



# City of New York

---

## OFFICE OF THE COMPTROLLER

John C. Liu  
COMPTROLLER



## FINANCIAL AUDIT

**Tina Kim**

Deputy Comptroller for Audit

Audit Report on the Financial and  
Operating Practices of the New York  
City Water and Sewer System and the  
Determination of Water Rates

FN13-075A

**December 11, 2013**

<http://comptroller.nyc.gov>



THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET  
NEW YORK, N.Y. 10007-2341

John C. Liu  
COMPTROLLER

December 11, 2013

**To the Residents of the City of New York:**

My office has audited the financial and operating practices of the New York City Water and Sewer System (the System) to determine whether water and sewer rates were established based on reasonable assumptions, revenue and expenses reported were accurate and complete, and whether the accounts receivable data maintained in the Department of Environmental Protection's (DEP) Customer Information System (CIS) were accurate and reliable. We audit these types of operations as a means of increasing accountability and ensuring Federal, State, and City resources are used effectively, efficiently, and in the best interest of the public.

In 1984, the New York City Municipal Water Finance Authority (the Authority) and the New York City Water Board (the Board) (collectively NYW) were created to change the way the City's water and sewer infrastructure was operated and funded. Under the new structure, the Authority is primarily responsible for (1) issuing bonds to finance the System's capital construction and infrastructure improvements and (2) hiring a rate consultant to provide professional services in connection with determining water rates.

The Board leases the System from the City and is primarily responsible for (1) establishing water and sewer rates and (2) ensuring revenues received are sufficient to place the System on a self-sustaining basis. The lease agreement provides for the City to manage the physical operation and capital improvement of the System, and bill and collect water and sewer charges on behalf of the Board. The operation and maintenance expenses incurred by the City are reimbursed by the Board.

The audit found that DEP did not maintain accurate and reliable accounts receivable data in the CIS. Accordingly, NYW may be underestimating the collectability of accounts receivable—a factor that can affect the rate-setting process. We attribute this problem to NYW's failure to establish a consistent and reasonable methodology to value accounts receivable and a lack of oversight over DEP operations. In addition, we identified problems with DEP's procedures for billing and collecting revenue from customer accounts that led to at least \$15 million in foregone revenues during Fiscal Year 2012.

As NYW is responsible for ensuring that the System has sufficient revenue to be "self-sustainable," there was no evidence that NYW was cognizant of DEP's problems in properly assessing late payment charges, accurately maintaining customer account information, and monitoring accounts with significant outstanding balances.

Some of NYW's underlying budget decisions used to establish water and sewer rates may not be based on reasonable assumptions. To ensure that the System meets debt coverage ratios expected by rating agencies, NYW budgets to ensure a surplus. However, the actual surplus for the audit period has exceeded the amount forecasted by 24 to 41 percent over the past four fiscal years. This leads us to believe NYW's cash flow projections might have overly estimated the water and sewer revenue needs.

The results of our audit have been discussed with NYW and DEP officials, and their comments have been considered in preparing this report. Their complete written responses are attached to this report. If you have any questions concerning this report, please e-mail my audit bureau at [audit@comptroller.nyc.gov](mailto:audit@comptroller.nyc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "John C. Liu".

John C. Liu

# TABLE OF CONTENTS

<b>AUDIT REPORT IN BRIEF.....</b>	<b>1</b>
Audit Findings and Conclusion .....	2
Audit Recommendations.....	2
Agency Response.....	3
<b>INTRODUCTION.....</b>	<b>3</b>
Background .....	4
Objectives.....	8
Scope and Methodology Statement.....	8
Discussion of Audit Results .....	9
<b>FINDINGS AND RECOMMENDATIONS.....</b>	<b>11</b>
Inadequate Oversight over the Revenue Reporting Process.....	11
Lack of Adequate Review of Accounts Receivable Data.....	11
Allowance for Uncollectible Accounts Not Accurately Determined.....	12
Lack of Consistent Accounting Methods .....	13
Lack of Oversight over DEP Operations Resulted in at Least \$15 Million in Uncollected Revenue .....	14
DEP Failed to Bill \$1.3 Million in Late Payment Charges.....	14
Inadequate Oversight over CIS Account Activities.....	14
Did Not Collect at Least \$14 Million in Revenue by Excluding Eligible Properties From Lien Sales .....	15
Inability to Enforce Collections Resulted in at Least \$27 million in Uncollected Revenue.....	16
Improper Review of Consultant Payments.....	16
Deficiencies in Forecasting Cash Flow .....	17
Other Issue .....	20
Recommendations .....	21
<b>DETAILED SCOPE AND METHODOLOGY .....</b>	<b>26</b>
<b>APPENDIX – DISCUSSION OF NYW RESPONSE</b>	
<b>ADDENDUM – NYW RESPONSE</b>	

# **THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER FINANCIAL AUDIT**

## **Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates**

**FN13-075A**

---

### **AUDIT REPORT IN BRIEF**

The New York City water and sewer system (the System) is a network of watersheds, reservoirs, tunnels, aqueducts, water mains, sewers, treatment plants, and pumping stations, including more than 7,000 miles of pipes running from upstate New York to every building in New York City (the City). The water supply system delivers more than one billion gallons of high quality drinking water every day to more than eight million people in the City and nearly one million residents in four counties north of the City. The System provides service to approximately 836,000 customer accounts in the City. Approximately 91 percent of the water and sewer system's City customers are residential.

In 1984, the New York City Municipal Water Finance Authority (the Authority) and the New York City Water Board (the Board) (collectively NYW) were created to change the way the City's water and sewer infrastructure was operated and funded. Under the new structure, the Authority is primarily responsible for (1) issuing bonds to finance the System's capital construction and infrastructure improvements, and (2) hiring a rate consultant to provide professional services in connection with determining water rates.

The Board leases the System from the City and is primarily responsible for (1) establishing water and sewer rates, and (2) ensuring revenues received are sufficient to place the System on a self-sustaining basis. The lease agreement provides for the City to manage the physical operation and capital improvement of the System, and bill and collect water and sewer charges on behalf of the Board. The operation and maintenance expenses incurred by the City are reimbursed by the Board. The Department of Environmental Protection (DEP) is the primary City agency that handles the operation of the System and provides billing services to the Board.

For Fiscal Year 2012, the combined certified financial statements of the Authority and the Board reported total revenue of \$3.48 billion and expenses of \$3.5 billion.

## Audit Findings and Conclusion

DEP did not maintain accurate and reliable accounts receivable data in the Customer Information System (CIS). Accordingly, given the heavy reliance on CIS data, NYW may be underestimating the collectability of accounts receivable—a factor that can affect the rate-setting process. We attribute this problem to NYW's failure to establish a consistent and reasonable methodology to value accounts receivable and a lack of oversight over DEP operations.

In addition, we identified problems with DEP's procedures for billing and collecting revenue from customer accounts that led to at least \$15 million in foregone revenues during Fiscal Year 2012. As NYW is responsible for ensuring that the System has sufficient revenue to be "self-sustainable," ensuring that DEP collects all legitimate revenue is an important NYW function. However, there was no evidence that NYW was cognizant of DEP's problems in:

- properly assessing late payment charges,
- accurately maintaining customer account information, and
- monitoring accounts with significant outstanding balances.

In a related matter, City-owned properties operated by private entities, State-owned properties, and Housing Development Fund Corporation cooperatives owed the City \$27 million in delinquent charges as of June 30, 2012. Given that these properties are largely excluded from lien sales, DEP has limited options to enforce collection of these charges. Nevertheless, there was no evidence that NYW directed DEP to pursue alternative methods to collect these funds.

Some of NYW's underlying budget decisions used to establish water and sewer rates may not be based on reasonable assumptions. To ensure that the System meets debt coverage ratios expected by rating agencies, NYW budgets to ensure a surplus. However, the actual surplus for the audit period has exceeded the amount forecasted by 24 to 41 percent over the past four fiscal years. This leads us to believe NYW's cash flow projections might have overly estimated the water and sewer revenue needs.

## Audit Recommendations

This report makes 15 recommendations. NYW should:

- Establish internal control procedures to ensure all the System's revenue data is properly reviewed and reported. This would include procedures to conduct independent review of the data extracted from CIS to ensure the extracted data is accurate and reliable.
- Re-evaluate the methodology used to calculate the allowance for uncollectible accounts and unbilled receivables.
- Ensure the data used to calculate the allowance for uncollectible accounts is relevant, sufficient, and reliable, so that the net realized value of the accounts receivable is reasonable and appropriate.
- Use consistent accounting methods when reporting revenue including receivables, late payment charges, and allowance for uncollectible accounts.
- Work with DEP to strengthen internal controls over the billing and collection process in order to increase collectability from customers.

- Ensure late payment charges are assessed for the frontage accounts that maintain delinquent balances.
- Ensure DEP carefully review the customer account history and includes all eligible properties in lien sales.
- Establish alternate methods to collect delinquent charges from City-owned properties that are operated by private entities, State-operated properties, and properties exempt from lien sales.
- Ensure DEP adheres to the City’s solicitation process and properly reviews all supporting documents submitted by the vendors and all invoices paid were appropriate.
- Ensure cash flow assumptions are established based on data that is adequately substantiated to justify water and sewer rates before they are enacted.

## Agency Response

In their response, NYW officials disagreed with the audit’s findings and most of the recommendations. NYW officials maintain that:

“the draft ‘audit’ (1) confused the legal and management relationship among the Authority, the Board, and DEP, (2) failed to comprehend that water and sewer charges are a lien on the property served and collectible upon transfer of the property, which renders a traditional corporate write-off policy inapplicable, (3) ignored the transformation of revenue collection through the installation of DEP’s automated meter reading (“AMR”) system . . . and, amazingly, (4) questioned common-place and prudent practices, such as debt defeasance to achieve lower interest payments and conservative planning to avoid shortfalls and the necessity of a mid-year rate increase.”

These representations by NYW officials about the audit are simply not credible. Although NYW officials present several arguments which attempt to refute the report’s findings, each argument presents either an irrelevant or unsupported conclusion. In some cases, the statements made are contradicted by NYW officials’ own documents and appear to be factually inaccurate. Further, despite providing NYW officials with ample meeting opportunities to disprove our findings, NYW officials failed to provide relevant information that would allow us to form a basis for any substantial revision of the draft audit report. In contrast to NYW officials’ complaint about each finding, NYW officials overlooked a salient message of our audit—that budget decisions such as cash flow projections and amounts set aside for debt defeasance must be reasonable and transparent to the public and currently are not.

While we agree with NYW officials’ assertion that planning for an annual surplus is prudent financial practice, we found that the actual expenses for debt defeasance were substantially higher than the budgeted amounts. Further, when comparing the surplus forecast at the time the water and sewer rates were established to the actual surplus, the actual surplus was substantially higher than originally forecasted. In that regard, water and sewer rates may have been set higher than necessary.

# INTRODUCTION

## Background

The New York City water and sewer system (the System) is a network of watersheds, reservoirs, tunnels, aqueducts, water mains, sewers, treatment plants, and pumping stations, including more than 7,000 miles of pipes running from upstate New York to every building in New York City (the City). The water supply system delivers more than one billion gallons of high quality drinking water every day to more than eight million people in the City and nearly one million residents in four counties north of the City. The System provides service to approximately 836,000 customer accounts in the City. Approximately 91 percent of the water and sewer system's City customers are residential.

Until the mid-1980's, the City funded water and sewer operating expenses through its general fund and financed necessary capital investments by issuing the City's general obligation bonds. In 1984, the City sought and obtained approval from the state legislature to change the way in which the City's water and sewer infrastructure was operated and funded. As a result of the new legislation, two entities were created: the New York City Municipal Water Finance Authority (the Authority) and the New York City Water Board (the Board) (collectively NYW).

Under the new structure, the Authority is primarily responsible for (1) issuing bonds to finance the System's capital constructions and infrastructure improvements and (2) hiring a rate consultant to provide professional services in connection with determining water rates.

The Board leases the System from the City and is primarily responsible for (1) establishing water and sewer rates, and (2) ensuring revenues received are sufficient to place the System on a self-sustaining basis. The lease agreement provides for the City to manage the physical operation and capital improvement of the System, and bill and collect water and sewer charges on behalf of the Board.

The City's Department of Environmental Protection (DEP) is the main agency that provides services to the Board including:

- Managing the physical operation and capital improvement of the System.
- Operating the billing and collection of water and sewer charges, including maintaining and tracking customer account information in its Customer Information System (CIS).<sup>1</sup> In monitoring the revenue billing and collection process, DEP is required to adhere to the internal control requirements of New York City Comptroller's Directive #21 entitled "Revenue and Receivable Monitoring." Accordingly, DEP's responsibilities include the establishment of a suitable Agency Receivables and Collections ledger; the maintenance of a timely and accurate billing and cash collection process; ensuring a disciplined follow-up of all overdue payments; the prompt forwarding of overdue receivables to internal law and/or collection units as appropriate; and the orderly and timely write-off of all receivables deemed uncollectible. Expenses incurred by DEP for the operation and maintenance of the infrastructure are reimbursed to the City by the Board.

---

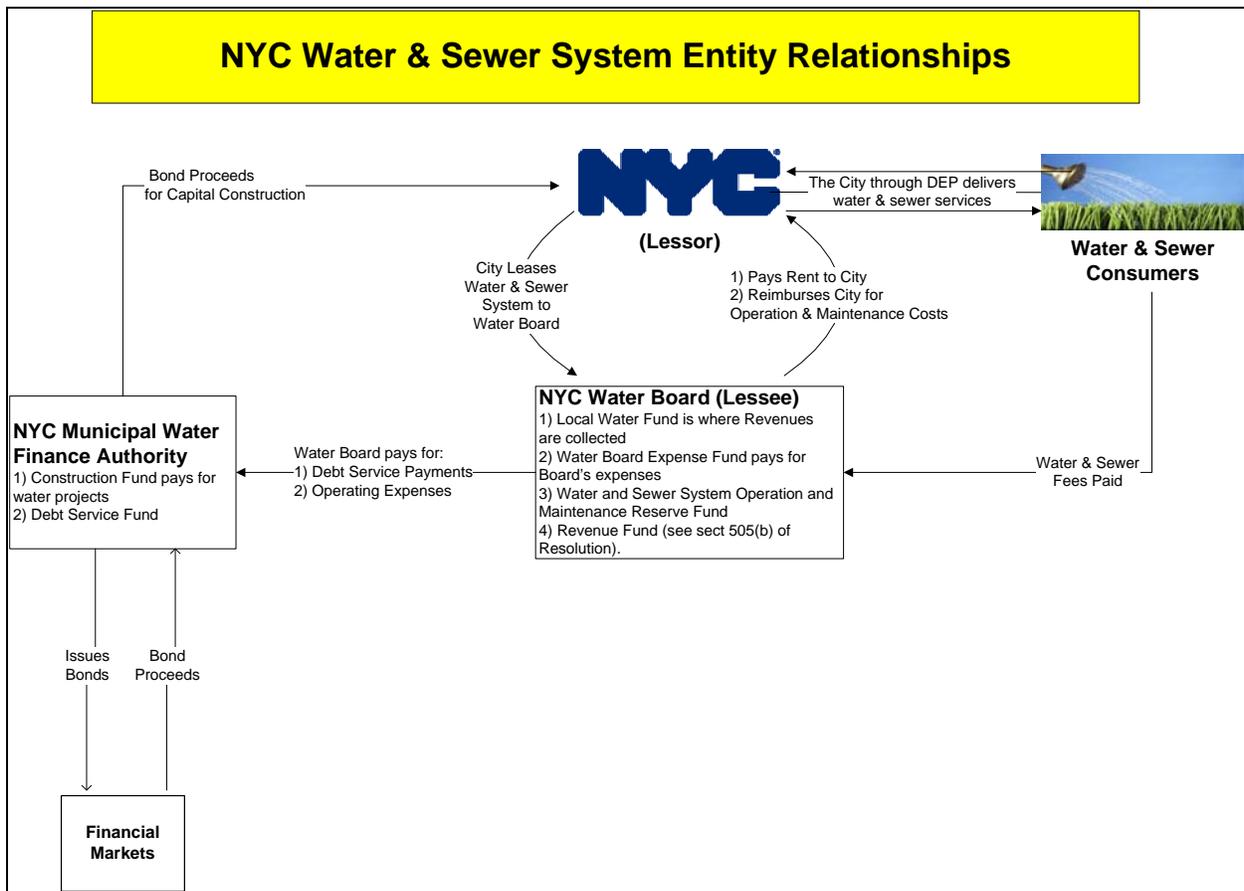
<sup>1</sup> CIS tracks and maintains customer and property information, account status, billing and payment history, and notes related to the customer being reviewed. CIS was installed in 1995 for DEP's Bureau of Customer Services (BCS) to provide customer service and to bill the City's water and sewer accounts. Since 2010, the NYW and DEP have been working with a consultant to build a new CIS. See the "Other Issues" section of this report.

- Levy the amount of any delinquent water and sewer charges against the persons and property liable and authorize the City to exercise all of its powers pursuant to the provisions of the laws of the State covering enforcement and collection of such water and sewer charges.

The Board also retains the City, through its Law Department, to provide legal services to the Board. All revenue received or receivable by Board should belong to the Board and should be applied as stipulated in the agreement. The agreement requires that the Board pay the City rent that is the greater of (i) principal and interest every fiscal year on City general obligation bonds issued for water and sewer purposes or (ii) 15 percent of the principal and interest on the Authority debt for each fiscal year.

