



**Sufficiency Review of the  
Reasonableness of the District of  
Columbia Water and Sewer Authority's  
(DC Water) Fiscal Year 2013 Revenue  
Estimate totaling \$447,479,008**

June 24, 2013

**Audit Team:**

Toya Murphy, Auditor in Charge  
Patrick McCray, Senior Financial Auditor  
Amy Wu, Financial Auditor

A Report by the Office of the District of Columbia Auditor  
Yolanda Branche, D.C. Auditor

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## **Acknowledgements**

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The D.C. Auditor (Auditor) would like to thank the District of Columbia Water and Sewer Authority's (DC Water) staff from the following departments: Finance and Budget, General Counsel, Customer Service, Risk Management, and the General Manager for their assistance and cooperation during the attestation engagement.

## **Agency's Acknowledgements**

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DC Water reported the following agency accomplishments:

- In March 2012, the Authority successfully issued \$440.6 million of subordinate lien public utility revenue bonds. The bonds, including original issue premiums, were used to fund approximately \$302 million in new capital projects and to advance-refund \$176.2 of outstanding 2003 subordinate lien revenue bonds.
- The Authority contributed \$11.3 million to the rate stabilization fund at the end of fiscal year 2012, raising the balance to \$28 million. The rate stabilization fund will be used in the future to smooth out peak rate increases at the Authority's discretion and in accordance with the Board's policy of reliable and predictable rate increases.
- On July 18, 2012, DC Water celebrated 75 years of providing the region with the highest levels of water treatment and bringing the world innovative research that influences treatment solutions around the globe.

## **Introduction**

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In a letter dated January 15, 2013, the General Manager of DC Water informed the Auditor that DC Water planned to issue bonds. The letter provided that the purpose of the bonds would be to finance a portion of DC Water's Fiscal Year (FY) 2013 and FY 2014 capital improvement budget. D.C. Code § 34-2202.09(h), provides that prior to the issuance of any new debt, DC Water is required to obtain an expert study and analysis to support its revenue certification and certify to the Auditor that DC Water's revenues are sufficient to pay operating costs, debt services on outstanding and proposed bonds, and other obligations.

This report provides the Auditor's analysis of the reasonableness of DC Water's FY 2013, \$447,479,008 revenue estimate to pay its costs, debt service on outstanding and proposed bonds, and other obligations.

## **Objectives, Scope and Methodology**

### **Audit Objective**

The objective of this attestation review was to determine whether DC Water's FY 2013 \$447.48 million revenue estimate (as provided by DC Water and supported by an expert study and analysis) was sufficient to cover the following: (1) DC Water's FY 2013 costs, (2) the principal, interest, and other requirements relating to proposed notes and outstanding revenue bonds; and (3) debt service payments and transfers on bonds as the payments become due and payable.

### **Audit Scope**

The attestation review covers FY 2013, October 1, 2012 through September 30, 2013.

### **Audit Methodology**

To meet the attestation objective the Auditor reviewed and analyzed the following:

- DC Water's Operating Budgets;
- DC Water's Comprehensive Annual Financial Reports for FY 2009 through 2012;
- Financial Statements and Independent Auditor's Report for Years Ended September 30, 2011 and September 30, 2012;
- Expert Study and Analysis completed by Amawalk Consulting Group, LLC;
- Minutes of the Board of Directors (Board) and Finance Committee meetings;
- Board Resolutions;
- DC Water's 10-year Financial Plan; and
- DC Water's FY 2013 financial data.

We also conducted interviews with key DC Water officials and Amawalk Consulting Group, LLC representatives.

## **Auditor's Responsibilities Regarding DC Water's Borrowing of Money and Incurring of Debt**

D.C. Code § 34-2202.09(h) states that:

During each fiscal year in which debt service on the proposed bonds and outstanding revenue bonds issued by the Authority, and the transfer provided in § 34-2202.07(f) becomes due and payable, the Authority may not issue bonds, notes, or other obligations or borrow money unless the Authority first certifies, to the reasonable satisfaction of the District of Columbia Auditor, that the revenues of the Authority are sufficient to pay its costs, the principal of and interest on and other requirements pertaining to the proposed bonds and outstanding revenue bonds issued by the Authority, and amounts equal to the debt service payments on District general obligation bonds issued by the District prior to October 1, 1996, which financed Department of Public Works, Water and Sewer Utility Administration capital projects, as such bonds and transfers become due and payable. The Authority's certification shall be supported by expert study and analysis.

### **Auditor's Determination of Revenue Reasonableness**

DC Water's revenue estimate was based on information that can and often changes rapidly. For example, an unforeseen national or local event can result in significant changes to DC Water's certified revenue estimate. However, at the time of our review, we believe that DC Water's FY 2013 revenue estimate of \$447.48 million was reasonable.

