



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

Finance and Budget Committee

Thursday, April 25, 2013

11:00 a.m.

1. **Call to Order** Timothy L. Firestine, Chairperson
2. **March 2013 Financial Report (Attachment 1)**..... Yvette Downs and Robert Hunt
 - A. Operating Revenues & Expenditures
 - B. Cash Reserves & Investments
 - C. Capital Disbursements Summary
 - D. **Investment Report**
3. **New Headquarters Building (Attachment 2)** George Hawkins
4. **Bond Financing Update** Mark Kim
5. **Financial Policies (Attachment 3)**..... Mark Kim
 - A. Operating Reserves
 - B. Renewal and Replacement Reserves
6. **Action Items** Mark Kim
 - A. **Revised Financial Policies (Attachment 4)**
 - B. **Approval for ROCIP II Broker Services – Aon Risk Services, Inc. (Attachment 5)**
 - C. **Approval for Legal Services – Douglas & Boykin PLLC (Attachment 6)**
7. **Other Business** Yvette Downs
 - A. Wholesale Customer Semi-Annual Briefing - June 14, 2013
 - B. FY 2015 Federal Bill
8. **Agenda for May Committee Meeting (Attachment 7)** Timothy L. Firestine
9. **Adjournment**

FOLLOW-UP ITEMS – Finance & Budget Committee (Meeting held February 28, 2013)

1. Provide additional information on the proposed Headquarters Building to explain expanded space requirements and other facility work that will be accomplished/eliminated within this project, other options available, and user-share estimates. **(Mr. Firestine and Ms. Nancoo) Status: See Attachment 2; to be discussed at meeting.**



March 2013 FINANCIAL REPORT

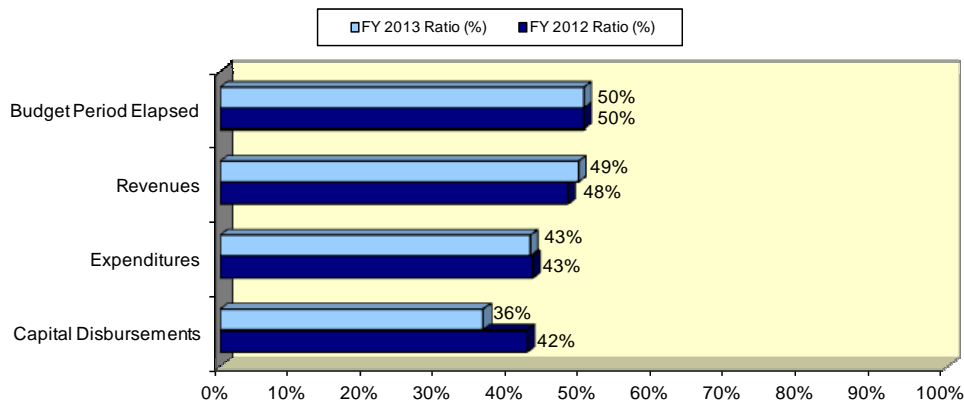
FY 2013 FINANCIAL PERFORMANCE

At the end of March, with 50 percent of the fiscal year completed, we are on track with budgetary expectations, with the exception of major under spending in Capital Disbursements as reported in prior months and discussed later in this report. The table below summarizes detailed information provided in the report.

Financial Performance As of March 31, 2013 (\$ in millions)

	Approved	Revised Budget	YTD Budget	YTD	Variance		% Revised Budget
				Actual	Favorable (Unfavorable)	50% of Budget	
Revenues (Receipts)*	\$460.2	\$447.5	\$223.7	\$220.4	(\$3.3)	-1.5%	49%
Expenditures*	\$456.8	\$440.3	\$220.2	\$187.9	\$32.3	15%	43%
Capital Disbursements	\$665.7	\$644.3	\$323.3	\$233.7	\$89.6	28%	36%

* Straight-lined (6/12 of revised budget)



120-day Operating Reserve Analysis (\$ in millions)

FY 2013 120-day Operating Reserve Objective	\$125.5
Actual Average Daily Balances	\$174.9
Difference	\$49.4

OPERATING REVENUES & RECEIPTS

At the end of March 2013, cash receipts totaled \$220.4 million, or 49.3 percent of the revised FY 2013 Budget. Several categories of customers make payments on a quarterly basis, including the federal and District governments, and wholesale customers. The table below provides a summary of operating receipts at the end of March.

REVENUE VARIANCE BY CATEGORY
(\$ in 000's)
As of March 31, 2013

Revenue Category	FY 2013 Revised Budget	Year-to- Date Budget	Actual Received	Variance Favorable (Unfavorable)	Actual % of Budget
Residential, Commercial, and Multi-family	236.2	118.1	125.4	7.3	53.1%
Federal	52.8	26.4	26.3	(0.1)	49.8%
District Government	12.0	6.0	3.2	(2.8)	26.5%
DC Housing Authority	6.3	3.1	3.2	0.1	50.6%
Customer Metering Fee	10.8	5.4	5.5	0.1	51.3%
Wholesale	75.2	37.6	37.3	(0.3)	49.5%
Right-of-Way Fee/PILOT	22.2	11.1	11.2	0.1	50.2%
Subtotal (before Other Revenues)	\$415.5	\$207.8	\$212.0	\$4.2	51.0%
Other Revenue without RSF					
IMA Indirect Cost Reimb. For Capital Projects	6.0	3.0	0.0	(3.0)	0.0%
DC Fire Protection Fee	6.9	3.5	3.3	(0.2)	47.8%
Stormwater (MS4)	1.0	0.5	0.4	(0.1)	39.6%
Interest	0.7	0.3	0.5	0.2	72.4%
Developer Fees (Water & Sewer)	8.0	4.0	3.0	(1.0)	37.8%
Others	2.9	1.5	1.2	(0.3)	41.4%
Subtotal	\$25.5	\$12.7	\$8.4	(4.3)	33.0%
Rate Stabilization Fund Transfer	\$6.5	\$3.3	\$0.0	(3.3)	0.0%
Other Revenue Subtotal	\$32.0	\$16.0	\$8.4	(7.6)	26.3%
Grand Total	\$447.5	\$223.7	\$220.4	-\$3.3	49.3%

Discussion of Relevant Variance

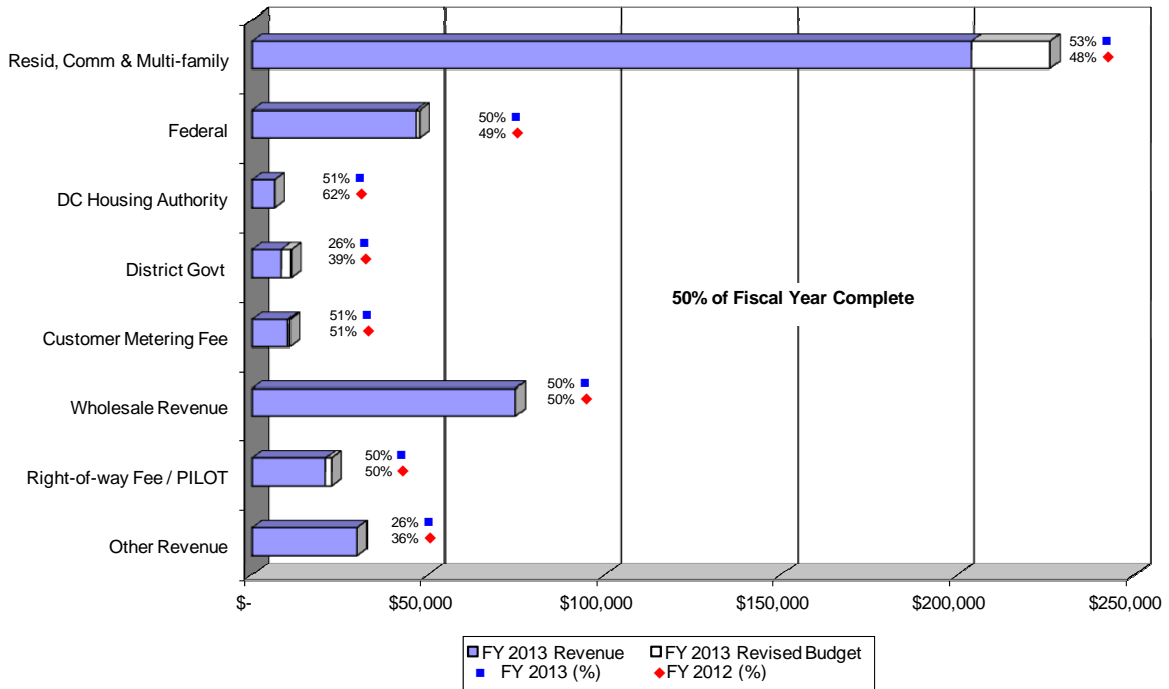
In general, revenues are on target with the exception for District Government and Other Revenues.