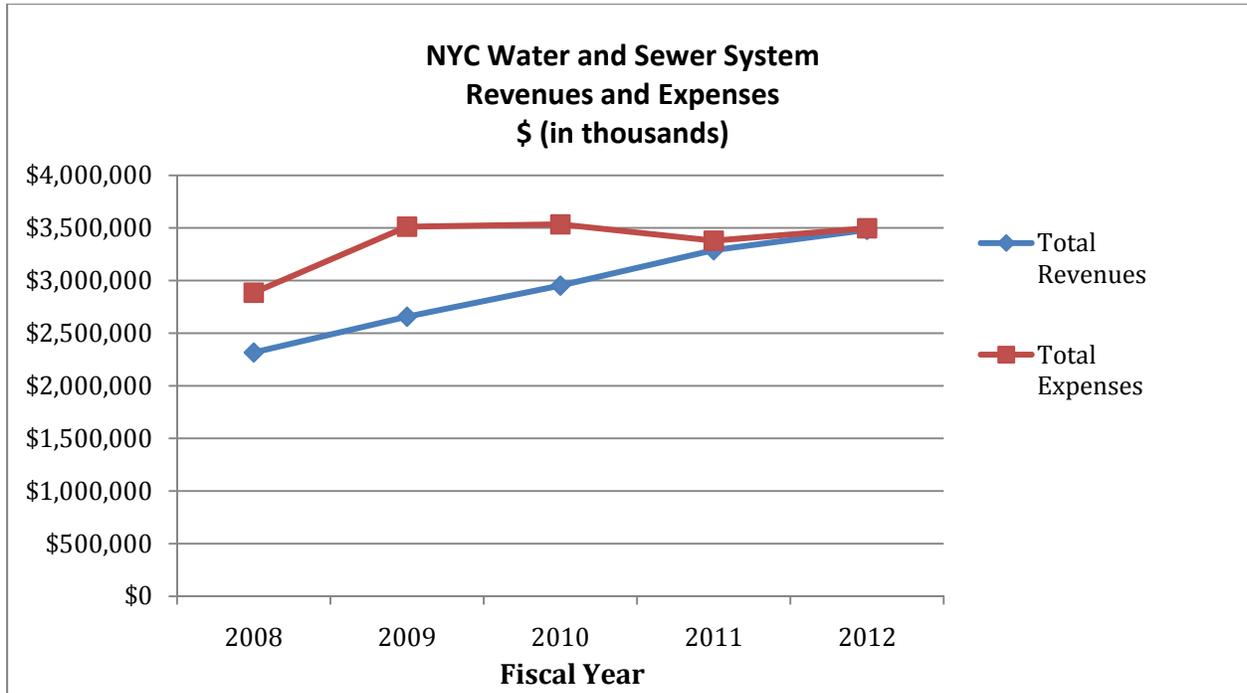
Proceeds from the issuance of bonds by the Authority are used to pay for capital construction and other water and sewer infrastructure costs.

The System's operations are complex and involve various entities. The following chart illustrates the Board's oversight responsibility and related entities' involvement under the various agreements.



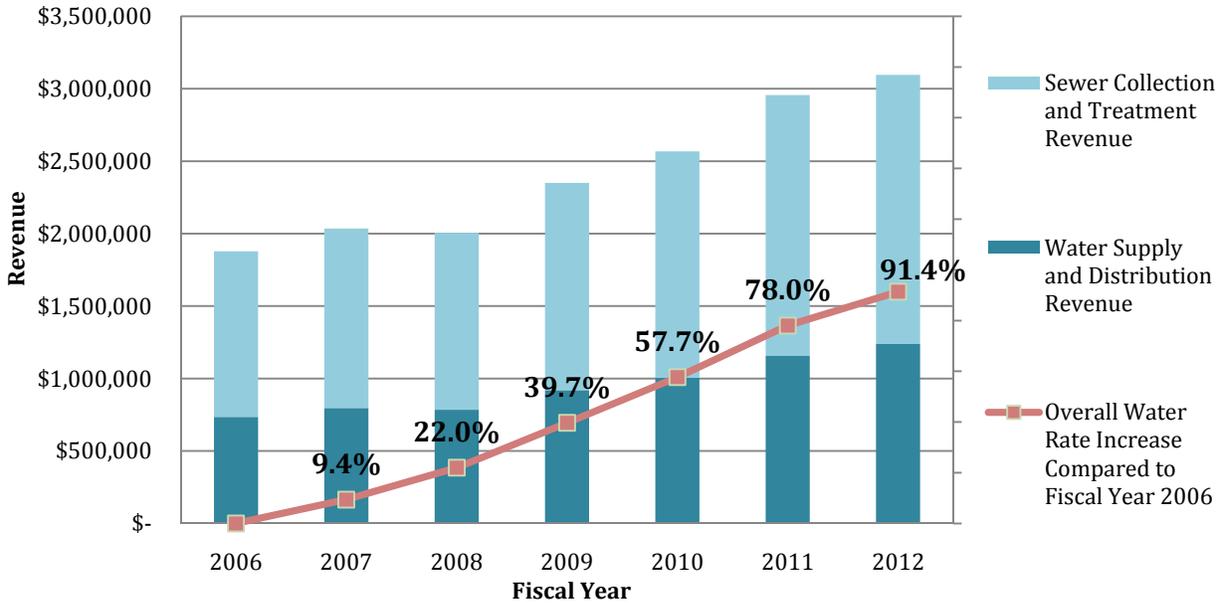
As authorized by the Public Authorities Law, Article 5, Title-2A, NYW can promulgate standards and procedures to ensure compliance with rules and regulations as it deems necessary. Accordingly, NYW is responsible for establishing internal controls to ensure the accuracy and reliability of financial data and promote effectiveness and efficiency of operations.

The Authority and the Board submit combined annual certified financial statements to the City. Both the Authority and the Board operations are overseen by boards of directors under mayoral control. For Fiscal Year 2012, the combined certified financial statements of the Board and the Authority reported total revenue of \$3.48 billion and expenses of \$3.5 billion. The following charts illustrate financial trends for the five-year period (2008 through 2012), and water and sewer revenue and rate increases from Fiscal Years 2006 to 2012<sup>2</sup>:

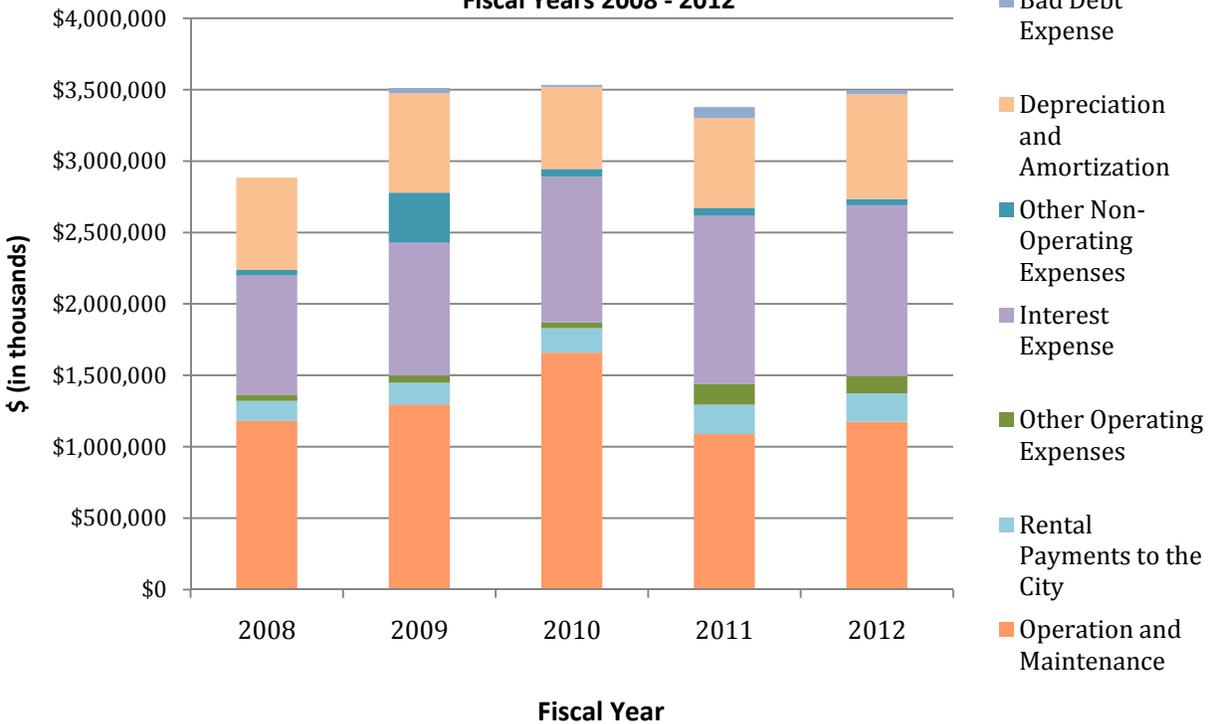


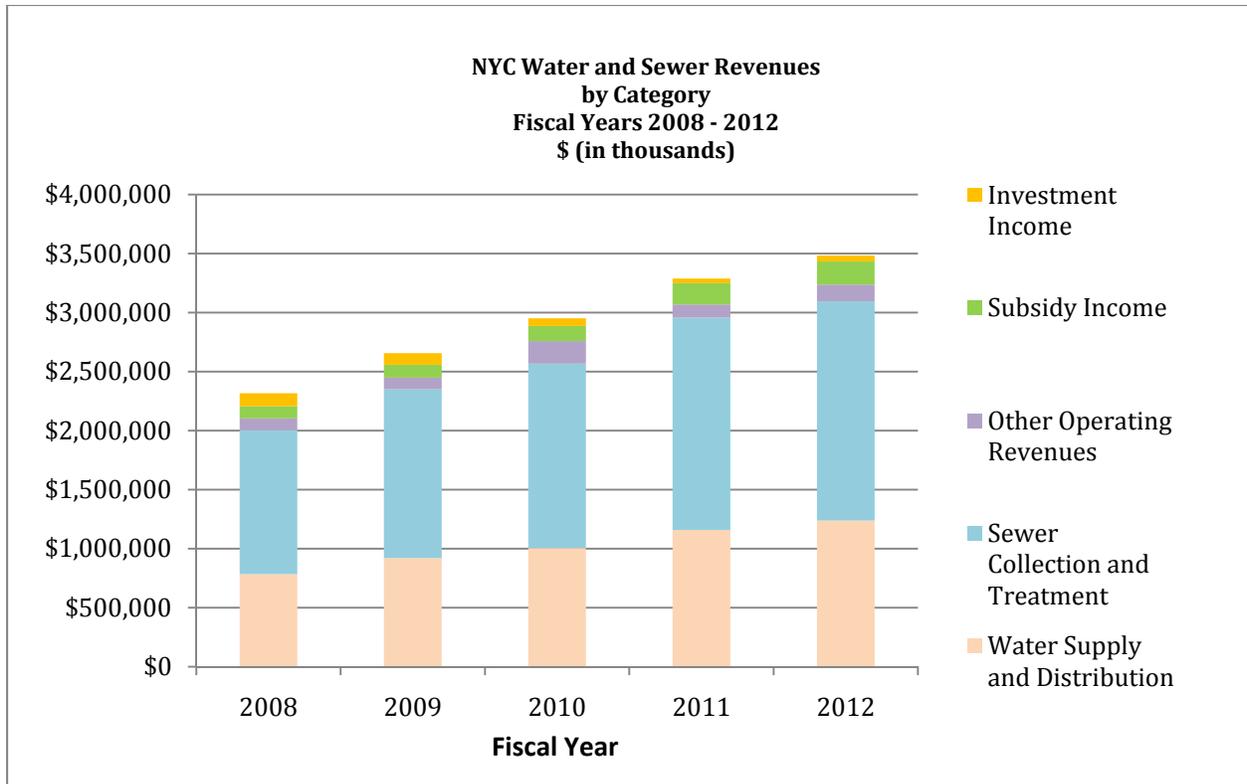
<sup>2</sup> Data obtained from the audited financial statements and NYW's website.

**Relationship Between the Overall Water Rate Increase  
and Water and Sewer Revenue for  
Fiscal Years 2006 to 2012  
\$ (in thousands)**



**NYC Water and Sewer Expenses  
by Category  
Fiscal Years 2008 - 2012**





## Objectives

The objectives of this audit were to determine whether water and sewer rates were established based on reasonable assumptions, revenue and expenses reported were accurate and complete, and whether DEP maintained accurate and reliable accounts receivable data in the Customer Information System.

## Scope and Methodology Statement

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope of this audit was July 1, 2010, to the present. Our audit scope did not cover the New York City Municipal Finance Authority's calculations of debt services requirements or amounts required to be deposited in the New York City Municipal Finance Authority's Expense Fund and Debt Service Reserve Fund and did not review engineering reports certifying the costs of water projects. Our review of these areas was limited to obtaining a general understanding of the relation and financial impact those areas may have on NYW's financial operations. Accordingly, our report did not comment on those financial and operating components. Please refer to the Detailed Scope and Methodology at the end of this report for the specific procedures and tests that were conducted.

## Discussion of Audit Results

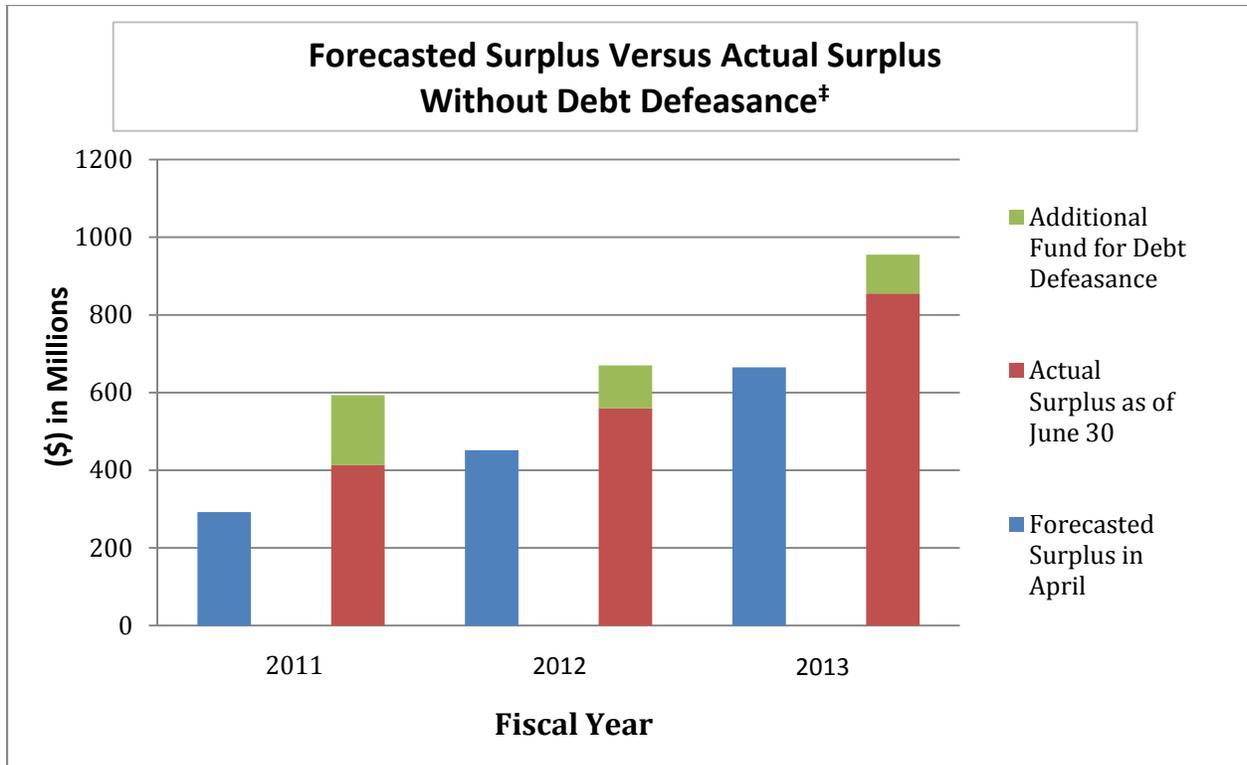
The matters covered in this report were discussed with NYW and DEP officials during and at the conclusion of this audit. A preliminary draft report was sent to NYW and DEP officials and discussed at an exit conference held on September 24, 2013. After the exit conference, NYW and DEP officials provided additional information on the issues addressed in the preliminary report. On October 23, 2013, we submitted a draft report to NYW and DEP officials with a request for comments. We received a written response from NYW officials on November 7, 2013.

In their response, NYW officials disagreed with the audit's findings and most of the recommendations. Furthermore, they maintain that

“the draft ‘audit’ (1) confused the legal and management relationship among the Authority, the Board, and DEP, (2) failed to comprehend that water and sewer charges are a lien on the property served and collectible upon transfer of the property, which renders a traditional corporate write-off policy inapplicable, (3) ignored the transformation of revenue collection through the installation of DEP’s automated meter reading (“AMR”) system . . . and, amazingly, (4) questioned common-place and prudent practices, such as debt defeasance to achieve lower interest payments and conservative planning to avoid shortfalls and the necessity of a mid-year rate increase.”

These representations by NYW officials about the audit are simply not credible. NYW officials present several arguments which attempt to refute the report's findings, but each argument presents either an irrelevant or unsupported conclusion, as noted in our detailed comments to NYW's response in the attached Appendix. In some cases, statements made are contradicted by NYW officials' own documents and appear to be factually inaccurate. As the response correctly points out, CIS has had major problems that were first highlighted in the FY 2008 Management Letter of the Independent Auditors. However, the significant concern is not that these issues were known as far back as FY 2008, but that these issues still have not been resolved. As noted, NYW hired a consultant in 2010 to resolve the CIS problems, but as of May 2013, the accounts receivable information generated by CIS is still unreliable.

