iii) the city in which the principal office of the Master Trust Agreement Trustee is located are not required or authorized to remain closed and on which the New York Stock Exchange, Inc. is not closed.

City means The City of New York, New York.

Clean Water SRF shall mean the water pollution control revolving fund established by the State pursuant to the State Clean Water Act.

Code shall mean the Internal Revenue Code of 1986, as amended, as in effect upon the issuance of any series of Subordinated NYCMWFA Bonds and the regulations of the U.S. Department of the Treasury promulgated thereunder as in effect upon the issuance of any series of Subordinated NYCMWFA Bonds.

Committed Subsidy Amount means the portion of interest payable on any Recipient Bonds which the Corporation is contractually obligated to fund from moneys within a Revolving Fund pursuant to the Project Finance Agreement.

Corporation shall mean New York State Environmental Facilities Corporation, a public benefit corporation created by the Act, and any successor entity which may succeed to its rights and duties respecting the Subordinated NYCMWFA Bonds and the Revolving Funds.

Cost of Issuance Fund shall mean the Cost of Issuance Fund established by the Subordinated NYCMWFA Indenture.

Credit Facility shall mean a letter of credit, revolving credit agreement, standby purchase agreement, surety bond, insurance policy or similar obligation, arrangement or instrument issued by a bank, insurance company or other financial institution which provides for payment of all or a portion of the principal or redemption price of, and interest on any series of Subordinated NYCMWFA Bonds or provides funds for the purchase of such Subordinated NYCMWFA Bonds or portions thereof.

De-allocated Reserve Account shall mean the De-allocated Reserve Account established by the Master Trust Agreement.

De-allocated Reserve Account Release Payments shall mean all monies received by the Trustee from the Master Trust Agreement Trustee pursuant to clause "THIRD" of Section 402(f) of the Master Trust Agreement. See Exhibit 2A of our Annual Information Statement, **"SUMMARY OF CERTAIN PROVISIONS OF THE MASTER TRUST AGREEMENT - Subordinate Pledge and Assignment of De-Allocated Reserve Subaccount."**

Debt Service Fund shall mean the Debt Service Fund established by the Subordinated NYCMWFA Indenture.

Debt Service Payment Date shall mean any date on which principal of, premium, if any, or interest on Bonds is due under the Subordinated NYCMWFA Indenture.

Debt Service Reserve Fund means a Debt Service Reserve Fund for a Series of Bonds established pursuant to a Supplemental Indenture as provided in the Subordinated NYCMWFA Indenture.

Debt Service Reserve Fund Requirement, with respect to any Series of Bonds, means the amount, if any, determined in accordance with the Supplemental Indenture authorizing such Series.

Debt Service Reserve Fund Shortfall as of any date of calculation means the sum of the deficiencies, if any, in the amount on deposit in each Debt Service Reserve Fund as compared to the Debt Service Reserve Fund Requirement, if any, for the related series of Outstanding Bonds, as determined by the Corporation and evidenced by the Officer's Certificate.

DEC shall mean the New York State Department of Environmental Conservation or any successor entity which may succeed to its rights and duties respecting the Revolving Fund.

DF Recipient Bond means a bond, note, or other obligation issued or incurred by the Recipient or any other municipality (as defined in the Act) or other person eligible to receive financial assistance from a Revolving Fund.

DOH shall mean the New York State Department of Health and any entity which may succeed to its rights and duties respecting the Drinking Water SRF.

Drinking Water SRF shall mean the drinking water revolving fund established pursuant to the State Drinking Water Act.

Event of Default shall mean any Event of Default specified in the Subordinated NYCMWFA Indenture or any Financing Indenture, as the context may require.

Financing Indenture, with respect to the Subordinated NYCMWFA Bonds, shall mean the Subordinated NYCMWFA Indenture.

Financing Indenture Trustee means Manufacturers and Traders Trust company as trustee under a Financing Indenture, and any successor or successors as trustee under a Financing Indenture.

General Reserve Fund means the General Reserve Fund established pursuant to the Subordinated NYCMWFA Indenture.

General Reserve Fund Requirement, as of any date of determination, shall mean the sum of (a) the Debt Service Reserve Shortfall, if any, and (b) the amount, if any, required to be retained in the General Reserve Fund in order to satisfy the General Reserve Fund Release Test after such date, assuming for purposes of such determination that (i) all scheduled payments on investments, if any, then held in the General Reserve Fund not then in default will be received as and when due, and (ii) all scheduled payments of principal and interest on Recipient Bonds and Pledged DF Recipient Bonds not then in default will be received as and when due, and (iii) no amounts then held as cash or projected to be held as cash will be reinvested, all as determined by the Corporation and evidenced by an Officer's Certificate.

General Reserve Fund Release Test shall mean that, as of any date of calculation, Projected Available Cashflow in any Bond Year, is expected to be available in an amount at least equal to 120% of the amount necessary to pay all Scheduled Debt Service for all Subordinated NYCMWFA Bonds in such Bond Year, as determined by the Corporation and evidenced by an Officer's Certificate.

Investment Fund shall mean the Investment Fund established by the Subordinated NYCMWFA Indenture.

Master Trust Agreement shall mean the Amended and Restated Master Trust Agreement dated as of July 1, 2005 between the Corporation and Manufacturers and Traders Trust Company, as trustee and as custodian, as amended and supplemented in accordance with its terms.

Master Trust Agreement Trustee or *Master Trustee* shall mean Manufacturers and Traders Trust Company in its capacity as trustee under the Master Trust Agreement, and its successor or successors as trustee under the Master Trust Agreement.

Officer's Certificate shall mean a certificate signed by an Authorized Officer of the Corporation.

Outstanding, when used with reference to the Subordinated NYCMWFA Bonds shall mean, as of any particular date, the aggregate of all the Subordinated NYCMWFA Bonds, authenticated and delivered under the Subordinated NYCMWFA Indenture, except:

(a) the Subordinated NYCMWFA Bonds canceled by the Trustee or delivered to the Trustee for cancellation at or prior to such date;

(b) the Subordinated NYCMWFA Bonds for the payment or redemption of which money in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent in trust for the Owners of such Subordinated NYCMWFA Bonds, provided that if such Subordinated NYCMWFA Bonds are to be redeemed, notice of such redemption has been duly given pursuant to the Subordinated NYCMWFA Indenture, or provision therefor satisfactory to the Trustee has been made;

(c) the Subordinated NYCMWFA Bonds paid or the Subordinated NYCMWFA Bonds deemed to be paid as provided in the Subordinated NYCMWFA Indenture; and

(d) the Subordinated NYCMWFA Bonds paid or in lieu of or in substitution for which other Subordinated NYCMWFA Bonds shall have been authenticated and delivered pursuant to the Subordinated NYCMWFA Indenture, unless proof satisfactory to the Trustee shall be presented that any such Subordinated NYCMWFA Bond shall be held by a bona fide purchaser (as such term is defined in the Uniform Commercial Code of the State of New York);

provided, however, that in determining whether the owners of the requisite principal amount of the Subordinated NYCMWFA Bonds outstanding have given any request, demand, authorization, direction, notice, consent or waiver under the Subordinated NYCMWFA Indenture, Subordinated NYCMWFA Bonds owned by or for the account of the Recipient shall be disregarded and deemed not to be outstanding, except that in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only the Subordinated NYCMWFA Bonds which the Trustee knows to be so owned shall be so disregarded. The Subordinated NYCMWFA Bonds so owned which have been pledged in good faith may be regarded as outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Subordinated NYCMWFA Bonds and that the pledgee is not the Recipient and that the pledgee is not holding such Subordinated NYCMWFA Bonds for the account of the Recipient.

Owner or Bondholder or Bondowner (when used in reference to the owner of any Subordinated NYCMWFA Bond) shall mean the person or persons in whose name or names the particular Subordinated NYCMWFA Bond shall be registered on the bond register kept pursuant to the Subordinated NYCMWFA Indenture.

Parity Corporation Reimbursement Obligation shall mean an obligation of the Corporation to reimburse directly the issuer of a Credit Facility for amounts paid by such issuer thereunder, the payment of such obligation being secured by a pledge and lien on a parity with the lien created by the granting clauses of the Subordinated NYCMWFA Indenture with respect to the related series of Subordinated NYCMWFA Bonds.

Paying Agent or Paying Agents shall mean any paying agent(s) for the Subordinated NYCMWFA Bonds and any successor or successors as paying agent(s) appointed pursuant to the Subordinated NYCMWFA Indenture.

Permitted Investments shall mean (i) obligations of the State or the United States of America, (ii) obligations the principal and interest of which are guaranteed by the State or the United States of America, (iii) deposits with such banks or trust companies as may be designated by the Corporation, each such bank or trust company deposit being continuously and fully secured by obligations described in clauses (i) or (ii), (iv) investment agreements and to the extent permitted by the Act, (v) obligations the

interest on which is not included in gross income under Section 103 of the Code, or (vi) any other obligations from time to time permitted by the applicable State Act.

Person shall mean an individual, a corporation, a partnership, an association, a joint stock company, a trust, any unincorporated organization or a government or political subdivision thereof.

Pledged DF Recipient Bond Payments shall mean payments of principal of, premium, if any, and interest on a DF Recipient Bond which are assigned and pledged as security for the benefit of the Subordinated NYCMWFA Bonds hereunder, excluding (i) any Reserved Corporation Interests and (ii) any Released DF Recipient Bond Payments and shall initially mean those DF Recipient Bond payments described in the Subordinated NYCMWFA Indenture.

Pledged DF Recipient Bonds shall mean the DF Recipient Bonds which are the source of Pledged DF Recipient Bond Payments.

Project shall mean the project of the Recipient financed with a series of the Subordinated NYCMWFA Bonds.

Project Costs shall mean the incurred costs of the Recipient which are eligible for financial assistance from the Revolving Fund under the State Act, which are allowable costs under the Regulations and which are reasonable, necessary and allocable by the Recipient to the Project under generally accepted accounting principles.

Projected Available Cashflow shall mean the sum of (i) projected Recipient Bond Payments, (ii) projected Pledged DF Recipient Bond Payments, (iii) projected payments of principal and interest on all investments held in the Debt Service Fund, the Debt Service Reserve Fund and the General Reserve Fund, assuming that all such investments not then in default will continue to be paid in accordance with their terms (iv) all moneys held uninvested in the General Reserve Fund, the Debt Service Reserve Fund and the Debt Service Fund and (v) all moneys projected by the Corporation to be available for transfer to all Subordinated Indenture Trustees by the Master Trust Agreement Trustee pursuant to clause "THIRD" of Section 402(f) of the Master Trust Agreement, assuming that no Bonds or Subordinated Bonds (each as defined in the Master Trust Agreement) not then in default will continue to make scheduled payments in accordance with their terms, all as determined by the Corporation and evidenced by an Officer's Certificate.

Project Finance Agreement shall mean the Project Financing Agreement between the Corporation and the Recipient relating to the Series 2006 B Bonds dated as of June 1, 2006, as amended and supplemented in accordance with its terms from time to time.

Rebate Amount shall have the meaning ascribed to such term in the related Tax Regulatory Agreement.

Rebate Fund, with respect to Subordinated NYCMWFA Bonds, shall mean the rebate fund established under the Subordinated NYCMWFA Indenture.

Recipient shall mean the New York City Municipal Water Finance Authority, a public benefit corporation, and its successors and assigns, and otherwise shall mean any other entity receiving financial assistance from the proceeds of SRF Bonds.

Recipient Bond Payments shall mean the amounts payable by the Recipient under the Pledged Recipient Bonds.

Recipient Bonds shall mean the bonds or notes issued by the Recipient evidencing the obligation to repay the advance of the proceeds of a series of SRF Bonds.

Recipient General Resolution shall mean the Recipient's Water and Sewer System Revenue Bond Resolution adopted November 14, 1985, as amended and supplemented.

Recipient Second Resolution shall mean the Recipient's Water and Sewer Second General Revenue Bond Resolution adopted March 30, 1994, as amended and supplemented.

Registered Owner or *Registered Owners* shall mean the person or persons in whose name or names the particular Subordinated NYCMWFA Bond shall be registered.

Regulations shall mean the regulations of DEC or DOH, adopted pursuant to and in furtherance of the State Act, as such may be amended from time to time.

Reimbursement Obligation shall mean an obligation of the Corporation as described in the Subordinated NYCMWFA Indenture to reimburse the issuer of a Credit Facility for amounts paid by such issuer thereunder, whether or not such obligation to so reimburse is evidenced by a promissory note or other similar instrument.

Released DF Recipient Bond Payments means each Recipient Bond Payment formerly treated as a Pledged DF Recipient Bond Payment which has been released from the lien of the Subordinated NYCMWFA Indenture.

Reserve Allocation shall mean, with respect to financial assistance made available from the proceeds of SRF Bonds, that amount or those amounts of funds, if any, derived or to be derived from the Capitalization Grant Agreements and/or State Matching Share and/or other sources established as Reserve Allocation for such financial assistance pursuant to the Master Trust Agreement.

Reserved Corporation Interests means any interest in payments to be received under DF Recipient Bonds which are a source of Pledged DF Recipient Bond Payments which is expressly reserved from any assignment to the Trustee of Pledged DF Recipient Bond Payments.

Revolving Fund shall mean either the Clean Water SRF or the Drinking Water SRF.

Revolving Fund Program shall mean the program administered by the Corporation and DEC relating to the Revolving Fund and established pursuant to the State Act and the Water Quality Act.

Scheduled Debt Service shall mean all scheduled payments of principal and interest on the Bonds, including sinking fund installments.

Series means all of the Bonds of a particular Series authenticated and delivered on original issuance and pursuant hereto and a Supplemental Indenture authorizing such Series and identified as such pursuant to such Supplemental Indenture, and any Bonds of such Series thereafter authenticated and delivered in lieu of or in substitution for such Bonds pursuant to Article II, regardless of variations in maturity, interest rate, sinking fund installments or other provisions.

SRF Bonds shall mean any bond or bonds or all the bonds, as the case may be, of the Corporation issued and secured pursuant to any one or more Financing Indentures and further secured under the Master Trust Agreement.

State shall mean the State of New York.

State Act shall mean Chapter 565 of the Laws of New York of 1989, as amended, or mean Title 2 of Article 56 of the Environmental Conservation Law, as amended.

State Matching Funds or *State Matching Share* shall mean State funds in an amount equal to twenty percent (20%) of amounts appropriated and allotted to the State by the federal government for deposit in a Revolving Fund.

State Drinking Water Act shall mean Title 2 of Article 56 of the Environmental Conservation Law of the State of New York, as amended.

Subsidy Credit means funds applied as a credit to the Recipient's debt service payments due to the Corporation immediately prior to each debt service payment date set forth on the Recipient Bonds. Subsidy Credit with respect to each debt service payment date on the Recipient Bonds will be calculated in accordance with the following formula:

$$\text{Subsidy Credit} = (\text{Subsidy Percentage} \times \text{principal amount of the Recipient Bonds outstanding immediately prior to such debt service payment date} \times \text{Subsidy Rate}) \times \text{one-half.}$$

Subsidy Percentage means the percentage used to calculate the Subsidy Credit as set forth in the Project Finance Agreement.

Subsidy Rate means the percentage used to calculate the Subsidy Credit on any debt service payment date, as set forth in the Project Finance Agreement.

Subordinated Financing Indenture shall mean an indenture or other similar document, pursuant to which a series of Subordinated SRF Bonds has been or is issued and delivered and shall include the Subordinated NYCMWFA Indenture.

Subordinated Indenture Trustee, with respect to each series of Subordinated NYCMWFA Bonds, shall mean the trustee under the Subordinated Financing Indenture in its capacity as such trustee.

Subordinated NYCMWFA Bond or *Subordinated NYCMWFA Bonds*, shall mean any bond or bonds or all of the bonds, as the case may be, of the Corporation executed, authenticated and delivered in one or more series under the Subordinated NYCMWFA Indenture.

Subordinated NYCMWFA Indenture shall mean the Indenture of Trust dated as of June 1, 2006 between the Corporation and the Trustee, as the same has been and may be amended and supplemented from time to time.

Subordinated SRF Bond or *Subordinated SRF Bonds* shall mean any bond or bonds or all the bonds, as the case may be, of the Corporation in one or more series, relating to the Revolving Fund Program, issued and secured pursuant to one or more Subordinated Financing Indentures and further secured under the Master Trust Agreement as described in Exhibit 2A to our Annual Information Statement under **"SUMMARY OF CERTAIN PROVISIONS OF THE MASTER TRUST AGREEMENT - Subordinate Pledge and Assignment of De-allocated Reserve Subaccount."**

Supplemental Indenture shall mean any indenture supplementary to, or amendatory of, the Subordinated NYCMWFA Indenture duly executed and delivered in accordance with the provisions of the Subordinated NYCMWFA Indenture.

Tax Regulatory Agreement shall mean, with respect to each series of the Subordinated NYCMFA Bonds, the Tax Regulatory Agreement or any similar agreement between the Corporation and the Recipient setting forth requirements designed to assure the compliance with certain requirements for the exclusion from gross income of the interest on such Subordinated NYCMWFA Bonds.

Trustee shall mean Manufacturers and Traders Trust Company, a corporation organized and existing under the laws of the State of New York, having its principal office in Buffalo, New York, in its capacity as trustee under the Subordinated NYCMWFA Indenture, and its successor or successors as trustee under the Subordinated NYCMWFA Indenture.

Water Quality Act shall mean the federal Water Quality Act of 1987, as amended.

SUMMARIES OF CERTAIN BASIC DOCUMENTS

The following are summaries of certain provisions of the Project Finance Agreement and the Financing Indenture relating to the Subordinated NYCMWFA Bonds. Such summaries do not purport to be complete and reference should be made to each of these documents individually for full and complete statements of such and all provisions therein.

SUMMARY OF CERTAIN PROVISIONS OF THE PROJECT FINANCE AGREEMENT

Certification of the City

On or before the date of issuance of any series of Additional Subordinated NYCMWFA Bonds, the Corporation shall have received a certificate of the City, dated as of the date of issuance of such series, confirming as of such date the representations, warranties and covenants of the City contained in the Project Finance Agreement, as applicable, and making such further certifications, representations, warranties, covenants or agreements as may be reasonably requested by the Corporation in furtherance of the purposes of the Project Finance Agreement.

Recipient Bonds

Application of Subsidy Credit. The Corporation agrees that it will on or before each interest payment date for the Subordinated NYCMWFA Bonds, credit to amounts payable on the Recipient Bonds the Subsidy Credit relating to such interest payment date. Monies applied as the Subsidy Credit may be derived from (a) amounts representing earnings on Reserve Allocation, if applicable, (b) amounts representing earnings from the investment of proceeds of the leveraged financing to be used to finance the acquisition, construction and installation of the Project deposited, (c) amounts made available as SRF Subsidy Credit under the Subsidy Reserve Agreement and (d) any other funds within the Revolving Fund so designated from time to time by the Corporation. There is no Reserve Allocation applicable to the Subordinated NYCMWFA Bonds. Subject to the next succeeding sentence, the amount payable by Recipient as interest on the Recipient Bonds will be reduced by the Subsidy Credit available to be deposited by the Corporation with the Trustee and credited to the Recipient Bonds. Notwithstanding the foregoing, in the event there are not monies available to deposit and credit such Subsidy Credit on or before any interest payment date, the Recipient shall be obligated to pay interest on the Recipient Bonds at the rates set forth thereon and the Recipient's sole remedy shall be to bring an action against the Corporation seeking to (i) compel the Corporation to credit such Subsidy Credit, or (ii) in the event that the Recipient shall have paid interest on the Recipient Bonds at the interest rates set forth thereon, obtain reimbursement from the Corporation for the additional interest so paid.

In the event the Recipient fails to pay when due any sum owing to the Corporation pursuant to the Recipient Bonds, the Corporation may, in addition to all rights and remedies provided in or permitted by the Project Finance Agreement, deduct such sum from any Subsidy Credit otherwise transferable for the account of the Recipient pursuant to the Project Finance Agreement, until such sum has been paid in full to the Corporation. In the event that the Recipient fails to make any payment on the Recipient Bonds when due but thereafter the Recipient pays in full all amounts then due or past due and the Corporation waives such payment default, then the portion of the Subsidy Credit used to make payments on Subordinated NYCMWFA Bonds due to Recipient's default shall be credited to the Recipient on the Business Day next succeeding such payment-in-full or as soon thereafter as shall be practicable; provided, however, that such Subsidy Credit shall be reduced in the amount of any Corporation expenses (including but not limited to any investment losses and the reasonable fees and expenses of the Corporation, the Trustee, the owners of Subordinated NYCMWFA Bonds and attorneys representing any of the foregoing) incurred as a result of the Recipient's failure to make any payment on the Recipient Bonds when due.

Redemption of the Recipient Bonds. The Recipient shall not, without the prior written consent of the Corporation, redeem prior to maturity any of the Recipient Bonds prior to the date on which any corresponding outstanding series of Bonds are redeemable. No Recipient Bonds shall be redeemed by the Recipient unless payment of principal, premium, if any, and interest on the Recipient Bonds remaining outstanding shall, in the aggregate provide sufficient funds to pay all payments of principal, premium, if any, and interest on the Bonds remaining outstanding when due.

Reimbursement of Fund. If the Corporation determines that funds disbursed pursuant to the Project Finance Agreement have been expended by the Recipient for costs that are not permissible Project Costs, the Recipient shall promptly reimburse, or cause to be reimbursed, the account from which such amounts were disbursed in an amount equal to the amount of those funds improperly applied. The Corporation is authorized to withhold all further transfers of Subsidy Credit to the Recipient pursuant to the Project Finance Agreement and apply such amounts to reimburse the Clean Water SRF or the Drinking Water SRF, as applicable, until the subject account is reimbursed for amounts misapplied.

Defaults; Remedies. If the Corporation determines that the Recipient, the New York City Water Board or the City is not complying with federal or State laws, regulations or requirements, or instructions of DEC or DOH, as applicable, relating to a Project or terms of the Project Finance Agreement and following due written notice such Project is not brought into compliance, the Corporation may deny certification of disbursement requests until such Project is brought into compliance.

In the event of any default of the Recipient under the terms of the Project Finance Agreement, the Corporation shall have, in addition to the remedies set forth in the Project Finance Agreement, all other remedies permitted by law and by the Project Finance Agreement, including the right to seek enforcement, at law or in equity, including but not limited to specific performance, of any right or obligation under the Project Finance Agreement; provided that such remedies, except with respect to payments due under the Recipient Bonds, shall be available only after failure on the part of the Recipient to correct such default for a period of thirty (30) days after the date on which written notice of such default, requiring the Recipient to remedy the same, shall have been given to the Recipient; provided further that, if such default can not be corrected within such thirty (30) day period, such remedies shall not be available if corrective action is instituted by the Recipient within such period and diligently pursued until such default is corrected.

Effective Date and Term. The Project Finance Agreement shall become effective upon its execution and delivery by the involved parties, shall remain in full force and effect from such date and shall expire on such date as all Bonds (including refunding bonds) issued for the purpose of purchasing any Recipient Bonds under the Project Finance Agreement shall be discharged and satisfied in accordance with the provisions thereof and all obligations of the Recipient to the Corporation as required by the Project Finance Agreement are satisfied.

Execution and Delivery of Recipient Bonds to Trustee. Concurrently with the authentication by the Trustee and delivery of Bonds of any series, the Corporation and the Recipient agree that the Recipient will execute and deliver to the Trustee its Recipient Bond or Bonds relating to such series of the Subordinated NYCMWFA Bonds, in accordance with the Recipient Second Resolution. Such Recipient Bond or Bonds shall (a) provide for payments of principal of, premium, if any, and interest sufficient in the aggregate, together with any Subsidy Credit and other moneys available under the Subordinated NYCMWFA Indenture transferred and applied as described above, to pay in full the payments of principal of, premium, if any, and interest on, the related Bonds as and when due and (b) require that all payments of principal of, or premium, if any, and interest on, the Recipient Bond or Bonds be made to the Trustee in such coin or currency of the United States of America as at the time of payment shall be legal

tender for the payment of public and private debts, and that each payment be made on or before the due date thereof.

Payment of Additional Project Costs

In the event that proceeds are not sufficient to pay the costs of the Project in full, the Recipient shall not be entitled to any reimbursement for that portion of the Project Costs as may be in excess of available proceeds from the Corporation, the Trustee or the holders of any Subordinated NYCMWFA Bonds, except from the proceeds of any additional financing which the Corporation may, in its sole and absolute discretion, provide. In the event that the Corporation does not provide additional financing, the City nevertheless shall be obligated to complete the Project in accordance with the Project Finance Agreement.

Tax Covenants

The Recipient covenants and agrees that it shall not take any action or omit to take any action within its reasonable control (i) which would result in the loss of the exclusion of the interest on any Subordinated NYCMWFA Bonds from gross income for purposes of Federal income taxation as that status is governed by Section 103(a) of the Code as in effect upon the issuance of such Subordinated NYCMWFA Bonds, (ii) which would cause any Subordinated NYCMWFA Bonds to be "Private Activity Bonds" within the meaning of section 141(a) of the Code as in effect upon the issuance of the Subordinated NYCMWFA Bonds or (iii) which would directly or indirectly permit the use of any proceeds of any Bonds (or amounts replaced with such proceeds) or any other funds, which use or action or omission would cause any Subordinated NYCMWFA Bonds to be "Arbitrage Bonds" within the meaning of Section 148(a) of the Code as in effect upon the issuance of such Subordinated NYCMWFA Bonds.

Payment of the Recipient Bonds

The Recipient covenants and agrees that it shall duly and punctually pay or cause to be paid (but solely from the sources therein provided) the principal or redemption price of its Recipient Bonds and the interest thereon, at the dates and places and in the manner stated in such Recipient Bonds and that such obligation shall not be subject to any defense (other than payment) or any rights of setoff, recoupment, abatement, counterclaim or deduction and shall be without any rights of suspension, deferment, diminution or reduction (including but not limited to any defenses or rights relating to the failure of the Corporation to make the Subsidy Credit available, or otherwise relating to the Subsidy Credit) it might otherwise have against the Corporation, DEC, DOH, the Trustee or the owner of any Subordinated NYCMWFA Bond.

Compliance with Recipient Second Resolution; Enforcement of Certain Agreements

The Recipient agrees to comply with the provisions of the Recipient Second Resolution, the Project Finance Agreement and the Lease (as defined in the Recipient Second Resolution) and to duly perform its covenants and agreements under the Financing Agreement, dated as of July 1, 1985 entered into pursuant to Section 1045-i of the New York City Municipal Water Finance Authority Act constituting Title 2A of Article 5 of the Public Authorities Law of the State.

Amendments, Supplements and Modifications

The Project Finance Agreement shall not be amended, supplemented or modified except by a written instrument executed by the Corporation, the Recipient and the City and upon compliance with the Financing Indenture.

Assignment of the Project Finance Agreement or the Recipient Bonds

The Recipient consents to the pledge and assignment of (i) any portion of the Corporation's estate, right, title and interest and claim in, to and under certain enumerated sections of the Project Finance Agreement and the right to make all related waivers and agreements in the name and on behalf of the Corporation, as agent and attorney-in-fact, and to perform all other related acts which are necessary and appropriate under the Project Finance Agreement, if any, and (ii) the Corporation's estate, right, title and interest and claim in, to and under the Recipient Bonds and payments under the Recipient Bonds to the Trustee. The Financing Indenture provides that, except during the continuance of a default under the Project Finance Agreement or an Event of Default under the Financing Indenture, the Trustee shall not sell, assign, transfer, convey or otherwise dispose of its interest in the Project Finance Agreement, if any, or in the Recipient Bonds without the express written consent of the Corporation and the Recipient. Notwithstanding the foregoing except during the occurrence and continuance of an Event of Default under the Recipient Second Resolution or Recipient General Resolution the Corporation's rights under the Project Finance Agreement will not be assigned to the Trustee without the consent of the Recipient. Except as provided in the Project Finance Agreement, the Corporation shall not sell, assign, transfer, convey or otherwise dispose of its interest in the Project Finance Agreement during the term of the Project Finance Agreement.

SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATED NYCMWFA INDENTURE

Liability Under Subordinated NYCMWFA Bonds

The Subordinated NYCMWFA Indenture provides that the Subordinated NYCMWFA Bonds shall not be general obligations of the Corporation, and shall not constitute an indebtedness of or a charge against the general credit of the Corporation. The liability of the Corporation under the Subordinated NYCMWFA Bonds shall be enforceable only to the extent provided in the Subordinated NYCMWFA Indenture and they shall be payable solely from the Recipient Bond Payments and any other funds held by the Trustee under the Subordinated NYCMWFA Indenture, and available for such payment. The Subordinated NYCMWFA Bonds shall not be a debt of the State of New York or The City of New York and neither the State of New York nor The City of New York shall be liable thereon. No owner of any Subordinated NYCMWFA Bond shall have the right to demand payment of the principal of, or premium, if any, or interest on the Subordinated NYCMWFA Bonds out of any funds raised by taxation.

Credit Facilities

In connection with the issuance of any series of Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture, the Corporation may obtain or cause to be obtained one or more Credit Facilities providing for payment of all or a portion of the principal of, redemption price or interest due or to become due on such Subordinated NYCMWFA Bonds, providing for the purchase of such Subordinated NYCMWFA Bonds by the issuer of such Credit Facility or providing funds for the purchase of such Subordinated NYCMWFA Bonds by the Corporation.

The Corporation may, in an agreement with the issuer of such Credit Facility, agree to directly reimburse such issuer for amounts paid under the terms of such Credit Facility, together with interest thereon (the "Reimbursement Obligation"); provided, however, that no Reimbursement Obligation shall be created, for purposes of the Subordinated NYCMWFA Indenture, until the related principal or interest payments on the Subordinated NYCMWFA Bonds are made from such Credit Facility; provided further that it shall be a condition to obtaining any Credit Facility that any Reimbursement Obligation or other obligation of the Corporation, to make any payments to the issuer of such Credit Facility shall be secured by a corresponding obligation of the Recipient to make payments in the same amounts to the Corporation, to reimburse the Corporation therefor. Any such Reimbursement Obligation may be secured by a pledge of, and a lien on, collateral and revenues securing such series of Subordinated NYCMWFA Bonds on a parity with the lien created by the Subordinated NYCMWFA Indenture and the applicable Supplemental Indenture. Any such Parity Corporation Reimbursement Obligation shall be deemed to be a part of the series of Subordinated NYCMWFA Bonds to which the Credit Facility which gave rise to such Parity Corporation Reimbursement Obligation relates. Any such Credit Facility shall be for the benefit of and secure such series of Subordinated NYCMWFA Bonds or portion thereof as specified in the applicable Supplemental Indenture.

Security for Subordinated NYCMWFA Bonds; Issuance of Subordinated NYCMWFA Bonds

Pledge and assignment effected by Subordinated NYCMWFA Indenture; Subordinated NYCMWFA Bonds equally and ratably secured; option of Corporation to assign certain further rights and remedies to Trustee. The Subordinated NYCMWFA Indenture provides that all Subordinated NYCMWFA Bonds issued and to be issued under the Subordinated NYCMWFA Indenture and all Parity Corporation Reimbursement Obligations are, and are to be, to the extent provided and subject to the Subordinated NYCMWFA Indenture, equally and ratably secured by the Subordinated NYCMWFA Indenture without preference, priority or distinction on account of the actual time or times of the

authentication or delivery or maturity or redemption of the Subordinated NYCMWFA Bonds and Parity Corporation Reimbursement Obligations, or any of them, so that, subject to the provisions of the Subordinated NYCMWFA Indenture, all Subordinated NYCMWFA Bonds and Parity Corporation Reimbursement Obligations at any time outstanding under the Subordinated NYCMWFA Indenture shall have the same right, lien and preference under and by virtue of the Subordinated NYCMWFA Indenture and shall all be equally and ratably secured with like effect as if they had all been simultaneously executed, authenticated and delivered. The aggregate principal amount of Subordinated NYCMWFA Bonds which may be executed and delivered by the Corporation and authenticated by the Trustee and secured by the Subordinated NYCMWFA Indenture is not limited except as is or may be provided in the Subordinated NYCMWFA Indenture or as may be limited by law.

As security for the payment of the principal of, and premium, if any, and interest on the outstanding Subordinated NYCMWFA Bonds and for the performance of each other obligation of the Corporation under the Subordinated NYCMWFA Indenture, the Corporation may pledge and assign to the Trustee certain portions of the Corporation's estate, right, title and interest and claim in, to and under certain sections of the Project Finance Agreement and the right to make all related waivers and agreements in the name and on behalf of the Corporation, as agent and attorney-in-fact, and to perform all other related acts which are necessary and appropriate under the Project Finance Agreement, subject to certain conditions set forth in the Subordinated NYCMWFA Indenture.

Except during the continuance of a default under the Project Finance Agreement or an Event of Default under the Subordinated NYCMWFA Indenture, the Trustee shall not sell, assign, transfer, convey or otherwise dispose of its interest in the Project Finance Agreement or in the Pledged Recipient Bonds without the express written consent of the Corporation and the Recipient.

Issuance of Additional Subordinated NYCMWFA Bonds to Finance Projects. One or more series of Additional Subordinated NYCMWFA Bonds may be authenticated by the Trustee and delivered upon original issuance, for the purpose of providing funds to finance all or a portion of the cost of construction of any Project, such purpose to be conclusively established by the documents referred to in the Subordinated NYCMWFA Indenture. The Corporation may execute and deliver to the Trustee, and the Trustee shall thereupon authenticate, such Additional Subordinated NYCMWFA Bonds and deliver them to the purchaser or purchasers thereof, provided that, prior to, or simultaneously with, such delivery, there shall have been delivered to the Trustee the proceeds (including accrued interest, if any) of the sale of such Additional Subordinated NYCMWFA Bonds in the amount specified in the order referred to in the Subordinated NYCMWFA Indenture.

Issuance of Additional Subordinated NYCMWFA Bonds for Refunding Purposes. From time to time the Corporation, in addition to the Subordinated NYCMWFA Bonds authorized to be executed, authenticated and delivered pursuant to the other provisions of the Subordinated NYCMWFA Indenture, may issue Additional Subordinated NYCMWFA Bonds for the purpose of refunding all or any part of any obligations then outstanding issued or incurred by the Corporation pursuant to an agreement with the Recipient or certain other outstanding obligations of the Recipient, but only upon the receipt by the Trustee of the documents required under the Subordinated NYCMWFA Indenture.

Additional Financial Assistance to the Recipient. Nothing contained in the Subordinated NYCMWFA Indenture shall be construed to limit the right of the Corporation to provide for any additional financial assistance to the Recipient pursuant to another indenture of trust or resolution and nothing contained in the Subordinated NYCMWFA Indenture shall be construed to require the Corporation to issue Additional Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture to fund such financial assistance to the Recipient.

Release of Additional Pledged DF Recipient Bonds and Pledged DF Recipient Bond Payments from Lien of the Subordinated NYCMWFA Indenture; Pledge of Additional Pledged DF Recipient Bonds and Additional Pledged DF Recipient Bond Payments.

The Corporation may release specific Pledged DF Recipient Bonds and Pledged DF Recipient Bond Payments from the lien created by the Subordinated NYCMWFA Indenture or substitute and add to the lien by providing and filing with the Trustee, (1) a revised schedule describing the specific Pledged DF Recipient Bonds and Pledged DF Recipient Bond Payments to be released and, if applicable, substituted therefor or added thereto, and (2) a certificate which demonstrates compliance with General Reserve Fund Release Test in each year Bonds are scheduled to be Outstanding.

The Trustee shall execute a release and such other instruments as the Corporation may reasonably request in order to evidence the release from the lien of the Subordinated NYCMWFA Indenture of the specific Pledged DF Recipient Bonds and Pledged DF Recipient Bond Payments to be released in accordance with the Subordinated NYCMWFA Indenture.

To the extent that any Pledged DF Recipient Bond is not payable to the Trustee, the Corporation shall transfer or cause to be transferred to the Trustee all Pledged DF Recipient Bond Payments upon receipt for deposit in the General Reserve Fund.

Amendment of Project Finance Agreement, Pledged Recipient Bonds, Recipient Second Resolution and Tax Regulatory Agreement

Amendments to Project Finance Agreement not requiring consent of Bondowners. The Corporation may, with prior written notice to the Trustee, but without consent of or notice to the Bondowners, amend or modify any provision of the Project Finance Agreement in any manner which (i) is required in connection with the issuance of Additional Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture; (ii) is required for the purpose of curing any ambiguity or formal defect or omission in the Project Finance Agreement; or (iii) will not affect the Subordinated NYCMWFA Bonds then outstanding, as determined in accordance with the Subordinated NYCMWFA Indenture as described in the second succeeding paragraph.

Amendments to Project Finance Agreement requiring consent of Bondowners. Except for amendments or modifications described in the Subordinated NYCMWFA Indenture, the Corporation shall not enter into any amendment or modification of the Project Finance Agreement without providing notice to the Trustee and obtaining the written consent of (a) in case all of the several series of Subordinated NYCMWFA Bonds then outstanding are affected by such modification or amendment, the owners of not less than sixty percent (60%) in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding, or (b) in case less than all of the several series of Subordinated NYCMWFA Bonds then outstanding are so affected, the owners of not less than sixty percent (60%) in aggregate principal amount of the aggregate of all Subordinated NYCMWFA Bonds so affected then outstanding; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Subordinated NYCMWFA Bonds of any specified series remain outstanding, the consent of the owners of such Subordinated NYCMWFA Bonds shall not be required and such Subordinated NYCMWFA Bonds shall not be deemed to be outstanding for the purpose of any calculation of outstanding Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture.

A series of Subordinated NYCMWFA Bonds shall be deemed to be affected by a modification or amendment of the Project Finance Agreement if the same materially adversely affects or diminishes the rights of the owners of any Subordinated NYCMWFA Bonds of such series. The Corporation may in its discretion determine whether or not in accordance with the provisions of the Subordinated NYCMWFA

Indenture the Subordinated NYCMWFA Bonds of any particular series would be affected by any modification or amendment of the Project Finance Agreement and any such determination shall be binding and conclusive on the Trustee and all owners of Subordinated NYCMWFA Bonds. The Corporation shall be entitled to rely upon an opinion of Bond Counsel with respect to the extent, if any, as to which any modification or amendment of the Project Finance Agreement affects the rights of any owners of Subordinated NYCMWFA Bonds then outstanding.

Amendments to the Pledged Recipient Bonds or the Recipient Second Resolution. The Corporation shall not consent to any amendment or modification of any outstanding Pledged Recipient Bonds or of the Recipient Second Resolution without providing notice to the Trustee and obtaining the prior written consent of (a) in case all of the several series of Subordinated NYCMWFA Bonds then outstanding are affected by such modification or amendment, the owners of not less than sixty percent (60%) in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding, or (b) in case less than all of the several series of Subordinated NYCMWFA Bonds then outstanding are so affected, the owners of not less than sixty percent (60%) in aggregate principal amount of the Subordinated NYCMWFA Bonds of each particular series so affected then outstanding; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Subordinated NYCMWFA Bonds of any specified series remain outstanding, the consent of the owners of such Subordinated NYCMWFA Bonds shall not be required and such Subordinated NYCMWFA Bonds shall not be deemed to be outstanding for the purpose of any calculation of outstanding Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture. No such modification or amendment shall be made which will affect the times, amounts and currency of payment of the principal, including sinking fund installments, if any, and of premium, if any, and interest on any Pledged Recipient Bonds.

A series shall be deemed to be affected by a modification or amendment of the Pledged Recipient Bonds or the Recipient Second Resolution if the same materially adversely affects or diminishes the rights of the owners of the Subordinated NYCMWFA Bonds of such series. The Corporation may in its discretion determine whether or not in accordance with the foregoing provisions Subordinated NYCMWFA Bonds of any particular series would be affected by any modification or amendment of the Pledged Recipient Bonds or the Recipient Second Resolution and any such determination shall be binding and conclusive on all owners of Subordinated NYCMWFA Bonds. The Corporation shall be entitled to rely upon an opinion of counsel with respect to the extent, if any, as to which any modification or amendment of the Pledged Recipient Bonds or the Recipient Second Resolution affects the rights of any owners of Subordinated NYCMWFA Bonds then outstanding, in accordance with the Subordinated NYCMWFA Indenture. The Corporation may in its discretion assign to the Trustee the right to consent to any amendment or modification of any outstanding series of Pledged Recipient Bonds or of the Recipient Second Resolution.

Amendments to Tax Regulatory Agreement. The Corporation may, without the consent of the Trustee and without notice to or consent of the Bondowners, enter into any amendment or modification of a Tax Regulatory Agreement upon the delivery to the Trustee of an opinion of Bond Counsel to the effect that the proposed amendment or modification will not adversely affect the exclusion from gross income for Federal income tax purposes of interest on the Subordinated NYCMWFA Bonds.

Cost of Issuance Fund; Investment Fund; Debt Service Fund

Creation and custody of pledged funds and accounts. The following funds and accounts are established under the Subordinated NYCMWFA Indenture:

- (1) Cost of Issuance Fund;
- (2) Investment Fund;
- (3) Debt Service Fund; and
- (4) General Reserve Fund.

Each such fund and account shall be held by the Trustee. At the election of the Corporation, a Debt Service Reserve Fund with respect to and for the benefit of one or more series of Bonds may be established pursuant to the Supplemental Indenture authorizing such Series. Moneys held in a Debt Service Reserve Fund shall be applied in accordance with the Subordinated NYCMWFA Indenture and with the Supplemental Indenture establishing the same. Within each such fund or account there is established an account or subaccount relating to each series of the Subordinated NYCMWFA Bonds. The Corporation may, by Supplemental Indenture establish one or more additional funds, accounts or subaccounts.

All funds and accounts established pursuant to the Subordinated NYCMWFA Indenture as described above and any amounts on deposit therein except interest earnings, which shall be applied in accordance with the Subordinated NYCMWFA Indenture, shall be available for and pledged for the payment of the Subordinated NYCMWFA Bonds unless the Supplemental Indenture establishing a fund, account or subaccount otherwise provides.

Cost of Issuance Fund. From the proceeds of each series of the Subordinated NYCMWFA Bonds, the amount set forth in the Subordinated NYCMWFA Indenture shall be deposited in the applicable account of the Cost of Issuance Fund. Such amounts shall be paid by the Trustee to pay issuance costs incurred in connection with the issuance of the Subordinated NYCMWFA Bonds. Upon certification by an Authorized Officer that no further costs of issuance are to be paid from such Account, the Trustee shall transfer any amounts remaining on deposit therein in accordance with the instructions of such Authorized Officer.

Investment Fund. The Trustee shall promptly deposit and hold in the Investment Fund the Pledged Recipient Bonds and the Recipient Bond Payments. On or before the date any payment of principal of, premium, if any, or interest on, the related series of Subordinated NYCMWFA Bonds is due, the Trustee shall withdraw from the Investment Fund and transfer to the funds and accounts set forth below the following amounts in the following order of priority:

FIRST: To the Debt Service Fund created with respect to such Subordinated NYCMWFA Bonds the amount, if any, required so that the balance in the Debt Service Fund shall equal the amount of principal, premium, if any, and interest, if any, due on such payment date; provided that for the purpose of computing the amount to be paid to the Debt Service Fund, there shall be excluded the amount, if any, set aside in the Debt Service Fund which was deposited therein as accrued interest or interest to be paid from the proceeds of the Subordinated NYCMWFA Bonds;

SECOND: To the Rebate Fund, the amount, if any, of any deficiency therein; and

THIRD: To the General Reserve Fund, the additional amount, if any, necessary so that the amount therein is equal to the General Reserve Fund Requirement, calculated as of such Debt Service Payment Date and as confirmed to the Trustee by the Corporation;

FOURTH: To the Master Trust Agreement Trustee for deposit in the Equity Fund to reimburse the appropriate Revolving Fund in the amount of any prior unreimbursed De-allocated Reserve Account Release Payments; and

FIFTH: To the extent that the Corporation certifies that amounts remaining in the Investment Fund are not required to make any future transfers pursuant to FIRST above, (assuming for purposes of such certification that unless an Event of Default shall exist under the Subordinated NYCMWFA Indenture or the Recipient Second Resolution, all future Recipient Bond Payments will be made in full when due), then all or any portion of remaining amounts in the Investment Fund, at the written direction of the Corporation, shall be paid (i) to the Corporation to reimburse the Corporation for any amounts owed by the Recipient to the Corporation pursuant to the Project Finance Agreement or (ii) to the Recipient.

Debt Service Fund. The Trustee shall promptly deposit the following receipts in the Debt Service Fund:

The amount, if any, of the proceeds of each series of Subordinated NYCMWFA Bonds, required by the Subordinated NYCMWFA Indenture to be deposited therein.

All amounts required to be transferred to the Debt Service Fund from the Investment Fund pursuant to paragraph "FIRST" above.

Amounts received from the Corporation for deposit in the Debt Service Fund in accordance with the Officer's Certificate delivered pursuant to the Subordinated NYCMWFA Indenture.

Any amounts required to be transferred to the Debt Service Fund from a Debt Service Reserve Fund which amounts shall be applied solely to pay the Related Series of Bonds.

Any amounts required to be transferred from the General Reserve Fund as described below, which amounts shall be applied to cure any deficiency in the amounts available to pay principal of, premium, if any, or interest on all Bonds.

Any De-allocated Reserve Account Release Payments.

Any other amounts required to be paid to the Debt Service Fund or otherwise made available for deposit therein by the Recipient or the Corporation, including amounts made available pursuant to the Subordinated NYCMWFA Indenture.

The Trustee shall pay out of the Debt Service Fund to the Paying Agents for any of such Subordinated NYCMWFA Bonds (i) on each interest payment date, the amount required for the payment of interest on such Subordinated NYCMWFA Bonds due on such interest payment date and (ii) on any redemption date, the amount required for the payment of accrued interest on such Subordinated NYCMWFA Bonds redeemed unless the payment of such accrued interest shall be otherwise provided for, and such amounts shall be applied by the Paying Agents to such payment.

The Trustee shall pay out of the Debt Service Fund to the Paying Agents for any of such Subordinated NYCMWFA Bonds on each principal payment date and redemption date for any of such Subordinated NYCMWFA Bonds, the amounts required for the payment of such principal or redemption price on such date, and such amounts shall be applied by the Paying Agent to such payments.

Amounts made available by the Recipient for such purpose may, and if so directed by the Corporation shall, be applied by the Trustee prior to the forty-fifth (45th) day preceding any sinking fund redemption date to the purchase of Subordinated NYCMWFA Bonds of the series and maturity that are subject to sinking fund redemption, at prices (including any brokerage and other charges) not exceeding

the redemption price payable for such Subordinated NYCMWFA Bonds pursuant to such sinking fund redemption plus unpaid interest accrued to the date of purchase. Any amounts so applied shall be credited to the next succeeding sinking fund installment for such Subordinated NYCMWFA Bonds. In connection with any such purchase, the Trustee, at the direction of the Corporation shall permit the Recipient to purchase a like principal amount of the Pledged Recipient Bonds of the same series and maturity at a purchase price equal to the price (including brokerage and other charges) paid for the purchase of the related Subordinated NYCMWFA Bonds.

Debt Service Reserve Funds; General Reserve Fund. (a) The Trustee shall promptly deposit in each Debt Service Reserve Fund the following receipts:

(1) any amounts required to be deposited therein in accordance with the Related Supplemental Indenture;

(2) subject to any transfer of investment earnings to the Earnings Fund or Rebate Fund required by the Related Tax Regulatory Agreement, any investment earnings on amounts on deposit in such Debt Service Reserve Fund; and

(3) any other amounts made available by the Corporation for deposit therein.

(b) The Trustee shall make the following transfers and payments from each Debt Service Reserve Fund on each Debt Service Payment Date in the following order of priority:

(1) On any Debt Service Payment Date on which any payment of interest on any Related Series of Bonds, the Trustee shall deposit in the Debt Service Fund the amounts held in such Debt Service Reserve Fund certified by the Corporation to be all or a portion of the Committed Subsidy Amount then available to the Recipient, determined in accordance with the Project Finance Agreement;

(2) On any Debt Service Payment Date for any Related Series of Bonds, the Trustee shall transfer from the Debt Service Reserve Fund for deposit in the Debt Service Fund, any amounts due on the Series 2013 A Bonds on such Debt Service Payment Date not yet available in the Debt Service Fund for such payment; and

(3) After making any transfers required by clauses (1) and (2) above, the Trustee shall transfer from the amount, if any, in a Debt Service Reserve Fund in excess of the related Debt Service Reserve Fund Requirement to the General Reserve Fund.

(c) The Trustee shall promptly deposit in the General Reserve Fund the following receipts:

(1) any amount required to be deposited therein in accordance with a Supplemental Indenture;

(2) all Pledged DF Recipient Bond Payments and any other proceeds of Pledged DF Recipient Bonds received by the Trustee;

(3) any amount required to be transferred to General Reserve Fund from a Debt Service Reserve Fund as described above;

(4) subject to any transfer of investment earnings to the Earnings Fund or Rebate Fund required by a Tax Regulatory Agreement, any investment earnings on amounts on deposit in such General Reserve Fund; and

(5) any other amounts made available by the Corporation.

(d) The Trustee shall make the following transfers and payments from the General Reserve Fund on each Debt Service Payment Date in the following order or priority:

(1) On any Debt Service Payment Date on which any payment of interest on Bonds is due, the Trustee shall transfer from the General Reserve Fund and deposit in the Debt Service Fund the moneys held in the General Reserve Fund certified by the Corporation to be all or a portion of the Committed Subsidy Amount then available to the Recipient, determined in accordance with the Project Finance Agreement;

(2) On any Debt Service Payment Date, after any transfers from any Debt Service Reserve Fund to the Debt Service Fund as described above the Trustee shall transfer from any amounts held in the General Reserve Fund for deposit in the Debt Service Fund, any amounts due on such Debt Service Payment Date not yet available in the Debt Service Fund for such payment; and

(3) After making any transfers required by clauses (1) and (2) above, as and to the extent so directed by the Corporation, the Trustee shall transfer amounts, if any, held within the General Reserve Fund in excess of the General Reserve Fund Requirement to the Master Trust Agreement Trustee for deposit in the De-Allocated Reserve Account in an amount equal to the amount released and transferred from the Series 2013 A Debt Service Fund to the General Reserve Fund as described above, with the balance, if any, to be deposited in the Equity Fund.

(e) All deposits, transfers and payments required by this Section shall be made in accordance with written directions of the Corporation.

Requests for De-allocated Reserve Account Release Payments. To the extent that there are not sufficient funds available under the Subordinated NYCMWFA Indenture on any date on which principal or interest is due on the Subordinated NYCMWFA Bonds for the payment of such principal or interest, the Trustee shall request an immediate transfer from the Master Trust Agreement Trustee of an amount equal to any deficiency of funds under the Subordinated NYCMWFA Indenture from any amounts available in the De-Allocated Reserve Account for the payment of Subordinated NYCMWFA Bonds.

Earnings Fund; Rebate Fund

Creation and Custody of Earnings Fund and Rebate Fund. The Subordinated NYCMWFA Indenture establishes an Earnings Fund and a Rebate Fund. Each such fund shall be held by the Trustee. The Rebate Fund and amounts on deposit therein are not available for and are not pledged for the payment of Subordinated NYCMWFA Bonds. The Earnings Fund and amounts on deposit therein are available for and are pledged for the payment of Subordinated NYCMWFA Bonds.

Earnings Fund. The Subordinated NYCMWFA Indenture provides for the periodic transfers of certain amounts from the Earnings Fund to the Rebate Fund. Computations of the amounts to be deposited in each fund under the Subordinated NYCMWFA Indenture and of the Rebate Amount shall be furnished to the Trustee by the Corporation in accordance with the Tax Regulatory Agreement. The Trustee is entitled conclusively to rely upon the accuracy of any such computation so furnished. Upon receipt of written instructions from an Authorized Officer, any amounts remaining in an account of the Earnings Fund after the calculation of the related Rebate Amount and the transfer of the required amount, if any, to the Rebate Fund shall be withdrawn by the Trustee and paid at the direction of the Corporation.

Rebate Fund. The Trustee shall promptly deposit in the related account of the Rebate Fund any amounts received pursuant to the Subordinated NYCMWFA Indenture or the Master Trust Agreement and any other amounts provided for such purpose by the Corporation or the Recipient. Amounts deposited in the Rebate Fund are to be applied in accordance with instructions of the Corporation to pay amounts, if any, determined owed to the United States of America under Section 148 of the Code, except to the extent otherwise permitted by the Subordinated NYCMWFA Indenture. The Trustee, upon the receipt of written instructions from an Authorized Officer specifying the amount of such excess, is authorized to withdraw the amount in excess of any then applicable Rebate Amount and pay it to or at the direction of the Corporation.

Security for and Investment of Moneys

Uninvested moneys held by the Trustee. All moneys received by the Trustee under the Subordinated NYCMWFA Indenture and not invested by the Trustee pursuant to the provisions of the Subordinated NYCMWFA Indenture, to the extent not insured by the Federal Deposit Insurance Corporation or other Federal agency, shall be deposited with the Trustee, or with a national or state bank or a trust company which has a combined capital and surplus aggregating not less than \$100,000,000.

Investment of, and payment of interest on, moneys. Moneys on deposit to the credit of the Cost of Issuance Fund, Debt Service Fund, Debt Service Reserve Fund, Investment Fund, Earnings Fund, General Reserve Fund or Rebate Fund may be retained uninvested as trust funds. Such moneys shall, at the direction of an Authorized Officer, be invested by the Trustee in the Permitted Investments described by the Subordinated NYCMWFA Indenture.

Investments of moneys on deposit to the credit of the Cost of Issuance Fund, Earnings Fund, Rebate Fund, Debt Service Fund, Debt Service Reserve Fund, General Reserve Fund or Investment Fund pursuant to the Subordinated NYCMWFA Indenture shall have maturity dates, or shall be subject to redemption or tender at the option of the Trustee, on the respective dates specified by an Authorized Officer, which dates shall be on or prior to the respective dates on which the moneys invested therein are payable for the purposes of such funds. The securities purchased with the moneys in each such fund shall be held by or under the control of the Trustee and shall be deemed a part of such fund. The interest, including any realized increment on securities purchased at a discount, received on all such securities in any fund shall be deposited by the Trustee to the credit of such fund, subject to the provisions of the Subordinated NYCMWFA Indenture. Losses, if any, realized on securities held in any fund shall be debited to such fund. The Trustee shall not be liable or responsible for any loss resulting from any such investment or resulting from the redemption, sale or maturity of any such investment as authorized by the Subordinated NYCMWFA Indenture. If at any time it shall become necessary that some or all of the securities purchased with the moneys in any such fund or account be redeemed or sold in order to raise the moneys necessary to comply with the provisions of the Subordinated NYCMWFA Indenture, the Trustee shall effect such redemption or sale, employing in the case of a sale any commercially reasonable method of effecting such sale.

Pledged DF Recipient Bonds shall not be considered investments for purposes of the foregoing limitations on investments.

Defaults and Remedies

Events of Default. The occurrence and continuation of one or more of the following events shall constitute an Event of Default:

(a) default in the payment of any installment of interest in respect of any Subordinated NYCMWFA Bond as the same shall become due and payable; or

(b) default in the payment of the principal of or premium, if any, in respect of any Subordinated NYCMWFA Bond as the same shall become due and payable either at maturity, upon redemption, by declaration or otherwise; or

(c) default in the payment of any sinking fund installment in respect of any Subordinated NYCMWFA Bond as the same shall become due and payable; or

(d) payment of the principal of and interest on the Pledged Recipient Bonds shall have been accelerated in accordance with the Recipient Second Resolution; or

(e) failure on the part of the Corporation duly to observe or perform any other of the covenants or agreements on the part of the Corporation contained in the Subordinated NYCMWFA Indenture, in the Master Trust Agreement (but solely to the extent that any such covenants or agreements would preserve the security for any Subordinated NYCMWFA Bonds afforded by the Master Trust Agreement and the pledge and assignment effected pursuant to the Master Trust Agreement) or in any Subordinated NYCMWFA Bond for a period of thirty (30) days after the date on which written notice of such failure, requiring the Corporation to remedy the same, shall have been given to the Corporation and the Recipient by the Trustee; provided that, if such failure cannot be corrected within such thirty (30) day period, it shall not constitute an Event of Default if corrective action is instituted by the Corporation within such period and is diligently pursued until the failure is corrected;

Upon the happening and continuance of any Event of Default specified in clause (d) above, the Trustee may, or upon written request of the owners of at least twenty-five percent (25%) in aggregate principal amount of all Subordinated NYCMWFA Bonds then outstanding, shall, by written notice given to the Corporation and to the Recipient and provided that the default has not theretofore been cured, declare the principal of all Subordinated NYCMWFA Bonds then outstanding to be due and payable immediately, and upon such declaration the said principal, together with interest accrued thereon, shall become due and payable immediately at the place of payment provided therein, anything in the Subordinated NYCMWFA Indenture or in the Subordinated NYCMWFA Bonds to the contrary notwithstanding. Except upon the occurrence and continuance of an Event of Default specified in clause (d) above, the Subordinated NYCMWFA Bonds will not be subject to acceleration. With respect to an Event of Default specified in clause (d) relating to the acceleration of the Pledged Recipient Bonds or clause (e) above relating to a Corporation default under the Master Trust Agreement, the Trustee shall not be charged with knowledge of such default until the Trustee shall have received or been deemed to have received notice thereof in accordance with the Subordinated NYCMWFA Indenture.

If, after the principal of said Subordinated NYCMWFA Bonds has been so declared to be due and payable but before all the Subordinated NYCMWFA Bonds shall have matured by their terms, all arrears of interest upon the Subordinated NYCMWFA Bonds are paid by the Corporation, and the Corporation also performs all other things in respect to which it may have been in default under the Subordinated NYCMWFA Indenture and pays the reasonable compensation and expenses of the Trustee and the Bondowners, including reasonable attorneys' fees, or provision satisfactory to the Trustee shall be made for such payments, then, and in every such case, the owners of a majority in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding, by written notice to the Corporation and to the Trustee, may annul such declaration and its consequences, and such annulment shall be binding upon the Trustee and upon all owners of Subordinated NYCMWFA Bonds, or, if the Trustee shall have acted in the absence of a written request of the owners of at least twenty-five percent (25%) in aggregate principal

amount of all outstanding Subordinated NYCMWFA Bonds, and if there shall not have been theretofore delivered to the Trustee written direction to the contrary by the owners of a majority in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding, then any such declaration shall ipso facto be deemed to be rescinded and any such default and its consequences shall ipso facto be deemed to be annulled; but no such annulment shall extend to or affect any subsequent default or impair or exhaust any right or remedy consequent thereon.

Judicial proceedings by Trustee. Upon the happening and continuance of any Event of Default, then and in every such case the Trustee in its discretion may, upon the written request of the owners of at least twenty-five percent (25%) in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding, and receipt of indemnity to its satisfaction shall (a) by suit, action or special proceeding, enforce all rights of the Bondowners and require the Corporation or the Recipient to perform its or their duties under the Act, the Project Finance Agreement, the Subordinated NYCMWFA Bonds, the Pledged Recipient Bonds and the Subordinated NYCMWFA Indenture, (b) bring suit upon the Subordinated NYCMWFA Bonds, (c) by action or suit in equity require the Corporation to account as if it were the trustee of an express trust for the Bondowners, or (d) by action or suit in equity enjoin any acts or things which may be unlawful or in violation of the rights of the Bondowners.

Limitation on actions by Bondowners. No owner of any of the Subordinated NYCMWFA Bonds shall have any right to institute any suit, action or proceeding in equity or at law for the enforcement of any trust under the Subordinated NYCMWFA Indenture, or any other remedy under the Subordinated NYCMWFA Indenture or under the Subordinated NYCMWFA Bonds, unless such owner previously shall have given to the Trustee written notice of an Event of Default as provided in the Subordinated NYCMWFA Indenture and unless also the owners of not less than twenty-five percent (25%) in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding shall have made written request of the Trustee so to do, after the right to exercise such powers or rights of action, as the case may be, shall have accrued, and shall have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted by the Subordinated NYCMWFA Indenture, or to institute such action, suit or proceeding in its or their name; nor unless there also shall have been offered to the Trustee security and indemnity satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall not have complied with such request within a reasonable time.

Concerning the Trustee and Paying Agent

No responsibility for own acts save willful misconduct or negligence. The Trustee may act upon the opinion or advice of any attorney (who may be the attorney or attorneys for the Corporation or the Recipient), approved by the Trustee in the exercise of reasonable care. The Trustee shall not be responsible for any loss or damage resulting from any action or non-action in good faith in reliance upon such opinion or advice. The Trustee shall not be liable for the exercise of any discretion or power under the Subordinated NYCMWFA Indenture or for anything whatever in connection with the trusts created in the Subordinated NYCMWFA Indenture, except only for its own willful misconduct or negligence.

Right to rely. The Subordinated NYCMWFA Indenture provides that the Trustee shall be protected and shall incur no liability in acting or proceeding in good faith upon any paper or document which it shall in good faith believe to be genuine and to have been authorized or signed by the proper Person or to have been prepared and furnished pursuant to any of the provisions of the Subordinated NYCMWFA Indenture, and the Trustee shall be under no duty to make any investigation or inquiry as to any statements contained or matters referred to in any such instrument but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements. Any action taken by the Trustee upon the request or consent of any Person who at the time of making such request or giving such consent is the owner of any Subordinated NYCMWFA Bond shall be conclusive and binding upon all

subsequent owners of such Subordinated NYCMWFA Bond or any Subordinated NYCMWFA Bond issued on registration of transfer thereof. The Trustee shall have no responsibilities for determining whether the Corporation and the Recipient have complied with the terms of the Tax Regulatory Agreement.

Removal of Trustee. The Trustee at any time and for any reason may be removed by an instrument in writing, appointing a successor, filed with the Trustee so removed and executed by the owners of a majority in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding; provided, however, that no such removal shall become effective until the acceptance of appointment by a successor Trustee in accordance with the Subordinated NYCMWFA Indenture.

The Trustee at any time other than during the continuance of an Event of Default and for any reason may be removed by an instrument in writing, executed by an Authorized Officer, appointing a successor, filed with the Trustee so removed; provided, however, that no such removal shall become effective until the acceptance of appointment by a successor Trustee in accordance with the Subordinated NYCMWFA Indenture.

Supplemental Indentures

Supplemental Indentures not requiring consent of Bondowners. Subject to the conditions and restrictions contained in the Subordinated NYCMWFA Indenture, the Corporation and the Trustee may, without the consent of or notice to the Bondowners, enter into an indenture or indentures supplemental to the Subordinated NYCMWFA Indenture, for any one or more of the following purposes (a) to cure any ambiguity or formal defect or omission in the Subordinated NYCMWFA Indenture, (b) to grant to or confer upon the Trustee for the benefit of the Bondowners any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Bondowners or the Trustee or either of them, (c) to subject to the provisions of the Subordinated NYCMWFA Indenture additional revenues, properties or collateral, (d) to modify, amend or supplement the Subordinated NYCMWFA Indenture or any Supplemental Indenture in such manner as to permit its qualification under any Federal statute now or hereafter in effect or under any state Blue Sky Law, and, in connection therewith, if they so determine, to add to the Subordinated NYCMWFA Indenture or any Supplemental Indenture, such other terms, conditions and provisions as may be permitted or required by said Federal statute or Blue Sky Law, provided that any such Supplemental Indenture shall not, in the judgment of the Trustee, be to the prejudice of the Owners of the Subordinated NYCMWFA Bonds, (e) to provide for the issuance of Additional Subordinated NYCMWFA Bonds, (f) to establish one or more funds, accounts or subaccounts pursuant to the Subordinated NYCMWFA Indenture and, (g) to provide for any change in the Subordinated NYCMWFA Indenture which, in the opinion of the Trustee, does not materially adversely affect or diminish the rights or interests of the Trustee or the Bondowners, provided that in making such determination the Trustee shall be entitled to rely on an opinion of counsel, in accordance with the Subordinated NYCMWFA Indenture.

Supplemental Indentures requiring consent of Bondowners. Except as otherwise provided in the Subordinated NYCMWFA Indenture, any modification or amendment of the Subordinated NYCMWFA Indenture may be made only with the consent of (a) in case all of the several series of Subordinated NYCMWFA Bonds then outstanding are affected by such modification or amendment, the owners of not less than sixty percent (60%) in aggregate principal amount of the Subordinated NYCMWFA Bonds then outstanding, or (b) in case less than all of the several series of Subordinated NYCMWFA Bonds then outstanding are so affected, the owners of not less than sixty percent (60%) in aggregate principal amount of the aggregate of all Subordinated NYCMWFA Bonds so affected then outstanding; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Subordinated NYCMWFA Bonds of any specified series remain outstanding, the consent of the owners of such

Subordinated NYCMWFA Bonds shall not be required and such Subordinated NYCMWFA Bonds shall not be deemed to be outstanding for the purpose of any calculation of outstanding Subordinated NYCMWFA Bonds under the Subordinated NYCMWFA Indenture. No such modification or amendment shall be made which will reduce the percentages of aggregate principal amount of Subordinated NYCMWFA Bonds, the consent of the owners of which is required for any such modification or amendment, or change the provisions of the Subordinated NYCMWFA Indenture relative to approval by series of Subordinated NYCMWFA Bonds, or permit the creation by the Corporation of any lien prior to or, except to secure Additional Subordinated NYCMWFA Bonds, on a parity with, the lien of the Subordinated NYCMWFA Indenture upon the Recipient Bond Payments and other funds pledged under the Subordinated NYCMWFA Indenture, or which will affect the times, amounts and currency of payment of the principal (including sinking fund payments, if any) of and premium, if any, and interest on the Subordinated NYCMWFA Bonds without the consent of the owners of all Subordinated NYCMWFA Bonds then outstanding and affected thereby.

For the purposes of the Subordinated NYCMWFA Indenture, a series of Subordinated NYCMWFA Bonds shall be deemed to be affected by a modification or amendment of the Subordinated NYCMWFA Indenture if the same materially adversely affects or diminishes the rights of the owners of the Subordinated NYCMWFA Bonds of such series. The Trustee may in its discretion determine whether or not in accordance with the foregoing provisions Subordinated NYCMWFA Bonds of any particular series would be affected by any modification or amendment of the Subordinated NYCMWFA Indenture and any such determination shall be binding and conclusive on the Corporation and all Owners of the Subordinated NYCMWFA Bonds. For purposes of the Subordinated NYCMWFA Indenture, the Trustee shall be entitled to rely upon an opinion of counsel with respect to the extent, if any, as to which such action affects the rights under the Subordinated NYCMWFA Indenture of any Owners of Subordinated NYCMWFA Bonds then outstanding, in accordance with the Subordinated NYCMWFA Indenture.

If at any time the Corporation shall request the consent of Bondowners to the execution of any such Supplemental Indenture for any of the purposes of the Subordinated NYCMWFA Indenture, the Trustee shall, upon being satisfactorily indemnified with respect to expenses, cause notice of the proposed execution of such Supplemental Indenture to be given to Bondowners in the manner provided in the Subordinated NYCMWFA Indenture. Such notice shall briefly set forth the nature of the proposed Supplemental Indenture and shall state that copies thereof are on file at the principal office of the Trustee for inspection by all Bondowners. If, within sixty (60) days or such longer period as shall be prescribed by the Corporation following the giving of such notice, the required consent and approval of Bondowners is obtained, no Owner of any Subordinated NYCMWFA Bond shall have any right to object to any of the terms and provisions contained therein.

The Trustee shall execute any Supplemental Indenture executed and delivered in accordance with the Subordinated NYCMWFA Indenture; provided that, if, in the opinion of the Trustee, any such Supplemental Indenture adversely affects the rights, duties, immunities or obligations of the Trustee under the Subordinated NYCMWFA Indenture or otherwise, the Trustee may in its discretion resign in accordance with the provisions of the Subordinated NYCMWFA Indenture, and upon giving notice of such resignation the Trustee, in accordance with the Subordinated NYCMWFA Indenture, shall have no obligation to execute such Supplemental Indenture.

Defeasance

If at any time (a) there shall have been delivered to the Trustee for cancellation any or all of the Subordinated NYCMWFA Bonds (other than any Subordinated NYCMWFA Bonds which have been mutilated, lost, stolen or destroyed and which shall have been replaced or paid as provided in the Subordinated NYCMWFA Indenture except for any such Subordinated NYCMWFA Bonds as are shown

by proof satisfactory to the Trustee to be held by bona fide purchasers), or (b) with respect to any or all of the Subordinated NYCMWFA Bonds not theretofore delivered to the Trustee for cancellation, the whole amount of the principal and the interest and the premium, if any, due and payable or to become due and payable on such Subordinated NYCMWFA Bond or Subordinated NYCMWFA Bonds then outstanding shall be paid or deemed to be paid. Provision shall also be made for paying all other sums payable under the Subordinated NYCMWFA Indenture, including the Corporation's, Trustee's and Paying Agents' fees and expenses with respect to such Subordinated NYCMWFA Bonds, then the Trustee, in such case, on demand of the Corporation made at the direction of the Recipient, shall release the lien of the Subordinated NYCMWFA Indenture with respect to such Subordinated NYCMWFA Bond or Subordinated NYCMWFA Bonds and turn over to or at the direction of the Corporation the Pledged Recipient Bonds relating to such Subordinated NYCMWFA Bond or Bonds or, if such Subordinated NYCMWFA Bonds constitute less than all of the Subordinated NYCMWFA Bonds of a series, shall exchange the Pledged Recipient Bonds corresponding to such Subordinated NYCMWFA Bonds for Pledged Recipient Bonds having the same terms except that the principal amount thereof shall be equal to the principal amount of the Subordinated NYCMWFA Bonds relating to such Pledged Recipient Bonds outstanding after giving effect to such payment (or provision therefor) or cancellation and shall execute such documents as may be reasonably required by the Corporation and the Recipient and in the case of such release in respect of all Subordinated NYCMWFA Bonds, shall turn over to or at the direction of the Corporation any balances remaining in any fund created under the Subordinated NYCMWFA Indenture, other than moneys and Investment Obligations (as defined in the second succeeding paragraph) retained for the redemption or payment of Subordinated NYCMWFA Bonds; otherwise, the Subordinated NYCMWFA Indenture shall be, continue and remain in full force and effect.

Notwithstanding the foregoing, the Trustee shall not release any funds held pursuant to the Subordinated NYCMWFA Indenture to the Corporation until it shall have received an opinion of Bond Counsel to the effect that such funds may be transferred to the Corporation without adversely affecting the exclusion of interest on any series of Subordinated NYCMWFA Bonds from gross income for Federal income tax purposes.