This sufficiency review was conducted in accordance with standards applicable to attestation engagements contained in Government Auditing Standards issued by the Comptroller General of the United States. Consistent with these standards, the Auditor's review included, on a test basis, a review of evidence supporting DC Water's FY 2013 revenue estimate. The Auditor believes the procedures used in conducting this review provided the proper framework for assessing the reasonableness of DC Water's FY 2013 revenue estimate.

## Background

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DC Water's mission is to "[e]xceed expectations by providing high quality water services in a safe, environmentally friendly, and efficient manner."

To accomplish its mission, DC Water provides retail water and wastewater services to approximately 600,000 people in the District. Additionally, DC Water provides wholesale wastewater conveyance and treatment to approximately 1.6 million people in Prince George's County and Montgomery County, Maryland; and Fairfax County and Loudoun County, Virginia. These jurisdictions are collectively referred to as the "User Jurisdictions."

DC Water provides wholesale customer services in accordance with the following agreements: (1) Intermunicipal Agreements; (2) Potomac Interceptor Agreement; and (3) Loudoun County Sanitation Authority Agreement. These agreements provide for DC Water's recovery of costs associated with providing retail water and wastewater conveyance and treatment services.

DC Water is governed by DC Water's Board of Directors (Board), which consists of 11 principal and 11 alternate members. Each member is appointed for a staggered four-year term. The Mayor, with the advice and consent of the Council, appoints six principal members to the Board to represent the District. The Mayor, with recommendations from User Jurisdictions, also appoints the remaining five principal members to represent the User Jurisdictions (two from Prince George's County and Montgomery County in Maryland; and one from Fairfax County, Virginia). DC Water's daily operations are managed by a General Manager who is appointed by the Board.

## **DC Water and Its Relationship to the District**

DC Water has the following two Memoranda of Understanding (MOU) with the District's Chief Financial Officer (CFO); Payment in Lieu of Taxes (PILOT) payments and Right of Way (ROW) fees. The two MOUs, in pertinent part, include the following provisions:

- MOU dated January 29, 1998, (modified by a September 12, 2003 MOU) provides that DC Water will pay the District a PILOT payment for District government services it receives, such as: police, fire and emergency services. Refer to page 13 of this report for further discussion and detail of the PILOT.
- MOU dated September 12, 2003, provides for the ROW occupancy permit fee. The MOU provides that all utilities in the District will be levied an occupancy fee for public underground infrastructure ROW usage. In accordance with the MOU, DC Water's occupancy fee is capped at \$5.1 million through September 13, 2013.

## **DC Water and its Relationship to the Washington Aqueduct**

DC Water purchases finished water from the U.S. Army Corps of Engineers, Washington Aqueduct Division (Aqueduct) and then supplies water to its DC Water customers. Pursuant to a Water Sales Agreement dated July 31, 1997, DC Water purchases approximately 73% of the finished water produced by the Aqueduct.

## Results

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### **The Amawalk Study and Analysis stated that DC Water's revenue estimate was reasonable supported and attainable**

D.C. Code § 34-2202.09(h), provides that DC Water's revenue certification must be supported by an expert study and analysis. DC Water's FY 2013 revenue estimate of \$447.48 was supported by an expert study and analysis conducted by Amawalk Consulting Group LLC (Amawalk). Amawalk's Study and Analysis determined that DC Water:

- Provided adequate documentation of the principal assumptions underlying the forecast enabling Amawalk to readily verify the forecast.
- Developed the forecast using the most current information available as of the date of the forecast.
- Demonstrated a thorough understanding of the risk factors inherent in the forecast and took them into consideration.
- Appropriately computed the projected revenues for FY 2013 through FY 2015.

Amawalk offered the following conclusions:

- The financial policies established by DC Water's Board call for gradual increases in rates and charges which aids customers in their efforts to adapt to higher rates.
- The DC Water bills the federal government and wholesale customers in advance on the basis of budgeted amounts reducing the likelihood of deviation from forecasted revenues in any given year.
- FY 2013 projected revenues assume a 3% decline in water consumption compared with customer usage in FY 2012. Year-to-date consumption by retail customers for the six month period ending March 31, 2013, excluding the Washington Aqueduct and a billing adjustment for the District government, is 2% lower than the usage for the same period in FY 2012. Amawalk concluded that the risk of lower than expected water consumption is mitigated to some extent in that lower than expected water demand

would only affect water and sewer revenues within the District and would not affect revenues from wholesale customers or the federal government.

- Amawalk further concluded that the risk of lower than projected revenues in FY 2013, which were due to lower consumption, is expected to be mitigated, in part, by DC Water's track record of incurring actual costs in each year that are lower than budgeted costs.

According to the Amawalk Study/Analysis, DC Water expects a surplus of \$28.9 million for FY 2013.