Further, despite providing NYW officials with ample meeting opportunities to disprove our findings, NYW officials failed to provide relevant information that would allow us to form a basis for any substantial revision of the draft audit report. In contrast to NYW officials' complaint about each finding, NYW officials overlooked a salient message of our audit—that budget decisions such as cash flow projections and amounts set aside for debt defeasance must be reasonable and transparent to the public and currently are not. While we agree with NYW officials' assertion that planning for an annual surplus is prudent financial practice, we found that the actual expenses for debt defeasance were substantially higher than the budgeted amounts. Further, when comparing the surplus forecast at the time the water and sewer rates were established to the actual surplus, the actual surplus was substantially higher than originally forecasted. As shown in the chart below, if NYW had not allocated additional funds for debt defeasance, each year's surplus would have exceeded \$590 million. It further confirmed that NYW's cash flow projections might have overly estimated the water and sewer revenue needs.



<sup>‡</sup> Except for the actual surplus for Fiscal Year 2013, all data is obtained from NYW's annual "Public Information Regarding Water and Wastewater Rates" reports. The actual surplus data for Fiscal Year 2013 is obtained from NYW's "2013-6-30 Year-End Collection Data & Analyses" report and NYW's certified financial statements for Fiscal Year 2013.

As the audit report concludes, given the above discussions, water and sewer rates may have been set higher than necessary.

The full text of NYW's response is included as Addendum to this report. Our comments concerning the response are included as an Appendix, which precedes the Addendum.

## FINDINGS AND RECOMMENDATIONS

DEP did not maintain accurate and reliable accounts receivable data in the Customer Information System (CIS). Accordingly, given the heavy reliance on CIS data, NYW may be underestimating the collectability of accounts receivable—a factor that can affect the rate setting process. We attribute this problem to NYW's failure to establish a consistent and reasonable methodology to value accounts receivable and a lack of oversight over DEP operations.

In addition, we identified problems with DEP's procedures for billing and collecting revenue from customer accounts that led to at least \$15 million in foregone revenues during Fiscal Year 2012. As NYW is responsible for ensuring that the System has sufficient revenue to be "self-sustainable," ensuring that DEP collects all legitimate revenue is an important NYW function. However, there was no evidence that NYW was cognizant of DEP's problems in:

- properly assessing late payment charges,
- accurately maintaining customer account information, and
- monitoring accounts with significant outstanding balances.

In a related matter, City-owned properties operated by private entities, State-owned properties, and Housing Development Fund Corporation cooperatives owed the City \$27 million in delinquent charges as of June 30, 2012. Given that these properties are largely excluded from lien sales, DEP has limited options to enforce collection of these charges. Nevertheless, there was no evidence that NYW directed DEP to pursue alternative methods to collect these funds.

Some of NYW's underlying budget decisions used to establish water and sewer rates may not be based on reasonable assumptions. To ensure that the System meets debt coverage ratios expected by rating agencies, NYW budgets to ensure a surplus. However, the actual surplus for the audit period has exceeded the amount forecasted by 24 to 41 percent over the past four fiscal years. This leads us to believe NYW's cash flow projections might have overly estimated the water and sewer revenue needs.

These matters are discussed in detail in the following sections of this report.

### **Inadequate Oversight over the Revenue Reporting Process**

#### **Lack of Adequate Review of Accounts Receivable Data**

NYW did not independently review the accuracy and completeness of CIS data used to support accounts receivable. Specifically, the accounts receivable information reported in CIS is not integrated with NYW's Microsoft Dynamics accounting system. As a result, NYW relies on manual adjustments to determine its accounts receivable balance and related revenue adjustments prepared at year-end. Also, the CIS-generated reports do not contain the necessary level of detail for NYW to determine accurate accounts receivable balances. To mitigate these deficiencies, DEP extracts account information from CIS, which contains account status and detailed billing and payment data of customer accounts, and provides the information to NYW. Based on the information provided by DEP, NYW makes the necessary adjustments to the account receivable balances. However, our review found that NYW did not independently

review the data to ensure the information provided by DEP was accurately supported. As a result, NYW used incorrect data as follows:

- Frontage billing information that was used to adjust the accounts receivable balance was off by \$1 million because NYW officials relied on a lump sum figure provided by DEP without reviewing the underlying data. This error went unnoticed until we asked for the supporting documentation in April 2013.
- \$2.8 million of outstanding charges for approximately 1,700 inactive prior customers was incorrectly included in the extraction of active customer accounts that had not been paying for two years. It appears that NYW did not properly communicate with DEP to ensure data is properly extracted. Because these inactive accounts were not part of the accounts receivable recorded in the general ledger, NYW should not include the \$2.8 million when calculating the allowance for uncollectible accounts. Had NYW properly reviewed the extracted data, it would have detected the errors and avoided the overstatement of the allowance for uncollectible accounts.

Inaccurate account receivable balances may potentially affect NYW's judgment regarding projected revenue collection and proposed increases in water rates. Therefore, NYW should ensure that the information used is based on accurate and reliable data. Because NYW is responsible for ensuring the accuracy and reliability of the accounting information, it should establish the necessary controls to ensure data provided is accurate. Our review found no evidence that NYW did so. In addition, the independent certified public accounting firm engaged in NYW's financial statements audit found issues with the accuracy of the accounts receivable. As noted, the auditors could not find evidence that the adjustments in CIS were properly reviewed and approved.

### **Allowance for Uncollectible Accounts Not Accurately Determined**

Our review noted that CIS does not produce reliable aging of accounts receivable reports that can provide an accurate measure of the true accounts receivable balances. Therefore, NYW cannot assess the proper collectability of accounts receivable using the aging report generated by CIS. As an alternative, NYW uses a method based on historical percentages to estimate amounts deemed uncollectible. However, our review found that NYW's method is not reasonable and not properly supported. Further, NYW's practice results in an unsubstantiated large amount in the allowance for uncollectible account.

CIS generates aging reports that show the status of outstanding account balances. However, these aging reports are inaccurate because of DEP's manual practice of canceling the original bill and re-creating a new bill which causes a re-set to the outstanding account balance and a distortion of the aging report process (i.e., the date of the earlier bill is no longer reflected in the aging calculation and the aging starts from the date of the new bill). As a result, NYW is not able to properly assess the collectability of the outstanding charges using the aging reports. NYW uses an alternate method to estimate the allowance for uncollectible accounts (i.e., the estimate of the outstanding charges that are not expected to be paid). Every June 30, DEP extracts "no-pay" and "some-pay" account data from CIS. NYW uses this information and applies historical percentages to certain categories of receivables (e.g., 75 percent for the "no-pay" category, 45 percent for the "some-pay" category, and 8.5 percent for unbilled receivable.)<sup>3</sup> However, these historical percentages cannot be substantiated. As our review noted, NYW has

---

<sup>3</sup> "No-pay" accounts are those for which there have not been payments by the property owners in the last two years; "some-pay" accounts are those for which property owners have made some payments within the last two years.

not re-evaluated the percentages for at least 10 years. Similarly, we could not ascertain the reasonableness of the unbilled receivables (approximately \$295 million was reported in Fiscal Year 2012) because they were based on an outdated estimate.

Based on NYW's records, the allowance for uncollectible accounts increased from \$168 million in Fiscal Year 2008 to \$314 million in Fiscal Year 2012. Over the last five fiscal years, NYW estimated that amounts ranging from approximately 42 percent to 48 percent of outstanding billed receivables were uncollectible. Table I shows the percentage of the allowance for uncollectible accounts compared to the total accounts receivable billed in the last five fiscal years.

**Table I**  
Allowance for Uncollectible Accounts  
Compared to Total Billed Accounts  
Receivable

<b>Fiscal Year</b>	<b>Allowance for Uncollectible Accounts<sup>†</sup></b>	<b>Total Billed Accounts Receivable*</b>	<b>Percentage of Accounts Receivable</b>
2012	\$314 million	\$685 million	46 percent
2011	\$287 million	\$628 million	46 percent
2010	\$213 million	\$513 million	42 percent
2009	\$201 million	\$477 million	42 percent
2008	\$168 million	\$352 million	48 percent

<sup>†</sup> Excluded 8.5 percent of allowance for unbilled receivable.

\* Based on information obtained from NYW's financial statements that included receivables from upstate customers, which are not recorded in CIS.

However, NYW did not establish the allowance for uncollectible accounts based on relevant, sufficient, and reliable data. NYW should compare the prior allowance with the actual write-off amounts in order to assess and develop reliable estimates in the future. Our review found that the actual amounts written off as uncollectible in CIS for the past five years ranged from \$199,780 to \$41.79 million, which indicates that NYW wrote off less than 0.025 percent of the allowance estimated for uncollectible, which is inconsistent with its own estimates. The allowance for uncollectible accounts is used to determine the net realizable receivable value of accounts receivable. As a result, the collectability of accounts receivable may have been underestimated. Consequently, NYW's projections for total revenue collections and related assumptions may be misleading.

### **Lack of Consistent Accounting Methods**

NYW inconsistently applied different accounting methods to determine its water and sewer revenue—a practice that is inconsistent with Generally Accepted Accounting Principles.

Our review found that while CIS classifies outstanding water and sewer charges, late payment charges, and other miscellaneous charges as accounts receivable, NYW only recorded the outstanding water and sewer charges as accounts receivable in its general ledger. As a result, NYW excluded \$87 million of late payment charges and other miscellaneous charges from

accounts receivable and understated the interest revenue by \$6.5 million in Fiscal Year 2012. We also found that while NYW only recorded outstanding water and sewer charges in its accounts receivable, it included the outstanding late payment charges and other miscellaneous charges when estimating the allowance for uncollectible accounts, which caused an overstatement of the allowance for uncollectible accounts. In addition, while NYW established a high reserve for the uncollectible accounts, it only writes off accounts on a case-by-case basis. NYW argues that it does not write off these accounts because water and sewer charges are a lien on the property served, and it believes that the outstanding water and sewer charges can ultimately be collected.

## **Lack of Oversight over DEP Operations Resulted in at Least \$15 Million in Uncollected Revenue**

At least \$15 million went uncollected due to NYW's lack of oversight over DEP's billing and collection operation. Under the lease agreement, NYW retains DEP to handle billing and collection activities on its behalf. However, NYW did not ensure that DEP has the proper procedures to monitor customer information and related revenue activities.

### **DEP Failed to Bill \$1.3 Million in Late Payment Charges**

We found that late payment assessments for each June and July for the frontage accounts that maintain delinquent balances were not recorded in CIS. As a result, DEP failed to bill approximately \$1.3 million in late payment charges in June and July 2012. Frontage accounts are billed annually based on a fixed rate.<sup>4</sup> Bills are sent in May for the upcoming fiscal year (July 1 to June 30) and the bills are due on July 31.

To determine whether DEP properly assessed late payment charges on delinquent accounts, we randomly selected and reviewed 30 accounts with the highest account balances (10 of these accounts were frontage accounts) that had not been paid for two years. We found that DEP did not assess late payment charges for all 10 frontage accounts in June and July. Based on our review of the frontage account billing information, approximately 5,400 of the 36,000 frontage accounts maintained a prior outstanding balance in Fiscal Year 2012. The total outstanding water and sewer charge was approximately \$88 million. We estimated that DEP failed to bill approximately \$1.3 million in late payment charges (monthly interest rate of 0.75 percent for two months of \$88 million outstanding charges).

### **Inadequate Oversight over CIS Account Activities**

We could not find evidence that DEP took adequate measures to collect delinquent charges from customers or followed up with customers who did not comply with their payment agreements.<sup>5</sup> In addition, we found the following problems that limit DEP's ability to collect revenue effectively:

---

<sup>4</sup> Charges are based on the size of a building and the number of water-using fixtures. Total annual frontage billing is over \$800 million.

<sup>5</sup> When a customer is in delinquent status, the customer can sign a payment agreement with DEP to avoid a lien sale. Under the payment agreement, the customer is obligated to pay the fixed monthly installment plus the current outstanding water and sewer charges. If the customer does not pay the required amounts for six months, the payment agreement is defaulted.

- Original bills were chronically canceled and re-billed with new charges, a practice that would distort the aging of the accounts receivable.
- Customer accounts did not identify the name of the occupant/owner of the accounts. Our review of all the accounts with outstanding balances as of June 30, 2012, showed that at least 2,000 out of approximately 460,000 accounts list the account name as “owner” or “occupant.” One of these accounts was established in 1995 and has never been paid. A \$101,943 balance accumulated before the charges were written off in December 2012 due to property damage caused by Hurricane Sandy. Proper identification of the person or entity responsible for paying water and sewer charges is an important factor in increasing customer collection rates.
- Bills that were not delivered to customers because (1) they contained incorrect addresses or (2) DEP was unable to determine the ownership of the property. In these cases, water and sewer charges continued to accumulate.
- Old account balances were not written off after new accounts were established. For example, as a result of a previous Comptroller’s audit, released in January 1999, DEP created two new accounts for Vinco Marine Management, Inc. (Vinco), a concessionaire of the Department of Parks and Recreation.<sup>6</sup> Under normal circumstances, the charges in the old accounts should have been canceled. However, the old charges, totaling \$441,953 in two old accounts, were not canceled and were included in the calculation of the allowance for uncollectible accounts. DEP wrote off all the outstanding charges in one of the new accounts in October 2012 because “the concessionaire is gone.” Furthermore, DEP made a series of adjustments to the second new account in November 2012 and created a credit balance of \$11,017 (i.e., NYW owed Vinco \$11,017), even though no payments were ever applied to this account.

As also noted in a previous Comptroller’s audit report, *Audit Report on the Department of Environmental Protection Controls over the Billing of Water and Sewer Charges of Residential Properties* (MH08-069A), issued on February 10, 2009, DEP was cited for not properly monitoring customer account information, resulting in incorrect CIS data. In its response, DEP agreed to address the issues of incomplete data in CIS. However, we noticed that CIS still contains incomplete data and the issues have not been corrected.

### **Did Not Collect at Least \$14 Million in Revenue by Excluding Eligible Properties From Lien Sales**

Local Law 68 authorizes DEP to collect delinquent charges through lien sales. Liens are sold to a third-party trust at discounted rate. The trust hires collection agencies to collect the outstanding debts from the property owners. Our review found that DEP inappropriately excluded properties from lien sales. As a result, it did not collect at least \$14 million in water revenue.

Specifically, of the 325 delinquent accounts reviewed, we found 69 accounts, with a total outstanding balance of approximately \$22 million (21 percent of the outstanding charges reviewed) as of June 30, 2012, were eligible for lien sales but were excluded without proper justifications. For example, Brookdale Hospital is a privately-owned hospital and was dropped

<sup>6</sup> Audit Report on the License Fees Due from Vinco Marine Management, Inc. and Compliance with the License Agreement, Audit Number FM98-232A, issued on April 30, 1999.

from a lien sale because it is a hospital. However, the local laws do not exempt privately-owned hospitals from lien sale. In fact, we found the property tax lien of another hospital was sold in an August 2011 lien sale. As of April 2013, Brookdale still owes NYW \$7 million in outstanding water and sewer charges. According to DEP officials, they will exclude certain properties from a lien sale based on internal policy and local laws. However, it is unclear why Brookdale and the other hospital were not treated in the same manner.

Additionally, we found that DEP did not appropriately apply the local law related to one-family properties. Under the law, if a one-family property owner only owes water and sewer charges, the property is exempt from a lien sale. However, if real property tax is owed in addition to water and sewer charges, the property is subject to a lien sale. We reviewed the 2011 tax lien sale and selected a sample of 50 out of the 280 one-family properties that owed real property tax. Based on our analysis of the sample selected, we found that 28 properties (56 percent) also had outstanding water and sewer charges of at least \$1,000, which should have been included in the lien sale. But the lien portion of the water and sewer charges was excluded from the sale. Had DEP included the outstanding water and sewer charges in the lien sale of the 28 properties, NYW would have collected approximately \$160,000 to \$185,000 (65 to 75 percent of \$246,199—the total outstanding charges as of February 2011). As not all liens that are eligible for sales are included in a lien sale, NYW's operating cash decreases.

## **Inability to Enforce Collections Resulted in at Least \$27 million in Uncollected Revenue**

DEP is not able to enforce collection of \$27 million in delinquent charges from certain types of properties, such as City-owned properties that are operated by private entities, State-operated properties, and Housing Development Fund Corporation (HDFC) cooperatives. Although records reviewed did not identify these properties as exempt, DEP had difficulty collecting delinquent charges from these customers. Our review of the 325 delinquent accounts found that at least \$27 million (26 percent of the outstanding charges reviewed) was not collected from these properties. For example, Riverbank State Park owed \$8.9 million of water and sewer charges as of June 30, 2012. As the park is operated by New York State, DEP has no other means to enforce payment. For the HDFC cooperatives, local laws exclude these properties from lien sales; therefore, if HDFC cooperatives default payments, DEP has no alternative methods to enforce collection. We found that 59 HDFC cooperatives accounts owed approximately \$16.4 million as of June 30, 2012. NYW does not ensure that DEP reviews the final disposition or classification on these accounts. Yet DEP claims that it has few enforcement mechanisms because it cannot place these properties in lien sales. However, NYW should direct DEP to investigate the accounts and pursue other available methods of collection rather than rely only on the lien sales process.

## **Improper Review of Consultant Payments**

DEP paid \$377,658 to a consultant company for application development services that were rendered prior to the contract start date or for services that may not have pertained to the contract for enhancing its Online Water and Sewer Permitting System. This practice is inconsistent with the City's solicitation procedures, which require DEP to review the supporting documents submitted by the contractor. According to DEP officials, DEP engaged the consultant prior to the start date of the contract period to ensure that DEP's target date for the completion of critical applications would be met. We found that some of these services were provided four months before the consultant submitted a proposal to DEP. In addition, the contractor billed for two consultants who each "worked" 24 hours on a Saturday and provided

timesheets that were not signed by the consultant and/or approved by a DEP project manager. NYW should ensure that DEP properly reviews and approves all expenditures in accordance with the Comptroller's Directives.