The District Government's actual receipts for the first two quarters total \$3.2 million or 26.5 percent of the revised FY 2013 budget. As stated in the previous report, the District Government had disputed consumption on large account (St. Elizabeth Hospital) and withheld a

portion of quarterly payment while the account was being investigated. The dispute has been resolved and DC Water has adjusted the District Government's bill by crediting \$2.26 million in November 2012 (FY 2013), which has resulted in lower receipts compared to budget for the first quarter FY 2013 bill.

Other Revenue receipts are lower than the straight-lined budget at \$8.4 million or 26.3 percent of the budgeted category primarily due to IMA Indirect Cost Reimbursement and transfer of Rate Stabilization Fund. The IMA indirect cost reimbursement for the capital projects is not anticipated to be received until the fourth quarter of the fiscal year. The Rate Stabilization Fund transfer is also anticipated in the fourth quarter of the fiscal year.

**FY 2013
OPERATING RECEIPTS BY CUSTOMER CATEGORY
As of March 31, 2013**



BREAKDOWN OF RETAIL RECEIPTS BY CUSTOMER CATEGORY
 (\$ in 000's)
 As of March 31, 2013

Customer Category	Water	Sewer	Clean Rivers		Total
			IAC	Metering Fee	
Residential	14,804	18,021	6,122	2,490	41,437
Commercial	23,510	24,175	7,959	1,704	57,348
Multi-family	12,981	15,487	2,297	589	31,353
Federal	10,922	10,368	4,992	470	26,752
District Govt	786	961	1,441	228	3,417
DC Housing Authority	1,315	1,588	271	68	3,242
Total:	64,320	70,601	23,080	5,549	163,550

Note: The breakdown of Collections into Residential, Commercial, & Multi-family and Water and Sewer is approximate as it is based on percentages of historical data and does not take into account adjustments and timing differences

Clean Rivers IAC – Actual vs. Budget
 (\$ in 000's)
 As of March 31, 2013

Customer Category	FY2013 Budget	Year-To-Date Budget	Actual Received	Variance Favorable / <Unfavorable>	Variance % of YTD Budget	Actual % of Budget
Residential	11,883	5,942	6,122	180	3%	52%
Commercial	13,905	6,953	7,959	1,007	14%	57%
Multi-family	4,665	2,333	2,297	(36)	-2%	49%
Federal	9,984	4,992	4,992	(0)	0%	50%
District Govt	3,145	1,573	1,441	(132)	-8%	46%
DC Housing Authority	547	274	271	(3)	-1%	49%
Total:	44,129	22,065	23,080	1,016	5%	52%

OPERATING EXPENDITURES

At the end of March, with 50 percent of the fiscal year completed, operating expenditures (including debt service and the right of way and PILOT fees) totaled \$187.9 million, or 43 percent of the FY 2013 Board-revised budget of \$440.3 million. These numbers include estimated incurred but unpaid invoices.

**Comparative Statement of Expenditures
As of March 31, 2013
(000's)**

	FY 2013					FY 2014
	Board Revised Budget	YTD Budget	YTD as of 03/31/2013	YTD Variance Favorable/(Unfavorable)		Approved Budget
				\$	%	Percent of Budget
Personnel Services	116,609	58,305	56,319	1,986	3.4%	48%
Contractual Services	82,350	41,175	31,267	9,908	24.1%	38%
Water Purchases	31,513	15,757	12,453	3,304	21.0%	40%
Chemicals and Supplies	31,360	15,680	12,179	3,501	22.3%	39%
Utilities	34,185	17,093	12,070	5,023	29.4%	35%
Small Equipment	993	497	527	(31)	-6.2%	53%
Subtotal O & M Expenditures	297,009	148,506	124,815	23,691	16.0%	42%
Debt Service	121,330	60,665	52,102	8,563	14.1%	43%
Payment in Lieu of Taxes	16,882	8,441	8,441	-	0.0%	50%
Right of Way	5,100	2,550	2,550	-	0.0%	50%
Total O & M Expenditures	440,321	220,162	187,908	32,254	14.7%	43%
Personnel Services Charged to Capital Projects	(16,690)	(8,345)	(5,187)	3,158	37.8%	31%
Total Net Operating Expenditures	423,631	211,817	182,720	29,097	13.7%	43%

Note: Actuals include accruals

Discussion

Personnel services (\$116.6 million annual budget; 39.3 percent of O&M budget) – At the end of March, personnel costs total \$56.3 million or 48 percent of budget. This compares to \$51.7 million or 46 percent of budget for the same period last fiscal year. Of the 1,212 positions budgeted (1,243 positions authorized), 1,055 positions were filled at the end of March. Overtime spending totals \$3.2 million of the annual budget of \$5.2 million, or 8 percent of regular payroll costs. Overtime costs to date continue to trend higher than the level of spending for the same period last year due to the Hurricane Sandy, emergency response to water main breaks caused by the fluctuation in temperature, support to the District for snow removal and the Presidential Inauguration. We will continue to monitor and report overtime activities and risks.

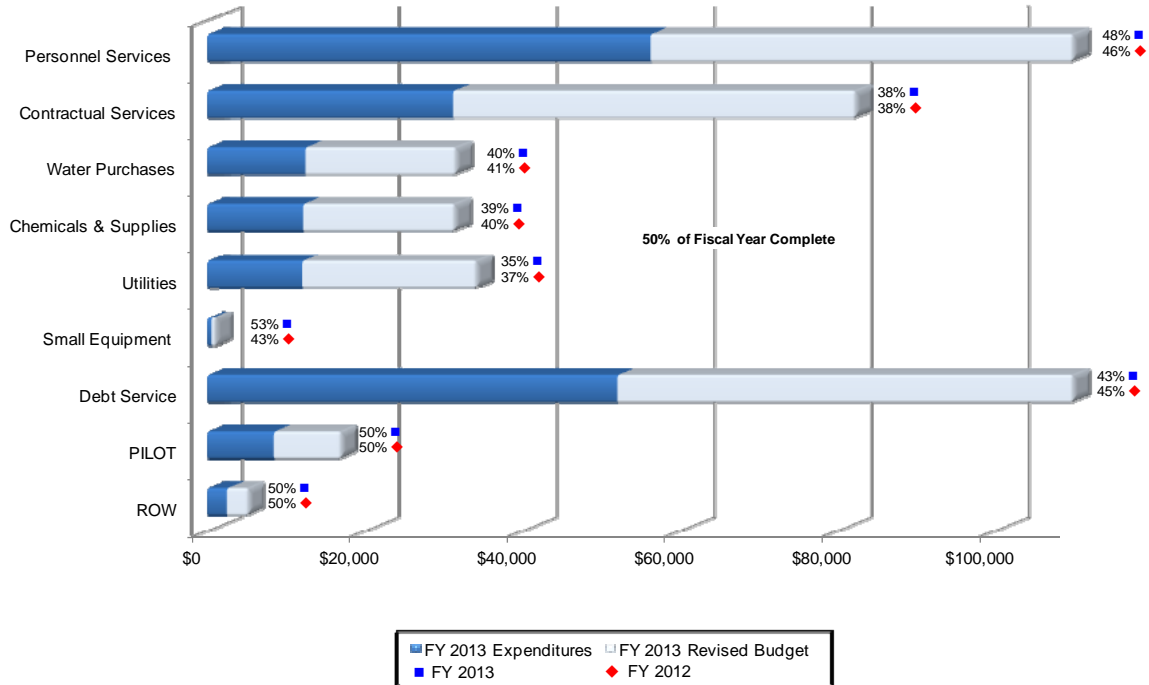
Contractual Services (\$82.4 million annual budget; 27.7 percent of O&M budget) – At the end of March, contractual services expenditures total \$31.3 million or 38 percent of budget and at the same level for the same period last year. This is due to under spending in various contractual line items throughout the Authority.

Utilities (\$34.2 million annual budget; 11.5 percent of O&M budget) – Additional information concerning actual performance in this category can be found later in this report.

Small Equipment (\$1 million annual budget; 0.3 percent of O&M budget) – At the end March, expenditures are slightly above the straight-line budget due to additional equipment (pumps, valves, valve actuators, and other motor parts) purchased to meet needed maintenance repairs. We anticipate coming within budget in this category at the end of the fiscal year.

Payment in Lieu of Taxes – (\$16.9 million annual budget) – Payments and accrued expenses for the District’s PILOT fee totaled \$8.4 million. Actual payment differs due to previous Board direction and resulting offsets associated with the Fire Protection Fee.

**FY 2013 Operating Expenditures
by Category
(\$ in 000's)
As of March 31, 2013**



CAPITAL SPENDING

For the month of March 2013, actual disbursements totaled \$36.3 million, with year-to-date disbursements totaling \$233.7 million, or 36 percent of the Approved FY 2013 Revised Disbursements Budget. Planned capital disbursements through March 2013 were \$323.3 million, or 50 percent of the FY 2013 Revised Disbursement Budget.