### **Results of Auditor's Analyses**

We reviewed DC Water's revenues, expenses, debt service and reserve categories to determine the reasonableness of DC Water's FY 2013 projections. Details of our review are provided in the following paragraphs.

#### **Revenues**

DC Water collects revenues from customers for water and sewer services it provides. DC Water's customer accounts are divided into four categories: (1) residential, (2) commercial, (3) government, and (4) wholesale.

DC Water's actual revenue for FY 2012 was \$423.87 million (cash basis accounting) and the FY 2012 budgeted revenue amount was \$426.16 million. DC Water's actual FY 2012 revenue was \$2.29 million less than its FY 2012 revenue projection of \$426.42 million. According to DC Water's Financial Planning Manager, a larger than normal portion of cash payments for FY 2012 water and sewer services were received during the first month of FY 2013. As a result, the FY 2012 cash balance was lower than expected.

DC Water's FY 2013 revenue projection is \$447.48 million. The FY 2013 projected revenue includes an October 1, 2012 retail water and sewer rate increase and a clean rivers impervious area charge (IAC) rate increase.

DC Water's FY 2013 revenue estimate reflects a 5.6% increase in the water and sewer rate from \$7.20 per Ccf (metered water usage stated in one hundred cubic feet or 748 gallons) in 2012 to \$7.60 in FY 2013. Additionally, the estimate includes a 44.1% increase in the IAC rate. The IAC rate increased from \$6.64 per equivalent residential unit (ERU) to \$9.57 per ERU.

We determined that on average overall water and sewer consumption decreased 3.4% from FY 2011 to FY2012. Also, water and sewer consumption for the first six months of FY 2013 was 2.57% less than the water and sewer consumption for the first six months of FY 2012. Our analysis of total water and sewer consumption for FY 2010 to FY 2012 indicated that, historically, actual water and sewer consumption for the first six months of the fiscal year accounted for approximately 46% of total water and sewer consumption for the year. Should the historical trend continue for FY 2013, it is likely that DC Water projection of a 2.24% decrease in FY 2013 water and sewer consumption would be reasonable. Further, DC Water officials indicated that weather is always unpredictable, consumption increases during warmer weather because of an increase in outdoor activities. As such, it is reasonable to anticipate that water consumption will increase during the last six months of FY 2013.

### **Expenses**

DC Water's operating expenditures include the following: (1) personnel services (staff), (2) contractual services, (3) chemicals and supplies, (4) small equipment, (5) utilities and rent, (6) water purchases, and (7) other. From FY 2011 to FY 2012 DC Water's overall operating expenses decreased \$2.4 million or 1.0% (excluding depreciation and amortization). However, detailed in the items listed below, some operating expenses increased while others decreased.

1. Personnel services spending increased 4.9%, primarily, because of increases in wages in addition to the increased number of personnel.
2. Contractual services spending decreased 8.3% due to lower litigation expenses during FY 2012.
3. Utilities and rent decreased 9% because DC Water procured electricity through a block purchase strategy. DC Water will continue to utilize the block purchase strategy in FY 2013.
4. Water purchases increased 4.5% primarily due to a rate increase from the Washington Aqueduct.

Historically, DC Water's year-end expenditures were below the budgeted expenditure amount. We determined that for the last four years, DC Water's expenditures on average were below budget. Further, Amawalk noted in the expert study and analysis that the Authority had a track record of incurring actual costs in each year that were lower than budgeted costs.

Should the historical trend continue for FY 2013, it is likely that DC Water's expenditures for FY 2013 will be below the budget.

### **Debt Service (Interest Expense and Fiscal Charges)**

From FY 2011 to FY 2012, DC Water's debt service expenses increased slightly by \$282,000, or 0.39% because of DC Water's issuance of \$440 million in public utility subordinate lien revenue bonds (Series 2012A, 2012B and 2012C) and the corresponding payment of interest on those bonds. The bonds were issued in FY 2012 utilizing the 35% federal subsidy from the Build America Bonds Program

DC Water's debt service expenditures for FY 2011 were 27.5% below the budgeted amount and FY 2012 debt service expenditures were 29.9% below the budgeted amount. The FY 2011 and FY 2012 reduction of debt service expenditures was due to lower than anticipated financing costs and conservative budgeting practices. Historically, DC Water's debt service expenditures have been below the budget.

In addition to its long term debt, DC Water has established a commercial paper program to provide interim financing for systems costs. Under this program, DC Water issues fixed rate, short-term (no greater than 270 days) notes. The commercial paper issuance is backed by a letter of credit. At the end of FY 2012, DC Water had \$41.2 million in outstanding taxable and tax-exempt commercial paper.