## Deficiencies in Forecasting Cash Flow

Our review found that NYW consistently used assumptions that were too conservative when forecasting its future cash flows and determining the increases of upcoming water rates. In addition, NYW's practice of maintaining a high level of surplus added an extra burden to paying customers. To ensure that the system meets debt coverage ratios expected by rating agencies, NYW budgets to ensure a surplus. However, the actual surplus for the audit period has exceeded the amount forecasted over the past four fiscal years. In addition to the higher than initially forecasted actual surplus amounts, NYW substantially increased the amounts of debt defeasance expense.<sup>7</sup> As a result, NYW's cash flow projections might have overly estimated the water and sewer revenue needs.

From Fiscal Years 2010 to 2013, NYW's forecasted surplus ranged from \$241.6 million to \$451.8 million. However, in each of the four consecutive fiscal years, the amounts of the additional surplus were 24 to 41 percent greater than those that were originally forecasted—a situation that leads us to conclude that the annual forecasts were too conservative (i.e., revenue was underestimated and/or expenditures were overestimated). (See Table II.)

---

<sup>7</sup> Under the practice of "debt defeasance," an entity sets aside enough cash in an escrow account to pay off the bonds prior to or at maturity.

**Table II**NYW's Increasing Surplus

	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>
	<u>(in millions)</u>			
Cash carried forward from prior year (as of July 1) used for debt service payments in the subsequent year	\$299.8	\$245.0	\$376.9	\$497.5
Overpayment in operating and maintenance expenses from prior year (as of July 1) <sup>8</sup>	<u>13.3</u>	<u>88.0</u>	<u>36.3</u>	<u>62.4</u>
Total surplus carried forward from prior year after payments of debt service and operating expenses	<b>\$313.1</b>	<b>\$333.0</b>	<b>\$413.2</b>	<b>\$559.9</b>
Forecasted surplus amount in April that was used for debt service payments in the subsequent year	<b>\$241.6</b>	<b>\$261.7</b>	<b>\$292.4</b>	<b>\$451.8</b>
Actual surplus exceeded forecast	\$71.5	\$71.3	\$120.8	\$108.1

Our review also found that the actual surplus increased from \$313.1 million to \$559.9 million (79 percent) from Fiscal Years 2011 to 2013 because of NYW's request to maintain a higher surplus in order to enhance debt service coverage. In addition, NYW had substantially increased its budget for debt defeasance in each year after the proposed rate increase was enacted. (See Table III.)

**Table III**Amounts Allocated for Debt Defeasance

<b>Fiscal Year</b>	<b>Original Budget**</b>	<b>Final Budget</b>	<b>Increase Above Budget</b>
2011	\$80 million	\$260 million	\$180 million
2012	\$125 million	\$235 million	\$110 million
2013	\$150 million	\$250 million	\$100 million

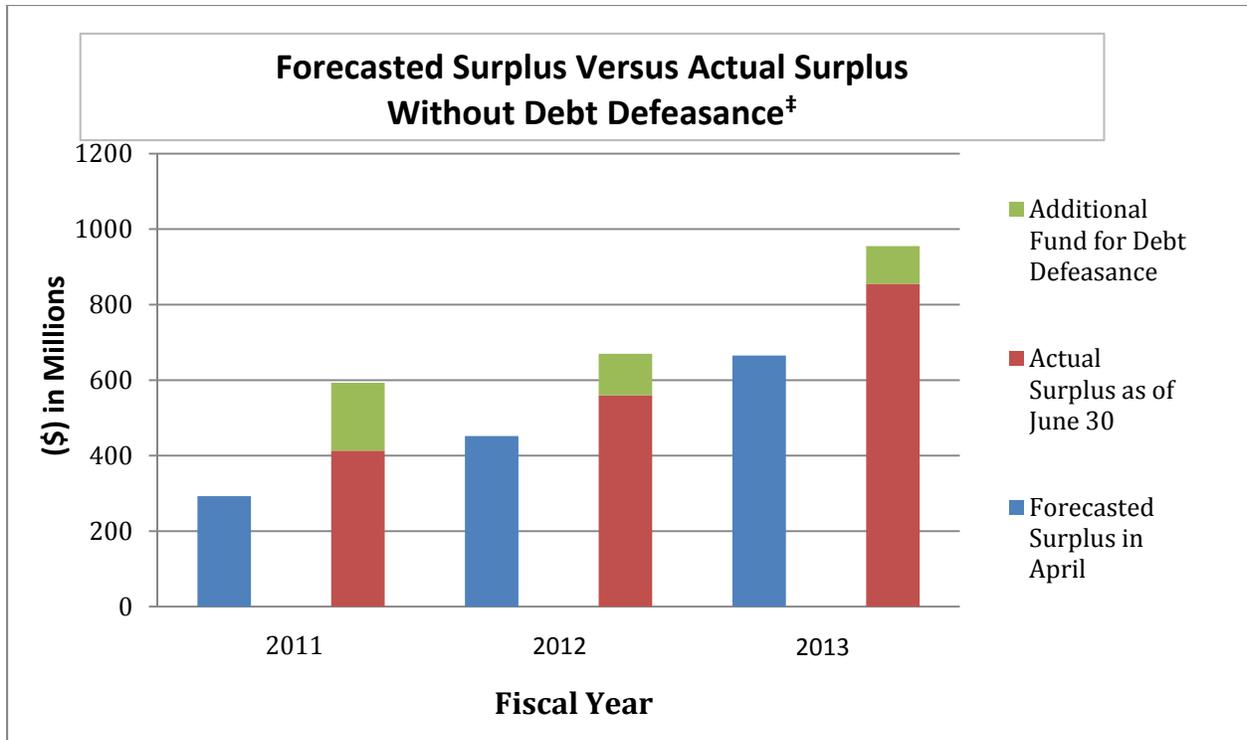
\*\* According to NYW's Forecasted Cash Flows and Summary of Assumptions, NYW can use the budget designated for cash-financed capital expenses for debt defeasance.

<sup>8</sup> NYW makes estimated monthly payments to the City for the System's operating and maintenance costs incurred by DEP and will reconcile the total payments and the actual cost by the end of each fiscal year. Any overpayments will be carried over to the next fiscal year as a credit.

Had NYW not consistently increased its allocations of funds for debt defeasance expenses, the surpluses would have been even greater. Even if NYW determined the debt defeasance was a beneficial expenditure for its operation, NYW should have properly budgeted and disclosed the debt amount in its rate report that was presented to the public prior to setting the new water rate. However, NYW did not include debt defeasance in the adopted budget. While we agree that it is necessary for NYW to maintain a certain level of surplus for its operation, NYW should take into consideration the necessity and appropriateness for budgeting a high level of surplus for its operation and allocating a substantial portion of the surplus for debt defeasance. When the surplus level is exceeding NYW's expectation, NYW should properly disclose this information. Instead of increasing its allocation of funds for debt defeasance, NYW should also consider using the extra funds for subsequent year's operation to offset the increase in water and sewer rates.

**NYW Response:** "Furthermore, the information presented in Table II of the draft document is incorrect in several respects. First, it shows the surplus amounts for FY 2009 through FY 2012, not FY 2010 through FY 2013 (as the columns are labeled). Second, the variances shown are incorrect; the third row, 'overpayment in operating and maintenance expenses,' is already incorporated in the second row, and it is not an additional amount. Third, in FY 2009 and FY 2010 (as well as in FY 2008), the System forewent the budgeted cash-financed capital and defeasance amounts in order to achieve a surplus that approximated projections, provided the debt service coverage ratios expected by the rating agencies and investors and allowed the System to meet its additional bonds test."

**Auditors' Comment:** The information in Table II is correctly presented. It showed that NYW officials did not carefully review the information presented in our report. First, the surpluses that were presented in the table were carried forward from the prior year. FY 2009 year-end surplus was carried over to FY 2010. Second, the "overpayment in operating and maintenance expenses" was not part of the cash carried forward to the next fiscal year as NYW claims. The "Carryforward Revenue" and "Credit for Prior Year Excess O&M Payment" were presented separately in NYW's "Public Information Regarding Water and Wastewater Rates" report. Third, even though NYW did not spend any amounts on debt defeasance or on cash-finance capital for Fiscal Years 2009 and 2010, the budget presented in the "Public Information Regarding Water and Wastewater Rates" did not support NYW's assertion. For example, in April 2008, NYW eliminated \$100 million that was budgeted for cash-finance capital and estimated the surplus ended Fiscal Year 2008 to be \$153.5 million. However, the actual surplus as of June 30, 2008 was \$245.2 million. NYW could have spent the \$100 million that was originally budgeted and could still have been able to achieve the projected surplus amount. It has been NYW's practice to use the budgeted amount for cash-financed capital on debt defeasance. However, the decision to change the amount spent on debt defeasance instead of cash-finance capital was not disclosed to the public. As shown in the chart below, if NYW had not allocated additional funds for debt defeasance, each year's surplus would have exceeded \$590 million. It further confirmed that NYW's cash flow projections might have overly estimated the water and sewer revenue needs.



† Except for the actual surplus for Fiscal Year 2013, all data is obtained from NYW's annual "Public Information Regarding Water and Wastewater Rates" reports. The actual surplus data for Fiscal Year 2013 is obtained from NYW's "2013-6-30 Year-End Collection Data & Analyses" report and NYW's certified financial statements for Fiscal Year 2013.

## Other Issue

In 2008, NYW and DEP began to develop a new CIS system to address several deficiencies in tracking, maintaining, and reporting water revenues. In 2010, NYW entered into a contract with International Business Machines, Corp. (IBM) to develop and implement a CIS system. However, as disclosed in NYW's independent CPA's management letter, IBM did not develop the new CIS system. Instead, IBM was working to upgrade the existing system "to address the material control weakness in the existing CIS, including the proper aging of accounts receivable." However, the problems remained unresolved. As of May 2013, IBM has received approximately \$17 million in fees, but has not yet upgraded the existing CIS. As noted in this report, given the heavy reliance on CIS data, NYW should take the necessary steps to ensure CIS problems are properly addressed.

## Recommendations

NYW should:

1. Establish internal control procedures to ensure all the System's revenue data is properly reviewed and reported. This would include procedures to conduct independent review of data extracted from CIS to ensure the extracted data is accurate and reliable.

**NYW Response:** "All data is extracted using software programs that were developed by independent information technology consultants and certified by DEP's quality assurance team."

**Auditors' Comment:** Even if the software programs were developed by independent information technology consultants and certified by DEP's quality assurance team, the programs still extract incorrect data from CIS. Because the accounts receivable data is critical to NYW's financial statements, it is NYW's responsibility to ensure the extracted data is accurate and reliable.

2. Re-evaluate the methodology used to calculate the allowance for uncollectible accounts and unbilled receivables.

**NYW Response:** "...the methodology currently in use has been developed in consultation with the City's and System's Independent Auditors, and it has been the methodology used in the System's audit that is annually reviewed by the Comptroller. The current policy is a conservative estimate of the allowance for uncollectible accounts based on the receivable amounts in accounts with specific payment histories. Periodically, the Authority does re-evaluate its methodology, and based on the improved collectability of receivables as a result of the recent completion of the AMR project and ensuing reduction in estimated bills, the Authority may be able to revise the methodology in consultation with the Independent Auditor."

**Auditors' Comment:** Although NYW's response states that it re-evaluates its methodology to calculate its allowance for uncollectible accounts periodically, we found no evidence to support such a claim. As noted, the balances for write-offs and the lien sales discounts did not support the amount reserved for the uncollectible accounts. Therefore, we stand by our conclusion that the allowance for uncollectible accounts was not accurately determined and reaffirm our recommendation for the methodology to be re-evaluated.

3. Ensure the data used to calculate the allowance for uncollectible accounts is relevant, sufficient, and reliable, so that the net realized value of the accounts receivable is reasonable and appropriate.

**NYW Response:** "...the Authority does not agree with the assumption on which this Recommendation is based. Water and sewer charges are a lien on the property served and will eventually be paid; as an example, of the \$2.8 million in charges noted in the draft document, approximately 3% of these charges have been paid since June 30, 2012. Additionally, the planned CIS upgrades are expected to facilitate increased data reliability."

**Auditors' Comment:** We disagree. Our assumption is based on standard techniques used to assess allowance for doubtful accounts estimates. As for the \$2.8 million, we cited these inactive accounts as exceptions because these

accounts were not included in the accounts receivable; therefore, NYW should not deduct any expenses associated with these accounts. Because NYW officials agree that the CIS data is not reliable and the majority of the outstanding charges can eventually be collected, they should consider using the direct write-off method, instead of using the allowance method.

4. Use consistent accounting methods when reporting revenue including receivables, late payment charges, and allowance for uncollectible accounts.

**NYW Response:** "...there is a clear explanation of why this Recommendation is invalid for the System's financial reporting. Principally, because the Board has offered interest-forgiveness programs in the past for customers who pledge to pay the remainder of their charges, the City and System's Independent Auditor has advised the Authority not to include LPC when reporting receivables. Additionally, because the Board is legally required to consider billing adjustments for up to four years from the initial bill date, the volume of cancellations and rebills has impacted the calculation of uncollectible accounts. Now that the number of estimated bills has decreased by 76%, the Board and DEP expect fewer bill adjustments going forward. If this is the case, the Authority, in consultation with the Independent Auditor, could consider a change to the accounting method affecting LPC and the allowance for uncollectible accounts."

**Auditors' Comment:** We are glad that NYW officials are considering changing their accounting method to record LPC. Using a consistent accounting method for both recording and reporting purposes as prescribed by GAAP will not contradict how NYW handles the LPC adjustments. It will only improve the accountability and transparency of its books and records as well as the financial presentation to the public.

5. Work with DEP to strengthen internal controls over the billing and collection process in order to increase collectability from customers.

**NYW Response:** "DEP is responsible for the billing and collection process, and in line with Strategy 11 of DEP's strategic plan, *Strategy 2011-2014*, DEP has diligently worked to increase revenue collection. DEP has aggressively pursued customers who do not pay, expanded its payment agreement program, and entered into a contract with a third-party collection agency that will report delinquent customers to the credit reporting agencies."

**Auditors' Comment:** Again, we found little evidence that NYW plays any active role in ensuring DEP's revenue collection function yields maximum results. Given that a core responsibility of NYW is to maintain the system on a self-sustainable basis, NYW should ensure it makes better efforts to help DEP maximize customers' revenue.

6. Ensure late payment charges are assessed for the frontage accounts that maintain delinquent balances.

**NYW Response:** "...we believe that the costs of upgrading CIS to facilitate this calculation outweigh the potential benefit, particularly since this situation will continue to be reduced as accounts convert to consumption-based billing."

**Auditors' Comment:** While NYW recognized the billing deficiency several years ago, the problem has existed since 1995. Had NYW properly monitored DEP's

operation, it would have discovered the deficiency earlier. It also showed that DEP did not have enough testing on the system before accepting it from the vendor. Therefore, all the forgone revenues that DEP did not bill and collect might well have exceeded the cost incurred to upgrade CIS. Rather than arbitrarily forgive LPC, NYW should conduct the proper cost–benefit analysis and address the problem.

7. Ensure DEP promptly follows up on delinquent accounts and customers who defaulted on their payment agreements.

**NYW Response:** “...DEP undertakes significant efforts to follow-up on delinquent accounts and collect from customers who have defaulted on their payment agreements. In the past two fiscal years, DEP has mailed over 1.7 million delinquency letters, placed nearly 1.7 million robocalls, fielded over 800,000 calls to the DEP call center, and conducted 46 lien sale outreach events. Customers who have defaulted on their payment agreements may also be included in the lien sale, if they own eligible properties.”

8. Ensure DEP establishes procedures to eliminate the practice of canceling the original bills and re-bill with new charges.

**NYW Response:** “The Board and DEP are legally required to review and appropriately adjust charges for up to four years from the date of issuance. Nonetheless, planned CIS functionality upgrades are expected to improve the accounts receivable aging issues, which are a result of cancelling and rebilling charges.”

**Auditors’ Comment:** Although NYW officials are expecting the upgraded CIS will improve the accounts receivable aging issue, these upgrades are still pending after five years.

9. Ensure DEP establishes procedures to identify ownership of the accounts.

**NYW Response:** “...DEP undertakes significant efforts to identify the ownership of accounts. In addition to providing customer registration forms for customers to revise their billing addresses, DEP also cross-references other City databases to ensure customer addresses are up to date.”

**Auditors’ Comment:** We note that DEP sent letters in August 2013 to all properties with an “unknown” owner/occupant, asking them to provide contact information.

10. Ensure DEP promptly follows up on undeliverable bills to customers.

**NYW Response:** “...DEP undertakes significant efforts to promptly follow-up on undeliverable bills. From January 1 through August 31, 2013, DEP has updated the ownership information for over 50,000 accounts using City information databases, as well as the Pitney Bowes Code-1 software and the Lexis Nexis Accurint system. According to the draft document, only 2,000 accounts (or 0.2% of the total number of accounts) remain in the queue.”

11. Ensure DEP conducts periodic reviews of CIS account activities.

**NYW Response:** “The premise of this Recommendation is false. DEP already has specialized staff dedicated to reviewing CIS account activities on a regular basis. Additional staff and consultants are also leveraged to review accounts as

a part of special projects. All of this work is an important part of achieving DEP's goal of fair and effective revenue collection."

**Auditors' Comment:** Again, we reiterate our recommendation. We found no evidence that such reviews are conducted despite NYW using additional specialized staff and consultants to accomplish this task. If periodic reviews are being conducted, we should not have found the problems that were cited in this report.

12. Ensure DEP carefully reviews the customer account history and includes all eligible properties in lien sales.

**NYW Response:** "...DEP included all eligible properties in the lien sales. Certain properties were validly excluded in accordance with established business rules. One such rule, which applied to the specific account cited in the draft document, is that all accounts with open billing disputes should be excluded; this is to avoid having to pay lien-sale-related penalties if such disputed charges are forgiven in court."