**Capital Disbursements Variance
(\$ in 000's)
As of March 31, 2013**

Description	FY 2013 Revised Disbursements Budget		Actual Disbursements			% of FY 2013 Revised Disbursements Budget	
	Annual	YTD	Oct. -'12 to Feb. -'13	MAR. -'13	YTD	Variance Compared to Plan	Percent of Annual Budget
Wastewater Treatment	\$358,543	\$181,425	117,648	\$17,796	\$135,443	25%	38%
Sanitary Sewer	29,084	12,041	8,458	2,062	10,521	13%	36%
Combined Sewer Overflow	163,509	83,495	46,612	10,881	57,493	31%	35%
Stormwater	3,252	1,448	1,546	296	1,842	-27%	57%
Water	60,858	30,706	15,199	4,246	19,445	37%	32%
Washington Aqueduct	10,598	5,300	1,418	0	1,418	73%	13%
Capital Equipment	18,422	8,928	6,524	974	7,498	16%	41%
Total Capital Projects	\$644,265	\$323,342	\$197,406	\$ 36,255	\$233,661	28%	36%

Discussion

More than 95 percent of the spending variance between the FY 2013 Revised Disbursements Budget and Actual Disbursements, on a year-to-date basis, is attributable to three Service Areas: Wastewater Treatment, Combined Sewer Overflow and Water.

Wastewater Treatment Service Area disbursements have been lower than budgeted for all Programs in this Service Area, most notably, the Enhanced Nitrogen Removal Facilities (ENRF), and Solids Processing Programs. The shortfall in ENRF Program disbursements spans all major projects in the Program, including the Wet Weather Peak Mitigation (aka Blue Plains Tunnel – ‘EG’), Enhanced Clarification Facilities (‘E8’), and the Nitrogen Removal Facilities (‘E9’) projects. Shortfall in spending for project E9 continues to be, partly, the result of a later-than-expected procurement of equipment associated with the second construction contract. There has been no impact on the schedule of the project.

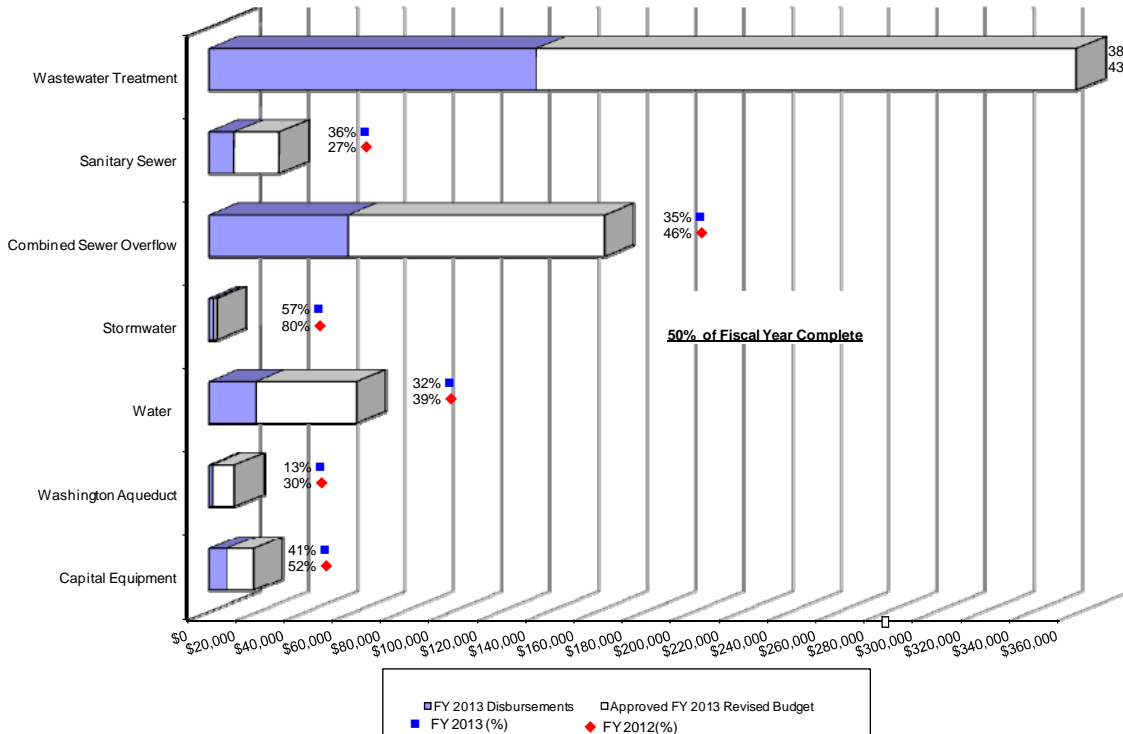
The shortfall in spending in the Solids Processing Program is primarily a result of revised disbursement projections for the Digester ('XA') project's construction contracts. These projects remain on schedule; however, the shortfall is currently not anticipated to recover.

Spending in the 'Clean Rivers Projects', as reported previously, has been lower than budgeted mainly due to schedule delays associated with concrete quality issues on the Wet Weather Peak Mitigation (aka Blue Plains Tunnel project 'EG'), and Poplar Point shaft diaphragm walls. Although the quality issues have been rectified, the delays hindered progress on the shafts and follow-up tunneling work. A recovery plan, to mitigate the delays, by adding one work day per week during the tunneling operations is anticipated to begin in early summer. Additionally, the spending is impacted by transfer of the CSO 019 Overflow Structure and Diversion Chamber work to a subsequent contract (Anacostia River Tunnel) in order to mitigate critical interface requirements. Although remediation plans are in place to mitigate impact to the critical path and to meet the consent decree of the project, spending is currently not anticipated to fully recover in this fiscal year.

With regards to the Water Service Area, Water Distribution Systems, Water On-Going, and the DDOT Water Programs are responsible for the majority of the year-to-date under-spending. The primary reason for this shortfall is the delayed invoicing on the Water Distribution and the DDOT water Programs, particularly on the Cross Town Water Main project ('GU').

The under-spending related to the Washington Aqueduct is attributable to delayed invoicing by the Aqueduct, and is expected to recover by the end of the fiscal year.

**FY 2013 Capital Disbursements Compared to Plan
By Service Area
(\$ in 000's)
As of March 31, 2013**



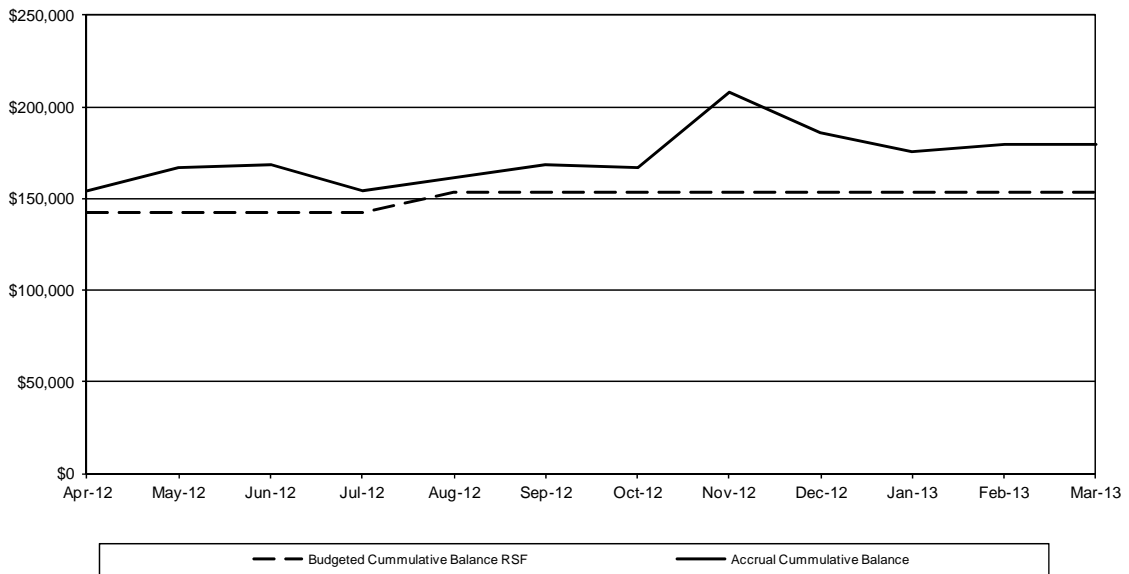
CASH AND INVESTMENT BALANCES

At the end of March, our operating reserve balance was \$151.3 million as compared to the FY 2013 operating reserve level objective of \$125.5 million. The following table provides a summary of all cash and investment account balances.