Subordinated NYCMWFA Bonds shall be deemed to be paid whenever there shall have been deposited with the Trustee (whether upon or prior to the maturity or the redemption date of such Subordinated NYCMWFA Bonds) either moneys in an amount which shall be sufficient, or noncallable obligations issued or guaranteed by or backed by the full faith and credit of, the United States of America (including certificates or any other evidence of an ownership interest in any such obligation or in specified portions thereof, which may consist of specified portions of the principal thereof or the interest thereon) (herein referred to as "Investment Obligations") certified by an independent accounting firm of national reputation to be of such maturities and interest payment dates and to bear such interest as will, without the necessity of further investment or reinvestment of either the principal amount thereof or interest therefrom, provide moneys which, together with the moneys, if any, deposited with the Trustee at the same time, shall be sufficient to pay when due the principal of, and premium, if any, and interest due and to become due on all such Subordinated NYCMWFA Bonds on and prior to the redemption date or maturity date thereof, as the case may be, and if redeemed prior to maturity an irrevocable instruction to mail the redemption notice as provided in the Subordinated NYCMWFA Indenture has been given, and the Trustee shall have been directed to give notice to the Registered Owners of such Subordinated NYCMWFA Bonds in the manner provided in the Subordinated NYCMWFA Indenture that a deposit meeting the requirements of this paragraph has been made and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal of, and premium, if any, and interest on, such Subordinated NYCMWFA Bonds; provided, however, that neither Investment Obligations nor moneys deposited with the Trustee pursuant to this paragraph nor principal or interest payments on any Investment Obligations shall be withdrawn, or used for any purpose other than, and

shall be held in trust for, the payment of the principal of, and premium, if any, and interest on such Subordinated NYCMWFA Bonds.

No Individual Liability

No covenant or agreement contained in the Subordinated NYCMWFA Bonds or in the Subordinated NYCMWFA Indenture shall be deemed to be the covenant or agreement of any director, officer, agent, or employee of the Corporation in his or her individual capacity, and neither the directors of the Corporation nor any official executing the Subordinated NYCMWFA Bonds shall be liable personally on the Subordinated NYCMWFA Bonds or be subject to any personal liability or accountability by reason of the issuance thereof.

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ATTACHMENT 1

**CERTAIN INFORMATION RELATING TO THE
NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY
AND TO THE SYSTEM**

New York City Municipal Water Finance Authority
255 Greenwich Street, 6th Floor
New York, New York 10007
212-788-5889

Mark Page, <i>ex officio</i>	<i>Member</i>
Joseph J. Martens, <i>ex officio</i>	<i>Member</i>
David M. Frankel, <i>ex officio</i>	<i>Member</i>
Carter H. Strickland, Jr., <i>ex officio</i>	<i>Member</i>
Marc V. Shaw	<i>Member</i>
Max Von Hollweg	<i>Member</i>

Alan L. Anders	<i>Chief Executive Officer</i>
Thomas G. Paolicelli	<i>Executive Director</i>
Marjorie E. Henning	<i>Secretary</i>
Michele Mark Levine	<i>Comptroller</i>
Robert L. Balducci	<i>Deputy Comptroller</i>
Prescott D. Ulrey	<i>Assistant Secretary</i>
Jeffrey M. Werner	<i>Assistant Secretary</i>
Raymond Orlando	<i>Director of Media and Investor Relations</i>

New York City Water Board
59-17 Junction Boulevard, 8th Floor
Flushing, New York 11373-5108
718-595-4032

Alan Moss	<i>Chair</i>
Alfonso L. Carney, Jr.	<i>Member</i>
Mehul Patel	<i>Member</i>
Arlene M. Shaw	<i>Member</i>
Benjamin A. Tisdell	<i>Member</i>

Steven Lawitts	<i>Executive Director</i>
Mathilde O. McLean	<i>Treasurer</i>
Greg L. Ascierto	<i>Deputy Treasurer</i>
Albert F. Moncure, Jr.	<i>Secretary</i>

Authority Consultants

Bond Counsel	<i>Orrick, Herrington & Sutcliffe LLP</i>
Consulting Engineer	<i>AECOM USA, Inc.</i>
Financial Advisors	<i>Lamont Financial Services Corporation</i>
	<i>Drexel Hamilton, LLC</i>
	<i>Acacia Financial Group, Inc.</i>
Rate Consultant	<i>Amawalk Consulting Group LLC</i>

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SUMMARY STATEMENT

The following is a brief summary of the information contained in this Attachment 1 and is subject in all respects to the additional information contained herein, including the appendices attached hereto. Defined terms have the same meaning herein as elsewhere in this Attachment 1.

Use of Proceeds:	The proceeds of the Authority's Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series 1 (the "Fiscal 2014 Series 1 Bonds") will be applied to refund certain of the Outstanding Authority Second Resolution Bonds previously issued to secure New York State Environmental Facilities Corporation (the "Corporation") bonds.
Description of the Bonds:	The Fiscal 2014 Series 1 Bonds are being issued by the Authority in the principal amount of \$401,090,000 pursuant to its Water and Sewer System Second General Revenue Bond Resolution, adopted on March 30, 1994, as amended (the "Authority Second Resolution"), and its Supplemental Resolution No. 98 adopted on June 14, 2013.
The System:	The Water System provides approximately 1,010 million gallons per day (mgd) of water to approximately 836,000 accounts in the City. It supplies water to approximately 9 million people, of which approximately 8.2 million are in the City and the balance are in Westchester, Putnam, Orange and Ulster Counties. The Sewer System is comprised of an extensive network of sewage collection and treatment facilities that treat approximately 1,300 mgd of wastewater. Under the Act, the Lease and the Agreement, the Board is obligated to pay the operating expenses of the System. The City is obligated to operate and maintain the System regardless of payment by the Board.

Revenue Bond Coverage (Cash Basis):

	Historical (1)			Projected (1)(2)	
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
	(Millions of Dollars)				
Revenues Available for Debt Service	\$2,622.4	\$3,039.6	\$3,277.7	\$3,432.3	\$3,538.2
Authority Expenses	29.4	33.4	41.1	39.4	43.8
Water Board Expenses	9.1	3.9	6.4	21.1	37.6
Net Operating Expenses (3)	1,343.6	1,023.7	1,174.1	1,257.7	1,399.4
Cash Financed Capital Construction	—	—	—	—	225.0
Cash Defeasance of Debt	—	259.3	235.6	250.0	—
Base Rental Payment	163.0	218.9	225.0	208.7	241.2
O&M Reserve Deposit	(4.0)	—	12.5	20.6	5.7
Total Expenses (4)	1,541.1	1,539.2	1,694.7	1,797.6	1,952.7
Total First Resolution Bond Debt Service	500.6	526.9	442.6	341.9	355.1
Net Debt Service on Subordinated Indebtedness (5)	340.7	596.9	642.9	627.7	663.6
Net Surplus	245.4	376.8	497.5	665.1	566.8
First Resolution Debt Service Coverage	5.24x	5.77x	7.41x	10.04x	9.96x
First and Second Resolution Debt Service Coverage (5)(6)	3.08x	2.68x	2.98x	3.50x	3.43x
Rate Increase (7)	12.9%	12.9%	7.5%	7.0%	5.6%

Totals may not add due to rounding.

- (1) Historical figures, which are derived from the accounting records used to prepare the statements of cash flows contained in the annual financial statements, and projected figures are shown on a cash basis.
- (2) Projections are as of May 10, 2013.
- (3) Includes credits for excess prior year payments to the City. Not including Authority and Board Expenses.
- (4) Includes Authority Expenses.
- (5) Includes interest on Commercial Paper Notes and reflects offset of carryforward revenues and subsidies provided by the New York State Environmental Facilities Corporation.
- (6) Revenues for coverage purposes are net of Authority expenses.
- (7) Actual rate increase.

Total Authority Debt Outstanding:

As of the date of this Attachment 1, the Authority has approximately \$7.4 billion of Authority First Resolution Bonds (defined below), and \$21.3 billion of Authority Second Resolution Bonds Outstanding (defined below), of which \$435,155,000 are to be refunded with the proceeds of the Fiscal 2014 Series 1 Bonds, including \$422.9 million in bond anticipation notes issued to the Corporation. See “CAPITAL IMPROVEMENT AND FINANCING PROGRAM—DEBT SERVICE REQUIREMENTS.” In addition, the Authority currently has an \$800 million commercial paper program.

Capital Program:

The City’s Ten Year Capital Strategy, which is updated every two years, was released on May 2, 2013 (the “Ten Year Capital Strategy”). The Ten Year Capital Strategy includes the projected capital improvements to the System for Fiscal Years 2014 through 2023. The City’s Current Capital Plan (the “Current Capital Plan”), which covers Fiscal Years 2013 through 2017, was published on May 2, 2013, is updated three times each Fiscal Year and is consistent with the Ten Year Capital Strategy for Fiscal Years 2014 through 2017. Projected capital improvement costs to the System for Fiscal Years 2013 through 2023 are reflected in the Capital Improvement Program (the “CIP”), which consists of the Current Capital Plan and the last six years of the Ten Year Capital Strategy. The CIP is designed to maintain a satisfactory level of service, to improve operation of the System and to address future System requirements.

Bond Financing Program:

The following table shows, as of May 10, 2013, total Authority indebtedness expected to be issued, excluding refunding bonds, from Fiscal Year 2013 to Fiscal Year 2017.

<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Period Total</u>
(Millions of Dollars)					
\$1,770.0	\$1,486.0	\$1,274.0	\$1,327.0	\$1,258.0	\$7,115.0

As of the date of this Attachment 1, during Fiscal Year 2013 the Authority has issued \$1.1 billion of Authority Second Resolution Bonds, not including refunding bonds and bond anticipation notes.

**Security for the Authority Second
Resolution Bonds:
Revenue Pledge:**

The Authority Second Resolution Bonds are special obligations of the Authority, payable solely from and secured by a pledge of amounts on deposit in the Subordinated Indebtedness Fund established under the Authority First Resolution and all moneys and securities in any of the funds and accounts established under the Authority Second Resolution, except the Arbitrage Rebate Fund and the Debt Service Reserve Fund.

Rate Covenant:

The Board has covenanted to establish and collect rates, fees and charges sufficient in each Fiscal Year so that Revenues collected in such Fiscal Year will be at least equal to the sum of 115% of Aggregate Debt Service on all Authority First Resolution Bonds Outstanding and on any Projected Series of Authority First Resolution Bonds (excluding Refundable Principal Installments for the payment of which funds are held in trust) payable in such Fiscal Year, and 100% of the Operating Expenses and Required Deposits (which includes debt service on the Authority Second Resolution Bonds and other Subordinate Indebtedness) to the extent required to be paid from Revenues for such Fiscal Year.

Additional Bonds Test:

Additional Authority Second Resolution Bonds may be issued for capital purposes under the Authority Second Resolution only if the Revenues for either of the last two Fiscal Years preceding the Fiscal Year in which the Authority Second Resolution Bonds are to be issued were at least equal to the sum of (i) 110% of the Aggregate Debt Service for such Fiscal Year on the Authority First Resolution Bonds, the Authority Second Resolution Bonds and certain other Subordinated Indebtedness (excluding any Debt Service paid from sources other than the Revenues) and (ii) 100% of the sum of Operating Expenses and Required Deposits for such Fiscal Year (excluding Required Deposits for the payment of Outstanding Authority Second Resolution Bonds and certain other Subordinated Indebtedness). Authority

	Second Resolution Refunding Bonds may be issued under the Authority Second Resolution either upon satisfaction of such conditions or other conditions.
No Debt Service Reserve Fund:	The Fiscal 2014 Series 1 Bonds will not be secured by the Debt Service Reserve Fund.
Rates:	Rates, fees and charges are imposed by the Board and are not subject to regulatory approval except for those rates charged to a limited class of upstate users representing approximately 1.7% of Revenues.
The Authority:	The Authority, a separate legal entity established in 1984, has the power to (i) issue bonds, bond anticipation notes and other obligations for the purpose of financing the renovation and improvement of the System, (ii) refund its bonds and notes and general obligation bonds of the City issued for water or sewer purposes, (iii) require the Board to fix rates sufficient to pay the costs of operating and financing improvements to the System and (iv) require the City to maintain the System adequately. The Authority has no taxing power.
The Board:	The Board, a separate legal entity established in 1984, has leased the System from the City. It is authorized to fix and collect rates, fees and charges adequate to pay the cost of operating and financing the System.
The Agreement:	Pursuant to the Agreement, the Authority has agreed to finance capital projects for the System, both current work and work commenced in prior years, through the issuance of bonds, notes or other indebtedness secured by revenues of the System.
The Lease:	Pursuant to the Lease, the Board has acquired the System from the City for a term continuing until provision has been made for the repayment of all Outstanding Authority First Resolution Bonds, Authority Second Resolution Bonds or other indebtedness of the Authority.

INTRODUCTORY STATEMENT

General

The purpose of this Attachment 1 is to set forth certain information pertaining to the New York City Municipal Water Finance Authority (the “Authority”), a public benefit corporation duly created and existing under the New York City Municipal Water Finance Authority Act, as amended (the “Act”); the New York City Water Board (the “Board”), a public benefit corporation created and existing under Chapter 515 of the Laws of 1984, both of which laws were enacted by the Legislature of the State of New York (the “State”); and the Authority’s Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series 1 (the “Fiscal 2014 Series 1 Bonds”). Capitalized terms used in this Attachment 1 and not defined herein shall have the meanings ascribed thereto in “APPENDIX C—GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS—Glossary.”

Pursuant to a lease agreement (the “Lease”) between the Board and The City of New York (the “City”), dated as of July 1, 1985, as amended, the Board has leased from the City its facilities for the collection, transmission and distribution of water (the “Water System”) and its facilities for the collection, treatment and disposal of sewage (the “Sewer System”) (collectively, the “System”). As required by the Act and the Lease, the System is operated and maintained by the Department of Environmental Protection of the City (“DEP”). The Board has also entered into a financing agreement, dated as of July 1, 1985, as amended (the “Agreement”), with the Authority and the City for the financing of capital improvements to the System through the issuance of bonds, notes and other obligations under the Authority’s Water and Sewer System General Revenue Bond Resolution adopted on November 14, 1985, as amended (the “Authority First Resolution” and, bonds issued thereunder the “Authority First Resolution Bonds”), or subordinate obligations of the Authority under its Authority Second Resolution (defined below). Pursuant to the Lease and the Agreement, the Board has agreed to levy and collect rates, fees and charges. Pursuant to the Lease, the City may, with the prior written consent of the Board, grant interests in the Leased Property which, in the reasonable judgment of the Board, do not interfere with the operation and maintenance of the System and the collection of the Revenues from the System.

The Fiscal 2014 Series 1 Bonds will be issued by the Authority pursuant to its Water and Sewer Second General Revenue Bond Resolution adopted on March 30, 1994, as amended (the “Authority Second Resolution”), and its Supplemental Resolution No. 98 adopted on June 14, 2013 (the “Supplemental Resolution”). All bonds issued under the Authority Second Resolution are referred to herein as “Authority Second Resolution Bonds.” The Authority Second Resolution and the Supplemental Resolution are collectively referred to herein as the “Resolutions”. The Bank of New York Mellon serves as trustee under the Resolutions (in such capacity, the “Trustee”) and will continue to serve as Trustee unless a successor is appointed in accordance with the Authority Second Resolution.

The Authority Second Resolution Bonds are special obligations of the Authority, payable solely from and secured by a pledge of amounts on deposit in the Subordinated Indebtedness Fund established by the Authority First Resolution and all moneys or securities in any of the funds and accounts established under the Authority Second Resolution, subject only to provisions of the Authority Second Resolution and the Agreement relating to the use and application thereof. The Board has covenanted in the Agreement to maintain rates, fees and charges at sufficient levels to produce in each twelve-month period beginning on July 1 (a “Fiscal Year”) an amount equal to 115% of the Aggregate Debt Service and Projected Debt Service on the Authority First Resolution Bonds to become due in such Fiscal Year on all Authority First Resolution Bonds, plus 100% of the operation and maintenance expenses of the System certified by the City and of Required Deposits (which includes the debt service on the Authority Second Resolution Bonds and other subordinate debt) to the extent required to be paid from Revenues. The Agreement requires a report of the Rate Consultant setting forth its recommendations as to any revisions of the rates, fees and charges necessary or advisable to meet the requirements of the rate covenant. The Board is obligated to take necessary action to cure or avoid any deficiency. See “SECURITY FOR THE AUTHORITY SECOND RESOLUTION BONDS—Rate Covenant.” The

Agreement also requires a Consulting Engineer to review the operation and maintenance of the System, and further requires the City to operate and maintain the System in accordance with the advice and recommendations of the Consulting Engineer. See “SECURITY FOR THE AUTHORITY SECOND RESOLUTION BONDS.”

Rates, fees and charges are imposed by the Board and are not subject to regulatory approval under current law except for the rates charged to a limited class of upstate users, representing approximately 1.7% of Revenues. See “RATES AND BILLINGS.”

The Authority has relied upon AECOM USA, Inc. (“AECOM”), its Consulting Engineer, for certain engineering feasibility information and upon Amawalk Consulting Group LLC (“Amawalk Consulting”), its Rate Consultant, for certain financial estimates and projections. See “ENGINEERING FEASIBILITY REPORT AND FORECASTED CASH FLOWS.”

Financial Projection Assumptions

The estimates and projections contained in this Attachment 1 are based on, among other factors, evaluations of historical revenue and expenditure data and analyses of economic trends affecting the Authority’s finances. The financial projections contained herein are subject to certain contingencies that cannot be quantified and are subject to the uncertainties inherent in any attempt to predict the results of future operations. Accordingly, such projections are subject to periodic revision which may involve substantial change. Consequently, the Authority makes no representation or warranty that these estimates and projections will be realized.

The financial projections contained in this Attachment 1, including bond financings, operating and maintenance expenses, debt service, revenues, sources and uses of funds, and forecasted cash flows and rate increases, were prepared as of May 10, 2013, and are expected to be updated annually. Actual financial results will differ from these projections.

PLAN OF FINANCE

The Authority Second Resolution Bonds to be refunded with the Fiscal 2014 Series 1 Bonds were previously issued to secure Corporation bonds. Upon the refunding of those Corporation bonds, the related Authority Second Resolution Bonds will be canceled. In addition, contemporaneously with the issuance of the Fiscal 2014 Series 1 Bonds, the Authority expects to issue approximately \$213.9 million of its Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series 2 (the “Fiscal 2014 Series 2 Bonds” which, together with the Fiscal 2014 Series 1 Bonds are collectively referred to herein as the “Fiscal 2014 Series 1 and Series 2 Bonds”) to evidence a direct loan to the Authority from the Corporation.

On June 19, 2013, the Authority entered into a contract of purchase with certain underwriters in connection with the sale of \$344,335,000 aggregate principal amount of New York City Municipal Water Finance Authority Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2013 Series EE (the “Fiscal 2013 Series EE Bonds”). The Authority expects to issue and deliver the Fiscal 2013 Series EE Bonds on June 27, 2013.

THE FISCAL 2014 SERIES 1 BONDS

The Fiscal 2014 Series 1 Bonds initially delivered to the Corporation will be dated their date of delivery. The Fiscal 2014 Series 1 Bonds will mature in amounts and bear interest at rates sufficient in the aggregate, together with subsidy payments from the Corporation, to pay the principal of, premium, if any, and interest on the Corporation’s Series 2013 A Bonds when due. Principal of, redemption premium, if any, and interest on the Fiscal 2014 Series 1 Bonds will be payable in lawful money of the United States of America.

SECURITY FOR THE AUTHORITY SECOND RESOLUTION BONDS

Revenues

The Act empowers the Board to establish and collect rates, fees and charges for the use of service provided by the System in order to receive Revenues, which together with other available amounts, will be sufficient to place the System on a self-sustaining basis. All Revenues of the System are deposited by the Board in the Local Water Fund held by the Board. The Authority holds a statutory first lien on the Revenues for the payment of all amounts due to the Authority under the Agreement. In the event that the Board fails to make any required payment to the Authority, the Authority or the Trustee may petition for the appointment, by any court having jurisdiction, of a receiver to administer the affairs of the Board, and, with court approval, establish rates and charges to provide Revenues sufficient to make required payments. However, no holder or owner of any bond or note issued by the Authority, or any receiver of the System, may compel the sale of any part of the System.

The City has covenanted in the Agreement to operate and maintain the System in accordance with the advice and recommendations of the Consulting Engineer. Such obligation to operate and maintain the System may be enforced by the Authority in accordance with the provisions of the Act and the terms of the Agreement and the Lease and is not contingent on payment by the Board. The amounts required to operate and maintain the System are certified to the Board by the City and reviewed by the Consulting Engineer.

Beginning on the first day of each month the Board is required to pay to the Trustee under the Authority First Resolution the Revenues in the Local Water Fund, for deposit in the Revenue Fund established under the Authority First Resolution until the amount so deposited equals the Minimum Monthly Balance and the Required Deposits for such month. The Minimum Monthly Balance is the amount required to accumulate the funds necessary for timely payment of all debt service on Outstanding Bonds. Required Deposits are the amounts required to be paid from Revenues for deposit to the Authority Expense Fund (including both periodic and termination payments under Interest Rate Exchange Agreements (see “APPENDIX D — FINANCIAL STATEMENTS — Note 5”)), the Debt Service Reserve Fund and the Subordinated Indebtedness Fund, including amounts required for payment of the Authority Second Resolution Bonds and other subordinate debt. See “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Agreement — Minimum Monthly Balance.”

After the Board makes the deposits described above to the Authority First Resolution Revenue Fund in such month from the balance remaining in the Local Water Fund, the Board is required, after paying monthly Board Expenses, to pay the City 1/12 of the Operating Expenses for such Fiscal Year. After making such payments, any amounts remaining in the Local Water Fund in each month are paid proportionately (a) to the Trustee for deposit in the Authority First Resolution Revenue Fund until the total of all amounts deposited in the Authority First Resolution Revenue Fund equals the Cash Flow Requirement for such Fiscal Year and (b) to the City until all amounts required to be paid to the City for Operating Expenses for such Fiscal Year have been paid. Pursuant to the Authority Second Resolution, amounts deposited into the Authority First Resolution Revenue Fund in any Fiscal Year in excess of the amounts required to be deposited into the Authority First Resolution’s Debt Service Fund, Authority Expense Fund, Debt Service Reserve Fund, and Arbitrage Rebate Fund are to be deposited into the Subordinated Indebtedness Fund established under the Authority First Resolution until the amount on deposit therein, together with the amounts on deposit in the Revenue Fund and Debt Service Fund established under the Authority Second Resolution, equals the Aggregate Debt Service for such Fiscal Year on Authority Second Resolution Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations. For a more complete description of the required payments from the Local Water Fund, see “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Authority First Resolution” and “Summary of the Agreement.”

Amounts on deposit in the Subordinated Indebtedness Fund will be available to pay debt service on Authority Second Resolution Bonds to the extent not otherwise required under the terms of the Authority First Resolution. As soon as practicable in each calendar month a portion of the amounts on deposit in the Subordinated Indebtedness Fund will be transferred free and clear of the lien of the

Authority First Resolution to the Revenue Fund under the Authority Second Resolution in an amount sufficient, together with the amount on deposit in the Revenue Fund and Debt Service Fund established under the Authority Second Resolution, to make the amount on deposit therein equal the Monthly Balance (as defined in the Authority Second Resolution). The Monthly Balance is the amount required to provide for timely payment of all Debt Service on Outstanding Authority Second Resolution Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations. See “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — GLOSSARY — Definition of Certain Terms Used in Authority Second Resolution — Monthly Balance.”

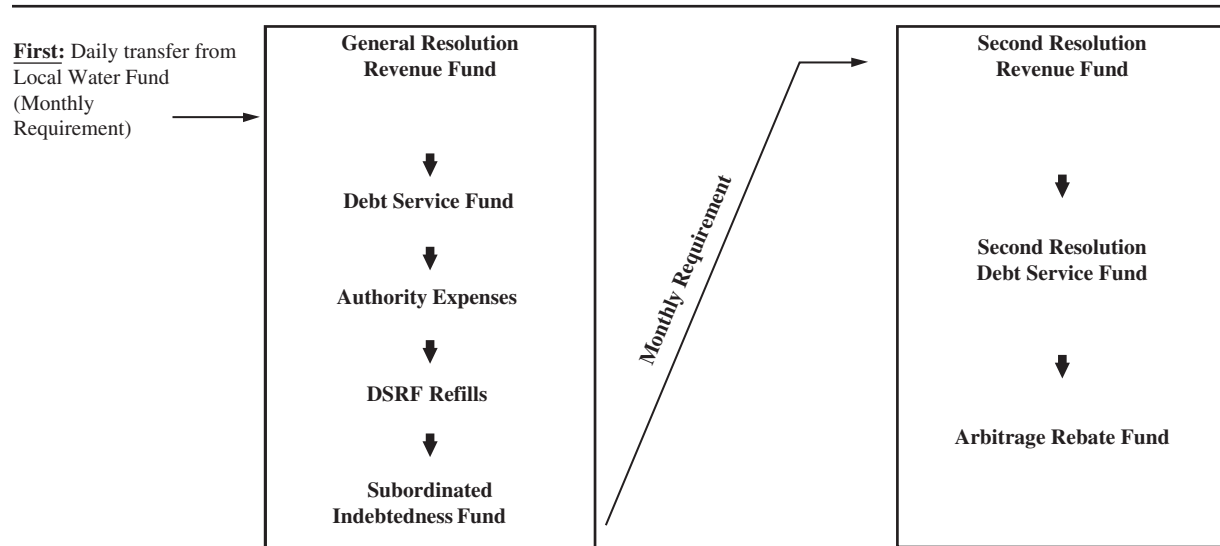
In addition, beginning on the day when no Authority First Resolution Bonds are Outstanding, Revenues are to be deposited from the Local Water Fund into the Revenue Fund established under the Authority Second Resolution. As described below, such Revenues will be used to make payments to the Authority Expense Fund, the Arbitrage Rebate Fund and the Subordinated Indebtedness Fund established under the Authority Second Resolution.

Amounts on deposit in the Revenue Fund established under the Authority Second Resolution are to be paid to the following funds established under the Authority Second Resolution in the following order of priority: first, to the Debt Service Fund; second, if no Authority First Resolution Bonds are then Outstanding, to the Authority Expense Fund; third, to the Debt Service Reserve Fund to replenish any deficiency therein; fourth, to the Arbitrage Rebate Fund; and fifth, if no Authority First Resolution Bonds are then Outstanding, to the Subordinated Indebtedness Fund established under the Authority Second Resolution, the amount required to be deposited in such Fund for such month in accordance with the Authority Budget. See “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Authority Second Resolution — Payments into Certain Funds.”

The Fiscal 2014 Series 1 and Series 2 Bonds will be on a parity with all other outstanding Authority Second Resolution Bonds heretofore and hereafter issued. The Fiscal 2014 Series 1 and Series 2 Bonds are payable from and secured by a pledge of (a) amounts on deposit in the Subordinated Indebtedness Fund, subject, however, to the first lien on such amounts in favor of Authority First Resolution Bonds and (b) except as described below under the heading “Debt Service Reserve Fund,” all moneys or securities in any of the funds and accounts established under the Authority Second Resolution, except the Arbitrage Rebate Fund. See “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Authority Second Resolution” and “Summary of the Agreement.”

Pursuant to the Agreement, the Authority First Resolution and the Authority Second Resolution, the Revenues received by the Board will be applied in the manner set forth in the following chart. The information contained in such chart is qualified by reference to the Agreement, the Authority First Resolution and the Authority Second Resolution.

Consolidated Flow of Funds



Second: Daily transfer from Local Water Fund (Monthly Requirement)

→ • Water Board Expenses

Third: Daily transfer from Local Water Fund (Monthly Requirement)

→ • System Operations and Maintenance

Fourth: Daily transfer from Local Water Fund (Up to Annual Requirement)

→ Pro rata to:
 • First Resolution Revenue Fund: for annual Debt Service, Authority expenses, DSRF, Subordinate Indebtedness (Second Resolution)
 • System Operations and Maintenance

Fifth - Seventh: Daily transfer from Local Water Fund (After Debt Service is set aside; typically funded during the last few months of the fiscal year)

→ • City lease payment, operating and maintenance reserve replenishment, surplus including pay as you go capital

Debt Service Reserve Fund

No deposit will be made to the Debt Service Reserve Fund established under the Authority Second Resolution upon the issuance of the Fiscal 2014 Series 1 and Series 2 Bonds, and the Fiscal 2014 Series 1 and Series 2 Bonds will not be secured by any amounts on deposit in such Debt Service Reserve Fund in the future. For a discussion of the Debt Service Reserve Fund established under the Authority Second Resolution, see “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Authority Second Resolution — Debt Service Reserve Fund.”

Rate Covenant

The Board has covenanted in the Agreement to establish, fix, revise and collect rates, fees and charges for the use of, or the services furnished by the System, adequate, together with other available funds, to provide for (i) the timely payment of Principal Installments of and interest on all Authority First Resolution Bonds, and the principal of and interest on any other indebtedness of the Authority (which includes Authority Second Resolution Bonds and other subordinate debt) payable from Revenues, (ii) the proper operation and maintenance of the System, (iii) all other payments required for the System not otherwise provided for, and (iv) all other payments required pursuant to the Agreement and the Lease.

Without limiting the generality of the foregoing, the Board has covenanted to establish and collect rates, fees and charges sufficient in each Fiscal Year so that Revenues collected in such Fiscal Year will be at least equal to the sum of 115% of Aggregate Debt Service and Projected Debt Service on all Authority First Resolution Bonds payable in such Fiscal Year, and 100% of the Operating Expenses and Required Deposits (including debt service on Authority Second Resolution Bonds and other subordinate debt) required to be paid from Revenues for such Fiscal Year (the “Rate Covenant”). For information about the treatment of Refundable Principal Installments under the Rate Covenant, see “— Refundable Principal Installments” below.

Under the Authority First Resolution and the Authority Second Resolution, the Authority is required to submit to the Board by May 1 of each year the Authority Budget for the ensuing Fiscal Year showing the itemized estimated Cash Flow Requirement for such Fiscal Year. At the beginning of each month, the Authority is to recalculate the Cash Flow Requirement for the then current Fiscal Year and to submit any revisions to the Authority Budget required as a consequence to the Board. The Authority Budget and Cash Flow Requirement are to be used by the Board to set rates, fees and charges.

The Board has covenanted in the Agreement to review the adequacy of rates, fees and charges at least annually. If such annual review, or the report of the Rate Consultant required pursuant to the Agreement, indicates that the rates, fees and charges are or will be insufficient to meet the requirements of the Rate Covenant described above, the Board will promptly take the necessary action to cure or avoid any such deficiency. In addition, under the Agreement, the City, which is responsible for billing, collecting and enforcing collections of rates and charges established by the Board, has agreed that it will diligently pursue all actions necessary to cure or avoid any such deficiency.

The Board has covenanted in the Agreement that it will not furnish or supply or cause to be furnished or supplied any product, use or service of the System free of charge or at a nominal charge, and will enforce (or cause the City to enforce) the payment of any and all amounts owing to the Board for use of the System, except to the extent required by the Act, as in effect on July 24, 1984.

Additional Authority Second Resolution Bonds

The Authority may issue additional Authority Second Resolution Bonds to pay for capital improvements to the System, to pay or provide for the payment of Authority First Resolution Bonds, Authority Second Resolution Bonds, bond anticipation notes, including commercial paper notes, to refund general obligation bonds of the City issued for water or sewer purposes and to fund certain reserves. Under the Authority Second Resolution such additional Authority Second Resolution Bonds may be issued on a parity with all Outstanding Authority Second Resolution Bonds only upon satisfaction of certain requirements including receipt by the Trustee of a certificate by an Authorized Representative of the Authority to the effect that the Revenues for either of the last two Fiscal Years immediately preceding the Fiscal Year in which such Authority Second Resolution Bonds are to be issued were at least equal to the sum of 110% of the Aggregate Debt Service on Outstanding Authority First Resolution Bonds, Authority Second Resolution Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations during such Fiscal Year (excluding from Aggregate Debt Service the amount thereof paid from a source other than Revenues), and 100% of the sum of the Operating Expenses of the System certified by the City and the Required Deposits for such Fiscal Year (excluding Required Deposits for the payment of Outstanding Authority Second Resolution Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations).

The Authority may issue additional Authority Second Resolution Bonds for the purpose of refunding Outstanding Bonds without satisfaction of the requirements described above only if:

- (a) the average annual debt service on the refunding Authority Second Resolution Bonds does not exceed the average annual debt service on the Authority Second Resolution Bonds to be refunded, and

(b) the maximum debt service in any Fiscal Year on the refunding Authority Second Resolution Bonds does not exceed the maximum debt service in any Fiscal Year on the Authority Second Resolution Bonds to be refunded.

See “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Authority Second Resolution.”

Authority Debt

At the date of this Attachment 1, the Authority has approximately \$7.4 billion aggregate principal amount of Outstanding Authority First Resolution Bonds (Capital Appreciation Bonds are included at their full accreted value at maturity). In addition, at the date of this Attachment 1, the Authority has approximately \$21.3 billion aggregate principal amount of Outstanding Authority Second Resolution Bonds, of which \$435,155,000 are to be refunded with the proceeds of the Fiscal 2014 Series 1 Bonds, including \$422.9 million in bond anticipation notes issued to the New York State Environmental Facilities Corporation. Of such Authority First Resolution Bonds and Authority Second Resolution Bonds, approximately \$3.6 billion are adjustable rate demand bonds, none of which is insured and none of which is an auction rate bond. Interest Rate Exchange Agreements are used to hedge \$401 million of the Authority’s adjustable rate demand bonds (see “APPENDIX D — FINANCIAL STATEMENTS — Note 5”).

Authority Second Resolution Bonds are payable from, among other sources, and secured by a pledge of, amounts on deposit in the Subordinated Indebtedness Fund, subject to the first lien on such amounts in favor of the Authority First Resolution Bonds. Amounts on deposit in the Subordinated Indebtedness Fund will be available, to the extent not utilized for Authority First Resolution Bonds, to pay debt service on Authority Second Resolution Bonds.

The Authority’s adjustable rate demand bonds are all supported by liquidity facilities with various banks in the form of standby bond purchase agreements. None of the standby bond purchase agreements supporting adjustable rate demand bonds provides for acceleration or a mandatory term out of bonds purchased thereunder, but all have provisions for the rates to be adjusted upward (up to 25% in the case of bonds held by a liquidity provider) in the event of the inability to remarket such bonds. For further information regarding agreements supporting the Authority’s adjustable rate demand bonds see Appendix E hereto, which also includes liquidity agreements for \$400 million of commercial paper.

The Authority is currently authorized to have outstanding up to \$800 million of commercial paper notes, including up to \$400 million of the Extendable Municipal Commercial Paper Notes described below (collectively, the “Commercial Paper Notes”). The Commercial Paper Notes are special obligations of the Authority, the proceeds of which are used to pay the costs of capital improvements to the System. The Commercial Paper Notes, Series One and Series Six are each secured by standby line of credit agreements which provide liquidity for such Commercial Paper Notes. The Authority has authorized its Extendable Municipal Commercial Paper Notes, Series Seven and Extendable Municipal Commercial Paper Notes, Series Eight (collectively, the “EMCP Notes”). Principal of and interest on the EMCP Notes are not secured by any liquidity or credit facility and are payable from remarketing proceeds and the proceeds of additional EMCP Notes, Authority First Resolution Bonds or Authority Second Resolution Bonds. If payment of an EMCP Note is not made on its stated maturity date, which may not be more than 90 days after its date of issuance, the maturity date will be automatically extended to a date that is 270 days after the EMCP Note’s issuance. Payment of the interest accrued through the original maturity date will be deferred until the extended maturity date. Upon extension, the EMCP Note will bear interest on the principal and deferred interest at a rate determined by a formula that is based upon a percentage of the SIFMA Municipal Index, which changes weekly, plus an upward adjustment that ranges from an additional 100 basis points to 400 basis points depending upon the ratings on the EMCP Notes. Currently, the adjustment would be 100 basis points. Interest on the extended EMCP Notes is payable monthly. The principal, deferred interest and accrued and unpaid interest on the extended EMCP Notes is payable on the extended maturity date.

Interest on the Commercial Paper Notes is secured by the Revenues of the System and the moneys and investments from time to time on deposit in the Subordinated Indebtedness Fund and the funds and accounts established under the respective commercial paper resolutions authorizing their issuance. However, the pledge of the Revenues and the moneys and investments from time to time on deposit in the Subordinated Indebtedness Fund is subject and subordinate to the pledge thereof made by the Authority First Resolution for the benefit of the holders of Authority First Resolution Bonds. Principal of the Commercial Paper Notes is secured solely by the proceeds of bonds issued to repay the Commercial Paper Notes.

The Authority's obligations to the banks providing standby lines of credit in connection with outstanding Commercial Paper Notes, including the Authority's obligation to pay principal of and interest on indebtedness incurred under such lines of credit, are secured by a pledge of the moneys and investments on deposit in the Subordinated Indebtedness Fund on a parity with the pledge to secure the Authority Second Resolution Bonds. Indebtedness incurred by the Authority under such lines of credit, if not repaid within 90 days, becomes payable over a period ending on the earlier of (i) three years after the expiration of the line of credit agreement or (ii) five years after the date of incurrence of such indebtedness. Interest on such advances is also secured by a pledge of Revenues which is subordinate to the pledge securing the Authority First Resolution Bonds.

Refundable Principal Installments

As permitted by the Authority Second Resolution, the Authority has designated the maturities of certain Bonds as "Refundable Principal Installments." The table below shows the series, maturity dates and principal amounts of those Bonds. A "Refundable Principal Installment" is an installment of principal which the Authority intends to pay with moneys that are not Revenues. In calculating Adjusted Debt Service for purposes of the additional bonds test and Debt Service Reserve Fund Requirement under the Authority Second Resolution, the stated principal amount of a Refundable Principal Installment is treated as if it were payable over a period extending from the due date of such Refundable Principal Installment through the last date on which it could have been authorized to be paid under the Act. The assumed amortization is calculated based upon equal annual payments of principal and interest over such period, with interest at the actual interest cost of the Series of Bonds that include the Refundable Principal Installment. The Adjusted Debt Service will continue to be calculated in this manner through the Fiscal Year in which each Refundable Principal Installment is stated to be due, unless the Authority has not made provision for its payment from sources other than Revenues by the time it adopts its budget for the Fiscal Year in which a Refundable Principal Installment is stated to be due. If provision has not been made by that time, Adjusted Debt Service for the Fiscal Year in which the Refundable Principal Installment comes due will include the full amount of the Refundable Principal Installment. See "CAPITAL IMPROVEMENT AND FINANCING PROGRAM — Debt Service Requirements."

Refundable Principal Installments

<u>Series</u>	<u>Maturity Date (June 15)</u>	<u>Principal Amount</u>
2012 Series DD	2018	\$ 35,000,000
2012 Series DD	2027	15,000,000
2012 Series GG	2017	25,000,000
2012 Series GG	2019	25,000,000
Total		<u>\$100,000,000</u>

For purposes of the Board's rate covenant, Refundable Principal Installments may be excluded from Debt Service to the extent they are payable from funds held in trust therefor. See "— Rate Covenant."

Derivatives

In an effort to reduce its borrowing costs over the life of its bonds, the Authority has entered into interest rate exchange agreements. For more information on the Authority's interest rate exchange agreements, see "APPENDIX D — FINANCIAL STATEMENTS — Note 5."

Covenant of the State

Section 1045-t of the Act constitutes a pledge of the State to the holders of Authority First Resolution Bonds and Authority Second Resolution Bonds not to limit or alter the rights vested in the Authority or the Board by the Act to fulfill the terms of any agreement made with or for the benefit of the holders of the Authority First Resolution Bonds and Authority Second Resolution Bonds until such obligations together with the interest thereon are fully met and discharged.

THE AUTHORITY

Purpose and Powers

The Authority is a public benefit corporation created pursuant to the Act. Among its powers under the Act, the Authority may borrow money, issue debt and enter into the Agreement, and refund its bonds and notes and general obligation bonds of the City issued for water or sewer purposes. Additionally, the Authority has the power to require that the Board charge and collect sufficient rates to pay the costs of operating and financing the System and to enforce the obligation of the City to adequately operate and maintain the System, regardless of reimbursement by the Board of costs incurred by the City for operation and maintenance.

Pursuant to the Act, there is a statutory first lien on the Revenues in favor of the payment of all amounts due to the Authority under the Agreement. The Revenues remain subject to this lien until provision for payment of all indebtedness issued by the Authority has been made.

Membership

The Act authorizes a seven-member board to administer the Authority (there is currently one vacancy). Four of the members of the Board of Directors are designated in the Act as *ex officio* members: the Commissioner of Environmental Protection of the City, the Director of Management and Budget of the City, the Commissioner of Finance of the City and the Commissioner of Environmental Conservation of the State. Of the three remaining public members, two are appointed by the Mayor and one is appointed by the Governor. The public members have terms of two years. Pursuant to the Act, all members continue to hold office until their successors are appointed and qualified.

The current members of the Board of Directors are:

<u>Member</u>	<u>Occupation</u>
Mark Page (1)	Director of Management and Budget of the City
Joseph J. Martens (1)	Commissioner of Environmental Conservation of the State
David M. Frankel (1)	Commissioner of Finance of the City
Carter H. Strickland, Jr. (1)	Commissioner of Environmental Protection of the City
Marc V. Shaw (2)	Senior Vice Chancellor, City University of New York
Max Von Hollweg (2)	Retired Partner, Sidley Austin LLP

(1) *Ex officio*.

(2) Appointed by the Mayor.

The following is a brief description of certain officers and staff members of the Authority:

Alan L. Anders, Chief Executive Officer

Mr. Anders was appointed Chief Executive Officer in March 2007 after serving as Executive Director from June 2002 and Treasurer from October 1990 to June 2002. Mr. Anders also serves as Deputy Director for Finance of the Office of Management and Budget of the City. Prior to joining the Authority and the City in September 1990, Mr. Anders had been a senior investment banker for J.P. Morgan Securities since 1977. Prior to that date, he was Executive Director of the Commission on Governmental Efficiency and Economy in Baltimore, Maryland. Mr. Anders is a graduate of the University of Pennsylvania and the University of Maryland Law School.

Thomas G. Paolicelli, Executive Director

Mr. Paolicelli was appointed Executive Director in August 2008. Prior to joining the Authority, Mr. Paolicelli was a Vice President/Senior Analyst for Moody's Investors Service ("Moody's") in

their U.S. Public Infrastructure Team. Prior to joining Moody's, Mr. Paolicelli worked at the Authority for nearly 5 years where he served in several capacities, including most recently as Treasurer. He has a Master's in Public Administration from the University of Albany and a Bachelor's in Civil Engineering from the University of Buffalo.

Marjorie E. Henning, Secretary

Ms. Henning was appointed Secretary in November 1993. Ms. Henning also serves as General Counsel to the Office of Management and Budget of the City. Ms. Henning is a graduate of the State University of New York at Buffalo and the Harvard Law School.

Michele Mark Levine, Comptroller

Ms. Levine was appointed Comptroller in February 2008 after serving as Assistant Comptroller since February 2005. She is a graduate of the State University of New York at Binghamton and the Maxwell School of Citizenship and Public Administration at Syracuse University.

Robert L. Balducci, Deputy Comptroller

Mr. Balducci was appointed Deputy Comptroller in March 2011 after having served as Assistant Comptroller since December 2008. He is a graduate of Baruch College of the City University of New York.

Prescott D. Ulrey, Assistant Secretary

Mr. Ulrey was appointed Assistant Secretary in February 1998. Mr. Ulrey also serves as Counsel to the Office of Management and Budget of the City. He is a graduate of the University of California at Berkeley, the Fletcher School of Law and Diplomacy of Tufts University and Columbia Law School.

Jeffrey M. Werner, Assistant Secretary

Mr. Werner was appointed Assistant Secretary in March 2004. Mr. Werner also serves as Deputy Counsel to the Office of Management and Budget of the City. He is a graduate of Bowdoin College and Columbia Law School.

Raymond Orlando, Director of Media and Investor Relations

Mr. Orlando was appointed Director of Media and Investor Relations in June 2000. He is a graduate of the University of Pennsylvania and the John F. Kennedy School of Government at Harvard University.

THE BOARD

Purpose and Powers

The Board is a public benefit corporation of the State created by Chapter 515 of the Laws of 1984. The primary responsibility of the Board is to fix, revise, charge, collect and enforce rates and other charges for the System.

The Board is required under the Act to establish rates that will provide adequate funds to pay the debt service on outstanding Authority indebtedness and the City's cost of operating and maintaining the System. In each Fiscal Year, any amounts remaining in the Local Water Fund, after making the required payments under the Agreement, shall be deposited in the General Account in the Operation and Maintenance Reserve Fund and shall be available either as a source of funding for System expenditures or upon certification of the City for deposit to the Authority's Construction Fund to pay for the costs of System capital projects. See "APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Summary of the Agreement—Application of Moneys in the Operation and Maintenance Reserve Fund."

Pursuant to the Lease, the Board has a leasehold interest in the System for a term continuing until all Bonds or other obligations issued by the Authority are paid in full or provision for payment has been made. Under the Lease, the City is required to provide billing, collection, enforcement and legal services to the Board. The Board is required to compensate the City for the cost of these services.

Membership

The Board consists of seven members who are appointed by the Mayor for terms of two years. There are currently two vacancies. The Act provides that at least one member will have experience in the science of water resource development and that no member of the Board will be a member of the Authority. The Chairman is appointed by the Mayor. Pursuant to the Act, all members continue to hold office until their successors are appointed and qualified.

The current members of the Board are:

<u>Member</u>	<u>Occupation</u>
Alan Moss, Chair	Retired
Alfonso L. Carney, Jr.	Principal, Rockwood Partners LLC
Mehul J. Patel	Vice President, Moynihan Station Development Corporation
Arlene M. Shaw	Associate, Schulte Roth & Zabel LLP
Benjamin A. Tisdell	Vice President, Lazard Freres & Co.

The following is a brief description of the staff members of the Board:

Steven Lawitts, Executive Director

Mr. Lawitts was appointed Executive Director in May 2006. He was appointed Chief Financial Officer of DEP in January 2010, where he had served since November 2008 as Acting Commissioner and as First Deputy Commissioner since May 2006. Prior to joining DEP, Mr. Lawitts served as Senior Vice President at the New York City School Construction Authority for three years. Mr. Lawitts previously served as Deputy Commissioner of the New York City Department of Sanitation for nearly ten years. Prior to that, Mr. Lawitts served sixteen years in the transportation industry, including the MTA (where he was Chief Financial Officer of the Long Island Railroad), Conrail and Amtrak. Mr. Lawitts is a graduate of Columbia College and received an MBA from Columbia University.

Mathilde O. McLean, Treasurer

Ms. McLean was appointed Treasurer in June 2010. Prior to joining DEP, Ms. McLean worked as a financial consultant to the New York State Environmental Facilities Corporation, an Assistant

Vice President at Citigroup in the Municipal Securities Division Infrastructure Group, and a Consultant with Public Financial Management. Ms. McLean is a graduate of Dartmouth College and received an MBA from Columbia University. She is also a CFA charterholder.

Greg L. Ascierto, Deputy Treasurer

Mr. Ascierto was appointed Deputy Treasurer in September 2011. He has worked for the Water Board since 1993, serving as counsel since 2000. Mr. Ascierto received his J.D. from Brooklyn Law School and his B.S. from the University of Buffalo.

Albert F. Moncure, Jr., Secretary

Mr. Moncure was named Acting Secretary in February 1997 and Secretary in April 1997. Mr. Moncure also serves as Chief of the Municipal Finance Division of the New York City Law Department. Mr. Moncure has worked for the Law Department since 1986. Mr. Moncure is a graduate of Dartmouth College and the Yale Law School.

THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Organization

Over 5,700 DEP staff members are assigned to the System. Approximately 800 people within the System staff are assigned to the design and construction of ongoing capital projects, including projects within the CIP, as hereinafter defined, and approximately 400 provide administrative and support services to both System and non-System staff. There are approximately 200 additional employees within the DEP staff whose duties are not related to water and sewer service and whose cost is not included as a System cost.

The New York City Department of Design and Construction (the “DDC”) has responsibility for the construction and reconstruction of water and sewer mains in the City. Based upon current workloads, a proportion of DDC’s staff equivalent to 350 full-time positions is devoted to System construction projects.

DEP is managed by a Commissioner, who is appointed by the Mayor. It is organized into seven functional areas: (1) Utility Operations, (2) Capital Program Delivery, (3) Sustainability and Regulatory Compliance, (4) Financial Management and Customer Service, (5) Legal Affairs, (6) Police and Security, and (7) Executive.

Utility Operations consists of the Office of Strategic Planning and three operating Bureaus: the Bureau of Wastewater Treatment; the Bureau of Water Supply; and the Bureau of Water and Sewer Operations. All operating bureaus coordinate activities through the Chief Operating Officer.

Capital Program Delivery is managed by the Bureau of Engineering, Design and Construction, which manages the design and construction of major capital projects, including major water transmission facilities, water treatment facilities, wastewater treatment and disposal facilities, wastewater pumping stations and stormwater/Combined Sewer Overflow facilities.

Sustainability and Regulatory Compliance is managed by the Sustainability group, which is responsible for the development and implementation of environmental policy and strategy, including water and air quality, the noise code, and other quality of life issues. Sustainability includes the Office of Green Infrastructure, the Bureau of Environmental Planning and Analysis and the Bureau of Environmental Compliance.

Financial Management and Customer service is managed by the office of the Chief Financial Officer. The Chief Financial Officer oversees the Budget Office and the Bureau of Customer Service and is also responsible for overseeing the administrative functions consisting of procurement, information technology, engineering audit, and human resources.

Legal Affairs is responsible for handling DEP’s legal matters. The Bureau of Police and Security is responsible for protecting the City water supply and the associated critical infrastructure from terrorism, pollution and crime. Executive includes the Commissioner and Chief of Staff, as well as the Bureau of Communication and Intergovernmental Affairs.

The following are brief descriptions of certain management personnel responsible for the operation of the System.

Carter H. Strickland, Jr., Commissioner

Mr. Strickland was appointed Commissioner effective August 17, 2011. Prior to then, Mr. Strickland served as Deputy Commissioner for Sustainability since January 2010. Prior to joining DEP, Mr. Strickland served as the Senior Policy Advisor for Air and Water with the Mayor’s Office of Long Term Planning and Sustainability. His other positions have included Acting Director and Associate Clinical Professor, Rutgers Environmental Law Clinic, and Assistant Attorney

General, New York State Attorney General's Office. Mr. Strickland received his J.D. from Columbia University School of Law and his B.A. from Dartmouth College.

Steven Lawitts, Chief Financial Officer

Mr. Lawitts was appointed Chief Financial Officer in January 2010 after serving since November 2008 as Acting Commissioner and as First Deputy Commissioner since May 2006. Prior to joining DEP, Mr. Lawitts served as Senior Vice President at the New York City School Construction Authority for three years. Mr. Lawitts previously served as Deputy Commissioner of the New York City Department of Sanitation for nearly ten years. Prior to that, Mr. Lawitts served sixteen years in the transportation industry, including the MTA (where he was Chief Financial Officer of the Long Island Railroad), Conrail and Amtrak. Mr. Lawitts is a graduate of Columbia College and received an MBA from Columbia.

Kathryn Garcia, Chief Operating Officer

Ms. Garcia was appointed Chief Operating Officer in January 2012. Since joining DEP in early 2006, Ms. Garcia has served as the agency's Chief of Staff, the Assistant Commissioner for the Office of Strategic Projects and most recently as Deputy Commissioner for Operations. Prior to joining DEP, she worked for a consulting firm, Appleseed, specializing in economic development strategies and urban planning. Ms. Garcia began her career at the NYC Department of Finance in the Audit and Enforcement Division, before pursuing opportunities in affordable housing development with the Local Initiatives Support Corporation. Ms. Garcia is a graduate of the University of Wisconsin-Madison.

Angela Licata, Deputy Commissioner

Ms. Licata was appointed Deputy Commissioner for Sustainability in December 2011. She has been with DEP since 1988 and has served in numerous positions most recently as Deputy Commissioner of the Bureau of Environmental Planning and Analysis. Ms. Licata is a graduate of Harpur College, Binghamton University.

Kathryn Mallon, P.E., Deputy Commissioner

Ms. Mallon was appointed Deputy Commissioner of the Bureau of Engineering Design and Construction in May 2010. Ms. Mallon has been with the Bureau of Engineering Design and Construction since 2008, previously serving as the Assistant Commissioner of In-House Design and Support. Prior to joining DEP, Ms. Mallon spent 20 years in the private sector focused primarily on the design and construction of drinking water treatment facilities. Ms. Mallon has a Bachelor's of Science in Civil Engineering from the University of Illinois-Urbana/Champaign and a Master's Degree in Environmental Engineering from the University of North Carolina — Chapel Hill.

Kevin McBride, Deputy Commissioner

Mr. McBride was appointed Deputy Commissioner of the Bureau of Police and Security in May 2009. Mr. McBride joined DEP from the New York City Police Department where he has served for over 30 years and holds the rank of Deputy Chief. While with the NYPD he served in several command capacities with extensive experience in operational, investigatory and managerial assignments. Mr. McBride holds a Bachelor of Science Degree in Business from the University of the State of New York and a Master of Public Administration from Marist College.

Diana Jones Ritter, Deputy Commissioner

Ms. Ritter was appointed Deputy Commissioner of Organizational Development in January 2013. Ms. Ritter oversees DEP's talent management systems and functions including Human Resources, Recruiting, Training, Labor Relations, and Discipline. Ms. Ritter has over 28 years of governmental experience including as Managing Director of the Metropolitan Transportation Authority, Commissioner of the New York State Office of Mental Retardation and Developmental Disabilities, and in various positions with the New York State Office of the Comptroller. Ms. Ritter is a graduate of Morgan State University, Baltimore, Maryland.

James Roberts, P.E., Deputy Commissioner

Mr. Roberts was appointed Deputy Commissioner of the Bureau of Water and Sewer Operations in November 2006. Mr. Roberts has been with DEP since 1986 and has served in numerous capacities including Borough Construction Engineer in the Borough of Queens and Chief of Shaft and Tunnel Maintenance and Operations for the Bureau of Water and Sewer Operations. Mr. Roberts is a Registered Professional Engineer and a graduate of Manhattan College's School of Engineering.

John Rousakis, General Counsel

John Rousakis was appointed General Counsel in February 2012. Prior to joining DEP, Mr. Rousakis was Counsel in the Energy, Natural Resources and Environment Group of the law firm of O'Melveny & Myers LLP and an Associate in the Environmental Group of the law firm of Morgan, Lewis & Bockius LLP. He also served as Counsel to the Chair of the New York State Assembly Environmental Conservation Committee. Mr. Rousakis holds a J.D. degree from the New York University School of Law and a Bachelor of Science in Engineering from Princeton University.

Paul Rush, P.E., Deputy Commissioner

Mr. Rush was appointed Deputy Commissioner of the Bureau of Water Supply in December 2006. He has been with the DEP since 1992. Most recently, Mr. Rush served as the Director, West of Hudson Operations Division of the Bureau of Water Supply and prior to that he held positions as District Engineer and Chief of Operations for the City's Delaware Water Supply System. Prior to joining DEP, Mr. Rush served on active duty with the United States Army as an Engineer Officer. Mr. Rush holds a Master of Science degree in Civil Engineering from Michigan Technological University and Bachelor of Science degree in Civil Engineering from the United States Military Academy. He is a Registered Professional Engineer in the State of New York.

Vincent Sapienza, P.E., Deputy Commissioner

Mr. Sapienza was appointed Deputy Commissioner of the Bureau of Wastewater Treatment in September 2009. He has been with DEP since 1983 and has held numerous positions in the bureau, most recently as Assistant Commissioner of Wastewater Treatment. His other positions have included Director of Regulatory Compliance, Chief of North Operations, Chief of Operations Support and Chief of Program Development. Mr. Sapienza is a graduate of Columbia University's School of Engineering and Applied Science and received an MBA from Hofstra University. He is a Professional Engineer.

Joseph Singleton, Deputy Commissioner

Mr. Singleton was appointed Deputy Commissioner for the Bureau of Customer Services in August 2006. He has been with DEP since 1995, serving in a variety of roles, including as Director of the Capital Budget. Mr. Singleton graduated with a B.A. in Economics from The State University of New York at Albany and received an MBA from St. John's University.

Labor Relations

During the last decade, there have been no strikes or major work stoppages of DEP employees affecting the System. Approximately 95% of DEP's employees are members of labor unions which represent such employees in collective bargaining with the City. The majority of DEP employees who are members of unions are members of District Council 37 of the American Federation of State, County and Municipal Employees ("DC 37"). An agreement with DC 37, covering the period from March 3, 2008 through March 2, 2010, was ratified on December 8, 2008. Those DEP employees who are not members of labor unions have generally received salary and benefits increases consistent with DC 37. Projected operation and maintenance expenses in this Attachment 1 include an annual 3% increase for Fiscal Years 2013 through 2016 to reflect allowances for changes in staffing, salary and wage adjustments covering all DEP employees, including collective bargaining increases beyond the 2008-10 round of collective bargaining, and other factors.

The City has not yet reached a collective bargaining agreement through the 2008-10 round of collective bargaining for approximately 1,130 sewage treatment and other workers whose contract expired at the end of the 2006-08 round of collective bargaining, or for approximately 200 environmental police officers, whose contract expired at the end of the 2005-06 round of collective bargaining. If the City reaches a settlement with these workers through the 2008-10 round of collective bargaining along previous settlement patterns, such settlement would result in costs to the System of approximately \$53 million in Fiscal Year 2013 and \$11 million in each Fiscal Year thereafter. The sewage treatment workers have received a preliminary determination from the New York City Comptroller's Office on a wage complaint covering the 2008-10 round and extending to 2011. If this preliminary determination were to be implemented, it would result in additional costs above the preceding estimates of \$39 million in Fiscal Year 2013 and \$13 million in each Fiscal Year thereafter. The City is reviewing this determination. Further, there has been an arbitration decision related to the collective bargaining agreement for the environmental police officers. The City and the environmental police officers' union have appealed the decision. However, if the current arbitration decision were implemented, it would result in additional costs to the System above the estimates set forth above of approximately \$1 million in Fiscal Year 2013 and cost savings from the estimates set forth above of approximately \$1 million in each Fiscal Year thereafter.

For information on other assumptions related to personal services costs, see "FINANCIAL OPERATIONS — Projected Operation and Maintenance Expenses."

CAPITAL IMPROVEMENT AND FINANCING PROGRAM

Ten Year Capital Strategy, Current Capital Plan and the Capital Improvement Program

The City's Ten Year Capital Strategy, which is updated every two years, was released on May 2, 2013 (the "Ten Year Capital Strategy"). The Ten Year Capital Strategy includes the projected capital improvements to the System for Fiscal Years 2014 through 2023. The City's Current Capital Plan (the "Current Capital Plan"), which covers Fiscal Years 2013 through 2017, was published on May 2, 2013, is updated three times each Fiscal Year and is consistent with the Ten Year Capital Strategy for Fiscal Years 2014 through 2017.

Projected capital improvement costs to the System for Fiscal Years 2013 through 2023 are reflected in the Capital Improvement Program (the "CIP"), which consists of the Current Capital Plan and the last six years of the Ten Year Capital Strategy.

The CIP establishes long range programmatic goals for the System and reflects a review of the present condition and long-term needs of the plant and equipment constituting the System. The CIP incorporates the replacement cycle for System facilities, extensions to the present service area, and programs to enhance and optimize the operation of the System. Allowances are included in the CIP for emergency repair and replacement. The value of the actual work done in any given year will differ from that outlined in the CIP.

The CIP was evaluated independently by AECOM. AECOM concluded that the CIP is responsive to the long-term operating requirements of the area served by the System. See "APPENDIX A—LETTER OF AECOM USA, Inc., CONSULTING ENGINEERS."

Although Amawalk Consulting, the Authority's rate consultant, has not performed a detailed independent review of the capital program elements and has not made an engineering evaluation of the System, Amawalk Consulting has concluded that the gross level of anticipated commitments through Fiscal Year 2023 as reflected in the CIP appears to be reasonable compared to other large water and wastewater utilities.

The CIP is presented in the following table:

CAPITAL IMPROVEMENT PROGRAM
(Thousands of Dollars)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
CITY FUNDS												
WATER SUPPLY AND TRANSMISSION												
Conveyance	\$ 305,751	\$ 9,100	\$ 766,550	\$ 43,700	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 1,125,101
City Tunnel No. 3, Stage 1	3,473	13,000	8,000	30,000	4,000	95,000	96,000	150,000	16,500	—	—	415,973
City Tunnel No. 3, Stage 2	23,146	26,543	7,359	2,800	15,467	475	8,282	30,000	315,000	2,000	—	431,072
Miscellaneous Programs	—	2,000	2,000	4,000	—	—	—	—	—	—	—	8,000
Subtotal	332,370	50,643	783,909	80,500	19,467	95,475	104,282	180,000	331,500	2,000	—	1,980,146
WATER DISTRIBUTION												
Groton Filtration Project	120,811	105,948	20,000	60,000	—	10,000	—	—	—	10,000	—	326,759
Dam Safety Program	33,994	79,083	106,274	15,429	59,200	202,000	10,000	—	13,000	13,500	—	545,980
Trunk Distribution and Main Extension	6,592	101,589	2,816	22,780	—	—	3,000	—	17,090	4,978	1,000	159,845
Trunk Distribution and Main Replacement	171,356	198,994	131,113	191,260	67,351	67,449	67,210	46,621	45,116	102,912	55,500	1,144,882
Water Quality Preservation	175,778	298,332	70,624	200,879	86,663	76,175	122,882	488,800	22,500	26,000	119,298	1,687,931
Extensions	11,207	26,960	570	—	740	—	—	—	—	—	—	39,477
Other System Improvements	3,387	20,794	29,938	15,734	28,251	41,882	3,947	2,000	2,000	2,000	—	149,933
Subtotal	523,125	831,700	361,335	506,082	242,205	397,506	207,039	537,421	99,706	159,390	189,298	4,054,807
WATER POLLUTION CONTROL												
Consent Decree Upgrading & Construction	31,611	18,743	—	—	—	—	—	—	—	—	—	50,354
Plant Upgrading & Reconstruction	336,296	369,088	239,852	296,502	488,369	318,851	218,513	211,550	136,957	216,613	338,231	3,170,822
Sludge Disposal	(953)	—	—	—	—	—	—	—	13,450	—	—	(953)
Plant Component Stabilization (1)	169,018	124,650	301,400	2,300	45,000	—	—	—	85,000	230,984	—	655,818
Water Quality Mandates	134,811	278,684	143,781	9,500	52,362	12,460	189,272	—	—	—	—	1,136,854
Subtotal	670,783	791,165	685,033	308,302	585,731	331,311	407,785	211,550	235,407	447,597	338,231	5,012,895
SEWERS												
Replacement or Augmentation	115,679	134,624	187,074	125,432	80,536	7,000	33,311	1,924	18,538	50,498	—	754,616
Extensions to Accommodate New Development	145,260	152,143	6,901	74,285	10,112	12,499	22,769	7,500	3,731	98,950	23,000	557,150
Programmatic Replacement and Reconstruction	4,033	38,438	3,397	17,965	59,856	—	104,274	—	65,589	—	—	293,552
Replacement of Chronically Failing Components	108,182	109,275	109,106	98,346	82,910	65,694	73,126	63,042	74,137	97,776	58,700	940,294
Trunks	1,194	3,963	—	1,700	—	—	—	—	—	—	—	6,857
Subtotal	374,348	438,443	306,478	317,728	233,414	85,193	233,480	72,466	161,995	247,224	81,700	2,552,469
EQUIPMENT												
Conservation	43,958	39,362	31,242	58,173	20,988	31,230	8,500	—	—	14,648	20,000	268,101
Management Information Systems	8,144	5,356	5,988	4,125	1,679	425	125	125	7,912	—	7,125	41,004
Facility Purchases & Reconstruction	(7,120)	34,594	—	38,412	4,066	13,000	—	9,000	—	5,000	—	96,952
Utility Relocation	33,515	27,326	20,000	30,000	25,000	20,000	30,000	20,000	28,662	25,000	20,000	279,503
Vehicles and Equipment	5,134	20,942	—	10,605	4,000	10,000	—	3,000	10,000	7,885	—	71,566
Subtotal	83,631	127,580	57,230	141,315	55,733	74,655	38,625	32,125	46,574	52,533	47,125	757,126
TOTAL CITY FUNDS	1,984,257	2,239,531	2,193,985	1,353,927	1,136,550	984,140	991,211	1,033,562	875,182	908,744	656,354	14,357,443
STATE, FEDERAL, AND PRIVATE FUNDS												
Plant Upgrading & Reconstruction	826	31,143	—	—	—	—	—	—	—	—	—	31,969
Plant Component Stabilization	10,184	—	—	—	—	—	—	—	—	—	—	10,184
Trunk Distribution and Main Replacement	7,016	500	—	—	—	—	—	—	—	—	—	7,516
Dam Safety Program	25,495	—	—	—	—	—	—	—	—	—	—	25,495
Other System Improvements	12,905	2,103	—	—	—	—	—	—	—	—	—	15,008
TOTAL NON-CITY FUNDS	56,426	33,746	—	—	—	—	—	—	—	—	—	90,172
TOTAL FUNDS	\$2,040,683	\$2,273,277	\$2,193,985	\$1,353,927	\$1,136,550	\$984,140	\$991,211	\$1,033,562	\$875,182	\$908,744	\$656,354	\$14,447,615

Following is an explanation of the major capital program elements within the CIP.

Water Supply and Transmission

Conveyance and Water Supply/Rondout-West Branch Tunnel Repair. DEP is engaged in research to develop alternate conveyance conduits and/or water supplies for the City in order to provide more dependability within the Water System, including the Rondout-West Branch Tunnel. The alternate water supplies or conveyances could be used during drought situations, to augment the City's daily water supply, or during repairs and inspections of existing aqueducts and tunnels.

DEP has completed an evaluation of alternatives to mitigate leaks in the Rondout-West Branch Tunnel and has elected to construct an approximately three mile long bypass tunnel which will allow DEP to repair the leaks. The cost of the bypass tunnel and associated conservation and alternative supply measures is estimated to be \$1.5 billion. For additional information, see "THE SYSTEM — The Water System — Water Collection and Distribution — *The Rondout-West Branch Tunnel.*"

Tunnel 3. Stages I and II of Tunnel 3 include completion of the Brooklyn/Queens and Manhattan segments. Stage I became operational in July 1998 and has improved the reliability of the transmission system. Completion of the Brooklyn/Queens segment of Stage II will improve services to Staten Island, Brooklyn and Queens. Activation of the Brooklyn/Queens segment of Stage II will follow activation of the Manhattan segment of Stage II which is expected to be completed in late 2013. See "THE SYSTEM — The Water System — Water Collection and Distribution."

Water Distribution

Croton Filtration Project. The City is a party to a federal court consent decree with the United States and the State which sets out a timetable for the design and construction of a full-scale water treatment facility to filter Croton System water. See "THE SYSTEM — The Water System — Governmental Regulation."

Dam Safety Program. Engineering reports sponsored by the U.S. Army Corps of Engineers indicated that the dams and reservoirs in service in the Catskill, Croton and Delaware Systems are safe but in need of rehabilitation and reconstruction. An ongoing dam reconstruction program has been established for rehabilitation of dams within the Catskill, Croton and Delaware watersheds and the Kenisco Dam.

Trunk Distribution and Main Extension and Replacement. This program includes the improvement and extension of the water distribution network for both trunk and distribution water mains. The program facilitates the replacement of undersized or failing system elements, as well as enhancing network reliability.

Water Quality Preservation. The City provides for improvements to the upstate watersheds including projects undertaken pursuant to the FADs (as hereinafter defined) in the Catskill and Delaware watersheds such as the acquisition of environmentally sensitive property, the creation of community wastewater management systems in areas where because of historic development patterns, individual septic systems do not provide adequate treatment, and retrofits to capture and treat stormwater from developed areas. See "THE SYSTEM — The Water System — Governmental Regulation," "THE SYSTEM — Overview," and "THE SYSTEM — The Water System — Water Collection and Distribution."

Water Pollution Control

Consent Decree Upgrading and Construction. The Clean Water Act (as hereinafter defined) and the State Consent Decrees (as hereinafter defined) require the upgrading of nine plants. The plant upgrades include the retrofitting of eight plants to achieve additional nitrogen treatment and upgrades at the Newtown Creek plant to improve plant operations. In addition, during periods of heavy rainfall, a combination of stormwater and sewage bypasses treatment and is released into the City's waterways

through the City's combined sewer overflow ("CSO") outfalls. Pursuant to a consent order between DEP and the New York State Department of Environmental Conservation ("NYSDEC"), DEP is implementing projects necessary to control the polluting effects of such releases. See "THE SYSTEM — The Sewer System — Governmental Regulation."

Plant Upgrading and Reconstruction. This program includes various projects undertaken to upgrade or reconstruct treatment plants, sewage pump stations, motor vessels, regulators and components of the plant treatment system.

Plant Component Stabilization. This program includes the replacement and reconstruction of failing components within the fourteen plants and their related facilities necessary to maintain reliability and the retrofit of eight water pollution control plants to decrease the amount of nitrogen discharged into the surrounding water.

Water Quality Mandates. USEPA and NYSDEC have imposed various water quality requirements on DEP, including mandates to mitigate CSOs, mandates to reduce chlorine discharge at waste water treatment plants and mandates to reduce storm water runoff in areas of the City served by separate sewers designed to carry only storm water. DEP is working with USEPA and NYSDEC to address these mandates.

Sewers

Replacement or Augmentation. This program provides for projects that expand the capacity of the Sewer System.

Replacement of Chronically Failing Components. This program provides for the replacement of sewers that have already collapsed or experience chronic malfunctions (for example, sagging, bends or improper alignment) that cannot be overcome through maintenance or experience chronic malfunction due to inadequate capacity.

Extensions. The City constructs sewers to replace septic tanks in populated areas to avoid health problems associated with viruses, bacteria and other sewage-related pollutants and minimizes stormwater flooding.

Programmatic Replacement and Reconstruction. This program provides for replacement and reconstruction of storm sewers for the alleviation of flooding.

Equipment

Conservation. This program provides for the installation and replacement of water meters in residential and commercial properties.

Utility Relocation for Sewers and Water Main Projects. Under the City's cost-sharing agreement with gas utilities, the City is required to pay 51% of utility work required as a result of water main and sewer construction projects.