**Auditors' Comment:** Based on the exceptions cited in this report, we did not find many billing disputes mentioned in the accounts' trigger notes. We found no reason to justify the exclusion of many of the accounts in the lien sale. Specifically, with regard to the single family homes, the current law only excludes these properties from lien sale if they have valid exemptions, such as senior citizen or disabled homeowners' exemptions. Therefore, we stand by our finding.

13. Establish alternate methods to collect delinquent charges from City-owned properties that are operated by private entities, State-operated properties, and properties exempt from lien sales.

**NYW Response:** "The Recommendation cannot be implemented. DEP would welcome the ability to establish alternative methods by which it could collect delinquent charges from City-owned properties that are operated by private entities, State-operated properties, and properties exempt from lien sales. Unfortunately, this has not been legally feasible. As mentioned on page 10 above, the existence of such delinquent charges has long been public, with articles in multiple newspapers and in DEP's own testimony at City Council hearings."

**Auditors' Comment:** NYW cannot rely only on lien sales to collect outstanding water and sewer charges. NYW should establish alternate methods to collect delinquent charges from these entities.

14. Ensure DEP adheres to the City's solicitation process and properly reviews all supporting documents submitted by vendors and all invoices paid were appropriate.

**NYW Response:** "...NYW does not have authority over DEP's operations. Furthermore, as explained on page 11 above, the draft document's statements regarding the contract are erroneous. This contract was based on an existing OGS information technology services contract that had been competitively procured. Initially, the contractor worked at risk to ensure that DEP's target dates for the completion of critical applications would be met, and during this

period, two contractors worked through the weekend to resolve issues associated with the deployment of the WSPS infrastructure.”

**Auditors’ Comment:** It is disingenuous for NYW to state that it does not have authority over DEP’s operations while paying for 100 percent of the services provided. As specifically disclosed in NYW agreements and financial statements, NYW retains DEP to manage the physical operations of the System. Therefore, this relationship authorizes NYW to exercise oversight regarding DEP’s expenses.

Further, because NYW does not oversee DEP’s operations, it might not be aware that the contractor started working on the project months before an RFP was sent to the qualified OGS vendors.

15. Ensure cash flow assumptions are established based on data that is adequately substantiated to justify water and sewer rates before they are enacted.

**NYW Response:** “Cash flow assumptions are established based on data that is adequately substantiated and consistent with best practices of highly-rated municipal entities. Prior to the annual rate proposal and adoption, cash flow assumptions are thoroughly reviewed by the Board, the Authority, DEP, and the System’s rate consultant. Collectively, we strongly disagree with the assertion that the assumptions used in the forecasts were too conservative. As described in more detail on pages 11, 12 and 13 of our response, conservative forecasting and planned surpluses are necessary given the uncertainty and risks facing the System. This approach is a practice of all highly-rated municipal entities, and as a result, the Authority’s bonds currently have a AAA rating from S&P, Aa1 from Moody’s and AA+ from Fitch. These three major rating agencies have all noted the System’s financial stability and capable financial management in their reports to investors, and due to these strong credit ratings and the System’s stable financial operations, the Authority’s bonds are attractive to investors. As a result the Authority is able to achieve very low interest rates on its debt, helping to keep the rates charged to System customers as low as possible. Finally, in years when our financial results are better than expected, any surplus funds are carried forward to the following fiscal year and used to lower rates.”

**Auditors’ Comment:** Per Moody’s analysis, the credit ratings of NYW could go up if it has “a significant and sustained improvement in collection rates and sustained stability in consumption levels.” Maintaining a high level of surplus should not be the only avenue for NYW to maintain its credit rating.

## DETAILED SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope of this audit was July 1, 2010, to the present. Our audit scope did not cover the New York City Municipal Finance Authority's calculations of debt services requirements or amounts required to be deposited in the New York City Municipal Finance Authority's Expense Fund and Debt Service Reserve Fund and did not review engineering reports certifying the costs of water projects. Our review of these areas was limited to obtaining a general understanding of the relation and financial impact those areas may have on NYW's financial operations. Accordingly, our report did not comment on those financial and operating components.

To achieve our audit objectives, we reviewed and abstracted the lease agreement and financing agreement between the City and NYW. We also reviewed audited financial statements, management letters, applicable laws, and other relevant documents. To gain an understanding of the internal controls over the billing, collection, payment, recording, and reporting process, we interviewed relevant DEP and NYW personnel. We documented the results through written narratives, memoranda, and flowcharts.

We traced NYW's account balances from the general ledgers to the trial balances, and then to the audited financial statements to ascertain whether the financial transactions were properly reported. We also reviewed and analyzed the accounts receivable balance and the allowance for uncollectible accounts to determine whether the account receivables and allowance for uncollectible accounts were correctly reported.

To determine the accuracy of the billing information maintained in CIS, we randomly selected 50 customer accounts from the extracted billing files provided by DEP's Office of Information Technology (OIT) whose quarterly or monthly bills were sent between June 11, 2012, and June 15, 2012, and analyzed the bills. We also analyzed all eight of the customer accounts that were billed on an annual basis during the period June 11, 2012, to June 15, 2012.

To determine whether DEP's CIS billed its customers on a regular basis, we randomly selected one account from each borough and then based on the block and lot information of each selected account, we selected 19 additional accounts from the adjacent lots. We then reviewed the billing history of these 100 accounts for Fiscal Year 2012.

We also randomly selected 30 accounts from the highest 200 account balances of the no-pay category and reviewed the account history to determine whether DEP properly assessed the late payment charges for Fiscal Year 2012.

To determine whether DEP properly followed up on the delinquent accounts, we randomly selected 25 accounts from the 33,816 no-pay category accounts and 25 accounts from the 65,989 some-pay category accounts in Fiscal Year 2012 and reviewed the notes in CIS and identified the types of actions that DEP had taken to collect the delinquent charges from these 50 customers.

To determine whether customer payments were accurately recorded in CIS, we judgmentally selected the highest collection periods from January 23, 2012, to January 27, 2012, and June 11, 2012, to June 15, 2012, to sample. We compared the payment collection data from the daily bank deposit records to the CIS transaction history data.

To determine the water revenue was accurately recorded in the general ledger, we traced deposits from the daily banks' statements to NYW's monthly collection summary schedule and then to the general ledger for the months of July 2011, January 2012, and June 2012.

We also reviewed the adjusting journal entries for Fiscal Year 2012 to determine whether the revenue-related adjustments were made appropriately.

In addition, we reviewed DEP's expenditures maintained in the City's Financial Management System (FMS) and the allocation of overhead costs to NYW to determine whether the operation and maintenance expenditures and annual rent that NYW paid to the City were appropriate. To determine whether DEP operations and maintenance expenses were properly supported and justified, we judgmentally selected the 50 highest vouchers from FMS for Fiscal Year 2012 and reviewed the supporting documents. Within the 50 vouchers, we randomly selected and reviewed four contracts to determine whether the payments were made in accordance with the contracts terms.<sup>9</sup> Based on our review of the payments of the four contracts, we selected one additional contract and reviewed payments.

Furthermore, we randomly selected 50 properties from the Department of Finance's 2011 list of properties that were marked as "Lien Sale" for water and sewer with an amount over \$9,000. We traced the lien sales from the list to CIS to determine whether DEP accurately recorded the sales in CIS. We also reviewed 200 and 125 accounts with the highest account balances from the 33,816 accounts in no-pay and 65,989 accounts in some-pay categories, respectively, to determine whether these accounts were eligible for lien sales.<sup>10</sup> Of the 325 accounts (200 accounts from the no-pay category plus 125 accounts from the some-pay category) that were selected, we judgmentally selected 65 properties from based on the building classifications and determined the reasons for non-payment.

Lastly, we interviewed Amawalk consultants, who prepared the financial forecasts for NYW's rate increase proposals, in order to obtain an understanding of the methodology used to prepare the forecasts. We also reviewed and analyzed NYW's Public Information Regarding Water and Wastewater Rates reports for Fiscal Years 2010 to 2014, Summary of Assumptions as of May 21, 2010, May 16, 2011, and May 4, 2012, and underlying supporting analyses for the Summary of Assumptions as of May 4, 2012, to determine whether the proposed rate increases were justified.

---

<sup>9</sup> Of the 50 vouchers, there were only 25 vouchers that have contracts.

<sup>10</sup> The delinquent charges of the selected 325 accounts have greater possibility to be sold at lien sale.

## ***Discussion of NYW's Response***

### **General Response**

***NYW Response:*** NYW officials disagreed with the audit's findings and most of the recommendations. Furthermore, they maintain that "the draft 'audit' (1) confused the legal and management relationship among the Authority, the Board, and DEP, (2) failed to comprehend that water and sewer charges are a lien on the property served and collectible upon transfer of the property, which renders a traditional corporate write-off policy inapplicable, (3) ignored the transformation of revenue collection through the installation of DEP's automated meter reading ('AMR') system . . . and, amazingly, (4) questioned common-place and prudent practices, such as debt defeasance to achieve lower interest payments and conservative planning to avoid shortfalls and the necessity of a mid-year rate increase."

***Auditors' Comment:*** These representations by NYW officials about the audit are simply not credible. NYW officials present several arguments which attempt to refute the report's findings, but each argument presents either an irrelevant or unsupported conclusion. In some cases, statements made are contradicted by NYW officials' own documents and appear to be factually inaccurate. Further, despite providing NYW officials with ample meeting opportunities to disprove our findings, NYW officials failed to provide relevant information that would allow us to form a basis for any substantial revision of the draft audit report. In contrast to NYW officials' complaints about each finding, NYW officials overlooked a salient message of our audit—that budget decisions such as cash flow projections and amounts set aside for debt defeasance must be reasonable and transparent to the public and current are not. While we agree with NYW officials' assertion that planning for an annual surplus is prudent financial practice, we found that the actual expenses for debt defeasance expenses were substantially higher than the budgeted amounts. Further, when comparing the surplus forecast at the time the water and sewer rates were established to the actual surplus, the actual surplus was substantially higher than originally forecasted. In that regard, water and sewer rates may have been set higher than necessary.

### **Specific Response**

#### **Legal Structure**

***NYW Response:*** "The draft document incorrectly combines the Board and the Authority as 'NYW' in the draft document. The draft document repeatedly uses the term 'NYW' to refer to two separate legal entities; therefore, it is never clear which of the two legal entities is the target of the recommendations. The draft document compounds this confusion by using the term 'NYW', which is the trademark of the Authority and which could lead the reader to incorrectly conclude that the draft document's recommendations are all directed at the Authority. The draft document has also attributed to 'NYW' responsibilities that the New York City Charter assigns to the Comptroller. For example, at the bottom of page 5 and in the accompanying diagram on page 6, the draft document incorrectly attributes oversight responsibility for the System to 'NYW'. Neither the Board nor the Authority has oversight responsibility over the City's operation of the System."

***Auditors' Comment:*** NYW officials are being disingenuous when arguing that the draft document incorrectly attributes oversight responsibility for the System to "NYW." Despite being two separate legal entities, both the Authority and the Board are collectively responsible for the financial operations of the System. Specifically, these responsibilities include the collection of

revenues, maintenance of adequate books and records, and preparation of financial information as a basis for accurate and transparent public disclosure. If, as stated by NYW officials, neither the Board nor the Authority has oversight responsibility over the financial operations of the Water and Sewer System, who does? The law that empowers the Board and the Authority was specifically established for the welfare and benefit of the people of the City. Such power requires a level of fiscal accountability and independent oversight to be exercised by both the Board and the Authority with respect to managing the Water and Sewer System financial activities, including the determination of water rates. It is irresponsible for NYW officials to obscure the issues in an attempt to exonerate themselves from their primary responsibility to ensure the financial information used to determine the water rates is reasonable and transparent.

Contrary to NYW's interpretation, the responsibilities that the New York City Charter assigns to the Comptroller are distinct to those of the NYW's. As mandated in the New York City Charter, the Comptroller is responsible for conducting audits as a means of providing an independent oversight over the System's operations. NYW's attempt to deny its responsibilities is a further indication that NYW has failed to fulfill its purpose to be accountable for the welfare and the benefit of the people of the City.

### **Revenue Reporting**

**NYW Response:** "In 2008, the Independent Auditor first noted the accounts receivable issues of DEP's Customer Information System ("CIS") in its annual management report, and reference to this finding has been included in each annual management letter that was provided to the Comptroller for review as a member of the City Audit Committee, made available on the web, and provided to the Comptroller's audit team at the beginning of this process. In other words, the 'finding' was actually reported to the Comptroller by the System five years beforehand. Likewise, DEP and OMB management, the Joint Audit Committee of the Authority and Board, the City Audit Committee, and the board members of both the Authority and the Board are well aware of the existence of the CIS-related accounts receivable issues. Modifications to CIS that will resolve the Independent Auditor's and Comptroller's concerns are underway."

**Auditors' Comment:** As the response correctly points out, CIS has had major problems that were first highlighted in the FY 2008 Management Letter of the Independent Auditors. However, the significant concern is not that these issues were known as far back as FY 2008, but that these issues still have not been resolved. As noted, NYW hired a consultant in 2010 to resolve the CIS problems, but as of May 2013, the accounts receivable information generated by CIS still unreliable.

**NYW Response:** "The draft document errs when it states that \$2.8 million of outstanding charges on inactive accounts were incorrectly included in the data extraction of customers who had not paid in two years. There was no specification that the extraction was only for 'active customer accounts', and furthermore, such a classification for water and sewer charges is inapplicable, as these accounts had the potential to become 'active.' Water and sewer charges are a lien on the property served and will eventually be paid. For example, approximately 3% of the \$2.8 million in charges noted in the draft document has been paid since June 30, 2012. As there was an inconsistency with the inclusion of these charges in the CIS list of outstanding balances, going forward, that list will be adjusted to include these charges. Considering that some of these accounts are paying, the final document should not suggest that DEP's analysis of uncollectible accounts should exclude those accounts that have not paid in two years."

**Auditors' Comment:** NYW officials did not address this issue until we pointed it out during the course of our audit. We have no objection to include the inactive customer accounts in the calculation of the allowance for uncollectible accounts as long as the accounts receivable also include inactive customer accounts. This should be a decision made by NYW. However, we found that NYW used inconsistent criteria/business rules to extract information from CIS. As a result, NYW misstated either the accounts receivable or the allowance for uncollectible accounts.

**NYW Response:** "...As noted, there are system limitations in CIS with regards to calculating accounts receivable. Thus, the System's financial staff does not utilize the method of estimating the allowance for uncollectible accounts that is most commonly used. In consultation with the Independent Auditor, the System has adopted a conservative policy of estimating the allowance for uncollectible accounts based on the receivable amounts in accounts with specific payment histories. The draft document has no foundation for asserting that this basis of historical percentages is unreliable since long-term historical collection rate data are currently unavailable from CIS..."

To summarize, because billing and lien sale adjustments are not included in the write-off amounts recorded in CIS and cited in the draft document, the write-off amounts that are in CIS cannot be the sole determinant of a collection rate. Due to the current system limitations, CIS does not provide a history of overall collection rates over time; however, this will be included in the modifications to CIS."

**Auditors' Comment:** NYW's business rules appear to be in contradiction to its management practices. In its response, NYW presents contradicting arguments, which further confirms that NYW uses inconsistent accounting methods to record its accounts receivable. As discussed, NYW's practice of using the direct write-off method in CIS does not support the presentation of bad debt expenses on its financial statements. As a result, while NYW presents an assumption to the general public that a large portion of the outstanding accounts receivable is not collectable, its officials actually believe that the majority of the water and sewer charges recorded in CIS will eventually be collected. NYW officials also tried to argue that a portion of the allowance for uncollectible accounts was for billing adjustments. However, in its response, NYW stated that its billing accuracy has been significantly improved and the necessity to adjust customers' bills had been decreased. Further, because the balances for write-offs and the lien sales discount amounts were much less than the amount in the reserve for uncollectible accounts, we conclude that either the allowance for uncollectible accounts were overstated or a significant number of bills needed to be adjusted.

**NYW Response:** "The draft document asserts that the System's financial statements 'lack... consistent accounting methods'; however, the accounting methods utilized in preparing the System's financial statements were developed in consultation with the Independent Auditor and presented to the Comptroller every year at the City Audit Committee..."

**Auditors' Comment:** NYW's financial statements are the responsibility of NYW management. The City Audit Committee does not assume responsibility for NYW's accounting policies or the fairness in the financial presentation and disclosures.

### **DEP Operations and Oversight**

**NYW Response:** "With regards to the \$1.3 million of LPC that were not calculated on overdue frontage accounts for the months of June and July of 2013, CIS cannot bill LPC on the delinquent balance of these accounts during their annual bill period. When the Board and DEP

recognized this shortcoming of CIS several years ago and considered CIS's inability to bill such accounts for delinquent charges in June and July, it was determined that it was impossible to rectify this shortcoming of CIS without incurring significant programming costs or billing each account manually."

**Auditors' Comment:** While NYW states that it recognized the billing deficiency several years ago, the problem has existed since 1995. Had NYW properly monitored DEP's operation, it would have discovered the deficiency earlier. It also showed that DEP did not have enough testing on the system before accepting it from the vendor. Therefore, all the forgone revenues that DEP did not bill and collect might well have exceeded the cost incurred to upgrade CIS. Rather than arbitrarily forgive LPC, NYW should conduct the proper cost-benefit analysis and address the problem.