**Cash Balances
As of March 31, 2013
(\$ in millions)**

Rate Stabilization Fund Account (RSF)	\$27.9
Operating Reserve Accounts	151.3
DC PILOT Fund	14.5
Operating Cash Balance Including RSF	193.7
Debt Service Reserve - Series 98	23.4
Bond Construction Fund - Series 10	29.0
Bond Construction Fund - Series 12	117.7
CSO LTCP Appropriations Account	33.8
Total All Funds	\$397.6

**FY 2013 Operating Cash Balances
(\$ in 000's)
(Operating Reserve and RSF)**



Overall Portfolio Performance

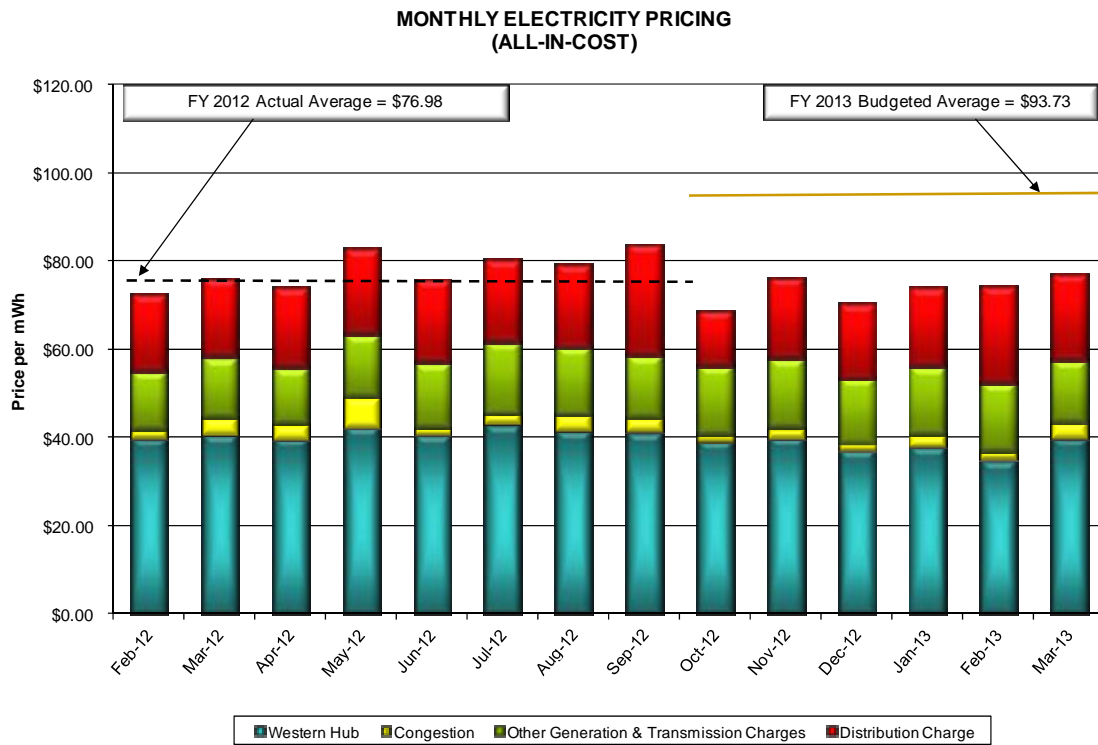
At the end of March, DC Water's total investment portfolio performed well and complied with the Authority's Investment Policy. Returns exceeded the established benchmarks for short term (less than one year) and core (one plus years) funds. Interest income for March (on a cash basis) was \$33,376, with year-to-date totals of \$437,554 as compared to the budget of \$539,336 for the year. A detailed investment performance report is attached.

OTHER STATUS REPORTS

ELECTRICITY

As of March 2013, there are no electricity block purchases for the Authority. Electricity market conditions continue to be significantly below prior years' experience. Staff continues to monitor the futures market with intent to purchase additional electric loads for FY 2013 if market conditions are appropriate and in line with budget assumptions.

The chart below depicts the all-in-cost for the electricity purchased by the Authority. As indicated in the chart, electricity prices generally increase during the winter and summer peak months. The average all-in-cost paid for March 2013 was \$77.14/mWh with the year-to-date average price of \$73.49/mWh.



Notes: A) Other generation charges include the capacity charges, loss factor adjustments, ancillary costs, and other adder (administrative) fees associated with electricity procurement over the spot market
 B) Prices include accruals for invoices not yet received.

Electricity Costs

The revised FY 2013 electricity budget of \$25.2 million represents 78 percent of the total utilities budget and assumes an average all-in-cost of \$93.73/mWh.

The current purchasing strategy can be compared to two benchmarks: the Standard Offer Service (S.O.S.) and spot market prices. As indicated in the chart below, DC Water's average year-to-date actual price is slightly higher than the spot market price and significantly below the S.O.S. price.

All-In-Cost (\$/mWh)				Electricity Budget (\$000)		
Unit Price				Amount		Variance
	Standard Offer Service (S.O.S.)	Spot Market	Actual ¹	Budgeted	Actual	Budgeted vs Actual
Oct-12	\$124.80	66.56	68.75	\$1,878	\$1,473	\$405
Nov-12	\$123.11	76.60	76.40	\$1,827	\$1,550	\$277
Dec-12	\$126.19	63.93	70.49	\$2,278	\$1,401	\$876
Jan-13	\$128.31	70.18	73.98	\$2,492	\$1,757	\$735
Feb-13	\$125.90	74.21	74.21	\$2,054	\$1,464	\$590
Mar-13	\$126.27	77.14	77.14	\$1,905	\$1,878	\$26
YTD Average	\$125.76	\$71.44	\$73.49	\$12,434	\$9,524	\$2,910
				Remainder	\$12,789	
				Total Budget	\$25,223	

¹ Actual prices are inclusive of the price mix of monthly block purchases and spot market unit prices.

Overall, the FY 2013 electricity expenditure is tracking favorably to budget. The year-to-date savings is attributable to the current electricity market conditions and uncharacteristic weather climate experienced to date.

RETAIL & WHOLESALE ACCOUNTS RECEIVABLE

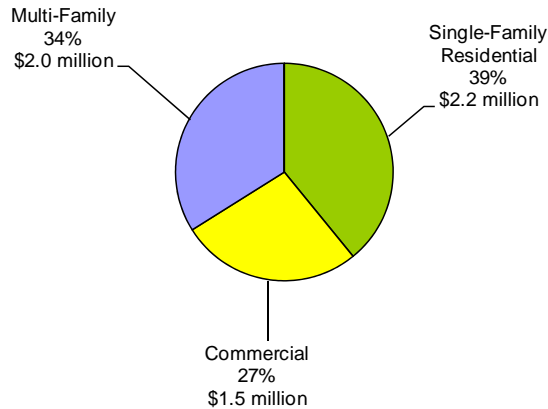
The following tables and chart show retail and wholesale accounts receivable over 90 days including a breakdown by customer class.

**Delinquent Accounts Receivable
Greater Than 90 Days by Customer
March 31, 2013**

	RETAIL		WHOLESALE		TOTAL	
	Greater than 90 Days		Greater than 90 Days		Greater than 90 Days	
	\$ in millions	# of accounts	\$ in millions	# of accounts	\$ in millions	# of accounts
September 30, 2008	\$6.1	15,635	\$0.0	0	\$6.1	15,635
September 30, 2009	\$4.9	10,211	\$0.0	0	\$4.9	10,211
September 30, 2010	\$5.1	13,441	\$0.0	0	\$5.1	13,441
September 30, 2011	\$5.5	13,039	\$0.0	0	\$5.5	13,039
September 30, 2012	\$5.5	13,063	\$0.0	0	\$5.5	13,063
October 31, 2012	\$5.7	12,537	\$0.0	0	\$5.7	12,537
November 30, 2012	\$5.8	12,876	\$0.0	0	\$5.8	12,876
December 31, 2013	\$6.0	13,480	\$0.0	0	\$6.0	13,480
January 31, 2013	\$5.9	12,700	\$0.0	0	\$5.9	12,700
February 28, 2013	\$5.8	12,269	\$0.0	0	\$5.8	12,269
March 31, 2013	\$5.7	12,077	\$0.0	0	\$5.7	12,077

** In June 09 the Authority wrote off approximately \$1.3M of bad debt*

**Retail Accounts
Greater Than 90 Days by Customer Class
March 31, 2013**



**Delinquent Accounts Receivable
Greater Than 90 Days by Customer
March 31, 2013**

	Number of Accounts			Month of March (All Categories)				Total Delinquent			
				Active		Inactive		No. of a/c Feb.		Amount (\$)	
	W & S a/c	Impervious Only a/c	Total No. of a/c	No. of a/c	Amount (\$)	No. of a/c	Amount (\$)	No. of a/c Feb.	Amount (\$)	No. of a/c Mar.	Amount (\$)
Commercial	11,901	3,340	15,241	1,419	1,399,804.10	174	142,898.24	1,747	1,606,229.31	1,593	1,542,702.34
Multi-family	7,366	440	7,806	799	1,811,677.82	157	129,469.99	967	1,877,831.09	956	1,941,147.81
Single-Family Residential	104,131	3,144	107,275	7,604	1,583,977.71	1,924	654,638.33	9,555	2,296,702.42	9,528	2,238,616.04
Total	123,398	6,924	130,322	9,822	4,795,459.63	2,255	927,006.56	12,269	5,780,762.82	12,077	5,722,466.19