Historical Capital Program

The following table presents capital commitments and capital expenditures of the System for Fiscal Years 2008 through 2012. Capital commitments are contractual obligations entered into during the Fiscal Year while capital expenditures represent cash payments made during the Fiscal Year.

System Capital Commitments and Expenditures (Millions of Dollars)

	FY 2008		FY 2009		FY 2010		FY 2011		FY 2012	
	System Funds(1)	All Funds(2)	System Funds(1)	All Funds(2)	System Funds(1)	All Funds(2)	System Funds(1)	All Funds(2)	System Funds(1)	All Funds(2)
Commitments										
Water Supply and Transmission (3)	\$ 20	\$ 20	\$ 237	\$ 237	\$ 89	\$ 89	\$ 1	\$ 1	\$ 97	\$ 97
Water Distribution	1,839	1,838(4)	663	663	660	660	602	602	578	590
Water Pollution Control	843	842(4)	944	936(4)	1,315	1,530	354	361	571	570
Sewers	200	200	164	164	127	134	178	190	366	368
Equipment	149	150	174	174	137	237	100	98(4)	59	59
Total	<u>\$3,051</u>	<u>\$3,050</u>	<u>\$2,182</u>	<u>\$2,174</u>	<u>\$2,328</u>	<u>\$2,650</u>	<u>\$1,235</u>	<u>\$1,252</u>	<u>\$1,671</u>	<u>\$1,684</u>
Expenditures (5)										
Water Supply and Transmission (3)	\$ 211	\$ 184(4)	\$ 98	\$ 82(4)	\$ 71	\$ 72	\$ 118	\$ 131	\$ 132	\$ 123
Water Distribution	868	971	1,164	1,186	1,334	1,343	1,196	1,150(4)	943	918
Water Pollution Control	917	909(4)	1,021	1,160	1,118	838(4)	1,128	1,126(4)	957	995
Sewers	190	186(4)	185	183(4)	196	203	174	177	184	200
Equipment	65	63(4)	74	90	146	170	216	240	120	169
Total	<u>\$2,251</u>	<u>\$2,313</u>	<u>\$2,542</u>	<u>\$2,701</u>	<u>\$2,865</u>	<u>\$2,626</u>	<u>\$2,832</u>	<u>\$2,824</u>	<u>\$2,336</u>	<u>\$2,405</u>

Totals may not add due to rounding.

- (1) System Funds include the proceeds of Authority bonds sold directly to the public and those privately placed with the Corporation under the revolving fund program and System revenues.
- (2) All Funds include federal and State capital grants.
- (3) Includes capital costs for improvements to upstate water pollution control plants which were paid for with the proceeds of Authority bonds but which are reported as operating expenses in the System's financial statements because such plants are owned by municipalities outside the City.
- (4) Cancellation of a non-City contract caused the All Funds commitment level to fall below the System Funds level.
- (5) System Funds are shown on a modified cash basis and reflect cash expended for System capital commitments, excluding federal and State grant-funded expenditures. All Funds, which include federal and State grant-funded expenditures, are shown on an accrual basis.
- (6) All Funds exclude expenditures for pollution remediation costs of \$61 million in Fiscal Year 2009 and \$250 million in Fiscal Year 2010 which are reported in the System's financial statements as operating costs.

Financing Program

Prior Financing. Since the first issuance of bonds by the Authority in 1985, capital improvements to the System have been financed primarily with (i) proceeds of bonds sold directly to the public and privately placed with New York State Environmental Facilities Corporation (the "Corporation") in connection with the revolving loan fund program described below, (ii) federal and State capital grants, and (iii) cash-financed capital construction paid from System revenues. See "Debt Service Requirements" below.

Future Financing. The Authority estimates that nearly 100% of the System's capital costs will be paid from: (i) proceeds of bonds and other forms of indebtedness sold to the public and privately placed with, or supported by, the Corporation and (ii) System revenues. Implementation of the CIP is dependent upon the Authority's ability to market its securities successfully in the public credit markets. For purposes of forecasting revenue requirements for the System, the principal amount of bonds estimated to be issued for capital purposes as of May 10, 2013, excluding refunding bonds, in each of the Fiscal Years 2014 through 2017 averages approximately \$1.3 billion per year. Projected Authority capital spending reflects commitments from both current and prior years. See the table entitled "Sources and Uses of Capital Funds" below.

Historically, federal grant funds were provided pursuant to the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 and by the Water Quality Act of 1987 (the “Clean Water Act”), in a program administered by the states, for construction and reconstruction of water pollution control facilities. The City has used these grant funds for five water pollution control plants: Oakwood Beach, Coney Island, Owls Head, Red Hook and North River. The Clean Water Act currently requires states to use federal funds in revolving loan programs in lieu of a federal grant program for water pollution control facilities. To this end, a revolving loan program has been established by the State and administered by the Corporation in order to use federal financial assistance together with State matching grants in a program to assist municipalities to construct eligible sewage facilities by providing subsidized loans. In addition, pursuant to the Safe Drinking Water Act Amendments of 1996, the State has also initiated a revolving loan program, also administered by the Corporation, to provide loans for drinking water projects. The Authority has participated in loans under both of the revolving loan programs and anticipates receiving additional financial assistance under the programs. These revolving loan programs have routinely featured the public sale of bonds by the Corporation to finance the purchase by the Corporation of Authority Second Resolution Bonds.

The Corporation has entered into an agreement to provide the Authority with approximately \$217.5 million in funds made available for certain projects through the American Reinvestment and Recovery Act of 2009 (the “Recovery Act”) and the Corporation has entered into an agreement to provide the Authority with \$30 million in funds made available for certain projects through the Clean Water State Revolving Fund. To date, the Authority has received approximately \$205.9 million. The Authority expects to receive the remaining funds over the next several years. The projected issuance of Authority debt in Fiscal Years 2013 through 2017 does not assume the receipt of such funds.

The Corporation has entered into an agreement to provide the Authority with \$217 million in funds for certain projects through the Drinking Water State Revolving Fund. The Authority issued a bond anticipation note to the Corporation and has drawn the full amount of the note. The Authority expects to refund the note with bonds.

Sources and Uses of Capital Funds

The following table presents the projected sources and uses of the funds for the System as of May 10, 2013. See “INTRODUCTORY STATEMENT — Financial Projection Assumptions.”

Sources and Uses of Capital Funds (Millions of Dollars)

Line No.	Description	2013	2014	2015	2016	2017	Period Total
Sources of Funds							
1	Proceeds from Sale of Bonds (1)	\$ 2,630.1	\$ 1,486.0	\$ 1,274.0	\$ 1,327.0	\$ 1,258.0	\$ 7,975.1
2	Proceeds from Commercial Paper Notes	1,840.7	1,418.0	1,217.0	1,267.0	1,201.0	6,943.7
3	Total Sources of Funds	4,470.8	2,904.0	2,491.0	2,594.0	2,459.0	14,918.8
Uses of Funds							
4	Refunding of Prior Bonds	860.1	0.0	0.0	0.0	0.0	860.1
5	Deposit to Construction Fund	2,124.0	1,418.0	1,217.0	1,267.0	1,201.0	7,227.0
6	Retirement of Commercial Paper Notes (1)	1,440.7	1,418.0	1,217.0	1,267.0	1,201.0	6,543.7
7	Other (2)	46.0	68.0	57.0	60.0	57.0	288.0
8	Total Uses of Funds	4,470.8	2,904.0	2,491.0	2,594.0	2,459.0	14,918.8
Construction Fund							
9	Beginning Balance	170.0	400.0	400.0	400.0	400.0	170.0
10	Transfer from Proceeds from Commercial Paper Notes	1,840.7	1,418.0	1,217.0	1,267.0	1,201.0	6,943.7
11	Transfer from Proceeds from Bonds	283.3	0.0	0.0	0.0	0.0	283.3
12	Cash Financed Capital Construction (3)	0.0	225.0	225.0	225.0	225.0	900.0
13	Total Available Construction Funds (1)	2,294.0	2,043.0	1,842.0	1,892.0	1,826.0	8,297.0
14	Less: Total Capital Spending (4)	(1,894.0)	(1,643.0)	(1,442.0)	(1,492.0)	(1,426.0)	(7,897.0)
15	Ending Balance	\$ 400.0	\$ 400.0	\$ 400.0	\$ 400.0	\$ 400.0	\$ 400.0

(1) The Authority expects to receive approximately \$217.5 million through the Recovery Act and \$30 million from the Corporation through the Clean Water State Revolving Fund program, which is not included in this table. The Authority has received \$205.9 million to date.

(2) Includes issuance costs and Debt Service Reserve Fund requirements.

(3) Funds projected for Cash Financed Capital Construction may also be used for the defeasance of bonds.

(4) Capital spending reflects commitments from current and prior years.

The following table shows projected debt service requirements, including payments on outstanding bonds and on future bonds projected to be issued as of May 10, 2013. For additional information, see “— Debt Service Requirements.”

Future Debt Service Requirements
(Millions of Dollars)

Line No.	Description	Bond Issues	2013	2014	2015	2016	2017
	Authority First Resolution Debt Service						
1	Outstanding Bonds		\$ 341.9	\$ 344.4	\$ 358.4	\$ 356.6	\$ 392.9
	Anticipated Future Bonds						
2	Fiscal Year 2014 Bonds	\$315.0	0.0	10.7	21.4	21.4	21.4
3	Fiscal Year 2015 Bonds	259.0	0.0	0.0	8.8	17.6	17.6
4	Fiscal Year 2016 Bonds	273.0	0.0	0.0	0.0	9.3	18.6
5	Fiscal Year 2017 Bonds	255.0	0.0	0.0	0.0	0.0	8.7
6	Total Authority First Resolution Debt Service		341.9	355.1	388.7	404.9	459.2
	Subordinated Obligations						
	Authority Second Resolution Authority Debt Service (1)						
7	Outstanding Authority Bonds Issued to the Public ...		727.6	844.6	815.2	939.1	904.4
	Anticipated Future Authority Second Resolution Bonds						
8	Fiscal Year 2013 Bonds	299.0	0.0	23.9	21.7	21.7	21.7
9	Fiscal Year 2014 Bonds	871.0	0.0	27.4	56.9	56.9	56.9
10	Fiscal Year 2015 Bonds	715.0	0.0	0.0	23.1	47.9	47.9
11	Fiscal Year 2016 Bonds	754.0	0.0	0.0	0.0	24.3	50.5
12	Fiscal Year 2017 Bonds	703.0	0.0	0.0	0.0	0.0	22.7
13	Interest Payments on Commercial Paper Notes		1.6	24.0	34.0	34.0	34.0
14	Outstanding Authority Second Resolution Bonds Issued to EFC		497.3	481.3	473.5	470.0	466.5
	Anticipated Future Authority Second Resolution EFC Bonds						
15	Fiscal Year 2013 Bonds	292.0	0.0	21.7	21.0	21.0	21.0
16	Fiscal Year 2014 Bonds	300.0	0.0	10.1	23.6	23.6	23.6
17	Fiscal Year 2015 Bonds	300.0	0.0	0.0	10.1	23.6	23.6
18	Fiscal Year 2016 Bonds	300.0	0.0	0.0	0.0	10.1	23.6
19	Fiscal Year 2017 Bonds	300.0	0.0	0.0	0.0	0.0	10.1
20	Less: Current EFC Subsidy (2)		(101.2)	(95.4)	(91.0)	(86.7)	(82.4)
21	Less: Future EFC Subsidy (3)		0.0	(9.0)	(16.0)	(22.0)	(29.0)
22	Actual Debt Service on Subordinated Indebtedness		1,125.2	1,328.7	1,372.0	1,563.4	1,595.0
23	Less: Carryforward Revenues		(497.5)	(665.1)	(566.8)	(549.5)	(474.3)
24	Net Debt Service on Subordinated Indebtedness		627.7	663.6	805.3	1,013.9	1,120.8
25	Total Debt Service Payable from Current Revenues (Line 6+Line 24) (4)		\$ 969.6	\$1,018.7	\$1,193.9	\$1,418.9	\$1,579.9

- (1) Debt service does not reflect federal interest subsidy payments on Build America Bonds. Federal subsidy payments on outstanding Build America Bonds are included as Revenues. See “FINANCIAL OPERATIONS — Projected Revenues.”
- (2) Includes the estimated Corporation subsidy on outstanding Authority Second Resolution Bonds.
- (3) Includes the estimated Corporation subsidy on anticipated future Authority Second Resolution Bonds.
- (4) Includes Total Authority First Resolution Debt Service plus net Debt Service on Subordinated Indebtedness.

For purposes of these projections, the Authority has assumed that interest rates on future Authority First Resolution Bonds and Authority Second Resolution Bonds issued to the public will be 6.05% for Fiscal Year 2013 and 6.8% for Fiscal Year 2014 and each year thereafter. Interest rates on future Authority Second Resolution Bonds issued to the Corporation will be 6% for Fiscal Year 2013 and 6.75% for Fiscal Year 2014 and each year thereafter. The Authority has further assumed that existing adjustable rate bonds and Commercial Paper Notes bear interest at an average rate of 0.25% for Fiscal Year 2013, 3% for Fiscal Year 2014 and 4.25% for Fiscal Year 2015 and each year thereafter.

Debt Service Requirements

The following schedule sets forth the amount required during each Fiscal Year (ending June 30) shown below for the payment of the principal of and the interest (including the Accreted Value of all Capital Appreciation Bonds) on Outstanding Authority First Resolution Bonds and Authority Second Resolution Bonds assuming that all adjustable rate bonds bear interest at an average rate of 0.25% for Fiscal Year 2013, 3% for Fiscal Year 2014 and 4.25% for each Fiscal Year thereafter with interest computed on the basis of a 30-day month and a 360-day year. The schedule does not include debt service on any outstanding Commercial Paper Notes.

Debt Service Requirements

FY Ending June 30	Debt Service on Outstanding Authority First Resolution Bonds	Debt Service on Outstanding Authority Second Resolution Bonds(1)(2)(3)(4)	Fiscal 2014 Series 1 and Series 2 Bonds		Debt Service on Authority Second Resolution Bonds, including Fiscal 2014 Series 1 and Series 2 Bonds(2)(3)(4)	Debt Service on First and Authority Second Resolution Bonds(1)(2)(3)(4)
			Principal	Interest		
2014 . . .	\$ 341,205,504	\$ 1,214,578,438	\$ 23,780,000	\$ 17,536,732	\$ 1,255,895,170	\$ 1,597,100,674
2015 . . .	355,250,064	1,187,183,035	22,166,667	18,531,444	1,227,881,145	1,583,131,209
2016 . . .	353,417,651	1,311,809,935	22,800,000	17,929,820	1,352,539,755	1,705,957,406
2017 . . .	389,645,865	1,277,966,274	23,310,000	17,435,179	1,318,711,453	1,708,357,318
2018 . . .	367,832,384	1,290,283,502	24,013,333	16,739,709	1,331,036,544	1,698,868,927
2019 . . .	417,943,666	1,278,224,024	24,701,667	15,989,381	1,318,915,072	1,736,858,738
2020 . . .	458,180,671	1,291,029,485	25,473,333	15,189,962	1,331,692,780	1,789,873,451
2021 . . .	461,168,896	1,257,021,961	26,258,333	14,357,346	1,297,637,639	1,758,806,535
2022 . . .	562,055,675	1,179,886,081	27,045,000	13,495,865	1,220,426,947	1,782,482,622
2023 . . .	600,781,650	1,141,280,675	27,625,000	12,602,185	1,181,507,860	1,782,289,510
2024 . . .	594,023,363	1,143,356,341	26,235,000	11,700,222	1,181,291,563	1,775,314,926
2025 . . .	428,052,363	1,244,605,549	27,013,333	10,799,869	1,282,418,751	1,710,471,113
2026 . . .	373,250,513	1,366,820,964	27,816,667	9,864,777	1,404,502,408	1,777,752,921
2027 . . .	503,660,513	1,226,805,966	27,640,000	8,895,705	1,263,341,671	1,767,002,183
2028 . . .	573,774,338	1,167,675,071	29,110,000	7,933,140	1,204,718,211	1,778,492,548
2029 . . .	507,665,525	1,226,540,606	29,750,000	7,111,561	1,263,402,166	1,771,067,691
2030 . . .	526,947,725	1,189,201,835	30,620,000	6,057,869	1,225,879,704	1,752,827,429
2031 . . .	340,594,700	1,355,224,302	31,520,000	4,969,122	1,391,713,424	1,732,308,124
2032 . . .	527,016,225	1,224,809,173	32,430,000	3,845,075	1,261,084,247	1,788,100,472
2033 . . .	625,172,050	1,096,441,686	20,345,000	2,685,606	1,119,472,292	1,744,644,342
2034 . . .	279,304,875	1,475,814,329	7,615,000	1,931,360	1,485,360,689	1,764,665,564
2035 . . .	541,519,875	1,204,924,313	7,800,000	1,764,211	1,214,488,524	1,756,008,399
2036 . . .	812,689,538	976,502,827	7,995,000	1,591,441	986,089,267	1,798,778,805
2037 . . .	806,595,838	973,824,844	8,190,000	1,412,752	983,427,596	1,790,023,434
2038 . . .	700,484,838	1,062,089,391	8,400,000	1,228,477	1,071,717,869	1,772,202,706
2039 . . .	732,153,838	1,058,207,572	8,610,000	1,038,217	1,067,855,789	1,800,009,627
2040 . . .	435,604,650	1,354,412,224	8,825,000	842,340	1,364,079,564	1,799,684,214
2041 . . .	22,312,500	1,765,413,112	9,050,000	640,689	1,775,103,801	1,797,416,301
2042 . . .	22,312,500	1,775,520,188	9,285,000	432,991	1,785,238,179	1,807,550,679
2043 . . .	22,312,500	1,760,637,777	9,520,000	219,436	1,770,377,213	1,792,689,713
2044 . . .	222,312,500	1,353,190,726	—	—	1,353,190,726	1,575,503,226
2045 . . .	338,812,500	935,867,476	—	—	935,867,476	1,274,679,976
2046 . . .	—	269,033,476	—	—	269,033,476	269,033,476
2047 . . .	—	1,249,923,476	—	—	1,249,923,476	1,249,923,476
2048 . . .	—	4,484,101	—	—	4,484,101	4,484,101
2049 . . .	—	4,484,101	—	—	4,484,101	4,484,101
2050 . . .	—	4,484,101	—	—	4,484,101	4,484,101
2051 . . .	—	4,484,101	—	—	4,484,101	4,484,101
2052 . . .	—	2,047,597	—	—	2,047,597	2,047,597
Total . . .	<u>\$14,244,055,288</u>	<u>\$41,906,090,635</u>	<u>\$614,943,333</u>	<u>\$244,772,480</u>	<u>\$42,765,806,448</u>	<u>\$57,009,861,736</u>

Totals may not add up due to rounding.

- (1) Does not include debt service on the Authority Second Resolution Bonds expected to be refunded with the proceeds of the Fiscal 2014 Series 1 Bonds. Includes the issuance of the Fiscal 2013 Series EE Bonds expected to be delivered on June 27, 2013, and excludes bonds to be refunded by the Fiscal 2013 EE Bonds.
- (2) Net of projected subsidy from the Corporation.
- (3) Does not reflect the interest subsidy provided by the federal government on Build America Bonds pursuant to the Recovery Act.
- (4) Assumes that the outstanding Fiscal 2012 Series DD Bonds and Fiscal 2012 Series GG Bonds, which are Refundable Principal Installments, will be amortized as provided in the definition of Adjusted Debt Service rather than paid in full at maturity. See "SECURITY FOR THE AUTHORITY SECOND RESOLUTION BONDS—Refundable Principal Installments" for additional information.

FINANCIAL OPERATIONS

The following tables present certain historical data relating to the System which have been derived from the books and records of the City, the Authority and the Board. For more information, see “INTRODUCTORY STATEMENT — Financial Projection Assumptions.”

Revenues

The following table presents, on a cash basis, the System revenues received during Fiscal Years 2008 through 2012, as derived from the accounting records utilized in preparation of the statement of cash flows, which is contained in the annual financial statements for Fiscal Years 2008 through 2012.

System Revenues (Millions of Dollars)

Line No.	Description	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
	Operating Revenues					
1	User Payments (1)	\$2,109.6	\$2,273.5	\$2,391.4	\$2,839.7	\$3,063.3
2	Upstate Revenues	46.0	42.2	40.9	64.7	60.9
3	Subtotal Service Revenue	2,155.6	2,315.7	2,432.3	2,904.5	3,124.2
4	Miscellaneous Revenues (2)	10.6	15.4	118.1	18.3	22.9
5	Subtotal Operating Revenue	2,166.2	2,331.0	2,550.4	2,922.7	3,147.0
	Nonoperating Revenues					
6	Interest Income on System Funds (3)	84.6	68.6	71.6	52.2	45.0
7	Federal Subsidy on Build America Bonds	—	—	12.0	65.4	75.5
8	Subtotal Nonoperating Revenues	84.6	68.6	83.6	117.6	120.5
9	Total Revenues	\$2,250.8	\$2,399.7	\$2,634.0	\$3,040.3	\$3,267.5

Totals may not add due to rounding.

- (1) Includes both current payments and payments relating to accounts in arrears.
- (2) Miscellaneous Revenues does not include subsidy payments from the Corporation on Authority First Resolution Bonds or Authority Second Resolution Bonds. Miscellaneous Revenues includes fees paid for a variety of services such as new connections to the System and fees paid for the review of developers' plans.
- (3) Includes interest income on the Construction Fund, Debt Service Fund, the Debt Service Reserve Fund, the Subordinated Debt Service Fund, the Revenue Fund and interest earned in escrow accounts for economically defeased debt.

The table above records actual cash received by the System and does not reflect either accounts receivable or billing accruals. The System has consistently realized collections of cash revenues in amounts exceeding costs for debt service, current operations and required levels of coverage. This has been achieved while maintaining residential water and sewer service costs at a level which is below the average of comparable large cities.

Expenses

The following table presents System expenses for Fiscal Years 2008 through 2012 on a cash basis which have been derived from the budget records utilized in preparation of the annual certificates of cash equivalents. These expenses represent operation, maintenance and general expenses excluding the lease rental payment to the City.

System Expenses
(Millions of Dollars)

<u>Description</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>
Authority Expenses	\$ 21.8	\$ 22.7	\$ 29.4	\$ 33.4	\$ 41.1
Water Board Expenses	28.4	24.9	9.1	3.9	6.4
Authority Expense for the Defeasance of Debt	—	—	—	259.3	235.6
Water Operations (1)					
Personal Services (2)	190.8	180.9	199.9	168.6	185.6
Other Than Personal Services (3)	257.6	284.8	294.0	298.1	313.9
Total Water Operations	448.4	465.7	493.9	466.7	499.5
Wastewater Operations (1)					
Personal Services (2)	308.0	288.9	589.8	322.1	358.2
Other Than Personal Services (3)	260.5	299.1	276.1	253.0	253.0
Total Wastewater Operations	568.5	588.0	865.9	575.1	611.2
Indirect Expenses (4)	56.2	56.2	87.3	62.1	78.2
Judgments and Claims	12.4	8.0	8.0	8.0	8.0
Net Operating Expenses	1,085.5	1,117.9	1,455.1	1,111.9	1,196.9
Less: Trust Account Release	—	—	(98.8)	—	—
Less: Credit for Excess Prior Year Payment to the City	(15.7)	(22.9)	(13.3)	(88.2)	(22.80)
Net Operating Expense Payments	1,069.8	1,095.0	1,343.0	1,023.7	1,174.1
Base Rental Payment to the City of New York	139.5	178.9	163.0	218.9	225.0
Deposits to O&M Reserve Fund	—	—	(4.0)	—	12.5
Total Expense	\$1,259.5	\$1,321.5	\$1,540.5	\$1,539.2	\$1,694.6

Totals may not add due to rounding.

- (1) Certain historical administrative and overhead costs of DEP were allocated to the water and sewer functions based upon the proportion of applicable personnel within DEP.
- (2) Personal Service costs include salaries, fringe benefits and pension costs.
- (3) Other Than Personal Service costs include real estate taxes paid to upstate communities for watershed properties, sludge disposal costs and for electricity, chemicals and supply costs.
- (4) Indirect Expenses include City agency support, and judgments and claims costs.

Projected Revenues

As indicated in the table below, “Subtotal Service Revenue” is projected as of May 10, 2013 to increase from approximately \$3.3 billion in Fiscal Year 2013 to approximately \$4.1 billion in Fiscal Year 2017 due to projected rate increases in those Fiscal Years. Upstate revenues are projected to increase from approximately \$60.5 million in Fiscal Year 2013 to approximately \$71.8 million in Fiscal Year 2017. This revenue growth is due to expected increases in the cost of water supply services.

City-wide water consumption in Fiscal Year 2012 was about 2.3% lower than consumption in Fiscal Year 2011. City-wide consumption in the first eleven months of Fiscal Year 2013 is about 0.4% higher than consumption during the same period in Fiscal Year 2012.

The projected revenues assume that in Fiscal Years 2014 and 2015, water consumption will decline at the rate of 1.5% per year. In Fiscal Years 2016 and 2017, it is assumed that water consumption will decline 2% per year.

Beginning in Fiscal Year 2013, Miscellaneous Revenues include an allowance for payments by the City which reflect the return to the System of a portion of the prior year Base Rental Payment to the City pursuant to the Lease. Amounts will vary with changes to the Base Rental Payment, which is based on debt service. The projected amount to be returned in Fiscal Year 2013 is \$12.2 million; the returned amount is expected to increase in each year. The projected amount to be returned in Fiscal Year 2017 is \$66.8 million.

Projected Revenues
(Millions of Dollars)

Line No.	Description	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Operating Revenues						
1	User Payments (1)	\$3,207.9	\$3,342.0	\$3,535.4	\$3,760.5	\$3,982.8
2	Upstate Revenues	60.5	61.8	65.5	64.5	71.8
3	Subtotal Service Revenue	3,268.4	3,403.7	3,600.9	3,825.0	4,054.6
4	Miscellaneous Revenues (2)	51.3	28.9	56.3	62.7	88.5
5	Subtotal Operating Revenue	3,319.8	3,432.7	3,657.2	3,887.7	4,143.1
Nonoperating Revenues						
6	Interest Income on System Funds (3)	37.0	30.0	23.0	25.0	27.0
7	Federal Subsidy on Build America Bonds (4)	75.5	75.5	75.5	75.5	75.5
8	Subtotal Nonoperating Revenue	112.5	105.5	98.5	100.5	102.5
9	Total Revenues	<u>\$3,432.3</u>	<u>\$3,538.2</u>	<u>\$3,755.7</u>	<u>\$3,988.2</u>	<u>\$4,245.6</u>

Totals may not add due to rounding. Figures are calculated on a cash basis.

Source: Amawalk Consulting.

(1) Includes late payment charges.

(2) Miscellaneous Revenues includes subsidy payments from the Corporation on Authority First Resolution Bonds, but does not include subsidy payments from the Corporation on Authority Second Resolution Bonds. Miscellaneous Revenues includes fees paid for a variety of services such as new connections to the System, fees paid for the review of developers' plans and payments from the City to return a portion of the prior year Base Rental Payment to the City pursuant to the Lease.

(3) Includes interest income on the Construction Fund, the Debt Service Fund, the Debt Service Reserve Fund and the Subordinated Debt Service Fund.

(4) Does not reflect any effect of federal sequestration.

Projected Operating and Maintenance Expenses

The table set forth below shows, for Fiscal Years 2013 through 2017, the System's projected operation and maintenance expenses as of May 10, 2013. See "INTRODUCTORY STATEMENT — Financial Projection Assumptions."

Projected Operation and Maintenance Expense
(Millions of Dollars)

Line No.	Description	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
1	Authority Operations	\$ 39.4	\$ 43.8	\$ 48.2	\$ 53.0	\$ 58.3
2	Board Operations	21.1	37.6	45.7	50.5	51.5
3	Authority Expense for the Defeasance of Debt	250.0	0.0	0.0	0.0	0.0
Water Operations						
4	Personal Services	225.2	236.6	246.6	255.0	270.8
5	Other Than Personal Services	321.5	379.8	376.6	386.1	369.0
6	Total Water Operations	546.7	616.4	623.2	641.1	639.8
Wastewater Operations						
7	Personal Services	415.1	423.7	442.6	457.8	486.2
8	Other Than Personal Services	330.9	331.8	340.5	349.2	365.1
9	Total Wastewater Operations	746.0	755.5	783.1	807.0	851.3
10	Indirect Expenses	19.4	19.4	19.4	19.4	19.4
11	Judgments and Claims	8.0	8.0	8.0	8.0	8.0
12	Net Operating Expenses	1,630.6	1,480.7	1,527.6	1,579.0	1,628.3
13	Less: Credit for Excess Prior Year Payment to the City	(62.4)	0.0	0.0	0.0	0.0
14	Net Operating Expense Payments	1,568.2	1,480.7	1,527.6	1,579.0	1,628.3
15	Base Rental Payment to the City of New York	208.7	241.2	252.8	283.9	296.8
16	Deposits to O&M Reserve Fund	20.6	5.7	7.0	7.2	7.4
17	Cash Financed Capital Construction	0.0	225.0	225.0	225.0	225.0
18	Total Expenses	<u>\$1,797.6</u>	<u>\$1,952.7</u>	<u>\$2,012.3</u>	<u>\$2,095.1</u>	<u>\$2,157.5</u>

Totals may not add due to rounding. Figures are calculated on a cash basis.

Source: Amawalk Consulting.

Operating expenses include administrative costs associated with the Authority and the Board, direct operating costs for the System, indirect operating costs of DEP, and other expenses and adjustments to annual operating expenses. Each of these is explained more fully below.

Authority Operations. Administrative expenses of the Authority shown on Line 1 of the table above, include annual fees required by the Corporation in connection with the Authority's participation in the State Revolving Fund Program. These fees are projected to be \$12.3 in Fiscal Year 2013 and are expected to increase in future years as the outstanding principal of bonds issued to the Corporation increases. Other expenses of the Authority include but are not limited to payments under interest rate exchange agreements (net of receipts), fees related to adjustable rate bonds, Commercial Paper Notes and the management of investments and arbitrage rebate payments.

Board Operations. The expenses of the Board shown on line 2 of the table above include payments for lock box services as well as professional services for the following: Operational Excellence Program, the service line protection program, collections and rates and charges.

Personal Services Cost. Personal services costs for both water operations and wastewater operations include direct salary costs plus fringe benefit and pension costs. The projected personal services costs for Fiscal Years 2014 through 2017 include an annual 3% increase to reflect allowances for changes in staffing, salary and wage adjustments, including collective bargaining increases, and other factors. Allowances for fringe benefit and pension costs are expected to be 51% of salaries and wages in Fiscal Year 2013 and each year thereafter. For information on labor relations, including retroactive contract settlements, see "THE DEPARTMENT OF ENVIRONMENTAL PROTECTION — Labor Relations."

Water Operations. The operating costs of the Water System include direct operation and maintenance costs applicable to one or more functional areas of the Water System and the distribution system as well as certain indirect operating costs of the DEP which are allocated between the Water System and the Sewer System. The operating costs of the Water System are divided into personal services costs and other than personal services costs.

Other than personal services costs include property taxes paid to upstate communities for watershed properties as well as chemicals, electricity, and other expenses. All but a small percentage of the Water System functions by gravity so that electricity costs necessary to maintain normal water transmission and distribution are relatively small.

Property tax payments for City-owned watershed lands are expected to be approximately \$147.2 million in Fiscal Year 2013. Property taxes on all watershed properties, except the UV Facility, are assumed to increase at the rate of 3% annually through Fiscal Year 2017. It is anticipated that property taxes on the UV Facility will increase from \$14.0 million in Fiscal Year 2013 to \$16.3 million in Fiscal Year 2014 in accordance with increasing tax rates and the increasing assessed value of the UV Facility.

DEP adds chemicals, including fluoride and chlorine, to drinking water and uses other chemicals in the treatment of wastewater. In Fiscal Year 2013, the anticipated cost of chemicals for the System is approximately \$59.3 million.

In accordance with the watershed protection agreement, DEP will implement additional programs which will enhance the ability of the City and the communities located in the watershed area to protect the quality of the water supply. The projected expenses for Fiscal Years 2013 through 2017 include \$23.5 million for programs related to filtration avoidance including the operation and maintenance of wastewater treatment facilities in the watershed. Such programs also include certain capital investments which are contained within the CIP. The forecasted operation and maintenance expenses for the Water System reflect operation and maintenance costs due to the Watershed Agreement.

In anticipation of the completion of both the Croton Filtration Plant and the UV Facility, estimated operating costs for both facilities have been incorporated in Projected Operation and Maintenance Expenses. In Fiscal Year 2014, when both the Croton Filtration plant and the UV Facility are expected to be fully operational, operation and maintenance expenses for both facilities are projected to be a total of \$62 million. Operating expenses for these plants, exclusive of property taxes on the UV Facility, are assumed to increase in Fiscal Year 2014 through Fiscal Year 2017 at the rate of 3% annually.

Wastewater Operations. The operating costs of the Sewer System include direct operation and maintenance costs applicable to one or more functional areas of the Sewer System as well as certain indirect operating costs of DEP allocated to the Water System and the Sewer System. The operating costs of the Sewer System are also divided into personal services and other than personal services costs.

Other than personal services costs, excluding property taxes, are assumed to increase of an estimated rate of 3% per year for the forecast period. Other than personal service costs include electricity for the water pollution control plants, pump stations and service yards, chemicals, and other expenses. Electricity, which represents a significant expense in operating the treatment plants and pump stations, is supplied primarily by the Power Authority of the State of New York. The budgeted costs for heat, light and power for the Water System and the Sewer System in Fiscal Year 2013 are approximately \$114.2 million. The vast majority of such expenses are for electricity for the Sewer System. The projected allowance for fuel oil in Fiscal Year 2013 is \$23.6 million. Another major component of other than personal services costs for the Sewer System is biosolids management, which is projected to be \$43.7 million in expenses in Fiscal Year 2013.

In Fiscal Year 2009, other than personal services expenses included \$29.0 million in escrow payments for the resolution of claims filed by NYSDEC relative to improvements at the Newtown Creek wastewater treatment plant. Some or all of the payments were to be recovered by the System if DEP met certain future milestone dates. DEP received \$7.0 million in returned payments in Fiscal Year 2012 and \$20.0 million in payments in Fiscal Year 2013. The return of these payments in Fiscal Year 2013 is included in Miscellaneous Revenues for that year. See “THE SYSTEM — THE SEWER SYSTEM — Full Secondary Treatment Requirements/Newtown Creek.”

Projected operating expenses for the System do not include provisions for the payment of any additional potential fines or penalties. See “THE SYSTEM.” In the event that fines or penalties are required to be paid, operating expenses will increase in the year in which such payments are made.

Other Expenses. Other expenses of the System include indirect expenses and judgments and claims. Indirect expenses, shown on Line 10 of the table, reflect costs allocated to the System for support provided by various City agencies and departments. Services provided include budget preparation and review, cost and revenue accounting, billing and collection, and legal support. The method of allocating these costs to the System is based upon costs initially allocated to DEP and subsequently divided between those attributable to water and sewer and those costs associated with other activities of DEP. The costs allocated to DEP as a whole are derived from the total costs of City support agencies and departments and a formalized cost allocation plan which distributes the costs to affected departments and agencies. DEP’s billing and collection expenses are included in the operation and maintenance costs of the Water System and the Wastewater System.

Projected Financial Operations

The following table shows a summary of the forecasted cash flows for the Authority as of May 10, 2013 for Fiscal Year 2013 through Fiscal Year 2017. See “CAPITAL IMPROVEMENT AND FINANCING PROGRAM — Debt Service Requirements.” See “RATES AND BILLINGS — Rates — Projected Rates.” The projected rate increases described herein under “RATES AND BILLINGS — Rates” have been assumed in order to meet projected cash expenditures in compliance with the Rate Covenant. See “FINANCIAL OPERATIONS — Projected Revenues.” As shown on Line 33 of the table, positive net surpluses are projected to be maintained throughout the reporting period. Actual carryforward revenues applied to Fiscal Year 2013 was \$497.5 million. Line 34 illustrates the projected coverage of Authority First Resolution debt service by current revenues available for debt service. Line 35 illustrates the projected coverage of Authority First Resolution and Authority Second Resolution debt service by current revenues available for debt service less Authority expenses.

Forecasted Cash Flows
(Millions of Dollars)

Line No.	Description	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Operating Revenues						
1	Water and Sewer User Payments	\$3,207.9	\$3,342.0	\$3,535.4	\$3,760.5	\$3,982.8
2	Upstate Revenue	60.5	61.8	65.5	64.5	71.8
3	Miscellaneous Revenue	51.3	28.9	56.3	62.7	88.5
Other Revenues						
4	Interest on Funds	37.0	30.0	23.0	25.0	27.0
5	Federal Subsidy on Outstanding Build America Bonds(1) ...	75.5	75.5	75.5	75.5	75.5
6	Current Revenues Available for Debt Service	3,432.3	3,538.2	3,755.7	3,988.2	4,245.6
Authority First Resolution Debt Service						
7	Outstanding Authority First Resolution Bonds	341.9	344.4	358.4	356.6	392.9
8	Anticipated Future Authority First Resolution Bonds	—	10.7	30.2	48.3	66.3
9	Total Authority First Resolution Debt Service	341.9	355.1	388.7	404.9	459.2
Debt Service on Subordinated Indebtedness(2)						
10	Outstanding Authority Second Resolution Bonds issued to the public	727.6	844.6	815.2	939.1	904.4
11	Anticipated Future Authority Second Resolution Bonds issued to the public	—	51.3	101.7	150.9	199.7
12	Interest Payments on Commercial Paper Notes	1.6	24.0	34.0	34.0	34.0
13	Outstanding Authority Second Resolution Bonds issued to the Corporation	497.3	481.3	473.5	470.0	466.5
14	Anticipated Future Authority Second Resolution Corporation Bonds	—	31.8	54.7	78.2	101.8
15	Less: Corporation Subsidy on Subordinated Bonds	(101.2)	(104.4)	(107.0)	(108.7)	(111.4)
16	Actual Debt Service on Subordinated Indebtedness	1,125.2	1,328.7	1,372.0	1,563.4	1,595.0
17	Less: Carryforward Revenues	(497.5)	(665.1)	(566.8)	(549.5)	(474.3)
18	Net Debt Service on Subordinated Indebtedness	627.7	663.6	805.3	1,013.9	1,120.8
19	Total Debt Service Payable from Current Revenues (line 9 + line 18)	969.6	1,018.7	1,193.9	1,418.9	1,579.9
Operating Expenses						
20	Authority Operations	39.4	43.8	48.2	53.0	58.3
21	Board Operations	21.1	37.6	45.7	50.5	51.5
22	Authority Expense for the Defeasance of Debt	250.0	—	—	—	—
23	Water System	546.7	616.4	623.2	641.1	639.8
24	Wastewater System	746.0	755.5	783.1	807.0	851.3
25	Indirect Expense	19.4	19.4	19.4	19.4	19.4
26	Judgments and Claims	8.0	8.0	8.0	8.0	8.0
27	Total Operating Expenses	1,630.6	1,480.7	1,527.6	1,579.0	1,628.3
28	Less: Credit for Excess Prior Year Payment to the City	(62.4)	—	—	—	—
29	Deposits to O&M Reserve Fund	20.6	5.7	7.0	7.2	7.4
30	Base Rental Payment to the City of New York	208.7	241.2	252.8	283.9	296.8
31	Cash Financed Capital Construction (3)	—	225.0	225.0	225.0	225.0
32	Total Expenses	1,797.6	1,952.7	2,012.3	2,095.1	2,157.5
33	Net Surplus (line 6-line 19-line 32)	\$ 665.1	\$ 566.8	\$ 549.5	\$ 474.3	\$ 508.2
34	Authority First Resolution Debt Service Coverage (line 6/line 9)	10.04	9.96	9.66	9.85	9.25
35	First and Authority Second Resolution Debt Service Coverage ((line 6 —line 20)/line 19)	3.50	3.43	3.11	2.77	2.65

Source: Amawalk Consulting.

Column subtotals and totals may reflect adjustments for rounding of amounts shown in individual line items.

- (1) Does not reflect any effect of federal sequestration.
- (2) Does not reflect interest subsidy on Build America Bonds provided by the federal government pursuant to the Recovery Act.
- (3) Funds projected for Cash Financed Capital Construction may be used for the defeasance of bonds in addition to funds otherwise provided for the defeasance of bonds and may be increased or decreased by the Authority from the amounts projected in each year.

City Comptroller Audit

The City Comptroller has commenced an audit of the financial and operating practices of the System and determination of water rates. The audit includes an examination of the System's revenue, expenses and related payments from and to the City, and may include an evaluation of internal controls over the financial data reported to the City.

RATES AND BILLINGS

Rates

The Board is responsible for setting rates in compliance with the Rate Covenant. See "SECURITY FOR THE AUTHORITY SECOND RESOLUTION BONDS — Rate Covenant." The Board retains the firm of Amawalk Consulting for the purpose of conducting a detailed review of the structure of water and sewer rates. The Board considers the results of Amawalk Consulting rate studies in establishing its rates and charges for service.

The System's rates and charges are largely exempt from federal and State regulation. Water rates, fees and charges for water supply are the responsibility of the Board and are not subject to further approval or regulation except for rates for upstate users. Currently approximately 1.7% of System Revenues are collected from such upstate users. Sewer charges are established by the Board as a percentage of water charges. The Board uses data compiled from meter readings for billings and to determine the effectiveness of City-mandated conservation measures.

The following table sets forth the changes in rates for water and sewer service since 2003:

History of Water and Sewer Rate Increases			
Effective Date	Increase in Flat-Rate Water/Metered Water	Metered Water Rate (per ccf)(1)	Sewer Rate
July 1, 2003	5.5%	\$1.52	159% of water charge
July 1, 2004	5.5	1.60	159% of water charge
July 1, 2005	3	1.65	159% of water charge
July 1, 2006	9.4	1.81	159% of water charge
July 1, 2007	11.5	2.02	159% of water charge
July 1, 2008	14.5	2.31	159% of water charge
July 1, 2009	12.9	2.61	159% of water charge
July 1, 2010	12.9	2.95	159% of water charge
July 1, 2011	7.5	3.17	159% of water charge
July 1, 2012	7	3.39	159% of water charge
July 1, 2013	5.6	3.58	159% of water charge

(1) ccf: 100 cubic feet.

Projected Rates. Although the Board sets rates for an annual period, it may increase rates during such period, as required. As of May 10, 2013, forecasted debt service, operating and other costs for the System indicated that the anticipated future rate increases to be set by the Board for water and sewer services combined are 7.8% in Fiscal Year 2015, 7.9% in Fiscal Year 2016 and 7.5% in Fiscal Year 2017.

Basic Sewer Charge. For all properties connected to the Sewer System, or legally required to be connected after receiving proper notice, there is a charge imposed equal to a fixed percentage of the property's water charge. Since July 1, 1992, the sewer charge has remained at 159% of the water charge.

Sewer Allowances. Certain commercial customers use water in their products and thus return less waste to the Sewer System than their water consumption might indicate. Upon application and approval, these commercial users are entitled to an effective rate reduction which reflects the proportion of water which is retained in their products or evaporated and not returned as sewage.

Sewer-only Customer Charges. In the case of premises which receive water service from alternative sources, a sewer charge is determined by DEP. For the current Fiscal Year, the sewer charge to such premises is equal to 159% of the dollar amount that would be charged for water usage if it were supplied by the Water System.

Upstate Water Rates. Rates for water supply service provided to municipalities and water districts located north of the City are established in accordance with the provisions of the Water Supply Act of 1905 (the “1905 Act”). The 1905 Act provides that such rates shall be based on the System’s actual cost of service. The sale of water and the rates and charges for these accounts are regulated by State law as well as by individual agreements between these communities and the City. Each contract provides for the metering of water sales to individual communities and the application of a specific charge per unit of metered volume. In most cases, per capita consumption in the upstate communities is less than that of customers within the City. In those instances where the community per capita consumption exceeds that of the City, the specified rate of charge for the excess (the “Excess Rate”) is the rate charged for retail service in the City. The City is currently analyzing State legislation, which became effective on February 15, 2012, to determine what implications, if any, it might have for challenges to the Excess Rate. As of July 1, 2013, water taken from either the Croton or Catskill/Delaware systems shall be charged at a rate of \$1,496.76 per million gallons for daily per capita amounts not in excess of daily per capita consumption within the City.

Comparative Charges. The following table presents comparative annual water and sewer charges in 30 large cities based upon a survey conducted in March 2013 by Amawalk Consulting Group LLC. Using a ranking system where 1 represents the lowest rates, the City's ranking relative to these cities is: for Single-Family Residential — 19, for Commercial — 19, and for Industrial — 23.

Comparative Annual Water and Sewer User Charges⁽¹⁾⁽²⁾

Single Family Residential		Commercial		Industrial	
City	Annual Charge	City	Annual Charge	City	Annual Charge
Memphis	\$ 402	Memphis	\$ 5,321	Memphis	\$ 351,237
Chicago	\$ 443	Chicago	\$ 5,534	St. Louis	\$ 495,734
Phoenix	\$ 457	St. Louis	\$ 6,454	Milwaukee	\$ 509,754
Miami-Dade	\$ 574	San Antonio	\$ 7,439	Dallas	\$ 556,068
Denver	\$ 615	Dallas	\$ 7,486	Denver	\$ 616,490
Milwaukee	\$ 657	Milwaukee	\$ 7,832	San Antonio	\$ 630,694
San Antonio	\$ 669	Denver	\$ 8,392	Indianapolis	\$ 633,714
St. Louis	\$ 710	Indianapolis	\$ 8,683	Chicago	\$ 646,974
Fort Worth	\$ 743	Phoenix	\$ 8,997	Louisville	\$ 729,080
Dallas	\$ 749	Fort Worth	\$ 9,198	Philadelphia	\$ 736,163
Los Angeles	\$ 755	Baltimore	\$ 9,281	Fort Worth	\$ 773,576
Louisville	\$ 839	Louisville	\$ 9,532	Columbus	\$ 822,035
Baltimore	\$ 862	San Jose	\$ 9,752	Baltimore	\$ 822,579
Indianapolis	\$ 886	Los Angeles	\$10,093	Detroit	\$ 847,110
Houston	\$ 891	Houston	\$10,648	San Jose	\$ 851,000
San Jose	\$ 909	Columbus	\$10,856	Jacksonville	\$ 905,132
Columbus	\$ 912	San Diego	\$10,953	Charlotte	\$ 912,523
Charlotte	\$ 918	Charlotte	\$11,135	Houston	\$ 970,914
New York	\$ 939	New York	\$11,738	Los Angeles	\$ 976,813
Detroit	\$ 941	Jacksonville	\$11,821	San Diego	\$1,021,597
Philadelphia	\$ 954	Miami-Dade	\$12,085	Phoenix	\$1,069,192
Jacksonville	\$1,072	Philadelphia	\$12,199	Washington, D.C.	\$1,171,808
Washington, D.C.	\$1,078	Cleveland	\$14,025	New York	\$1,173,810
Boston	\$1,107	Boston	\$15,198	Miami-Dade	\$1,229,170
Austin	\$1,145	San Francisco	\$15,493	Cleveland	\$1,312,992
Cleveland	\$1,179	Detroit	\$16,166	Austin	\$1,348,003
San Diego	\$1,205	Austin	\$16,590	San Francisco	\$1,524,356
San Francisco	\$1,490	Washington, D.C.	\$17,513	Boston	\$1,674,658
Atlanta	\$2,064	Seattle	\$25,980	Seattle	\$2,251,772
Seattle	\$2,126	Atlanta	\$29,123	Atlanta	\$2,940,887
Average	\$ 943	Average	\$11,851	Average	\$1,016,861

(1) User charges are based upon information provided by the identified cities and standardized assumptions regarding water consumption, wastewater discharge, stormwater drainage area and other factors. Actual charges in each city will vary in accordance with local usage patterns. There may be significant differences in typical single family residential usage among cities which results in charges that are different than shown above. Some cities bill for sewer use on the basis of winter water consumption which could affect sewer billings if a customer's use was not uniform throughout the year. Sewer charges include stormwater charges in those cities where separate stormwater fees are assessed. Some cities use property tax revenue or other revenues to pay for part of the cost of water, wastewater or stormwater services. In such situations, the user charges will not reflect the full cost of water, wastewater or stormwater services. Some cities impose charges that become part of the cost of water/sewer services. Water/sewer bills in some cities are subject to sales taxes, gross receipts taxes and/or other fees.

(2) Charges for all cities reflect rate schedules in effect in March 2013.

Accounts, Billing and Collection

The Bureau of Customer Services of DEP renders bills to customers of the System and collects payments of such bills. The bureau installs and reads meters, verifies meter accuracy, and maintains current information for those customers on the flat-rate system of billing described below.

The System has approximately 836,000 water and sewer accounts, nearly all of which are for water and sewer service. Approximately 91% of the System's water and sewer customers are residential. The remainder are primarily commercial and industrial users, with industrial users accounting for only a small portion of water and sewer usage.

Since 1988, the basis for service charges for residential properties has been in a continuous process of transition from a flat-rate basis of annual billing to a meter-based billing system which relies on the actual measurement of usage. The Universal Metering Program is designed to improve water conservation, water supply system management, and rate equity. Approximately 792,000 accounts, representing 95% of total accounts and 71% of total revenues, are billed on a metered basis. Approximately 98% of all water and sewer accounts have meters installed, although some accounts that have meters installed are not yet billed on that basis. The City has issued contracts for the installation of meters for the remaining unmetered accounts and is testing and replacing meters where necessary. Since July 2000, unmetered properties which have not taken steps to install a meter have been required to pay a surcharge doubling their annual water and sewer charge. A surcharge was levied on approximately 6,000 accounts in their most recent bills. Commercial accounts are required by the Board and the City to have meters installed for all water services. Substantially all of these accounts are in compliance with this requirement. Meters are read and billed on a quarterly basis, except meters for some larger accounts which are read and billed more frequently. Unlike flat-rate charges, which were commonly paid through mortgage escrow accounts, metered charges are billed directly to customers, which, among other factors, has required DEP to handle a substantially higher volume of customer account inquiries.

Approximately 44,000 accounts, representing 5% of total accounts and 26% of total revenues, continue to be billed annually through the flat-rate system. These accounts are charged for water either on a per unit charge or through a frontage-based billing system, a computation which incorporates, among other factors, the width of the front of the building, the number of stories, the number of dwelling units, and the number of water-using fixtures (such as bathtubs, showers and toilets) in the building. Flat-rate annual bills are normally sent to customers prior to the start of each Fiscal Year and are due at the end of the first month of the Fiscal Year.

On May 4, 2012, the Board adopted a modified Multi-Family Conservation Program ("MCP"). Pursuant to the MCP, approximately 29,000 of the accounts which had been billed on a frontage basis are being billed on the basis of a fixed charge per dwelling unit per year. All accounts enrolled in the MCP will have until January 1, 2015 to install approved meters and until June 30, 2016 to install high-efficiency plumbing fixtures, if they haven't done so already. Accounts which fail to install a meter by the deadline will be removed from the MCP, and will be subject to increased charges on future bills. Failure to comply with the high-efficiency plumbing fixture requirement will result in an automatic conversion to metered charges. The per dwelling charges under the MCP are designed to be approximately the same as the charges that would be levied on a frontage basis. However, as part of the MCP, DEP provides all enrolled accounts with tools which will assist them in comparing the annual MCP charges with those charges which would be due if they were charged based on actual use. Since any account enrolled in the MCP may switch to metered billing at any time, it is expected that accounts which would be billed less under metered billing than the MCP will switch to metered billing. The financial forecast assumes that most existing customers will remain with the MCP charge, which is payable in advance, but that some customers will convert to metered billing, which are charges levied after consumption occurs. Through May 2013, fewer customers have converted to metered billing than originally forecasted. The Board will continue to monitor the progress of customer decisions regarding the available billing methodologies and the resulting effects on cash receipts.

DEP is aggressively pursuing the replacement of old meters and the implementation of an automated meter reading system. Likewise, meters being installed in new construction or as upgrades using the reimbursable metering program must meet new requirements for automated meter reading equipment. DEP has installed over 431,000 new water meters to date.

DEP has contracted with a vendor to provide technology for the automated meter reading system in which meters transmit usage information by radio signal to DEP. To date, DEP has installed over 821,000 transmitters, representing 96% of DEP's installation target, and the automated meter reading system has been activated for those accounts that have had transmitters installed. All customers whose accounts have been upgraded for automated meter reading can now access a website, which updates at least four times per day to display their water consumption, including detail of the cubic feet and gallons consumed and the cost to be billed. With an increasing percentage of automatic meter readers installed, DEP has seen a corresponding decrease in estimated bills, which have decreased from 17.4% of bills in January 2009 to 4.0% of bills in April 2013.

Certain institutions are exempt under State law from the payment of all or a portion of their water and sewer charges depending upon usage. These institutions include religious corporations and certain educational institutions, charitable institutions, homes for the aged, hospitals and other non-profit or charitable corporations.

DEP manages its account and billing information through its Customer Information System ("CIS"), which incorporates both frontage and metered accounts. DEP has identified weaknesses in the ability of CIS to identify and report account errors and corrections on a comparable basis over time. DEP has entered into a contract with IBM to implement necessary enhancements to the CIS to address these weaknesses, the cost of which is fully funded in the CIP. Implementation of these enhancements is expected to be completed in the first quarter of Fiscal Year 2014.

The Board and DEP have undertaken initiatives to enhance the collection of water and sewer billings. In September 2007, the Board authorized a payment incentive program for delinquent single-family accounts that provides for service termination if payment is not made in accordance with the program. In October 2007, the Board authorized and approved modifications to the regulations governing service terminations, including reducing the dollar amount and the delinquent period thresholds for determining an account's eligibility for service termination and narrowing the period of time during the year when water cannot be shut off. DEP has issued water shut-off notices to single family residential customers pursuant to the Board's regulations governing service terminations. Although most customers receiving such notices pay their bills or enter into payment agreements, DEP has terminated service for a small number of single family residential properties.

In December 2007, the City Council and the Mayor reauthorized the City's lien sale program which had expired in 2006, and expanded it to allow the City, on behalf of the Board, to sell, with certain exceptions, liens from unpaid water and sewer charges on multi-family houses and commercial businesses, independent of the existence of property tax liens. The lien sale program authorization expired on December 31, 2010. In March 2011, the City Council and the Mayor authorized a renewal of the lien sale program through December 31, 2014. Such renewal includes certain changes to the program, including an adjustment of the dollar threshold required before the City can sell water liens on certain multi-family houses. The Board has also adopted updated policies regarding the denial of access and new policies regarding theft of service, effective July 1, 2009.

DEP has procured a collection agency to assist in collecting delinquent accounts, which will target single family residential customers which are not covered by DEP's lien authorization. By aggressively pursuing collections rather than the termination of delinquent single family residential accounts, DEP hopes to reduce the number of service terminations each year. The selected collection agency is expected to begin work in the first quarter of Fiscal Year 2014.

The Board, at its annual meeting on May 21, 2010, authorized a pilot program to bill stand-alone parking lots, which historically have not received a water bill, for the stormwater runoff they produce.

The pilot program for stand-alone parking lots requires lot owners with no water service to pay a charge for the stormwater runoff they produce or demonstrate that they are addressing stormwater on site with green infrastructure or other measures. Under this pilot program, DEP is currently billing approximately 431 stand-alone parking lots on an annual basis at a rate of \$0.0608 per square foot of property area for wastewater service. A credit is available for parking lots who demonstrate the ability to capture stormwater and prevent it from entering the wastewater system.

As a result of Hurricane Sandy, which hit the City on October 29, 2012, DEP has taken certain steps to delay or suspend certain payments due in relation to accounts most severely affected by the storm. See “THE SYSTEM — Overview — Hurricane Sandy.”

THE SYSTEM

Overview

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 approximately 8.2 million people. The Water System provides an average of approximately 1,010 mgd of water in the City. Water consumption has decreased since 1980 when an average of approximately 1,500 mgd was provided by the Water System. The City is also required by State law to sell water in counties where its water supply facilities are located and where it currently provides water to an additional approximately 1 million people. The amount of water that can be safely drawn from a watershed during the worst period in the drought of record is the “Dependable Yield.” DEP has determined that the System could have furnished an average of 1,290 mgd during the drought of record in the mid-1960s. During periods of normal rainfall, watersheds supply more than the Dependable Yield.

The Sewer System collects and treats an average of approximately 1,300 mgd of wastewater. Sewer service is provided to virtually the entire City, except for parts of the Borough of Staten Island, the Borough of Queens communities of Breezy Point and Douglaston, and the Borough of Brooklyn community of Seagate. Sewer service is also provided to certain upstate communities in System watershed areas.

According to AECOM, the System is in adequate condition (the highest rating category). See “APPENDIX A — LETTER OF AECOM USA, INC., CONSULTING ENGINEERS.”

In recent years, DEP has taken a number of steps to enhance and augment its security arrangements to protect the System, including water supply structures and facilities. These steps include, among others: increasing the size of the DEP police force to approximately 200 officers and further securing facilities through additional locks, fences and other physical barriers to prevent access by unauthorized persons. Increased security requirements have resulted in additional labor costs and related expenses.

Hurricane Sandy

On Monday, October 29, 2012 Hurricane Sandy hit the Mid-Atlantic East Coast as a tropical storm. The storm caused widespread damage to the coastal and other low lying areas of the City and power failures in various parts of the City, including most of downtown Manhattan, and at many System facilities, including some of its water supply facilities outside of the City. Extensive flooding also occurred at many System facilities in the City. The City, along with the State and federal governments, is engaged in a major effort to address the health and safety of its residents affected by the storm and the repair and long-term stabilization of its infrastructure and other storm-damaged property. While DEP is still assessing damage and planning for capital repairs to certain elements of its infrastructure, to date, the estimated damage from Hurricane Sandy is approximately \$95 million, which includes approximately \$51 million of operating and maintenance expenses and approximately \$44 million of capital expenses. The City anticipates that all of its costs relating to the storm will ultimately be paid from non-City sources, primarily the federal government.

To protect the City’s infrastructure, service was terminated to nearly 300 properties destroyed or condemned as a result of Hurricane Sandy. Additionally, DEP suspended the accrual of approximately \$4.5 million in late payment charges from delinquent accounts for the month of November 2012. DEP also postponed billing customers at approximately 7,100 properties that were likely unoccupied as a result of Sandy’s impact and 2,700 properties where DEP’s automatic meter transmitting units were not responding after the storm. During the postponement, charges to these properties continued to accrue. The postponement of billing ended with the June 17, 2013 billing cycle, with payments due 28 days after the issuance of the bill. Such properties represent approximately 1.2% of all accounts. DEP does not expect revenues to be impacted significantly as a result of Hurricane Sandy or these billing changes.

Since February 2011, DEP has been conducting a study of the effects of climate change on the City's wastewater and drainage systems and to assess the sensitivity of DEP's infrastructure to future climatic conditions based on projections for sea level rise, storm surge, precipitation and temperature in 2050. The study includes evaluating the risks associated with a "no action" scenario versus mitigation through a mix of targeted cost-effective strategies designed to protect critical assets on-site.

As a result of Hurricane Sandy, DEP has expanded the study to focus on the site specific nature of climate change impacts on the System, including interdependencies between DEP infrastructure and the electrical grid, and cost-effective investments that would improve the System's resiliency. DEP also incorporated FEMA's updated interim flood zone maps, which were released in January 2013 and adopted new design standards for enhancements and improvements to the System's infrastructure. DEP's study was integrated into a report, "A Stronger, More Resilient New York" (the "Report"), which was released by the City in June 2013. The Report identifies \$5 billion of improvements to the System for the period from Fiscal Year 2013 through 2023, \$4.5 billion of which is currently funded in the CIP. The remaining \$500 million is expected to be funded from federal sources and by deferring and reprioritizing projects in the CIP without impacting service delivery.

The Water System

Water Collection and Distribution

Water for the System can be drawn from three upstate reservoir systems (the Croton, Catskill and Delaware Systems) and a system of wells in Queens that were acquired as part of the City's acquisition of the Jamaica Water Supply Company ("Jamaica Water"). The three upstate water collection systems include 19 storage reservoirs and three controlled lakes with a total storage capacity of approximately 580 billion gallons. They were designed and built with various interconnections to increase flexibility by permitting exchange of water from one system to another. This feature mitigates localized droughts and takes advantage of excess water in any of the three watersheds. DEP is continuing to enhance its infrastructure to increase its operational flexibility.

The Water System is currently furnishing water to users in portions of four of the eight eligible northern counties. The Water System provides approximately 85% of the water used in Westchester County and approximately 7.5% of the water used in Putnam, Orange and Ulster Counties.

Approximately 95% of the total water supply is delivered to buildings by gravity. Only about 5% of the water is regularly pumped by DEP to maintain the desired pressure. When drought conditions exist, additional pumping is required.

The three main reservoir systems are the Croton, Catskill and Delaware Systems. See "New York City Water Supply System" map in Appendix F.

The following tables set forth the capacities and original in-service dates of the System's collecting and balancing reservoirs and distribution facilities based on the City records.

Collecting Reservoirs

<u>Name</u>	<u>Available Capacity(1) (Billion Gallons)</u>	<u>Original In-Service Date</u>
Croton		
New Croton	19.0	1905
Croton Falls Main	14.2	1911
Cross River	10.3	1908
West Branch	10.1	1895
Titicus	7.2	1893
Amawalk	6.7	1897
East Branch	5.2	1891
Muscoot	4.9	1905
Bog Brook	4.4	1892
Middle Branch	4.0	1878
Boys Corner	1.7	1873
Croton Falls Diverting	0.9	1911
Total	88.6	
Catskill		
Ashokan	122.9	1915
Schoharie	17.6	1926
Total	140.5	
Delaware		
Pepacton	140.2	1955
Cannonsville	95.7	1964
Rondout	49.6	1950
Neversink	34.9	1954
Total	320.4	
Total Available Capacity	547.5	

Totals may not add due to rounding.

(1) Capacity above minimum operating level.

Balancing Reservoirs and Distribution Facilities

<u>Name</u>	<u>Storage Capacity (billion gallons)</u>	<u>Original In-Service Date</u>
Balancing Reservoirs		
Kensico	30.6	1915
Hillview	0.9	1915
Total Balancing Reservoirs	31.5	
Distribution Facilities		
Central Park (offline)	1.0	1862
Jerome Park	0.8	1905
Silver Lake (tanks)	0.1	1970
Total Distribution Facilities	1.9	
Total Storage Capacity	33.4	

The following table sets forth the Dependable Yield and storage capacity for each of the water supply systems.

Water System Dependable Yield and Capacity

<u>System</u>	<u>Dependable Yield (mgd)</u>	<u>Storage Capacity(1) (billion gallons)</u>
Croton	240	86.6
Catskill	470	140.5
Delaware	580	320.4
Queens wells	33	2.6
Total	1,323	550.1

(1) Capacity above minimum operating level.

The total volume of water used each year by the City and upstate customers includes water consumed by metered and unmetered customer accounts, water used in firefighting, leakage and other uses. The following table summarizes the total quantities of water delivered each year to the City and upstate customers for Fiscal Year 2008 through Fiscal Year 2012.

Historical Annual Water Use by the City and Upstate Customers (million gallons)

<u>Year</u>	<u>City Use</u>	<u>Upstate</u>	<u>Total</u>
2008	408,490	43,559	452,048
2009	378,961	41,477	420,438
2010	370,685	40,797	411,482
2011	377,953	42,682	420,635
2012	369,241	39,713	408,954

Totals may not add due to rounding.

The Croton System, when operating at full capacity, had provided approximately 10% of the City's daily water supply under normal conditions and up to 30% of the daily water supply during drought conditions. The Croton System has been used only on a very limited basis since 2004. Absent exigent circumstance, the Croton System will not be used until the start up of the Croton Filtration Plant in 2014. DEP's decision to filter Croton System water, and to limit the use of the Croton System until the treatment plant is on line, was based on water quality issues, including past exceedances of regulations for disinfection by-products (specifically haloacetic acids), turbidity, and color. Long-term use of the Croton System will be determined by DEP's operational needs. See "— Governmental Regulation — *Croton Filtration.*" The Croton System consists of 12 reservoirs and three controlled lakes on the Croton

River, its three branches and three other tributaries. The water in the Croton System flows from upstream reservoirs through natural streams to downstream reservoirs, terminating at the New Croton Reservoir. The watershed which supplies the Croton System has an area of 375 square miles. It lies primarily within the State, approximately 45 miles north of lower Manhattan, with a small portion in the State of Connecticut.

The Catskill System watersheds occupy sparsely populated areas in the central and eastern portions of the Catskill Mountains. The Catskill and Delaware Systems together currently provide the City's entire daily water supply. Water in the Catskill System comes from the Esopus and Schoharie Creek watersheds, located approximately 100 miles north of lower Manhattan and 35 miles west of the Hudson River. The Catskill System is comprised of the Schoharie Reservoir (formed by the Gilboa Dam across Schoharie Creek) and Ashokan Reservoir (formed by the Olivebridge Dam across Esopus Creek) and the Catskill Aqueduct. Schoharie Reservoir water is delivered to the Esopus Creek via the Shandaken Tunnel, from which it then travels to the Ashokan Reservoir.

Gilboa Dam is comprised of an earthen dam and a concrete gravity dam, with the concrete portion also acting as the spillway. In 2005, an engineering analysis of the dam showed that the spillway had lost some mass over time and that the dam did not meet NYSDEC safety guidelines applicable to the reconstruction of existing dams. In December 2006, DEP completed a series of interim steps to bring the dam into compliance with NYSDEC safety guidelines for the reconstruction of existing dams.

Although there is no evidence that the dam is facing imminent risk of failure, DEP has determined that the rehabilitation of the dam should be advanced. Work on the crest gates, which increased DEP's ability to manage the Schoharie Reservoir and maintain it at proper levels, was completed in July 2011. Site preparation work for the full reconstruction of the dam to bring the dam up to compliance with NYSDEC safety guidelines for new dams began in September 2009 and was completed in Fiscal Year 2011. Damage caused by Hurricane Irene in August 2011 destroyed the site preparation work. The site has been restored and progress continues on the dam reconstruction. The estimated cost to complete the rehabilitation of the dam is \$171 million, \$151 million of which is funded in the CIP.

The Delaware System is located approximately 125 miles north of lower Manhattan. Three Delaware System reservoirs collect water from a sparsely populated region on the branches of the Delaware River: Cannonsville Reservoir (formed by the Cannonsville Dam on the West Branch of the Delaware River); Pepacton Reservoir (formed by the Downsview Dam across the East Branch of the Delaware River); and Neversink Reservoir (formed by the Neversink Dam across the Neversink River, a tributary to the Delaware River). Water from these three reservoirs is diverted to Rondout Reservoir, formed by the Merriman Dam across Rondout Creek, a tributary to the Hudson River.

In addition, wells in Queens, which have been offline since 2007 due to the availability of higher quality water from the Catskill and Delaware Systems, are capable of providing approximately 1% of the City's daily water supply. The wells could be used to provide more of the daily supply if required to meet water supply needs. Unlike the rest of the City's water supply, which is a surface and gravity-supplied system originating in a network of upstate reservoirs, well water is pumped from extensive underground aquifers. DEP is currently planning improvements to the ground water system which will augment the supply of water from underground aquifers.

The System's water supply is transported through an extensive system of tunnels and aqueducts. See "New York City Water Tunnels" map in Appendix F. Croton System water is delivered from the New Croton Reservoir by the New Croton Aqueduct to the Jerome Park Reservoir in the Bronx. From Jerome Park Reservoir, the water will be treated in the new Croton Water Filtration Plant, located under Van Cortlandt Park and then conveyed through new finished water tunnels to the pressurized section of the New Croton Aqueduct, and to trunk mains, which carry water to the distribution service areas. The Catskill and Delaware Aqueducts convey water from Ashokan Reservoir and Rondout Reservoir to Kensico Reservoir and then to Hillview Reservoir in Yonkers. Both Kensico and Hillview Reservoirs serve as balancing reservoirs. Water from the Catskill and Delaware Systems is mixed in the Kensico

Reservoir, and is conveyed to Hillview Reservoir where water enters Tunnels 1, 2 and 3. Trunk mains carry water from tunnel shafts and from the distribution facilities (Jerome Park and Hillview Reservoirs and Silver Lake Tanks) to the service area.

Current demand/flow projections show that if conservation programs, including metering, toilet replacement, hydrant locking, leak detection, and public information, remain effective there will be no immediate need for the City to find additional long-term water supply sources to meet normal demand. However, with the construction of the Rondout-West Branch bypass tunnel, there will be a short-term need to find additional water supply sources. See “— Rondout-West Branch Tunnel.” DEP continues to evaluate additional strategies and projects for improving the dependability of water supplies, which could entail the development of additional or interim supplies to meet demands during periods of extended facility outages due to planned or unplanned inspection, repair or rehabilitation, such as during the Rondout-West Branch Tunnel shutdown.

DEP is moving forward with its Water for the Future program. Water for the Future is designed to address known and suspected leaks in the Rondout West Branch section of the Delaware Aqueduct, which can convey up to 890 million gallons per day (mgd), and typically delivers an average of 600 mgd annually, more than 50% of the City’s daily water supply. The Water for the Future program consists of multiple projects required to address the leaks in the Aqueduct. These projects include constructing a bypass tunnel around an area of significant leakage in the Roseton area in the Town of Newburgh, NY and water supply augmentation projects necessary to ensure adequate water supply for the City during construction of the connection between the new bypass tunnel and the Delaware Aqueduct. Additional water supply augmentation includes rehabilitation of the City’s groundwater system in southeast Queens, rehabilitation of the Catskill Aqueduct, and demand management measures to encourage in-City water conservation, including retrofits on City owned facilities.