**NYW Response:** "The draft document's statement that the audit team 'could not find evidence that DEP took adequate measures to collect delinquent charges' is unfounded. DEP has undertaken significant efforts to collect water and sewer charges. DEP effectively communicates with delinquent customers, and its success rate has led to incremental average collections of 2.8% above the annual revenue plan for FY 2012 and FY 2013. In these past two fiscal years, DEP has mailed over 1.7 million delinquency letters (943,748 in FY 2012 and 782,380 in FY 2013), placed nearly 1.7 million robocalls (818,852 in FY 2012 and 879,337 in FY 2013), fielded over 800,000 calls to the DEP call center (407,785 in FY 2012 and 395,954 in FY 2013), and conducted 46 lien sale outreach events (19 in FY 2012 and 27 in FY 2013)..."

**Auditors' Comment:** Our review could not substantiate NYW's claims.

**NYW Response:** "The draft document's statement that eligible properties were excluded from the lien sale is inaccurate. DEP did not include \$14 million in delinquent charges in recent lien sales because those exclusions were valid and were based on established business rules. Customers who are technically eligible for the lien sale may be excluded for the following reasons: a series of estimated bills, an ongoing billing dispute or litigation, or a review of valid DOF exemptions, such as senior citizen or disabled homeowners' exemptions..."

The draft document wrongly asserts that DEP inappropriately excluded single-family homes during the 2011 lien sale. With regards to the eligibility of single-family homes, New York City Administrative Code Section 11-319 excludes the delinquent water charges of single-family homes from the lien sale..."

**Auditors' Comment:** Based on the exceptions cited in this report, we did not find many billing disputes mentioned in the accounts' trigger notes. We found no reason to justify the exclusion of many of the accounts in the lien sale. Specifically, with regard to the single family homes, the current law only excludes these properties from lien sale if they have valid exemptions, such as senior citizen or disabled homeowners' exemptions. Therefore, we stand by our finding.

### **Forecasting Cash Flow**

**NYW Response:** "The Board and the Authority strongly disagree with the assertions that the assumptions used in the annual cash flow forecasts were too conservative and that the annual surpluses were too high. The draft document also incorrectly implies that the practice of maintaining a high level of surplus adds an extra burden to customers. Annually, the System is subject to significant uncertainty and unplanned events, which have financial impacts. As is the practice of all highly-rated municipal enterprises and as recommended by the Government Finance Officers Association ('GFOA'), this uncertainty must be covered by adequate unallocated funds (e.g., surplus). In consultation with the Board and Authority's rate consultant,

the annual surplus is sized consistent with a close assessment of System risks and to provide the debt service coverage needed to maintain the System's credit ratings. In fact, not providing adequate surplus would weaken the System's financial stability and ultimately be counterproductive since it would undermine the System's ratings and result in higher interest costs on its debt."

**Auditors' Comment:** While we agree with NYW officials' assertion that planning for an annual surplus is prudent financial practice, we found that NYW underestimated the amount of surplus that would result from proposed rates and substantially increased its budget for debt defeasance expenses after the proposed rate increase was enacted, thereby leading to cash flow projections that might have overly estimated the water and sewer revenue needs. Further, when comparing the surplus forecast at the time the water and sewer rates were established to the actual surplus, the actual surplus was substantially higher than originally forecasted. In that regard, water and sewer rates may have been set higher than necessary.

**NYW Response:** "All of the rating agencies have noted the System's financial stability and capable financial management as a strength of the System, and this is reflected in the fact that the Authority is one of the highest rated water and sewer utilities in the U.S. with General Resolution ratings of AAA/Aa1/AA+ (Standard and Poor's/Moody's/Fitch). Further, Moody's has indicated that '...weakened financial ratios and debt service coverage would cause a downgrade'..."

**Auditors' Comment:** What the response is not disclosing is that Moody's also stated "A significant and sustained improvement in collection rates" can also make the rating go up. (Moody's Rating Action November 8, 2013) Maintaining a high level of surplus should not be the only avenue for NYW to maintain its credit rating.

**NYW Response:** "Furthermore, the information presented in Table II of the draft document is incorrect in several respects. First, it shows the surplus amounts for FY 2009 through FY 2012, not FY 2010 through FY 2013 (as the columns are labeled). Second, the variances shown are incorrect; the third row, 'overpayment in operating and maintenance expenses,' is already incorporated in the second row, and it is not an additional amount. Third, in FY 2009 and FY 2010 (as well as in FY 2008), the System forewent the budgeted cash-financed capital and defeasance amounts in order to achieve a surplus that approximated projections, provided the debt service coverage ratios expected by the rating agencies and investors and allowed the System to meet its additional bonds test."

**Auditors' Comment:** The information in Table II is correctly presented. It showed that NYW officials did not carefully review the information presented in our report. First, the surpluses that were presented in table were carried forward from prior year. FY 2009 year-end surplus was carried over to FY 2010. Second, the "overpayment in operating and maintenance expenses" was not part of the cash carried forward to the next fiscal year as NYW's claims. The "Carryforward Revenue" and "Credit for Prior Year Excess O&M Payment" were presented separately in NYW's "Public Information Regarding Water and Wastewater Rates" report. Third, even though NYW did not spend any amounts on debt defeasance or on cash-finance capital for Fiscal Years 2009 and 2010, the budget presented in the "Public Information Regarding Water and Wastewater Rates" did not support NYW's assertion. For example, in April 2008, NYW eliminated \$100 million that was budgeted for cash-finance capital and estimated the surplus ended Fiscal Year 2008 to be \$153.5 million. However, the actual surplus as of June 30, 2008 was \$245.2 million. NYW could have spent the \$100 million that was originally budgeted and could still have been able to achieve the projected surplus amount. We also note that it has been NYW's practice to use the budgeted amount for cash-financed capital on debt

defeasance. However, the decision to change the amount spent on debt defeasance instead of cash-finance capital was not disclosed to the public. It further confirmed that the financial information presented to the public might have overly estimated the water and sewer revenue needs.

November 7, 2013

Tina Kim  
Deputy Comptroller  
One Centre Street, Room 1100  
New York, NY 10007-2341

Re: Audit Report on the Financial and Operating Practices of the New York  
City Water and Sewer System and the Determination of Water Rates  
FN13-075A

Dear Ms. Kim:

Reference is made to the above mentioned draft report dated October 23, 2013.

Attached is a copy of our formal response. Please contact John Lento at (718) 595-3424 if you have any questions.

Sincerely,



Steven W. Lawitts  
Executive Director

Attachment

C: Carter H. Strickland, Jr., Commissioner, Department of Environmental Protection  
Michele Mark Levine, Comptroller, New York City Municipal Water Finance Authority  
Mathilde O. McLean, Treasurer, New York City Water Board  
John Lento, Audit Coordinator

## **Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A**

The preliminary and final draft documents have been reviewed with appropriate officers of the New York City Water Board (the “Board”), the New York City Municipal Water Finance Authority (the “Authority”) and the New York City Department of Environmental Protection (“DEP”). Unfortunately, the draft does not reflect the collective comments shared in the 90-minute exit conference with the audit team led by the Assistant Comptroller for Audit, the subsequent one-hour, face-to-face meeting with the Deputy Comptroller for Audit, or the 11 pages of detailed recommendations on how to fix the numerous incorrect statements in the preliminary draft document. Therefore, these general and specific responses are hereby submitted with a demand that the draft “audit” be amended to remove its significant and numerous deficiencies.

### **General Response**

The draft document is the product of more than a year of effort and approximately \$1 million of New York City (“City”) resources. Despite this allocation of resources, the draft “audit” (1) confused the legal and management relationship among the Authority, the Board, and DEP, (2) failed to comprehend that water and sewer charges are a lien on the property served and collectible upon transfer of the property, which renders a traditional corporate write-off policy inapplicable, (3) ignored the transformation of revenue collection through the installation of DEP’s automated meter reading (“AMR”) system, which has been installed on over 96% of accounts and reduced estimated bills from 18% to less than 4%, and, amazingly, (4) questioned common-place and prudent practices, such as debt defeasance to achieve lower interest payments and conservative planning to avoid shortfalls and the necessity of a mid-year rate increase.

In fact, as we told the audit team, as the inquiry purports to cover “the Determination of Water Rates”, it cannot be the subject of a technical audit. Rate-setting is a planning and budgeting process that relies on the data that is available 16 months before the end of the fiscal year (“FY”) for which the rates are being set. From this preliminary set of data, DEP, the Authority, OMB and the Board must use their best business judgment and operational experience to agree on a set of assumptions including interest rates on debt, water consumption, payment and collection rates, changes in wage and fringe rates, chemical costs and many other factors that cannot be predicted with certainty. The preliminary draft, which was sent to us in September, contained “findings” and “conclusions” that defied industry standard practices, let alone best practices, for prudent rate-setting in a major utility with industry-leading bond ratings. The recommendations in the preliminary draft, if actually implemented, would have violated the rate covenant of the water and wastewater system (the “System”) and plunged the System into a deficit, potentially violating the covenants on more than \$30 billion of outstanding bonds.

Furthermore, the few genuine findings contained in the draft document are either immaterial, representing less than 0.1% of the revenues of the System, or are simply a rehashing of issues that DEP first raised with the Comptroller five years ago in the City Audit Committee’s annual review of the System’s financials. The overreaching language in the draft document is disproportional to and unjustified by the immateriality of the audit findings.

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

We have expressed our concerns about this audit throughout the process, starting with the subject of the audit, “The Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates”, which is so broad as to be useless. Upon the commencement of the audit over a year ago, we raised this concern at the entrance conference with the audit team, citing that finances, operations and rate-setting theoretically cover *everything* that the System does.<sup>1</sup> The audit team nonetheless proceeded and has produced a purported “audit” that differs notably from preceding audits<sup>2</sup> in the use of overbroad language that not only compromises the impartiality of the exercise but also is clearly not meant to improve the water and sewer system.

Tellingly, the findings in the draft document conflict with earlier public statements by Deputy Comptrollers. For at least the last seven years, the Deputy Comptroller for Public Finance has partnered with the Authority, the Board, OMB and DEP and has been a full participant when the System has met with bond-rating agencies to review the Authority’s credit ratings. The Deputy Comptroller for Public Finance has extolled the virtues of the System to the rating agencies, citing the System’s strong management and financial stewardship, among other positive attributes. Additionally, the Deputy Comptroller for Audit sits on the City Audit Committee, along with several other members recommended by the Comptroller. In the four annual appearances of the System before the City Audit Committee during Comptroller John Liu’s

---

<sup>1</sup> Previous, successful audits by the Comptroller had much narrower, targeted scopes such as the accuracy of the automated meter reading system or the billing of water and sewer fees to hotels, e.g., *The Department of Environmental Protection’s Billing of Hotels for Water and Sewer Usage*, *The Department of Environmental Protection’s Monitoring of Prime Contracts with Subcontracting Goals Covered by Local Law 129*, *The Department of Environmental Protection’s Billing of Water and Sewer Usage for Properties Sold by the Economic Development Corporation*, and *The Reliability and Accuracy of the Automated Meter Reading Data Administered by the Department of Environmental Protection*.

<sup>2</sup> In previous audits published by Comptroller Liu and Deputy Comptroller Kim, the lead statements in each audit’s findings section were balanced and used language and tone that were appropriate to the size of the findings:

- *Audit Report on the Department of Environmental Protection’s Billing of Hotels for Water and Sewer Usage* – June 28, 2011 – “In general, DEP is properly billing hotels for water and sewer charges in accordance with its policies and procedures and the *New York City Water Board Water and Wastewater Rate Schedule*. However, we noted discrepancies regarding DEP’s billing and collection practices that resulted in 20 hotels that were not billed the correct amount because of problems with the meters on the property or meters that DEP did not know exist.”
- *Audit Report on the Department of Environmental Protection’s Monitoring of Prime Contracts with Subcontracting Goals Covered by Local Law 129* – June 1, 2012 – “The audit determined that DEP complied with provisions of LL129 with respect to monitoring prime contractors’ use of M/WBEs firms. However, weaknesses were identified in DEP’s monitoring activities that limit the agency’s ability to effectively assess its prime contractors’ overall compliance in attaining their M/WBE subcontracting goals.”
- *Audit Report on the Department of Environmental Protection’s Billing of Water and Sewer Usage for Properties Sold by the Economic Development Corporation* – May 15, 2013 – “EDC properly notifies DEP when property is sold and, in response, DEP generally updates its billing system. However, for two of 39 properties reviewed, DEP did not update its billing system.”
- *Audit Report on the Reliability and Accuracy of the Automated Meter Reading Data Administered by the Department of Environmental Protection* – October 4, 2013 – “We found that the AMR data transmission from the AMR device to the AMR database is accurate and secure. However, we found several water meter issues that could affect billing.”

tenure, the Comptroller’s representatives have never even asked a substantive question about the books of the System.

### **Specific Responses**

In the remainder of this response, we will address the points raised by the draft document in the order in which they appear in the draft.

**Legal Structure.** The draft document incorrectly combines the Board and the Authority as “NYW” in the draft document. The draft document repeatedly uses the term “NYW” to refer to two separate legal entities; therefore, it is never clear which of the two legal entities is the target of the recommendations. The draft document compounds this confusion by using the term “NYW”, which is the trademark of the Authority and which could lead the reader to incorrectly conclude that the draft document’s recommendations are all directed at the Authority. The draft document has also attributed to “NYW” responsibilities that the New York City Charter assigns to the Comptroller. For example, at the bottom of page 5 and in the accompanying diagram on page 6, the draft document incorrectly attributes oversight responsibility for the System to “NYW”. Neither the Board nor the Authority has oversight responsibility over the City’s operation of the System.

As we have explained on several occasions, there are multiple entities involved in providing water and sewer service to New Yorkers, each serving its own specific purpose. The System was established this way for a reason. Following the City’s financial difficulties in the 1970s, City officials showed foresight in their decision to petition the New York State Legislature to pass the New York State Public Authorities Law (“PAL”) – Article 5, Title 2-A, Sections 1045 and 1046, which establishes the three-part, bankruptcy-remote structure of the City’s water and wastewater system. The Board and the Authority are legally independent from the City and each other. The System is operated and maintained by the City through DEP, and the System is leased by the City to the Board. The Authority is responsible for issuing debt to fund capital investments in the System. Revenues from the operation of the System belong to the Board, so that, in the unlikely event of a City bankruptcy proceeding, the Board will retain the System Lease and revenues, and water and wastewater service can continue to be provided to New Yorkers. According to Section 1045-j of the PAL, the Board’s responsibility is to set the rates at a level that is sufficient to cover the expenses of the System and to disburse the collected revenue to the appropriate City agencies.<sup>3</sup> As further defined in Section 8.3 of the Lease, the Board is required to make payments for the System’s operating expenses as certified by City’s Director of Management and Budget, and these amounts are further certified by the System’s Consulting Engineer as “reasonable and appropriate”. As per Article 6 of the Lease, the only portion of the

---

<sup>3</sup> Public Authorities Law, Section 1045-j. “The water board shall establish, fix and revise, from time to time, fees, rates, rents or other charges for the use of, or services furnished, rendered or made available by, the sewerage system or water system... in such amount at least sufficient at all times so as to provide funds in an amount sufficient together with other revenues available to the board ... (i) to pay to the authority ... an amount sufficient for the purpose of paying the principal of and the interest on the outstanding notes or bonds of the authority as the same shall become due and payable ... (ii) to pay to the city, in accordance with the agreement, an amount sufficient for the purpose of paying the costs of administering, maintaining, repairing and operating and the cost of constructing capital improvements to the water system or sewerage system.”

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

City's operations over which the Board has any say are those of legal and billing services, as the Board "hires, retains and employs the City" to "provide billing services to the Board, including... maintenance of the books, records and accounts of such billing systems". In this Article 6 of the Lease, the Board is permitted to discontinue the use of the City's billing services with a two-year notice.

Furthermore, it is the Comptroller who has audit authority over the expenses of the City, including those funded through bonds issued by the Authority. Pursuant to Chapter 5, Section 93 of the City Charter, the "comptroller shall have power and it shall be his duty to audit all vouchers before payment." Likewise, it is also the responsibility of the Comptroller to "audit the operations and programs of city agencies to determine whether funds are being expended or utilized efficiently and economically." Pursuant to this Section of City Charter, it is the Comptroller who summarily reviews all DEP contracts and payments and approves all bond issuance by the Authority.

Page 6 of the draft document includes several other details that are overly simplified or incorrect, including that there is no "Revenue Fund" of the Board as shown in the flow chart. Also, the second paragraph omits the fact that the Comptroller is responsible for reviewing the annual certified financial statements of the Board and Authority and approving them in his role as a member of the City Audit Committee. The draft document also misstates the board structure of the Board and the Authority in the last two sentences in the second paragraph on page 6. The Authority's seven-member board is comprised of four *ex officio* members and three appointed members, only two of whom are appointed by the Mayor of New York City.

**Findings and Recommendations.** The first two paragraphs on page 10 of the draft document contain many accusations that are unfounded and even inflammatory. For example, in the second paragraph, the draft document states that \$15 million was uncollected during FY 2012. While \$1.3 million of this (or 0.04% of FY 2012 System revenue) may not have been properly billed, the draft document's assertion regarding the remaining \$14 million is incorrect, for the reasons stated below.

**Revenue Reporting.** Most of the issues related to accounts receivable reporting cited in the draft document have previously been noted by the City's and System's independent auditor, Deloitte & Touche (the "Independent Auditor"). In 2008, the Independent Auditor first noted the accounts receivable issues of DEP's Customer Information System ("CIS") in its annual management report, and reference to this finding has been included in each annual management letter that was provided to the Comptroller for review as a member of the City Audit Committee, made available on the web, and provided to the Comptroller's audit team at the beginning of this process. In other words, the "finding" was actually reported to the Comptroller by the System five years beforehand. Likewise, DEP and OMB management, the Joint Audit Committee of the Authority and Board, the City Audit Committee, and the board members of both the Authority and the Board are well aware of the existence of the CIS-related accounts receivable issues. Modifications to CIS that will resolve the Independent Auditor's and Comptroller's concerns are underway.