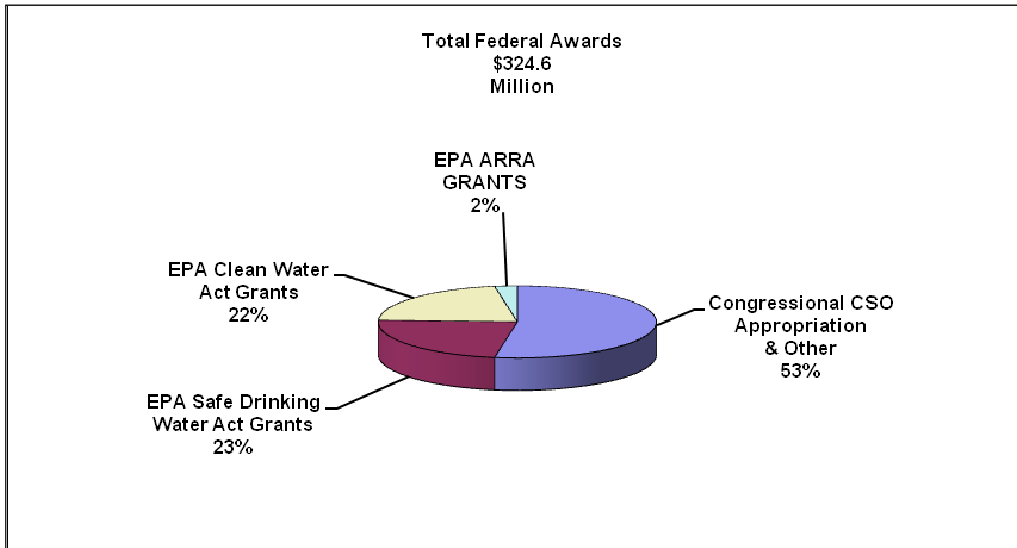
Notes: -Included in the above \$4.80m (or 9,822 accounts) of the DC Water Over 90 days delinquent accounts, \$1,019,460.61 (or 2,488 accounts) represents Impervious only Accounts over 90 days delinquent.

-Reportable delinquencies do not include balances associated with a long standing dispute between DC Water and a large commercial customer.

GRANTS REPORT

The Authority receives grants to fund a portion of its capital costs from the U.S. Environmental Protection Agency (EPA) under two acts: the Clean Water Act of 1972 and the Safe Drinking Water Act of 1974. DC Water also receives a limited amount of EPA grant funding for certain operating functions. Additionally, DC Water has now received thirteen Congressional CSO appropriations.

As of March 2013, including the CSO appropriation, DC Water has a total of \$324.6 million awarded in federal funds for active projects.



DC Water will be affected by sequestration through an estimated reduction in the amount of EPA funding received for Clean Water from \$7.1 million to \$6.5 million and for Safe Drinking Water from \$8.9 million to an estimated \$8.5 million, (although, there has not been an official estimate for Safe Drinking Water from Region III). Of the nine ARRA grants received in FY 2009 and FY 2010, eight have been closed and the remaining one previously scheduled by the Army Corps of Engineers to be closed by March 31, 2013 has been moved to the third quarter. Of the eight grants scheduled for closing in FY 2013, two were closed this quarter for a total of four this fiscal year.

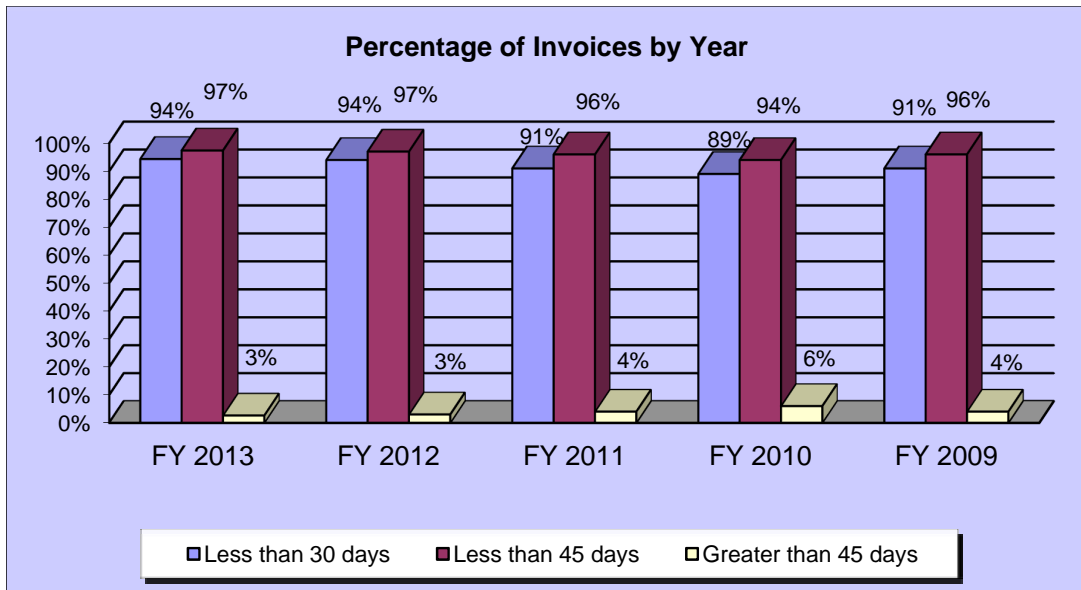
The cumulative federal appropriation for CSO increased to \$168.6 million with the additional appropriation of \$12.6 million on January 16, 2012. Additional Federal appropriation of \$15 million was approved for FY 2013 but has not been received to date. The cumulative life-to-date cash disbursement for the CSO appropriation is \$150.5 million through March 31. Based on the projected FY 2013 capital spending on the Clean Rivers' projects and no additional funding, all remaining CSO funds is projected to be depleted by the end of FY 2013.

ACCOUNTS PAYABLE PERFORMANCE

During the first six months of Fiscal Year 2013, a total of 5,511 invoices were processed and paid compared to 5,760 for the same period in FY 2012 (as shown in the table below) and with a dollar value of \$274.8 million compared to \$243 million for FY 2012. For FY 2013 year-to-date, approximately 94.4 percent of the invoices, less retainage and disputes, were paid within 30 days compared to 94 percent paid within 30 days during FY 2012. The percentages for January, February and March were 91 percent, 95.2 percent and 96.5 percent, respectively. The Authority’s goal is to pay 97 percent of all undisputed invoices within 30 days.

Accounts Payable Performance FY 2013 v. FY 2012				
Days	FY 2013		FY 2012	
	Number	Percent	Number	Percent
Less than 30	4,966	94%	4,829	94%
Less than 45	5,126	97%	4,993	97%
Greater than 45	137	3%	155	3%
Subtotal	5,263	100%	5,148	100%
Retainage/Dispute	248		612	
Total	5,511		5,760	

The chart below shows year-to-date historical performance for fiscal year 2009 through fiscal year 2013.



D.C. WATER AND SEWER AUTHORITY
 FY 2013 CASH FLOW SUMMARY
 through 3/31/13
 (\$ in 000's)

	Annual Budget Cash Basis	YTD 50% Cash Budget	YTD Actual Cash Oct. 1, 2012 - Mar. 31 2013	Variance Favorable (Unfavorable)	
OPERATING BUDGET					
Cash Provided					
Retail	318,168	159,084	163,550	4,466	3%
Wholesale	75,195	37,597	37,262	(336)	-1%
Other	47,497	23,748	19,521	(4,227)	-18%
Transfer from Rate Stabilization Fund	6,500	3,250		(3,250)	-100%
Total Cash Provided	447,359	223,680	220,333	(3,347)	-1%
Operating Cash Used					
Personnel Services	99,919	49,960	50,984	(1,025)	-2%
Contractual Services	82,350	41,175	34,638	6,537	16%
Chemicals & Supplies	31,360	15,680	13,835	1,845	12%
Utilities	34,185	17,093	10,337	6,756	40%
Water Purchases	31,513	15,757	13,671	2,085	13%
Small Equipment	993	497	497	()	0%
Total Operating Cash Used	280,320	140,160	123,962	16,198	12%
Other Cash Used					
Debt Service	116,179	58,090	52,102	5,988	10%
Payment in Lieu of Taxes/Right of Way	21,982	10,991	8,757	2,234	20%
Total Other Cash Used	138,161	69,081	60,859	8,222	12%
Total Cash Used	418,481	209,241	184,821	24,420	12%
Net Cash Provided (Used) by Operating Act.	28,878	14,439	35,511	21,072	
CAPITAL BUDGET					
Cash Provided					
Debt Proceeds	320,582	160,291	101,583	(58,708)	-37%
Capital Equipment Financing	10,799	5,400		(5,400)	-100%
EPA Grants	32,424	16,212	12,414	(3,798)	-23%
CSO Grants	30,000	15,000	14,436	(564)	-4%
Interest Income	303	152	172	20	13%
Wholesale Capital Contributions	225,614	112,807	86,437	(26,370)	-23%
Total Cash Provided	619,723	309,861	215,042	(94,819)	-31%
Cash Used					
DC Water Capital Program	633,668	316,834	232,243	84,591	27%
Washington Aqueduct Projects	10,598	5,299	1,418	3,881	73%
Total Cash Used	644,266	322,133	233,661	88,472	27%
Net Cash/PAYGO Provided (Used) by Cap. Act.	(24,543)	(12,272)	(18,619)	(6,347)	
Beginning Balance, October 1 (Net of Rate Stab. Fund) Projected					
Plus (Less) Operating Surplus	28,878	14,439	35,511		
Wholesale Customer Refunds from Prior Years	(5,800)	(2,900)			
Interest Earned From Bond Reserve	120	60	39		
Transfer to Rate Stabilization Fund	(4,100)	(2,050)			
Prior Year Federal Billing Reconciliation	(5,105)	(2,553)	(2,553)		
Customer Rebate	(4,200)	(2,100)			
Cash Used for Capital	(24,543)	(12,272)	(18,619)		
Balance Attributable to O&M Reserve	125,500		151,331		
OTHER CASH RESERVES					
		Current Balance			
Rate Stabilization Fund	27,950				
CSO Long-Term Control Plan Appropriation	33,767				
DC PILOT Reserve Fund	14,476				