Rondout-West Branch Tunnel. The Rondout-West Branch Tunnel carries water 45 miles from the Delaware System under the Hudson River and into West Branch Reservoir. It has a capacity of 890 mgd and normally conveys 50% of the City’s water supply. It has the highest pressures and the highest velocities in the Water System. In addition, a portion of the tunnel crosses a fractured rock formation, which is potentially subject to greater stress than the deep rock tunnels located in the City. DEP regularly assesses the condition and integrity of the System’s tunnels and aqueducts to determine the extent and effect of water loss. In particular, since the early 1990s, DEP has monitored the condition of the Rondout-West Branch Tunnel, which comprises a portion of the Delaware Aqueduct. As a result of DEP’s flow tests, visual observations and other analyses, it has been determined that approximately 15 mgd to 36 mgd of water is being lost from the tunnel and is surfacing in the form of springs or seeps in the area. This amounts to a loss of approximately 4% of the daily volume of water provided by the tunnel under peak flow conditions. The situation in the tunnel and amount of water loss is stable. In the opinion of the professional engineering firm retained by DEP in conjunction with that investigation, there is very little immediate risk of failure of the tunnel. DEP has completed an evaluation of various alternatives to mitigate the leak and has elected to construct an approximately three mile long bypass tunnel. Connection of the bypass to the existing tunnel is expected to require that the tunnel be shut down for one 6 to 10 month period or two or three shut downs of shorter duration starting in 2021, during which periods supply augmentation is expected to be needed. A reduction of the estimated amount of water supply augmentation needed during the tunnel shut down has reduced the estimated cost of the project. The estimated cost to complete the design and construction of the shafts and tunnel bypass, as well as implementation of water supply augmentation projects and water conservation measures, is estimated to be \$1.5 billion, \$1.4 billion of which is included in the CIP.

Tunnel 1. From Hillview Reservoir, water from the Catskill and Delaware Systems is delivered into the City by a circular, cement-lined, pressurized, bedrock tunnel that narrows in diameter from 15 to 11 feet. Tunnel 1 is 18 miles in length and extends south from Hillview Reservoir through the West Bronx to Manhattan and Brooklyn. Tunnel 1 is 200 to 750 feet underground and thus avoids interference with streets, buildings, subways, sewers, pipes and other underground infrastructure. These depths are necessary to ensure substantial rock covering necessary to withstand the pressure of the water

inside and to preclude leakage. Tunnel 1 has a capacity of approximately 1,000 mgd. Shafts placed along the tunnel connect with surface mains which deliver water to the distribution system.

Tunnel 2. The second tunnel also delivers Catskill and Delaware System water from Hillview Reservoir. It is a circular, cement-lined, pressurized, bedrock tunnel, 200 to 800 feet below the street surface and 15 to 17 feet in diameter. Tunnel 2 extends south from Hillview Reservoir, east of Tunnel 1, through the Bronx, under the East River at Rikers Island, through Queens and Brooklyn, and connects with Tunnel 1 in Brooklyn. Tunnel 2 has a capacity of more than 1,000 mgd and is 20 miles in length. Shafts placed along the tunnel connect with surface mains which deliver water to the distribution system.

Richmond Tunnel. Connecting to Tunnel 2 in Brooklyn is the ten-foot diameter, five-mile long Richmond Tunnel, which was completed in 1970 and carries water 900 feet beneath Upper New York Bay to Staten Island. The Richmond Tunnel, the Richmond Distribution Chamber, the Richmond Aqueduct and the underground Silver Lake Tanks were designed to improve the water supply facilities of Staten Island. The underground storage tanks (among the world's largest) have a combined capacity of 100 million gallons and replaced the Silver Lake Reservoir (now Silver Lake).

Tunnel 3. A relatively new water tunnel, Tunnel 3, connecting the reservoir system to the City is presently under construction to increase capacity to meet a growing demand in the eastern and southern areas of the City, permit inspection and rehabilitation of Tunnels 1 and 2, and provide water delivery alternatives to the City in the event of disruption in Tunnel 1 or 2. Tunnel 3 is being built in four stages. Stage I commenced operation in July 1998. It follows a 13-mile route which extends south from Hillview Reservoir in Yonkers under Central Park Reservoir in Manhattan, and east under the East River and Roosevelt Island to Long Island City in Queens. Stage II will extend from the end of Stage I to supply Queens, Brooklyn and the Richmond Tunnel and from the valve chamber at Central Park into lower Manhattan. The Stage III project is now referred to as the "Kensico-City Tunnel." Stage IV is intended to deliver additional water to the eastern parts of the Bronx and Queens. It would extend southeast from the northern terminus of Stage I in the Bronx to Queens and then southwest to interconnect with the Queens portion of Stage II and with the installation of additional surface mains or the construction of additional shafts. Stage IV will enable the system to maintain full service even if Tunnel 1 or 2 were shut down. The estimated cost of work on Tunnel 3 through Fiscal Year 2023 is fully funded in the CIP.

Kensico-City Tunnel. The Kensico-City Tunnel will extend from the Kensico Reservoir to the interconnecting chamber of Tunnel 3, Stage I, south of Hillview Reservoir. The estimated cost to design and construct the tunnel is expected to be between \$4 billion and \$6 billion, which would be incurred in the years beyond the CIP.

The water distribution system consists of a grid network of over 6,700 miles of pipe, as well as valves, fire hydrants, distribution facilities, gatehouses, pump stations, and maintenance and repair yards. Approximately 35% of the pipe in the System was laid before 1930, 35% between 1930 and 1969, and the remainder thereafter. The CIP provides for the programmatic replacement of water mains in accordance with certain established criteria.

Various facilities provide storage to meet the hourly fluctuations in demand for water throughout the City, as well as any sudden increase in draft that might arise from fire or other emergencies. With the exception of some communities in the outlying areas of the City which may experience low pressure service during peak hours in summer months, the water distribution system provides generally excellent service.

Drought Response Measures

From time to time the Water System experiences drought conditions caused by significantly below-normal precipitation in the watershed areas. The last drought was in 2002. As of June 26, 2013, the System's reservoirs were filled to 98.9% of capacity. Normal levels at this time of year are approximately 96.8% of capacity.

The Water System relies upon a surface water supply, and is sensitive to major fluctuations in precipitation. Throughout even the most extreme droughts, the Water System has continued to supply

sufficient amounts of water to the City. To ensure adequate water supply during drought conditions, DEP, in conjunction with other City, State and interstate agencies, maintains a Drought Management Plan. The Drought Management Plan defines various drought phases that trigger specific management and operational action. Three defined phases are: “Drought Watch,” “Drought Warning,” and “Drought Emergency.” A Drought Emergency is further subdivided in four stages based on the projected severity of the drought and provides increasingly stringent and restrictive measures.

A Drought Watch is declared when there is less than a 50% probability, based on the existing record since 1927, that either the Catskill or Delaware reservoir system will be filled by the following June 1. This phase initiates the pumping of water from the Croton System. In addition, during this phase a public awareness program begins and users, including upstate communities taking water from the System, are requested to initiate conservation measures. New York State Department of Health (“NYSDOH”), NYSDEC, and the Delaware River Basin Commission (the “DRBC”) are advised of the Water System’s status, and discussions are held with City agencies concerning their prospective participation in the event of a declaration of a Drought Warning.

A Drought Warning is declared when there is less than a 33% probability that either the Catskill or Delaware reservoir system will fill by June 1. All previous efforts are continued or expanded and additional programs are initiated, including the coordination of specific water saving measures by other City agencies.

A Drought Emergency is declared when it becomes necessary to reduce consumption by imposing even more stringent measures. In addition to the imposition of restrictions, DEP may enhance existing System management and public awareness programs, expand its inspection force and perform additional leak and waste surveys in public and private buildings. DEP may also require communities outside of the City that are served by the System to adopt similar conservation measures.

Governmental Regulation

The System is subject to federal, State, interstate and municipal regulation. At the federal level regulatory jurisdiction is vested in USEPA; at the State level in NYSDEC and NYSDOH; at the interstate level in the DRBC and the Interstate Environmental Commission and at the municipal level in DEP, the New York City Department of Health and Mental Hygiene (“NYCDOH”), DOB and the Department of Small Business Services and to a limited degree, in municipalities and districts located in eight counties north of the City. Water quality protection regulations are enforced within the watershed areas north of the City through a network of overlapping governmental jurisdictions including NYSDEC and NYSDOH; and county, municipal and district police, engineers and inspectors; and DEP. The various jurisdictions maintain physical security, take water samples, monitor construction activities and wastewater treatment in the watershed, and generally oversee the physical condition of, activity on and the operation of water supply lands and facilities. Portions of the overall legislative and regulatory framework governing the watersheds may be found in the City’s Administrative Code, Health Code and Watershed Regulations. Regulatory enforcement within City limits is almost exclusively accomplished through City personnel. Provisions incorporating and augmenting the substance of the federal Safe Drinking Water Act (“SDWA”), related regulations and the Sanitary Code, are contained in the Health Code, Watershed Regulations and the City’s Building and Building Construction Codes. These provisions are enforced by personnel from DEP, NYCDOH and DOB.

Drinking Water Regulations/Filtration and Watershed Protection. Pursuant to the SDWA, USEPA has promulgated nationwide drinking water regulations which specify the maximum levels of contaminants allowed in drinking water and which govern the construction, operation, and maintenance of the System. USEPA has also promulgated filtration treatment regulations, known as the federal Surface Water Treatment Rule (“SWTR”), which prescribe guidelines concerning protection and treatment of surface water supplies. Enforcement of many of the related regulations promulgated by SDWA, including the SWTR, has been delegated by USEPA to the NYSDOH. See “— Croton Filtration” and “— Catskill/Delaware Filtration Avoidance.”

Croton Filtration. The City is constructing a full scale water treatment facility to filter Croton System water as mandated by the terms of a 1998 federal court consent decree, as supplemented in 2002 and 2005 (the “Croton Filter Consent Decree”).

The Croton Filter Consent Decree sets forth milestones, including start-up of the Croton Water Treatment Plant and commencement of operations of the facility on October 31, 2011, which were not met by the City. Because of the withdrawal of the low bidder on one of the general construction contracts for the facility, DEP missed several milestones relating to commencement of construction. Those milestones have now been met and DEP has paid the corresponding penalties related to such missed milestones. DEP has also continued to experience some additional delays in the construction schedule. DEP has requested a modification of the Croton Filter Consent Decree to extend the required date for completion of the treatment facility, and negotiations with the USEPA over the request are ongoing. Based on a currently expected construction completion date of April 15, 2014, additional penalties could be as high as \$92 million under the milestones set forth in the current Consent Decree. It is anticipated that the total remaining cost to complete the Croton filtration plant will be \$253 million, all of which is included in the CIP. Additionally, DEP is mandated to construct a permanent golf club house. The cost of such club house is not yet finalized, though \$49 million is included in the CIP for its construction.

Catskill/Delaware Filtration Avoidance. With respect to the Catskill and Delaware systems, the City believes that it will continue to be able to meet the criteria for non-filtered supplies under the SWTR.

Since 1993, USEPA has been issuing Filtration Avoidance Determinations (“FADs”) pursuant to which the City is not required to filter water from the Catskill and Delaware Systems. If the City were to have to filter water from the Catskill and Delaware Systems, construction costs to provide such filtration are estimated to be greater than \$6 billion. To further the City’s ability to comply with the FAD, on January 21, 1997, the City entered into the Watershed Memorandum of Agreement with the State, Delaware and Catskill watershed communities, USEPA, and several environmental groups (the “Watershed Memorandum of Agreement”). The Watershed Memorandum of Agreement supplemented the City’s existing watershed protection program with approximately \$400 million in additional funding for economic-environmental partnership programs with upstate communities.

In July 2007, USEPA issued a new FAD (the “2007 FAD”), which supersedes previous determinations and has a term of 10 years, divided into two five-year periods. The 2007 FAD requires the City to take certain actions to protect the Catskill and Delaware water supplies. These actions include the continuation of certain environmental and economic partnership programs established under the Watershed Memorandum of Agreement and the creation of new programs. The City will need to reach agreement with NYSDOH and USEPA on which of such programs should be continued into the second five-year period, whether and how any such programs to be continued should be modified, and/or whether additional programs are needed during the remainder of the 2007 FAD. To assist in making these decisions and reaching an agreement, DEP prepared a Revised Long Term Watershed Protection Plan, which was submitted to USEPA/NYSDOH on December 15, 2011. Additional funding has been added to the CIP for Fiscal Years 2013 through 2017 to support the FAD program for the second five years; it is possible additional funding could be required as part of the second five year period.

Since 1997, the FAD has required that the City solicit property from owners of land in the watershed and acquire (with certain limited exceptions) title to or conservation easements on any solicited land if the owner accepts the City’s purchase price. The 2007 FAD required the City to allocate a total of \$300 million for land acquisition during its ten year term, including approximately \$59 million of unspent funds remaining from moneys set aside for land acquisition under the Watershed Memorandum of Agreement and the previous FAD and \$241 million in new funding.

Since 2008, there has been increased interest in natural gas drilling, using high volume hydraulic fracturing (“HVHF”), in southeastern New York State, including the Catskill/Delaware watershed. In connection with this increased interest, NYSDEC initiated an environmental review relating to natural

gas drilling, which has provided several opportunities for public comment and which is not yet complete. DEP has been studying the potential impacts HVHF may have on the System, including any potential impacts on water quality. Since 2009, the City has called for a prohibition on all natural gas drilling in the watershed due to the potential for natural gas drilling as currently practiced to harm water quality and jeopardize the City's FAD and damage the City's water supply infrastructure. In 2011, NYSDEC agreed in the context of its ongoing environmental review to support a ban against high volume, but not low volume, hydraulic fracturing in the watershed. Low volume hydraulic fracturing is currently allowed in the watershed, though NYSDEC believes that it is not economically viable and that it will not take place in the watershed in the foreseeable future. DEP has asked NYSDEC to consider whether further environmental review of low volume hydraulic fracturing is required if low volume drilling is in fact proposed in the watershed. DEP has also proposed an exclusionary zone for HVHF around certain DEP infrastructure which would extend outside the watershed. In September 2012, NYSDEC requested that NYSDOH review the public health risks of HVHF utilizing a panel of outside experts; there is no timeline for completion of the health review. NYSDEC also began the process to promulgate regulations governing HVHF. Because the environmental review was not complete in time to meet the deadlines for the rulemaking process, NYSDEC will need to rerelease natural gas regulations for another public review period once the environmental review is complete. To date, no permits have been filed to drill for natural gas in the watershed.

LT2. In January 2006, USEPA issued the Long Term 2 Enhanced Surface Water Treatment Rule ("LT2"). The purpose of LT2 is to reduce the incidence of waterborne disease by mandating certain levels of inactivation and/or the removal of certain microorganisms from water supply systems, including the Catskill and Delaware Systems. DEP anticipates achieving compliance with such levels through the construction and operation of its planned ultraviolet treatment facility (the "UV Facility"). See "*UV Facility.*" LT2 also mandates that uncovered finished water storage facilities, which include the Hillview Reservoir, be covered or that water from such facilities be treated. DEP has entered into an Administrative Order with NYSDOH and an Administrative Consent Order with USEPA which mandate that the City begin work on a cover by December 31, 2018. In late August 2011, USEPA announced that as part of a periodic review of existing regulations it would review LT2 and its requirement to cover uncovered finished storage reservoirs such as Hillview Reservoir. See "*Hillview Reservoir.*"

UV Facility. The UV Facility provides treatment for Catskill and Delaware water. The UV Facility began operation by December 1, 2012, as required under an USEPA administrative order. The order also provides a schedule for validation testing, which is required to be completed by October 29, 2013, to ensure compliance with LT2; DEP is on schedule to meet this milestone. The cost to complete the UV Facility, including the validation testing, is fully funded in the CIP.

Hillview Reservoir. As with the UV Facility, DEP's commitments to cover the Hillview Reservoir pre-date LT2. In March 1996, DEP entered into the Hillview Administrative Order with NYSDOH which, as modified in 1997 and 1999 (the "State Hillview Administrative Order"), required, among other things, the City to cover the Hillview Reservoir by December 31, 2005 to reduce the possibility of E. coli bacteria entering the Water System. The City has not commenced construction of a cover for the Hillview Reservoir and therefore did not meet the December 31, 2005 milestone date set out in the State Hillview Administrative Order. Pursuant to an Administrative Order with USEPA to cover the Hillview Reservoir (the "Federal Hillview Administrative Order") the City's deadline to begin constructing the cover has been extended to December 31, 2018, with a construction completion date of May 31, 2028. The State Hillview Administrative Order has been modified to mirror the Federal Hillview Administrative Order schedule. The State and Federal Hillview Administrative Orders allow the City to seek a schedule modification based on DEP's on-going assessment of water supply facility construction priorities, although there is no assurance that any such modification would be granted.

DEP has requested that NYSDOH and USEPA extend the deadline to begin construction of the cover for an additional six years beyond the existing deadline. On February 9, 2011, the City was informed that USEPA referred the Federal Hillview Administrative Order and the City's extension

request to the U.S. Department of Justice (“USDOJ”). In light of USEPA’s announcement that it is reviewing LT2 and its requirement to cover uncovered finished water storage reservoirs such as Hillview Reservoir, USDOJ and the City have agreed to defer negotiations over revised dates until USEPA completes its review.

Currently, the cost of constructing a concrete cover over the Hillview Reservoir, as DEP originally proposed, is expected to be approximately \$1.6 billion. Under the schedule set forth in the Federal Hillview Administrative Order, most of the costs related to the cover would be incurred in the years beyond the CIP. The CIP does not include funding to construct a cover, but does include \$23 million for design. DEP is continuing to investigate less costly alternatives to a concrete cover, including a floating cover, which would require the consent of NYSDOH and USEPA.

Tap Water Testing Program. Pursuant to USEPA and NYSDOH regulations which require water suppliers to monitor for lead and copper that may have leached from pipes into drinking water, DEP manages an at-the-tap sampling program to determine whether tap water from the sampled sites has elevated levels of lead and copper. Regulations require that the sampling be done at consumer taps that are known to be at risk for containing lead, meaning they have lead service lines or confirmed lead in their plumbing. To reduce the leaching of metals, DEP adds orthophosphate to the water before it enters the distribution system, which promotes the formation of a protective coating inside pipes and plumbing.

Consumer Confidence Report. The SDWA requires that utilities prepare and distribute to their consumers a brief annual water quality report, referred to as the Consumer Confidence Report (the “CCR”). The CCR covering calendar year 2012, the most recent such report, demonstrates that the quality of the City’s drinking water remains high.

Delaware System Operations. The conditions under which the System’s Pepacton, Neversink and Cannonsville Reservoirs may be operated are set forth under the terms of a 1954 decree of the Supreme Court of the United States (the “1954 Decree”). It authorizes the System to divert 800 mgd of water from the Delaware River Basin for use by the Water System, subject to specified conditions. At the same time, a June 1, 2013 agreement with the parties to the decree requires the System, under certain circumstances, based on the time of year, reservoir storage, anticipated inflow and water supply demand, to release water from the three reservoirs into the tributaries of the Delaware River, in support of enhanced habitat protection and flood mitigation. Enforcement of the 1954 Decree is under the jurisdiction of a River Master appointed by the Supreme Court of the United States.

Shandaken Tunnel SPDES Permit. As a result of federal litigation resulting in a determination that a SPDES permit is required for water transfers such as the City’s transfer of water through the Shandaken Tunnel, DEP applied for and obtained a SPDES permit for the Shandaken Tunnel. As a result of state court litigation challenging the terms of the SPDES permit, DEP has applied for variances with respect to the permit’s temperature and turbidity limits. Depending upon the State’s action with respect to the variance application, DEP could be required to undertake costly capital projects. The City continues to believe that, consistent with USEPA’s Water Transfers Rule, adopted after the federal litigation concerning the Shandaken Tunnel was concluded, the Clean Water Act permit program does not apply to transfers of untreated water (such as the Shandaken Tunnel). Accordingly, the City will continue its efforts to defend the Water Transfers Rule and oppose the requirement for obtaining a SPDES permit for this water transfer.

Catskill Alum SPDES Permit. DEP adds alum to the Catskill aqueduct upstream of Kensico Reservoir when necessary to control turbidity levels. The diversions of water containing alum into Kensico Reservoir are authorized under a SPDES permit for the Catskill Influent Chamber (“Catskill Alum SPDES Permit”). Among other things, the Catskill Alum SPDES permit requires DEP to take measures to reduce the use of alum. One such measure is DEP’s use of the Ashokan Release Channel to release water from the Ashokan Reservoir through a release channel into the lower Esopus Creek. This release of water from the west basin of Ashokan Reservoir helps prevent the transfer of turbid water to the east basin but can result in both an increase in flow and turbidity in the lower Esopus Creek. The City’s compliance with the Catskill Alum SPDES Permit and operation of the Ashokan Release Channel are the subject of pending litigation. See “LITIGATION.”

In January 2013, USEPA listed the Lower Esopus as an impaired water pursuant to Section 303(d) of the Clean Water Act. Inclusion on the 303(d) list has no immediate regulatory consequences, but may render the Lower Esopus a priority for regulatory or planning activities.

For more information regarding litigation relating to the Water System, see “LITIGATION.”

The Sewer System

The Sewer System is comprised of the sewage collection system and the water pollution control facilities. See “New York City Drainage Areas and Water Pollution Control Plants” map in Appendix F.

Sewage Collection and Treatment

The Sewer System’s plants treat approximately 1,300 mgd of wastewater. The Sewer System is divided into 14 drainage areas corresponding to the 14 water pollution control plants and includes over 7,500 miles of sewer pipes of varying size which are classified as one of three types: sanitary, storm or combined. Sanitary sewers accommodate household and industrial waste. Storm sewers carry rainwater and surface water runoff. Combined sewers carry both types of waste. Approximately 70% of the City’s sewers are of the combined type. In addition to the sewage pipes, the Sewer System includes catch basins and seepage basins to prevent flooding and sewer backups.

The facilities related to the treatment of sewage include water pollution control plants, four combined sewer overflow retention facilities, wastewater pump stations, laboratories, sludge dewatering facilities and inner-harbor vessels which transport sludge between facilities. Sludge is a by-product of the sewage treatment process. Sludge that is treated through the sewage treatment process (or “biosolids”) is acceptable for land-based beneficial use either directly or after additional provisions such as composting or lime stabilization.

The Sewer System’s water pollution control pump stations convey wastewater to the water pollution control plants. When gravity flow becomes uneconomical or not feasible for engineering reasons, pump stations lift the flow so that it can again flow by gravity. In some locations, pump stations utilize pressure piping called force mains to direct the flow of wastewater to the plants. The CIP includes an ongoing program to reconstruct and refurbish pump stations.

During periods of heavy rainfall a combination of stormwater and sewage bypasses treatment and is released into the City’s waterways via combined sewer overflows. The combined sewer overflow abatement program provides for studies, design and construction of facilities to address this issue. DEP is under an NYSDEC Administrative Consent Order to reduce the volume of combined sewer overflows. See “— Governmental Regulation — Combined Sewer Overflows.”

DEP’s current contracts for the beneficial use of biosolids include composting and lime stabilization in Pennsylvania and landfill cover in Virginia. DEP also landfills a portion of its biosolids at various locations to diversify disposal options and reduce costs.

Governmental Regulation

Under the Clean Water Act, USEPA oversees compliance with federal environmental laws, regulations and guidelines concerning sewage. Included in that regulatory framework is the National Pollutant Discharge Elimination System Permit Program and the issuance of water pollution control plant operating permits. As authorized by the Clean Water Act, administration of the permit program has been delegated to the State.

Water Pollution Control Plants. The System includes six City-owned surface discharging water pollution control plants in the watershed, one City-owned subsurface discharging water pollution control plant in the watershed, one additional City-owned upstate surface discharging water control plant in the City of Port Jervis, and 14 in-City water pollution control plants.

DEP’s 14 in-City water pollution control plants are governed by plant-specific SPDES permits. Each SPDES permit includes an effluent limit for residual chlorine, among other parameters. Each permit further contains a schedule of compliance which requires each plant to undertake improvements to

further reduce residual chlorine and dates for such work to be completed. The interim limit is in effect until completion of construction of facilities necessary to achieve compliance with a final effluent limit. The final effluent limit has not yet been determined by NYSDEC. Depending on the final limit, DEP may be required to install ultraviolet filtration facilities, the cost of which would be incurred in the years beyond the CIP. Due to a number of issues, on May 18, 2011, DEP submitted a permit modification requesting additional time to complete these projects. On January 30, 2012, NYSDEC issued a notice of violation (“NOV”) alleging violations of several existing SPDES permit milestones related to total residual chlorine. On September 4, 2012, NYSDEC provided a draft consent order to DEP. DEP provided NYSDEC with comments and expects to continue negotiations to resolve the NOV.

NYSDEC has commenced discussion with DEP concerning modifications to DEP’s SPDES permits for the 14 in-City water pollution control plants. NYSDEC is seeking to publicly notice the draft permit in June 2013. While it is premature to make an accurate assessment, some of the potential modifications could result in increased costs to DEP.

Harbor and Waterway Protection. According to the most recent Harbor Survey issued by DEP, the water quality in New York Harbor and surrounding rivers continues to show long-term overall improvement. The Harbor Survey is an ongoing monitoring effort of the City’s waterways that has been done since 1909. The Survey monitors over a dozen water quality parameters at 70 sampling stations within New York Harbor and its tributaries. A key parameter of the overall health of aquatic systems is dissolved oxygen (“DO”). The Harbor Survey has found DO levels in most parts of the harbor at historic highs, although river-bottom DOs are periodically below acceptable concentrations. Many local waterways, which were unfishable just 20 years ago, now meet the coliform bathing standards. These water quality improvements are primarily a response to: continued water pollution control plant construction and upgrades; abatement and surveillance of illegal discharges; and increased capture of wet-weather flows.

In April 2004, the City health code for bathing beaches began utilizing a standard based on enterococcus, rather than coliform, which is regarded as a more precise indicator of water quality. DEP’s Harbor Survey has begun a monitoring program for enterococcus and has been assisting the NYCDOH in its beach assessments.

In 2006, the City entered into a State Court Consent Judgment with NYSDEC (the “Nitrogen Consent Judgment”) which requires DEP to upgrade five water pollution control plants, four of which discharge into the Upper East River and one of which discharges into Jamaica Bay, in order to reduce nitrogen discharges and comply with SPDES nitrogen limits by January 1, 2017. The Nitrogen Consent Judgment also establishes less stringent nitrogen limits during construction of the modified facility plan than those set out in the draft SPDES permits. Pursuant to a series of amendments, including the “First Amended Nitrogen Consent Judgment”, executed in 2011, DEP is now committed to construct nitrogen upgrades at all four plants that discharge into Jamaica Bay and the four Upper East River plants. The cost of complying with the Nitrogen Consent Judgment, as amended by the First Amended Nitrogen Consent Judgment, is \$160 million, all of which is included in the CIP. The First Amended Nitrogen Consent Judgment also requires that DEP provide between \$12.025 million and \$15.025 million in funding for marshland restoration projects in Jamaica Bay. The First Amended Nitrogen Consent Judgment also resolves DEP’s liability for missing certain milestones under the Nitrogen Consent Judgment and extends future milestones. One of the upgrade projects is behind schedule, and DEP has requested a modification of the applicable construction completion milestone. Stipulated penalties under the order could exceed \$5 million.

Newtown Creek/Full Secondary Treatment Requirements. The Newtown Creek water pollution control plant is in the process of being upgraded, pursuant to the terms of a State court consent judgment (the “Newtown Creek Consent Judgment”), agreed to by NYSDEC and DEP, as modified to require, among other things, that the plant meet the secondary treatment standards required by the Clean Water Act by May 1, 2013. This milestone was achieved on May 31, 2011. All of the System’s 14 in-City water pollution control plants now meet secondary treatment requirements. The current estimated cost to complete the remaining work at Newtown Creek pursuant to the Newtown Creek Consent Judgment is

\$46 million, which is fully funded in the CIP. On November 5, 2012, NYSDEC, based on DEP's substantial completion of the required milestones, and in recognition of the impacts of Hurricane Sandy on New York City, returned to DEP approximately \$22 million in funds that had previously been placed in escrow as part of the Newtown Creek Consent Judgment.

Under the Newtown Creek Consent Judgment, DEP completed certain construction work, including the installation of five new main sewage pumps ("MSPs"). Due to failures of certain of the pumps once they were in operation, DEP was not able to certify completion of the September 5, 2012 milestone in the Newtown Creek Consent Judgment, and submitted a notice of *force majeure* to NYSDEC. DEP's consultants determined that the failures were due to errors in the pump design and manufacture. DEP is presently negotiating the terms of the proposal provided by the pump manufacturer which includes a revised MSP design and a schedule for re-manufacture and re-installation of the MSPs. DEP has also hired an independent consultant who is preparing an MSP re-design and a schedule for manufacture of new MSPs if necessary. NYSDEC agrees that DEP is not at fault, and has not assessed any penalties for the delay. NYSDEC and DEP are presently negotiating a new milestone for certification of completion of the MSPs, and completion of the Newtown Creek Consent Judgment construction.

North River Wastewater Treatment Plant Fire/Notice of Violation. On July 20, 2011, a four-alarm fire that began in the engine room of the North River wastewater treatment plant caused a full evacuation of the plant and a shutdown of plant operations. As a result of the power interruption and related issues, the plant discharged between 225 and 270 million gallons of untreated wastewater into the Hudson River from July 20 to July 22, 2011. An independent consultant retained by DEP concluded that the most probable cause of the fire was a fastener that was over-tightened during replacement of the fuel injectors in June 2011. Additionally, the consultant made recommendations for certain modifications to prevent future similar failures which DEP is undertaking at the North River plant and its other engine plants, where appropriate, to enhance fire safety. On July 25, 2011, DEP received a request for information from the US Chemical Safety and Hazard Investigation Board ("CSB") regarding the fire, which DEP responded to. CSB has taken no further action. On August 5, 2011, NYSDEC issued a NOV for the bypass that occurred during the two-day shutdown of the plant. To date NYSDEC has not made a specific penalty demand and DEP's potential liability is difficult to estimate at this time. Based on the result of the independent consultant's findings, DEP requested a withdrawal of the NOV which NYSDEC denied. DEP anticipates further discussions with NYSDEC concerning the NOV. The remaining cost to make repairs to the plant is approximately \$11.6 million, \$11.4 million of which is funded in the CIP.

Combined Sewer Overflows. The System is also required to develop programs to reduce pollution from combined sewer overflows ("CSOs"). In June 1992, DEP entered into an administrative consent order with the State (the "CSO Consent Order") establishing various deadlines for the construction of nine combined sewer overflow projects. The 1992 CSO Consent Order was modified in January 2005, April 2008 and August 2009. The 1992 CSO Consent Order and subsequent modifications relied primarily on the building of large underground storage tanks ("Grey Infrastructure") to capture CSOs and pump the captured flow back to nearby wastewater treatment plants.

In September 2010, DEP released a Green Infrastructure Plan (the "Plan"), that offered a new approach to reducing CSOs through a cost-effective mix of Grey Infrastructure and methods such as bioswales, tree plantings, and green roofs to either retain and/or detain flow during rain events ("Green Infrastructure"). In March 2012, DEP and NYSDEC entered into a modification to the CSO Consent Order (the "2012 Modified CSO Consent Order") that incorporates the goals of the Plan. The 2012 Modified CSO Consent Order eliminates nine projects that were contemplated by the CSO Consent Order and defers two additional projects pending completion of long term control plans. In lieu of these projects, DEP is required to construct 15 projects (a mix of Green Infrastructure and Grey Infrastructure). DEP has missed certain milestones and is currently tracking delays to additional CSO projects. DEP has also submitted modification requests with new dates for certain projects. Based on the requested milestone dates for these projects, penalties could be approximately \$5,855,000 although DEP believes that some of the delay is attributable to circumstances outside its control and thus not subject to penalties.

DEP estimates the cost of complying with the 2012 Modified CSO Consent Order through the end of the CIP is \$1 billion, all of which is currently included in the CIP. Certain of the milestones in the 2012 Modified CSO Consent Order extend beyond the end of the CIP.

USEPA Request For Information. In January 2010, DEP received a request for information from USEPA concerning the City's 14 wastewater treatment plants and wastewater collection system. After complying with the request, DEP was informed by the United States Department of Justice ("DOJ") on March 29, 2011, that the matter had been referred to DOJ for possible civil enforcement of the Clean Water Act and the regulations thereunder. DOJ has notified DEP that it intends to pursue enforcement against DEP. DEP is currently negotiating this matter with DOJ and USEPA. DEP may be required to implement additional programs related to the operation of its wastewater system as a result of DOJ's enforcement.

Superfund Designation. On March 2, 2010, following up on an earlier notice of proposed listing, USEPA listed the Gowanus Canal, a waterway located in Brooklyn, New York, as a federal Superfund site under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). While it was evaluating listing the Gowanus Canal, on November 5, 2009, USEPA notified the City that it considers the City a potential responsible party ("PRP") under CERCLA for hazardous wastes in the Gowanus Canal. In its PRP notice letter, USEPA identified current and formerly City-owned and operated properties, including an asphalt plant, an inactive incinerator, and waterfront properties historically leased to private entities, as sources of hazardous substances in the Gowanus Canal. On February 2, 2011, following an investigation of the location, concentrations, types, sources, and risks of contamination in the canal, USEPA issued a Gowanus Canal Remedial Investigation Report. That report identified three former manufactured gas plants as the likely source of much of the contamination in the canal, but also identified CSOs as the likely source of some contamination. On December 30, 2011 USEPA released its draft feasibility study for the canal, evaluating various alternatives to address the contamination identified in its report. DEP is currently undertaking a \$160 million capital project which will modernize a flushing tunnel to directly improve water quality and circulation within the canal. This work also includes up-sizing a pump station at the head of the canal to reduce the discharge of CSOs and dredging of a portion of the canal. Based on prior communications between DEP and USEPA, the pump project should not be impacted by the listing of the Gowanus Canal as a federal Superfund site, although the dredging project may be impacted. On December 27, 2012, USEPA released its proposed plan for the Gowanus Canal Superfund remediation. The proposed plan includes dredging the contaminated sediment in the Canal and covering it with a cap. The proposed plan also recommends additional CSO controls for two outfalls in order to prevent recontamination of the Canal following implementation of the Superfund remedy. Excluding operation and maintenance and land acquisition costs, USEPA estimates that these Superfund-related CSO controls will cost approximately \$80 million. The overall projected remedial costs (including the dredging and capping) are approximately \$500 million. The City continues to question the technical basis of Superfund related CSO controls and, on April 26, 2013, submitted comments on the overall proposed plan.

On September 27, 2010, following up on an earlier notice of proposed listing, USEPA listed Newtown Creek, the waterway on the border between Brooklyn and Queens, New York, as a Superfund site. On April 6, 2010, USEPA notified the City that it considers the City a PRP under CERCLA for hazardous wastes in the Newtown Creek. In its Newtown Creek PRP notice letter, EPA identified historical City activities that filled former wetlands and low lying areas in and around the Newtown Creek and releases from formerly City-owned and operated facilities, including municipal incinerators, as well as discharges from sewers and combined sewer overflow outfalls as potential sources of hazardous substances in the Newtown Creek. The City is participating with five companies that own or operate facilities adjacent to Newtown Creek in the investigation of conditions in Newtown Creek and the evaluation of feasible remedies. This investigation, which is being performed under an Administrative Settlement Agreement and Order on Consent with USEPA jointly entered into by the five companies and the City, is expected to take approximately six to seven years and cost approximately \$32 million, with the City's share being one quarter of the total, subject to reallocation. The settlement does not cover any remedy that may ultimately be chosen by USEPA to address the contamination identified as a result of the investigation and evaluation.

Under CERCLA, a responsible party may be held responsible for monies expended for response actions at a Superfund site, including investigative, planning, removal, remedial and EPA enforcement actions. A responsible party may also be ordered by USEPA to take response actions themselves. Responsible parties include, among others, past or current owners or operators of a facility from which there is a release of a hazardous substance that causes the incurrence of response costs. The nature, extent, and cost of response actions at either Gowanus Canal or Newtown Creek, and the contribution, if any, of discharges from the System of hazardous substances to the Creek, and the extent of DEP's liability, if any, for monies expended for such response actions, will likely not be determined for several years.

Separate Sewers. In addition to the combined sewers, which are subject to the CSO control program, portions of the City are served by separate sewers designed to carry only stormwater. Such municipal separate storm sewer systems ("MS4s") are also subject to regulation under the Clean Water Act, and therefore require SPDES permits. Currently, the SPDES requirements for the City's separate sewers are incorporated into the SPDES permits for the 14 water pollution control plants. In April 2010, however, NYSDEC indicated its intention to issue a separate, Citywide MS4 permit which is likely to impose significant new requirements. The City does not yet have an estimate of the costs associated with those new requirements, nor are such costs included in the CIP.

For more information on litigation relating to the Sewer System, see "LITIGATION."

ECONOMIC AND DEMOGRAPHIC INFORMATION

This section presents information regarding certain economic and demographic information about the City. All information is presented on a calendar year basis unless otherwise indicated. The data set forth are the latest available. Sources of information are indicated in the text or immediately following the tables. Although the Authority considers the sources to be reliable, the Authority has made no independent verification of the information provided by non-city sources and does not warrant its accuracy.

New York City Economy

The City has a diversified economic base, with a substantial volume of business activity in the service, wholesale and retail trade and manufacturing industries, and is the location of many securities, banking, law, accounting, new media and advertising firms.

The City is a major seaport and focal point for international business. Many of the major corporations headquartered in the City are multinational in scope and have extensive foreign operations. Numerous foreign-owned companies in the United States are also headquartered in the City. These firms are found in all sectors of the City's economy, but are concentrated in trade, professional and business services, tourism and finance. The City is the location of the headquarters of the United Nations, and several affiliated organizations maintain their principal offices in the City. A large diplomatic community exists in the City to staff the United Nations and the foreign consulates.

Economic activity in the City has experienced periods of growth and recession and can be expected to experience periods of growth and recession in the future. The City experienced a recession in the early 1970s through the middle of that decade, followed by a period of expansion in the late 1970s through the late 1980s. The City fell into recession again in the early 1990s which was followed by an expansion that lasted until 2001. The economic slowdown that began in 2001 as a result of the September 11 attack, a national economic recession, and a downturn in the securities industry came to an end in 2003. Subsequently, Wall Street activity, tourism and the real estate market drove a broad-based economic recovery until the second half of 2007. A decrease in economic activity began in the second half of 2007 and continued through the first half of 2010. The Mayor's most recent financial plan for the City's fiscal years 2013 through 2017 (the "Financial Plan") assumes that the gradual increase in economic activity that occurred in the second half of 2010 will continue through 2013.

Personal Income

Total personal income for City residents, unadjusted for the effects of inflation and the differential in living costs, increased from 2001 to 2011 (the most recent year for which City personal income data are available). From 2000 to 2008, personal income in the City and in the nation averaged 4.9% and 4.8% growth, respectively. After decreasing by 5.8% in 2009, total personal income increased by 7.5% and 5.1% in 2010 and 2011, respectively. The following table sets forth information regarding personal income in the City from 2001 to 2011.

Personal Income(1)

<u>Year</u>	<u>Total City (\$ billions)</u>	<u>Per Capita City</u>	<u>Per Capita U.S.</u>	<u>Per Capita City as a Percent of U.S.</u>
2001	\$299.0	\$37,093	\$31,157	119.1%
2002	299.5	37,107	31,481	117.9
2003	305.7	37,895	32,295	117.3
2004	327.6	40,732	33,909	120.1
2005	351.6	43,876	35,452	123.8
2006	386.7	48,374	37,725	128.2
2007	416.5	51,978	39,506	131.6
2008	427.9	53,037	40,947	129.5
2009	403.2	49,584	38,637	128.3
2010	433.3	52,928	39,791	133.0
2011	455.5	55,245	41,560	132.9

Sources: U.S. Department of Commerce, Bureau of Economic Analysis and the Bureau of the Census.

(1) In current dollars. Personal Income is based on the place of residence and is measured from income which includes wages and salaries, supplements to wages and salaries, proprietors' income, personal dividend income, personal interest income, rental income of persons and transfer payments.

Employment Trends

The City is a leading center for the banking and securities industry, life insurance, communications, fashion design and retail fields. Over the past two decades the City has experienced a number of business cycles. From 1992 to 2000, the City added 453,600 private sector jobs (growth of 17%). From 2000 to 2003, the City lost 174,600 private sector jobs (decline of 6%). From 2003 to 2008, the City added 255,100 private sector jobs (growth of 9%). From 2008 to 2009, the City lost 103,700 private sector jobs (decline of 3%). From 2009 to 2012, the City added 205,500 private sector jobs (growth of 7%). All such changes are based on average annual employment levels through and including the years referenced. As of April 2013, total employment in the City was 3,943,900 compared to 3,865,000 in April 2012, an increase of approximately 2.0%.

The table below shows the distribution of employment from 2002 to 2012.

Employment Distribution											
Average Annual Employment (In thousands)											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Goods Producing Sectors											
Construction	116	113	112	113	118	127	133	121	112	112	115
Manufacturing	139	127	121	114	106	101	96	82	76	76	76
Service Producing Sectors											
Trade Transportation and Utilities	536	534	539	547	559	570	574	552	559	575	588
Information	177	164	160	163	165	167	170	165	166	171	177
Financial Activities	445	434	435	445	458	468	465	434	429	439	439
Professional and Business Services	550	537	542	556	571	592	603	569	575	598	619
Education and Health Services	646	658	665	679	695	705	719	735	753	769	785
Leisure and Hospitality	255	260	270	277	285	298	310	309	322	342	363
Other Services	150	149	151	153	154	158	161	160	161	165	170
Total Private	3,015	2,975	2,995	3,047	3,112	3,186	3,230	3,126	3,153	3,247	3,332
Government	566	557	554	556	555	559	564	567	558	551	546
Total	3,581	3,531	3,549	3,603	3,667	3,745	3,794	3,693	3,711	3,798	3,878

Note: Totals may not add due to rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics. Data are presented using the North American Industry Classification System ("NAICS").

Sectoral Distribution of Employment and Earnings

In 2011, the City's service producing sectors provided approximately 3.1 million jobs and accounted for approximately 81% of total employment. Figures on the sectoral distribution of employment in the City from 1980 to 2000 reflect a significant shift to the service producing sectors and a shrinking manufacturing base relative to the nation.

The structural shift to the service producing sectors affects the total earnings as well as the average wage per employee because employee compensation in certain of those sectors, such as financial activities and professional and business services, tends to be considerably higher than in most other sectors. Moreover, average wage rates in these sectors are significantly higher in the City than in the nation. In the City in 2011, the employment share for the financial activities and professional and business services sectors was approximately 27% while the earnings share for that same sector was approximately 50%. In the nation, those same service producing sectors accounted for only approximately 19% of employment and 26% of earnings in 2011. Due to the earnings distribution in the City, sudden or large shocks in the financial markets may have a disproportionately adverse effect on the City relative to the nation.

The City's and the nation's employment and earnings by sector for 2011 are set forth in the following table.

Sectoral Distribution of Employment and Earnings in 2011(1)

	<u>Employment</u>		<u>Earnings(2)</u>	
	<u>NYC</u>	<u>U.S.</u>	<u>NYC</u>	<u>U.S.</u>
Goods Producing Sectors				
Mining	0.0%	0.6%	0.0%	1.2%
Construction	3.0	4.2	2.9	5.3
Manufacturing	2.0	8.9	1.4	10.1
Total Goods Producing	4.9	13.7	4.4	16.6
Service Producing Sectors				
Trade, Transportation and Utilities	15.1	19.1	8.8	15.5
Information	4.5	2.0	7.1	3.3
Financial Activities	11.6	5.9	29.7	9.4
Professional and Business Services	15.7	13.2	20.2	16.4
Education and Health Services	20.3	15.1	11.1	12.8
Leisure & Hospitality	9.0	10.2	4.7	4.2
Other Services	4.3	4.1	2.8	3.7
Total Service Producing	80.6	69.5	84.4	65.3
Total Private Sector	85.5	83.2	89.6	82.2
Government(3)	14.5	16.8	10.4	17.8

Note: Data may not add due to rounding or disclosure limitations. Data are presented using NAICS.

Sources: The two primary sources are the U.S. Department of Labor, Bureau of Labor Statistics and the U.S. Department of Commerce and the Bureau of Economic Analysis.

- (1) The sectoral distributions are obtained by dividing each industry's employment or earnings by total non-agricultural employment or earnings.
- (2) Includes the sum of wage and salary disbursements, other labor income and proprietor's income. The latest information available is 2011 data.
- (3) Excludes military establishments.

The comparison of employment and earnings in 1980 and 2000 set forth below is presented using the industry classification system which was in use until the adoption of NAICS in the late 1990s. Though NAICS has been implemented for most government industry statistical reporting, most historical earnings data have not been converted. Furthermore, it is not possible to compare data from the two classification systems except in the general categorization of government, private and total employment.

The table below reflects the overall increase in the service producing sectors and the declining manufacturing base in the City from 1980 to 2000.

The City's and the nation's employment and earnings by industry are set forth in the following table.

Sectoral Distribution of Employment and Earnings(1)

Sector	Employment				Earnings(2)			
	1980		2000		1980		2000	
	NYC	U.S.	NYC	U.S.	NYC	U.S.	NYC	U.S.
Private Sector:								
Non-Manufacturing:								
Services	27.0%	19.8%	39.1%	30.7%	26.0%	18.4%	30.2%	28.7%
Wholesale and Retail Trade	18.6	22.5	16.8	23.0	15.1	16.6	9.3	14.9
Finance, Insurance and Real Estate	13.6	5.7	13.2	5.7	17.6	5.9	35.5	10.0
Transportation and Public Utilities	7.8	5.7	5.7	5.3	10.1	7.6	5.2	6.8
Contract Construction	2.3	4.8	3.3	5.1	2.6	6.3	2.9	5.9
Mining	0.0	1.1	0.0	0.4	0.4	2.1	0.1	1.0
Total Non-Manufacturing	69.3	59.6	78.1	70.3	71.8	56.9	83.2	67.3
Manufacturing:								
Durable	4.4	13.4	1.6	8.4	3.7	15.9	1.3	10.5
Non-Durable	10.6	9.0	4.9	5.6	9.5	8.9	4.8	6.1
Total Manufacturing	15.0	22.4	6.5	14.0	13.2	24.8	6.1	16.6
Total Private Sector	84.3	82.0	84.7	84.3	85.2	82.1	89.8	84.6
Government(3)	15.7	18.0	15.3	15.7	14.8	17.9	10.3	15.4

Totals may not add due to rounding. Data are presented using the Standard Industrial Classification System.

Sources: The two primary sources of employment and earnings information are U.S. Department of Labor, Bureau of Labor Statistics, and U.S. Department of Commerce, Bureau of Economic Analysis.

(1) The sectoral distributions are obtained by dividing each industry's employment or earnings by total non-agricultural employment or earnings.

(2) Includes the sum of wage and salary disbursements, other labor income, and proprietors' income. The latest information available for the City is 2000 data.

(3) Excludes military establishments.

Population

The City has been the most populous city in the United States since 1790. The City's population is larger than the combined population of Los Angeles and Chicago, the two next most populous cities in the nation.

The following table provides information concerning the City's population.

Year	Population Total
1970	7,895,563
1980	7,071,639
1990	7,322,564
2000	8,008,278
2010	8,175,133

Note: Figures do not include an undetermined number of undocumented aliens.

Source: U.S. Department of Commerce, Bureau of the Census.

LITIGATION

There is no action, suit, proceeding or investigation, at law or in equity, before or by any court, public board or body pending or, to the best knowledge of the Authority, threatened against or affecting the Authority to restrain or enjoin the issuance, sale or delivery of the Fiscal 2014 Series 1 Bonds, or in any way contesting or affecting the validity of the Fiscal 2014 Series 1 Bonds, or any proceedings of the Authority, the Board or the City taken with respect to the issuance or sale of the Fiscal 2014 Series 1 Bonds, or with respect to the Authority First Resolution, the Authority Second Resolution or the pledge or application of any money or security provided for the payment of the Fiscal 2014 Series 1 Bonds, or the existence or powers of the Authority or the Board.

Pursuant to the Lease and the Agreement, the City has agreed, subject to certain conditions, to indemnify the Authority and the Board against any and all liability in connection with any act done or omitted in the exercise of their powers which is taken or omitted in good faith in pursuance of their purposes under the Act. The City, however, is entitled to reimbursement by the Board for the amount of any judgment or settlement paid by the City (and not otherwise reimbursed from any other source) arising out of a tort or contract claim to the extent that the City's liability therefor is related to the operation, maintenance and improvement of the System provided, however, that the Board is not required to reimburse the City in any one year for tort claims in excess of 5% of the Revenues of the Board for such Fiscal Year.

There are numerous claims seeking damages and injunctive and other relief against the City related to the System. Except as noted below, these claims represent routine litigation incidental to the performance of the City's governmental functions in connection with the operation, maintenance and improvement of the System. Contract claims on water supply, sewer and water pollution control projects arise in varying amounts based on alleged change orders and related matters. While most seek under \$10 million in damages, actions seeking, respectively, damages of approximately \$26 million, \$160 million, \$19 million, \$32 million, \$11 million and \$16 million are pending. While the probable outcome of these actions cannot be determined at this time, contract claims are expected to be funded through the CIP, which may be revised from time to time to accommodate such claims as well as other changes therein. The ultimate outcome of the proceedings described below is not currently predictable, and unfavorable determinations therein could result in substantial expenditures.

On July 18, 2007 a Con Edison steam main located at Lexington Avenue and 41st Street in Manhattan ruptured resulting in one death, dozens of personal injuries, and substantial property damage. The City was served with 350 notices of claim. About 89 lawsuits with approximately 212 plaintiffs/subrogorors have been commenced and the City is a defendant, or a third-party defendant, in each. The other defendants are Con Edison, owner and operator of the steam system, and Team Industrial Services, a company hired by Con Edison to seal leaks in the main. Con Edison's investigation concluded that a sudden pressure surge known as a "waterhammer" caused the rupture, and two "steam traps" designed to drain water were clogged with an epoxy sealant injected by Team Industrial Services. Con Edison also claims the excessive water, or condensate, formed inside the main because it was submerged in cool water. The allegation against the City is that defective DEP infrastructure leaked water on the main. If plaintiffs and/or Con Edison prevail the City could incur substantial damages. The City denies the allegations and is vigorously contesting liability.

NYSDEC served the City with an administrative complaint in February 2011, alleging a number of violations of the Catskill Alum SPDES Permit. (See "*Catskill Alum SPDES Permit*" in the "GOVERNMENTAL REGULATION" section above.) The complaint sought penalties in the amount of \$2.6 million relating to the operation of the Ashokan release channel, as well as other relief. The City has negotiated an administrative consent order (the "Catskill Alum Consent Order") with NYSDEC to resolve the allegations in the complaint. DEC accepted public comments on the Catskill Alum Consent Order through July 16, 2012. If not altered in response to public comment, the order requires DEP, among other things, to comply with an interim protocol for operation of the Ashokan release channel; pay a penalty, of which \$100,000 is payable and \$500,000 is suspended; fund various projects in the total amount of \$950,000; apply for a modified SPDES permit; and undertake an environmental impact study

in support of such modified SPDES permit. In addition, in January 2011, Ulster County sent DEP a 60-day notice letter pursuant to the Clean Water Act, notifying DEP, as well as NYSDEC and USEPA, that it intends to sue the City, challenging certain transfers of water out of the Ashokan Reservoir without a SPDES permit. The City does not believe a SPDES permit is required for the releases through the release channel because the lower Esopus Creek would receive flows from the upper Esopus Creek had the Ashokan Reservoir not been built. In December 2011, Riverkeeper and Ulster County both submitted comments on the interim protocol to NYSDEC and also petitioned NYSDEC to issue a SPDES permit governing the release channel. As noted above, the City does not believe such a permit is required by law. If the City were required to stop using the release channel, or to reduce the turbidity in the releases, the City could incur substantial costs.

The number of potential claims and the extent of the System's liability, if any, for damages relating to Hurricane Sandy are not known at this time but could be material.

APPROVAL OF LEGAL PROCEEDINGS

The issuance of the Fiscal 2014 Series 1 Bonds is subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, New York, New York, Bond Counsel. Certain legal matters will be passed upon for the City and the Board by the City's Corporation Counsel.

FURTHER INFORMATION

The references herein to and summaries of federal, State and local laws, including but not limited to the Code, the Constitution and laws of the State, the Act, the 1905 Act, the Clean Water Act, the SDWA, the Ban Act, the MPRSA, and documents, agreements and court decisions, including but not limited to the Lease, the Agreement, the Authority First Resolution and the Authority Second Resolution are summaries of certain provisions thereof. Such summaries do not purport to be complete and are qualified in their entirety by reference to such acts, laws, documents, agreements or decisions. Copies of the Lease, the Agreement, the Authority First Resolution and the Authority Second Resolution are available for inspection during normal business hours at the office of the Authority.

Any statements in this Attachment 1 involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. Neither this Attachment 1 nor any statement which may have been made orally or in writing shall be construed as a contract or as a part of a contract with the original purchasers or any holders of the Fiscal 2014 Series 1 Bonds.

CONTINUING DISCLOSURE UNDER SEC RULE 15c2-12

To the extent that Rule 15c2-12 (the "Rule") of the Securities and Exchange Commission ("SEC") under the Securities and Exchange Act of 1934, as amended (the "1934 Act"), requires the Underwriters to determine, as a condition to purchasing the Corporation's Series 2013 A Bonds, that the Authority will covenant to the effect of the provisions here summarized (the "Undertaking"), and the Rule as so applied is authorized by a federal law that as so construed is within the powers of Congress, the Authority agrees with the record and beneficial owners from time to time of the Corporation's Series 2013 A Bonds ("Bondholders") that it will:

(1) within 270 days after the end of the 2013 Fiscal Year and each Fiscal Year, to the Electronic Municipal Market Access System ("EMMA") (<http://emma.msrb.org>) established by the Municipal Securities Rulemaking Board (the "MSRB"), core financial information and operating data for the prior fiscal year, including (i) the System's audited financial statements, prepared in accordance with generally accepted accounting principles in effect from time to time, and (ii) material historical

financial and operating data concerning the System and the Revenues of the System generally of the type included in this Attachment 1 under the captions “CAPITAL IMPROVEMENT AND FINANCING PROGRAM,” “FINANCIAL OPERATIONS,” “RATES AND BILLING” and “THE SYSTEM;”

(2) provide in a timely manner not in excess of 10 Business Days after the occurrence of any event described below, notice to EMMA, of any of the following events with respect to the Fiscal 2014 Series 1 Bonds:

- (a) principal and interest payment delinquencies;
- (b) non-payment related defaults if material;
- (c) in the case of credit enhancement that is provided in connection with the issuance of the Fiscal 2014 Series 1 Bonds, unscheduled draws on such credit enhancement reflecting financial difficulties and substitution of credit providers, or their failure to perform;
- (d) unscheduled draws on debt service reserves reflecting financial difficulties;
- (e) adverse tax opinions or the issuance by the IRS of a proposed or final determination of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Fiscal 2014 Series 1 Bonds or other material events affecting the tax status of the Fiscal 2014 Series 1 Bonds;
- (f) modifications to rights of security holders if material;
- (g) bond calls if material, and tender offers;
- (h) defeasances;
- (i) release, substitution, or sale of property securing repayment of the securities if material;
- (j) bankruptcy, insolvency, receivership, or similar event of the Authority;
- (k) consummation of a merger, consolidation, or acquisition involving the Authority, or sale of all or substantially all of the assets of the Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such action or the termination of a definitive agreement relating to such actions, other than pursuant to its terms, if material;
- (l) appointment of a successor or additional trustee or the change of name of a trustee, if material; and
- (m) rating changes; and

(3) provide in a timely manner, to the MSRB, notice of any failure by the Authority to comply with clause (1) above.

With respect to event (c) the Authority does not undertake to provide any notice with respect to credit enhancement added after the primary offering of the securities, unless the Authority applies for or participates in obtaining the enhancement.

Event (d) is included pursuant to a letter from the SEC staff to the National Association of Bond Lawyers dated September 19, 1995. However, event (d) may not be applicable, since no “debt service reserves” will be established for the Fiscal 2014 Series 1 Bonds.

Event (e) is relevant only to the extent interest on the Fiscal 2014 Series 1 Bonds is tax-exempt.

With respect to event (g) the Authority does not undertake to provide the above-described event notice of a mandatory redemption through sinking fund installments, not otherwise contingent upon the occurrence of an event, if (i) the terms, dates and amounts of redemption are set forth in detail in the final official statement (as defined in the Rule), (ii) the only open issue, which securities will be redeemed in the case of a partial redemption, (iii) notice of redemption is given to the Bondholders as required under the terms of the securities and (iv) public notice of redemption is given pursuant to Exchange Act Release No. 23856 of the SEC, even if the originally scheduled amounts are reduced prior to optional redemptions or security purchases.

The Authority expects to provide the information described in clause (1) above by delivering its first bond Attachment 1 that includes its financial statements for the preceding fiscal year.

No Bondholder may institute any suit, action or proceeding at law or in equity (“Proceeding”) for the enforcement of the Undertaking or for any remedy for breach thereof, unless such Bondholder has filed with the Authority evidence of ownership and a written notice of and request to cure such breach, and the Authority has not complied within a reasonable time; provided, however, that any Proceeding challenging the adequacy of any information provided pursuant to paragraphs (1) and (2) above may be brought only by the Trustee for the holders of a majority in aggregate principal amount of the Fiscal 2014 Series 1 Bonds affected thereby which at the time are Outstanding. All Proceedings may be instituted only as specified herein, in the federal or State courts located in the Borough of Manhattan, State and City of New York, and for the equal benefit of all holders of the Outstanding Bonds benefited by the same or a substantially similar covenant. No remedy may be sought or granted other than specific performance of the covenant at issue.

Any amendment to the Undertaking will take effect only if:

(a) the amendment is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of the Authority or the Board, or type of business conducted; the Undertaking, as amended, would have complied with the requirements of the Rule at the time of sale of the Fiscal 2014 Series 1 Bonds to the Underwriters of such bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and the amendment does not materially impair the interests of Bondholders, as determined by parties unaffiliated with the Authority (such as, but without limitation, the Authority’s financial advisor or bond counsel) and the annual financial information containing (if applicable) the amended operating data or financial information will explain, in narrative form, the reasons for the amendment and the “impact” (as that word is used in the letter from the staff of the SEC to the National Association of Bond Lawyers dated June 23, 1995) of the change in the type of operating data or financial information being provided; or

(b) all or any part of the Rule, as interpreted by the staff of the SEC at the date of the Undertaking, ceases to be in effect for any reason, and the Authority elects that the Undertaking will be deemed terminated or amended (as the case may be) accordingly.

For purposes of the Undertaking, a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares investment power which includes the power to dispose, or to direct the disposition of, such security, subject to certain exceptions, as set forth in the Undertaking. Any assertion of beneficial ownership must be filed, with full documentary support, as part of the written request to the Authority described above.

The Authority has complied, in all material respects, with its continuing disclosure undertakings pursuant to the Rule.

INVESTMENTS

The Authority invests moneys available in the Debt Service Fund, the Construction Fund and the Revenue Fund. Investments are made pursuant to restrictions contained in the Resolutions and the Authority’s Investment Guidelines as adopted and modified from time to time by the Authority’s Board of Directors. In conjunction with the annual audit of the financial statements of the System, the independent auditors are required to provide to the Authority’s Board of Directors an Investment Compliance letter confirming compliance with both the Authority’s Investment Guidelines and with Investment Guidelines of Public Authorities of the State Comptroller of New York. Annual valuation of all funds is at the lower of amortized cost or market value. For other investment restrictions, see “APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS.” The Authority’s primary objective in investment of its available funds is preservation of principal. The Authority is not legally authorized to enter into reverse repurchase agreements. Authority does not make leveraged investments.

FINANCIAL STATEMENTS AND INDEPENDENT AUDITORS

The financial statements of the System as of and for the years ended June 30, 2012 and June 30, 2011 (the “Audited System Financial Statements”) included in Appendix D to this Attachment 1 have been audited by Deloitte & Touche LLP, independent certified public accountants, as stated in their report appearing therein. Deloitte & Touche LLP, the Authority’s independent auditor has not reviewed, commented on or approved, and is not associated with, this Attachment 1. The report of Deloitte & Touche LLP relating to the Authority’s financial statements for the fiscal years ended June 30, 2012 and 2011, which is a matter of public record, is included in this Attachment 1. However, Deloitte & Touche LLP has not performed any procedures on any financial statements or other financial information of the Authority, including without limitation any of the information contained in this Attachment 1, since the date of such report and has not been asked to consent to the inclusion of its report in this Attachment 1.

ENGINEERING FEASIBILITY REPORT AND FORECASTED CASH FLOWS

Certain information contained in this Attachment 1 under the captions “Capital Improvement and Financing Program — Ten Year Capital Strategy, Current Capital Plan and the Capital Improvement Program,” “The System — The Water System,” “The System — The Sewer System” has been reviewed and independently evaluated by AECOM which has provided the opinion letter set forth in Appendix A confirming such information. AECOM also serves as a consulting engineer to DEP on capital projects relating to the System. As a result of occasional, routine litigation initiated by third parties arising from such projects, AECOM and the City have from time to time been either co-parties or adverse parties in such litigation.

Certain financial forecasts contained in this Attachment 1 in the tables titled “Sources and Uses of Capital Funds” and “Future Debt Service Requirements” under the caption “Capital Improvement and Financing Program” and “Projected Operating and Maintenance Expenses,” “Projected Revenues,” and “Forecasted Cash Flows” under the caption “Financial Operations” have been examined by Amawalk Consulting, to the extent and for the periods indicated in those tables. The conclusions of Amawalk Consulting with respect to the reasonableness of the forecasts are set forth in an opinion letter attached hereto as Appendix B. Amawalk Consulting has provided consulting services including feasibility studies, rate studies and organizational analysis to numerous clients in the water and wastewater industry including the City of New York Water and Sewer System, the Boston Water and Sewer Commission, the District of Columbia Water and Sewer Authority and the Water and Sewer Authority of Nanjing, PRC.

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**LETTER OF
AECOM USA, INC.
CONSULTING ENGINEERS**

June 26, 2013

Mr. Thomas G. Paolicelli
Executive Director
New York City Municipal Water Finance Authority

Subject: New York City Municipal Water Finance Authority Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series 1

Dear Mr. Paolicelli,

We hereby submit the opinion of AECOM USA, Inc. (“AECOM”) on the condition of the Water and Sewer System serving The City of New York (the “City”). Capitalized terms used herein and not otherwise defined have the meanings ascribed to such terms in the Attachment 1.

Based on the information set forth in this Attachment 1, our experience and our analyses during the preparation of the 1983 feasibility study, the methodology described below and subject to the reliance and assumptions made throughout this letter, AECOM concludes that overall the Water and Sewer system (the “System”) serving the City continues to be operated in a professional and prudent manner. Further, AECOM is of the opinion that:

- The condition of the System continues to receive the highest rating of our three rating categories (adequate).
- The expense allocations for Fiscal Year 2013 and the projected expense allocations for Fiscal Year 2014 are adequate for the continued reliable operation of the System.
- The Capital Improvement Program (the “CIP”) is responsive to the long-term operating requirements of the service area.
- Current staffing levels of the System are sufficient for proper operation and maintenance. Additional staffing needs have been identified for future facilities.

AECOM hereby consents to the inclusion of those opinions and conclusions attributed to it in the Attachment 1.

Purpose and Scope

This letter has been prepared to document the results of analyses carried out during the period of August 1983 to the present by personnel of AECOM in connection with the issuance by the New York City Municipal Water Finance Authority (the “Authority”) of the Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series 1. Certain studies and analyses were performed in anticipation of the creation of the Authority and were used in developing the information in the Attachment 1 under the captions: “CAPITAL IMPROVEMENT AND FINANCING PROGRAM — Ten Year Capital Strategy, Current Capital Plan and the Capital Improvement Program, “THE SYSTEM — The Water System,” and “THE SYSTEM — The Sewer System.” The following identifies the major investigations undertaken:

- An overview of the System’s service area and major facilities, including a general assessment of the capacity and condition of existing water, wastewater and drainage facilities and a review of recently completed improvements
- An analysis of the CIP for the period 2013-2023 and the funding needed to carry out the CIP and ongoing capital contracts commenced prior to the CIP
- An analysis of the management of the System and its current and anticipated operating programs

Since 1983, AECOM has provided engineering services related to the City's Water and Wastewater Operations Evaluation Study. During this period AECOM has performed an evaluation of the condition of the System, independently reviewed the capital plans for water and wastewater programs, and jointly with the rate consultant reviewed the operating programs of the New York City Department of Environmental Protection ("DEP"). The following topics were addressed in this effort:

- Present Condition of Physical Facilities
- Remaining Useful Life of Facilities
- Reliability of Utility Systems
- Operation and Maintenance Programs
- Current Utility Use
- Maximum Existing Capacity
- Needs for Routine Maintenance, Upgrading and Expansion
- Evaluation of the Impact of Legal Mandates
- Overview of Present Capital Improvement Program
- Safety Practices and Potential for Catastrophe

Methodology

Interviews with staff members of the Authority and the City were conducted, current engineering and financial reports, System operating data and other document were reviewed and major facilities were inspected. Audited financial statements of the City and data supplied by the Authority were also reviewed to identify historical costs and revenues. The evaluation of current needs and future conditions was made by analyzing historical data, assessing the effectiveness of current City maintenance programs, reviewing the plans of key outside agencies, and taking into account current trends and the anticipated impact of the CIP.

The physical condition of the System was rated by AECOM. A uniform rating system, similar to those used by consulting firms providing similar services was established consisting of three rating categories; Adequate, Marginal, and Inadequate as described:

- Adequate: Shows no signs of deterioration beyond normal wear, meets design intent, and requires only routine maintenance and scheduled refurbishment to meet or exceed expected useful life.
- Marginal: Is functional but does not meet design intent and requires non-routine maintenance or capital replacement to restore to adequate condition
- Inadequate: Does not provide functional operation, and requires major reconstruction to restore to adequate condition.

The Consulting Engineer

AECOM has served the water and wastewater industry for over 100 years and the City as a consulting engineer for many decades dealing with water supply, water distribution, sewage collection, and wastewater treatment. AECOM is one of the largest consulting engineering firms and is recognized in the United States and internationally as a leader in services to the water and wastewater industry.

We have no responsibility to update this letter or the information provided in the Attachment 1 for the captioned sections described above for events and circumstances occurring after the date of this letter.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Pfrang', with a stylized flourish at the end.

William P. Pfrang, P.E., BCEE
Vice President
AECOM USA, Inc.

Amawalk Consulting Group LLC

26 BROADWAY, SUITE 950, NEW YORK, NY 10004 • TEL: 212.361.0050 • FAX: 212.361.0055

June 26, 2013

Mr. Thomas G. Paolicelli
Executive Director
New York City Municipal Water Finance Authority

Subject: New York City Municipal Water Finance Authority
Water and Sewer System Second General Resolution Revenue Bonds,
Fiscal 2014 Series 1

Dear Mr. Paolicelli:

The purpose of this letter is to summarize the conclusions of the independent analysis of the financial forecast of the Authority (the “Forecasted Cash Flows”) for Fiscal Years 2013 through 2017 (the “Reporting Period”) prepared by the Amawalk Consulting Group LLC in connection with the issuance by the New York City Municipal Water Finance Authority (the “Authority”) of the Authority’s \$401,090,000 Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series 1 (the “Fiscal 2014 Series 1 Bonds”). Proceeds from the Fiscal 2014 Series 1 Bonds are expected to be used to refund certain of the Outstanding Authority Second Resolution Bonds previously issued to secure New York State Environmental Facilities Corporation bonds. In conducting the analysis, the Amawalk Consulting Group LLC has prepared the following tables which are included in this Attachment 1 under the headings “Capital Improvement and Financing Program” and “Financial Operations.”

- Sources and Uses of Capital Funds
- Future Debt Service Requirements
- Projected Revenues
- Projected Operation and Maintenance Expense
- Forecasted Cash Flows

The forecast includes provisions for the financing of improvements to the City of New York (the “City”) Water and Sewer System (the “System”) as reflected in the Capital Improvement Program (the “CIP”) for the Reporting Period. The Forecasted Cash Flows set forth the ability of the System to meet the operating costs, working capital needs and other financial requirements of the System, including the debt service requirements associated with the Outstanding Bonds issued under the Authority’s General Bond Resolution (the “Authority First Resolution”) and obligations issued under the Authority’s Second General Resolution (the “Authority Second Resolution”) and additional Bonds and Authority Second Resolution Bonds whose issuance by the Authority during the five years ending June 30, 2017 is anticipated.

Revenues pledged to secure the Authority’s Bonds are to be derived from the following sources: (i) all Revenues, (ii) all moneys or securities in any of the Funds and Accounts, and (iii) all other monies and securities to be received, held or set aside by the Authority or by any Fiduciary pursuant to the Authority First Resolution. The term “Revenues,” as defined by the Authority First Resolution, includes, but is not limited to, all rents, fees, charges and other income and receipts derived by the New York City Water Board (the “Board”) from users of the System, and certain investment proceeds received by the Board.

Moneys pledged to secure bonds issued under the Authority Second Resolution are to be derived from: (i) all available amounts on deposit in the Subordinated Indebtedness Fund established under the

Authority First Resolution and (ii) all moneys or securities in any of the funds and accounts established under the Authority Second Resolution, except the Arbitrage Rebate Fund and the Debt Service Reserve Fund.

The Forecasted Cash Flows summarize the anticipated financial operations of the Authority for the Reporting Period. The Authority's books, records, financial reports, and statistical data have been reviewed to the extent practicable, and other investigations and analyses were conducted as deemed necessary to assemble and analyze the forecast of revenues, revenue requirements, and debt service coverage for the Reporting Period. Various financial tests and analyses have been performed to support the findings and conclusions presented herein. The Authority's fiscal year ends on June 30, and all references in the Attachment 1 to a fiscal year ("Fiscal Year") relate to the 12 month period ending June 30 of the year shown.

Proposed improvements and additions to the System under the CIP for the Reporting Period were independently evaluated and confirmed by AECOM USA, Inc. ("AECOM"). The forecasted cash flows rely upon the conclusions of AECOM regarding the capital and operating expenditures that are necessary during the Reporting Period to maintain the System in good working order.

Based on the studies performed, the Amawalk Consulting Group LLC offers the following opinions and conclusions:

1. Revenues (including projected revenue increases resulting from anticipated future rate increases to be implemented by the Board), as set forth in the Forecasted Cash Flows, are currently and will be sufficient to meet the following requirements during the Reporting Period:

a. One hundred and fifteen percent (115%) of the principal of and interest on all Bonds issued under the Authority First Resolution, as the same shall become due and payable, for which such Revenues are pledged;

b. One hundred percent (100%) of the principal of and interest on all bonds issued under the Authority Second Resolution and other subordinate obligations payable from Revenues;

c. One hundred percent (100%) of all expenses of operation, maintenance and repair of the System;

d. One hundred percent (100%) of other Required Deposits as required by the Authority First Resolution. In addition, revenues are adequate to make all payments to the City.