### **DC Water's Long-Term Debt Has Increased**

DC Water's long-term debt is increasing primarily because of the capital improvement program. Between FY 2011 and FY 2012, DC Water's long-term outstanding debt increased by \$245.7 million or 16.1%. The increase resulted from DC Water's issuance of \$440.6 million in public utility subordinate lien revenue bonds in FY 2012.

### **DC Water Reserve Funds**

DC Water's financial position is strengthened by the following reserve accounts:

1. An operating reserve equal to six months of operating and maintenance expenses. This is more than the amount required by the Master Indenture of Trust which only required DC Water to maintain a balance equal to 60 days operating and maintenance expenses. This includes a renewal and replacement reserve;

2. A DC Insurance reserve; and
3. A DC PILOT reserve that includes a set aside to pay additional fees.

Additionally, DC Water has a Rate Stabilization Fund (RSF) which consists of DC Water’s excess operating cash after funding the operating reserve at the required level. The rate stabilization reserve totaled \$27.95 million at the close of FY 2012. According to the Board’s policy, the RSF can be used at any time during the fiscal year and the RSF is in addition to the Board-required six-month operating and maintenance reserve fund. DC Water’s reserve accounts are presented in Figure 1.

**Figure 1 - DC Water’s Reserves - As of March 31, 2013**

<b>Reserve</b>	<b>Account Balance</b>
Operating Reserve	\$ 41,118,833
Renewal and Replacement Reserve	35,000,000
Undesignated Reserve	49,381,167
Total Operating and Maintenance Reserve	\$ 125,500,000

In addition to the reserves presented in Table 1, as of March 31, 2013, DC Water’s Insurance Reserve totaled \$1,000,000 and the DC PILOT reserve totaled \$14,476,759.

**DC Water Should Continue to Work to Resolve the PILOT Payment Matter with the District**

According to information provided by DC Water and discussions held with DC Water officials, DC Water is continuing negotiations with the District regarding the Payment in Lieu of Taxes (PILOT) payment.

In accordance with a MOU agreement with the District, DC Water agreed to pay the District government a PILOT for services the District government indicated they provided, such as: police, fire, and emergency services. DC Water was to pay an agreed to amount and the District’s Chief Financial Officer (CFO) was required to provide an annual cost certification. In June 2009, DC Water received a cost certification from the District’s CFO. According to DC Water, the CFO’s estimates were significantly higher than the amounts permitted based on the criteria established in the MOU. DC Water and District officials have met to discuss the differences; however, the parties have not yet reached an agreement. DC Water continues to make PILOT payments for what DC Water considers the undisputed portion of the PILOT obligation to

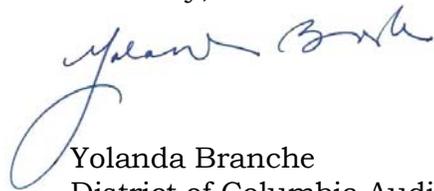
the District. DC Water established a reserve for the disputed portion of PILOT payments. The reserve account for the disputed portion of PILOT payments has a balance of \$14.5 million. DC Water and District officials should continue to work to resolve this matter.

## Conclusion

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Based on our review of the Amawalk expert study and analysis and our review of DC Water's revenues, expenses and reserves, and other relevant information we were reasonably satisfied that DC Water's certification of revenues totaling \$447.48 million for FY 2013 is a reasonable estimate.

Sincerely,

A handwritten signature in blue ink, appearing to read "Yolanda Branche". The signature is written in a cursive style with a large initial "Y".

Yolanda Branche  
District of Columbia Auditor

## Appendix A

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### DC Water Sufficiency Calculation FY 2013 (Dollars in 000's)

<b>Revenue Type:</b>		
Residential, Commercial & Multi- Family District government and DC Housing Authority	\$220,404	
Federal	42,854	
Metering Fee/Groundwater	10,781	
Payment in Lieu of Taxes/Right of Way Fee	22,142	
IAB CSO Revenue	44,129	
Wholesale revenues	75,195	
Other revenues	31,855 <sup>1</sup>	
Interest Earned From Bond Reserve	<u>120</u>	
<b>Total</b>		<b>\$447,480</b>
<b>Operating Expenses:</b>		
Personnel Services	99,919	
Contractual Services	82,350	
Water Purchases	31,513	
Chemicals & Supplies	31,360	
Utilities & Rent	34,185	
Small Equipment	<u>993</u>	
<b>Subtotal</b>		<b>280,320</b>
<b>Other Expenses:</b>		
Debt Service	116,179	

Payment in Lieu of Taxes /Right of Way Fee	<u>21,982</u>	
<b>Subtotal</b>		<b>138,161</b>
<b>Total Operating Expenses</b>		<b><u>\$418,481</u></b>
<b>Projected Operating Surplus</b>		<b><u>\$28,999*</u></b>
*Difference due to rounding		