Finance and Budget Committee - 2. March 2013 Financial Report (Attachment 1) - Yvette Downs and Robert Hunt

**FY 2013 Overtime
Budget vs Actual
Period Ended March 31, 2013**

Department	FY 2012				FY 2013							
	Annual Budget	Actual	Percent of Budget Expended	Actual to Budget \$ Variance	Annual Budget	Percent of Annual Budget Expended	FY 2013 Year-to-Date					YTD Overtime as % of YTD Regular
							Straight-Line Budget 10/01/12 - 03/31/13	Actual 10/01/12 - 03/31/13	Actual to Straight-Line Budget Variance	Percentage YTD Straight-Line Budget Expended		
Office of the Secretary	4,000	2,729	68%	1,271	4,000	25%	2,000	1,015	985	51%		1%
General Manager	13,000	1,493	11%	11,507	10,000	9%	5,000	888	4,112	18%		0%
General Counsel	2,000	619	31%	1,381	2,000	0%	1,000	0	1,000	0%		0%
External Affairs	2,000	1,090	54%	910	2,000	31%	1,000	615	385	61%		0%
Internal Audit	-	-	0%	-	-	0%	0	0	0	0%		0%
Information Technology	24,006	23,207	97%	799	20,000	67%	10,000	13,494	(3,494)	135%		2%
Procurement	30,000	15,792	53%	14,208	30,000	104%	15,000	31,165	(16,165)	208%		3%
Customer Service	240,000	178,495	74%	61,505	240,000	55%	120,000	131,628	(11,628)	110%		4%
Finance & Budget	30,000	18,725	62%	11,275	30,000	75%	15,000	22,558	(7,558)	150%		1%
Risk Management	1,000	132	13%	868	1,000	2%	500	16	484	3%		0%
Assistant General Manager	1,000	1,040	104%	(40)	1,000	108%	500	1,078	(578)	216%		1%
Human Capital Management	5,000	26,255	525%	(21,255)	5,000	33%	2,500	1,671	829	67%		0%
Occupational Safety & Health	2,000	924	46%	1,076	2,000	1%	1,000	24	976	2%		0%
Facilities & Security	150,000	190,193	127%	(40,193)	200,000	92%	100,000	183,665	(83,665)	184%		10%
Water / Sewer Pump Maintenance	200,000	142,036	71%	57,964	200,000	49%	100,000	97,229	2,771	97%		9%
Engineering & Technical Services	548,481	780,106	142%	(231,625)	680,000	54%	340,000	369,789	(29,789)	109%		6%
Water Services	1,080,000	880,798	82%	199,202	1,080,000	58%	540,000	630,420	(90,420)	117%		13%
Clean Rivers	25,000	2,333	9%	22,667	5,000	59%	2,500	2,928	(428)	117%		1%
Sewer Services	900,000	874,742	97%	25,258	900,000	80%	450,000	718,086	(268,086)	160%		15%
Wastewater Treatment - Operations	956,000	1,092,676	114%	(136,676)	847,209	65%	423,605	551,826	(128,222)	130%		14%
Process Engineering	0	0	-	-	195,000	18%	97,500	35,158	62,342	36%		5%
Maintenance Services	800,000	717,769	90%	82,231	700,000	55%	350,000	388,468	(38,468)	111%		12%
Permit Operations	2,500	1,803	72%	697	11,000	19%	5,500	2,053	3,447	37%		0%
Fleet Management	1,000	808	81%	192	1,000	74%	500	736	(236)	147%		0%
Total DC WATER	\$5,016,987	\$4,953,761	99%	\$63,225	\$5,166,209	62%	\$2,583,105	\$3,184,510	-\$601,405	123%		8.3%

Notes:

- (1) *Budget 10/01/12 - 03/31/13 * reflects annual budget straight-lined
- (2) * % YTD Budget Expended* reflects variance between straight-lined budget to-date and actual overtime
- (3) *Actual 10/01/12 thru. 03/31/13* includes 8 days accruals for March.
- (3) YTD payroll does not include fringe benefits

Finance and Budget Committee - 2. March 2013 Financial Report (Attachment 1) - Yvette Downs and Robert Hunt

Capital Projects
 FY 2013 Disbursements Analysis
 as of March 31, 2013
 (dollars in thousands)

Description	Approved FY 2013 Revised Disbursements Budget		Actual Disbursements			% of Approved FY 2013 Revised Disbursements Budget		Commitments
	Annual	YTD	Oct. -'12 to Feb. -'13	MAR. -'13	¹ YTD	Annual	YTD	
Wastewater Treatment								
Liquid Processing Projects	\$23,884	\$12,428	\$8,836	\$1,875	\$10,711	45%	86%	45,221
Plantwide Projects	27,128	11,491	6,502	1,349	7,851	29%	68%	102,258
Solids Processing Projects	159,690	73,983	62,685	2,008	64,693	41%	87%	283,814
Enhanced Nitrogen Removal Facilities (formerly Total Nitrogen Program)	<u>147,842</u>	<u>83,523</u>	<u>39,624</u>	<u>12,288</u>	<u>51,913</u>	35%	62%	<u>192,246</u>
Total Wastewater Treatment	358,543	181,425	117,648	17,521	135,168	38%	75%	623,540
Sanitary Sewer								
Sanitary Collection Sewers	858	397	250	19	269	31%	68%	2,055
Sanitary On-Going Projects	10,544	3,298	2,008	188	2,196	21%	67%	8,905
Sanitary Pumping Facilities	679	412	222	0	222	33%	54%	358
Sanitary Sewer Program Management	4,229	2,124	1,830	73	1,903	45%	90%	14,387
Sanitary Interceptor/Trunk Force Sewers	<u>12,774</u>	<u>5,810</u>	<u>4,149</u>	<u>1,751</u>	<u>5,899</u>	46%	102%	<u>13,819</u>
Total Sanitary Sewer	29,084	12,041	8,458	2,030	10,489	36%	87%	39,525
Combined Sewer Overflow								
CSO Program Management	1,634	664	532	0	532	33%	80%	11,039
Combined Sewer Projects	8,955	4,649	1,034	239	1,273	14%	27%	21,335
D.C. Clean Rivers Project (aka Long-Term Control Plan)	<u>152,920</u>	<u>78,182</u>	<u>45,046</u>	<u>10,476</u>	<u>55,522</u>	36%	71%	<u>204,912</u>
Total Combined Sewer Overflow	163,509	83,495	46,612	10,715	57,327	35%	69%	237,286
Stormwater								
Stormwater Local Drainage	28	6	0	0	0	0%	0%	239
Stormwater On-Going Program	812	372	24	270	294	36%	79%	616
Stormwater Pumping Facilities	-	-	0	0	0			0
DDOT Stormwater Program	2	-	0	0	0	0%		0
Stormwater Research and Program Management	289	131	967	0	967	334%	738%	1,097
Stormwater Trunk/Force Sewers	<u>2,120</u>	<u>939</u>	<u>556</u>	<u>21</u>	<u>577</u>	27%	61%	<u>471</u>
Total Stormwater	3,252	1,448	1,546	291	1,837	57%	127%	2,422
Water								
Water Distribution Systems	25,445	12,984	8,468	1,299	9,768	38%	75%	43,381
Water On-Going Projects	10,321	5,049	2,483	1,043	3,526	34%	70%	8,429
Water Pumping Facilities	3,226	1,472	419	148	567	18%	38%	15,165
DDOT Water Projects	5,791	3,008	137	884	1,021			8,246
Water Storage Facilities	1,353	566	32	96	128	9%	23%	1,353
Water Projects Program Management	4,332	1,971	1,373	300	1,673	39%	85%	8,227
Water Lead Program	1,860	1,391	859	147	1,006	54%	72%	7,021
AMR Installation / Replacement	<u>8,529</u>	<u>4,265</u>	<u>1,428</u>	<u>266</u>	<u>1,694</u>	20%	40%	<u>1,167</u>
Total Water	60,858	30,706	15,199	4,184	19,383	32%	63%	92,989
Washington Aqueduct	10,598	5,300	1,418	0	1,418	13%	27%	
Capital Equipment	18,422	8,928	6,524	974	7,498	41%	84%	6,867
Total Capital Projects	\$644,265	\$323,342	\$197,406	\$35,715	\$233,121	36%	72%	1,002,628