2. In the analysis of the forecast of future operations summarized in this Attachment 1, the Amawalk Consulting Group LLC has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. These assumptions are reasonable and attainable, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

3. The water and wastewater rates, fees and charges of the Board, including projected increases, are reasonable and compare favorably to the rates and charges of other major cities.

The opportunity to be of service to the Authority in this important matter is greatly appreciated.

Very truly yours,



Edward J. Markus
Amawalk Consulting Group LLC

GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS

GLOSSARY

Set forth below are definitions of certain terms contained in the Agreement, the Lease, the Authority First Resolution and the Resolutions and not otherwise defined in this Attachment 1.

Definition of Certain Terms Used in the Authority First Resolution

Adjusted Aggregate Debt Service: For any Fiscal Year and as of any date of calculation is the sum of the Adjusted Debt Service for all Series of Bonds Outstanding during such Fiscal Year.

Adjusted Debt Service: For any Fiscal Year, as of any date of calculation and with respect to any Series of Bonds, is the Debt Service for such Fiscal Year for such Series except that, if any Refundable Principal Installment of such Series of Bonds is included in Debt Service for such Fiscal Year, Adjusted Debt Service shall mean Debt Service determined as if each such Refundable Principal Installment had been payable over a period extending from the due date of such Refundable Principal Installment through the last date on which such Series of Bonds could have been stated to mature under the Act as in effect on the date of issuance of such Series, in installments which would have required equal annual payments of Principal Installments and interest over such period. Interest deemed payable in any Fiscal Year after the actual due date of any Refundable Principal Installment of any Series of Bonds shall be calculated at the actual interest cost payable on the Bonds of such Series (using the actuarial method of calculation).

Aggregate Debt Service: For any Fiscal Year, as of any date of calculation, the sum of the Debt Service for all Bonds Outstanding during such Fiscal Year.

Authority Expenses: All reasonable or necessary current expenses of the Authority, including all salaries, administrative, general, commercial, engineering, advertising, public notice, auditing and legal expenses, insurance and surety bond premiums, fees paid to banks, insurance companies or other financial institutions for the issuance of Credit Facilities, consultants' fees and charges, payment to pension, retirement, health and hospitalization funds, costs of public hearings, ordinary and current rentals of equipment and other property, lease payments for real property or interests therein, expenses, liabilities and compensation of any Fiduciary and all other expenses necessary, incidental or convenient for the efficient operation of the Authority. Bond Counsel has determined that payments made under an Interest Rate Exchange Agreement are deemed Authority Expenses if the Interest Rate Exchange Agreement relates to Authority First Resolution Bonds.

Authorized Newspaper: The Bond Buyer or any other newspaper of general circulation printed in the English language and customarily published at least once a day for at least five days (other than legal holidays) in each calendar week in the Borough of Manhattan, City and State of New York, designated by the Authority.

Authorized Representative: In the case of both the Authority and the Board, their respective Chairman or Executive Director, or such other person or persons so designated by resolution of the Authority or the Board, as the case may be, and in the case of the City, the Mayor, unless a different City official is designated to perform the act or sign the document in question.

Bond or Bonds: For purposes of the Agreement and the Authority First Resolution (and as used in this Attachment 1 unless the context otherwise requires), the bonds, notes or other evidences of indebtedness issued by the Authority under and pursuant to the Act and the Authority First Resolution, including Parity Bond Anticipation Notes and Parity Reimbursement Obligations; but shall not mean Subordinated Indebtedness or other Bond Anticipation Notes or Reimbursement Obligations; and for purposes of the Lease, means any bonds, notes or other evidences of indebtedness for borrowed money issued by the Authority.

Bond Counsel's Opinion: An opinion signed by an attorney or firm of attorneys of nationally recognized standing in the field of law relating to revenue bonds of municipalities and public agencies, selected by the Authority and satisfactory to the Trustee.

Bond Payment Date: June 15 and December 15 of each year; provided, however, that if any such day is not a Business Day, then the Bond Payment Date shall be the next succeeding Business Day.

Business Day: Any day which is not a Saturday, Sunday or a day on which the New York Stock Exchange, banking institutions chartered by the State or the United States of America or the Note Trustee are legally authorized to close in the City.

Cash Flow Requirement: For each Fiscal Year and as of any date of certification, the amount, certified by the Authority to the Trustee and the Board equal to the difference between (A) the sum of (i) the estimated Aggregate Debt Service for such Fiscal Year, (ii) the Projected Debt Service for such Fiscal Year, (iii) the estimated Authority Expenses for such Fiscal Year, and (iv) the other Required Deposits estimated for such Fiscal Year and (B) (i) if the certification is made prior to the commencement of the Fiscal Year, the amount anticipated by the Authority as of such date of certification to be held by the Trustee, as of the first day of such Fiscal Year, in the Revenue Fund and (ii) if the certification is made after the commencement of such Fiscal Year, the amount which had been anticipated pursuant to (B) (i) above.

Consulting Engineer: AECOM or such other independent engineer or engineering firm of recognized standing selected by the Authority and satisfactory to the Board.

Corporation: The New York State Environmental Facilities Corporation and any successor entity which may succeed to its rights and duties respecting the State Revolving Fund.

Cost or Costs of a Water Project: The cost of construction, as such term is defined in the Act, including, without limiting the generality of the foregoing, the erection, alteration, improvement, increase, enlargement or rehabilitation of the System or a Water Project, the inspection and supervision thereof, the engineering, architectural, legal, fiscal, economic and environmental investigations and studies, designs, surveys, plans, specifications, procedures and other actions incidental thereto; the cost of the acquisition of all Property; the cost of demolishing, removing or relocating any buildings or structures on lands so acquired (including the cost of acquiring any lands to which such buildings or structures may be moved or relocated); the cost of all systems, facilities, machinery, appurtenances, equipment, financing charges and interest prior to, during and after construction (if not paid or provided for from revenues or other sources); the cost of engineering and architectural surveys, plans and specifications; the cost of consultants' and legal services; the cost of lease guarantee or bond insurance; other expenses necessary, reasonably related or incidental to the construction of such Water Project and the financing of the construction thereof, including the cost of Credit Facilities, the amounts authorized in the Authority First Resolution to be paid into any reserve or other special fund from the proceeds of Bonds and the financing or the placing of any Water Project in operation, including reimbursement to any governmental entity or any other person for expenditures that would be Costs of such Water Project and all claims arising from any of the foregoing.

Counterparty: An entity whose senior long term debt obligations, or whose obligations under an Interest Rate Exchange Agreement are guaranteed by a financial institution whose senior long term debt obligations, have a rating (at the time the subject Interest Rate Exchange Agreement is entered into) of AA or better by Moody's Investors Service and AA or better by Standard & Poor's Ratings Services.

Credit Facility: A letter of credit, revolving credit agreement, standby purchase agreement, surety bond, insurance policy or similar obligation, arrangement or instrument issued by a bank, insurance company or other financial institution which provides for payment of all or a portion of the Principal Installments or interest due on any Series of Bonds or provides funds for the purchase of such Bonds or portions thereof.

Debt Service: For any Fiscal Year or part thereof, as of any date of calculation and with respect to any Series, means an amount equal to the sum of (a) interest payable during such Fiscal Year or part thereof on Bonds of such Series, except to the extent that such interest is to be paid from amounts representing

Capitalized Interest and (b) the Principal Installments of the Bonds of such Series payable during such Fiscal Year or part thereof. Such interest and Principal Installments for such Series shall be calculated on the assumption that (x) no Bonds of such Series Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment thereof upon stated maturity or upon mandatory redemption by application of Sinking Fund Installments and (y) Variable Rate Bonds will bear interest at the greater of (A) the rate or rates which were assumed by the Authority in the Authority Budget for such Fiscal Year to be borne by Variable Rate Bonds during such Fiscal Year or (B) the actual rate or rates borne during such Fiscal Year on Variable Rate Bonds Outstanding during the 12 calendar months preceding the date of calculation.

Debt Service Reserve Requirement: As of any date of calculation, and for any Fiscal Year, shall mean the amount equal to the maximum Adjusted Aggregate Debt Service in the current or any future Fiscal Year on all Bonds Outstanding; provided, however, that, if (i) the payment of the Principal Installments of or interest on any Series of Bonds or portion thereof is secured by a Special Credit Facility, (ii) the payment of the Tender Option Price of any Option Bond of a Series is secured by a Special Credit Facility or (iii) the Authority has determined in a Supplemental Resolution authorizing the issuance of a Series of Bonds that such Series of Bonds will not be secured by the Common Account in the Debt Service Reserve Fund, the Supplemental Resolution authorizing such Series may specify the Debt Service Reserve Requirement, if any, for the Bonds of such Series.

DEC: The New York State Department of Environmental Conservation and any successor entity which may succeed to its rights and duties respecting the State Revolving Fund.

Defeasance Obligations: (A) any non-callable bonds or other obligations which as to principal and interest constitute direct obligations of, or are guaranteed by the United States of America, including obligations of any agency thereof or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America to the extent unconditionally guaranteed by the United States of America or (B) any other non-callable receipt, certificate or other evidence of an ownership interest in obligations or in specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in subclause (A); provided, however, that, when used in connection with any Bond authorized to be issued by a Supplemental Resolution adopted on or after June 1, 2001, such term also means: (C) a non-callable obligation of the United States of America which has been stripped by the United States Department of Treasury itself or by any Federal Reserve Bank (not including "CATS," "TIGRS" and "TRS" unless the Authority obtains Rating Confirmation with respect to the Bonds to be defeased); (D) the interest component of REFCORP bonds for which separate payment of principal and interest is made by request of the Federal Reserve Bank of New York in book-entry form; (E) an obligation of any state or territory of the United States of America, any political subdivision of any state or territory of the United States of America, or any agency, authority, public benefit corporation or instrumentality of such state, territory or political subdivision (i) the interest on which is excludable from gross income under Section 103 of the Code, (ii) that, at the time an investment therein is made or such obligation is deposited in any fund or account established pursuant to the Authority First Resolution, is rated in the highest rating category of the Rating Agencies, (iii) that is not subject to redemption prior to maturity other than at the option of the holder thereof or either (1) has irrevocably been called for redemption or (2) as to which irrevocable instructions have been given to call such obligation on a stated future date and (iv) the timely payment of the principal or redemption price thereof and interest thereon is fully secured by a fund consisting only of cash or obligations described in clauses (A), (B), (C), (D), (E) or (F), which fund may be applied only to the payment of principal, interest and redemption premium, if any, on the obligation secured thereby; and (F) a non-callable note, bond, debenture, mortgage or other evidence of indebtedness that, at the time acquired, is (i) issued or guaranteed by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Student Loan Marketing Association, the Federal Farm Credit System or any other instrumentality of the United States of America and (ii) rated in the highest rating category of the Rating Agencies; provided, further, that the term "Defeasance Obligations" shall not mean any interest in a unit investment trust or a mutual fund.

Financial Guaranties: One or more of the following: (i) irrevocable, unconditional and unexpired letters of credit issued by banking institutions the senior long-term debt obligations of which (or the holding company of any such banking institution) have (at the time of issue of such letter of credit) a rating of Aa2 or better by Moody's Investors Service and AA or better by Standard & Poor's Ratings Services; or (ii) an irrevocable and unconditional policy or policies of insurance in full force and effect issued by municipal bond insurers the obligations insured by which are eligible for a rating of Aa or better by Moody's Investors Service and AA or better by Standard & Poor's Ratings Services; in each case providing for the payment of sums for the payment of Principal Installments of an interest on Bonds in the manner provided in the Authority First Resolution; and providing further that any Financial Guaranty of the type described in (i) above must be drawn upon, on a date which is at least thirty (30) days prior to the expiration date of such Financial Guaranty, in an amount equal to the deficiency which would exist if the Financial Guaranty expired, unless a substitute Financial Guaranty is acquired prior to such expiration date as provided in a related Supplemental Resolution.

Fiscal Year: The twelve-month period commencing on July 1 of each year; provided, however, that the Authority, the Board and the City may agree on a different twelve-month period as the Fiscal Year and in such event the dates set forth in the Agreement, the Lease and the Authority First Resolution shall be adjusted accordingly.

Government Obligation: A direct obligation of the United States of America, an obligation the principal of, and interest on which are guaranteed as to full and timely payment by the United States of America, an obligation (other than an obligation subject to variation in principal repayment) to which the full faith and credit of the United States of America are pledged, an obligation of a federal agency guaranteed as to full and timely payment by the United States of America and approved by the Authority, and a certificate or other instrument which evidences the ownership of, or the right to receive all or a portion of the payment of, the principal of or interest on, direct obligations of the United States of America.

Interest Rate Exchange Agreement: Any financial arrangement (i) that is entered into by the Authority with an entity that is a Counterparty at the time the arrangement is entered into; (ii) which provides that the Authority shall pay to such entity an amount based on the principal amount of a Series of Bonds, and that such entity shall pay to the Authority an amount based on the principal amount of such Series of Bonds, in each case computed in accordance with a formula set forth in such agreement, or that one shall pay to the other any net amount due under such arrangement; (iii) which has been designated in writing to the Trustee by an Authorized Representative of the Authority as an Interest Rate Exchange Agreement with respect to a Series of Bonds and (iv) which, in the opinion of Bond Counsel, will not adversely affect the exclusion of interest on Bonds from gross income for the purposes of federal income taxation.

Investment Securities shall mean and include any of the following securities, if and to the extent the same are at the time legal investments by the Authority of the funds to be invested therein and conform to the policies set forth in any investment guidelines adopted by the Authority and in effect at the time of the making of such investment:

(i) direct obligations of, or obligations guaranteed as to principal and interest by, the State or direct obligations of any agency or public authority thereof, provided such obligations are rated, at the time of purchase, in one of the two highest rating categories by each Rating Agency then maintaining a rating on Outstanding Bonds;

(ii) (A) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are guaranteed by the United States of America, including obligations of any agency thereof or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America to the extent unconditionally guaranteed by the United States of America or (B) any other receipt, certificate or other evidence of an ownership interest in obligations or in specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in subclause (A) of this clause (ii);

(iii) obligations of any agency, subdivision, department, division or instrumentality of the United States of America; or obligations fully guaranteed as to interest and principal by any agency, subdivision, department, division or instrumentality of the United States of America;

(iv) banker's acceptances or certificates of deposit issued by a commercial bank (A) whose long-term debt obligations are rated by each Rating Agency then maintaining a rating on the Outstanding Bonds at least equal to the rating on Outstanding Bonds that are not insured or otherwise secured by a Credit Facility or a Special Credit Facility, (B) that has its principal place of business within the State and (C) that has capital and surplus of more than \$100,000,000;

(v) corporate securities, including commercial paper and fixed income obligations, which are, at the time of purchase, rated by each Rating Agency then maintaining a rating on Outstanding Bonds in its highest rating category for comparable types of obligations;

(vi) repurchase agreements collateralized by securities described in clauses (ii) or (iii) above with any registered broker/dealer or with any domestic commercial bank whose long-term debt obligations are rated "investment grade" by each Rating Agency then maintaining a rating on Outstanding Bonds, provided that (1) a specific written repurchase agreement governs the transaction, (2) the securities are held, free and clear of any lien, by the Trustee or an independent third party acting solely as agent for the Trustee, and such third party is (a) a Federal Reserve Bank, or (b) a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus and undivided profits of not less than \$25 million, and the Trustee shall have received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee, (3) the repurchase agreement has a term of thirty days or less, or the Trustee will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within five business days of such valuation, (4) the fair market value of the collateral securities in relation to the amount of the repurchase obligation, including principal and interest, is equal to at least 102% and (5) the repurchase agreement meets the guidelines then applicable to such investments of each Rating Agency then maintaining a rating on Outstanding Bonds;

(vii) investment agreements or guaranteed investment contracts with any financial institution whose senior 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 (at the time such agreement or contract is entered into) in one of the two highest rating categories for comparable types of obligations by each Rating Agency then maintaining a rating on the Bonds;

(viii) money market funds rated in the highest rating category for comparable types of obligations by each Rating Agency then maintaining a rating on the Bonds; and

(ix) municipal obligations, the payment of principal and redemption price, if any, and interest on which is irrevocably secured by obligations of the type referred to in clauses (i), (ii) or (iii) above and which obligations have been deposited in an escrow arrangement which is irrevocably pledged to the payment of such municipal obligations and which municipal obligations are rated in the highest rating category for comparable types of obligations by each Rating Agency then maintaining a rating on the Bonds.

Leased Property: The real and personal property and other rights therein leased by the City to the Board pursuant to Article II of the Lease.

Local Water Fund: The special trust fund by that name established by the Act in the custody of the Board into which all Revenues are required to be deposited promptly upon receipt thereof by the Board.

Minimum Monthly Balance: For each Series of Bonds Outstanding, the monthly amount calculated in accordance with Section 4.3(a) of the Agreement. See "Summary of Certain Documents — Summary of the Agreement — Minimum Monthly Balance" in this Appendix C.

O&M Reserve Fund Requirement: For each Fiscal Year, the amount equal to one-sixth (1/6) of the Operating Expenses as set forth in the Annual Budget.

Operating Expenses: All reasonable or necessary current expenses of maintaining, repairing, operating and managing the System net of governmental operating aid, including: all salaries; administrative, general, commercial, architectural, engineering, advertising, public notice, auditing, billing, collection, enforcement and legal expenses; insurance and surety bond premiums; consultants' fees; payments to pension, retirement, health and hospitalization funds; taxes; payments in lieu of taxes; costs of public hearings; ordinary and current rentals of equipment or other property; hydrant rentals; lease payments for real property or interests therein (excluding certain amounts paid by the Board to the City pursuant to the Lease); depository expenses; reasonable reserves for maintenance and repair and all other expenses necessary, incidental or convenient for the efficient operation of the System; but only to the extent properly attributable to the Board or the System and payable by the Board to the City pursuant to the Lease and, except for certain administrative expenses of the Board, payable by the Board to the City pursuant to the Lease.

Option Bonds: Bonds which by their terms may be tendered by and at the option of the owner thereof for payment by the Authority prior to the stated maturity thereof, or the maturates of which may be extended by and at the option of the owner thereof.

Outstanding: As of any date, all Bonds therefore or thereupon being authenticated and delivered under the Authority First Resolution except:

- (a) any Bonds canceled by the Trustee at or prior to such date;
- (b) any Bond (or portion thereof) for the payment or redemption of which there shall be set aside and held in trust under the Authority First Resolution either:
 - (i) moneys in an amount sufficient to pay when due the Principal Installments or Redemption Price thereof, together with all accrued interest,
 - (ii) Defeasance Obligations in such principal amounts, of such maturities, bearing such interest and otherwise having such terms and qualifications, as are necessary to provide moneys (whether as principal or interest) in an amount sufficient to pay when due the Principal Installments or Redemption Price thereof, together with all accrued interest, or
 - (iii) any combination of (i) and (ii) above,

and, if such Bond or portion thereof is to be redeemed, for which notice of redemption has been given as provided in Article VI of the Authority First Resolution or provision satisfactory to the Trustee has been made for the giving of such notice;

- (c) any Bond in lieu of or in substitution for which other Bonds have been authenticated and delivered; and

- (d) any Bond deemed to have been paid as provided in Section 1201(b) of the Authority First Resolution.

Parity Bond Anticipation Notes: Bond Anticipation Notes the interest on which is payable from and secured by a pledge of, and a lien on, a parity with all other Bonds.

Permitted Encumbrances: When used with reference to the System, (i) any and all liens, encumbrances, security interests or other defects in or clouds on title existing on the Effective Date, (ii) the Lease, (iii) easements, rights of way and exceptions which do not materially impair the operation or maintenance of the Leased Property or the Revenues therefrom, (iv) mechanics', materialmen's, warehousemen's and other similar liens, as permitted by law and liens for taxes at the time not delinquent or being contested and (v) agreements for the sale and leaseback of elements of the System.

Principal Installment: As of any date of calculation and with respect to any Series, so long as any Bonds thereof are Outstanding, (i) the principal amount of Bonds (including (x) any amount designated in, or determined pursuant to, the applicable Supplemental Resolution, as the "principal amount" with

respect to any Bonds which do not pay full current interest for all or any part of their term) (y) the Tender Option Price of any Option Bonds which may be tendered for purchase or payment prior to the stated maturity thereof in accordance with the terms of the Supplemental Resolution authorizing such Option Bonds, unless such amount is secured by a Credit Facility which is not in default and (z) the principal amount of any Parity Reimbursement Obligations of such Series due (or so tendered for payment) on a certain future date for which no Sinking Fund Installments have been established, or (ii) the unsatisfied balance of any Sinking Fund Installments due on a certain future date for Bonds of such Series, or (iii) if such future dates coincide as to different Bonds of such Series, the sum of such principal amount of Bonds and of such unsatisfied balance of Sinking Fund Installments due on such future date. "Principal Installment" does not include the principal of Parity Bond Anticipation Notes.

Project Financing Agreement: Any Project Financing Agreement to be entered into among the Authority, the City, DEC and the Corporation pursuant to the State Revolving Fund Act.

Projected Debt Service: For any Fiscal Year or part thereof means, as of any date of calculation and with respect to any Projected Series of Bonds, an amount, certified by the Authority to the Trustee and the Board, as provided in the Agreement, equal to the Debt Service estimated by the Authority to be payable during such Fiscal Year on such Projected Series.

Projected Series of Bonds: Any Series of Bonds described in an Authority Budget as anticipated to be issued in the Fiscal Year to which such Authority Budget relates.

Rate Consultant: The independent accountant or firm of independent accountants, or a management consultant or firm of management consultants, or independent engineer or firm of independent engineers, having, in any case, a recognized standing in the field of water and sewer system consulting selected by the Authority and satisfactory to the Board. The Rate Consultant may be the same firm as the Consulting Engineer.

Rating Agencies: Moody's Investors Service and Standard & Poor's Ratings Services and their respective successors and assigns.

Rating Confirmation: A written confirmation of each Rating Agency to the effect that the rating assigned to each of the Bonds rated by such Rating Agency will remain unchanged and will not be withdrawn, suspended or reduced as a consequence of some act or occurrence.

Redemption Price: When used with respect to a Bond or portion thereof, the principal amount thereof plus the applicable premium, if any, payable upon either optional or mandatory redemption thereof pursuant to the Authority First Resolution.

Refundable Principal Installment: Any Principal Installment for any Series of Bonds which the Authority intends to pay with moneys which are not Revenues, provided that such intent shall have been expressed in the Supplemental Resolution authorizing such Series of Bonds and provided further that such Principal Installment shall be a Refundable Principal Installment only through the date of the Authority Budget adopted during the Fiscal Year immediately preceding the Fiscal Year in which such Principal Installment comes due unless the Authority has delivered to the Trustee a certificate of an Authorized Representative that it has made provision for the payment of such Principal Installment from a source other than Revenues.

Refunding Bond: Any Bond authenticated and delivered on original issuance pursuant to Section 206 or Section 207 of the Authority First Resolution for the purpose of refunding any Outstanding Bonds or thereafter authenticated and delivered in lieu of or substitution for such Bond pursuant to the Authority First Resolution.

Reimbursement Obligation: The obligation of the Authority described in the Authority First Resolution to directly reimburse the issuer of a Credit Facility for amounts paid by such issuer thereunder, whether or not such obligation to so reimburse is evidenced by a promissory note or other similar instrument.

Required Deposits: For any Fiscal Year, amounts, if any, payable into the Authority Expense Fund, the Debt Service Reserve Fund and the Subordinated Indebtedness Fund but only to the extent such payments are required to be made from Revenues pursuant to the Authority First Resolution.

Revenues shall mean (a) all the rents, fees, charges, payments and other income and receipts derived by the Board from users of the System, together with all operating aid therefor from any governmental entity, federal, State or local, to the Board, (b) investment proceeds and proceeds of insurance received by the Board (other than the proceeds of insurance with respect to the damage or destruction of all or any portion of the System), (c) Subsidy Payments derived by the Authority, (d) amounts derived by the Authority from a Counterparty pursuant to an Interest Rate Exchange Agreement, and (e) investment proceeds derived from amounts on deposit in the Funds and Accounts established hereunder that are deposited or retained in the Revenue Fund or the Local Water Fund, and but shall not include (w) amounts required to be refunded because of billing or payment errors, (x) any amount attributable to any of the foregoing sources described in clause (a) which (i) is expressly excluded by the Agreement or the Lease, or (ii) is derived from a use of the System not directly related to the supply, treatment and distribution of water to the consumers thereof or the collection, disposal or treatment of sewage, (y) any amount from any governmental entity, federal, State or local, in aid of or for or with respect to the Costs of Water Projects, other than Subsidy Payments, or (z)(i) fines (excluding interest on late payments which shall constitute Revenues), (ii) amounts from the use of water to generate electricity, (iii) amounts from the State as a result of mandatory water discharges from reservoirs or (iv) amounts from the granting of easements, licenses, rights-of-way or other interests in the real property constituting a part of the System.

Special Credit Facility: With respect to any Series of Bonds or portion thereof, a Credit Facility (a) which provides funds for (i) the direct payment of the Principal Installments of and interest on such Bonds when due or (ii) the payment of the Principal Installments of and interest on such Bonds in the event amounts otherwise pledged to the payment thereof are not available when due or (iii) the payment of the Tender Option Price of any Option Bond which may be tendered to the Authority for purchase or payment in accordance with the Supplemental Resolution authorizing such Option Bond (in any case, regardless of whether such Credit Facility provides funds for any other purpose) and (b) which (i) requires the Authority to directly reimburse the issuer of such Credit Facility for amounts paid thereunder and (ii) provides that such obligation is a Parity Reimbursement Obligation.

State: The State of New York.

State Revolving Fund: The New York State Water Pollution Control Revolving Fund established pursuant to the State Revolving Fund Act.

State Revolving Fund Act: Chapter 565 of the laws of New York of 1989, as amended.

Subordinated Indebtedness: Any bond, note or other evidence issued by the Authority in furtherance of its corporate purposes under the Act and payable from the subordinated Indebtedness Fund.

Subsidy Payments shall mean amounts payable to the Authority from any governmental entity, federal, State or local, in connection with Bonds of the Authority.

Supplemental Resolution: A resolution of the Authority authorizing the issuance of a Series of Bonds or otherwise amending or supplementing the Resolution.

System: The Water System and the Sewerage System, collectively, as such terms are defined in the Act.

Tender Option Price: With respect to any Option Bond tendered for purchase or payment, an amount equal to the principal amount thereof plus interest accrued and unpaid thereon from the immediately preceding Bond Payment Date to the date of such tender.

Trustee: The trustee appointed by the Authority pursuant to the Authority First Resolution, and any successors thereto.

Variable Rate Bond: As of any date of determination, any Bond on which the interest rate borne thereby may vary during any part of its remaining term.

Water Project: Any sewerage facility, water facility or water and sewerage facility, as the case may be, including the planning, development, financing or construction thereof.

Definition of Certain Terms Used in the Authority Second Resolution

“Account” shall mean one of the special accounts created and established pursuant to Article V of the Authority Second Resolution.

“Adjusted Aggregate Debt Service” for any Fiscal Year, as of any date of calculation, unless used in relation to Authority First Resolution Bonds, shall mean the sum of the Adjusted Debt Service payable during such Fiscal Year for all Outstanding Bonds of a Series, Parity Bond Anticipation Notes and Parity Reimbursement Obligations, and, when used in relation to Authority First Resolution Bonds, shall have the meaning ascribed thereto in the Authority First Resolution.

“Adjusted Debt Service” for any Fiscal Year, as of any date of calculation, unless used in relation to Authority First Resolution Bonds, shall mean the sum of (a) the Debt Service for such Fiscal Year with respect to the Bonds of a Series except that, if any Refundable Principal Installment of such Series of Bonds is included in Debt Service for such Fiscal Year, Adjusted Debt Service shall mean Debt Service determined as if such Refundable Principal Installment had been payable over a period extending from the due date of such Refundable Principal Installment through the last date on which such Series of Bonds could have been stated to mature under the Act as in effect on the date of issuance of such Series, in installments which would have required equal annual payments of Principal Installments and interest over such period, (b) the Debt Service for such Fiscal Year with respect to Outstanding Parity Bond Anticipation Notes and (c) the Debt Service for such Fiscal Year with respect to Parity Reimbursement Obligations; and, when used in relation to Authority First Resolution Bonds, shall have the meaning ascribed thereto in the Authority First Resolution. Interest deemed payable in any Fiscal Year after the actual due date of any Refundable Principal Installment of any Series of Bonds shall be calculated at the actual interest cost on all Bonds of such Series (using the actuarial method of calculation).

“Aggregate Debt Service” for any Fiscal Year, as of any date of calculation, unless used in relation to Authority First Resolution Bonds, shall mean the sum of (a) the Debt Service for all Bonds Outstanding during such Fiscal Year, (b) the interest payable during such Fiscal Year on all Parity Bond Anticipation Notes Outstanding during such Fiscal Year and (c) the Debt Service payable during such Fiscal Year on all Parity Reimbursement Obligations Outstanding during such Fiscal Year; and, when used in relation to Authority First Resolution Bonds, shall have the meaning ascribed thereto in the Authority First Resolution.

“Arbitrage Rebate Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Authority Budget” shall mean the annual budget of the Authority, as amended or supplemented, adopted or in effect for a particular Fiscal Year, as provided in the Authority Second Resolution.

“Authority Expense Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Authorized Representative” shall mean (i) in the case of both the Authority and the Board, their respective Chairman or Executive Director, or such other person or persons so designated by resolution of the Authority or the Board, as the case may be, and (i) in the case of the City, the Mayor, unless a different City official is designated in the Authority Second Resolution or in a Supplemental Resolution to perform the act or sign the document in question.

“Board” shall mean the New York City Water Board, a body corporate and politic constituting a corporate municipal instrumentality of the State created and existing under and by virtue of the Act.

“Bond” or **“Bonds”** shall mean any of the bonds authenticated and delivered pursuant to the Authority Second Resolution.

“Bond Anticipation Note” shall mean any note authorized to be issued under a resolution adopted pursuant to the Authority Second Resolution.

“Bond Counsel’s Opinion” or **“Opinion of Bond Counsel”** shall mean an opinion signed by Orrick, Herrington & Sutcliffe LLP or by any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to revenue bonds of municipalities and public agencies, selected by the Authority and satisfactory to the Trustee.

“Bond Payment Date” shall mean each date on which interest or both a Principal Installment and interest shall be due and payable on any of the Outstanding Bonds, Parity Bond Anticipation Notes or Parity Reimbursement Obligations according to their respective terms.

“Bondholder”, **“Owner”** or **“Holder”** or words of similar import shall mean, when used with reference to a Bond, the person in whose name the Bond is registered.

“Capitalized Interest” shall mean (i) for any particular Series, that portion of the proceeds of the Bonds of such Series, if any, required by the Supplemental Resolution authorizing such Series to be deposited in a sub-account established for such Series in the Capitalized Interest Account of the Debt Service Fund, for the purpose of funding the payment of a portion of the interest on the Bonds of such Series and (ii) for any Parity Bond Anticipation Notes, that portion of the proceeds of such Parity Bond Anticipation Notes, if any, required by the resolution authorizing such Bond Anticipation Notes to be deposited in a sub-account established for such Parity Bond Anticipation Notes in the Capitalized Interest Account of the Debt Service Fund, for the purpose of funding the payment of interest on such Bond Anticipation Notes.

“Capitalized Interest Account” shall mean the account by that name established in the Debt Service Fund pursuant to the Authority Second Resolution.

“Cash Flow Requirement” shall mean, for each Fiscal Year and as of any date of certification, the amount, certified by the Authority to the Trustee and the Board as provided in the Agreement, equal to the difference between (a) the sum of (i) the estimated Aggregate Debt Service for such Fiscal Year on Authority First Resolution Bonds, (ii) the Projected Debt Service for such Fiscal Year on Authority First Resolution Bonds, (iii) the SGR Cash Flow Requirement for such Fiscal Year, (iv) the estimated Authority Expenses for such Fiscal Year and (v) the other Required Deposits estimated for such Fiscal Year and (b) (i) if such certification is made prior to the commencement of such Fiscal Year, the amount anticipated by the Authority as of such date of certification to be held as of the first day of such Fiscal Year, in the FGR Revenue Fund and (ii) if such certification is made after the commencement of such Fiscal Year, the amount described in subclause (i) of this clause (b).

“City” shall mean The City of New York.

“Code” shall mean the Internal Revenue Code of 1986, as amended, or any successor thereto, as the same may be in effect from time to time.

“Common Account” shall mean the account by that name established in the Debt Service Reserve Fund pursuant to the Authority Second Resolution.

“Construction Account” shall mean the account by that name established in the FGR Subordinated Indebtedness Fund pursuant to the Authority Second Resolution.

“Construction Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Consulting Engineer” shall mean AECOM USA, Inc. or such other independent engineer or firm of engineers of recognized standing selected by the Authority and satisfactory to the Board and may include an independent engineer or firm of engineers retained by the City in one or more other capacities.

“Costs” or **“Costs of a Water Project”** shall mean the cost of “construction”, as such term is defined in the Act including, without limiting the generality of the foregoing, the erection, building, alteration, improvement, increase, enlargement, extension, reconstruction, renovation or rehabilitation of the

System or a Water Project, the inspection and supervision thereof, the engineering, architectural, legal, fiscal, economic and environmental investigations and studies, surveys, designs, plans, working drawings, specifications, procedures and other actions incidental thereto; the cost of the acquisition of all property; the cost of demolishing, removing or relocating any buildings or structures on lands so acquired, including the cost of acquiring any lands to which such buildings or structures may be moved or relocated; the cost of all systems, facilities, machinery, apparatus and equipment, financing charges, interest prior to, during and after construction to the extent not paid or provided for from revenues or other sources; the cost of engineering and architectural surveys, plans and specifications; the cost of consultants' and legal services; the cost of lease guarantee or bond insurance, other expenses necessary, reasonably related or incidental to the construction of such Water Project and the financing of the construction thereof, including the cost of Credit Facilities, the amounts authorized in the Authority Second Resolution to be paid into any reserve or other special fund from the proceeds of Bonds and the financing of the placing of any Water Project in operation, including reimbursement to any municipality, any state agency, the State, the United States of America, or any other person for expenditures that would be costs of such Water Project under the Authority Second Resolution and all claims arising from any of the foregoing.

“Costs of Issuance” shall mean all items of expense directly or indirectly payable or reimbursable and related to the authorization, sale and issuance of Bonds, including but not limited to printing costs, costs of preparation and reproduction of documents, filing and recording fees, initial fees and charges of any Fiduciary, legal fees and charges, fees and disbursements of consultants and professionals, costs of credit ratings, fees and charges for preparation, execution, transportation and safekeeping of Bonds, costs and expenses of refunding, premiums for the insurance of the payment of the Bonds and any other cost, charge or fee in connection with the original issuance of Bonds.

“Counterparty” shall mean an entity (i) whose senior long term debt obligations are rated (at the time the subject Interest Rate Exchange Agreement is entered into) in either of the two highest rating categories from a recognized statistical rating organization or (ii) whose obligations under an Interest Rate Exchange Agreement are guaranteed by a financial institution whose senior long term debt obligations are rated (at the time the subject Interest Rate Exchange Agreement is entered into) in either of the two highest rating categories from a nationally recognized statistical rating organization or (iii) whose obligation, if any, to make payment to the Authority upon termination of the Interest Rate Exchange Agreement is fully collateralized by Investment Securities of the type described in clause (ii) of the definition of Investment Securities, provided however, that such obligation shall be deemed to be fully collateralized if the Investment Securities shall have a market value, determined periodically in accordance with the Interest Rate Exchange Agreement, that is not less than the termination payment by any amount not greater than .1% of the Revenues for the preceding Fiscal Year.

“Credit Facility” shall mean a letter of credit, revolving credit agreement, standby purchase agreement, surety bond, insurance policy or similar obligations, arrangement or instrument issued by a bank, insurance company or other financial institution which (i) provides for payment of all or a portion of the Principal Installments or interest due on any Series of Bonds or on Parity Bond Anticipation Notes, (ii) provides funds for the purchase of such Bonds or portions thereof or (iii) secures the payment by the Authority of its obligations under an Interest Rate Exchange Agreement relating to Bonds.

“Debt Service” for any Fiscal Year or part thereof shall mean, as of any date of calculation (i) with respect to the Outstanding Bonds of any Series, an amount equal to the sum of (a) interest payable during such Fiscal Year or part thereof on such Bonds, except to the extent that such interest is to be paid from amounts representing Capitalized Interest and (b) the Principal Installments of such Bonds payable during such Fiscal Year or part thereof; (ii) with respect to Outstanding Parity Bond Anticipation Notes, interest payable thereon during such Fiscal Year or part thereof, except to the extent that such interest is to be paid from amounts representing Capitalized Interest; and (iii) with respect to a Parity Reimbursement Obligation, an amount equal to the sum of (a) interest payable during such Fiscal Year or part thereof on such Parity Reimbursement Obligation and (b) the Principal Installments of such Parity Reimbursement Obligation payable during such Fiscal Year or part thereof. Such interest and

Principal Installment shall be calculated on the assumption that (x) no such Bonds, Parity Bond Anticipation Notes or Parity Reimbursement Obligations Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment thereof upon stated maturity or upon mandatory redemption by application of Sinking Fund Installments and (y) Variable Rate Bonds will bear interest at the greatest of (A) the rate or rates which were assumed by the Authority in the Authority Budget for such Fiscal Year to be borne by Variable Rate Bonds during such Fiscal Year or (B) the average rate or rates borne during such Fiscal Year on Variable Rate Bonds Outstanding during the twelve calendar months preceding the date of calculation; provided, however, that if the Authority has in connection with any Variable Rate Bonds entered into an Interest Rate Exchange Agreement which provides that the Authority is to pay to the Counterparty an amount determined based upon a fixed rate of interest on the Outstanding principal amount of such Variable Rate Bonds or that the Counterparty is to pay to the Authority an amount determined based upon the amount by which the rate at which such Variable Rate Bonds bear interest exceeds a stated rate of interest on all or any portion of such Variable Rate Bonds, it will be assumed that such Variable Rate Bond bears interest at the fixed rate of interest to be paid by the Authority or the rate in excess of which the Counterparty is to make payment to the Authority in accordance with such agreement.

“Debt Service Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Debt Service Reserve Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Debt Service Reserve Requirement” shall mean, as of any date of calculation, and for any Fiscal Year, the amount equal to the maximum Adjusted Aggregate Debt Service on Bonds in the current or any future Fiscal Year on all Bonds Outstanding; *provided, however*, that if, upon the issuance of a Series of Bonds, such amount would require moneys, in an amount in excess of the maximum amount permitted under the Code to be deposited therein from the proceeds of such Bonds, to be deposited therein, the Debt Service Reserve Requirement shall mean an amount equal to the sum of the Debt Service Reserve Requirement immediately preceding issuance of such Bonds and the maximum amount permitted under the Code to be deposited therein from the proceeds of such Bonds, as certified by an Authorized Representative of the Authority; *provided, further*, that, if (i) the payment of the Principal Installments of or interest on any Series of Bonds or portion thereof is secured by a Special Credit Facility, (ii) the payment of the Tender Option Price of any Option Bond of a Series is secured by a Special Credit Facility or (iii) the Authority has determined in a Supplemental Resolution authorizing the issuance of a Series of Bonds that such Series of Bonds will not be secured by the Common Account in the Debt Service Reserve Fund, the Supplemental Resolution authorizing such Series may specify the Debt Service Reserve Requirement, if any, for the Bonds of such Series: *provided, further*, that if, as a result of the expiration or termination of a Financial Guaranty, a deficiency shall be created in the Debt Service Reserve Fund, the Debt Service Reserve Requirement shall be calculated so as to exclude the amount of such deficiency and the Debt Service Reserve Requirement shall be increased in each of the five Fiscal Years after the date such deficiency was created by an amount equal twenty per centum (20%) of the aforesaid deficiency.

For the purpose of calculating the Debt Service Reserve Requirement for any Variable Rate Bonds of a Series, the maximum Adjusted Debt Service on such Series shall be determined by reference to the Pro Forma Bond Issue for the Variable Rate Bonds of such Series set forth in the Supplemental Resolution authorizing such Series.

“Defeasance Obligations” (A) any non-callable bonds or other obligations which as to principal and interest constitute direct obligations of, or are guaranteed by the United States of America, including obligations of any agency thereof or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America to the extent unconditionally guaranteed by the United States of America or (B) any other non-callable receipt, certificate or other evidence of an ownership interest in obligations or in specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in subclause

(A); (C) a non-callable obligation of the United States of America which has been stripped by the United States Department of Treasury itself or by any Federal Reserve Bank (not including “CATS,” “TIGRS” and “TRS” unless the Authority obtains Rating Confirmation with respect to the Bonds to be defeased); (D) the interest component of REFCORP bonds for which separate payment of principal and interest is made by request of the Federal Reserve Bank of New York in book-entry form; (E) an obligation of any state or territory of the United States of America, any political subdivision of any state or territory of the United States of America, or any agency, authority, public benefit corporation or instrumentality of such state, territory or political subdivision (i) the interest on which is excludable from gross income under Section 103 of the Code, (ii) that, at the time an investment therein is made or such obligation is deposited in any fund or account established pursuant to the Authority Second Resolution, is rated in the highest rating category of the Rating Agencies, (iii) that is not subject to redemption prior to maturity other than at the option of the holder thereof or either (1) has irrevocably been called for redemption or (2) as to which irrevocable instructions have been given to call such obligation on a stated future date and (iv) the timely payment of the principal or redemption price thereof and interest thereon is fully secured by a fund consisting only of cash or obligations described in clauses (A), (B), (C), (D), (E) or (F), which fund may be applied only to the payment of principal, interest and redemption premium, if any, on the obligation secured thereby; and (F) a non-callable note, bond, debenture, mortgage or other evidence of indebtedness that, at the time acquired, is (i) issued or guaranteed by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Student Loan Marketing Association, the Federal Farm Credit System or any other instrumentality of the United States of America and (ii) rated in the highest rating category of the Rating Agencies; provided, further, that the term “Defeasance Obligations” shall not mean any interest in a unit investment trust or a mutual fund.

“Depository” shall mean any bank or trust company selected by the Board or the Authority, as the case may be, as a depository of moneys to be held under the provisions of the Agreement or the Authority Second Resolution, and may include the Trustee.

“Event of Default” shall mean any event specified as an event of default in the Authority Second Resolution.

“FGR Authority Expense Fund” shall mean the Authority Expense Fund established pursuant to the Authority First Resolution.

“FGR Construction Fund” shall mean the Construction Fund established pursuant to the Authority First Resolution.

“FGR Debt Service Reserve Fund” shall mean the Debt Service Reserve Fund established pursuant to the Authority First Resolution.

“FGR Debt Service Fund” shall mean the Debt Service Fund established pursuant to the Authority First Resolution.

“FGR Revenue Fund” shall mean the Revenue Fund established pursuant to the Authority First Resolution.

“FGR Subordinated Indebtedness Fund” shall mean the Subordinated Indebtedness Fund established pursuant to the Authority First Resolution.

“Fiduciary” shall mean the Trustee or any Paying Agent or Depository.

“Financial Guaranty” shall mean a surety bond, insurance policy or letter of credit which constitutes any part of the Debt Service Reserve Requirement and which is authorized to be delivered to the Trustee pursuant to the Authority Second Resolution.

“Financial Guaranty Provider” shall mean the issuer of any Financial Guaranty.

“Authority First Resolution” shall mean the Water and Sewer System General Revenue Bond Resolution adopted by the Authority on November 14, 1985 as amended and supplemented in accordance therewith and as the same may be amended or supplemented in accordance therewith and the Authority Second Resolution.

“Authority First Resolution Bond” shall mean a bond, note or other evidence of indebtedness issued pursuant to the Authority First Resolution, including a “Parity Bond Anticipation Note” and a “Parity Reimbursement Obligation,” as such terms are defined in the Authority First Resolution.

“Fiscal Year” shall have the meaning ascribed to such term in the Agreement.

“Fund” shall mean any fund established pursuant to the Authority Second Resolution.

“Interest Rate Exchange Agreement” means an agreement entered into by the Authority relating to Bonds or Authority First Resolution Bonds which provides that during the term of such agreement the Authority is to pay to the Counterparty an amount based on the interest accruing at a fixed or variable rate per annum on an amount equal to all or a portion of the principal amount of such Bonds or Authority First Resolution Bonds and that the Counterparty is to pay to the Authority either (i) an amount based on the interest accruing on such principal amount at a fixed or variable rate per annum, in each case computed according to a formula set forth in such agreement, or that one shall pay to the other any net amount due under such agreement or (ii) an amount based on the amount by which the rate at which such Bonds or First General Resolution Bonds bear interest exceeds a rate stated in such agreement.

“Investment Securities” shall mean and include any of the following securities, if and to the extent the same are at the time legal investments by the Authority of the funds to be invested therein and conform to the policies set forth in any investment guidelines adopted by the Authority and in effect at the time of the making of such investment:

(i) direct obligations of, or obligations guaranteed as to principal and interest by, the State or direct obligations of any agency or public authority thereof, provided such obligations are rated, at the time of purchase, in one of the two highest rating categories by each Rating Agency then maintaining a rating on Outstanding Bonds;

(ii) (a) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are guaranteed by the United States of America, including obligations of any agency thereof or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America to the extent unconditionally guaranteed by the United States of America or (b) any other receipt, certificate or other evidence of an ownership interest in obligations or in specified portions thereof (which may consist of specified portions of the interest thereon) of the character described in subclause (a) of this clause (ii);

(iii) obligations of any agency, subdivision, department, division or instrumentality of the United States of America; or obligations fully guaranteed as to interest and principal by any agency, subdivision, department, division or instrumentality of the United States of America;

(iv) banker’s acceptances or certificates of deposit issued by a commercial bank (a) whose long-term debt obligations are rated by each Rating Agency then maintaining a rating on the Outstanding Bonds at least equal to the rating on Outstanding Bonds that are not insured or otherwise secured by a Credit Facility or a Special Credit Facility, (b) that has its principal place of business within the State and (c) that has capital and surplus of more than \$100,000,000;

(v) corporate securities, including commercial paper and fixed income obligations, which are, at the time of purchase, rated by each Rating Agency then maintaining a rating on Outstanding Bonds, in its highest rating category for comparable types of obligations;

(vi) repurchase agreements collateralized by securities described in clause (ii) or (iii) above with any registered broker/dealer or with any domestic commercial bank whose long-term debt obligations are rated “investment grade” by each Rating Agency then maintaining a rating on Outstanding Bonds, provided that (a) a specific written repurchase agreement governs the transaction, (b) the securities are held, free and clear of any lien, by the Trustee or an independent third party acting solely as agent for the Trustee, and such third party is either a Federal Reserve Bank or a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus and undivided profits of not less than \$25 million, and the Trustee shall

have received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee, (c) the repurchase agreement has a term of thirty days or less, or the Trustee will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within five business days of such valuation, (d) the fair market value of the collateral securities in relation to the amount of the repurchase obligation, including principal and interest, is equal to at least 102% and (e) the repurchase agreement meets the guidelines then applicable to such investments of each Rating Agency then maintaining a rating on Outstanding Bonds;

(vii) investment agreements or guaranteed investment contracts with any financial institution whose prior 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 (at the time such agreement or contract is entered into) in one of the two highest rating categories or comparable types of obligations by each Rating Agency then maintaining a rating on the Bonds;

(viii) money market funds rated in the highest rating category for comparable types of obligations by each Rating Agency then maintaining a rating on the Bonds; and

(ix) municipal obligations, the payment of principal and redemption price, if any, and interest on which is irrevocably secured by obligations of the type referred to in clauses (i), (ii) or (iii) above and which obligations have been deposited in an escrow arrangement which is irrevocably pledged to the payment of such municipal obligations and which municipal obligations are rated in the highest rating category for comparable types of obligations by each Rating Agency then maintaining a rating on the Bonds.

Obligations of the Trustee or an affiliate thereof may be Investment Securities, provided that they otherwise qualify.

“Local Water Fund” shall mean the special fund by that name established by the Act in the custody of the Board.

“Mayor” shall mean the Mayor of the City or such other person duly appointed and authorized to act on behalf of the Mayor.

“Monthly Balance” shall mean the amount, calculated as of the first day of each month, equal to the sum of:

(i) For the Bonds of a Series and Parity Reimbursement Obligations which are Outstanding during the Fiscal Year in which such month falls, an amount equal to the product obtained by multiplying (a) the difference between (1) the amount of interest due or projected to be due on or prior to the later of the next Succeeding Bond Payment Date for such Bonds and the 15th day of the next succeeding month and (2) the amount, if any, held in the sub-account for such Bonds in the Capitalized Interest Account by (b) a fraction, the numerator of which is the number of full months since the end of the month preceding the last Bond Payment Date for such Bonds (or, with respect to the first Bond Payment Date for such Bonds, the number of full months since the last day of the month preceding the date of issuance of such Bonds) and the denominator of which is the number of months between Bond Payment Dates for such Bonds minus one (or, with respect to the first Bond Payment Date therefor, the number of months between the last day of the month preceding the date of issuance of such Bonds and the first Bond Payment Date therefor minus one); *provided, however*, that if this formula would produce (A) a fraction greater than one, then the fraction shall be equal to one, or (B) a denominator less than one, then the fraction shall equal one; plus

(ii) For the Bonds of a Series and Parity Reimbursement Obligations which are Outstanding during the Fiscal Year in which such month falls, an amount equal to the Principal Installment due on the next Succeeding Bond Payment Date, which falls within twelve months or less, on which a Principal Installment on such Bonds is due, multiplied by a fraction, the numerator of which is the number of full months since the last day of the month preceding the last Bond Payment Date on which

a Principal Installment on such Bonds was due (or, with respect to the first such Bond Payment Date, twelve minus the number of full months to the first Bond Payment Date on which a Principal Installment on such Bonds is due), and the denominator of which is eleven; *provided, however*, that if this formula would produce a fraction greater than one, then the fraction shall be equal to one; plus

(iii) For Parity Bond Anticipation Notes which are outstanding during the Fiscal Year in which such month falls, an amount equal to the product obtained by multiplying (a) the difference between (1) the amount of interest due or projected to be due during such Fiscal Year on such Parity Bond Anticipation Notes and (2) the amount, if any, held in the sub-account for such Parity Bond Anticipation Notes in the Capitalized Interest Account, by (b) a fraction, the numerator of which is the number of full months since the end of the month preceding the last interest payment date for such Parity Bond Anticipation Notes (or, with respect to the first interest payment date for such Parity Bond Anticipation Notes, the number of full months since the last day of the month preceding the date of issuance of such Parity Bond Anticipation Notes) and the denominator of which is the number of months between interest payment dates for such Parity Bond Anticipation Notes minus one (or, with respect to the first interest payment date for such Parity Bond Anticipation Notes, the number of months between the last day of the month preceding the date of issuance of such Parity Bond Anticipation Notes and the first interest payment date therefor minus one); *provided, however*, that if this formula would produce (A) a fraction greater than one, then the fraction shall be equal to one, or (B) a denominator less than one, then the fraction shall equal one.

“Operating Expenses” shall have the meaning ascribed thereto in the Agreement.

“Option Bonds” shall mean Bonds which by their terms may be tendered by and at the option of the owner whereof for purchase or payment by the Authority prior to the stated maturity thereof, or the maturities of which may be extended by and at the option of the owner thereof.

“Other Moneys” shall mean moneys which do not constitute Revenues and which are derived from payments to be made to or upon the order of the Authority (i) by a Counterparty pursuant to an Interest Rate Exchange Agreement relating to Authority First Resolution Bonds, (ii) by the New York State Environmental Facilities Corporation pursuant to any agreement by and between the Authority and such corporation heretofore or hereafter entered into in connection with the issuance of Bonds or Authority First Resolution Bonds, including the Loan Agreement, dated as of May 1, 1990, by and between the New York State Environmental Facilities Corporation and the Authority, as amended, the Loan Agreement, dated as of January 1, 1991, by and between the New York State Environmental Facilities Corporation and the Authority, as amended and the Loan Agreement, dated as of December 1, 1991, by and between the New York State Environmental Facilities Corporation and the Authority, as amended, (iii) as Subsidy Payments and (iv) of any other moneys and securities pledged by the Authority to the payment of the Bonds pursuant to Article V of the Authority Second Resolution and a Supplemental Resolution.

“Outstanding” when used with reference to Authority First Resolution Bonds or Parity Bond Anticipation Notes, shall have the meaning given to such term in the Authority First Resolution or the resolution pursuant to which such Parity Bond Anticipation Notes were issued, respectively; when used with reference to Parity Reimbursement Obligations, shall have the meaning given to such term in the agreement creating such Parity Reimbursement Obligations; and, when used with reference to Bonds, shall mean, as of any date, all Bonds theretofore or thereupon being authenticated and delivered under the Resolution except:

- (a) any Bonds canceled by the Trustee at or prior to such date;
- (b) any Bond (or portion thereof) for the payment or redemption of which there shall be set aside and held in trust under the Authority Second Resolution either:
 - (i) moneys in an amount sufficient to pay when due the Principal Installments or Redemption Price thereof, together with all accrued interest,
 - (ii) Defeasance Obligations in such principal amounts, of such maturities, bearing such interest and otherwise having such terms and qualifications, as are necessary to provide moneys

(whether as principal or interest) in an amount sufficient to pay when due the Principal Installments or Redemption Price thereof, together with all accrued interest, or

(iii) any combination of (i) and (ii) above,

and, if such Bond or portion thereof is to be redeemed, for which notice of redemption has been given as provided in Article VI, or the applicable Supplemental Resolution, or provision satisfactory to the Trustee has been made for the giving of such notice;

(c) any Bond in lieu of or in substitution for which other Bonds have been authenticated and delivered; and

(d) any Bond deemed to have been paid as provided in Section 1201(b) of the Authority Second Resolution.

“Parity Bond Anticipation Note” shall mean a Bond Anticipation Note the interest on which is payable from and secured by a pledge of, and lien on, Revenues, Other Moneys and amounts on deposit in the FGR Subordinated Indebtedness Fund on a parity with the lien created by Section 501 of the Authority Second Resolution.

“Parity Reimbursement Obligation” shall mean a Reimbursement Obligation, the payment of which is secured by a pledge of, and a lien on, Revenues, Other Moneys and amounts on deposit in the FGR Subordinated Indebtedness Fund on a parity with the lien created by Section 501 of the Authority Second Resolution.

“Principal Installment” shall mean, as of any date of calculation and with respect to any Series, so long any Bonds thereof are Outstanding, (i) the principal amount of Bonds (including (x) any amount designated in, or determined pursuant to, the applicable Supplemental Resolution, as the “principal amount” with respect to any Bonds which do not pay full current interest for all or any part of their term, (y) the Tender Option Price of any Option Bonds which may be tendered to the Authority for purchase or payment prior to the stated maturity thereof in accordance with the terms of the Supplemental Resolution authorizing such Option Bonds, unless such amount is secured by a Credit Facility which is not in default and (z) the principal amount of any Parity Reimbursement Obligation) of such Series due (or so tendered for purchase or payment) on a certain future date for which no Sinking Fund Installments have been established, or (ii) the unsatisfied balance of any Sinking Fund Installments due on a certain future date for Bonds of such Series, or (iii) if such future dates coincide as to different Bonds of such Series, the sum of such principal amount of Bonds and of such unsatisfied balance of Sinking Fund Installments due on such future date.

“Projected Debt Service” for any Fiscal Year or part thereof shall mean, unless used in relation to Authority First Resolution Bonds, an amount with respect to a Projected Series, certified by the Authority to the Trustee and the Board, as provided in the Agreement, equal to the Debt Service estimated by the Authority to be payable during such Fiscal Year or part thereof on such Projected Series, and, when used in relation to Authority First Resolution Bonds, shall have the meaning ascribed thereto in the Authority First Resolution.

“Projected Series of Bonds” or **“Projected Series”** shall mean any Series of Bonds or Parity Bond Anticipation Notes described in an Authority Budget as anticipated to be issued in the Fiscal Year to which such Authority Budget relates.

“Rating Agency” shall mean each of Moody’s Investors Service and Standard & Poor’s Ratings Services and its respective successors and assigns.

“Redemption Price” shall mean, when used with respect to a Bond or portion thereof, the principal amount thereof plus the applicable premium, if any, payable upon either optional or mandatory redemption thereof pursuant to the Authority Second Resolution.

“Refunding Bond” shall mean any Bond authenticated and delivered on original issuance pursuant to the Authority Second Resolution for the purpose of refunding any Outstanding Bonds, or thereafter authenticated and delivered pursuant to the Authority Second Resolution in lieu of or substitution for such Bond.

“Reimbursement Obligation” shall mean the obligation of the Authority described in the Authority Second Resolution (i) to reimburse directly the issuer of a Credit Facility for amounts paid by such issuer thereunder or (ii) make payment to a Counterparty of amounts payable thereto by the Authority pursuant to an Interest Rate Exchange Agreement relating to Bonds, in either case.

“Required Deposits” shall mean, for any Fiscal Year during which Authority First Resolution Bonds are Outstanding, the amount, if any, payable into the FGR Authority Expense Fund, the FGR Debt Service Reserve Fund and the FGR Subordinated Indebtedness Fund, and for any Fiscal Year during which no Authority First Resolution Bonds are Outstanding, the amount, if any, payable into the Authority Expense Fund, the Debt Service Reserve Fund and the Subordinated Indebtedness Fund, but in each case only to the extent such payments are required to be made from Revenues.

“Revenue Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Revenues” shall have the meaning given to it in the Agreement as the same may be amended from time to time in accordance therewith and the Authority Second Resolution.

“Authority Second Resolution” shall mean the Water and Sewer System Second General Revenue Bond Resolution, adopted by the Authority on March 30, 1994, as the same may be amended or supplemented by a Supplemental Resolution.

“Series” or **“Series of Bonds”** shall mean all of the Bonds authenticated and delivered on original issuance identified pursuant to the Supplemental Resolution authorizing such Bonds as a separate Series of Bonds and any Bonds thereafter authenticated and delivered in lieu of or in substitution therefor pursuant to the Authority Second Resolution regardless of variations in maturity, interest rate or other provisions.

“SGR Cash Flow Requirement” shall mean, for each Fiscal Year and as of any date of certification, the amount of Revenues, certified by the Authority to the Trustee and the Board as provided in the Agreement and the Authority Second Resolution, to be required to be deposited into the Subordinated Indebtedness Fund in such Fiscal Year, which amount shall be equal to the difference between (a) the sum of (i) the Aggregate Debt Service for such Fiscal Year, (ii) the Projected Debt Service for such Fiscal Year, (iii) the amount of Parity Reimbursement Obligations payable in such Fiscal Year, (iv) the amount, if any, required to restore the Debt Service Reserve Fund to the Debt Service Reserve Requirement and (v) the amount, if any, withdrawn from the Construction Account pursuant to the Authority First Resolution during such or any prior Fiscal Year and (b) the sum of (i) if such certification is made prior to the commencement of such Fiscal Year, the amount anticipated by the Authority as of such date of certification to be held, as of the first day of such Fiscal Year, in the Revenue Fund or (ii) if such certification is made after the commencement of such Fiscal Year, the amount held, as of the first day of such Fiscal Year, in the Revenue Fund and (iii) the amount of Other Moneys paid or projected to be paid to the Authority during such Fiscal Year.

“Sinking Fund Installment” shall mean, as of any particular date of calculation, the amount required, as of such date of calculation, to be paid by the Authority on a future date for the retirement of Outstanding Bonds which are stated to mature subsequent to such future date, but does not include any amount payable by the Authority by reason only of the maturity of a Bond.

“Special Account” shall mean one or more of the Special Accounts established in the Debt Service Reserve Fund by a Supplemental Resolution pursuant to the Authority Second Resolution.

“Special Credit Facility” shall mean, with respect to any Series of Bonds or portion thereof, a Credit Facility (a) which provides funds for (i) the direct payment of the Principal Installments of and interest on such Bonds when due or (ii) the payment of the Principal Installments of and interest on such Bonds in the event amounts otherwise pledged to the payment thereof are not available when due or (iii) the payment of the Tender Option Price of any Option Bond which may be tendered to the Authority for purchase or payment in accordance with the Supplemental Resolution authorizing such Option Bond (in any case, regardless of whether such Credit Facility provides funds for any other purpose) and (b) which A (i) requires the Authority to reimburse the issuer of such Credit Facility directly for amounts paid thereunder and (ii) provides that such obligation is a Parity Reimbursement Obligation.

“State” shall mean the State of New York.

“Subordinated Indebtedness” shall mean any bond, note or other evidence of indebtedness issued by the Authority in furtherance of its corporate purposes under the Act and secured by a pledge of moneys in the Subordinated Indebtedness Fund or Other Moneys, or both, which is subordinate to the pledge thereof made under the Authority Second Resolution.

“Subordinated Indebtedness Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“Subsidy Payments” shall mean amounts payable to the Authority by the United States of America or by the State or by any agency or instrumentality of either in connection with Bonds of the Authority which amounts do not constitute Other Moneys described in the paragraph (ii) of the definition of Other Moneys.

“Supplemental Resolution” shall mean a resolution of the Authority authorizing the issuance of a Series Bonds or otherwise amending or supplementing the Authority Second Resolution, adopted in accordance with Article VIII of the Authority Second Resolution.

“Surplus Fund” shall mean the fund by that name established pursuant to the Authority Second Resolution.

“System” shall mean the “Water System” and the “Sewer System” as such quoted terms are defined in Sections 1045-b(14) and (21) of the Act.

“Tender Option Price” shall mean, with respect to any Option Bond tendered for purchase or payment in accordance with the Supplemental Resolution authorizing such Option Bond, an amount equal to the principal amount of such Option Bond plus the interest accrued and unpaid thereon to the date of such tender.

“Trustee” shall mean The Bank of New York Mellon, and its successor or successors and any other person which may at any time be substituted in its place pursuant to the Authority Second Resolution.

“Variable Rate Bond” shall mean, as of any date of determination, any Bond on which the interest rate borne thereby may vary during any part of its remaining term.

“Water Project” shall have the meaning ascribed thereto in Section 1045-b(20) of the Act, including any sewerage facility, water facility or water and sewerage facility as described therein and constituting a part of the System.

Summary of Certain Documents

The following are brief summaries of certain provisions of the Agreement, the Lease, the Authority First Resolution and the Authority Second Resolution. These summaries do not purport to be complete and are subject in all respects to the provisions of, and are qualified in their entirety by, reference to the respective documents to which they relate.

Summary of the Agreement

Financing of Water Projects. The Authority agrees to use its best efforts to finance all or a part of the Cost of all Water Projects described in Appendix A to the Agreement. In consideration for the Authority’s issuance of the Bonds, the Board gives, grants, conveys and transfers to the Authority all of its right, title and interest in the Revenues, including without limitation, all of its rights to collect and receive said Revenues subject only to provisions of the Act, the Agreement and the Authority First Resolution permitting the application of said Revenues to the purposes therein set forth. The Board itself incurs no indebtedness under the terms of the Agreement, Lease, Authority First Resolution or any other document executed in connection therewith. (*Sections 2.1, 2.2 and 2.4*)

Transfer of Funds. The Authority shall deposit the proceeds of each Series of Bonds with the Trustee in accordance with the provisions of the Authority First Resolution and the Supplemental Resolution authorizing such Series; provided, however, that the portion of the proceeds designated to pay the Costs of any Water Project shall be held only in the Construction Fund established pursuant to the Authority First Resolution.

The Authority shall authorize payment of such Costs in the manner set forth in the Authority First Resolution once evidence thereof is provided in a Certificate signed by an Authorized Representative of the Board or City, as the case may be. Neither the Authority nor the Trustee shall be required to provide funds to pay the Costs of Water Projects from any source other than the Construction Fund, and neither the Authority nor the Trustee shall pay to the City from such Fund any amount in excess of that set aside for the purposes thereof, or for the Projects listed in Appendix A to the Agreement. (*Sections 3.1 and 3.2*)

Local Water Fund. The Board shall deposit all Revenues, as promptly as practicable after receipt, into the Local Water Fund. There shall also be deposited in the Local Water Fund all amounts received by the Board from the Trustee pursuant to the Authority First Resolution. (*Section 4.1*)

Establishment of Certain Funds and Application of Revenues in Local Water Fund. The Board shall establish two special funds (in addition to the Local Water Fund) to be held by the Board at a Depositary: the Board Expense Fund and the Operation and Maintenance Reserve Fund, with the General Account therein. The Board shall hold such funds as trust funds and the amounts on deposit shall only be applied for the purposes provided in the Agreement.

Beginning on the first day of each month in each Fiscal Year, the Board is required to apply the Revenues in the Local Water Fund, *first*, to the Trustee for deposit in the Revenue Fund until the amount on deposit in the Revenue Fund equals the Minimum Monthly Balance for such month and the Trustee shall have received the amounts, if any, required to be deposited in the Authority Expense Fund, the Debt Service Reserve Fund and the Subordinated Indebtedness Fund for such month. Thereafter, in such month from the balance remaining in the Local Water Fund, the Board is required, after making provision for Board Expenses, to pay to the City 1/12th of the operating expenses for such Fiscal Year. After making such payments, any amounts remaining in the Local Water Fund in each month are applied daily (i) to satisfy the Cash Flow Requirement (if the required payments to the City for Operating Expenses have been made), (ii) to satisfy required payments to the City for Operating Expenses (if the Cash Flow Requirement has been satisfied) or (iii) proportionately, to the Trustee for deposit in the Revenue Fund and to the City for the payment of Operating Expenses, until the total of all amounts deposited in the Revenue Fund during such Fiscal Year equals the Cash Flow Requirement and all Operating Expenses required to be paid shall have been paid. Thereafter, as long as the amount on deposit in the Revenue Fund in each month is equal to the Minimum Monthly Balance and the Cash Flow Requirement continues to be met, all such amounts in the Local Water Fund shall be paid as follows: *first*, to the Authority until the total of the amounts so paid equals the principal of and interest on any bonds, notes or other obligations of the Authority (other than Bonds, Bond Anticipation Notes, and Subordinated Indebtedness) payable within the then current Fiscal Year, together with all other amounts necessary to make the required deposits to the reserve and other funds and amounts established for such bonds, notes or other obligations; *second*, to the City until the amounts so paid are equal to the rental payment for such Fiscal Year and the unsatisfied balance, if any, of the rental payment for any prior Fiscal Year; and, *third*, to the Operation and Maintenance Reserve Fund, until the amount therein on deposit is equal to the O&M Reserve Requirement for such Fiscal Year. Any amounts remaining in the Local Water Fund on the last day of each Fiscal Year shall be paid to the General Account in the Operation and Maintenance Reserve Fund. (*Section 4.2*)

Minimum Monthly Balance. The Minimum Monthly Balance shall be calculated as of the first day of the month and shall be equal to the sum of:

- (i) For each Series of Bonds which is Outstanding during the current Fiscal Year, an amount equal to the product obtained by multiplying (a) the difference between (1) the amount of interest due or projected to be due on the next succeeding Bond Payment Date for such Series and (2) the amount, if any, held in the applicable subaccount for such Series in the Capitalized Interest Account in the Debt Service Fund by (b) a fraction, the numerator of which is the number of full months since the end of the month preceding the last Bond Payment Date for such Series (or, with respect to the first Bond Payment Date for such Series, the number of full months since the last day of the month preceding the date of issuance of such Series) and the denominator of which is the number of months between Bond Payment Dates minus one (or, with respect to the first Bond Payment Date

for a Series, the number of months between the last day of the month preceding the date of issuance of such Series and the first Bond Payment Date minus one); provided, however, that if this formula would produce (A) a fraction greater than one, then the fraction shall be equal to one, or (B) a denominator less than one, then the fraction shall be equal to one; plus

(ii) For each Series of Bonds which is Outstanding during the current Fiscal Year, an amount equal to the Principal Installment due or projected to be due on the next succeeding Bond Payment Date for such Series which falls within twelve months or less on which a Principal Installment is due, multiplied by a fraction, the numerator of which is the number of full months since the last day of the month preceding the last Bond Payment Date on which a Principal Installment was due (or, with respect to the first such Bond Payment Date, twelve minus the number of full months to the first Bond Payment Date on which a Principal Installment is due), and the denominator of which is eleven; provided, however, that if this formula would produce a fraction greater than one, then the fraction shall be equal to one. (*Section 4.3*)

Deposits to Operation and Maintenance Reserve Fund. There shall be deposited to the Operation and Maintenance Reserve Fund in each Fiscal Year from the sources described below the amount required, if any, so that the amounts on deposit therein satisfy the O&M Reserve Fund Requirement for the ensuing Fiscal Year.

Deposits to the Operation and Maintenance Reserve Fund may be made from the proceeds of the sale of Bonds of the Authority, from the Local Water Fund, or from any other moneys lawfully available therefor, subject to the following limitations:

(i) The maximum deposit to the Operation and Maintenance Reserve Fund from the proceeds of Bonds of the Authority, as of any time of calculation, may not exceed the O&M Reserve Fund Requirement then in effect, reduced by the cumulative sum of prior deposits thereto from proceeds of Bonds of the Authority.

(ii) Deposits to the Operation and Maintenance Reserve Fund from the Local Water Fund shall be subject to the priorities established in Section 4.2 of the Agreement.

(iii) If there shall be a deficit in the Operation and Maintenance Reserve Fund on May 1 of any Fiscal Year, and if as of such May 1 the Board does not project that available Revenues will at least equal the O&M Reserve Requirement for such Fiscal Year by June 30 of such Fiscal Year, then the Board shall include in its Annual Budget for the ensuing Fiscal Year an amount sufficient, together with other amounts available therefor, to at least equal the O&M Reserve Fund Requirement for the ensuing Fiscal Year.

If on July 1 of any Fiscal Year the amount on deposit in the Operation and Maintenance Reserve Fund is less than the O&M Reserve Fund Requirement, such deficit shall (subject to paragraph (i) above) be made up from the proceeds of the sale of Bonds issued during such Fiscal Year; provided, however, if, prior to May 1 of such Fiscal Year such deficit has not been made up from Bond proceeds, the Board shall include the amount of such deficit in its Annual Budget for the ensuing Fiscal Year and the amounts necessary to restore such deficit shall be deposited in the Operation and Maintenance Reserve Fund.