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

The draft document's statement that there is a "lack of adequate review of accounts receivable data" is a gross overstatement. First, there is no reason why detailed accounts receivable information must be in the Microsoft Dynamics accounting system ("MDAS"). The MDAS functions only as a general ledger; CIS functions as the subsidiary ledger. Second, while CIS currently has some system limitations, including the lack of an accurate aging of current accounts receivable balances and the unavailability of historic accounts receivable collection rates for estimating a reserve for uncollectible accounts, these limitations are fully understood by all of those involved in the finances of the System, and modifications to CIS that will provide this information are planned.

The draft document also incorrectly claims that accounts receivable balances are obtained via manual extractions from CIS. All data is extracted using software programs that were developed by independent information technology consultants and certified by DEP's quality assurance team. As reported in FY 2012, there was a \$1 million error in the adjustment of the accounts receivable balance due to a typographical error in the body of an email that should have been caught upon review; however, this \$1 million was approximately 0.12% of the correct numerical value, which was approximately \$836 million of frontage-based billing charges for FY 2012, and this typographical error did not affect the actual amount of receivables outstanding.

The draft document errs when it states that \$2.8 million of outstanding charges on inactive accounts were incorrectly included in the data extraction of customers who had not paid in two years. There was no specification that the extraction was only for "active customer accounts", and furthermore, such a classification for water and sewer charges is inapplicable, as these accounts had the potential to become "active." Water and sewer charges are a lien on the property served and will eventually be paid. For example, approximately 3% of the \$2.8 million in charges noted in the draft document has been paid since June 30, 2012. As there was an inconsistency with the inclusion of these charges in the CIS list of outstanding balances, going forward, that list will be adjusted to include these charges. Considering that some of these accounts are paying, the final document should not suggest that DEP's analysis of uncollectible accounts should exclude those accounts that have not paid in two years.

Furthermore, the accrual-based representation of accounts receivable on the financial statements has no bearing on the cash-based rate setting process. For rate setting, revenue projections are based on year-over-year cash collections, combined with consumption forecasts. If in fact accrual-based accounting was a factor in the rate-setting process, the revenue and expense graphs on pages 7 and 8 of the draft document, which include non-cash items such as depreciation, would be considered. As these graphs show a history of expenses that actually exceeded revenues in three of the four recent fiscal years, they could lead someone to conclude that the rates adopted should have been higher than they were, and they directly contradict the draft document's statement regarding cash flow surplus on pages 16 and 17.

Furthermore, the heading – "Allowance for Uncollectible Accounts Not Accurately Determined" – is inaccurate and inappropriate for a professional audit. As noted, there are system limitations in CIS with regards to calculating accounts receivable. Thus, the System's financial staff does not utilize the method of estimating the allowance for uncollectible accounts that is most commonly used. In consultation with the Independent Auditor, the System has adopted a

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

conservative policy of estimating the allowance for uncollectible accounts based on the receivable amounts in accounts with specific payment histories. The draft document has no foundation for asserting that this basis of historical percentages is unreliable since long-term historical collection rate data are currently unavailable from CIS. Basing the allowance for uncollectible accounts on actual available account history is a valid means of estimation that has been agreed to by the City's and the System's Independent Auditor. Again, DEP has planned modifications to CIS that would provide additional aging information.

With regards to accounts receivable write-offs, amounts are only written off if and when it is determined that there is not a valid lien against taxable real property for such accounts. For example, a write-off may occur in a specific instance as ordered by the courts as a result of litigation. Also, in FY 2008 and FY 2009, the Board authorized a Payment Incentive Program ("PIP"), whereby severely delinquent customers could realize a portion of debt relief through an account balance credit adjustment if the customer agreed to pay the balance owed. This program was successful in reducing a significant portion of debt that had been difficult to collect. The System does not follow a traditional corporate write-off policy because, as mentioned above, the water and sewer charges are a lien on the property served, and eventually there will be a property transfer and the ability to receive payment for outstanding charges. Therefore, the idea of using the dollar amount of only actual write-offs – and not other adjustments – as a proxy for the overall collectability of current accounts balances is nonsensical.

Other adjustments that are considered in the calculation of the System's allowance for uncollectible accounts are billing adjustments. According to the PAL Section 1045-g.4, the Board is required to review disputed charges that are up to four years old, and through such review, the Board may determine that billing adjustments are warranted. As an example, some adjustments are due to the availability of an actual meter reading where estimates had previously been used, or they may occur due to the application of various Board programs, such as the leak forgiveness program, which allows for a customer's unusually high charges to be partially forgiven upon the submission of a valid plumber's receipt that indicates the repair of an eligible leak. The amounts of such downward adjustments no longer exist as customer charges or receivables of the System; therefore, these amounts are not ultimately collectable and should be factored into the allowance for uncollectable amounts at year end.

Also, in the sale of water and sewer liens as part of the New York City Tax Lien Trust sale, all liens are sold for less than the full value of the related receivable; while as recorded in CIS, the account balances are "paid in full". Thus the margin, after adjusting for the City's residual payments, if any, is ultimately uncollectible. To summarize, because billing and lien sale adjustments are not included in the write-off amounts recorded in CIS and cited in the draft document, the write-off amounts that are in CIS cannot be the sole determinant of a collection rate. Due to the current system limitations, CIS does not provide a history of overall collection rates over time; however, this will be included in the modifications to CIS.

The draft document asserts that the System's financial statements "lack... consistent accounting methods"; however, the accounting methods utilized in preparing the System's financial statements were developed in consultation with the Independent Auditor and presented to the Comptroller every year at the City Audit Committee. For the presentation of late payment

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

charges (“LPC”), based on historical activity, we have adopted a conservative policy of recognizing LPC revenues only when they are realized. On several occasions in the past, such as with the PIP noted above, DEP and the Board have offered programs through which DEP will cancel some or all of an account’s LPC for customers who pay, or enter into a payment plan under which they agree to pay, their outstanding water and sewer charges. Also, when a bill is downwardly adjusted pursuant to a customer complaint, the LPC may be forgiven based on the rationale that a customer should not be penalized for not paying an incorrect bill. Because the impact and frequency of LPC adjustments make ultimate collectability not reasonably estimable, we do not recognize LPC as accounts receivable in the financial statements, and the Independent Auditor has concurred with this approach. Thus, in the calculation of the allowance for uncollectable accounts, while we consider the “no pay” accounts to be completely uncollectable, we only reserve for the portion estimated to be for utility charges (75%), not the accumulated LPC. Similarly, for the “some pay” accounts, which are estimated to be 50% collectable, we only reserve 45%; the difference is the estimated portion of the balances that is LPC, which are not reported in the first place.

With regards to miscellaneous charges, the System does not include such charges in the calculation of accounts receivable for the financial statements because most are paid in cash at the time of the transaction, such as upon the issuance of a permit. Additionally, these charges are usually not associated with the account of a specific property. Therefore, they are not lienable, and if they are not paid in cash at the time of the transaction, their collectability is not as assured as for regular water and sewer charges. Thus, in consultation with the Independent Auditor, the System adopted a conservative policy of recognizing miscellaneous charges only when they are paid.

**DEP Operations and Oversight.** In contrast to the draft document’s incorrect assertion, the Board legally lacks oversight over DEP operations. The Board’s only option with regards to DEP’s involvement in the System is to choose whether or not DEP shall provide billing services. Pursuant to Section 6.1 of the Lease, the Board retains DEP solely to provide billing and collections services; and the only remedy for the Board is to give notice to the City that it is terminating the use of the City’s billing services, as stated in Section 6.4 of the Lease. Therefore, the Board is not given oversight over DEP’s operations. However, we will address the draft document’s comments in regards to DEP’s performance below.

With regards to the \$1.3 million of LPC that were not calculated on overdue frontage accounts for the months of June and July of 2013, CIS cannot bill LPC on the delinquent balance of these accounts during their annual bill period. When the Board and DEP recognized this shortcoming of CIS several years ago and considered CIS’s inability to bill such accounts for delinquent charges in June and July, it was determined that it was impossible to rectify this shortcoming of CIS without incurring significant programming costs or billing each account manually. Furthermore, as LPC for the two months has historically been a miniscule portion of the value of the flat-rate billing, it was determined that the integrity of the flat-rate bills was more important than the ability to bill for LPC in these two months, and the accounts were not manually billed. To provide context for this omission in the example cited in the draft document, in May 2013, over \$836 million of new annual charges were billed to approximately 41,000 flat-rate accounts. \$88 million of delinquent charges were outstanding on these accounts at the time of the May

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

billing, and \$1.3 million in LPC (or 0.16% of the value of the flat-rate billing) was not charged to these accounts. A solution is to convert these accounts to consumption-based billing, and the Board has recently adopted policies that it expects will encourage this conversion. For example, in FY 2013, the Board introduced the Multiple-family Conservation Program, under which approximately 30,000 flat-rate accounts were converted from the “frontage” billing system to a per unit charge. These accounts are required to install meters and low-flow fixtures, and after completing these requirements, it is our expectation that many properties will review their consumption and convert to less expensive charges under meter-based billing. This conversion will mitigate the impact of this CIS deficiency. Additionally, going forward, the Board could force all delinquent flat-rate customers to convert to meter-based charges. However, over \$31 million (or 35%) of the \$88 million in delinquent charges cited in the draft document as the basis for this \$1.3 million in unbilled LPC, was attributable to Housing Development Fund Corporations (“HDFC”) properties, from which it is difficult to collect as noted on page 15 of the draft document and also addressed on page 10 below.

The draft document’s statement that the audit team “could not find evidence that DEP took adequate measures to collect delinquent charges” is unfounded. DEP has undertaken significant efforts to collect water and sewer charges. DEP effectively communicates with delinquent customers, and its success rate has led to incremental average collections of 2.8% above the annual revenue plan for FY 2012 and FY 2013. In these past two fiscal years, DEP has mailed over 1.7 million delinquency letters (943,748 in FY 2012 and 782,380 in FY 2013), placed nearly 1.7 million robocalls (818,852 in FY 2012 and 879,337 in FY 2013), fielded over 800,000 calls to the DEP call center (407,785 in FY 2012 and 395,954 in FY 2013), and conducted 46 lien sale outreach events (19 in FY 2012 and 27 in FY 2013). Additionally, customers placed on the lien sale list receive five separate letters before the sale date.

With respect to customers who do not comply with their payment agreements, DEP has a number of steps in place to encourage payment and collect outstanding charges. First, each customer who is two months behind on a payment agreement receives a call from a DEP representative reminding him/her to resolve the delinquency. Thereafter, each customer receives delinquency notices on a regular basis. Finally, all lien-sale-eligible accounts are added to the 90-day lien sale list if the customer has defaulted on a payment agreement. On average, such customer would have received at least four delinquency notices, several outbound collections calls, and four robocalls before having his/her lien sold. In FY 2013, the water and sewer charge liens of 44 customers who had defaulted on their payment agreements were sold in the lien sale.

DEP does not “chronically” cancel and rebill accounts with new charges. All adjustments are made in the normal course of business, pursuant to the PAL and Board policies. DEP must adjust incorrectly billed accounts. Regardless, as a result of the installation of DEP’s AMR system, the number of cancellations and rebills is declining. During September 2013, 96% of accounts billed on consumption-based charges were billed based on actual meter readings. Compared to the January 2009 baseline, this means that the number of estimated reads has declined by 76% as of September 2013, and the number of bills that are canceled and rebilled has been reduced by nearly 50%. We expect the number of cancellations and rebills to continue to decline, as they lag the realized reduction in estimated charges due to AMR. This has and will

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

continue to reduce the impact of CIS's inability to manage the effects of billing cancellations and rebilling on the System's accounts receivable.

With regards to bills addressed as owner/occupant, the lack of ownership information for 2,000 accounts, or 0.2% of the total, does not have a significant effect on DEP's collection efforts. Furthermore, applying names to such accounts is actively and aggressively pursued as a part of DEP's existing efforts, and from January 1 through August 31, 2013, DEP updated the ownership information for over 50,000 accounts. DEP has partnered with the City's Department of Finance ("DOF"), including the Office of the City Register, to obtain up-to-date owner information. On a weekly basis, two electronic files are submitted to DEP from DOF's Statement of Accounts and the Register's Automated City Register Information System ("ACRIS"), and DEP electronically compares the files, identifies the most recent data contained in each file, and includes the newest ownership and mailing information in CIS for the relevant accounts. Where the information in the files does not match or a mailing address has been updated more recently than a deed date, a manual review of the account is undertaken. For customers who are acquiring a property, DEP has incorporated a Customer Registration Form and affirmative mailing acknowledgement within the ACRIS online system, and DEP provides physical customer registration forms at DOF locations and for download from the DEP website. Additionally, if a bill is returned from the U.S. Postal Service as "undeliverable as addressed", the ownership and mailing information is researched using various tools, such as the Pitney Bowes Code-1 software and the Lexis Nexis Accurint system. As an additional measure, in August 2013, a letter was sent to all properties with an "unknown" owner/occupant, requesting that they provide DEP with their contact information on an enclosed customer registration form. Also, nearly 90% of all "unknown" accounts made a payment within the last six months, and the only specific example of an "owner" or "occupant" account that was incorrectly cited in the draft document as unpaid and "written off" was a mislabeled City-owned property that was adjusted to reflect that fact.

Regarding the Vinco Marine Management ("Vinco") accounts, the property concerned is owned by the City and was leased by Vinco until 2001. In a review of outstanding charges, DEP reviewed one Vinco account in 2012 and noted that Vinco had stopped leasing the property and was no longer the City's concessionaire. At this time, DEP did not review any additional, separate Vinco accounts; therefore, as noted in the draft document, DEP was inconsistent in how it handled the charges on the accounts associated with the previously leased property.

The draft document's statement that DEP has left the issues cited in the *Audit Report on the Department of Environmental Protection Controls over the Billing of Water and Sewer Charges of Residential Properties* unaddressed is simply incorrect. As noted above, DEP has made significant progress in attributing ownership to customer accounts in CIS. Over 50,000 accounts have been updated in the first eight months of 2013. Property transfers occur daily in New York City, and there will always be accounts that will be unidentified at a specific point in time. As described above, DEP has procedures in place to attribute such accounts to a new owner.

The draft document's statement that eligible properties were excluded from the lien sale is inaccurate. DEP did not include \$14 million in delinquent charges in recent lien sales because those exclusions were valid and were based on established business rules. Customers who are

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

technically eligible for the lien sale may be excluded for the following reasons: a series of estimated bills, an ongoing billing dispute or litigation, or a review of valid DOF exemptions, such as senior citizen or disabled homeowners' exemptions. Excluded customers can be placed in the next lien sale as soon as the issue has been resolved. One specific customer cited in the draft document is Brookdale Hospital. Brookdale Hospital was dropped from the lien sale in the spring of 2012 to facilitate an in-depth review of the charges. When Brookdale was included in the lien sale in the spring of 2013, Brookdale Hospital filed a billing dispute on May 3, 2013, and it was again dropped from the sale. Brookdale Hospital was not given special treatment; rather, excluding customers with an open billing dispute is a standard lien review practice for DEP, as the System is penalized for selling any liens that are subsequently forgiven in court.

The draft document wrongly asserts that DEP inappropriately excluded single-family homes during the 2011 lien sale. With regards to the eligibility of single-family homes, New York City Administrative Code Section 11-319 excludes the delinquent water charges of single-family homes from the lien sale:

- (ii) the sewer rents component, sewer surcharges component or water rents component of such tax lien may not be sold pursuant to this subdivision on any one family residential real property in class one . . .

Therefore, regardless of whether or not single-family homes were included in the City's tax lien sale, for the water and sewer portion of the lien sale, DEP appropriately applied the local law and, pursuant to such law, did not include the 28 properties or collect the \$185,000 of charges cited in the draft document.

Regarding the inclusion of single-family homes in the lien sale, on February 18, 2011, (then) Commissioner Holloway testified to the City Council on what was then the proposed legislation. As clearly stated by the Commissioner before the City Council:

A second serious concern with the bill is the exclusion of single-family homes from lien-sale eligibility.... Right now, DEP's only recourse to get these funds is to threaten water shut offs.... Including single family homes in the lien sale process is a much fairer, and certainly more economical way to collect unpaid water bills from New Yorkers who can afford to pay.

A full transcript of the Commissioner's testimony may be found on DEP's website: [http://www.nyc.gov/html/dep/html/testimony/lien\\_sale\\_02182011.shtml](http://www.nyc.gov/html/dep/html/testimony/lien_sale_02182011.shtml). DEP, the Board and the Authority would all welcome the Comptroller's active advocacy of the inclusion of the water and sewer charges of single-family homes in the lien sale authority.

**Collection Enforcement.** The information presented in the draft document regarding outstanding charges for HDFC and government-owned properties has long been public information that has been referenced in DEP's City Council hearings and written about in the press. With regards to the charges due on HDFC properties, the draft document concurs with a position that we have long supported. With regards to Riverbank State Park, the City has been involved in communication with the State for a number of years. Furthermore, the \$8.9 million cited in the draft document as outstanding charges for Riverbank State Park was based on billing estimates. Following billing adjustments pursuant to a recent meter reading, the outstanding charges are \$7.2 million as of November 2013.

**Consultant Payments.** DEP’s contract cited in the draft document was executed based on an existing New York State Office of General Services (“OGS”) information technology services contract. Overall, fifty-two firms with competitively-procured OGS contracts were solicited to work on the DEP scope, and only SVAM International Co. responded. In order to ensure that DEP’s target dates for the completion of critical applications would be met, DEP engaged this OGS contractor beginning on June 29, 2011, which was prior to the execution of the DEP contract. The contractor worked at risk for this initial period until the DEP contract officially commenced on November 30, 2011. During the weekend of October 1-2, 2011, which was while the contractor was working at risk, two contractors worked through the weekend to resolve issues associated with the deployment of the water and sewer permitting system (“WSPS”) infrastructure, including meeting significant coding requirements so that the WSPS could be deployed on the production server.