¹ Includes actual OCIP related disbursements of \$5,314,679

**DC WATER
LISTING OF CSO CONGRESSIONAL FUNDING AND PROJECTS
MARCH 31, 2013**

Footnote	Name	Period	Federal Award Amount	Cumulative Federal Expenditures as of 12/31/12	Current Quarter Expenditures	Cumulative Federal Expenditures as of 03/31/13	Remaining Federal Balance
1	<u>CONGRESSIONAL CSO APPROPRIATION BUDGET</u>	02/03 -					
	<u>LTCP Projects</u>						
	Anacostia CSS LTCP - Facility Plan Phase		63,865,968	63,832,035	5,195,921	69,027,956	(5,161,988)
	Potomac CSS LTCP Facility Plan		1,753,000	419,826	11,306	431,132	1,321,868
	CSO LTCP Rock Creek Projects		1,753,000	156,729		156,729	1,596,271
	CSO Sewer Instrumentation & Control		25,000	15,950		15,950	9,050
	Total LTCP Projects		67,396,968	64,424,540	5,207,227	69,631,767	(2,234,799)
	<u>Program Management</u>						
	CSO Program Management		3,457,000	460,280		460,280	2,996,720
	CSO Long Term Control Plan		5,120,155	251,439		251,439	4,868,716
	Total Program Management		8,577,155	711,719		711,719	7,865,436
	<u>Nine Minimum Control Projects</u>						
	WASA Low Impact Development Projects		1,500,000	155,914	85	155,999	1,344,001
	Potomac Pumping Station Rehabilitation		5,112,500	5,045,455		5,045,455	67,045
	Rock Creek CSO Projects		5,100,194	5,077,550	34,093	5,111,643	(11,449)
	CSO Nine Minimum Control Projects		575,000	574,226		574,226	774
	Outfall Sewer Rehabilitation		19,865,787	19,696,724		19,696,724	169,063
	Potomac Pumping Station Phase III		7,469,599	331,237	1,096	332,333	7,137,266
	Swirl Facilitation Rehabilitation		1,830,000	159,793		159,793	1,670,207
	CSO Fabridam Replacement		4,479,579	4,479,579		4,479,579	0
	Main and O Pumping Station		37,838,285	35,717,634	32,469	35,750,103	2,088,182
	East Side Pumping Station		7,792,966	7,761,444		7,761,444	31,522
	Poplar Point Pumping Station		878,000	877,143		877,143	857
	Dry Weather Overflow Elimination		154,912	154,912		154,912	0
	CSO Wet Weather Water Quality Monitoring		24,657	24,657		24,657	0
	Total Nine Minimum Control Projects		92,621,479	80,056,268	67,743	80,124,011	12,497,468
	TOTAL CSO APPROPRIATION		\$168,595,602	\$145,192,527	\$5,274,970	\$150,467,497	\$18,128,105

**DC WATER
LISTING OF CSO CONGRESSIONAL FUNDING AND PROJECTS
MARCH 31, 2013**

Footnote	Name	Period	Federal Award Amount	Cumulative Federal Expenditures as of 12/31/12	Current Quarter Expenditures	Cumulative Federal Expenditures as of 03/31/13	Remaining Federal Balance
	<u>Cash Reconciliation</u>						
	Plus Unreimbursed 2nd Quarter Expenditures						3,359,237
	Interest Earned						<u>12,279,457</u>
	Reconciled Total Cash						33,766,799
	Cash per Treasury						\$33,766,799

FOOTNOTES

1	Appropriation on February 20, 2003	\$49,675,000
	Appropriation on January 22, 2004	29,823,000
	Appropriation on November, 2004	4,800,000
	Less Federal Recission	(38,400)
	Appropriation on December 15, 2005	7,000,000
	Less Federal Recission	(70,000)
	Appropriation on April 5, 2007 (\$7,000,000 less recission)	7,000,000
	Less Federal Recission	(70,000)
	Appropriation on March 25, 2008	8,000,000
	Appropriation on April 3, 2009	16,000,000
	Appropriation on February 17, 2010	20,000,000
	Appropriation on November 3, 2010	3,506,000
	Appropriation on February 2, 2011	4,986,000
	Appropriation on June 8, 2011	2,984,002
	Appropriation on December 14, 2011	2,378,068
	Appropriation on January 16, 2012	12,621,932
	Total Appropriation	168,595,602

**DC WATER
LISTING OF EPA/MISC OPEN GRANTS
MARCH 31, 2013**

		Total EPA		Federal	Cumulative		Cumulative	
		Allowable	% of	Grant	Federal	Current	Federal	Remaining
Name	Period	Project	Federal	Award	Expenditures	Quarter	Expenditures	Federal
		Budget	Funding	Amount	as of 12/31/12	Expenditures	as of 03/31/13	Balance
<u>CLEAN WATER ACT GRANTS</u>								
Nitrification Facilities Upgrade	9/04 - 12/15	\$51,858,033	55%	\$28,521,918	22,939,100		22,939,100	5,582,818
Filtration and Disinfection Facility Upgrade Phase 2	9/06 - 09/13	9,872,426	55%	5,429,834	4,887,700		4,887,700	542,134
Raw Wastewater Pump Station 1 Upgrade	09//08 - 08/13	3,834,893	55%	2,109,191	1,581,900		1,581,900	527,291
Biological Sludge Thickening Facility Rehabilitation	8/10 - 12/13	14,060,069	55%	7,733,038	6,921,900		6,921,900	811,138
Area Substation 6	9/10 - 12/13	6,829,465	53%	3,626,566	2,887,300	164,400	3,051,700	574,866
Rehabilitation of Sewers, Various Locations Companion	9/10 - 12/13	447,397	23%	101,752		33,600	33,600	68,152
Blue Plains Enhanced Nitrogen Removal Facilities	5/12- 9/17	27,327,655	55%	15,030,210	4,198,800	1,913,900	6,112,700	8,917,510
Blue Plains Enhanced Nitrogen Removal -North	9//12- 7/17	8,921,952	55%	4,907,074				
Rock Creek Combined Sewer Separation	5/06 - 12/12	2,743,336	55%	1,508,835	700,500		700,500	808,335
Filtration/Disinfection Facilities Upgrade, Phase 3	11/10 - 11/13	2,116,364	55%	1,164,000	1,046,000		1,046,000	118,000
Nit/Denit Sedimentation Basin Replacement Actuators	7/11 - 4/14	529,144	55%	291,000			0	291,000
TOTAL OPEN CLEAN WATER ACT GRANTS		\$ 128,540,734		\$ 70,423,418	\$ 45,163,200	\$ 2,111,900	\$ 47,275,100	\$ 18,241,244
<u>SAFE-DRINKING WATER GRANTS</u>								
Large Valve Replacements, Contract 7	09/08 - 09/13	\$3,458,000	80%	\$2,766,400	1,310,400	234,400	1,544,800	1,221,600
Large Valve Replacements, Contract 9	12/11 - 08/14	2,697,597	80%	2,158,077				2,158,077
Large Valve Replacements, Contract 10	2/13 - 9/15	2,020,300	80%	1,616,240				
Small Diameter Water Main Replacements 2008	09/08 - 06/13	12,560,176	80%	8,548,141	6,346,600		6,346,600	2,201,541
Small Diameter Water Main Replacements for 2010	9/10 - 12/13	2,648,917	80%	657,700	545,300		545,300	112,400
Cross-Town Tunnel Water Main Rehabilitation	6/11 - 5/13	6,064,214	80%	4,851,371	833,700		833,700	4,017,671
Small Diameter Water Main Rehabilitation Contract	6/11 - 5/14	14,978,250	80%	11,982,600	5,730,800	1,502,600	7,233,400	4,749,200
Small Diameter Water Main Replacements Contract 8	9/12 - 3/16	14,286,216	80%	11,428,974				11,428,974
Anacostia Pumping Station Replacement	08/07 - 06/13	21,988,000	80%	14,590,400	14,212,600		14,212,600	377,800
Fort Reno Pumping Station Rehabilitation & Upgrade	9/10 - 12/14	7,300,000	80%	3,007,480	206,300	217,000	423,300	2,584,180
16th & Alaska Pumping Station Upgrades	6/12 - 9/14	1,420,000	80%	1,136,000				1,136,000
Storage Facility Upgrades - Contract 2	6/12 - 03/15	1,900,000	80%	1,520,000				1,520,000
Bryant Street Pumping Discharge Piping Replacement	9/10 - 4/14	10,180,000	80%	8,144,000			0	8,144,000
Steel Water Mains, Contract 1	7/12 - 1/14	3,143,507	80%	2,514,805				2,514,805
TOTAL SAFE DRINKING WATER GRANTS		\$ 104,645,177		\$ 74,922,188	\$ 29,185,700	\$ 1,954,000	\$ 31,139,700	\$42,166,248
TOTAL EPA GRANTS (SRF)		\$ 233,185,911		\$ 145,345,606	\$ 74,348,900	\$ 4,065,900	\$ 78,414,800	\$ 60,407,492