Amounts required to be deposited in the General Account shall be held separate and apart from other amounts held in the Operation and Maintenance Reserve Fund and applied as described below. (*Section 4.4*)

Application of Moneys in the Operation and Maintenance Reserve Fund. If on the first day of any month the Board has not paid to the City an amount equal to the product of (i) the amount required to be paid for Operating Expenses pursuant to Section 8.1 of the Lease, multiplied by (ii) a fraction the numerator of which is the number of months which have commenced during such Fiscal Year, and the denominator of which is 12, the Board shall withdraw from the Operation and Maintenance Reserve Fund and pay to the City, on demand, an amount equal to 1/12 of the amount so required to be paid pursuant to Section 8.1 of the Lease, or the entire balance in such Fund if less than sufficient. Amounts

on deposit in the General Account may be applied (i) to purposes provided for in Section 4.2, (ii) to the payment of Bonds in accordance with Article XII of the Authority First Resolution or (iii) to the Costs of Water Projects, but shall be retained therein to the extent required by the Annual Budget. *(Section 4.5)*

Application of Moneys in Board Expense Fund. Amounts on deposit in the Board Expense Fund shall be applied by the Board solely for the purposes of paying expenses of the Board, in accordance with the Annual Budget. *(Section 4.6)*

Application of Revenues After Default. The Board has covenanted that if an “event of default” (as defined in the Authority First Resolution) shall occur, the Board shall pay or cause to be paid to the Trustee, upon its request, all moneys and securities then held by the Board in the Local Water Fund and thereafter the Revenues as promptly as practicable after receipt. *(Section 4.7)*

Amounts Remaining. Any amounts received or held by the Authority or the Trustee pursuant to the Authority First Resolution, any similar document or the Agreement after all Bonds and other evidences of indebtedness have been paid in full or are no longer Outstanding and after payment of all other obligations and expenses of the Authority, or provision for payment thereof has been made, shall be paid to the City.

Any payments by the City to the Water Board pursuant to Section 1045-h(3) of the Act shall be confined to consideration for the sale of goods or the rendering of services by the Water Board to the City pursuant to the Lease or the Agreement as contemplated by the Act. *(Section 4.8)*

Rate Covenant. The Board has covenanted and agreed to establish, fix and revise fees, rates or other charges for the use of or services furnished by the System which, together with any other available funds, are adequate to provide for (i) the timely payment of the Principal Installments of and interest on all Bonds and the principal of and interest on any other indebtedness of the Authority payable from Revenues, (ii) the proper operation and maintenance of the System, (iii) all other payments required for the System not otherwise provided for and (iv) all other payments required pursuant to the Agreement and the Lease. Without intending to limit the generality of the foregoing, the Board has also covenanted to establish and collect rates, fees and charges sufficient in each Fiscal Year so that Revenues collected in such Fiscal Year will be at least equal to the sum of (i) 115% of estimated Aggregate Debt Service and Projected Debt Service payable in such Fiscal Year (excluding any Refundable Principal Installment if payable from funds held in trust therefor and assuming with respect to Variable Rate Bonds that the effective rate of interest is that which the Authority determines so long as such rate is not less than the rate such Bonds bear at the time Aggregate Debt Service is determined), (ii) 100% of the Operating Expenses and Authority Expenses payable in such Fiscal Year and (iii) 100% of the amount necessary to pay the other Required Deposits for such Fiscal Year. However, a failure to generate such Revenues does not constitute an “event of default” if the Board takes timely action to correct any such deficit. The Board shall review, at least annually, such rates, fees and charges to determine whether such rates, fees and charges are, or will be, sufficient to meet the requirements thereof and shall promptly take action to cure or avoid any deficiency. Except to the extent required by Section 1045-j of the Act, as in effect on July 24, 1984, with regard to the requirement that tax exempt organizations be charged for service provided by the System or by existing agreements (including any successor agreements with Jamaica Water), the Board will not furnish or supply any product, use or service of the System free of charge or at a nominal charge. *(Section 6.1)*

Consulting Engineer and Rate Consultant. The Authority shall employ a Consulting Engineer and a Rate Consultant whose duties, respectively, shall be to make any certificates and perform any other acts required or permitted of the Consulting Engineer and the Rate Consultant under the Agreement and the Authority First Resolution. If so determined by the Authority, the same person or firm may perform the duties and functions of the Consulting Engineer and the Rate Consultant.

In each Fiscal Year, the Consulting Engineer and the Rate Consultant shall make an examination of, and shall report to the Authority, the Board, the City and the Trustee, on the properties and operations of the System. The report of the Rate Consultant shall set forth among other findings, the Rate Consultant’s recommendation as to any necessary or advisable revisions of rates, fees and charges

for the ensuing Fiscal Year and such other advice and recommendation as it may deem desirable. The Consulting Engineer's report shall set forth its findings as to whether the System has been maintained in good repair and sound operating condition, and its estimate of the amount, if any, required to be expended to place such properties in such condition and the details of such expenditures and the approximate time required therefor. The City covenants that if any such report of the Consulting Engineer shall set forth that the properties of the System have not been maintained in good repair and sound operating condition, it will promptly restore the properties to good repair and sound operating condition with all expedition practicable. (*Section 6.2*)

Covenant to Operate and Maintain System. The City has covenanted that it shall, at all times:

(a) in accordance with the advice and recommendations of the Consulting Engineer, operate the System properly and in a sound and economical manner and maintain, preserve, and keep the same preserved and kept with the appurtenances and every part and parcel thereof, in good repair, working order and condition, and from time to time make, or cause to be made, all necessary and proper repairs, replacements and renewals so that at all times the operation of the System may be properly and advantageously conducted, regardless of any failure on the part of the Board to make the payments to the City required by Section 8.1 of the Lease; provided, however, that nothing contained in the Agreement shall require the City to operate, maintain, preserve, repair, replace, renew or reconstruct any part of the System if there shall be filed with the Board, the Authority and the Trustee (i) a certificate of the Commissioner acting as the Authorized Representative of the City stating that in the opinion of the City abandonment of operation of such part of the System will not adversely affect the operation of the System or the amount of Revenues derived therefrom and is not prejudicial to the interests of the Board, the Authority or the Bondholders and (ii) a Certificate of the Consulting Engineer concurring with such statement;

(b) enforce the rules and regulations governing the operation, use and services of the System established from time to time by the Board or the City;

(c) observe and perform all of the terms and conditions contained in the Act, and comply with all valid acts, rules, regulations, orders and directions of any legislative, executive, administrative or judicial body having competent jurisdiction of the City or the System; provided, however, that the failure of the City to comply with the covenant contained in this subsection (c) for any period shall not constitute a default on its part so long as the City (i) is taking reasonable and timely steps to permit compliance and (ii) the City shall have delivered to the Board and to the Authority a Certificate of the Consulting Engineer which (1) sets forth in reasonable detail the facts and circumstances attendant to such non-compliance, (2) sets forth the steps being taken by the City to permit compliance, (3) sets forth the estimated date on which the City will be in compliance and (4) states that in the opinion of the Consulting Engineer such non-compliance during the period described will not adversely affect the operation of the System or the amount of Revenues to be derived therefrom; and

(d) not create or suffer to be created any lien or charge upon the System or any part thereof except for Permitted Encumbrances. (*Section 6.3*)

Annual Budget. On May 1 of each year (or on such later date as the Authority, the Board and the City may agree) the Authority shall deliver to the Board a certified copy of the Authority Budget for the ensuing Fiscal Year showing the Cash Flow Requirement for such Fiscal Year. Based upon the information contained in (a) the Authority Budget, (b) the City's certification pursuant to Section 8.3 of the Lease and (c) the Certificate of the Consulting Engineer delivered to the Board pursuant to Section 8.3 of the Lease (collectively, the "Budget Documents"), the Board shall prepare the Annual Budget for the ensuing Fiscal Year. In addition to the information contained in the Budget Documents the Board shall also make provision in the Annual Budget for Board Expenses for the ensuing Fiscal Year, for the amount, if any, required to be deposited in the Operation and Maintenance Reserve Fund in accordance with Section 4.4 of the Agreement, and for the application of the amounts in the General Account therein. Thereafter, but in no event later than 15 days after the date of publication of the

Executive Budget of the City, the Board shall adopt such Annual Budget. Promptly after adoption of the Annual Budget, and in no event later than June 10 (or such other date as the Authority, the Board and the City may agree) of each year, the Board shall establish the rates, fees and charges for the use of the System for the ensuing Fiscal Year. The Board may from time to time, either before or after commencement of the Fiscal Year to which it relates, amend the Annual Budget, but (except for its own expenses) only in accordance with and after receipt of amended Budget Documents. If as of the first day of any Fiscal Year an Annual Budget has not been adopted, the Annual Budget for the immediately preceding Fiscal Year shall be the Annual Budget for such Fiscal Year until a new Annual Budget is adopted. *(Section 6.4)*

Tax Exemption. The City, the Authority and the Board have covenanted that so long as any Bonds shall be Outstanding, no one will take any action, nor fail to take any action, which, if taken or not taken, as the case may be, would adversely affect the tax-exempt status of the interest payable on the Bonds then Outstanding, the interest on which is excluded from gross income under the Internal Revenue Code of 1986. *(Section 6.5(b))*

Discontinuance of Service. The Board has covenanted to enforce or cause the City to enforce the rules and regulations providing for discontinuance of, or disconnection from, the supply of water or the provision of sewer service, or both, as the case may be, for non-payment of fees, rents, rates or other charges imposed by the Board, provided that such discontinuance or disconnection shall not be carried out except in the manner and upon the notice as is required of a waterworks corporation pursuant to Sections 89(b)(3)(a)-(c) and 116 of the Public Service Law of the State. *(Section 6.7)*

Covenant of City as to Rates and Charges. The City has covenanted that, upon the issuance of the Bonds by the Authority, the City will not thereafter levy user fees, rents and other charges with respect to the System until all Bonds are paid or are no longer Outstanding pursuant to the terms of the Authority First Resolution; provided, however, that the City may levy *ad valorem* taxes to pay the costs and expenses of the System or to pay the principal of and interest on any general obligation bonds of the City issued to finance the System or any part thereof. *(Section 6.9)*

Books and Records. Each of the Authority and the Board shall keep or cause to be kept proper books of record and account in which complete and correct entries shall be made of all transactions relating to their corporate purposes under the Act. In accordance with Section 1045-y of the Act, the Authority and the Board shall annually submit to the Mayor, the Comptroller and the Director of Management and Budget of the City a detailed report concerning their activities for the Fiscal Year. In addition, the Authority and the Board shall submit to the Mayor, the Comptroller and the Director of Management and Budget of the City audited annual financial statements of the Authority and the Board together with a report thereon of an accountant satisfactory to the Board. *(Section 6.11)*

Liens. Until the Bonds or other evidences of indebtedness issued by the Authority for its purposes under the Act have been paid in full or provision has been made therefor in accordance with the Authority First Resolution or similar document, the Agreement provides that the Board shall not create, and, to the extent it has the power to do so, shall not permit to be created, any lien upon or pledge of the Revenues except the lien and pledge thereon created by the Act. *(Section 6.12)*

Security Interests. Except to the extent provided in the Act, neither the Board nor the Authority may grant any Bondholder any security interest in any of the assets or Properties of the Board. *(Section 6.13)*

Financing through State Revolving Fund. In connection with the financing of Water Projects by the Authority with funds provided from the State Revolving Fund, the City may enter into a Project Financing Agreement or Agreements among DEC, the Corporation and the Authority and make in any such agreement certain representations, warranties, covenants and agreements. *(Section 6.16)*

Agreement of the State. Under the provisions of the Agreement, the parties pledge and agree, for and on behalf of the State as provided in the Act, that the State will not alter or limit the rights vested by the Act in the Authority or the Board to fulfill the terms of any agreement made with or for the benefit

of the Bondholders, or in any way impair the rights and remedies of Bondholders, until the Bonds, together with the interest thereon, interest on any unpaid installment of interest, and all costs and expenses incurred in any action or proceeding by or on behalf of such holders, are fully met and discharged. (*Section 7.1*)

Events of Default and Remedies. An “event of default” or a “default” means any one of the following events: (i) failure by the Board to pay the Authority those amounts required under the Agreement; (ii) failure of the City or the Board to observe any covenant, term or condition of the Agreement (other than the payments the Board shall make to the Authority) and such failure shall have continued for a period of sixty (60) days after written notice, specifying such failure and requesting that it be remedied, is given to the City or the Board, or both, by the Authority unless the Authority shall agree in writing to extend such time prior to its expiration, provided such extension shall not be unreasonably withheld if the City or the Board has instituted and is diligently pursuing corrective action which cannot be completed within the applicable period; (iii) the Authority shall file a petition, or otherwise seek relief, under any federal or State bankruptcy or similar law; and (iv) the terms, conditions and security provided under the Agreement and the Authority First Resolution or the respective provisions of the Act pursuant to which the Authority First Resolution has been adopted or the Bonds have been issued or entered into (including, without limitation, the provisions under which the lien upon the Revenues has been created pursuant to the Agreement and the Authority First Resolution and the provisions establishing the powers and obligations of the Board and the relationship of the Authority to the Board and the City) shall be materially and adversely limited, altered or impaired by any legislative action or any final judgment. (*Section 8.1*)

Whenever an event of default shall have occurred and be continuing, the Authority and the Trustee may take whatever legal action may appear necessary or desirable to: (i) collect the payments then due and as they thereafter become due and (ii) so long as any Bonds are Outstanding, enforce performance and observance of any obligation or covenant of the City or the Board under the Agreement. In addition, if the Board defaults in making the payments to the Authority required under the Agreement as a result of its failure to impose sufficient fees, rates, rents or other charges, the Authority may petition for the appointment of a receiver to administer the affairs of the Board in order to achieve Revenues sufficient to make such payments by establishing fees, rates, rents or other charges at least sufficient therefor. The remedies conferred upon or reserved to the Authority in respect of any event of default are not exclusive of other available remedies, but shall be in addition to every other remedy given under the Agreement or existing at law or in equity or by statute. (*Sections 8.2 and 8.3*)

Termination. The Agreement shall terminate and the covenants and other obligations contained therein shall be discharged and satisfied, when (i) payment of all indebtedness of the Authority has been made or provided for in accordance with the Authority First Resolution or similar document securing such indebtedness and (ii) either all payments required thereunder have been made in full, or provision for such payments satisfactory to the Authority has been made, or the City pays or assumes all liabilities, obligations, duties, rights and powers of the Authority under the Agreement. (*Section 9.1*)

Amendments. The parties to the Agreement may enter into any amendment, change or modification of the Agreement (if in writing, signed by each of the parties and consented to in writing by the Trustee if required by the Authority First Resolution) including, without limitation, amendments to Appendix A to the Agreement; provided that the parties shall enter into no such amendment, change or modification which materially adversely affects the rights of the holders of any Bonds by modifying or revoking certain enumerated provisions of the Agreement without first complying with the applicable provisions of the Authority First Resolution. (*Section 10.1*)

Conflicts. The Agreement provides that its provisions shall not change or in any manner alter the terms of the Authority First Resolution, or the security, rights or remedies of the Trustee or the Bondholders. In the event any provision of the Agreement conflicts at any time, or in any manner, with the provisions of the Authority First Resolution or any Bond, the provisions of the Authority First Resolution or Bond shall be controlling and conflicting provisions of the Agreement shall be disregarded. (*Section 12.1*)

Summary of the Lease

Term of Lease and Demise of Leased Property. The City has leased the Leased Property to the Board for the term of the Lease (the “Lease Term”). The Lease Term commenced on the Effective Date (July 1, 1985) and continues until the later of the 40th anniversary of the Effective Date or the date on which all bonds, notes or other obligations of the Authority are paid in full or provision for such payment is made pursuant to the resolution, trust indenture or other instrument under which such bonds, notes or other obligations are issued. During the Lease Term the Board may use the Leased Property only for its corporate purposes and upon the terms and conditions contained in the Lease.

The Leased Property includes (whether now in use or hereafter acquired, and whether or not located within the boundaries of the City) all of the City’s right, title and interest in: (i) the City’s sewerage system, including but not limited to all plants, structures, equipment and other real and personal property or rights therein acquired, rehabilitated or constructed (including all work in progress as soon as commenced) and used or to be used for the purpose of collecting, treating, pumping, neutralizing, storing and disposing of sewage, including, but not limited to, main, collecting, outlet or other sewers, pumping stations, groundwater recharge basins, backflow prevention devices, sludge dewatering facilities, vessels, barges, clarifiers, filters and phosphorous removal equipment, vehicles and other property used in connection with the sewer system; (ii) the City’s water system, including but not limited to all plants, structures and other real and personal property or rights therein, acquired, rehabilitated or constructed (including all work in progress as soon as commenced) and used or to be used for the purpose of supplying, distributing, accumulating or treating water, including, but not limited to, reservoirs, basins, dams, canals, aqueducts, pipelines, mains, pumping stations, water distribution systems, intake systems, water-works, sources of water supply, purification or filtration plants, water meters and rights of flowage or diversion, vehicles and other property used in connection with the water system; and (iii) any other materials, supplies, plans and property contained in the above-mentioned plants and structures incidental to, or necessary or useful and convenient for, the operation of such facilities; provided, however, that the Leased Property shall not include the City’s right, title and interest in the following: (i) any property or rights of the City the conveyance of which pursuant to the Lease would cause a reversion to or in favor of, or permit a reentry by or in favor of, any third party; (ii) all mines and minerals whatsoever (but not including surface or subsurface waters) now or hereafter found and discovered, crops and timber, on or under the lands to be conveyed pursuant to the Lease; with power and authority for the City to perform certain mineral extraction and agricultural/timber activities; provided, however, that the City shall not undertake any such activities which interfere with the operation, maintenance or collection of Revenues of the System. (*Section 2.1*)

Right of City to Enter Leased Property. The City retains the right to enter upon any portion of the Leased Property, to use any property not constituting a part thereof which is located in, across or upon the Leased Property or for any purpose unless, in the reasonable judgment of the Board, such entry or use would adversely affect the collection of Revenues. (*Section 2.2*)

Substitution of Board for City. Where necessary or desirable and to the extent permitted by law, the City and the Board agree to use their best efforts to substitute the Board for the City with respect to any application or proceedings filed or commenced in relation to the Leased Property with the various State and federal regulatory bodies having jurisdiction. (*Section 2.5*)

Indemnification. The City agrees, to the extent permitted by law and subject to certain conditions, to hold the Board harmless from any and all liability, loss or damage from or in connection with any act the Board does or omits in the exercise of its powers if taken or omitted in good faith and in pursuance of its corporate purposes. (*Sections 3.1, 3.2 and 7.2*)

Operation and Maintenance of the Leased Property. The City shall administer and operate the Leased Property, maintain the Leased Property in good and safe order and condition and make all repairs therein. The City’s duty to “maintain” and “repair” shall include all necessary repairs, replacements, renewals, alterations and additions, whether structural, non-structural, ordinary or extraordinary and its duty to “administer” shall include, without limitation, the enforcement of

regulations of the Board and the City relating to the use of the System. However, the Lease shall not impose any obligation or liability upon the City for the administration, operation, maintenance and repair of the System not previously imposed upon it in connection with its prior operation and maintenance of the System. Both the Board and the City shall use all reasonable care to prevent the occurrence of waste, damage or injury to the Leased Property. The System shall be used and operated and maintained in accordance with all applicable laws, rules and regulations. *(Sections 4.1, 4.2 and 4.3)*

Construction and Acquisition. The Board authorizes the City to perform the construction and effectuation of any Water Project specified in the Agreement and the City may incur Costs in connection therewith. The City may acquire all real and personal property, or any interest therein, necessary or useful for the construction or effectuation of a Water Project; provided that all such property or interest acquired by the City through the exercise of the power of eminent domain shall be taken in the name of the City. *(Sections 5.1, 5.2 and 5.3)*

Billing and the Levy of Water and Sewer Charges. The City has agreed to provide billing services to the Board. Such services include but are not limited to: (i) notification to users of the System of the water and sewer charges levied by the Board, (ii) collection of such charges (including the City's use of its power of enforcement and collection of unpaid taxes under the laws of the State to enforce and collect any delinquent water and sewer charges from the persons and property liable therefor) and (iii) maintenance of the books, records and accounts of the billing systems. *(Sections 6.1 and 6.2)*

Late Payments. All late payments of water and sewer charges are the property of the Board and shall be collected by the City on behalf of the Board. Notwithstanding the foregoing, the Board has assigned to the City all of its rights and interest in and to all outstanding charges levied and uncollected on all properties at the time title thereto is vested in the City pursuant to *in rem* proceedings in consideration for the City's payment to the Board, in each Fiscal Year after the Effective Date, of an amount equal to 2% of such outstanding charges (unless, during the Lease Term, the City and the Board mutually agree on a different procedure for allocating such outstanding charges). *(Section 6.3)*

Discontinuance of Billing Services. If either the City or the Board no longer desires that the City provide the Board with billing services, the party desiring termination shall give written notice of such fact to the other party at least two years prior to the termination. Notwithstanding such termination of billing services, Section 6.2 of the Lease shall remain in full force and effect. *(Section 6.4)*

Legal Services. The Board has hired the City's Law Department to provide it with legal services. However, the Board may hire a different attorney or firm of attorneys to provide it with legal services. If the Board retains counsel to defend a claim against it without the prior approval of the Corporation Counsel of the City (which approval shall not be unreasonably withheld), the Board shall not be entitled to the indemnification from the City provided in Article III of the Lease with respect to such claim, unless the City elects in writing to provide such indemnification. *(Sections 7.1 and 7.2)*

Payments of Costs by the Board. The Board has agreed to pay to the City amounts sufficient to: (i) pay the cost of administration, maintenance, repair and operation of the Leased Property, including overhead costs incurred by the City attributable to the Leased Property (but less the amount of any governmental operating aid received or receivable within the current Fiscal Year with respect to the System), the cost of materials and supplies, and the amount of any judgment or settlement paid by the City arising out of a tort claim (but only if the costs of such claim are not otherwise reimbursed, the City's liability for such claim is related to Construction of a Water Project or operation or maintenance of the System and the costs of such claims do not exceed for any Fiscal Year 5% of the aggregate revenues shown on the Board's last year-end audited financial statements); (ii) reimburse the City for capital Costs incurred by the City in the Construction of Water Projects (if requested by the City and not otherwise reimbursed) including, without limitation, the payment of any judgment or settlement arising out of a contract claim related to the Construction of any Water Project; (iii) pay the cost of billing and collection services provided by the City; (iv) pay the cost of legal services provided by the City; and (v) reimburse the City for the compensation, or the costs of the services, of any City officers and employees provided on a full-time or part-time basis to the Board. *(Section 8.1)*

Base Rental Payments. In addition, the Board shall pay the City a rental payment for the System, but only to the extent requested by the City, and not to exceed the greater of (i) the principal and interest payable on general obligation bonds issued by the City for water and sewer purposes and certified by the City to be paid within such Fiscal Year, or (ii) 15% of the amount of principal and interest payable on the Bonds of the Authority and certified by the Authority to be paid within such Fiscal Year. (*Section 8.2*)

Method of Payment. The City shall certify within five business days after publication of the City's Executive Budget for the ensuing Fiscal Year the (i) amount which the City reasonably anticipates it will expend in connection with the costs described in Section 8.2 of the Lease and (ii) the amount of the payments described in Section 8.1 of the Lease; provided that, prior to the Board's payment to the City the Board shall have received, in addition to such certification by the City, a certificate of the Consulting Engineer to the effect that such amounts certified by the City for such payments and costs are reasonable and appropriate. Upon the Board's payment of all such amounts so certified or requested and any other payments required under the Act, or, after provisions for their payment have been made, the Board shall pay to the City, as Additional Rent in each Fiscal Year, any surplus of funds received. (*Section 8.3*)

Disposition of Property. The Board agrees that it will not sell, lease, sublease, assign, transfer, encumber (other than Permitted Encumbrances) or otherwise dispose of any part of the Leased Property, or any other real property or personal property which may be acquired by the Board, or its interest in the Lease, without the prior written approval of the City.

The City will not sell, transfer or otherwise dispose of real property or personal property included in the Leased Property without the Board's written consent. In the case of personal property, the value of which is less than \$1 million per unit (or of greater value if the Board designates), the Board will adopt rules and procedures for the expedited disposition thereof. Upon the City's request to dispose of any real property or personal property valued in excess of \$1 million, the Board will give such consent only upon receipt of a certificate signed by the Consulting Engineer to the effect that such real or personal property may be disposed of without materially adversely affecting the Revenues of the System or impairing the ability of the Board to make any payments required by the Lease or the Agreement or any other agreement to which it may be a party or be bound. The City may also, with the prior written consent of the Board, grant interests in the Leased Property which, in the reasonable judgment of the Board, do not interfere with the operation and maintenance of the System and the collection of the Revenues from the System. (*Section 11.1*)

Encumbrances. The Board may not encumber the Leased Property without the prior written approval of the City. The City may grant temporary licenses for use of the Leased Property which do not interfere with the operation and maintenance of the System or the collection of Revenues therefrom. (*Section 11.3*)

Summary of the Authority First Resolution

Terms used in this Summary of the Authority First Resolution shall have the meanings ascribed thereto in "APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Glossary."

Pledge of Revenues and Funds. The Authority pledges for the payment of the Principal Installments or Redemption Price of and any interest on the Bonds, in accordance with their terms and the provisions of the Authority First Resolution: (i) all Revenues, (ii) all moneys or securities in any of the Funds and Accounts created under the Authority First Resolution, except that moneys or securities on deposit in a Special Account are pledged only to the Series of Bonds to which such Account relates and moneys or securities on deposit in the Common Account are pledged only to the Bonds for which a Special Account has not been established pursuant to the Authority First Resolution, and (iii) all other moneys and securities to be received, held or set aside by the Authority or by any Fiduciary pursuant to the Authority First Resolution; subject only to the provisions of the Authority First Resolution and the Agreement permitting the application of such amounts for or to the purposes and on the terms and conditions therein set forth. It is the intention of the Authority that, to the fullest extent permitted by

law, such pledge shall be valid and binding from the time when it is made; that the Revenues, moneys, securities and other funds so pledged, and then or thereafter received by the Authority, shall immediately be subject to the lien of such pledge; and that the obligation to perform the contractual provisions therein contained shall have priority over any or all other obligations and liabilities of the Authority and shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the Authority, irrespective of whether such parties have notice thereof.

As further security for the payment of the Bonds, the Authority, under the Authority First Resolution, assigns, transfers and pledges to the Trustee all of its rights and interests under and pursuant to the Agreement (excluding rights to notice and other procedural rights, its right to indemnification and rights and interests not material to Bondholders), including, without limiting the generality of the foregoing, the present and continuing right: (i) to claim, collect or receive from the Board, all Revenues thereunder, (ii) to bring actions and proceedings thereunder for enforcement of such right of collection, and (iii) to do any and all things which the Authority is or may become entitled to do under the Agreement; provided that such assignment shall not impair or diminish any obligation of the Authority under the Agreement.

The Bonds are special obligations of the Authority payable solely from the Revenues and other amounts described in the Authority First Resolution and do not and will not constitute an indebtedness of the State, the City or the Board and neither the State, the City nor the Board shall be in any way liable thereon. (*Sections 203 and 501*)

Establishment of Funds and Accounts. The Authority First Resolution establishes the following Funds:

- (1) Construction Fund;
- (2) Revenue Fund;
- (3) Debt Service Fund;
- (4) Authority Expense Fund;
- (5) Debt Service Reserve Fund;
- (6) Subordinated Indebtedness Fund;
- (7) Surplus Fund; and
- (8) Arbitrage Rebate Fund.

The Authority First Resolution establishes in the Debt Service Reserve Fund a separate account known as the “Common Account”, and provides that any Supplemental Resolution which authorizes a Special Credit Facility may establish one or more “Special Accounts” in the Debt Service Reserve Fund. The Authority First Resolution also establishes in the Debt Service Reserve Fund a separate account to be known as the “Capitalized Interest Account”.

The Trustee shall hold all of the Funds and Accounts, except the Authority Expense Fund, which shall be held by the Authority.

The Trustee is directed to make withdrawals and transfers from the Funds and Accounts established by the Authority First Resolution in order to comply with any agreement entered into upon or after the date of issuance of the Authority’s Fiscal 1987 Series C Bonds providing for the rebate of certain arbitrage earnings to the United States. (*Section 502*)

Construction Fund. The Authority shall deposit from time to time in the Construction Fund the net proceeds from the sale of each Series of Bonds and make the deposits in the Funds and Accounts required by the applicable Supplemental Resolutions. The Authority shall also deposit from time to time in the Construction Fund any other amounts required to be deposited therein pursuant to the Authority First Resolution or the Agreement, including amounts received by the Authority for or in connection with the System and determined by the Authority to be deposited therein. Any proceeds of insurance maintained by the Board or the City against physical loss of or damage to the System, or of contractors’

performance bonds pertaining to the construction of the System, shall also be paid into the Construction Fund.

Except as otherwise provided, amounts in the Construction Fund may only be expended to pay Costs of Water Projects (including Costs of Issuance). The Trustee shall make payments from the Construction Fund, except as otherwise provided, only upon receipt of a Disbursement Request signed by an Authorized Representative of the Authority.

To the extent that other moneys are not available therefor in any other Fund or Account, amounts in the Construction Fund shall be applied to the payment of principal of and interest on Bonds when due. (*Section 503*)

Allocation of Revenues — Revenue Fund. The Authority shall cause all Revenues received from the Board pursuant to the Agreement or otherwise to be paid to the Trustee and deposited promptly upon receipt in the Revenue Fund. There shall also be deposited in the Revenue Fund all other amounts required by the Authority First Resolution or the Agreement to be so deposited. (*Section 504*)

Payments Into Certain Funds. From the Revenues in the Revenue Fund, the Trustee shall make, as soon as practicable in each month, the following deposits in the following order:

(i) to the Debt Service Fund all such amounts until the amount therein on deposit in such month equals the Minimum Monthly Balance for such month for all Series of Bonds Outstanding;

(ii) from the balance, if any, remaining in such month after making the deposits required in (i) above, to the Authority Expense Fund the entire balance until the total on deposit therein in such month is equal to the product obtained by multiplying (A) the sum of the Authority Expenses for the then current Fiscal Year plus (if included in the Authority Budget for the then current Fiscal Year) an amount (the “Reserve for Expenses”) equal to one-sixth ($\frac{1}{6}$ th) of such Authority Expenses by (B) a fraction, the numerator of which is 12 minus the number of full months, excluding the month of calculation, remaining in the Fiscal Year, and the denominator of which is 12;

(iii) from the balance, if any, remaining after making the deposits required in (i) and (ii) above, *first*, to the Common Account in the Debt Service Reserve Fund, the amount, if any, necessary to make the total on deposit in the Common Account equal to the Debt Service Reserve Requirement for the Bonds to which such Common Account relates or, if less than sufficient, the entire balance and, *second*, to each Special Account until the amount therein on deposit equals the Debt Service Reserve Requirement for the Bonds to which each Special Account relates; *provided, however*, if the balance remaining is less than sufficient to credit in full each Special Account, credit shall be made pro rata among all Special Accounts in the same ratio as the Debt Service Reserve Requirement related to such Special Account bears to the sum of the Debt Service Reserve Requirements for all of the Bonds related to the Special Accounts; and

(iv) from the balance, if any, remaining after making the deposits required in (i), (ii) and (iii) above, to the Subordinated Indebtedness Fund the amount required to be deposited in accordance with the Authority Budget, or the entire balance, if less than sufficient.

Beginning with the first day of each Fiscal Year, the Trustee shall calculate the amounts deposited in the Revenue Fund on a daily basis until the total of all amounts deposited therein during such Fiscal Year is at least equal to the Cash Flow Requirement. On such date, if any, the Trustee is directed to give the notice to the Authority and the Board provided in Section 4.3(b) of the Agreement. Thereafter, during each Fiscal Year, no further Revenues shall be paid to the Trustee pursuant to paragraph Fourth of Section 4.2(c) of the Agreement so long as the Cash Flow Requirement, as the same may be revised from time to time, continues to be met. (*Section 505*)

Debt Service Fund. The Trustee shall, for each Series of Bonds Outstanding, pay from the Debt Service Fund the amounts due on each Bond Payment Date for the payment of the Principal Installments, if any, and from the moneys in the Debt Service Fund, including moneys in the Capitalized Interest Account in such Fund, interest on the Outstanding Bonds and on the redemption date or date of

purchase, the amounts required for the payment of accrued interest on Bonds to be redeemed or purchased on such date unless the payment of such accrued interest shall be otherwise provided.

The Trustee may, and if so directed by an Authorized Representative of the Authority shall, prior to the forty-fifth day preceding the due date of each Sinking Fund Installment, apply the amounts accumulated in the Debt Service Fund for such Sinking Fund Installment, together with any interest on the Bonds for which such Sinking Fund Installment was established: (i) to the purchase of Bonds of like Series and maturity at prices (including any brokerage and other charges) not exceeding the Redemption Price payable for such Bonds when such Bonds are redeemable with such Sinking Fund Installment plus unpaid interest accrued or (ii) to the redemption of such Bonds, if redeemable by their terms, at or below said Redemption Price. Upon such purchase or redemption of any Bond, the Trustee shall then credit an amount equal to the principal of the Bond so purchased or redeemed toward the next Sinking Fund Installments thereafter to become due and the amount of any excess over the amount of such Sinking Fund Installment shall be credited against future Sinking Fund Installments in direct chronological order.

In any event, the Trustee shall, as soon as practicable after the forty-fifth day preceding the due date of any such Sinking Fund Installment, call for redemption a sufficient amount of Bonds of like Series and maturity to complete the retirement of the principal amount specified for such Sinking Fund Installment of such Bonds whether or not it then has moneys in the Debt Service Fund to pay the applicable Redemption Price thereof on the redemption date. The Trustee shall apply to the redemption of the Bonds on each such redemption date the amount required for the redemption of such Bonds. *(Sections 506 and 514)*

Authority Expense Fund. The Authority shall apply amounts credited to the Authority Expense Fund to the payment of Authority Expenses. Any moneys in the Authority Expense Fund which the Authority determines are in excess of that needed to meet the sum of the unpaid Authority Expenses for such Fiscal Year plus (if such amount was included in the Authority Budget for such Fiscal Year) the Reserve for Expenses, shall be applied toward any deficiencies in the following Funds and Accounts in the order stated: the Debt Service Fund, Debt Service Reserve Fund and Subordinated Indebtedness Fund. Any remaining amounts shall be credited to the Revenue Fund. *(Section 507)*

Debt Service Reserve Fund. The Authority First Resolution establishes a Debt Service Reserve Fund and a Common Account therein. In addition, the Authority First Resolution provides that any Supplemental Resolution which provides for a Special Credit Facility to secure the principal, interest or Tender Option Price of any Bonds may establish one or more "Special Accounts" in the Debt Service Reserve Fund. From the proceeds of each Series of Bonds there shall be deposited in the Debt Service Reserve Fund the amount, if any, necessary to make the amount on deposit therein equal to the Debt Service Reserve Requirement, after giving effect to the issuance of such Bonds; and all such amounts will be credited to the Common Account, unless a Supplemental Resolution requires a deposit in a Special Account. Amounts on deposit in the Common Account will be applied, to the extent necessary, to pay the Principal Installments of and interest on the Bonds; *provided, however*, that the amounts in the Common Account may not be applied to pay the Principal Installments or Tender Option Price of or interest on Bonds for which such payments are secured by a Special Credit Facility, if the Supplemental Resolution authorizing such Bonds has established a Special Account. Likewise, amounts in any Special Account may not be applied to pay the Principal Installments of or interest on any Bond for which such payments may be made from the Common Account. Amounts on deposit in each of the Accounts in the Debt Service Reserve Fund shall be applied, to the extent other funds are not available in the Surplus Fund, the Subordinated Indebtedness Fund and the Authority Expense Fund, to pay the Principal Installments of, and interest on the Bonds to which such Account relates when due. Amounts so applied shall be derived first from cash or Investment Securities on deposit, and second from draws and demands on Financial Guaranties.

If, as of June 30 of each year, the amount in any Account in the Debt Service Reserve Fund exceeds the applicable Debt Service Reserve Requirement after giving effect to any Financial Guaranty

deposited in such Fund, the Trustee shall, on the first business day of the following Fiscal Year, withdraw from such Account the amount of any excess therein over the applicable Debt Service Reserve Requirement as of the date of such withdrawal for deposit into (i) the Arbitrage Rebate Fund, the amount estimated by the Authority to be required by the Code to be rebated to the Department of the Treasury, (ii) the Surplus Fund, the amount required to be deposited therein in accordance with the Authority Budget, and (iii) the Revenue Fund, the amount of any excess then remaining in the Debt Service Reserve Fund over the applicable Debt Service Reserve Fund Requirement.

Whenever the amount (exclusive of Financial Guaranties) in all of the Accounts in the Debt Service Reserve Fund, together with the amount in the Debt Service Fund, is sufficient to pay all Outstanding Bonds in accordance with their respective terms, the funds on deposit in the Debt Service Reserve Fund shall be transferred to the Debt Service Fund and applied to the redemption or payment at maturity of all Bonds Outstanding.

In lieu of the required deposits and transfers to the Debt Service Reserve Fund, the Authority may cause to be deposited into the Debt Service Reserve Fund Financial Guaranties in an amount equal to the difference between the Debt Service Reserve Requirement and the sums, if any, then on deposit in the Debt Service Reserve Fund or being deposited in the Debt Service Reserve Fund concurrently with such Financial Guaranties. The Financial Guaranties shall be payable (upon the giving of notice as required thereunder) on any date on which moneys will be required to be withdrawn from the Debt Service Reserve Account and applied to the payment of a Principal Installment of or interest on any Bonds and such withdrawal cannot be met by amounts on deposit in the Debt Service Reserve Fund. If a disbursement is made pursuant to Financial Guaranties, the Authority shall be obligated either (i) to reinstate the maximum limits of such Financial Guaranties or (ii) to deposit into the Debt Service Reserve Fund, funds in the amount of the disbursement made under such Financial Guaranties, or a combination of such alternatives, as shall provide that the amount in the Debt Service Reserve Fund equals the Debt Service Reserve Requirement.

In the event of the refunding of any Bonds, the Trustee shall, upon the written direction of the Authority, withdraw from the Debt Service Reserve Fund all or any portion of amounts accumulated therein with respect to the Bonds being refunded and deposit such amounts as provided in such written direction; provided that such withdrawal shall not be made unless (a) immediately thereafter the Bonds being refunded shall be deemed to have been paid pursuant to Section 1201 of the Authority First Resolution, and (b) the amount remaining in the Debt Service Reserve Fund after such withdrawal shall not be less than the Debt Service Reserve Requirement. (*Section 508*)

Subordinated Indebtedness Fund. The Trustee shall apply amounts on deposit in the Subordinated Indebtedness Fund solely to the maintenance of reserves for, or the payment of, Subordinated Indebtedness (or as otherwise provided by the resolution of the Authority authorizing each issue of Subordinated Indebtedness). The Trustee shall withdraw from the Subordinated Indebtedness Fund any amount necessary to render the balances in the Debt Service Fund or Debt Service Reserve Fund sufficient to meet the requirements of such Funds. (*Section 509*)

Surplus Fund. The Trustee shall, on each Bond Payment Date, apply moneys credited to the Surplus Fund in the following amounts: (i) to the Debt Service Fund the amount, if any, necessary (or all the moneys in the Surplus Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in such Fund and (ii) to the Debt Service Reserve Fund the amount, if any, necessary (or all the moneys in the Surplus Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in any Account in such Fund. Such transfer shall be made notwithstanding any other provisions of the Authority First Resolution requiring deposits in such Funds. Amounts on deposit in the Surplus Fund on the last day of a Fiscal Year shall be withdrawn from such Fund and transferred to the Board for deposit in the Local Water Fund. (*Section 510*)

Arbitrage Rebate Fund. Amounts on deposit in the Arbitrage Rebate Fund shall be applied by the Trustee to make payments to the Department of the Treasury of the United States of America. Notwithstanding the foregoing, the Trustee shall apply moneys credited to the Arbitrage Rebate Fund in

the following amounts: (i) to the Debt Service Fund the amount, if any, necessary (or all the moneys in the Arbitrage Rebate Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in the Debt Service Fund and (ii) to the Debt Service Reserve Fund the amount, if any, necessary (or all the moneys in the Arbitrage Rebate Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in any Account in the Debt Service Reserve Fund.

Amounts on deposit in the Arbitrage Rebate Fund in excess of the amount required to be maintained therein for the purposes of such Fund may be transferred and paid by the Trustee to the Surplus Fund. (*Section 510-a*)

Subordinated Indebtedness. The Authority may issue Subordinated Indebtedness payable out of and secured by a pledge of and lien on amounts in the Subordinated Indebtedness Fund available for such payment. Such Subordinated Indebtedness, however, shall be issued only for the purposes set forth in the Authority First Resolution and shall be secured by a pledge subordinate in all respects to the pledge created by the Authority First Resolution as security for the bonds. (*Section 511*)

Depositaries. All moneys or securities held by the Trustee shall constitute trust funds and the Trustee may and shall, if directed by the Authority, deposit such moneys or securities with one or more Depositaries. All moneys or securities held by the Authority in the Authority Expense Fund shall be deposited with one or more Depositaries. All moneys or securities deposited under the provisions of the Authority First Resolution with the Trustee or any Depositary shall be held in trust and applied only in accordance with the provisions of the Authority First Resolution, and each of the Funds established by the Authority First Resolution shall be a trust fund for the purposes thereof.

Each Depositary holding moneys or securities in trust for the Trustee shall be a bank or trust company organized under the laws of the State or a national banking association (having its principal office within the State), having capital stock, surplus and undivided earnings aggregating at least \$100,000,000 and willing and able to accept the office on reasonable and customary terms and authorized by law to act in accordance with the provisions of the Authority First Resolution. (*Section 512*)

Investment of Certain Funds. Moneys held in the Debt Service Fund, the Debt Service Reserve Fund and the Subordinated Indebtedness Fund (subject to the terms of any resolutions or other instruments securing any issue of Subordinated Indebtedness) shall be invested and reinvested to the fullest practicable extent in Investment Securities which mature not later than such times as shall be necessary to provide moneys when needed to make payments required from such Funds; provided that in the case of the Debt Service Reserve Fund maturation may not occur later than fifteen years from the date of such investment, and in the case of the Debt Service Fund, investments shall be of the type described in clauses (ii), (iii) and (vi), and in the case of the Debt Service Reserve Fund, clauses (ii) and (iii), of the definition of "Investment Securities" (in either case, to the fullest extent practicable). Moneys in the Authority Expense Fund, the Revenue Fund, the Construction Fund, the Arbitrage Rebate Fund and the Surplus Fund may be invested in Investment Securities which mature no later than such times as shall be necessary to provide moneys when needed to make payments from such Funds. The Trustee shall make all investments in accordance with written instructions from any Authorized Representative of the Authority. Moneys in any Fund or Account may be combined with moneys in any other Fund or Account for the purpose of making such investments in Investment Securities.

Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) earned on any moneys or investments in such Funds and Accounts, other than the Construction Fund, the Arbitrage Rebate Fund and the Debt Service Reserve Fund, shall be paid into the Revenue Fund as and when received. Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) earned on any moneys or investments in (i) the Debt Service Reserve Fund shall be paid into the Arbitrage Rebate Fund or the Surplus Fund, (ii) the Construction Fund shall be paid to the Board for deposit in the Local Water Fund quarterly, on the 15th day of each July, October, January and April of each Fiscal Year upon receipt of a written request and a certificate of the Authority relating to the satisfaction of the Cash Flow Requirement and (iii) the Arbitrage Rebate Fund shall remain in such fund.

All Investment Securities acquired with moneys in any Fund or Account, including any Fund or Account held by the Authority, shall be held by the Trustee in pledge or by a Depositary as agent in pledge in favor of the Trustee. (*Section 514*)

Additional Bonds. The Authority may issue Bonds from time to time without limitation as to amount except as provided in the Authority First Resolution or as specified by law to generate funds sufficient to meet the Costs of Water Projects, to make deposits in the Funds and Accounts or to refund Outstanding Bonds, Bond Anticipation Notes, Subordinated Indebtedness or outstanding bonds of the City issued to pay the capital costs of the System. All Bonds shall be issued subject to the terms, conditions and limitations established in the Authority First Resolution and in one or more Series as therein provided.

Bonds shall be authenticated and delivered only upon the Trustee's receipt of, among other items:

- (a) a certified copy of the Supplemental Resolution authorizing such Series;
- (b) (i) in the case of the initial Series of Bonds, an executed copy of the Agreement and the Lease; and (ii) in the case of any subsequent Series of Bonds, an executed copy of any amendment or supplement to the Agreement or the Lease not theretofore delivered to the Trustee;
- (c) except in the case of Series of Bonds issued prior to July 1, 1986 and any Series of Refunding Bonds issued pursuant to Section 207 of the Authority First Resolution, a certificate of an Authorized Representative of the Authority setting forth (i) the Revenues for either of the last two full Fiscal Years immediately preceding the Fiscal Year in which such Bonds are to be issued and (ii) the Aggregate Debt Service during such Fiscal Year for which Revenues are set forth pursuant to clause (i) above (excluding from Aggregate Debt Service any Principal Installment or portion thereof which was paid from sources other than Revenues) and (iii) the sum of the Operating Expenses and the Required Deposits for such period, and showing that the amount set forth in (i) is at least equal to the sum of (x) an amount equal to 115% of the amount set forth in (ii) and (y) an amount equal to 100% of the amount set forth in (iii);
- (d) except in the case of the initial Series of Bonds under the Authority First Resolution and any Series of Refunding Bonds issued pursuant to Section 207 of the Authority First Resolution, a certificate of the Consulting Engineer setting forth the projected Operating Expenses for each of the five Fiscal Years following the Issuance of such Series of Bonds (plus the Fiscal Year in which such Bonds are issued);
- (e) except in the case of the initial Series of Bonds under the Authority First Resolution and any Series of Refunding Bonds issued pursuant to Section 207, a certificate, signed by an Authorized Representative of the Authority setting forth the estimated Required Deposits for each of the five Fiscal Years following the issuance of such Series of Bonds (plus the Fiscal Year in which such Bonds are issued); and
- (f) except in the case of the initial Series of Bonds under the Authority First Resolution and any Series of Refunding Bonds issued pursuant to Section 207, a certificate of the Rate Consultant (i) setting forth the estimated Revenues for each of the five Fiscal Years following the issuance of such Series of Bonds (plus the Fiscal Year in which such Bonds are issued) after giving effect to any increases or decreases in rates, fees and charges projected for such Fiscal Years and (ii) showing for each such Fiscal Year that the estimated Revenues for such Fiscal Year will be at least equal to the sum of (A) 115% of the maximum estimated Adjusted Aggregate Debt Service on all Bonds then Outstanding including the Bonds to be issued, and (B) 100% of the sum of the projected Operating Expenses and Required Deposits, as shown on the Certificate of the Consulting Engineer delivered pursuant to paragraph (d) above and the Certificate of the Authority delivered pursuant to paragraph (e) above, respectively. (*Sections 204 and 206*)

Refunding Bonds. One or more Series of Refunding Bonds may be issued pursuant to Section 207 of the Authority First Resolution at any time to refund any Outstanding Bonds provided that (i) estimated average annual Debt Service on such Series of Refunding Bonds shall not exceed the average annual

Debt Service on the Bonds to be refunded and (ii) the maximum Debt Service in any Fiscal Year on such Series of Refunding Bonds shall not exceed the maximum Debt Service in any Fiscal Year on the Bonds to be refunded, all as shown in a Certificate signed by an Authorized Representative of the Authority and delivered to the Trustee prior to the authentication and delivery of such Series of Refunding Bonds. Refunding Bonds shall be issued in a principal amount sufficient, together with other moneys available therefor, to accomplish such refunding and to make the deposits in the Funds and Accounts required by the provisions of the Supplemental Resolution authorizing such Bonds. (*Section 207*)

Bond Anticipation Notes. Whenever the Authority shall authorize the issuance of a Series of Bonds, the Authority may, by resolution, authorize the issuance of notes (and renewals thereof) in anticipation of such Series of Bonds. The principal of and interest on such notes and renewals thereof shall be payable from the proceeds of such notes or from the proceeds of the sale of the Series of Bonds in anticipation of which such notes are issued. The proceeds of such Bonds may be pledged for the payment of the principal of and interest on such notes and any such pledge shall have a priority over any other pledge of such proceeds created by the Authority First Resolution. The Authority may also pledge the Revenues to the payment of the interest on, and subject to Section 707 of the Authority First Resolution, the principal of such notes. A copy of the Authority First Resolution of the Authority authorizing such notes, certified by an Authorized Representative of the Authority, shall be delivered to the Trustee following its adoption, together with such other information concerning such notes as the Trustee may reasonably request. (*Section 208*)

Credit Facilities. In connection with the issuance of any Series of Bonds, the Authority may obtain or cause to be obtained one or more Credit Facilities providing for payment of all or a portion of the Principal Installments, or Redemption Price or interest due or to become due on such Bonds, providing for the purchase of such Bonds by the issuer of such Credit Facility or providing funds for the purchase of such Bonds by the Authority.

The Authority may secure such Credit Facility by an agreement providing for the purchase of the Series of Bonds secured thereby with such adjustments to the rate of interest, method of determining interest, maturity or redemption provisions as specified by the Authority in the applicable Supplemental Resolution. The Authority may also in an agreement with the issuer of such Credit Facility agree to directly reimburse such issuer for amounts paid under the terms of such Credit Facility, together with interest thereon (the "Reimbursement Obligation"); *provided, however*, that no Reimbursement Obligation shall be created until amounts are paid under such Credit Facility. Any such Reimbursement Obligation (a "Parity Reimbursement Obligation") may be secured by a pledge of, and a lien on Revenues on a parity with the lien created by Section 501 of the Authority First Resolution. Upon the payment of amounts under the Credit Facility which payment results in the Parity Reimbursement Obligation becoming due and payable, such Parity Reimbursement Obligation shall be deemed to be part of the Series of Bonds to which the Credit Facility which gave rise to such Parity Reimbursement Obligation relates.

Any such Credit Facility shall be for the benefit of and secure such Series of Bonds or portion thereof, as specified in the applicable Supplemental Resolution. (*Section 209*)

Indebtedness and Liens. The Authority First Resolution provides that the Authority shall not issue any bonds, or other evidences of indebtedness, other than the Bonds, Bond Anticipation Notes, Subordinated Indebtedness and Parity Reimbursement Obligations, secured by a pledge of or other lien on the Revenues and shall not create or cause to be created any lien on such Revenues or on any amounts held by any Fiduciary, under the Authority First Resolution; however, the Authority may: (i) issue notes payable from the proceeds of Bonds or other obligations for the corporate purposes of the Authority payable or secured by Revenues derived on and after such date as the pledge of the Revenues provided in the Authority First Resolution is discharged and satisfied and (ii) issue bonds or other obligations for the corporate purposes of the Authority payable out of or secured by the pledge of amounts in the Local Water Fund after satisfaction of the Cash Flow Requirement for the then current Fiscal Year, and which recite on their face that such pledge of said amounts is and shall be in all respects subordinate to the provisions of the lien and pledge created by the Authority First Resolution. (*Section 707*)

Agreement of the State. In accordance with Section 1045-t of the Act, the Authority agrees, for and on behalf of the State, that the State will not alter or limit the rights vested by the Act in the Authority or the Board to fulfill the terms of any agreement made with or for the benefit of the Bondholders, or in any way impair the rights and remedies of Bondholders, until the Bonds, together with the interest thereon, with interest on any unpaid installment of interest, and all costs and expenses in connection with any action or proceeding by or on behalf of such holders, are fully met and discharged. (*Section 711*)

Authority Budget. The Authority shall, on or before May 1, in each Fiscal Year, adopt and file with the Trustee, the Board and the City, a certified copy of the Authority Budget showing the estimated Cash Flow Requirement and the components thereof (on a monthly basis) for the ensuing Fiscal Year, together with any other information required to be set forth therein by the Authority First Resolution or the Agreement. Such Authority Budget may set forth such additional information as the Authority may determine or as the Board or the City may request. If for any reason the Authority shall not have adopted the Authority Budget before such May 1, the Authority Budget for the then current Fiscal Year shall be deemed to be the Authority Budget for the ensuing Fiscal Year until a new Authority Budget is adopted. The Authority may at any time adopt an amended Authority Budget for the then current or ensuing Fiscal Year, but no such amended Authority Budget shall supercede any prior Budget until the Authority shall have filed with the Trustee, the Board and the City a copy of such amended Authority Budget. Each month the Authority shall recalculate the Cash Flow Requirement. (*Sections 712 and 713*)

Enforcement and Amendment of Agreement and Lease. The Authority shall enforce or cause to be enforced the provisions of the Agreement and the Lease and duly perform its covenants and agreements under the Agreement. The Authority will not consent or agree to or permit any rescission of or amendment to or otherwise take any action under or in connection with the Agreement or the Lease except in accordance with Article X of the Agreement of the Authority First Resolution. (*Section 714*)

Supplemental Resolutions. The Authority First Resolution permits the modification or amendment of the rights and obligations of the Authority and of the holders of the Bonds thereunder by a Supplemental Resolution, with the written consent of the holders of two-thirds of the principal amount of: (i) the Bonds then Outstanding and (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Bonds of the Series so affected and then Outstanding; however, if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the consent of the holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of modification; provided no such modification or amendment shall change the terms of redemption, maturity of principal, installment of interest, or reduce the principal amount, Redemption Price, or rate of interest without the consent of the holder of the affected Bond, or reduce the percentages of consents required to effect any future modification or amendment.

The Authority may adopt (without the consent of any holders of the Bonds) supplemental resolutions to authorize additional Bonds; to add to the restrictions contained in the Authority First Resolution upon the issuance of additional indebtedness; to add to the covenants of the Authority contained in, or surrender any rights reserved to or conferred upon it by, the Authority First Resolution; to confirm any pledge under the Authority First Resolution of Revenues or other moneys; to preserve the federal tax exemption of interest on the Bonds; or otherwise to modify any of the provisions of the Authority First Resolution (but no such other modification may be effective while any of the Bonds of any Series theretofore issued are Outstanding); or to cure any ambiguity, supply any omission or to correct any defect in the Authority First Resolution or to insert such provisions clarifying matters or questions arising under the Authority First Resolution as are necessary or desirable, and are not contrary to or inconsistent with the Authority First Resolution as theretofore in effect or to provide for additional duties of the Trustee (provided that the Trustee shall consent thereto). (*Arts. VIII and IX*)

Defaults and Remedies. The Authority First Resolution provides that if one or more of the following Events of Default shall occur, namely: (i) a default in the payment of the principal or Redemption Price of any Bond; (ii) a default in payment of any installment of interest on any Bond;

(iii) a default by the Authority in the performance or observance of any other of its covenants, agreements or conditions in the Authority First Resolution for a period of 45 days after written notice thereof; (iv) a default under the Agreement or the Lease by the Board or the City for a period of 45 days after written notice thereof; or (v) a filing of a petition for relief under any federal or State bankruptcy or similar law by the Authority; then, upon the happening and continuance of any Event of Default, the Trustee may, and upon the written request of the holders of not less than a majority in principal amount of the Bonds Outstanding the Trustee shall, declare the principal and accrued interest on all the Bonds then Outstanding, due and payable immediately subject, however, to rescission of such declaration and annulment of the default upon the remedying thereof.

The Authority covenants that upon the occurrence of an Event of Default, the books of record and account of the Authority shall at all times be subject to the inspection and use of the Trustee and of its agents and attorneys and that, upon demand of the Trustee, the Authority will account, as if it were the trustee of an express trust, for all Revenues and other moneys, securities and funds pledged or held under the Authority First Resolution for such period as shall be stated in such demand.

Upon default, the Trustee may proceed to protect and enforce its rights and the rights of the holders of the Bonds under the Authority First Resolution forthwith by a suit or suits in equity or at law, whether for the specific performance of any covenant therein contained, or in aid of the execution of any power therein granted, or for an accounting against the Authority as if the Authority were the trustee of an express trust, or in the enforcement of any other legal or equitable right as the Trustee, being advised by counsel, shall deem most effectual to enforce any of its rights or to perform any of its duties under the Authority First Resolution. During the continuance of an Event of Default, Revenues shall be applied first, to the reasonable and proper charges and expenses of the Trustee; then (unless the principal of all of the Bonds shall have been declared payable) to the payment of all unpaid interest ratably, and then to unpaid principal or Redemption Price, ratably; and if all of the principal of the Bonds shall be due and payable, to the payment of unpaid principal and interest, without preference or priority of interest over principal, principal over interest or of any Bond or installment over any other Bond or installment, without any discrimination or preference. No Bondholder has any right to institute suit to enforce any provision of the Authority First Resolution or the execution of any trust thereunder or for any remedy thereunder, unless the Trustee has been requested by the holders of at least a majority in principal amount of the Bonds to take such action and has been offered adequate security and indemnity and has failed to commence such suit in the manner provided in the Authority First Resolution. The right to appoint a statutory trustee under Section 1045-p of the Act is expressly abrogated. (*Art. X*)

Defeasance of Bonds Other than Variable Rate or Option Bonds. Any Outstanding Bond shall prior to the maturity or redemption date thereof be deemed to have been paid and shall cease to be entitled to any lien, benefit or security under the Authority First Resolution if (i) in the case of any Bonds to be redeemed prior to their maturity, the Authority shall have given to the Trustee irrevocable instructions accepted in writing by the Trustee to publish on such date the notice of redemption therefor (other than Bonds purchased by the Trustee prior to the publication of the notice of redemption), (ii) there shall have been deposited with the Trustee either moneys in an amount sufficient, or Defeasance Obligations the principal of and/or the interest on which, when due, without reinvestment, will, as verified by the report of a firm of nationally recognized independent certified public accountants⁽¹⁾, provides moneys which, together with the moneys deposited shall be sufficient, to pay when due the principal or Redemption Price (if applicable) and interest due and to become due on said Bonds and (iii) in the event said Bonds are not by their terms subject to redemption within the next succeeding 60 days, the Authority shall have given the Trustee irrevocable instructions to publish, as soon as practicable, a notice to the holders of such Bonds that the deposit required above has been made with the Trustee and that said Bonds are deemed paid in accordance with the Authority First Resolution and stating such maturity or redemption date upon which moneys are to be available to pay the principal or Redemption Price, if applicable, on such Bonds (other

⁽¹⁾ Any Supplemental Resolution adopted by the Authority on or after February 28, 2005 provides that the verification report may be prepared by a firm of nationally recognized verification agents rather than a firm of nationally recognized independent certified public accountants.

than Bonds purchased by the Trustee prior to the publication of the notice of redemption); provided that any notice published for Bonds constituting less than all of the Outstanding Bonds of any maturity within a Series shall specify the letter and number or other distinguishing mark of each such Bond. The Trustee shall, to the extent necessary, apply moneys to the retirement of said Bonds in amounts equal to the unsatisfied balances of any Sinking Fund Installments thereto.

The Trustee shall, if so directed by the Authority prior to the maturity date of Bonds deemed to have been paid which are not to be redeemed prior to their maturity date or prior to the publication of the above notice of redemption for Bonds deemed paid and to be redeemed, apply moneys deposited with the Trustee in respect of such Bonds and redeem or sell Defeasance Obligations so deposited with the Trustee and purchase such Bonds and the Trustee shall immediately thereafter cancel all such Bonds so purchased; *provided, however*, that the moneys and Defeasance Obligations remaining on deposit with the Trustee after the purchase and cancellation of such Bonds shall be sufficient to pay when due the Principal Installment or Redemption Price, if applicable, and interest due or to become due on all Bonds. (*Section 1201*)

Defeasance of Variable Rate Bonds. The Resolution provides that for the purposes of determining whether Variable Rate Bonds shall be deemed to have been paid prior to the maturity or redemption date thereof, by the deposit of moneys, or Defeasance Obligations and moneys (if any), the interest due on such Bonds shall be calculated at the maximum rate permitted; *provided, however*, that if, as a result of such Bonds having borne interest at less than the maximum rate for any period, the total amount of moneys and Investment Securities on deposit with the Trustee for the payment of interest on such Bonds exceeds the total amount required to be deposited with the Trustee, the Trustee shall, if requested by the Authority, pay the amount in excess to the Authority free and clear of any lien or pledge securing the Bonds or otherwise existing under the Authority First Resolution. (*Section 1201*)

Defeasance of Option Bonds. Under the Authority First Resolution, Option Bonds shall be deemed paid in accordance with the Authority First Resolution only if, in addition to satisfying several of the requirements applicable to other than Variable Rate or Option Bonds, there shall have been deposited with the Trustee moneys in an amount which shall be sufficient to pay the maximum amount of principal of and premium due, if any, and interest on such Bonds which could become payable to the holders of such Bonds upon the exercise of any options provided to the holders of such Bonds; *provided, however*, that if the options originally exercisable by the holder of an Option Bond are no longer exercisable, such Bond shall not be considered an Option Bond. (*Section 1201*)

Summary of the Authority Second Resolution

Terms used in this Summary of the Authority Second Resolution shall have the meanings ascribed thereto in "APPENDIX C — GLOSSARY AND SUMMARY OF CERTAIN DOCUMENTS — Glossary — Definition of Certain Terms Used in Authority Second Resolution."

Pledge of Revenues and Funds. The Authority pledges for the payment of the Bonds in accordance with their terms and the provisions of the Authority Second Resolution, subject only to the provisions of the Authority Second Resolution, the Authority First Resolution, the Act and the Agreement permitting the application thereof for or to the purposes and on the terms and conditions of the Authority Second Resolution and therein set forth: (i) all moneys or securities in any of the Funds and Accounts, other than the Arbitrage Rebate Fund, (ii) all Other Moneys, (iii) in moneys or securities on deposit in the FGR Subordinated Indebtedness Fund, except that moneys or securities on deposit in a Special Account are pledged only to the Series of Bonds to which such Account relates and moneys or securities on deposit in the Common Account are pledged only to the Bonds for which a Special Account has not been established pursuant to the Authority Second Resolution, (iv) all other moneys and securities to be received, held or set aside by the Authority or by any Fiduciary pursuant to the Authority Second Resolution and (v) from and after the time that the pledge of Revenues made in the Authority First Resolution shall be discharged and satisfied in accordance with the Authority First Resolution, all Revenues; *provided, however*, that such pledge shall be in all respects subordinate to the provisions of the Authority First Resolution and the lien and pledge created by the Authority First Resolution. This

pledge shall, to the fullest extent permitted by law, be valid and binding from the time when it is made and the Revenues, moneys, securities and other funds so pledged and then or thereafter received by the Authority shall immediately be subject to the lien of such pledge and the obligation to perform the contractual provisions contained in the Authority Second Resolution and shall be valid and binding as against all parties having claims of any kind in tort contract or otherwise against the Authority, irrespective of whether such parties have notice thereof.

The Act provides that (i) the pledges made by the Authority Second Resolution are valid, binding and perfected from the time when they are made and property so pledged shall immediately be subject to the lien of such pledges without any physical delivery thereof or further act, (ii) the lien of such pledges shall be valid, binding and perfected as against all parties having claims of any kind in tort, contract or otherwise against the Authority irrespective of whether such parties have notice thereof and (iii) no instrument by which such pledges are created nor any financing statement need be recorded or filed. Accordingly, no financial statements have been or will be filed. Based upon the foregoing, the Authority represents that under the laws of the State (i) the Authority Second Resolution creates valid and binding pledges in favor of the holders from time to time of the Bonds, enforceable in accordance with the terms set forth in the Authority Second Resolution, (ii) the pledges made by the Authority Second Resolution and each pledge made to secure obligations of the Authority which, by the terms set forth in the Authority Second Resolution, are prior to or of equal rank with such pledge are and shall be prior to any judicial lien hereafter imposed on the property pledged by the Authority Second Resolution to enforce a judgment against the Authority on a simple contract and (iii) no instrument by which such pledges are created nor any financing statement need be recorded or filed in order to establish or maintain such priority. The Authority further represents that the Authority has not heretofore made a pledge of, granted a lien on or security interest in, or made an assignment or sale of the Revenues or any other property pledged by the Authority Second Resolution that is prior to or of equal rank with the pledge made by the Authority Second Resolution and neither the Revenues nor any other property pledged by the Authority Second Resolution have been described in any financing statement. Except as expressly permitted by the Authority Second Resolution, the Authority shall not hereafter make or suffer to exist any pledge or assignment of, lien on or security interest in the Revenues or other property pledged by the Authority Second Resolution that is prior to or of equal rank with the pledge made by the Authority Second Resolution, or file any financing statement describing any such pledge, assignment, lien or security interest, except in connection with pledges, assignments, liens or security interests expressly permitted by the Authority Second Resolution.

As further security for the payment of the principal or Redemption Price of and interest on the Bonds, the Authority assigns, transfers and pledges to the Trustee all of its rights and interests under and pursuant to the Agreement (excluding rights to notice and other procedural rights, its rights to indemnification and rights and interests not material to Bondholders), including, without limiting the generality of the foregoing, the present and continuing right (i) to make claim for, collect or cause to be collected, receive or cause to be received, from the Board all Revenues thereunder, (ii) to bring actions and proceedings thereunder for the enforcement thereof, and (iii) to do any and all things which the Authority is or may become entitled to do under the Agreement; *provided, however* that such assignment, transfer and pledge are and shall be in all respects subject and subordinate to the assignment, transfer and pledge made by the Authority First Resolution; *provided, further*, that the assignment made by the Authority Second Resolution shall not impair or diminish any obligation of the Authority under the Agreement.

The Bonds are special obligations of the Authority payable solely from the special funds provided for such payment pursuant to the Act, the Authority First Resolution and the Authority Second Resolution and do not and will not constitute an indebtedness of the State, the City or the Board and neither the State, the City nor the Board shall be in any way liable thereon. (*Sections 203 and 501*)

Establishment of Funds and Accounts. The Authority Second Resolution establishes the following Funds:

- (1) Construction Fund;

- (2) Revenue Fund;
- (3) Debt Service Fund;
- (4) Authority Expense Fund;
- (5) Debt Service Reserve Fund;
- (6) Subordinated Indebtedness Fund;
- (7) Arbitrage Rebate Fund; and
- (8) Surplus Fund.

The Authority Second Resolution establishes in the Debt Service Reserve Fund a separate account known as the “Common Account”, and provides that any Supplemental Resolution which authorizes a (i) Special Credit Facility to secure the payment of the Principal Installments of and interest on the Bonds authorized thereby, (ii) which provides for a Special Credit Facility to secure the payment of the Tender Option Price of any Option Bonds authorized thereby, or (iii) wherein the Authority has determined that the Series of Bonds authorized thereby will not be secured by the Common Account in the Debt Service Reserve Fund, may establish one or more Special Accounts in the Debt Service Reserve Fund. The Authority Second Resolution also establishes in the Debt Service Fund a separate account to be known as the “Capitalized Interest Account”.

The Trustee shall hold all of the Funds and Accounts.

The Trustee is directed to make withdrawals and transfers from the Funds and Accounts established by the Authority Second Resolution in order to rebate certain arbitrage earnings to the United States. (*Section 502*)

Construction Fund. From and after the date on which no Authority First Resolution Bonds are Outstanding, the Authority shall deposit from time to time in the Construction Fund the net proceeds from the sale of each Series of Bonds and make the deposits in the Funds and Accounts required by the applicable Supplemental Resolutions. The Authority shall also deposit from time to time in the Construction Fund any other amounts required to be deposited therein pursuant to the Authority Second Resolution or the Agreement, including amounts received by the Authority for or in connection with the System and determined by the Authority to be deposited therein. In addition, all moneys on deposit in the Construction Account shall be deposited in the Construction Fund as soon as practicable after the date on which there are no Authority First Resolution Bonds Outstanding. From and after the date on which no Authority First Resolution Bonds are Outstanding and proceeds of insurance maintained by the Board or the City against physical loss of or damage to the System, or of contractors’ performance bonds pertaining to the construction of the System, shall also be paid into the Construction Fund.

Except as otherwise provided, amounts in the Construction Fund, and subject to the provisions of the Authority First Resolution, the Construction Account may only be expended to pay Costs of Water Projects (including Costs of Issuance). The Trustee shall, subject to certain exceptions contained in the Authority First Resolution and the Authority Second Resolution, make payments from the Construction Fund, except as otherwise provided, only upon receipt of a Disbursement Request signed by an Authorized Representative of the Authority.

To the extent that other moneys are not available therefor in any other Fund or Account, amounts in the Construction Fund and Construction Account shall be applied to the payment of principal of and interest on Bonds and of the interest on Parity Bond Anticipation Notes when due. The Authority will cause moneys in the Construction Account to be transferred to the Debt Service Fund at such time and in such amount as may be required for such purpose. (*Section 504*)

Allocation of Revenues — Revenue Fund. The Authority shall cause all Other Moneys and, from and after the date on which no Authority First Resolution Bonds are Outstanding, all Revenues received from the Board pursuant to the Agreement to be paid to the Trustee and deposited promptly upon receipt in the Revenue Fund. There shall also be deposited in the Revenue Fund all other amounts required by the Authority Second Resolution or the Agreement to be so deposited.

In addition to the payments to be made from the Subordinated Indebtedness Fund, as soon as practicable in each month the amount in the Subordinated Indebtedness Fund (other than in the Construction Account) shall be transferred to the Revenue Fund until the amount on deposit therein is equal to the sum of:

(i) together with the amount in the Debt Service Fund, the Monthly Balance for such month and the amount necessary to pay the purchase price or Redemption Price of Bonds purchased or called for redemption; plus

(ii) the amount, if any, necessary to make the total on deposit in the Debt Service Reserve Fund and credited to the Common Account equal to the Debt Service Reserve Requirement for the Bonds to which such Common Account relates, and to make the total on deposit in each Special Account equal to the Debt Service Reserve Requirement for the Bonds to which each such Special Account relates; plus

(iii) the amount, if any, then required to be in the Subordinated Indebtedness Fund. (Section 505)

Payments Into Certain Funds. From the Revenues in the Revenue Fund, the Trustee shall make, as soon practicable in each month, the following deposits in the following order:

(i) to the Debt Service Fund, all such amounts until the total on deposit therein equals the sum of (A) the Monthly Balance for such month for all Series of Bonds Outstanding and (B) the amount necessary to pay the purchase price or Redemption Price of Bonds purchased or called for redemption;

(ii) if no Authority First Resolution Bonds are then Outstanding, from the balance, if any, remaining in such month after making the deposits required by paragraph (i) to the Authority Expense Fund the entire balance until the total on deposit therein in such month is equal to the product obtained by multiplying (A) the sum of (i) the Authority Expenses for the then current Fiscal Year as set forth in the Authority Budget, plus (ii) if included in the Authority Budget for the then current Fiscal Year, an amount ("the Reserve for Expenses") equal to one-sixth of such Authority Expenses by (B) a fraction, the numerator of which is twelve (12) minus the number of full months (excluding the month of calculation) remaining in the Fiscal Year and the denominator of which is twelve (12);

(iii) from the balance, if any remaining after making the deposits required by paragraphs (i) and (ii), to the Debt Service Reserve Fund, first, to the credit of the Common Account therein the amount, if any, necessary to make the total on deposit in such Fund and credited to the Common Account equal to the Debt Service Reserve Requirement for the Bonds to which such Common Account relates, or, the entire balance if less than sufficient and, then, from the balance of such deposit, if any, remaining after crediting the Common Account as aforesaid, to the credit of each Special Account an amount equal to the Debt Service Reserve Requirement for the Bonds to which each such Special Account relates; *provided, however*, that if the balance remaining is less than sufficient to credit in full each Special Account, credit shall be made pro rata among all Special Accounts in the same ratio as the Debt Service Reserve Requirement related to each Special Account bears to the sum of the Debt Service Reserve Requirements for all the Bonds related to Special Accounts:

(iv) from the balance, if any, remaining after making the deposits required by paragraphs (i), (ii) and (iii) to the Arbitrage Rebate Fund, the amount, if any, equal to the earnings in investments in the Debt Service Reserve Fund which were transferred to the Revenue Fund in the preceding month; and

(v) from the balance, if any, remaining after making the deposits required by paragraphs (i), (ii), (iii) and (iv) and if no Authority First Resolution Bonds are then Outstanding, to the Subordinated Indebtedness Fund the amount required to be deposited in such Fund for such month in accordance with the Authority Budget to the entire balance if less than sufficient.