**Forecasting Cash Flow.** The Board and the Authority strongly disagree with the assertions that the assumptions used in the annual cash flow forecasts were too conservative and that the annual surpluses were too high. The draft document also incorrectly implies that the practice of maintaining a high level of surplus adds an extra burden to customers. Annually, the System is subject to significant uncertainty and unplanned events, which have financial impacts. As is the practice of all highly-rated municipal enterprises and as recommended by the Government Finance Officers Association (“GFOA”), this uncertainty must be covered by adequate unallocated funds (e.g., surplus). In consultation with the Board and Authority’s rate consultant, the annual surplus is sized consistent with a close assessment of System risks and to provide the debt service coverage needed to maintain the System’s credit ratings. In fact, not providing adequate surplus would weaken the System’s financial stability and ultimately be counterproductive since it would undermine the System’s ratings and result in higher interest costs on its debt.

All of the rating agencies have noted the System’s financial stability and capable financial management as a strength of the System, and this is reflected in the fact that the Authority is one of the highest rated water and sewer utilities in the U.S. with General Resolution ratings of AAA/Aa1/AA+ (Standard and Poor’s/Moody’s/Fitch). Further, Moody’s has indicated that “...weakened financial ratios and debt service coverage would cause a downgrade”. The attractiveness of the Authority’s bonds to investors is due to the strong credit ratings and stable financial operations, which ensure continued access to the capital markets at the lowest possible interest rates, helping to keep the rates charged to System customers as low as possible.

The draft document also takes issue with the fact that recent surpluses have been greater than originally forecast, from which it concludes that the forecasts were too conservative. The actual variations in surplus from the projected amounts in FY 2009 through FY 2012 were less than 3% of revenue. Given the uncertainties facing a System of this size and the uncertainties in financial forecasting, this variance is well within an acceptable range, and the size of the annual surplus is consistent with best practices. Furthermore, the information presented in Table II of the draft document is incorrect in several respects. First, it shows the surplus amounts for FY 2009 through FY 2012, not FY 2010 through FY 2013 (as the columns are labeled). Second, the variances shown are incorrect; the third row, “overpayment in operating and maintenance

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

expenses”, is already incorporated in the second row, and it is not an additional amount. Third, in FY 2009 and FY 2010 (as well as in FY 2008), the System forewent the budgeted cash-financed capital and defeasance amounts in order to achieve a surplus that approximated projections, provided the debt service coverage ratios expected by the rating agencies and investors and allowed the System to meet its additional bonds test.

The draft document’s shortsighted approach with regards to financial management and debt defeasance fails to recognize the beneficial rate impact that results from lower debt service after debt has been defeased. Annual budgeting for funds to use in financing capital projects with cash or in debt defeasance is a common industry best practice that is favored by all of the rating agencies since it improves the System’s balance sheet by lowering the debt load. Likewise, the Authority budgets for cash-financed capital construction each year and, based on financial analysis, will use those funds either to retire outstanding bonds through debt defeasance or to pay for System capital costs. Because of low interest rates in the bond markets from FY 2011 to FY 2013, it was financially advantageous for the Authority to apply the funds to pay-down high-coupon debt through debt defeasance rather than use them for cash-financed construction. Additionally, because of better than expected results from FY 2011 through FY 2013, the Authority was able to increase the debt defeasance shown in Table II. These increases obviously could not be known at the time of rate setting, which was 16 months prior to the end of the fiscal year when the debt defeasance was undertaken. Overall, the \$800 million of debt defeasance undertaken in FY 2011 through FY 2013 lowered the debt service costs paid by rate payers by \$954 million, including \$548 million during the 5-year forecast period of FY 2012 through FY 2016, which has and will lower rate increases in those years. Furthermore, as mentioned above, from FY 2008 to FY 2010 the amounts budgeted for cash-financed capital construction/debt defeasance were not used for those purposes because revenues were less than projected and funds were not available.

The draft document states that the System should consider using extra funds for the subsequent year’s operations to offset the increase in water and sewer rates. In fact, this is exactly what the System does and is required to do. If results are better than forecast, any remaining revenues at the end of each fiscal year stay within the system and are used in the next year to offset expenses and lower projected rate increases. Unfortunately, for several years ending with the rate setting for FY 2009, the adopted rate increases were incrementally higher each year than the rate projections had been during the previous year. Fortunately, the System was able to stop this trend during the rate setting for FY 2010. Since FY 2010, due to lower interest rates and reductions in federally mandated spending, the System has been able to adopt rates that have been lower than the projection made in the previous year. For FY 2010, the adopted rate increase was 12.9% (7.9% lower than the 14.0% projection from April 2008); for FY 2011, the adopted rate increase was 12.9% (9.8% lower than the 14.3% projection from April 2009); for FY 2012, the adopted rate increase was 7.5% (23.5% lower than the 9.8% projection from April 2010); and for FY 2013, the adopted rate increase was 7.0% (24.7% lower than the 9.3% projection from April 2011). To expand on the FY 2013 rate setting process, which was the last to occur during the scope of the audit, during FY 2012, the combination of debt service and rental payment savings, improved collections, an increase in the funds that had been carried forward from FY 2011 and other positive changes resulted in a \$315 million improvement in the financial forecast compared to the original projections. This result was used to benefit rate

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

payers, as it allowed the Board to adopt a rate increase of 7.0% for FY 2013 that was 24.7% lower than the 9.3% increase that had been projected in April 2011. Additionally, the System's most recent five-year projections from May 2013 assume that surpluses will be drawn down from the FY 2014 projection of \$567 million to \$508 million by FY 2017 in order to stabilize and lower rate increases during the forecast period.

With regards to the draft document's statement that the Board and the Authority should properly disclose the amount of surplus and the funds used for cash-financed capital construction or debt defeasance – that is exactly what we do in several different ways. This information is provided in the System's combined annual financial statements, which are available on the Board's and the Authority's websites, and in the Authority's bond official statements, more than 27 of which were posted on the Authority's website from FY 2010 through FY 2013. Each spring, the Board's booklet called *Public Information Regarding Water and Wastewater Rates* also shows the current year's cash defeasance and surplus projections along with a forecast of cash-financed capital construction for the ensuing fiscal year. This booklet is available on the Board's website and distributed at all rate hearings. Additionally, DEP's presentation to the Board and at each public rate hearing includes a comparison of the financial plan and present forecast of the current fiscal year; this presentation is also posted on the Board's website.

Conservative forecasting and planned surpluses are necessary and prudent to provide the needed liquidity given the risks in operating and maintaining the largest municipal water and sewer system in the country. This strong liquidity has been cited by all of the rating agencies as a credit strength. Our approach to rate setting ensures financial stability, strong credit ratings and continued access to the capital markets at the lowest possible interest cost, which benefits all system customers. Additionally, as explained above, when results are better than forecasted, revenues at the end of the year stay within the System and are used in the next year to lower rate increases.

**Other.** The draft document overstates the amount DEP has paid to IBM for improvements to the CIS system. As mentioned throughout this response, DEP has been engaged in rectifying the accounts receivable issues of CIS. Originally, IBM was retained to develop a new CIS, but as challenges arose, this scope was revised, and IBM was tasked with modifying the existing CIS. This scope modification also revised the fees to IBM to \$7 million. In October 2013, IBM's contract with DEP ended, and DEP obtained the code that had been developed by IBM. DEP is evaluating which components of IBM's work can be utilized and what level of additional work is required to achieve the project's goals.

**Recommendations.** The Recommendations are not properly reconciled with the allocation of various System responsibilities. To summarize the detailed explanation of System responsibilities that is provided on pages 3 and 4 of this response, the System is operated and maintained by DEP. The Board and the Authority are legally independent from the City and each other. The Authority is responsible for issuing debt to fund capital investments in the System. The Board's responsibility is to set the rates at a level that is sufficient to cover the expenses of the System and to disburse the collected revenue to the appropriate City agencies. The responsibility for revenue collections is assigned to DEP.

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

Processes are already in place for many of the items cited in the draft document, as has been explained above and summarized below. Additionally, many of the Recommendations are related to the processes of DEP over which “NYW” has no responsibility. Recommendations numbered one, five through 12 and 14 are related to collections and System operations; these tasks are the responsibility of DEP. Recommendations numbered two through four are related to the System’s preparation of the annual financial statements, and as supporting documents for the bond issuance, these items are the responsibility of the Authority. Recommendation number 13 is not within the power of the Board, the Authority or DEP. Recommendation number 15 is the collective responsibility of the Board, the Authority, and DEP.

Finally, in the Recommendations, as in the rest of the draft document, the draft document seems to confuse accounting principles with cash-based collections. Accounting principles have no effect on the rate-setting process or what the actual cash-based surplus will or will not be. Also, the draft document attempts to imply that all of the Recommendations made in the report will affect the customers of the System; however, many of these recommendations will not affect the System’s customers.

- 1. Establish internal control procedures to ensure all the System's revenue data is properly reviewed and reported. This would include procedures to conduct independent review of the data extracted from CIS to ensure the extracted data is accurate and reliable.*

As mentioned above on page 5, all data is extracted using software programs that were developed by independent information technology consultants and certified by DEP’s quality assurance team.

- 2. Re-evaluate the methodology used to calculate the allowance for uncollectable accounts and unbilled receivables.*

As mentioned above on pages 5 and 6, the methodology currently in use has been developed in consultation with the City’s and System’s Independent Auditor, and it has been the methodology used in the System’s audit that is annually reviewed by the Comptroller. The current policy is a conservative estimate of the allowance for uncollectible accounts based on the receivable amounts in accounts with specific payment histories. Periodically, the Authority does re-evaluate its methodology, and based on the improved collectability of receivables as a result of the recent completion of the AMR project and ensuing reduction in estimated bills, the Authority may be able to revise the methodology in consultation with the Independent Auditor.

- 3. Ensure the data used to calculate the allowance for uncollectible accounts is relevant, sufficient, and reliable, so that the net realized value of the accounts receivable is reasonable and appropriate.*

As mentioned above on page 5, the Authority does not agree with the assumption on which this Recommendation is based. Water and sewer charges are a lien on the property served and will eventually be paid; as an example, of the \$2.8 million in charges noted in the draft

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

document, approximately 3% of these charges have been paid since June 30, 2012. Additionally, the planned CIS upgrades are expected to facilitate increased data reliability.

4. *Use consistent accounting methods when reporting revenue including receivables, late payment charges, and allowance for uncollectable accounts.*

On pages 6 and 7 above, there is a clear explanation of why this Recommendation is invalid for the System's financial reporting. Principally, because the Board has offered interest-forgiveness programs in the past for customers who pledge to pay the remainder of their charges, the City and System's Independent Auditor has advised the Authority not to include LPC when reporting receivables. Additionally, because the Board is legally required to consider billing adjustments for up to four years from the initial bill date, the volume of cancellations and rebills has impacted the calculation of uncollectable accounts. Now that the number of estimated bills has decreased by 76%, the Board and DEP expect fewer bill adjustments going forward. If this is the case, the Authority, in consultation with the Independent Auditor, could consider a change to the accounting method affecting LPC and the allowance for uncollectible accounts.

5. *Work with DEP to strengthen internal controls over the billing and collection process in order to increase collectability from customers.*

DEP is responsible for the billing and collection process, and in line with Strategy 11 of DEP's strategic plan, *Strategy 2011-2014*, DEP has diligently worked to increase revenue collection. DEP has aggressively pursued customers who do not pay, expanded its payment agreement program, and entered into a contract with a third-party collection agency that will report delinquent customers to the credit reporting agencies.

6. *Ensure late payment charges are assessed for the frontage accounts that maintain delinquent balances.*

As mentioned on pages 7 and 8 above, we believe that the costs of upgrading CIS to facilitate this calculation outweigh the potential benefit, particularly since this situation will continue to be reduced as accounts convert to consumption-based billing.

7. *Ensure DEP promptly follows up on delinquent accounts and customers who defaulted on their payment agreements.*

As described above on page 8, DEP undertakes significant efforts to follow-up on delinquent accounts and collect from customers who have defaulted on their payment agreements. In the past two fiscal years, DEP has mailed over 1.7 million delinquency letters, placed nearly 1.7 million robocalls, fielded over 800,000 calls to the DEP call center, and conducted 46 lien sale outreach events. Customers who have defaulted on their payment agreements may also be included in the lien sale, if they own eligible properties.

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

8. *Ensure DEP establishes procedures to eliminate the practice of canceling the original bills and re-bill with new charges.*

As mentioned on pages 6 and 8 above, the Board and DEP are legally required to review and appropriately adjust charges for up to four years from the date of issuance. Nonetheless, planned CIS functionality upgrades are expected to improve the accounts receivable aging issues, which are a result of cancelling and rebilling charges.

9. *Ensure DEP establishes procedures to identify ownership of the accounts.*

As noted on page 9 above, DEP undertakes significant efforts to identify the ownership of accounts. In addition to providing customer registration forms for customers to revise their billing addresses, DEP also cross-references other City databases to ensure customer addresses are up to date.

10. *Ensure DEP promptly follows up on undeliverable bills to customers.*

As noted on page 9 above, DEP undertakes significant efforts to promptly follow-up on undeliverable bills. From January 1 through August 31, 2013, DEP has updated the ownership information for over 50,000 accounts using City information databases, as well as the Pitney Bowes Code-1 software and the Lexis Nexis Accurint system. According to the draft document, only 2,000 accounts (or 0.2% of the total number of accounts) remain in the queue.

11. *Ensure DEP conducts periodic reviews of CIS account activities.*

The premise of this Recommendation is false. DEP already has specialized staff dedicated to reviewing CIS account activities on a regular basis. Additional staff and consultants are also leveraged to review accounts as a part of special projects. All of this work is an important part of achieving DEP's goal of fair and effective revenue collection.

12. *Ensure DEP carefully reviews the customer account history and includes all eligible properties in lien sales.*

As stated on pages 9 and 10 above, DEP included all eligible properties in the lien sales. Certain properties were validly excluded in accordance with established business rules. One such rule, which applied to the specific account cited in the draft document, is that all accounts with open billing disputes should be excluded; this is to avoid having to pay lien-sale-related penalties if such disputed charges are forgiven in court.

13. *Establish alternate methods to collect delinquent charges from City-owned properties that are operated by private entities, State-operated properties, and properties exempt from lien sales.*

The Recommendation cannot be implemented. DEP would welcome the ability to establish alternative methods by which it could collect delinquent charges from City-owned properties

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

that are operated by private entities, State-operated properties, and properties exempt from lien sales. Unfortunately, this has not been legally feasible. As mentioned on page 10 above, the existence of such delinquent charges has long been public, with articles in multiple newspapers and in DEP's own testimony at City Council hearings.

*14. Ensure DEP adheres to the City's solicitation process and properly reviews all supporting documents submitted by the vendors and that all invoices paid were appropriate.*

As mentioned throughout this response, "NYW" does not have authority over DEP's operations. Furthermore, as explained on page 11 above, the draft document's statements regarding the contract are erroneous. This contract was based on an existing OGS information technology services contract that had been competitively procured. Initially, the contractor worked at risk to ensure that DEP's target dates for the completion of critical applications would be met, and during this period, two contractors worked through the weekend to resolve issues associated with the deployment of the WSPS infrastructure.

*15. Ensure cash flow assumptions are established based on data that is adequately substantiated to justify water and sewer rates before they are enacted.*

Cash flow assumptions are established based on data that is adequately substantiated and consistent with best practices of highly-rated municipal entities. Prior to the annual rate proposal and adoption, cash flow assumptions are thoroughly reviewed by the Board, the Authority, DEP, and the System's rate consultant. Collectively, we strongly disagree with the assertion that the assumptions used in the forecasts were too conservative. As described in more detail on pages 11, 12 and 13 of our response, conservative forecasting and planned surpluses are necessary given the uncertainty and risks facing the System. This approach is a practice of all highly-rated municipal entities, and as a result, the Authority's bonds currently have a AAA rating from S&P, Aa1 from Moody's and AA+ from Fitch. These three major rating agencies have all noted the System's financial stability and capable financial management in their reports to investors, and due to these strong credit ratings and the System's stable financial operations, the Authority's bonds are attractive to investors. As a result the Authority is able to achieve very low interest rates on its debt, helping to keep the rates charged to System customers as low as possible. Finally, in years when our financial results are better than expected, any surplus funds are carried forward to the following fiscal year and used to lower rates.

### **Conclusion**

As detailed in this response, many of the draft document's assumptions and conclusions are inaccurate and unsubstantiated. The Board, the Authority, and DEP have been diligent in their respective roles related to the System, and the "audit" has provided little affirmative, significant evidence to the contrary. Furthermore, the fiscally prudent strategy applied in the System's rate setting process has benefitted customers. In FY 2014, debt service is projected to be \$1.7 billion, accounting for over 40% of the System's costs. Any change in ratings or bond market acceptance of the Authority's debt would dramatically harm the System's financial position and increase the debt service costs. Accurate financial projections and stable account balances have

*Response to the Audit Report on the Financial and Operating Practices of the New York City Water and Sewer System and the Determination of Water Rates – FN13-075A*

satisfied the rating agencies and investors who hold our \$30 billion of outstanding debt. The reserves on hand have also enabled DEP to respond to emergencies such as the North River fire, Hurricane Irene, and Hurricane Sandy and to incidents such as the labor settlements required by the Comptroller; for example the Local 1320 and Local 3 settlements in FY 2010 cost the System over \$250 million.

Adequately funding the System is about ensuring the delivery of water and the treatment of wastewater for New Yorkers. With respect to this vital task, the Board, the Authority and DEP have all upheld their responsibilities and are aggressively addressing the financial challenges of the System each day.