Beginning with the first day of each Fiscal Year, the Authority shall cause to be calculated the amounts deposited in the Revenue Fund on a daily basis until it is determined that the total of all amounts deposited therein during such Fiscal Year is at least equal to the SGR Cash Flow Requirement. Thereafter, during such Fiscal Year, no further amounts on deposit in the FGR Subordinated Indebtedness Fund shall be required to be deposited in the Revenue Fund; *provided, however*, if the Authority shall thereafter certify an amended Authority Budget for such Fiscal Year showing an SGR Cash Flow Requirement in excess of the SGR Cash Flow Requirement last certified for such Fiscal Year, calculation of the amounts deposited in the Revenue Fund on a daily basis shall be resumed until it is determined that the total of all amounts deposited therein during such Fiscal Year is at least equal to the SGR Cash Flow Requirement, as amended. Thereafter, during such Fiscal Year, no further amounts on deposit in the FGR Subordinated Indebtedness Fund shall be required to be deposited in the Revenue Fund, unless the Authority thereafter, in such Fiscal Year, again certifies an amended Authority Budget showing an SGR Cash Flow Requirement in excess of the SGR Cash Flow Requirement theretofore certified in such Fiscal Year. (*Section 506*)

Debt Service Fund. The Trustee shall for the Outstanding Bonds of a Series, Parity Bond Anticipation Notes and Parity Reimbursement Obligations, pay (i) on each Bond Payment Date, (1) from the moneys on deposit in the Debt Service Fund the amounts required for the payment of the Principal Installments, if any, due on such Bond Payment Date and (2) from the moneys on deposit in the Debt Service Fund, including the moneys credited to the subaccount, if any, established for such Series in the Capitalized Interest Account in such Fund, the interest due on such Bond Payment Date, (ii) on any redemption date or date of purchase, the amounts required for the payment of accrued interest on Bonds to be redeemed or purchased on such date unless the payment of such accrued interest shall be otherwise provided and (iii) on each Bond Payment Date for Parity Bond Anticipation Notes, the interest due thereon on such Bond Payment Date, including from moneys credited to the sub-account, if any, established for such Parity Bond Anticipation Notes in the Capitalized Interest.

The Trustee may, and if so directed by an Authorized Representative of the Authority shall, prior to the forty-fifth day preceding the due date of each Sinking Fund Installment, apply the amounts accumulated in the Debt Service Fund for such Sinking Fund Installment, together with any interest on the Bonds for which such Sinking Fund Installment was established: (i) to the purchase of Bonds of like Series and maturity at prices (including any brokerage and other charges) not exceeding the Redemption Price payable for such Bonds when such Bonds are redeemable with such Sinking Fund Installment plus unpaid interest accrued or (ii) to the redemption of such Bonds, if redeemable by their terms, at or below said Redemption Price. Upon such purchase or redemption of any Bond, the Trustee shall then credit an amount equal to the principal of the Bond so purchased or redeemed toward the next Sinking Fund Installments thereafter to become due and the amount of any excess over the amount of such Sinking Fund Installment shall be credited against future Sinking Fund Installments in direct chronological order.

In any event, the Trustee shall, as soon as practicable after the forty-fifth day preceding the due date of any such Sinking Fund Installment, call for redemption a sufficient amount of Bonds of like Series and maturity to complete the retirement of the principal amount specified for such Sinking Fund Installment of such Bonds whether or not it then has moneys in the Debt Service Fund to pay the applicable Redemption Price thereof on redemption date. The Trustee shall apply to the redemption of the Bonds on each such redemption date the amount required for the redemption of such Bonds.

In the event of the refunding of any Bonds, the Trustee shall, upon the written direction of the Authority, withdraw from the Debt Service Fund and the Capitalized Interest Account related to the Bonds to be refunded all or any portion of amounts accumulated therein with respect to the Bonds to be refunded and deposit such amounts as provided in such written direction; *provided, however*, that such withdrawal shall not be made unless (i) immediately thereafter the Bonds being refunded shall be deemed to have been paid, and (ii) after giving effect to any amounts being simultaneously deposited therein the amount remaining in the Debt Service Fund after such withdrawal shall not be less than the Monthly Balance at the date of such withdrawal with respect to Bonds then Outstanding, after the Bonds to be refunded have been deemed paid. (*Section 507*)

Authority Expense Fund. The Authority shall apply amounts credited to the Authority Expense Fund to the payment of Authority Expenses. Any moneys in the Authority Expense Fund which the Authority determines are in excess of that needed to meet the sum of the unpaid Authority Expenses for such Fiscal Year plus (if such amount was included in the Authority Budget for such Fiscal Year) the Reserve for Expenses shall be applied toward any deficiencies in the following Funds and Accounts in the order stated: the Debt Service Fund, Debt Service Reserve Fund and Subordinated Indebtedness Fund. Any remaining amounts shall be credited to the Revenue Fund. (*Section 508*)

Debt Service Reserve Fund. The Authority Second Resolution establishes a Debt Service Reserve Fund and a Common Account therein. In addition, the Authority Second Resolution provides that any Supplemental Resolution which provides (i) for a Special Credit Facility to secure the payment of the Principal Installments of and interest on the Bonds authorized thereby, (ii) which provides for a Special Credit Facility to secure the payment of the Tender Option Price of any option Bonds authorized thereby, or (iii) wherein the Authority has determined that the Series of Bonds authorized thereby will not be secured by the Common Account in the Debt Service Reserve Fund, may establish one or more Special Accounts in the Debt Service Reserve Fund. From the proceeds of each Series of Bonds there shall be deposited in the Debt Service Reserve Fund the amount, if any, necessary to make the amount on deposit therein equal to the Debt Service Reserve Requirement, after giving effect to the issuance of such Bonds; and all such amounts will be credited to the Common Account, unless a Supplemental Resolution requires a deposit in a Special Account.

Amounts on deposit in the Common Account will be applied, to the extent necessary, to pay the Principal Installments of and interest on the Bonds; *provided, however*, that the amounts in the Common Account may not be applied to pay the Principal Installments of and interest on, or Tender Option Price of or interest on, Bonds for which such payments are secured by a Special Credit Facility, or to pay Principal Installments of and interest on Bonds that the Authority has determined will not be secured by amounts in the Common Account; these Bonds will be secured by amounts, if any, on deposit in the Special Account. Likewise, amounts in any Special Account may not be applied to pay the Principal Installments of or interest on any Bond for which such payments may be made from the Common Account. Amounts on deposit in each of the Accounts in the Debt Service Reserve Fund shall be applied, to the extent other funds are not available pursuant to the Authority Second Resolution to pay the Principal Installments of, and interest on the Bonds to which such Account relates when due. Amounts so applied shall be derived first from cash or Investment Securities on deposit, and then from draws and demands on Financial Guaranties; *provided, however*, that if more than one Financial Guaranty is held in an Account at the time moneys are to be withdrawn therefrom the Trustee shall obtain payment under each such Financial Guaranty pro rata based upon the respective amounts then available to be paid thereunder.

If, as of June 30 of each year, the amount in any Account in the Debt Service Reserve Fund exceeds the applicable Debt Service Reserve Requirement after giving effect to any Financial Guaranty deposited in such Fund, the Trustee shall, on the first business day of the following Fiscal Year, withdraw from such Account the amount of any excess therein over the applicable Debt Service Reserve Requirement as of the date of such withdrawal for deposit into (i) the Arbitrage Rebate Fund, the amount estimated by the Authority to be required by the Code to be rebated to the Department of the Treasury, and (ii) the Reserve Fund, the amount of any excess then remaining in the Debt Service Reserve Fund over the applicable Debt Service Reserve Fund Requirement. If, as of February 1 of each year the amount in any Account in the Debt Service Reserve Fund is less than the applicable Debt Service Reserve Requirement and, to the extent that such deficiency has not been made up by May 1 of such year by either (i) deposits pursuant to Sections 506, 511 or 512 of the Authority Second Resolution or (ii) an increase in the market value of the securities therein or (iii) a combination of (i) and (ii), the Authority shall, in its Authority Budget for the ensuing Fiscal Year, include the amount necessary to make up such deficiency as a Required Deposit.

Whenever the amount (exclusive of Financial Guaranties) in all of the Accounts in the Debt Service Reserve Fund, together with the amount in the Debt Service Fund, is sufficient to pay all Outstanding

Bonds in accordance with their respective terms, the funds on deposit in the Debt Service Reserve Fund shall be transferred to the Debt Service Fund and applied to the redemption or payment at maturity of all Bonds Outstanding.

In lieu of or in substitution for moneys or Investment Securities otherwise required to be deposited in the Common Account of the Debt Service Reserve Fund, the Authority may deposit or cause to be deposited with the Trustee a Financial Guaranty for the benefit of the Holders of the Bonds for all or any part of the Debt Service Reserve Requirement; *provided, however*, (i) that any such surety bond or insurance policy shall be issued by an insurance company or association duly authorized to do business in the State and either (A) the claims paying ability of which is rated the highest rating accorded by a nationally recognized rating agency, or (B) obligations insured by a surety bond or an insurance policy issued by such company or association and rated at the time such surety bond or insurance policy is delivered, without regard to qualification of such rating by symbols such as “+” or “-” or numerical notation, in the highest rating category by each Rating Agency or, if Outstanding Bonds are not rated by both Rating Agencies, by whichever Rating Agency that then rates Outstanding Bonds and (ii) that any such letter of credit shall be issued by a bank, a trust company, a national banking association, a corporation subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956 or any successor or provision of law, a federal branch pursuant to the International Banking Act of 1978 or any successor provision of law or a domestic branch or agency of a foreign bank which branch or agency is duly licensed or authorized to do business under the laws of any state or territory of the United States of America, the unsecured or uncollateralized long term debt obligations of which, or long term obligations secured or supported by a letter of credit issued by such person, are rated at the time such letter of credit is delivered, without regard to qualification of such rating by symbols such as “+”, or “-” or numerical notation, in at least the second highest rating category by each Rating Agency or, if Outstanding Bonds are not rated by both Rating Agencies, by whichever Rating Agency that then rates Outstanding Bonds.

In addition to the conditions and requirements set forth above, no Financial Guaranty shall be deposited in full or partial satisfaction of the Debt Service Reserve Requirement unless the Trustee shall have received prior to such deposit (i) an opinion of counsel to the effect that such Financial Guaranty has been duly authorized, executed and delivered by the Financial Guaranty Provider thereof and is valid, binding and enforceable in accordance with its terms, (ii) in the event such Financial Guaranty Provider is not a domestic entity, an opinion of foreign counsel in form and substance satisfactory to the Trustee and (iii) in the event such Financial Guaranty is a letter of credit, an opinion of counsel acceptable to the Trustee and to each Financial Guaranty Provider substantially to the effect that payments under such letter of credit will not constitute avoidable preferences under Section 547 of the United States Bankruptcy Code in a case commenced by or against the Authority thereunder or under any applicable provisions of the Debtor and Creditor Law of the State.

Notwithstanding the foregoing, if at any time after a Financial Guaranty has been deposited with the Trustee the ratings on any Outstanding Bonds are less than in the second highest rating category by each Rating Agency, without regard to qualification of such rating by symbols such as “+” or “-” or numerical notation, and the unsecured or uncollateralized long term debt of the Financial Guaranty Provider or the long term debt obligations secured or supported by a surety bond, insurance policy or letter of credit of a Financial Guaranty Provider is reduced below the third highest rating category by each Rating Agency, without regard to qualification of such rating by symbols such as “+” or “-” or numerical notation, the Authority shall either (i) replace or cause to be replaced said Financial Guaranty with another Financial Guaranty which satisfies the requirements of the two preceding paragraphs or (ii) deposit or cause to be deposited in the Debt Service Reserve Fund an amount of moneys equal to the value of the Financial Guaranty of such Financial Guaranty Provider, such deposits to be, as nearly as practicable, in ten equal semi-annual installments commencing on the earlier of the December 15 or June 15 next succeeding the reduction in said ratings.

Each Financial Guaranty shall be payable (upon the giving of such notice as may be required thereby) on any date on which moneys are required to be withdrawn from the Debt Service Reserve

Fund and such withdrawal cannot be made without drawing upon such letter of credit or obtaining payment under such surety bond or insurance policy.

For the purposes of the above provisions under the heading “Debt Service Reserve Fund”, and the provisions under the heading “Investment of Certain Funds” below, in computing the amount on deposit in the Debt Service Reserve Fund, a letter of credit, a surety bond or an insurance policy shall be valued at the amount available to be drawn or payable thereunder on the date of computation: *provided, however*, that, if the unsecured or uncollateralized long term debt of the Financial Guaranty Provider thereof, or the long term debt obligations secured or supported by a surety bond, insurance policy or letter of credit of said Financial Guaranty Provider has been reduced below the ratings required by the third paragraph under the heading “Debt Service Reserve Fund”, said Financial Guaranty shall be valued at the lesser of (i) the amount available to be paid thereunder on the date of calculation and (ii) the difference between the amount available to be paid thereunder on the date of issue thereof and an amount equal to a fraction of such available amount the numerator of which is the aggregate number of December 15th’s and June 15th’s which has elapsed since such ratings were reduced and the denominator of which is ten.

With respect to any demand for payment under any Financial Guaranty, the Trustee shall make such demand for payment in accordance with the terms of such Financial Guaranty in a timely manner to assure the availability of moneys on the Bond Payment Date for which such moneys are required.

In the event of the refunding of any Bonds, the Trustee shall, upon the written direction of the Authority, withdraw from the Debt Service Reserve Fund all or any portion of amounts accumulated therein with respect to the Bonds being refunded and deposit such amounts as provided in such written direction; provided that such withdrawal shall not be made unless (a) immediately thereafter the Bonds being refunded shall be deemed to have been paid pursuant to Section 1201 of the Authority Second Resolution, and (b) the amount remaining in the Debt Service Reserve Fund after such withdrawal shall not be less than the Debt Service Reserve Requirement. (*Section 509*)

Subordinated Indebtedness Fund. The Trustee shall apply amounts on deposit in the Subordinated Indebtedness Fund solely to the maintenance of reserves for, or the payment of, Subordinated Indebtedness (or as otherwise provided by the resolution of the Authority authorizing each issue of Subordinated Indebtedness). The Trustee shall withdraw from the Subordinated Indebtedness Fund any amount necessary to render the balances in the Debt Service Fund or Debt Service Reserve Fund sufficient to meet the requirements of such Funds. (*Section 510*)

Arbitrage Rebate Fund. Amounts on deposit in the Arbitrage Rebate Fund shall be applied by the Trustee to make payments to the Department of the Treasury of the United States of America. Notwithstanding the foregoing, the Trustee shall apply moneys credited to the Arbitrage Rebate Fund in the following amounts: (i) to the Debt Service Fund the amount, if any, necessary (or all the moneys in the Arbitrage Rebate Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in the Debt Service Fund and (ii) to the Debt Service Reserve Fund the amount, if any, necessary (or all the moneys in the Arbitrage Rebate Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in any Account in the Debt Service Reserve Fund.

Amounts on deposit in the Arbitrage Rebate Fund in excess of the amount required to be maintained therein or the purposes of such Fund may be transferred and paid by the Trustee to the Revenue Fund. (*Section 511*)

Surplus Fund. The Trustee shall, on each Bond Payment Date, apply moneys credited to the Surplus Fund in the following amounts: (i) to the Debt Service Fund the amount, if any, necessary (or all the moneys in the Surplus Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in such Fund and (ii) to the Debt Service Reserve Fund the amount, if any, necessary (or all the moneys in the Surplus Fund if less than the amount necessary) to make up any deficiency in the amount required to be on deposit in any Account in such Fund. Such transfer shall be

made notwithstanding any other provisions of the Authority Second Resolution requiring deposits in such Funds. Amounts on deposit in the Surplus Fund on the last day of a Fiscal Year shall be withdrawn from such Fund and transferred to the Board for deposit in the Local Water Fund. (*Section 512*)

Depositories. All moneys or securities held by the Trustee under the provisions of the Authority Second Resolution shall constitute trust funds and the Trustee may, and shall, if directed in writing by an Authorized Representative of the Authority deposit such moneys or securities with one or more Depositories in trust for the Trustee. All moneys or securities deposited under the provisions of the Authority Second Resolution with the Trustee or any Depository shall be held in trust and applied only in accordance with the provisions of the Authority Second Resolution and the applicable provisions of the Authority First Resolution, and each of the Funds and the Accounts shall be a trust fund for the purposes thereof. The Authority and the Trustee shall instruct each Depository that any moneys or securities credited to a Fund or an Account under the Authority Second Resolution which are deposited with such Depository shall be identified to be part of such Fund or Account and subject to the pledge in favor of the Trustee created under the Authority Second Resolution. Prior to the first deposit of any moneys or securities with each Depository, the Authority and the Trustee shall obtain from such Depository its agreement to serve as agent of the Trustee in holding such moneys or securities in pledge in favor of the Trustee and the contract or other written instrument between the Authority and such Depository governing the establishment and operation of such account shall provide the moneys or securities from time to time deposited with such Depository shall be held by such Depository as such agent in pledge in favor of the Trustee; *provided, however*, that, except as otherwise expressly provided in the Authority Second Resolution, the Authority shall be permitted at any time to make withdrawals from and write checks or other drafts against any account held by the Authority and established with such Depository and apply the same for the purposes specified in the Authority Second Resolution and, subject to Section 515 of the Authority Second Resolution, the Authority shall be permitted to invest amounts in any such account in Investment Securities.

Each Depository holding moneys or securities in trust for the Trustee shall be a bank or trust company organized under the laws of the State or a national banking association (having its principal office within the State), having capital stock, surplus and undivided earnings aggregating at least \$100,000,000 (or such greater amount as set forth in a Supplemental Resolution) and willing and able to accept the office on reasonable and customary terms and authorized by law to act in accordance with the provisions of the Authority Second Resolution. (*Section 513*)

Investment of Certain Funds. Moneys held in the Debt Service Fund, the Debt Service Reserve Fund and the Subordinated Indebtedness Fund (subject to the terms of any resolutions or other instrument securing any issue of Subordinated Indebtedness) shall be invested and reinvested to the fullest practical extent in Investment Securities which mature not later than such times as shall be necessary to provide moneys when needed to make payments required from such Funds; provided that in the case of the Debt Service Fund, investments shall be of the type described in clauses (ii), (iii) or (iv) of the definition of "Investment Securities." Moneys in the Authority Expense Fund, the Revenue Fund, the Construction Fund, the Arbitrage Rebate Fund and the Surplus Fund may be invested and reinvested in Investment Securities which mature later than such times as shall be necessary to provide moneys when needed to make payments from such Funds. The Trustee shall make all investments in accordance with the direction of an Authorized Representative of the Authority, given either in writing, which may be sent by electronic transmission of a facsimile, or by telephonic communication subsequently confirmed in writing. Moneys in any Fund or Account may be combined with moneys in any other Fund or Account for the purpose of making such investments in Investment Securities.

Interest (net of that which represents a return of accrued interest paid in connection with the purchase of any investment) and other investment earnings on any moneys or investments in the Funds and Accounts, other than the Construction Fund, the Debt Service Reserve Fund and the Arbitrage Rebate Fund, shall be paid into the Revenue Fund as and when received. Interest (net of that which represents a return of accrued interest paid connection with the purchase of any investment) and other investment earnings on any moneys or investments in (i) the Debt Service Reserve Fund shall be paid into the

Arbitrage Rebate Fund, the Surplus Fund or the Revenue Fund; (ii) the Arbitrage Rebate Fund shall remain in such Fund; and (iii) the Construction Fund shall be paid quarterly, on the fifteenth day of each July, October, January and April of each Fiscal Year, to the Board deposit in the Local Water Fund; *provided, however*, that no such payment shall be made unless the Trustee shall receive (A) the written direction of an Authorized Representative of the Authority to make such payment and (B) a Certificate of an Authorized Representative of the Authority stating that, as of the date thereof, there has been deposited in the Revenue Fund during such Fiscal Year an amount equal to the Cash Flow Requirement.

All Investment Securities acquired with moneys in any Fund or Account shall be held by the Trustee in pledge or by a Depositary as agent in pledge in favor of the Trustee. (*Section 515*)

Additional Bonds. In order to provide sufficient funds for the Costs of Water Projects or for the purpose refunding any Bonds, Authority First Resolution Bonds or any other bonds, notes or other obligations issued either by the Authority or the City to pay the capital costs of the System, Bonds of the Authority are authorized to be issued from time to time without limitations as to amount except as provided in the Authority Second Resolution or as may be limited by law and such Bonds shall be issued subject to the terms, conditions and limitations established in the Authority Second Resolution and in one or more Series as therein provided.

Bonds shall be authenticated and delivered only upon the Trustee's receipt of, among other items:

(a) a Bond Counsel's Opinion as to validity and certain other matters required by the Authority Second Resolution;

(b) a certified copy of the Supplemental Resolution authorizing such Series;

(c) an executed copy of an amendment or supplement to the Agreement or the Lease not theretofore delivered to the Trustee;

(d) except in the case of any Series of Refunding Bonds issued pursuant to Section 207 of the Authority Second Resolution, a Certificate of an Authorized Representative of the Authority setting forth (i) the Revenues for either of the last two full Fiscal Years immediately preceding the Fiscal Year in which such bonds are to be issued and (ii) the Aggregate Debt Service on Authority First Resolution Bonds, Outstanding Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations during such Fiscal Year for which Revenues are set forth pursuant to clause (i), excluding from Aggregate Debt Service the amount thereof which was paid from sources other than Revenues, and (iii) the sum of the Operating Expenses and the Required Deposits for such Fiscal Year (exclusive of Required Deposits for the payment of Outstanding Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations), and showing that the amount set forth in (i) is at least equal to the sum of (x) 110% of the amount set forth in (ii) and (y) 100% of the amount set forth in (iii);

(e) except in the case of Refunding Bonds issued pursuant to Section 207 of the Authority Second Resolution, a Certificate of each of the respective Authorized Representatives of the Authority, the Board and City, each dated as of the date of such delivery, stating that (i) the Authority is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Authority Second Resolution, (ii) the Board is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Agreement or the Lease and (iii) the City is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Agreement or the Lease;

(f) a Certificate signed by an Authorized Representative of the Authority setting forth the Cash Flow Requirement as of such date; and

(g) in the case of any Series for which Capitalized Interest has been provided by the Supplemental Resolution authorizing such Series, (i) the written direction of an Authorized Representative of the Authority to establish the sub-account for such Series in the Capitalized Interest Account in the Debt Service Fund and (ii) the amount of the proceeds of such Series to be

deposited in the Subordinated Indebtedness Fund for payment to such sub-account. (*Sections 204 and 206*)

Refunding Bonds. One or more Series of Refunding Bonds may be issued pursuant to Section 207 of the Authority Second Resolution at any time to refund any Outstanding Bonds only upon the Trustee's receipt of, among other things, a Certificate signed by an Authorized Representative of the Authority stating that (a) the average annual Debt Service on the Refunding Bonds of such Series does not exceed the average annual Debt Service on the Bonds be refunded and (b) the maximum Debt Service in any Fiscal Year on the Refunding Bonds of such Series shall not exceed the maximum Debt Service in any Fiscal Year on the Bonds to be refunded. (*Section 207*)

Bond Anticipation Notes. The Authority may, by resolution, authorize the issuance of notes (and renewals thereof in anticipation of the issuance of a Series of Bonds. The principal of and interest on such notes and renewals thereof shall be payable from the proceeds of such notes or from the proceeds of the sale of the Series of Bonds issued to provide for the payment of such notes. The proceeds of such Bonds may be pledged for the payment of the principal of and interest on such notes and any such pledge shall have a priority over any other pledge of such proceeds created by the Authority Second Resolution. The Authority may also pledge (i) the Funds and Accounts, other than the Arbitrage Rebate Fund, and (ii) the Revenues to the payment of the interest on, and subject to Section 706 of the Authority Second Resolution, the principal of such notes. A copy of the Authority Second Resolution of the Authority authorizing such notes, certified by an Authorized Representative of the Authority, shall be delivered to the Trustee following its adoption, together with such other information concerning such notes as the Trustee may reasonably request. (*Section 208*)

Credit Facilities and Interest Rate Exchange Agreements. In connection with the issuance of any Series of Bonds or Parity Bond Anticipation Notes, the Authority may obtain or cause to be obtained one or more Credit Facilities providing for payment of all or a portion of the Principal Installments, Redemption Price or interest due or to become due on such Bonds or the principal or interest due or to become due on such Parity Bond Anticipation Notes, providing for the purchase of such Bonds by the issuer of such Credit Facility or Revolving funds for the purchase of such Bonds by the Authority. In connection therewith the Authority may enter into such agreements with the issuer of such Credit Facility providing for, among other things: (i) reimbursement of the issuer of the Credit Facility for amounts paid under the terms thereof; *provided, however*, that no obligation to reimburse such issuer shall be created, for purposes of the Authority Second Resolution, until amounts are paid under such Credit Facility; (ii) the payment of fees and expenses to such issuer for the issuance of such Credit Facility; (iii) the terms and conditions of such Credit Facility and the Series of Bonds or the Parity Bond Anticipation Notes affected thereby; and (iv) the security, if any, to be provided for the issuance of such Credit Facility. The Authority may secure such Credit Facility by an agreement providing for the purchase of the Series of Bonds secured thereby with such adjustments to the rate of interest, method of determining interest, maturity, or redemption provisions as specified by the Authority in the applicable Supplemental Resolution. Any such Credit Facility shall be for the benefit of and secure such Series of Bonds or portion thereof as specified in the applicable Supplemental Resolution.

In connection with the Bonds of any Series or Parity Bond Anticipation Notes, the Authority may enter into one or more Interest Rate Exchange Agreements providing for, inter alia: (i) the payment of fees, expenses and other amounts to the Counterparty; (ii) the terms and conditions of such Interest Rate Exchange Agreements; (iii) the Bonds of the Series or Parity Bond Anticipation Notes to which such Interest Rate Exchange Agreement relate; and (iv) the security, if any, to be provided by the Authority or the Counterparty for performance of their respective obligations under the Interest Rate Exchange Agreement.

The Authority may also in an agreement with the issuer of a Credit Facility agree to reimburse such issuer directly for amounts paid under the terms of such Credit Facility, together with accrued interest thereon; *provided, however*, that no obligation to reimburse an issuer of a Credit Facility shall be created, for purposes of the Authority Second Resolution, until amounts are paid under such Credit Facility.

Such payments to reimburse the issuer of a Credit Facility and the obligations of the Authority to make payments to a Counterparty, are referred to in the Authority Second Resolution as a “Reimbursement Obligation.” Any Reimbursement Obligation (a “Parity Reimbursement Obligation”) may be secured by a pledge of and a lien on, the Revenues, Other Moneys, the Funds and Accounts (other than the Arbitrage Rebate Fund) and amounts in the FGR Subordinated Indebtedness Fund on a parity with the lien created thereon by Section 501 of the Authority Second Resolution; *provided, however*, that with respect to Parity Bond Anticipation Notes, such pledge and lien may secure only the Authority’s Reimbursement Obligation incurred on account of amounts advanced for the payment of the interest on such Parity Bond Anticipation Notes unless the principal amount of such Reimbursement Obligation which was advanced on account of the principal of such Parity Bond Anticipation Notes is payable to the provider of the Credit Facility in substantially equal installments payable over not less than eight calendar quarters. Any such Parity Reimbursement Obligation shall be deemed to be a part of the Series or Parity Bond Anticipation Notes to which the Credit Facility or Interest Rate Exchange Agreement, as the case may be, which gave rise to such Parity Reimbursement Obligation relates. (*Section 209*)

Indebtedness and Liens. The Authority Second Resolution provides that the Authority shall not issue any bonds, notes, or other evidences of indebtedness or otherwise incur any indebtedness, other than the First General Resolution Bonds, Bonds, Parity Bond Anticipation Notes or Parity Reimbursement Obligations, secured by a pledge of or other lien or charge on the Revenues or any of the assets pledged which is prior to or of equal rank or priority with the pledge made and shall not create or cause to be created any lien or charge on the Revenues or on any of the assets pledged which is prior to or of equal rank or priority with the pledge made; *provided, however*, that, with respect to Bond Anticipation Notes, such lien or pledge shall secure payment of the interest thereon, unless the principal thereof shall be secured by a lien on the Revenues as hereinafter provided in this paragraph. This paragraph shall not prevent the Authority from issuing bonds, other notes or other obligations for the corporate purposes of the Authority payable out of, or secured by a pledge of, Revenues to be derived on and after such date as the pledge of the Revenues provided in the Authority Second Resolution shall be discharged and satisfied as provided in Section 1201 of the Authority Second Resolution, or from issuing bonds or notes or other obligations for the corporate purposes of the Authority which are payable out of or secured by the pledge of amounts available therefor in the Local Water Fund after satisfaction, in each Fiscal Year, of the Cash Flow Requirement for such Fiscal Year and which recite on their face that such pledge of said amounts is and shall be in all respects subordinate to the provisions of the Authority Second Resolution and the lien and pledge created by the Authority Second Resolution.

The Authority will not issue any bonds, notes or other evidences of indebtedness or otherwise incur any indebtedness, other than Bonds or Authority First Resolution Bonds, payable from, or secured by a pledge of or other lien or charge on the Construction Account of the FGR Subordinated Indebtedness Fund. (*Section 706*)

Agreement of the State. In accordance with Section 1045-t of the Act, the Authority agrees, for and on behalf of the State, that the State will not alter or limit the rights vested by the Act in the Authority or the Board to shall the terms of any agreement made with or for the benefit of the Bondholders, or in any way impair the right, and remedies of Bondholders, until the Bonds, together with the interest thereon, with interest on any unpaid installment of interest, and all costs and expenses in connection with any action or proceeding by or on behalf of such holders, are fully met and discharged. (*Section 709*)

Authority Budget. The Authority shall, on or before May 1, in each Fiscal Year, adopt and file with the Trustee, the Board and the City, a copy of the Authority Budget, duly certified by an Authorized Representative of the Authority, showing the estimated Cash Flow Requirement (including the amount of each item constituting a component thereof, on a monthly basis) for the ensuing Fiscal Year, together with the estimated Revenues, other than Revenues to be received from the Board pursuant to the Agreement, expected to be received by the Authority in the ensuing Fiscal Year, and any other information required to be set forth therein by the Authority Second Resolution or the Agreement. Such Authority Budget may set forth such additional information as the Authority may determine or as the Board or the City may request.

If for any reason the Authority shall not have adopted the Authority Budget before May 1, the Authority Budget for the then current Fiscal Year shall be deemed to be the Authority Budget for the ensuing Fiscal Year until new Authority Budget is adopted.

The Authority may at any time adopt an amended Authority Budget for the then current or ensuing Fiscal Year, but no such amended Authority Budget shall supercede any prior Budget until the Authority shall have filed with the Trustee, the Board and the City a copy of such amended Authority Budget. (*Section 710*)

Cash Flow Requirement. On the first day of each month after the adoption of the Authority Budget for any Fiscal Year, the Authority shall recalculate the Cash Flow Requirement for such Fiscal Year. If any such recalculation results in the determination of a Cash Flow Requirement in excess of the Cash Flow Requirement set forth in the then current Authority Budget, the Authority shall adopt and file an amended Authority Budget in accordance with Section 711(c) of the Authority Second Resolution.

At any time on or after May 1 of a Fiscal Year, but not later than June 15 of such Fiscal Year, the Authority shall recalculate the Cash Flow Requirement for such Fiscal Year and include therein, in addition to all other amounts required by the Authority Second Resolution or by the Agreement or Authority First Resolution to be included therein, an amount equal to the lesser of (i) the amount estimated to be in the Local Water Fund on June 30 of such Fiscal Year after the Board has made the payments and deposits required by paragraphs FIRST through SEVENTH of Section 4.2(c) of the Agreement and (ii) an amount equal to the difference between (x) the Aggregate Debt Service on Bonds, Parity Bond Anticipation Notes and Parity Reimbursement Obligations payable during the next succeeding Fiscal Year, less (y) the Other Moneys projected to be received during such next succeeding Fiscal Year. Upon such recalculation the Authority shall adopt and file an amended Authority Budget in accordance with Section 711(c) of the Authority Second Resolution.

If a Financial Guaranty is to expire or terminate during a Fiscal Year and as a result thereof the amount in the Debt Service Reserve Fund would be less than the Debt Service Reserve Requirement, the Authority shall include in the Authority Budget and the Cash Flow Requirement for such Fiscal Year and for each of the four Fiscal Years next succeeding such Fiscal Year an amount equal to twenty percent (20%) of the deficit in the Debt Service Reserve Fund created by such expiration or termination, unless prior to adoption of the Authority Budget for any such Fiscal Year the Authority has obtained an extension of or substitute for such Financial Guaranty or a commitment for the issuance of such extension or substitute. (*Section 711*)

Enforcement and Amendment of Agreement and Lease. The Authority shall enforce or cause to be enforced the provisions of the Agreement and the Lease and duly perform its covenants and agreements under the Agreement. The Authority will not consent or agree to or permit any rescission of or amendment to or otherwise take any action under or in connection with the Agreement or the Lease except in accordance with Article X or the Agreement and Section 714 of the Authority Second Resolution. (*Section 713*)

Amendments to Authority First Resolution, Agreement and Lease. Except as otherwise provided in the Authority Second Resolution, the Authority First Resolution, the Agreement or the Lease may not be amended, changed, modified or terminated, nor may any provision thereof be waived, without the consent of the Holders of Outstanding Bonds as provided in the Authority Second Resolution, if such amendment, change, modification, termination or waiver:

(i) amends subsection (c)(ii), (c)(iii), (g), (h), (i), (j), (k) or (l) of Section 206 of the Authority First Resolution:

(ii) amends Section 207 or Section 209 of the Authority First Resolution in any manner which would permit Authority First Resolution Bonds or Parity Reimbursement Obligations to be issued or incurred which, except for such amendment, could not be issued or incurred; or

(iii) amends Article V of the Authority First Resolution in any manner which reduces the amount or delays the time at which moneys are to be deposited in the FGR Subordinated

Indebtedness Fund or modifies the order in which payments to the FGR Subordinated Indebtedness Fund are to be made or the purposes for which moneys in the FGR Subordinated Indebtedness Fund may be applied; or

(iv) modifies the events which constitute “Events of Default” under Section 1001 of the Authority First Resolution, or

(v) amends the Authority First Resolution, the Agreement or the Lease in any manner which would indirectly modify the provisions of any of the Sections of the Authority First Resolution referred to in clauses (i), (ii), (iii) or (iv) of Section 714(a) of the Authority Second Resolution in a manner proscribed thereby; or

(vi) adversely affects the interest of the Holders of Outstanding Bonds in any material respect.

No such amendment, change, modification, termination or waiver shall take effect unless the prior written consent of (a) the Holders of at least a majority in principal amount of the Bonds then Outstanding, or (b) in case less than all of the several Series of Bonds then Outstanding are affected by the amendment, change, modification, termination or waiver, the Holders of not less than a majority in principal amount of the Bonds of the Series so affected and then Outstanding; *provided, however*, that if such amendment, change modification, termination or waiver will, by its terms, not take effect so long as any Bonds of any specified Series and maturity remain Outstanding, the consent of the Holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds under the provisions contained under this “Amendments to Authority First Resolution and Agreement.”

Notwithstanding the provisions of the preceding paragraph, the amendments to the Authority First Resolution made be the resolution of the Authority entitled “Twenty-second Supplemental Resolution to the Water and Sewer System General Revenue Bond Resolution adopted November 14, 1985,” which resolution was adopted by the Authority on November 10, 1993, and any amendments to the Agreement necessary or appropriate to implement or conform the provisions of the Agreement to the Authority First Resolution as so amended may take effect without the prior written consent of Holders of any of the Bonds.

For the purposes of the provisions under this heading “Amendments to Authority First Resolution, Agreement and Lease” the purchasers of the Bonds of a Series, whether purchasing as underwriters, for resale or otherwise, upon such purchase from the Authority, may consent to an amendment, change, modification, termination or waiver permitted by the paragraphs under this heading “Amendments to Authority First Resolution, Agreement and Lease” with the same effect as a consent given by the Holder of such Bonds.

For the purposes of the provisions under this heading, “Amendments to Authority First Resolution, Agreement and Lease,” Series shall be deemed to be adversely affected by an amendment, change, modification or alteration of the Authority First Resolution or the Agreement if the same adversely affects or diminishes the rights of the Holders of the Bonds of such Series in any material respect. The Trustee may in its discretion determine whether or not, in accordance with the foregoing provisions, Bonds of any particular Series would be adversely affected in any material respect by any amendment, change, modification or alteration, and any such determination shall be binding and conclusive on the Authority and all Holders of Bonds.

For the purposes of the provisions under this heading “Amendments to Authority First Resolution, Agreement and Lease,” the Trustee shall be entitled to rely upon an opinion of counsel, which counsel shall be satisfactory to the Trustee with respect to whether any amendment, change, modification or alteration adversely affects the interests of any Holders of Bonds then Outstanding in any material respect. (*Section 714*)

Supplemental Resolutions. The Authority Second Resolution permits the modification or amendment of the rights and obligations of the Authority and of the holders of the Bonds thereunder by a Supplemental Resolution, with the written consent of the holders of a majority of the principal amount

of: (i) the Bonds then Outstanding and (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Bonds of the Series so affected and then Outstanding; however, if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the consent of the holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of modification: provided no such modification or amendment shall change the terms of redemption, maturity of principal, installment of interest, or reduce the principal amount, Redemption Price, or rate of interest without the consent of the holder of the affected Bond, or reduce the percentages of consents required to effect any future modification or amendment.

The Authority may adopt (without the consent of any holders of the Bonds) supplemental resolutions to authorize additional Bonds; to add to the restrictions contained in the Authority Second Resolution upon the issuance of additional indebtedness; to add to the covenants of the Authority contained in, or surrender any rights reserved to or conferred upon it by, the Authority Second Resolution; to confirm any pledge under the Authority Second Resolution of Revenues or other moneys; to preserve the federal tax exemption of interest on the Bonds; or otherwise to modify any of the provisions of the Authority Second Resolution (but no such other modification may be effective while any of the Bonds of any Series theretofore issued are Outstanding); or to cure any ambiguity, supply any omission or to correct any defect in the Authority Second Resolution or to insert such provisions clarifying matters or questions arising under the Authority Second Resolution as are necessary or desirable, and are not contrary to or inconsistent with the Authority Second Resolution as theretofore in effect; or to modify any provision of the Authority Second Resolution or of any previously adopted Supplemental Resolution in any respect, provided that such modification shall not adversely affect the interests of the Bondholders in any material respect: or to provide for additional duties of the Trustee (provided that the Trustee shall consent thereto).

For the purposes of Article IX of the Authority Second Resolution, the purchasers of the Bonds of a Series, whether purchasing as underwriters, for resale or otherwise, upon such purchase from the Authority, may consent to a modification or amendment permitted by Sections 803 or 902 of the Authority Second Resolution in the manner provided in the Authority Second Resolution, except that no proof of ownership shall be required, and with the same effect as a consent given by the Holder of such Bonds; *provided, however*, that, if such consent is given by a purchaser who is purchasing as an underwriter or for resale, the nature of the modification or amendment and the provisions for the purchaser consenting thereto shall be described in the official statement, prospectus, offering memorandum or other offering document prepared in connection with the primary offering of the Bonds of such Series by the Authority. (*Arts. VIII and IX*)

Defaults and Remedies. The Authority Second Resolution provides that if one or more of the following Events of Default shall occur, namely: (i) a default in the payment of the principal or Redemption Price of any Bond; (ii) a default in payment of any installment of interest on any Bond; (iii) a default by the Authority in the performance or observance of any other of its covenants, agreements or conditions in the Authority Second Resolution for a period of 45 days after written notice thereof; (iv) a default under the Agreement or the Lease by the Board or the City for a period of 45 days after written notice thereof; (v) a filing of a petition for relief under any federal or State bankruptcy or similar law by the Authority; or (vi) a default by the Authority on any indebtedness payable out of the FGR Subordinated Indebtedness Fund has occurred as a result of which the principal thereof has been declared to be immediately due and payable, which declaration has not been annulled; then, upon the happening and continuance of any Event of Default, the Trustee, if no Authority First Resolution Bonds are then Outstanding under the Authority First Resolution or if the principal of all Authority First Resolution Bonds then Outstanding has been declared to be due and payable immediately pursuant to Section 803 of the Authority First Resolution, may, and upon the written request of the holders of not less than a majority in principal amount of the Bonds Outstanding the Trustee shall, declare the principal and accrued interest on all the Bonds then Outstanding, due and payable immediately subject, however, to rescission of such declaration and annulment of the default upon be remedying thereof.

The Authority covenants that upon the occurrence of an Event of Default, the books of record and account of the Authority shall at all times be subject to the inspection and use of the Trustee and of its agents and attorneys and that, upon demand of the Trustee, the Authority will account, as if it were the trustee of an express trust, for all Revenues and other moneys, securities and funds pledged or held under the Authority Second Resolution for such period as shall be stated in such demand.

Upon default, the Trustee may proceed to protect and enforce its rights and the rights of the holders of the Bonds under the Authority Second Resolution forthwith by a suit or suits in equity or at law, whether for the specific performance of any covenant therein contained, or in aid of the execution of any power therein granted, or for an accounting against the Authority as if the Authority were the trustee of an express trust, or in the enforcement of any other legal or equitable right as the Trustee, being advised by counsel, shall deem most effectual to enforce any of its rights or to perform any of its duties under the Authority Second Resolution. During the continuance of an Event of Default, Revenues shall be applied first, to the reasonable and proper charges and expenses of the Trustee; then (unless the principal thereof shall have been declared payable) to the payment of all unpaid interest ratably, and then to unpaid principal or Redemption Price of any Bond or Parity Reimbursement Obligations, ratably; if the principal of all of the Bonds shall be due and payable, to the payment of the principal and interest then due and unpaid upon the Bonds and Parity Reimbursement Obligations and of the interest then due and unpaid on Parity Bond Anticipation Notes without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond, Parity Reimbursement Obligation or Parity Bond Anticipation Note over any other Bond, Parity Reimbursement Obligation or Parity Bond Anticipation Note, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or preference. No Bondholder has any right to institute a suit to enforce any provision of the Authority Second Resolution or the execution of any trust thereunder or for any remedy thereunder, unless the Trustee has been requested by the holders of at least a majority in principal amount of the Bonds then Outstanding to take such action and has been offered adequate security and indemnity and has failed to commence such suit in the manner provided in the Authority Second Resolution. The right to appoint a statutory trustee under Section 1045-p of the Act is expressly abrogated. (*Art. X*)

Defeasance of Bonds Other than Variable Rate or Option Bonds. Any Outstanding Bond shall prior to the maturity or redemption date thereof be deemed to have been paid and shall cease to be entitled to any lien, benefit or security under the Authority Second Resolution if (i) in the case of any Bonds to be redeemed prior to their maturity, the Authority shall have given to the Trustee irrevocable instructions accepted in writing by the Trustee to publish on such date the notice of redemption therefor (other than Bonds purchased by the Trustee prior to the publication of the notice of redemption), (ii) there shall have been deposited with the Trustee either moneys in an amount sufficient, or Defeasance Obligations the principal of and the interest on which, when due, without reinvestment, will, as verified by the report of a firm of nationally recognized independent certified public accountants,⁽¹⁾ provide moneys which, together with the moneys deposited shall be sufficient, to pay when due the principal or Redemption Price (if applicable) and interest due and to become due on said Bonds and (iii) in the event said Bonds are not by their terms subject to redemption within the next succeeding 60 days, the Authority shall have given the Trustee irrevocable instructions to publish, as soon as practicable, a notice to the holders of such Bonds that the deposit required above has been made with the Trustee and that said Bonds are deemed paid in accordance with the Authority Second Resolution and stating such maturity or redemption date upon which moneys are to be available to pay the principal or Redemption Price, if applicable, on such Bonds (other than Bonds purchased by the Trustee prior to the publication of the notice of redemption); provided that any notice published for Bonds constituting less than all of the Outstanding Bonds of any maturity within a Series shall specify the letter and number or other distinguishing mark of each such Bond. The Trustee shall, to the extent necessary, apply moneys

⁽¹⁾ Any Supplemental Resolution adopted by the Authority on or after January 12, 2006 provides that the verification report may be prepared by a firm of nationally recognized verification agents rather than a firm of nationally recognized independent certified public accountants.

to the retirement of said Bonds in amounts equal to the unsatisfied balances of any Sinking Fund Installments thereto.

The Trustee shall, if so directed by the Authority prior to the maturity date of Bonds deemed to have been paid which are not to be redeemed prior to their maturity date or prior to the publication of the above notice of redemption for Bonds deemed paid and to be redeemed, apply moneys deposited with the Trustee in respect of such Bonds and redeem or sell Defeasance Obligations so deposited with the Trustee and purchase such Bonds and the Trustee shall immediately thereafter cancel all such Bonds so purchased; *provided, however*, that the moneys and Defeasance Obligations remaining on deposit with the Trustee after the purchase and cancellation of such Bonds shall be sufficient to pay when due the Principal Installment or Redemption Price, if applicable, and interest due or to become due on all Bonds. (*Section 1201*)

Defeasance of Variable Rate Bonds. The Authority Second Resolution provides that for the purposes of determining whether Variable Rate Bonds shall be deemed to have been paid prior to the maturity or redemption date thereof, by the deposit of moneys, or Defeasance Obligations and moneys (if any), the interest due on such Bonds shall be calculated at the maximum rate permitted; *provided, however*, that if, as a result of such Bonds having borne interest at less than the maximum rate for any period, the total amount of moneys and Investment Securities on deposit with the Trustee for the payment of interest on such Bonds exceeds the total amount required to be deposited with the Trustee, the Trustee shall, if requested by the Authority, pay the amount in excess to the Authority free and clear of any lien or pledge securing the Bonds or otherwise existing under the Authority Second Resolution. (*Section 1201*)

Defeasance of Option Bonds. Under the Authority Second Resolution, Option Bonds shall be deemed paid in accordance with the Authority Second Resolution only if, in addition to satisfying several of the requirements applicable to Bonds other than Variable Rate or Option Bonds, there shall have been deposited with the Trustee moneys in an amount which shall be sufficient to pay the maximum amount of principal of and premium due, if any; and interest on such Bonds which could become payable to the holders of such Bonds upon the exercise of any options provided to the holders of such Bonds; *provided, however*, that if the options originally exercisable by the holder of an Option Bond are no longer exercisable, such Bond shall not be considered an Option Bond. (*Section 1201*)

New York City Water and Sewer System

(A Component Unit of The City of New York)

Financial Statements as of and for the
Years Ended June 30, 2012 and 2011,
Required Supplementary Information, and
Independent Auditors' Report

NEW YORK CITY WATER AND SEWER SYSTEM

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INDEPENDENT AUDITORS' REPORT

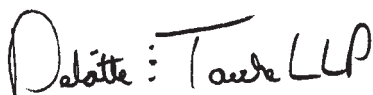
To the Joint Audit Committee of
New York City Municipal Water Finance Authority
and New York City Water Board

We have audited the accompanying combining balance sheets of the business-type activities of the New York City Municipal Water Finance Authority and the New York City Water Board, which collectively comprise the New York City Water and Sewer System (the "System"), a component unit of The City of New York, New York, as of June 30, 2012 and 2011, and the related combining statements of revenues, expenses and changes in net assets (deficit), and cash flows for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to previously present fairly, in all material respects, the respective financial position of the business-type activities of the New York City Municipal Water Finance Authority and the New York City Water Board of the System as of June 30, 2012 and 2011, and the respective changes in their net assets and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedule of funding progress for the other postemployment benefit plan on pages 2-10 and 45 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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.



October 10, 2012

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS

Overview of the Financial Statements

The following is an overview of the financial activities of the New York City Water and Sewer System (the "System") for the fiscal years ended June 30, 2012 and 2011. 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 basic financial statements of the System, which include the balance sheets, the statements of revenues, expenses and changes in net assets and the statements of cash flows, are presented for the purposes of displaying entity-wide information, in accordance with Governmental Accounting Standards Board (GASB) standards. These financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting.

Financial Analysis and Results of Operations

The following summarizes the activities of the System for the fiscal years 2012, 2011 and 2010 (in thousands):

	2012	2011	2010	Variance	
				2012 v 2011	2011 v 2010
REVENUES:					
Water supply and distribution	\$ 1,238,352	\$ 1,158,977	\$ 1,005,045	\$ 79,375	\$ 153,932
Sewer collection and treatment	1,857,527	1,797,777	1,562,777	59,750	235,000
Other operating revenues	<u>140,595</u>	<u>111,552</u>	<u>190,251</u>	<u>29,043</u>	<u>(78,699)</u>
Total operating revenues	3,236,474	3,068,306	2,758,073	168,168	310,233
Subsidy income	196,241	180,986	128,110	15,255	52,876
Investment income	<u>48,936</u>	<u>38,313</u>	<u>65,760</u>	<u>10,623</u>	<u>(27,447)</u>
Total revenues	<u>3,481,651</u>	<u>3,287,605</u>	<u>2,951,943</u>	<u>194,046</u>	<u>335,662</u>
EXPENSES:					
Operations and maintenance	1,373,038	1,294,533	1,539,846	78,505	(245,313)
Other operating expenses	73,814	103,334	289,989	(29,520)	(186,655)
Bad debt expense	28,541	76,799	14,032	(48,258)	62,767
Administration and general	47,402	40,424	40,257	6,978	167
Depreciation and amortization	733,425	628,339	574,483	105,086	53,856
Capital distribution	42,005	53,591	32,580	(11,586)	21,011
Loss on retirement of capital assets	1,646	3,426	23,254	(1,780)	(19,828)
Interest expense	<u>1,196,647</u>	<u>1,178,226</u>	<u>1,019,633</u>	<u>18,421</u>	<u>158,593</u>
Total expenses	<u>3,496,518</u>	<u>3,378,672</u>	<u>3,534,074</u>	<u>117,846</u>	<u>(155,402)</u>
Net loss before capital contributions	(14,867)	(91,067)	(582,131)	76,200	491,064
CAPITAL CONTRIBUTIONS	<u>26,903</u>	<u>18,696</u>	<u>30,424</u>	<u>8,207</u>	<u>(11,728)</u>
CHANGE IN NET ASSETS	12,036	(72,371)	(551,707)	84,407	479,336
NET ASSETS — Beginning	<u>(352,888)</u>	<u>(280,517)</u>	<u>271,190</u>	<u>(72,371)</u>	<u>(551,707)</u>
NET (DEFICIT) ASSETS — Ending	<u>\$ (340,852)</u>	<u>\$ (352,888)</u>	<u>\$ (280,517)</u>	<u>\$ 12,036</u>	<u>\$ (72,371)</u>

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Operating Revenue

2012-2011

Operating revenues increased by \$168.2 million or 5.5% due predominantly to a rate increase of 7.5%.

2011-2010

Operating revenues increased by \$310.2 million or 11.2% due predominantly to a rate increase of 12.9%.

The following summarizes other operating revenues for fiscal years 2012, 2011, and 2010 (in thousands):

	2012	2011	2010	Variance	
				2012 v 2011	2011 v 2010
Upstate water fees	\$ 60,891	\$ 64,737	\$ 40,876	\$ (3,846)	\$ 23,861
Late payment fees	44,069	30,270	29,107	13,799	1,163
Change in residual interest in sold liens	12,777	(1,734)	2,156	14,511	(3,890)
Release of escrow/trust	7,353	4,406	98,820	2,947	(94,414)
Federal funding	2,632	2,504	2,733	128	(229)
Litigation settlement receipt	-	-	8,867	-	(8,867)
Connection fees and permits	12,873	11,369	7,692	1,504	3,677
Total other operating revenues	<u>\$140,595</u>	<u>\$111,552</u>	<u>\$190,251</u>	<u>\$29,043</u>	<u>\$ (78,699)</u>

Other Operating Revenue

2012-2011

In fiscal year 2012, the New York State Department of Environmental Conservation ("DEC") returned \$7.4 million of escrowed funds to the System, as the New York City Department of Environmental Protection ("DEP") met the requirement for secondary treatment at its Newtown Creek Wastewater Treatment Plant in advance of the established milestone date. The escrow fund had been established in 2009 to cover potential penalties that would be incurred in the event DEP missed mandated construction milestones.

Upstate water fees decreased by \$3.8 million or 5.9% compared to 2011. The decrease is due primarily to a reduction in consumption.

The change in residual interest in sold liens increased by \$14.5 million as a bond sale transaction by the purchasing trust had not been completed as of June 30, 2012.

Connection fees and permits increased by \$1.5 million or 13.2% due to a special initiative to bring buildings into compliance with the New York State Sanitary Code regarding backflow prevention.

Late payment fees increased by \$13.8 million or 45.6% primarily due to the rate increase and a decrease in billing adjustments. The substantial completion of DEP's installation of its wireless meter reading system has increased the number of actual readings and reduced the number of estimated readings that had previously resulted in billing adjustments.

Federal funding of \$2.6 million was received by the Water Board in fiscal 2012 to support technical assistance in developing a Contamination Warning System Demonstration Pilot Program.

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

2011-2010

In fiscal 2011 the System received \$4.4 million from two trust accounts established in 2004. These trust funds were established to pay for fines pertaining to nitrogen removal and combined sewer overflow abatement pursuant to consent orders from the New York State Department of Environmental Conservation. By meeting certain conditions, the System was entitled to use the funds from the trust accounts.

Upstate water fees increased by \$23.9 million or 58.4% compared to 2010. The increase is due primarily to consumption related to weather in the summer of 2010 and a rate increase of 24.7%.

The change in residual interest in sold liens decreased by \$3.9 million.

Connection fees and permits increased by \$3.7 million or 47.8% due to increased new construction activity.

Federal funding was received by the Water Board in fiscal 2011 to support technical assistance in developing a Contamination Warning System Demonstration Pilot Program.

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Investment Income

2012-2011

Investment income increased by \$10.6 million or 27.7%. The increase was due to a reduction of the unrealized loss on the agreements to purchase securities in fiscal 2012 of \$6.1 million compared to a loss of \$14.4 million in fiscal 2011. The reduction is primarily due to the maturity of a portion of the agreements to purchase securities. The fair values of the contracts change as a result of changes in market interest rates.

2011-2010

Investment income decreased by \$27.4 million or 41.7%. The decrease was due to lower interest rates on invested assets and an unrealized loss of \$14.4 million due to the change in the fair market value of agreements to purchase securities in fiscal 2011 compared to a loss of \$0.3 million in fiscal 2010. The fair values of the contracts change as a result of changes in market interest rates.

Operating Expenses

2012-2011

Operations and maintenance expenses increased by \$78.5 million or 6.1% due primarily to an increase in the fringe benefit rate applicable to City employees from 30% in fiscal year 2011 to 46% in fiscal year 2012. Water Board general and administrative expenses increased by approximately \$2.5 million, primarily due to expenditures incurred under new contracts. Water Authority general and administrative expenses increased by \$4.5 million primarily due to remarketing and liquidity fees in connection with new variable rate debt.

2011-2010

Operations and maintenance expenses decreased by \$245.3 million or 15.9% because of a large collective bargaining settlement that had increased operations and maintenance costs in fiscal 2010. Water Board general and administration expenses decreased by \$3.4 million due to decreases in certain outside contractor costs. Water Authority general and administration expenses increased by \$3.6 million primarily for increases in fees related to variable rate debt.

Non-operating Expenses

2012-2011

Interest expense increased by \$18.4 million or 1.6%, primarily due to an increase in bonds outstanding of \$1.5 billion or 5.5%.

2011-2010

Interest expense increased by \$158.6 million or 15.6%, primarily due to an increase in bonds outstanding of \$2.5 billion or 10.6%.

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Changes in Net Assets

2012-2011

The change in net assets represents the net total of operating income, non-operating losses, and capital contributions. Net assets increased by \$12.0 million in fiscal year 2012.

2011-2010

The change in net assets represents the net total of operating income, non-operating losses, and capital contributions. Net assets decreased by \$72.4 million in fiscal year 2011.

Following is a summary of the System's assets, liabilities and net assets as of June 30, (in thousands):

	2012	2011	2010	Variance	
				2012 v 2011	2011 v 2010
Current assets	\$ 2,496,428	\$ 2,251,021	\$ 2,132,321	\$ 245,407	\$ 118,700
Residual interest in sold liens	51,777	39,000	40,734	12,777	(1,734)
Deferred outflows from hedging	134,752	53,216	71,930	81,536	(18,714)
Deferred bond and financing expenses	176,618	176,139	163,703	479	12,436
Capital assets	<u>26,474,776</u>	<u>24,988,836</u>	<u>23,016,469</u>	<u>1,485,940</u>	<u>1,972,367</u>
Total assets	<u>\$ 29,334,351</u>	<u>\$ 27,508,212</u>	<u>\$ 25,425,157</u>	<u>\$ 1,826,139</u>	<u>\$ 2,083,055</u>
Long-term liabilities	\$ 27,914,458	\$ 26,115,749	\$ 23,549,533	\$ 1,798,709	\$ 2,566,216
Current liabilities	<u>1,760,745</u>	<u>1,745,351</u>	<u>2,156,141</u>	<u>15,394</u>	<u>(410,790)</u>
Total liabilities	<u>29,675,203</u>	<u>27,861,100</u>	<u>25,705,674</u>	<u>1,814,103</u>	<u>2,155,426</u>
Net assets (deficit):					
Invested in capital assets — net of related debt	(372,021)	(215,322)	920,728	(156,699)	(1,136,050)
Restricted for debt service	687,656	573,461	239,192	114,195	334,269
Restricted for operations and maintenance	212,885	199,636	191,772	13,249	7,864
Unrestricted (deficit)	<u>(869,372)</u>	<u>(910,663)</u>	<u>(1,632,209)</u>	<u>41,291</u>	<u>721,546</u>
Total net (deficit) assets	<u>(340,852)</u>	<u>(352,888)</u>	<u>(280,517)</u>	<u>12,036</u>	<u>(72,371)</u>
Total liabilities and net assets	<u>\$ 29,334,351</u>	<u>\$ 27,508,212</u>	<u>\$ 25,425,157</u>	<u>\$ 1,826,139</u>	<u>\$ 2,083,055</u>

2012-2011

Current assets increased by \$245.4 million or 10.9%. The increase is due to an increase in monies held by the Authority for debt service in fiscal 2013.

Deferred outflows from hedging increased by \$81.5 million due to a decrease in the fair value of the hedging derivative instruments.

Long term liabilities increased by \$1.8 billion primarily due to the increase in long term portion of bonds payable of \$1.5 billion.

Pollution remediation obligations have increased by \$5.6 million.

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Current liabilities increased by \$15.4 million or less than 1%, primarily due to an increase of \$15.9 million in the service credits on customer accounts.

2011-2010

Current assets increased by \$118.7 million or 5.6%. The increase is due to excess monies held by the Authority for debt service in fiscal 2012.

Deferred outflows from hedging decreased by \$18.7 million due to an increase in the fair value of the hedging derivative instruments.

Long term liabilities increased by \$2.6 billion primarily due to the increase in long term portion of bonds payable of \$2.5 billion.

Pollution remediation obligations have increased by \$28.4 million.

Current liabilities decreased by \$410.8 million or 19.1% primarily due to a decrease of \$285.6 million in the amount payable to The City primarily for capital costs, a decrease of \$200 million in commercial paper notes payable, and offset by other changes.

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Capital Assets

The System's capital assets include buildings, equipment, vehicles, water supply and distribution and wastewater collection and treatment systems. Capital assets as of June 30, are detailed as follows (in thousands):

	2012	2011	2010	Variance	
				2012 v 2011	2011 v 2010
Nondepreciable assets — Utility plant under construction	\$ 8,422,470	\$ 7,804,563	\$ 6,112,362	\$ 617,907	\$ 1,692,201
Utility plant in service:					
Buildings	34,877	34,877	24,193	-	10,684
Equipment	2,014,704	1,723,907	1,538,451	290,797	185,456
Vehicles	150,531	150,591	157,179	(60)	(6,588)
Water supply, treatment and distribution, and sewage collection, treatment and disposal systems	25,669,088	24,407,185	23,740,818	1,261,903	666,367
Total utility plant in service	27,869,200	26,316,560	25,460,641	1,552,640	855,919
Less accumulated depreciation for:					
Buildings	(19,820)	(18,447)	(16,444)	(1,373)	(2,003)
Equipment	(790,180)	(667,675)	(573,595)	(122,505)	(94,080)
Vehicles	(98,639)	(93,086)	(98,852)	(5,553)	5,766
Water supply, treatment and distribution, and sewage collection, treatment and disposal systems	(8,908,255)	(8,353,079)	(7,867,643)	(555,176)	(485,436)
Total accumulated depreciation	(9,816,894)	(9,132,287)	(8,556,534)	(684,607)	(575,753)
Total — net utility plant in service	18,052,306	17,184,273	16,904,107	868,033	280,166
Total capital assets — net	\$ 26,474,776	\$ 24,988,836	\$ 23,016,469	\$ 1,485,940	\$ 1,972,367

The increase in the System's capital assets, net of depreciation during fiscal 2012 was \$1.5 billion or 5.9%. Capital asset additions for fiscal 2012 were \$2.3 billion. See Note 3 (Utility Plant) for further details.

The increase in the System's capital assets, net of depreciation during fiscal 2011 was \$1.9 billion or 8.6%. Capital asset additions for fiscal 2011 were \$2.6 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 related to the System's filtration avoidance determination, including land acquisition in the upstate watershed, costs for parks improvements related to the Croton filtration plant, and costs associated with pollution remediation are financed with debt, but they are not recorded as System's 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 assets (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 supply, treatment and distribution and sewer collection and treatment capital assets.

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

The debt program of the Authority includes commercial paper, long-term debt of the Authority and a bond anticipation note and subsidized bonds issued through the New York State Environmental Facilities Corporation ("EFC"). The commercial paper program is the main source of financing to reimburse The City for payments made for water and sewer projects. The Authority then issues long-term debt of its own or through EFC to retire outstanding commercial paper. The Authority also periodically issues refunding bonds to refinance higher-coupon debt. See Note 9 (Short Term Debt) and Note 10 (Long-Term Debt) for further details.

At June 30, 2012, the total outstanding debt of the System was \$28.4 billion, of which \$400 million was commercial paper and \$108.1 million was outstanding against bond anticipation notes issued to EFC. The remaining \$27.9 billion consisted of variable and fixed-rate bonds maturing in varying installments through 2045. The total outstanding long-term debt at June 30, 2012 was as follows (in thousands):

Issue Date

2012	\$ 3,735,182
2011	4,541,205
2010	3,114,624
2009	3,481,104
2008	2,813,339
2007 and prior	<u>10,292,825</u>
Total long-term debt	<u>\$27,978,279</u>

In the summary above, bonds retired through refunding in fiscal 2012 are removed from the year in which the refunded bonds were issued, and the refunding bonds are included in the fiscal 2012 amount.

In fiscal 2012, the Authority issued \$3.0 billion of water and sewer revenue bonds directly to the public, including \$857.4 million of refunding bonds and \$2.2 billion of new money bonds. The Authority also issued \$669.3 million of Clean Water and Drinking Water State Revolving Fund ("SRF") bonds to EFC, all of which were refunding bonds. The Authority also drew down an additional \$55.7 million against its Fiscal 2010 Series 1 bond anticipation note issued to EFC. The Authority used new money bond proceeds to finance capital improvements to the System, to provide long-term financing of commercial paper notes, which had previously financed capital improvements to the system, and to pay the costs of issuance on the bonds.

On September 22, 2011, the Authority issued \$450.9 million of new money and refunding tax-exempt fixed rate Second General Resolution bonds, Fiscal 2012 Series AA General Bonds. The new money bonds included a term bond maturing in 2044. The Authority used the new money bond proceeds to pay for capital improvements to the System and to pay the costs of issuance of the bonds. The refunding bonds refunded portions of the Authority's outstanding First Resolution 2001C and 2002G bonds. The refunding bonds included serial bonds maturing from 2032 through 2034.

On September 29, 2011, the Authority issued \$200 million of new money tax-exempt adjustable rate bonds under its First General Resolution, Fiscal 2012 Series A-1 and A-2 bonds. The bonds are backed by a standby bond purchase agreement from a bank. These bonds will mature in 2044 and were used to refund the Authority's commercial paper notes.

Additionally, on September 29, 2011, EFC entered into an agreement to provide the Authority a direct loan in an amount up to \$30 million. The Authority expects to receive these funds to pay for certain capital projects over the next several years. As of June 30, 2012, the Authority has not drawn on this loan.

On November 29, 2011, the Authority issued \$450 million of new money tax-exempt fixed rate Second General Resolution Revenue bonds, Fiscal 2012 Series BB. This bond issue included term bonds maturing in

NEW YORK CITY WATER AND SEWER SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

2039 and 2044. The Authority used proceeds to pay for capital improvements to the System, refund commercial paper notes, and to pay the costs of issuance of the bonds.

On January 30, 2012, the Authority issued \$350 million of new money tax-exempt fixed rate Second General Resolution Revenue bonds, Fiscal 2012 Series CC and \$50 million of Fiscal 2012 Series DD bonds. The Series CC bond issue included a term bond maturing in 2045 and the Series DD bond issue included two refundable principal installment bonds maturing in 2018 and 2027. The Authority used proceeds to pay for capital improvement to the System, refund commercial paper notes, and to pay the costs of issuance of the bonds.

On March 19, 2012, the Authority issued \$522.5 million of new money and refunding tax-exempt fixed rate Second General Resolution Revenue Bonds, Fiscal 2012 Series EE bonds. The new money bonds included a term bond maturing in 2045. The refunding bonds refunded portions of the Authority's outstanding First Resolution 2001 A, 2004 B, and 2004 C bonds and the Authority's outstanding Second General Resolution 2007 DD bonds. The refunding bonds included serial bonds maturing from 2019 through 2039. The Authority used the new money bond proceeds to refund commercial paper issuance and to pay the costs of issuance of the bonds.

On March 27, 2012, the Authority issued \$325 million of new money tax-exempt adjustable rate First Resolution Revenue Bonds, Fiscal 2012 Series B bonds. The bonds will mature in 2045. The Authority used the proceeds to pay for capital improvements to the System, refund commercial paper notes, and to pay the costs of issuance of the bonds.

On May 31, 2012, the Authority issued \$669.4 million of Second General Resolution fixed-rate, refunding, Fiscal 2012 Series 2 and 3 bonds to EFC. The source of funds to the Authority for its Series 2 bonds was from tax-exempt bonds issued by EFC (2012 A). The source of funds for the Authority's Series 3 bonds was SRF program funds. All proceeds from the issuance will refund the entire par amount outstanding of EFC's 2002 B, D, and J bonds (except for the 2012 maturity in each series) and the Authority's Fiscal 2002 Series 3, 4 and 5 bonds and its 2003 Series 1 bonds, issued to EFC as security for EFC bonds being refunded.

On June 28, 2012, the Authority issued \$611.7 million of new money and refunding tax-exempt fixed rate Second General Resolution Revenue Bonds, Fiscal 2012 Series FF and \$50 million of new money tax-exempt fixed rate Fiscal 2012 Series GG bonds. The 2012 Series FF bond issue refunded \$33.3 million of the Authority's outstanding First Resolution 2003 Series A, \$41.3 million of its 2004 Series C, and \$147.9 million of its 2005 Series B bonds. The 2012 Series GG bond issue included two refundable principal installment bonds maturing in 2017 and 2019. The Authority used the new money bond proceeds to finance capital improvements to the System, refund commercial paper notes, and to pay the costs of issuance of the bonds.

Economic Factors and Next Year's Rates

Rates are adopted each year by the Board in May for the following fiscal year. A rate increase of 7% for fiscal 2013, based on projected revenues and cost, became effective July 1, 2012.

Request for Information

This financial report is provided as an overview of the System's finances. Questions concerning any of the information in this report or requests for additional information should be directed to Raymond Orlando, Director of Media and Investor Relations, New York City Municipal Water Finance Authority, 255 Greenwich Street, New York, New York 10007. His phone number is (212) 788-5875 and his fax number is (212) 788-9721.

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NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING BALANCE SHEET

JUNE 30, 2012

(In thousands)

	New York City		Eliminations	Total
	Water Board	Municipal Water Finance Authority		
ASSETS				
CURRENT ASSETS:				
Unrestricted cash and cash equivalents	\$ 5,453	\$ 7	\$ -	\$ 5,460
Restricted cash and cash equivalents	49	1,158,351	-	1,158,400
Restricted investments	212,836	391,836	-	604,672
Accrued interest and subsidy receivable	-	27	-	27
Accounts receivable:				
Billed — less allowance for uncollectable water and sewer receivables of \$339,317	370,643	-	-	370,643
Unbilled	294,855	-	-	294,855
Receivable from The City of New York	62,371	-	-	62,371
Total current assets	946,207	1,550,221	-	2,496,428
NON-CURRENT ASSETS:				
Utility plant in service — less accumulated depreciation of \$9,816,893	18,052,306	-	-	18,052,306
Utility plant construction	8,422,470	-	-	8,422,470
Total capital assets	26,474,776	-	-	26,474,776
Residual interest in sold liens	51,777	-	-	51,777
Deferred outflows from hedging	-	134,752	-	134,752
Long-term deferred bond and financing expenses	-	176,618	-	176,618
Revenue required to be billed by and received from the Board	-	16,044,536	(16,044,536)	-
Total non-current assets and deferred items	26,526,553	16,355,906	(16,044,536)	26,837,923
TOTAL	\$ 27,472,760	\$ 17,906,127	\$ (16,044,536)	\$ 29,334,351

See notes to combining financial statements.

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING BALANCE SHEET

JUNE 30, 2012

(In thousands)

	New York City			
	Water Board	Municipal Water Finance Authority	Eliminations	Total
LIABILITIES AND NET ASSETS				
LONG-TERM LIABILITIES:				
Bonds and notes payable — net of current portion	\$ -	\$ 27,526,870	\$ -	\$ 27,526,870
Net premium on bonds and notes payable	-	465,991	-	465,991
Unamortized deferred bond refunding costs	-	(309,633)	-	(309,633)
Pollution remediation obligation	108,300	-	-	108,300
OPEB liability	-	790	-	790
Interest rate swap agreement — net	-	122,140	-	122,140
Revenue requirements payable to the Authority	<u>16,044,536</u>	<u>-</u>	<u>(16,044,536)</u>	<u>-</u>
Total long-term liabilities	<u>16,152,836</u>	<u>27,806,158</u>	<u>(16,044,536)</u>	<u>27,914,458</u>
CURRENT LIABILITIES:				
Accounts payable and accrued expenses	45,524	54,358	-	99,882
Revenue received in advance	51,296	-	-	51,296
Commercial paper payable	-	400,000	-	400,000
Current portion of bonds and notes payable	-	451,409	-	451,409
Payable to The City of New York	-	677,880	-	677,880
Service credits on customer accounts	<u>80,278</u>	<u>-</u>	<u>-</u>	<u>80,278</u>
Total current liabilities	<u>177,098</u>	<u>1,583,647</u>	<u>-</u>	<u>1,760,745</u>
Total liabilities	<u>16,329,934</u>	<u>29,389,805</u>	<u>(16,044,536)</u>	<u>29,675,203</u>
NET ASSETS:				
Invested in capital assets — net of related debt	26,474,776	(26,846,797)	-	(372,021)
Restricted for debt service	-	687,656	-	687,656
Restricted for operations and maintenance	212,885	-	-	212,885
Unrestricted (deficit)	<u>(15,544,835)</u>	<u>14,675,463</u>	<u>-</u>	<u>(869,372)</u>
Total net assets	<u>11,142,826</u>	<u>(11,483,678)</u>	<u>-</u>	<u>(340,852)</u>
TOTAL	\$ 27,472,760	\$ 17,906,127	\$ (16,044,536)	\$ 29,334,351

See notes to combining financial statements.

(Concluded)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING BALANCE SHEET

JUNE 30, 2011

(In thousands)

	New York City		Eliminations	Total
	Water Board	Municipal Water Finance Authority		
ASSETS				
CURRENT ASSETS:				
Unrestricted cash and cash equivalents	\$ 14,866	\$ 9	\$ -	\$ 14,875
Restricted cash and cash equivalents	173,276	1,045,479	-	1,218,755
Restricted investments	26,360	340,397	-	366,757
Accrued interest and subsidy receivable	-	24	-	24
Accounts receivable:				
Billed — less allowance for uncollectible water and sewer receivables of \$310,776	340,039	-	-	340,039
Unbilled	274,283	-	-	274,283
Receivable from The City of New York	36,288	-	-	36,288
Total current assets	865,112	1,385,909	-	2,251,021
NON-CURRENT ASSETS:				
Utility plant in service — less accumulated depreciation of \$9,132,287	17,184,273	-	-	17,184,273
Utility plant construction	7,804,563	-	-	7,804,563
Total capital assets	24,988,836	-	-	24,988,836
Residual interest in sold liens	39,000	-	-	39,000
Deferred outflows from hedging	-	53,216	-	53,216
Long-term deferred bond and financing expenses	-	176,139	-	176,139
Revenue required to be billed by and received from the Board	-	15,519,332	(15,519,332)	-
Total non-current assets and deferred items	25,027,836	15,748,687	(15,519,332)	25,257,191
TOTAL	<u>\$ 25,892,948</u>	<u>\$ 17,134,596</u>	<u>\$ (15,519,332)</u>	<u>\$ 27,508,212</u>

See notes to combining financial statements.

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING BALANCE SHEET

JUNE 30, 2011

(In thousands)

	New York City			
	Water Board	Municipal Water Finance Authority	Eliminations	Total
LIABILITIES AND NET ASSETS				
LONG-TERM LIABILITIES:				
Bonds and notes payable — net of current portion	\$ -	\$ 26,078,417	\$ -	\$ 26,078,417
Net premium on bonds and notes payable	-	197,357	-	197,357
Unamortized deferred bond refunding costs	-	(300,850)	-	(300,850)
Pollution remediation obligation	102,652	-	-	102,652
OPEB Liability	-	699	-	699
Interest rate swap agreement — net	-	37,474	-	37,474
Revenue requirements payable to the Authority	<u>15,519,332</u>	<u>-</u>	<u>(15,519,332)</u>	<u>-</u>
Total long-term liabilities	<u>15,621,984</u>	<u>26,013,097</u>	<u>(15,519,332)</u>	<u>26,115,749</u>
CURRENT LIABILITIES:				
Accounts payable and accrued expenses	45,052	61,618	-	106,670
Revenue received in advance	61,517	-	-	61,517
Commercial paper payable	-	400,000	-	400,000
Current portion of bonds and notes payable	-	430,452	-	430,452
Payable to The City of New York	-	682,345	-	682,345
Service credits on customer accounts	<u>64,367</u>	<u>-</u>	<u>-</u>	<u>64,367</u>
Total current liabilities	<u>170,936</u>	<u>1,574,415</u>	<u>-</u>	<u>1,745,351</u>
Total liabilities	<u>15,792,920</u>	<u>27,587,512</u>	<u>(15,519,332)</u>	<u>27,861,100</u>
NET ASSETS:				
Invested in capital assets — net of related debt	24,988,836	(25,204,158)	-	(215,322)
Restricted for debt service	-	573,461	-	573,461
Restricted for operations and maintenance	199,636	-	-	199,636
Unrestricted (deficit)	<u>(15,088,444)</u>	<u>14,177,781</u>	<u>-</u>	<u>(910,663)</u>
Total net assets (deficit)	<u>10,100,028</u>	<u>(10,452,916)</u>	<u>-</u>	<u>(352,888)</u>
TOTAL	\$ 25,892,948	\$ 17,134,596	\$ (15,519,332)	\$ 27,508,212

See notes to combining financial statements.

(Concluded)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

YEAR ENDED JUNE 30, 2012

(In thousands)

	New York City		
	Water Board	Municipal Water Finance Authority	Total
OPERATING REVENUES:			
Water supply and distribution	\$ 1,238,352	\$ -	\$ 1,238,352
Sewer collection and treatment	1,857,527	-	1,857,527
Other operating revenues	140,595	-	140,595
Total operating revenues	3,236,474	-	3,236,474
OPERATING EXPENSES:			
Operation and maintenance	1,373,038	-	1,373,038
Bad debt expense	28,541	-	28,541
Administration and general	9,478	37,924	47,402
Other operating expenses	73,814	-	73,814
Total operating expenses	1,484,871	37,924	1,522,795
DEPRECIATION AND AMORTIZATION	692,296	41,129	733,425
OPERATING INCOME (LOSS)	1,059,307	(79,053)	980,254
NON-OPERATING REVENUE (EXPENSES):			
Interest expense	-	(1,196,647)	(1,196,647)
Loss on retirement of capital assets	(1,646)	-	(1,646)
Subsidy income	-	196,241	196,241
Capital distribution	(42,005)	-	(42,005)
Investment income	239	48,697	48,936
NET INCOME (LOSS) BEFORE CAPITAL CONTRIBUTIONS	1,015,895	(1,030,762)	(14,867)
CAPITAL CONTRIBUTION	26,903	-	26,903
CHANGE IN NET ASSETS	1,042,798	(1,030,762)	12,036
NET ASSETS (DEFICIT) — Beginning of year	10,100,028	(10,452,916)	(352,888)
NET ASSETS (DEFICIT) — End of year	\$ 11,142,826	\$ (11,483,678)	\$ (340,852)

See notes to combining financial statements.

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS (DEFICIT) YEAR ENDED JUNE 30, 2011 (In thousands)

	New York City		
	Water Board	Municipal Water Finance Authority	Total
OPERATING REVENUES:			
Water supply and distribution	\$ 1,158,977	\$ -	\$ 1,158,977
Sewer collection and treatment	1,797,777	-	1,797,777
Other operating revenues	111,552	-	111,552
Total operating revenues	3,068,306	-	3,068,306
OPERATING EXPENSES:			
Operation and maintenance	1,294,533	-	1,294,533
Bad debt expense	76,799	-	76,799
Administration and general	6,409	34,015	40,424
Other operating expenses	103,334	-	103,334
Total operating expenses	1,481,075	34,015	1,515,090
DEPRECIATION AND AMORTIZATION	593,996	34,343	628,339
OPERATING INCOME (LOSS)	993,235	(68,358)	924,877
NON-OPERATING REVENUE (EXPENSES):			
Interest expense	-	(1,178,226)	(1,178,226)
Loss on retirement of capital assets	(3,426)	-	(3,426)
Subsidy income	-	180,986	180,986
Capital distribution	(53,591)	-	(53,591)
Investment income	672	37,641	38,313
NET INCOME (LOSS) BEFORE CAPITAL CONTRIBUTIONS	936,890	(1,027,957)	(91,067)
CAPITAL CONTRIBUTION	18,696	-	18,696
CHANGE IN NET ASSETS	955,586	(1,027,957)	(72,371)
NET ASSETS (DEFICIT) — Beginning of year	9,144,442	(9,424,959)	(280,517)
NET ASSETS (DEFICIT) — End of year	\$ 10,100,028	\$ (10,452,916)	\$ (352,888)

See notes to combining financial statements.

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING STATEMENT OF CASH FLOWS

YEAR ENDED JUNE 30, 2012

(In thousands)

	New York City		
	Water Board	Municipal Water Finance Authority	Total
CASH FLOWS FROM OPERATING ACTIVITIES:			
Receipts from customers	\$ 3,147,038	\$ -	\$ 3,147,038
Payments for operations and maintenance	(1,399,122)	-	(1,399,122)
Payments for administration	(6,373)	(37,557)	(43,930)
Net cash provided by (used in) operating activities	1,741,543	(37,557)	1,703,986
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Proceeds from issuing bonds, notes and other borrowings — net of issuance costs	-	5,039,373	5,039,373
Acquisition and construction of capital assets	293	(2,267,908)	(2,267,615)
Payments by the Board to the Authority	(1,738,239)	1,738,239	-
Repayments of bonds, notes and other borrowings	-	(3,344,945)	(3,344,945)
Interest paid on bonds, notes and other borrowings	-	(1,002,007)	(1,002,007)
Net cash (used in) provided by capital and related financing activities	(1,737,946)	162,752	(1,575,194)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of investments	-	49,541	49,541
Purchase of investments	(187,260)	(105,823)	(293,083)
Interest on investments	1,023	43,957	44,980
Net cash used in investing activities	(186,237)	(12,325)	(198,562)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(182,640)	112,870	(69,770)
CASH AND CASH EQUIVALENTS — Beginning of year	188,142	1,045,488	1,233,630
CASH AND CASH EQUIVALENTS — End of year	\$ 5,502	\$ 1,158,358	\$ 1,163,860

See notes to combining financial statements.

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING STATEMENT OF CASH FLOWS

YEAR ENDED JUNE 30, 2012

(In thousands)

	New York City		
	Water Board	Municipal Water Finance Authority	Total
RECONCILIATION OF OPERATING (LOSS) INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Operating income (loss)	\$ 1,059,307	\$ (79,053)	\$ 980,254
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:			
Depreciation and amortization	692,296	41,129	733,425
Operations and maintenance expense paid for with bond proceeds	44,092	-	44,092
Pollution remediation expense	24,074	-	24,074
Changes in assets and liabilities (net):			
Pollution remediation liability	5,648	-	5,648
Receivables — net	(51,176)	-	(51,176)
Receivable from The City	(26,083)	(25)	(26,108)
Residual interest in sold liens	(12,777)	-	(12,777)
Accounts payable	472	392	864
Revenues received in advance	(10,221)	-	(10,221)
Service credits on customer accounts	15,911	-	15,911
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	<u>\$ 1,741,543</u>	<u>\$ (37,557)</u>	<u>\$ 1,703,986</u>

The following are the noncash capital and related financing activities:

Interest expense includes the amortization of net (premium) and discount in the amount of \$17,493 in 2012.

Capital expenditures in the amount \$677,880 had been incurred but not paid at June 30, 2012.

The Board received capital assets of \$26,611 in 2012 which represented capital contributed by The City.

The Board received capital assets of \$292 in 2012 which represented capital contributed by Westchester County.

See notes to combining financial statements.

(Concluded)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING STATEMENT OF CASH FLOWS

YEAR ENDED JUNE 30, 2011

(In thousands)

	New York City		
	Water Board	Municipal Water Finance Authority	Total
CASH FLOWS FROM OPERATING ACTIVITIES:			
Receipts from customers	\$ 2,922,730	\$ -	\$ 2,922,730
Payments for operations and maintenance	(1,242,579)	-	(1,242,579)
Payments for administration	(3,826)	(33,419)	(37,245)
Net cash provided by (used in) operating activities	1,676,325	(33,419)	1,642,906
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Proceeds from issuing bonds, notes and other borrowings — net of issuance costs	-	6,410,737	6,410,737
Acquisition and construction of capital assets	-	(2,965,506)	(2,965,506)
Payments by the Board to the Authority	(1,661,360)	1,661,360	-
Repayments of bonds, notes and other borrowings	-	(4,069,142)	(4,069,142)
Interest paid on bonds, notes and other borrowings	-	(956,950)	(956,950)
Net cash (used in) provided by capital and related financing activities	(1,661,360)	80,499	(1,580,861)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of investments	1,134	75,289	76,423
Purchases of investments	-	(80,969)	(80,969)
Interest on investments	706	51,463	52,169
Net cash provided by (used in) investing activities	1,840	45,783	47,623
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	16,805	92,863	109,668
CASH AND CASH EQUIVALENTS — Beginning of year	171,337	952,625	1,123,962
CASH AND CASH EQUIVALENTS — End of year	\$ 188,142	\$ 1,045,488	\$ 1,233,630

See notes to combining financial statements.

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

COMBINING STATEMENT OF CASH FLOWS

YEAR ENDED JUNE 30, 2011

(In thousands)

	New York City		
	Water Board	Municipal Water Finance Authority	Total
RECONCILIATION OF OPERATING (LOSS) INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Operating income (loss)	\$ 993,235	\$ (68,358)	\$ 924,877
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:			
Depreciation and amortization	593,996	34,343	628,339
Operations and maintenance expense paid for with bond proceeds	56,040	-	56,040
Pollution remediation expense	18,902	-	18,902
Changes in assets and liabilities (net):			
Pollution remediation liability	28,392	-	28,392
Receivables — net	(71,850)	-	(71,850)
Receivable from The City	51,953	-	51,953
Residual interest in sold liens	1,734	-	1,734
Accounts payable	78	596	674
Revenues received in advance	4,188	-	4,188
Service credits on customer accounts	(343)	-	(343)
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	<u>\$ 1,676,325</u>	<u>\$ (33,419)</u>	<u>\$ 1,642,906</u>

The following are the noncash capital and related financing activities:

Interest expense includes the amortization of net (premium) and discount in the amount of (\$979) in 2011.

Capital expenditures in the amount of \$635,323 had been incurred but not paid at June 30, 2011.

The Board received capital assets of \$18,412 in 2011 which represented capital contributed by The City.

The Board received capital assets of \$284 in 2011 which represented capital contributed by Westchester County.

See notes to combining financial statements.

(Concluded)

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

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

The Financing Agreement (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 subject to contractual agreements with the Authority and the Board.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Investments and Cash Equivalents — Investments and cash equivalents consist principally of securities of the United States and its agencies, certificates of deposit, guaranteed investment contracts, and repurchase agreements. 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 assets, 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 Asset 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 asset 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 bondholders and satisfy reserve requirements.

Bond Discount and Bond Issuance Costs — Bond discount and bond issuance costs are amortized over the life of the related bond issue, using the effective yield method of amortization for bond discount and bond issuance costs.

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 at its estimated historical cost based on appraisals or other methods when historical cost information is not available, net of depreciation. Depreciation is computed using the straight-line method based upon estimated useful lives, as follows:

	Years
Buildings	40–50
Water supply and wastewater treatment systems	15–50
Water distribution and sewage collection systems	15–75
Equipment	5–35
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 statements of revenues, expenses and changes in net assets.

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 includes but is not limited to administration,

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

Deferred Revenues — Revenues received in advance of the period to which they relate are deferred and recorded as revenue when earned. Customer account credit balances are included in refunds payable not in accounts receivable.

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 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.

New Accounting Standards — In November 2010, GASB issued Statement No. 60, *Accounting and Financial Reporting for Service Concession Agreements*. The Statement establishes the financial reporting for service concession agreements. The Statement is effective for financial statement periods beginning after December 15, 2011. The System has not entered into any service concession agreements. GASB Statement No. 60 is not expected to have an impact on its financial statements.

In November 2010, GASB issued Statement No. 61, *The Financial Reporting Entity: Omnibus — An Amendment of GASB Statement No. 14 and No. 34*. The Statement amends existing standards relating to the composition and reporting of the governmental financial reporting entity. The Statement is effective for financial statement periods beginning after June 15, 2012. The System has completed the process of evaluating GASB Statement No. 61 and it does not have an impact on the System's financial statements.

In December 2010, GASB issued Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 GASB and AICPA Pronouncements*. The Statement incorporates a large volume of FASB and AICPA accounting pronouncements into the GASB hierarchy of generally accepted accounting principles for governments. The Statement is effective for financial statement periods beginning after December 15, 2011. The System has completed the process of evaluating GASB Statement No. 62 and the Statement does not have an impact on the System's financial statements.

In June 2011, GASB issued Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. The Statement establishes new reporting requirements of two elements (deferred outflows of resources and deferred inflows of resources) and renames the statement of net assets to statement of net position, as well as reported net assets, and components thereof, to net position. The Statement is effective for financial statements for periods beginning after December 15, 2011. The System has not completed the process of evaluating GASB Statement No. 63, but the Statement is expected to change only the formatting and naming of the System's statement of position and components thereof, with no overall financial impact.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

In June 2011, GASB issued Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provision*. GASB 64 clarifies the existing requirements for the termination of hedge accounting upon default or termination of a swap counterparty or swap counterparty's credit support provider. GASB Statement No. 64 is effective for financial statements for periods beginning after June 15, 2011. As The System has not experienced a default or termination of such agreements, GASB Statement No. 64 does not have an impact on the System's financial statements.

In March 2012, GASB issued Statement No. 65, *Items Previously Reported as Assets and Liabilities*. GASB Statement No. 65 establishes accounting and reporting standards that reclassify certain items that are currently reported as assets and liabilities to deferred outflows of resources or deferred inflows of resources and that recognizes certain items currently being reported as assets and liabilities as outflows and inflow of resources. In addition, it limits the use of the term deferred in the financial statement presentation. The provisions of GASB Statement No. 65 are effective for financial statement for periods beginning after December 15, 2012. The System has not completed the process of evaluating GASB Statement No. 65, but it expects that the required accounting change will have an effect to debt issuance cost recognition and reporting in the statement of net assets upon implementation.

In March 2012, GASB issued Statement No. 66, *Technical Corrections-2012 an amendment of GASB Statements No. 10 and No. 62*. GASB Statement No. 66 resolves conflicting accounting and reporting guidance that resulted from the issuance of two pronouncements, GASB Statement No. 54 *Fund Balance Reporting and Governmental Fund Type Definitions*, and GASB Statement No. 62 *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*. The provisions of GASB Statement No. 66 are effective for financial statements for periods beginning after December 15, 2012. The System has not completed the process of evaluating GASB Statement No. 66, but it does not expect it to have an impact on the System's financial statements.

In June 2012, GASB issued Statement No. 67, *Financial Reporting for Pension Plans*. GASB Statement No. 67 establishes standards of financial reporting for defined benefit pension plans. 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 financial statements, other than the related implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, discussed below.

In June 2012, GASB also 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. The requirements of GASB Statement No. 68 are effective for fiscal years beginning after June 15, 2014. The System has not completed the process of evaluating GASB Statement No. 68, but because the System participates in a cost sharing multiple-employer pension system as defined by GASB Statement No. 68, implementation is expected to result in 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 plan, calculated as specified in GASB Statement No. 68. Additional footnote and supplementary disclosures will also be required upon implementation. The System expects to implement GASB Statement No. 68 in the same year that The City does so.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

3. UTILITY PLANT

The following is a summary of utility plant activity for the fiscal years ended June 30, 2012 and 2011 (in thousands):

	Balance at June 30, 2010	Additions	Deletions	Balance at June 30, 2011	Additions	Deletions	Balance at June 30, 2012
Nondepreciable assets/ utility construction	\$ 6,112,362	\$2,569,789	\$877,588	\$ 7,804,563	\$2,254,102	\$1,636,195	\$ 8,422,470
Depreciable assets/ utility plant in service							
Buildings	24,193	10,684	-	34,877	-	-	34,877
Equipment	1,538,451	185,577	121	1,723,907	290,946	149	2,014,704
Vehicles	157,179	6,826	13,414	150,591	-	60	150,531
Water supply, treatment and distribution, and sewage collection, treatment and disposal systems	23,740,818	674,500	8,133	24,407,185	1,345,248	83,345	25,669,088
Total depreciable assets	25,460,641	877,587	21,668	26,316,560	1,636,194	83,554	27,869,200
Less accumulated depreciation for:							
Buildings	(16,444)	(2,003)	-	(18,447)	(1,373)	-	(19,820)
Equipment	(573,595)	(94,080)	-	(667,675)	(122,535)	(30)	(790,180)
Vehicles	(98,852)	5,766	-	(93,086)	(5,611)	(58)	(98,639)
Water supply, treatment and distribution, and sewage collection, treatment and disposal systems	(7,867,643)	(485,436)	-	(8,353,079)	(572,646)	(17,470)	(8,908,255)
Total accumulated depreciation	(8,556,534)	(575,753)	-	(9,132,287)	(702,165)	(17,558)	(9,816,894)
Total utility plant in service — net	16,904,107	301,834	21,668	17,184,273	934,029	65,996	18,052,306
Total capital assets — net	\$23,016,469	\$2,871,623	\$899,256	\$24,988,836	\$3,188,131	\$1,702,191	\$26,474,776

4. INVESTMENTS AND CASH DEPOSITS

Investments — Pursuant to the Water and Sewer General Revenue Bond Resolution and the Authority's and the Board's investment guidelines, the Authority and the 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 soundness of each bank, and the banking relationships are under constant operational and credit reviews. Each bank in which the System's cash is deposited is required to have its principal office in New York State and have capital stock, surplus, and undivided earnings aggregating at least \$100 million. The System had \$532 million and \$546 million respectively, on deposit at June 30, 2012 and 2011, which was covered by Federal depository insurance.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

4. INVESTMENTS AND CASH DEPOSITS (CONTINUED)

Cash and cash equivalents, including restricted and unrestricted balances were comprised of the following at June 30, 2012 and 2011 (in thousands):

	2012	2011
Cash	\$ 531,694	\$ 546,833
Cash equivalents	<u>632,166</u>	<u>686,797</u>
Cash and cash equivalents	<u>\$ 1,163,860</u>	<u>\$ 1,233,630</u>

The System had the following investments at June 30, 2012 and 2011 (in thousands):

Investments	Fair Value	
	2012	2011
U.S. Government Sponsored Entities	\$ 835,692	\$ 673,660
New York State Instrumentalities	290,192	232,649
Dreyfus Government Money Market	9,311	39,497
Guaranteed Investment Contracts	90,354	92,913
Repurchase agreements market value adjustment	<u>11,289</u>	<u>14,835</u>
Total investments including cash equivalents	1,236,838	1,053,554
Less amounts reported as cash equivalents	<u>(632,166)</u>	<u>(686,797)</u>
Investments	<u>\$ 604,672</u>	<u>\$ 366,757</u>

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 Resolution and may be invested in securities or categories in investments that are specifically enumerated as permitted investments for such account pursuant to the Resolution. Reserves for operations and maintenance are invested as permitted by the Board's investment guidelines

Credit Risk — Investment guidelines and policies are 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, 2012 and 2011 include obligations of, or guaranteed by, the United States of America, the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association or the Federal Farm Credit System, and shares of money market funds, all of which are rated "AAA" or "A-1+" by S&P and "Aaa" or "P-1" by Moody's. 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

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

4. INVESTMENTS AND CASH DEPOSITS (CONTINUED)

in one of the two highest rating categories for comparable types of obligations by each rating agency then maintaining a rating on the Authority's 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 35% of the System's investments are agreements to purchase securities or Guaranteed Investment Contracts ("GIC") 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, 2012. The fair value of the agreements to purchase securities is susceptible to changes in market interest rates.

Segmented Time Distribution on Investments and Cash Equivalents

Maturity Date	Fair Value Amount
Under 6 months ¹	\$ 711,175
Over 6 months to 1 year	218,457
Over 1 year to 3 years	56,732
Over 3 years and beyond	148,831
Over 3 years and beyond (GIC and repurchase agreements) ²	<u>101,643</u>
Total	<u>\$ 1,236,838</u>

¹ Includes variable rate demand obligations with maturities greater than three years which can be tendered weekly at par.

² Includes the fair value of agreements to purchase securities and \$90,354,000 GIC with a one-time option to terminate at par by provider on 6/15/2013, which is expected to be exercised.

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 in the Trustee's name by the Trustee or in the Board's name by its custodian bank.

5. DERIVATIVE INSTRUMENTS

As of June 30, 2012 the Authority had the following:

Type	Notional Amount	Effective Date	Maturity Date	Terms	Fair Value	Counterparty Credit Rating (Moody's/S&P/Fitch)
Hedging Derivatives						
Muni-CPI	\$ 20,000,000	7/9/2002	6/15/2013	pay 4.15% receive muni-CPI rate	\$ (305)	Baa1/A-/A
Synthetic fixed rate	240,600,000	10/24/2007	6/15/2036	pay 3.439% receive 67% of 1-month LIBOR	(80,668)	Aa2/AAA/NR
Synthetic fixed rate	160,400,000	10/24/2007	6/15/2036	pay 3.439% receive 67% of 1-month LIBOR	(53,779)	A3/A/A
Investment Derivative						
Synthetic variable rate	\$ 200,000,000	12/23/2003	6/15/2014	Pay SIFMA Index receive 3.567%	\$ 12,612	A2/AA-/A+

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

5. DERIVATIVE INSTRUMENTS (CONTINUED)

Hedging Derivative Instruments — The Authority executed an interest rate exchange agreement (the “Muni-CPI agreement”) effective July 9, 2002 in conjunction with its sale of \$20 million of muni-CPI Bonds in the 2013 maturity of its Fiscal 2003 Series A Water and Sewer System Revenue Bonds (the “CPI Bonds”). The CPI Bonds pay the holder a floating rate tied to the consumer price index [a fixed spread of 1.53% plus a floating rate equal to the change in the Consumer Price Index — Urban (“CPI-U”) for a given period]. Under the interest rate exchange agreement, the Authority pays the counterparty a fixed interest rate of 4.15% while it receives a floating interest rate matching the rate on the CPI Bonds. This allowed the Authority to achieve a fixed rate 10 basis points lower than conventional fixed rate debt in the 2013 maturity at the time of issuance. The interest rate exchange agreement terminates upon the maturity of the CPI Bonds on June 15, 2013. The Authority’s obligations under the interest rate exchange agreement are payable as Authority expenses.

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 counterparties, with 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 bonds.

Credit Risk — The Authority is exposed to the risk that the counterparty (or its guarantor) will default under its agreement. For the Muni-CPI agreement, the Authority would have to pay another counterparty to assume the position of the defaulting counterparty or face unhedged risk on changes in the CPI-U. The Authority has the right to terminate the Muni-CPI interest rate exchange agreement if the counterparty is downgraded below BBB- by Standard and Poor’s or Baa3 by Moody’s. Under the synthetic fixed rate agreements, the Authority has the right to terminate the swap, regardless of collateral posting, if the counterparty’s ratings fall below both A3 and A-.

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 the 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

Basis Risk — Since, during the term of the agreement, the rate on the CPI Bonds will exactly match the rate being paid by the counterparty, there is no basis risk for the Muni-CPI agreement. The Authority is exposed to basis risk on its synthetic fixed rate agreements because the amount the Authority receives

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

5. DERIVATIVE INSTRUMENTS (CONTINUED)

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. There is no interest rate risk with the Muni-CPI agreement. The fixed rate paid by the Authority on its synthetic fixed rate agreements may exceed the rate received (67% of LIBOR).

Investment Derivative — The Authority executed an interest rate exchange agreement (the "synthetic variable rate agreement") against its existing portfolio of second general resolution fixed rate bonds issued through the New York State Environmental Facilities Corporation ("EFC"). Pursuant to the interest rate exchange agreement, the Authority receives a fixed payment of 3.567% and pays a floating rate based on the SIFMA Municipal Swap Index. The agreement provides the Authority with floating rate debt at a lower cost than variable rate demand bonds. The Authority's obligations under the Interest Rate Exchange Agreement are payable as operating expenses.

Credit Risk — The counterparty under this interest rate exchange agreement must post collateral if its ratings fall below A3 by Moody's or A- by Standard and Poor's and the amount the counterparty would owe the Authority upon termination exceeds specified threshold amounts.

The Authority has the right to terminate the swap, regardless of collateral posting, if the counterparty's ratings fall below both A3 and A-. If interest rates at the time of Counterparty default are lower than they were at the time the transaction was entered into, the Authority may not be able to replace the Counterparty on the same terms and conditions without incurring added cost.

Interest Rate Risk — During the term of the synthetic variable rate agreement, the rate paid by the Authority (SIFMA Municipal Swap Index) may exceed the fixed rate received.

Financial Statements Effect — The market value of derivatives at June 30, 2012 and June 30, 2011, was negative \$122.1 million and negative \$37.5 million, respectively. The market value of hedge derivatives at June 30, 2012 and June 30, 2011, was negative \$134.8 million and negative \$53.2 million, respectively. These amounts are shown as deferred outflows in the balance sheet. The decrease in market value of the non-hedge derivative at June 30, 2012 and June 30, 2011 was \$3.1 million and \$1.2 million, respectively.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

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 later of, the fortieth anniversary of the commencement of the lease or the date on which all bonds, notes or other obligations of the Authority are paid in full or 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):

	2012	2011
Water supply, treatment, transmission and distribution	\$ 441,726	\$ 402,603
Sewer collection and treatment systems	477,381	494,740
City agency support cost	63,440	62,181
Fringe benefits	185,388	117,961
Judgments and claims	<u>8,693</u>	<u>11,658</u>
Operation and maintenance	1,176,628	1,089,143
Rental payments to the City	<u>196,410</u>	<u>205,390</u>
Total operations maintenance and rental payments	<u>\$ 1,373,038</u>	<u>\$ 1,294,533</u>

7. PAYABLE TO AND RECEIVABLE FROM THE CITY

As of June 30, 2012 and 2011, all utility construction and other projects financed by Authority debt 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, 2012 and 2011, the System had a net payable of \$615.5 million and \$646.1 million, respectively, to The City for payments of utility construction and for overpayment of operations and maintenance expense.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

8. OTHER OPERATING EXPENSES

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

	2012	2011
Pollution remediation	\$ 29,722	\$ 47,294
Payments for watershed improvements	<u>44,092</u>	<u>56,040</u>
Total other operating expenses	<u>\$ 73,814</u>	<u>\$ 103,334</u>

The City's Department of Environmental Protection 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 debt proceeds, similarly to capital projects. Such long-term benefit projects include payment for environmental protection and related improvement in the watershed areas, and pollution remediation projects throughout the System.

9. SHORT TERM DEBT

In fiscal 2012 and 2011, the changes in short-term debt were as follows (in thousands):

	Balance at June 30, 2010	Additions	Deletions	Balance at June 30, 2011	Additions	Deletions	Balance at June 30, 2012
Commercial paper (1)	<u>\$600,000</u>	<u>\$1,800,000</u>	<u>\$2,000,000</u>	<u>\$400,000</u>	<u>\$1,778,300</u>	<u>\$1,778,300</u>	<u>\$400,000</u>

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

Commercial paper activity is comprised of the following for the year ended June 30, 2012 (in thousands):

	Balance at June 30, 2011	Issued	Retired	Balance at June 30, 2012
Commercial Paper Series 1 — Variable Rate, Short-term Rolling Maturity Backed by Line of Credit	\$ -	\$ 586,700	\$ 586,700	\$ -
Commercial Paper Series 6 — Variable Rate, Short-term Rolling Maturity Backed by Line of Credit	-	400,000	200,000	200,000
Commercial Paper Series 7 — Variable Rate, Short-term Rolling Maturity	200,000	400,000	400,000	200,000
Commercial Paper Series 8 — Variable Rate, Short-term Rolling Maturity	<u>200,000</u>	<u>391,600</u>	<u>591,600</u>	<u>-</u>
Total commercial paper payable	<u>\$ 400,000</u>	<u>\$ 1,778,300</u>	<u>\$ 1,778,300</u>	<u>\$ 400,000</u>

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

10. LONG-TERM DEBT

In fiscal 2012, the changes in long-term debt were as follows (in thousands):

Bonds Payable	Balance at June 30, 2011	Additions	Deletions	Balance at June 30, 2012
First resolution	\$ 8,813,677	\$ 525,000	\$ 1,098,733	\$ 8,239,944
Second resolution	<u>17,695,192</u>	<u>3,210,182</u>	<u>1,167,039</u>	<u>19,738,335</u>
Total bonds payable	26,508,869	3,735,182	2,265,772	27,978,279
Due within one year	(430,452)	-	-	(451,409)
Less discounts (net)	(197,357)	(298,721)	(30,087)	(465,991)
Less deferred refunding costs	<u>300,850</u>	<u>36,649</u>	<u>(27,866)</u>	<u>309,633</u>
Total bonds payable	<u>\$25,974,924</u>	<u>\$ 3,473,110</u>	<u>\$ 2,263,551</u>	<u>\$ 27,683,228</u>

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

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

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

As part of the American Recovery and Reimbursement Act of 2009, the System has and will receive funding through EFC of \$217.5 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 bond anticipation note payable by the Authority. The total \$217.5 million note is expected to be forgiven by EFC after the note is fully drawn. Based on the expected length of projects, the note is a long-term liability.

The System also will receive funding through EFC of \$30 million for certain 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 bond anticipation note payable by the Authority. The total \$30 million note is expected to be forgiven by EFC after the note is fully drawn. Based on the expected length of projects the note is a long-term liability.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

10. LONG-TERM DEBT (CONTINUED)

During fiscal 2012, the Authority issued \$1.5 billion of bonds to refund \$1.7 billion of outstanding bonds. These refundings resulted in a loss of \$36.7 million. The Authority in effect reduced its aggregate debt service for principal and interest by \$267.6 million and obtained an economic benefit of \$196.4 million.

During fiscal 2012, the Authority defeased \$228.44 million of outstanding bonds using current revenue. This resulted in a loss of \$4.5 million.

During fiscal 2011, the Authority issued \$1.6 billion of bonds to refund \$1.4 billion of outstanding bonds and \$200 million of Commercial Paper Series 5. These refundings resulted in a loss of \$17.3 million. The Authority in effect reduced its aggregate debt service by \$139 million.

The Authority has defeased cumulatively \$14.8 billion and \$13.1 billion of outstanding bonds as of June 30, 2012 and 2011, respectively through the EFC and by placing proceeds of refunding bonds issued in an irrevocable escrow account to provide for all future debt service payments on defeased bonds. Proceeds were used to purchase U.S. Government securities that were placed in the irrevocable escrow account. Accordingly, the escrow account assets and liabilities for the defeased bonds are not included in the Authority's financial statements. As of June 30, 2012 and 2011, \$13.2 billion and \$11.7 billion of the defeased bonds, respectively, had been retired using the assets of the escrow accounts.

Debt service requirements to maturity, including amounts relating to commercial paper and the bond anticipation notes, at June 30, 2012 are as follows (in thousands):

June 30	Principal (1)	Interest (2)	Total
2013	\$ 851,409	\$ 1,298,110	\$ 2,149,519
2014	355,304	1,329,160	1,684,464
2015	360,618	1,318,524	1,679,142
2016	432,912	1,303,344	1,736,256
2017	470,723	1,287,231	1,757,954
2018–2022	2,956,652	6,092,134	9,048,786
2023–2027	3,339,804	5,400,535	8,740,339
2028–2032	4,048,542	4,535,445	8,583,987
2033–2037	5,039,335	3,494,029	8,533,364
2038–2042	6,473,000	2,126,988	8,599,988
2043–2045	4,049,980	376,053	4,426,033
	<u>\$28,378,279</u>	<u>\$28,561,553</u>	<u>\$56,939,832</u>

(1) Includes \$400 million of commercial paper due in 2013.

(2) Includes interest for variable rate bonds at 3.00% for FY 2013, and 4.25% for FY 2014 and thereafter. Variable rate bonds are remarketed daily or weekly, and interest rates are determined by the market on the day of sale.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

10. LONG-TERM DEBT (CONTINUED)

Bonds, notes payable, and commercial paper are comprised of the following for the year ended June 30, 2012 (in thousands):

	Balance at June 30, 2011	Issued	Retired/ defeased	Balance at June 30, 2012
1991 Fiscal Series B — 7.00% Serial and Term Bonds maturing in varying installments through 2012	\$ 615	\$ -	\$ 615	\$ -
1992 Fiscal Series B — 6.80% to 6.81% Serial and Term Bonds maturing in varying installments through 2014	1,067	-	778	289
1993 Fiscal Series A — 5.50% Serial, Term, and Capital Appreciation Bonds maturing in varying installments through 2012	-	-	-	-
1994 Fiscal Series 1 — 5.75% to 5.88% Serial Bonds maturing in varying installments through 2013	20,140	-	7,385	12,755
1995 Fiscal Series 1 — 6.88% Serial Bonds maturing in varying installments through 2016	11,775	-	3,560	8,215
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	18,825	-	2,715	16,110
1998 Fiscal Series 3 — 6.00% Serial Bonds maturing in varying installments through 2012	43,915	-	43,915	-
1998 Fiscal Series 4 — 5.00% to 5.20% Serial Bonds maturing in varying installments through 2018	6,415	-	855	5,560
1999 Fiscal Series A — 4.75% to 5.00% Serial Bonds maturing in varying installments through 2031	-	-	-	-
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	6,650	-	680	5,970
2001 Fiscal Series C — 5.13% Term Bonds maturing in varying installments through 2033	112,040	-	112,040	-
2001 Fiscal Series D — Capital Appreciation Bonds maturing in varying installments through 2021	79,845	-	-	79,845
2001 Fiscal Series E — 4.50% to 5.25% Serial and Term Bonds maturing in varying installments through 2031	-	-	-	-
2001 Fiscal Series F — Adjustable Rate Bonds maturing in varying installments through 2033	184,130	-	-	184,130
2002 Fiscal Series G — 5.13% Term Bonds maturing in varying installments through 2032	100,000	-	100,000	-
2002 Fiscal Series 3 — 4.04% to 5.22% Serial Bonds maturing in varying installments through 2031	386,874	-	386,874	-
2002 Fiscal Series 4 — 5.06% to 6.74% Serial Bonds maturing in varying installments through 2023	154,399	-	154,399	-
2002 Fiscal Series 5 — 3.82% to 5.27% Serial Bonds maturing in varying installments through 2031	135,513	-	135,513	-
2002 Fiscal Series 6 — 3.71% to 5.40% Serial Bonds maturing in varying installments through 2019	54,611	-	6,046	48,565
2002 Fiscal Series 7 — 7.50% Serial Bonds maturing in varying installments through 2012	360	-	360	-
2003 Fiscal Series A — 4.15% Muni-CP1 Bonds maturing in 2013	490,160	-	470,160	20,000
2003 Fiscal Series D — 4.00% to 5.25% Serial and Term Bonds maturing in varying installments through 2017	56,645	-	56,645	-

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

10. LONG-TERM DEBT (CONTINUED)

	Balance at June 30, 2011	Issued	Retired/ defeased	Balance at June 30, 2012
2003 Fiscal Series E — 5.00% Term Bonds maturing in 2034 and 2038	\$ 367,265	\$ -	\$ -	\$ 367,265
2003 Fiscal Series F — Adjustable Rate Bonds maturing in 2035	201,655	-	-	201,655
2003 Fiscal Series 1 — 4.62% to 4.89% Serial Bonds maturing in varying installments through 2032	112,746	-	112,746	-
2003 Fiscal Series 2 — 4.97% to 5.24% Serial Bonds maturing in varying installments through 2028	497,998	-	14,213	483,785
2003 Fiscal Series 3 — 0.48% to 5.75% Serial Bonds maturing in varying installments through 2025	16,090	-	840	15,250
2003 Fiscal Series 4 — 0.35% to 5.80% Serial Bonds maturing in varying installments through 2025	25,570	-	1,350	24,220
2003 Fiscal Series 5 — 3.36% to 5.00% Serial Bonds maturing in varying installments through 2032	231,758	-	9,577	222,181
2004 Fiscal Series A — 5.00% Term Bonds maturing in 2027 and 2035	217,000	-	-	217,000
2004 Fiscal Series B — 3.40% to 5.00% Serial bonds maturing in varying installments through 2023	333,160	-	115,205	217,955
2004 Fiscal Series C — 3.10% to 5.00% Serial and Term Bonds maturing in varying installments through 2035	592,750	-	82,980	509,770
2004 Fiscal Series 1 — 3.58% to 5.00% Serial Bonds maturing in varying installments through 2033	241,964	-	9,522	232,442
2004 Fiscal Series 2 — 1.70% to 4.84% Serial Bonds maturing in varying installments through 2026	209,155	-	8,393	200,762
2005 Fiscal Series A — 5.00% Term Bonds maturing in 2039	150,000	-	-	150,000
2005 Fiscal Series B — 3.38% to 5.00% Serial and term Bonds maturing in varying installments through 2036	915,510	-	149,110	766,400
2005 Fiscal Series C — 3.50% to 5.00% Serial Bonds maturing in varying installments through 2031	571,860	-	850	571,010
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	189,770	-	6,998	182,772
2005 Fiscal Series 2 — 2.58% to 5.00% Serial Bonds maturing in varying installments through 2034	321,394	-	12,362	309,032
2006 Fiscal Series A — 3.63% to 5.00% Serial Bonds maturing in varying installments through 2039	517,350	-	420	516,930
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	50,000	-	10,000	40,000
2006 Fiscal Series 1 — Adjustable rate bonds maturing in varying installments through 2035	192,285	-	7,333	184,952
2006 Fiscal Series 2 — Adjustable rate bonds maturing in varying installments through 2036	178,166	-	5,738	172,428
2006 Fiscal Series 3 — Adjustable rate bonds maturing in varying installments through 2036	227,613	-	7,234	220,379
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 maturing in 2037	199,910	-	-	199,910

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

10. LONG-TERM DEBT (CONTINUED)

	Balance at June 30, 2011	Issued	Retired/ defeased	Balance at June 30, 2012
2007 Fiscal Series BB — 3.75% to 5.00% Serial Bonds maturing in varying installments through 2021	\$ 131,745	\$ -	\$ -	\$ 131,745
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	395,000	-	125,000	270,000
2007 Fiscal Series 1 — 2.55% to 5.00% Serial Bonds maturing in varying installments through 2036	203,354	-	6,918	196,436
2007 Fiscal Series 2 — 2.60% to 4.80% Serial Bonds maturing in varying installments through 2036	259,343	-	8,626	250,717
2007 Fiscal Series 3 — 4.17% to 6.42% Serial Bonds maturing in varying installments through 2024	149,330	-	-	149,330
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	108,790	-	9,930	98,860
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 maturing in varying installments through 2036	401,000	-	-	401,000
2008 Fiscal Series DD — 4.50% to 5.00% Serial Bonds maturing in varying installments through 2039	504,905	-	-	504,905
2008 Fiscal Series 1 — 3.00% to 5.00% Serial Bonds maturing in varying installments through 2037	237,922	-	13,031	224,891
2008 Fiscal Series 2 — 3.04% to 5.00% Serial Bonds maturing in varying installments through 2037	209,496	-	7,057	202,439
2009 Fiscal Series AA — 3.25% to 5.00% Serial Bonds maturing in varying installments through 2022	334,075	-	-	334,075
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 maturing in varying installments through 2034	150,100	-	-	150,100
2009 Fiscal Series A — 5.00% to 5.75% Serial Bonds maturing in varying installments through 2040	536,030	-	-	536,030
2009 Fiscal Series DD — 5.25% to 6.00% Serial Bonds maturing in varying installments through 2040	325,580	-	-	325,580
2009 Fiscal Series EE — 2.50% to 5.50% Serial Bonds maturing in varying installments through 2040	645,455	-	-	645,455
2009 Fiscal Series FF — 3.00% to 5.50% Serial Bonds maturing in varying installments through 2040	362,830	-	-	362,830
2009 Fiscal Series 1 — 3.86% to 5.16% Serial Bonds maturing in varying installments through 2038	363,591	-	8,845	354,746
2009 Fiscal Series 2 — 4.87% Serial Bonds maturing in varying installments through 2038	76,041	-	4,623	71,418
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	218,820	-	2,795	216,025
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

(Continued)

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

10. LONG-TERM DEBT (CONTINUED)

	Balance at June 30, 2011	Issued	Retired/ defeased	Balance at June 30, 2012
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	131,319	-	9,384	121,935
2010 Fiscal Series 3 — 3.61% Serial Bonds maturing in varying installments through 2039	66,430	-	3,620	62,810
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	52,410	55,657	-	108,067
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	-	-	209,510
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	541,810	-	2,155	539,655
2011 Fiscal Series HH — 4.00% to 5.00% Serial Bonds maturing in 2026 through 2032	662,245	-	-	662,245
2011 Fiscal Series 1 and 2 — 3.58% Serial Bonds maturing in varying installments through 2041	678,762	-	26,377	652,385
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 2 and 3 — 2.00% to 5.00% Serial Bonds maturing in varying installments through 2029	-	669,375	-	669,375
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; 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; 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 Installments maturing in 2017 and 2019	-	50,000	-	50,000
	<u>26,508,869</u>	<u>\$3,735,182</u>	<u>\$2,265,772</u>	<u>27,978,279</u>
Current portion of bonds and notes payable	<u>430,452</u>			<u>451,409</u>
Bonds and notes payable, less current portion	<u>\$26,078,417</u>			<u>\$27,526,870</u>

(Concluded)

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

11. RESTRICTED ASSETS

As of June 30, 2012 and 2011, certain cash, investments, and accrued interest of the System are restricted as follows (in thousands):

	2012	2011
The Board:		
Operation and maintenance reserve account	\$ 212,836	\$ 199,626
Operation and maintenance reserve fund	<u>49</u>	<u>10</u>
Subtotal — Board	<u>212,885</u>	<u>199,636</u>
The Authority:		
Revenue fund	492,391	363,608
Debt service reserve fund	887,262	865,727
Debt service fund	-	5,517
Construction fund	<u>170,534</u>	<u>151,024</u>
Subtotal — Authority	<u>1,550,187</u>	<u>1,385,876</u>
Total restricted assets	<u>\$ 1,763,072</u>	<u>\$ 1,585,512</u>

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

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

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

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

12. COMMITMENTS AND CONTINGENCIES

- a. **Construction** — The System has contractual commitments of approximately \$4.7 billion and \$7.5 billion at June 30, 2012 and 2011, respectively, for water and sewer projects.
- b. **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.
- c. **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, 2012, the potential future liability attributable to the System for claims outstanding against The City was estimated to be \$168.6 million. This amount is included in the estimated liability for unsettled claims, which is reported in The City's balance sheet. The potential future liability is The City's best estimate based on available information. The estimate may be revised as further information is obtained and as pending cases are litigated.
- d. **Arbitrage Rebate** — To maintain the exemption from Federal income tax of interest on bonds issued subsequent to January 1, 1986, the System will fund amounts required to be rebated to the Federal Government pursuant to Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"). The Code requires the payment to the United States Treasury of the excess of the amount earned on all non-purpose obligations over the amount that would have been earned if the gross proceeds of the issue were invested at a rate equal to the yield on the issue, together with any earnings attributable to such excess. Construction funds, debt service funds or any other funds or accounts funded with proceeds of such bonds, including earnings, or pledged to or expected to be used to pay interest on such bonds are subject to this requirement. Payment is to be made after the end of the fifth bond year and after every fifth bond year thereafter, and within 60 days after retirement of the bonds. During fiscal 2012 and 2011, the System paid \$3.5 million and \$2.1 million, respectively, in rebates. At June 30, 2012 and 2011, the Authority had a liability of \$2.1 million and \$7.9 million, respectively. These amounts are included in accrued payable expense in the balance sheets.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

13. PENSION PLANS

During fiscal 2012 and 2011, the Authority was billed and contributed \$157.3 thousand and \$112.9 thousand, respectively, for 11 employees who participate in the defined benefit pension plan. All other personnel are employees of The City and are covered under The City's pension plan. The System pays the costs of The City employees' pension through an allocation of fringe benefit costs, which is included principally within operations and maintenance expenses in the accompanying financial statements.

The following table shows the amount the Authority was billed and contributed (in thousands):

Date	Required Contribution	Actual Contribution	%
June 30, 2012	\$ 157	\$ 157	100 %
June 30, 2011	113	113	100
June 30, 2010	112	112	100

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*.

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

Funding Policy — The Authority is not required to provide funding for OPEB, other than the pay-as-you-go amount necessary to provide current benefits to retirees and eligible beneficiaries/dependents. For the years ended June 30, 2012 and 2011, the Authority had three retirees and made contributions of \$8.7 thousand and \$5.7 thousand respectively. Members are not required to contribute; although, retirees may elect basic health insurance programs and/or optional coverage that require contributions.

Annual OPEB Cost and Net OPEB Obligation — The Authority's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer ("ARC"), an amount that was actuarially determined in accordance with the parameters of GASB 45. The frozen entry age cost method was used in the actuarial valuation prepared as of June 30, 2011, which was the basis for the fiscal 2012 ARC calculation.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

14. OTHER POST-EMPLOYMENT BENEFITS (CONTINUED)

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, 2012 and 2011 (in thousands):

	2012	2011
Annual required contribution	\$ 799	\$ 705
Interest on net OPEB obligations	28	21
Adjustment to annual required contribution	(727)	(555)
Annual OPEB cost	100	171
Payments	(9)	(6)
Net OPEB obligation — beginning of year	699	534
Net OPEB obligation — end of year	\$ 790	\$ 699

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, 2010 through 2012 were as follows (in thousands):

	Annual OPEB Cost	Percentage of Annual OPEB Cost contributed	Net OPEB Obligation
June 30, 2012	\$ 100	8.8 %	\$ 790
June 30, 2011	171	3.3	699
June 30, 2010	143	3.1	534

Funded Status and Funding Progress — As of June 30, 2011, the most recent actuarial valuation date, the cost was 0% funded. The actuarial accrued liability for benefits was \$662.4 thousand, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability ("UAAL") of \$662.4 thousand. The covered payroll (annual payroll of active employees covered by the Plan) was \$918.6 thousand, and the ratio of the UAAL to the covered payroll was 72.0%

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

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

14. OTHER POST-EMPLOYMENT BENEFITS (CONTINUED)

The System's funding progress information as of June 30, 2012 is as follows:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL) — Entry Age	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
June 30, 2011	\$ -	\$662	\$ 662	- %	\$919	72.0 %

The schedule of funding progress, presented as required supplementary information following the notes to the combined financial statements, presents multiyear trend information about whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

15. POLLUTION REMEDIATION OBLIGATIONS

The System reports pollution remediation obligations ("PROs") as required by GASB standards. 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) because the System has determined that there is an imminent endangerment to public health and safety as a result of an existing pollution condition, (4) because the System has been named in a lawsuit to compel remediation or has been identified by a regulator as a party responsible or potentially responsible for remediation and/or (5) because the System has voluntarily commenced remediation. As of June 30, 2012 and 2011, the System reported \$108.3 million and \$102.6 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. RELATED PARTY TRANSACTIONS

During fiscal 2012 and 2011 the Authority bought \$0 million and \$6.3 million, respectively of New York City Transitional Finance Authority ("TFA") bonds. The Authority held no TFA bonds at June 30, 2012 and 2011.

NEW YORK CITY WATER AND SEWER SYSTEM

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED JUNE 30, 2012 AND 2011 (CONTINUED)

17. SUBSEQUENT EVENTS

On July 12, 2012 the Authority issued Fiscal 2013 Series 1 Bonds to EFC in the amount of \$316.79 million to refund principal of \$48.6 million and \$323.2 million of Fiscal 2002 Series 6 and Fiscal 2003 Series 2 bonds respectively, and to pay the costs of issuance of the bonds.

On July 17, 2012 the Authority issued \$200 million of commercial paper notes, Series 1, to pay for construction costs of the System.

On August 22 2012 the Authority issued \$200 million of commercial paper notes, Series 8, to pay for construction costs of the System.

On August 19, 2012 the Authority drew down \$5.4 million of Fiscal 2010 Series 1 BANS.

On September 27, 2012 the Authority issued Fiscal 2013 Series 2 Bond Anticipation Notes (BANs) to EFC in the amount of \$217 million. The Authority has not drawn on this BAN.

On October 4, 2012 the Authority issued Fiscal 2013 Series AA new money tax-exempt adjustable rate bonds in the amount of \$200 million to refund its commercial paper notes series 6.

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REQUIRED SUPPLEMENTARY INFORMATION

NEW YORK CITY WATER AND SEWER SYSTEM

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS FOR THE OTHER
POSTEMPLOYMENT BENEFIT PLAN (UNAUDITED)
JUNE 30, 2012 AND 2011
(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, 2012	June 30, 2011	\$ -	\$ 662	\$ 662	- %	\$ 919	72.0 %
June 30, 2011	June 30, 2010	-	563	563	-	1,026	54.8
June 30, 2010	June 30, 2009	-	431	431	-	676	63.7

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APPENDIX E

ADJUSTABLE RATE DEMAND BONDS

The Authority has entered into credit and liquidity agreements with the following banks to support its Authority First Resolution Bonds, Authority Second Resolution Bonds and commercial paper program:

Series	Outstanding Principal Amount	Provider	Facility Type	Expiration or Optional Termination by Provider
2000 C	\$ 107,500,000	Sumitomo Mitsui Banking Corporation	SLOC (1)	06/05/15
2001 F-1	100,000,000	Dexia Crédit Local	SBPA (2)	05/15/14
2001 F-2	84,130,000	JPMorgan Chase Bank, N.A.	SBPA	05/15/14
2003 F-1-A	50,000,000	Wells Fargo Bank, N.A.	SBPA	06/25/14
2003 F-1-B	50,000,000	U.S. Bank, N.A.	SBPA	05/18/14
2003 F-2	101,655,000	BayernLB	SBPA	11/30/15
2006 AA-1A ...	100,000,000	California State Teachers' Retirement System	SBPA	10/27/15
2006 AA-1B ...	100,000,000	State Street Bank and Trust Company	SBPA	10/27/15
2006 AA-2	100,000,000	Dexia Crédit Local	SBPA	10/27/17
2006 AA-3	100,000,000	Dexia Crédit Local	SBPA	10/27/17
2007 CC-1	160,500,000	Bank of Nova Scotia	SBPA	11/01/16
2007 CC-2	50,000,000	Bank of Nova Scotia	SBPA	11/01/16
2008 B-1-A	100,000,000	Sumitomo Mitsui Banking Corporation	SLOC	03/04/16
2008 B-1-B	100,000,000	Royal Bank of Canada	SBPA	03/04/16
2008 B-2	100,000,000	Royal Bank of Canada	SBPA	03/01/16
2008 B-3	135,000,000	Bank of America, N.A.	SBPA	03/18/16
2008 B-4	100,000,000	Royal Bank of Canada	SBPA	03/01/16
2008 BB-1	100,000,000	Bank of Tokyo-Mitsubishi UFJ, Ltd.	SBPA	10/02/15
2008 BB-2	101,000,000	Bank of America, N.A.	SBPA	10/23/15
2008 BB-3	100,000,000	Royal Bank of Canada	SBPA	10/02/15
2008 BB-4	50,000,000	Royal Bank of Canada	SBPA	10/02/15
2008 BB-5	50,000,000	Bank of America, N.A.	SBPA	10/23/15
2009 BB-1	100,435,000	Landesbank Hessen-Thüringen Girozentrale	SBPA	08/07/13(3)
2009 BB-2	100,435,000	Landesbank Hessen-Thüringen Girozentrale	SBPA	08/07/13(3)
2010 CC	200,000,000	Barclays Bank, PLC	SBPA	12/16/14
2010 DD-1	100,000,000	TD Bank, N.A.	SBPA	11/18/13
2010 DD-2	75,000,000	The Bank of New York Mellon	SBPA	11/18/13
2010 DD-3-A ...	50,000,000	U.S. Bank, N.A.	SBPA	11/18/13
2010 DD-3-B ...	50,000,000	California State Teachers' Retirement System	SBPA	11/18/13
2011 FF-1	100,000,000	Bank of America, N.A.	SBPA	03/18/16
2011 FF-2	100,000,000	KBC Bank, N.V.	SBPA	03/03/14
2012 A-1	100,000,000	Mizuho Corporate Bank, Ltd.	SBPA	09/29/14
2012 A-2	100,000,000	Mizuho Corporate Bank, Ltd.	SBPA	09/29/14
2012 B-1	100,000,000	U.S. Bank, N.A.	SBPA	03/27/15
2012 B-2	100,000,000	California Public Employees' Retirement System	SBPA	03/27/15
2012 B-3	75,000,000	State Street Bank and Trust Company	SBPA	03/27/15
2012 B-4	50,000,000	The Northern Trust Company	SBPA	03/27/15
2013 AA-1	50,000,000	PNC Bank, National Association	SBPA	10/02/15
2013 AA-2	150,000,000	Bank of Tokyo-Mitsubishi UFJ, Ltd.	SBPA	10/02/15
CP Series 1	200,000,000	JPMorgan Chase Bank, N.A.	LOC (4)	12/31/14
CP Series 6(5) ..	100,000,000	Landesbank Hessen-Thüringen Girozentrale	LOC	12/29/15
CP Series 6(5) ..	100,000,000	Landesbank Baden-Württemberg	LOC	12/29/15
Total	<u>\$4,040,655,000</u>			

(1) Standby Letter of Credit

(2) Standby Bond Purchase Agreement

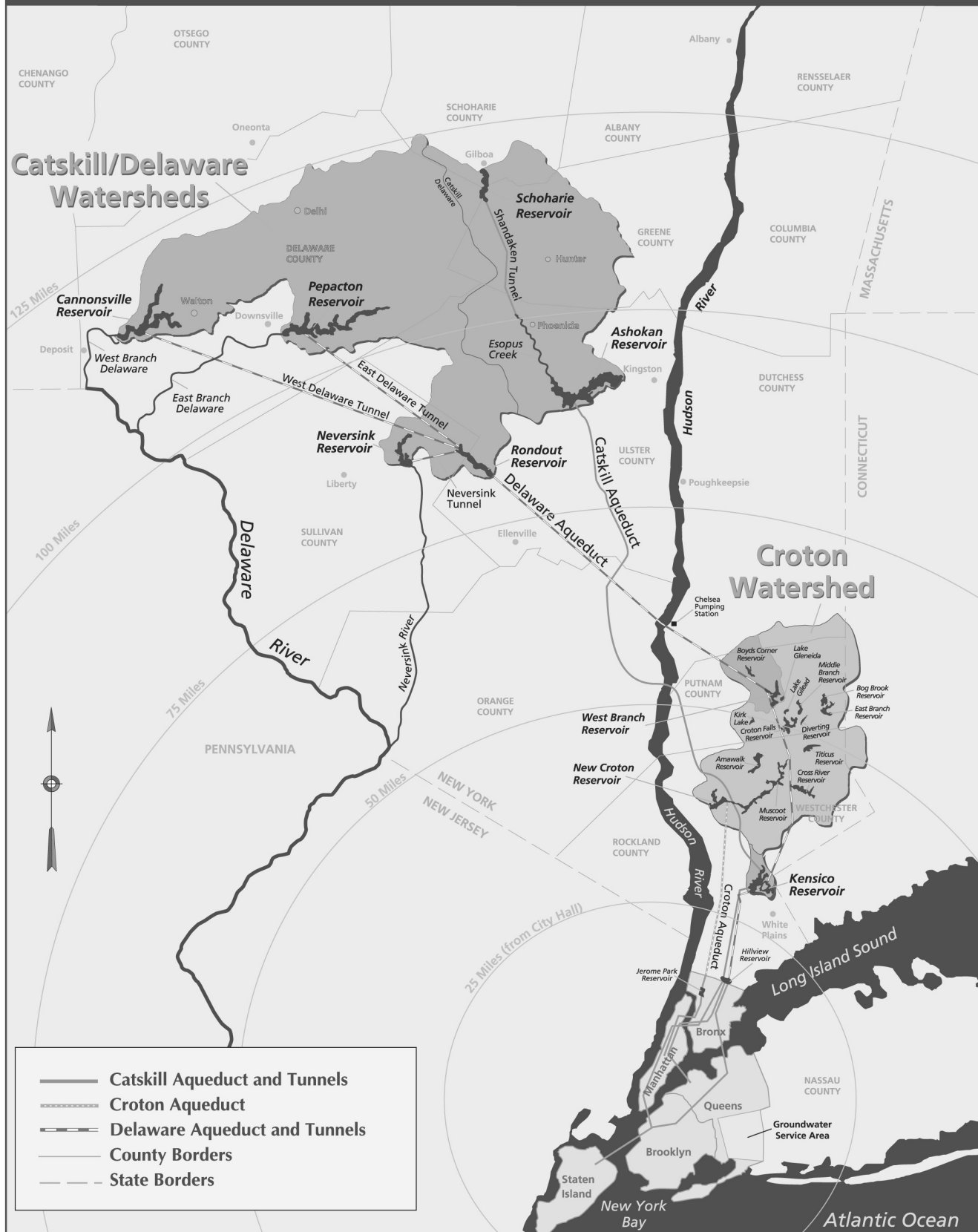
(3) Expected to be extended in July 2013.

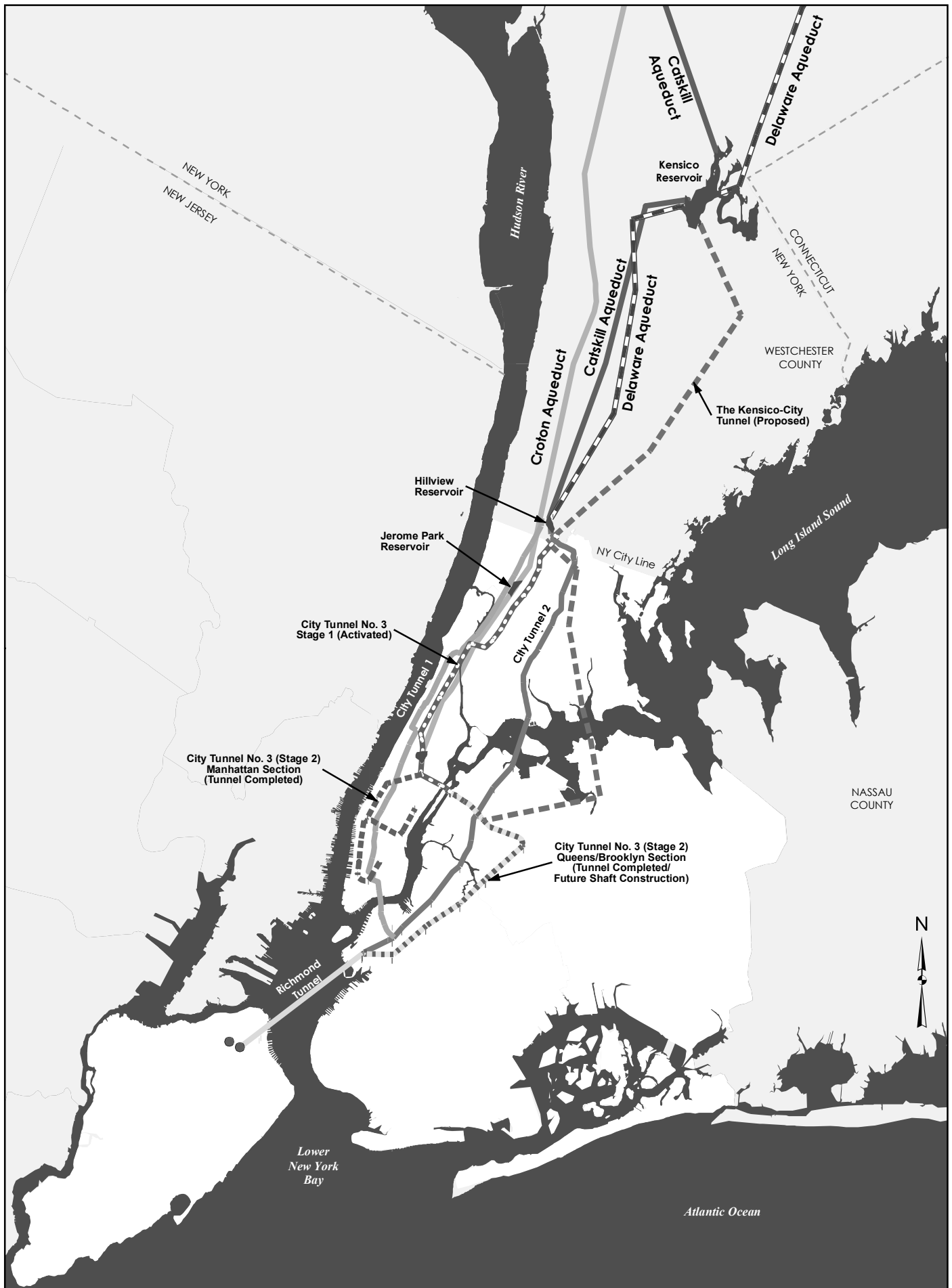
(4) Line of Credit

(5) The CP Series 6 program is expected to be paid down with the proceeds of Corporation bonds and terminated in July 2013.

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New York City Water Supply System

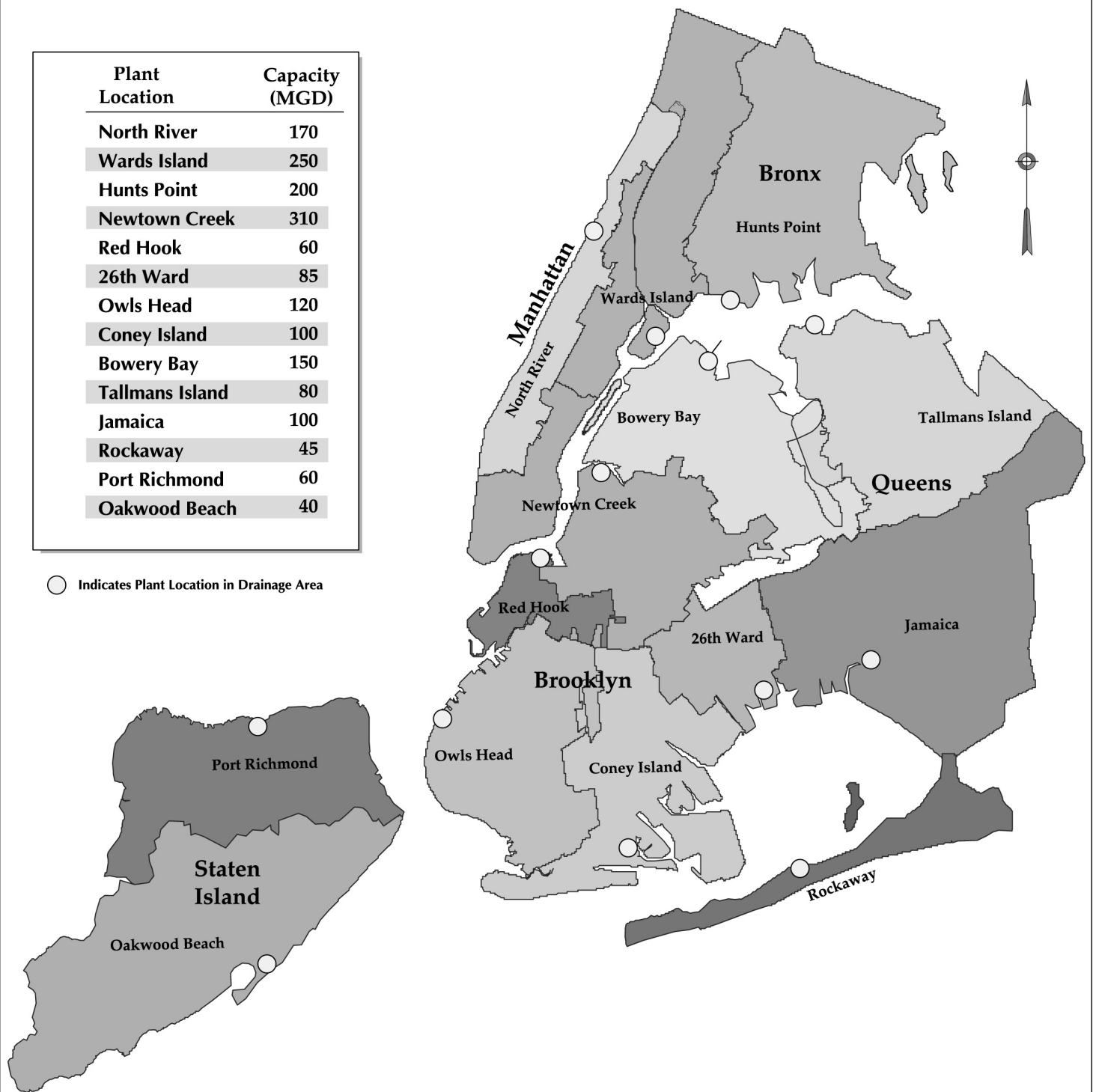




New York City Drainage Areas and Water Pollution Control Plants

Plant Location	Capacity (MGD)
North River	170
Wards Island	250
Hunts Point	200
Newtown Creek	310
Red Hook	60
26th Ward	85
Owls Head	120
Coney Island	100
Bowery Bay	150
Tallmans Island	80
Jamaica	100
Rockaway	45
Port Richmond	60
Oakwood Beach	40

○ Indicates Plant Location in Drainage Area



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