**DC WATER
LISTING OF EPA/MISC OPEN GRANTS
MARCH 31, 2013**

Name	Period	Total EPA Allowable Project Budget	% of Federal Funding	Federal Grant Award Amount	Cumulative Federal Expenditures as of 12/31/12	Current Quarter Expenditures	Cumulative Federal Expenditures as of 03/31/13	Remaining Federal Balance
ARRA FUNDING--SAFE DRINKING WATER								
Large Valve Replacement Contract 8	12/09 - 12/12	1,997,348	100%	1,997,348	1,997,348		1,997,348	0
Small Diameter Distrib. Main Rehab., Contract 6	12/09 - 6/13	5,789,629	100%	5,789,629	5,238,800		5,238,800	550,829
TOTAL ARRA SAFE DRINKING GRANTS		\$ 19,500,000		\$7,786,977	\$7,236,148	\$0	\$7,236,148	\$550,829
ARRA FUNDING CLEAN WATER GRANTS								
Watts Branch Sewer Rehab, Phase 2	10/09 - 12/12	\$ 680,511	100%	\$680,511	\$680,511		\$680,511	0
TOTAL ARRA CLEAN WATER GRANTS		\$ 680,511		\$ 680,511	\$ 680,511	\$ -	\$ 680,511	\$ -
GRAND TOTAL ARRA GRANTS		\$ 25,295,442		\$ 8,467,488	\$ 7,916,659	\$ -	\$ 7,916,659	\$ 550,829
GRAND TOTAL ALL EPA GRANTS		\$ 258,481,353		\$ 153,813,094	\$ 82,265,559	\$ 4,065,900	\$ 86,331,459	\$ 60,958,321
MISC. GRANTS								
DC Office of Deputy Mayor for Planning & Economic Dev.	12/07 - 05/09		50%	1,100,000	721,712		721,712	378,288
DC Dept. Parks & Rec., DDOE and DCWASA	06/06 - 06/10		48%	1,094,000	223,273		223,273	870,727
BOLD = NEW GRANTS								



DC Water

Investment Performance Report – March 2013



**DC Water
Finance Division
Economic Update**

ECONOMIC COMMENTARY

- The U.S. economy grew 0.4% during the fourth quarter of 2012. Strong consumer spending and growing personal income have caused some economists to forecast first quarter GDP growth above 3%. The federal budget sequestration, which became effective March 1st, will reduce GDP in the second half of the year to a level between 1.0% and 1.5%.
- The March employment report was disappointing, showing growth of only 88,000 jobs. The national unemployment rate fell 0.1% to 7.6%.
- The Federal Reserve (Fed) voted to keep the federal funds rate near zero and reiterated its commitment to monthly purchases of Treasuries and mortgage-backed securities (MBS).

PORTFOLIO RECAP

- The portfolio is diversified among Bank Deposits, Commercial Paper, Federal Agencies, FDIC Insured CDs, and SEC registered money market funds.
- The overall yield-to-cost of the portfolio is 0.39%.
- The portfolio is in compliance with the Authority's Investment Policy.

2010A Construction Fund

- The Authority purchased \$10 million of 4 month commercial paper with a yield of 0.13%.

Operating Reserve Fund

- The Authority purchased \$2.5 million of 2 year CDs with a yield of 0.60%.

CSO LTCP Appropriations Fund

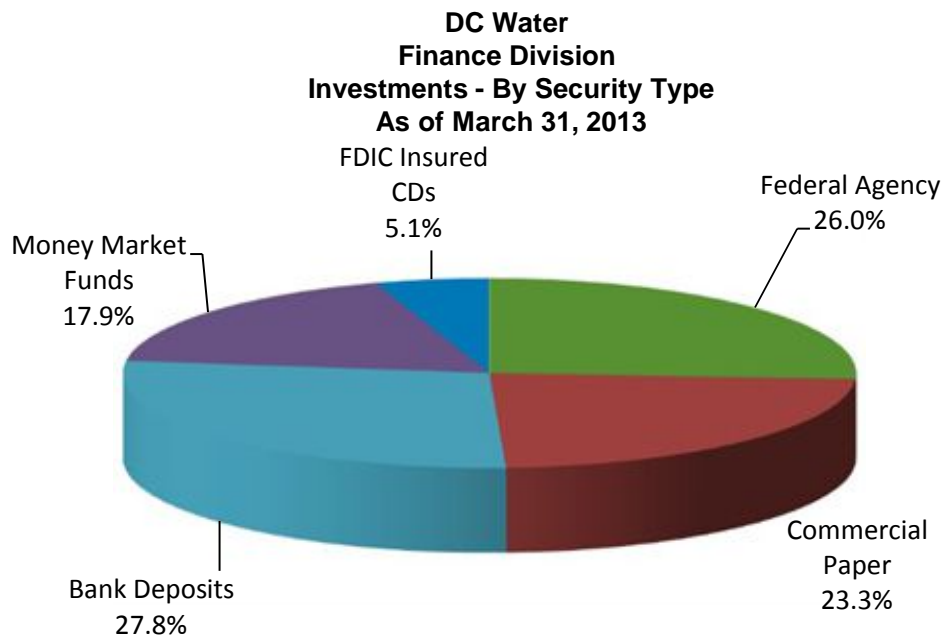
- The Authority purchased \$20 million of 3 to 4 month commercial paper with an average yield of 0.17%.

Rate Stabilization Fund

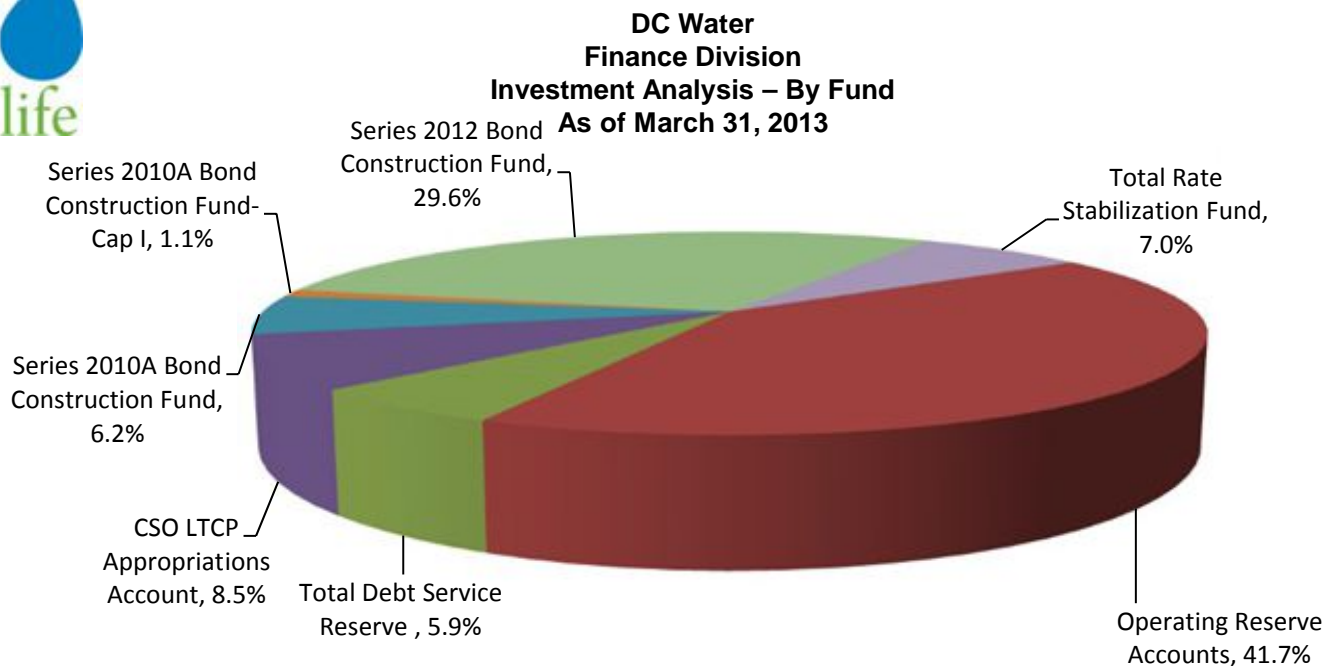
- The Authority purchased \$10 million of 3 month commercial paper with a yield of 0.22%.

2012 Bond Construction Fund

- The Authority purchased \$10 million of 3 month commercial paper with a yield of 0.23%.
- The Authority purchased \$10 million of 3 month federal agency discount notes with a yield of 0.08%.



Security Type	Book Value + Accrued Interest	Asset Allocation	Permitted By Policy
Bank Deposits	\$ 110,498,499	27.8%	100.0%
Money Market Funds	71,130,189	17.9%	100.0%
Bankers Acceptances	-		40.0%
Commercial Paper	92,489,705	23.3%	35.0%
U.S. Treasuries	-	0.0%	100.0%
Federal Agency	103,393,167	26.0%	80.0%
FDIC Insured CDs	20,086,037	5.1%	30.0%
Municipal Obligations	-	0.0%	20.0%
Total	\$ 397,597,597	100.0%	

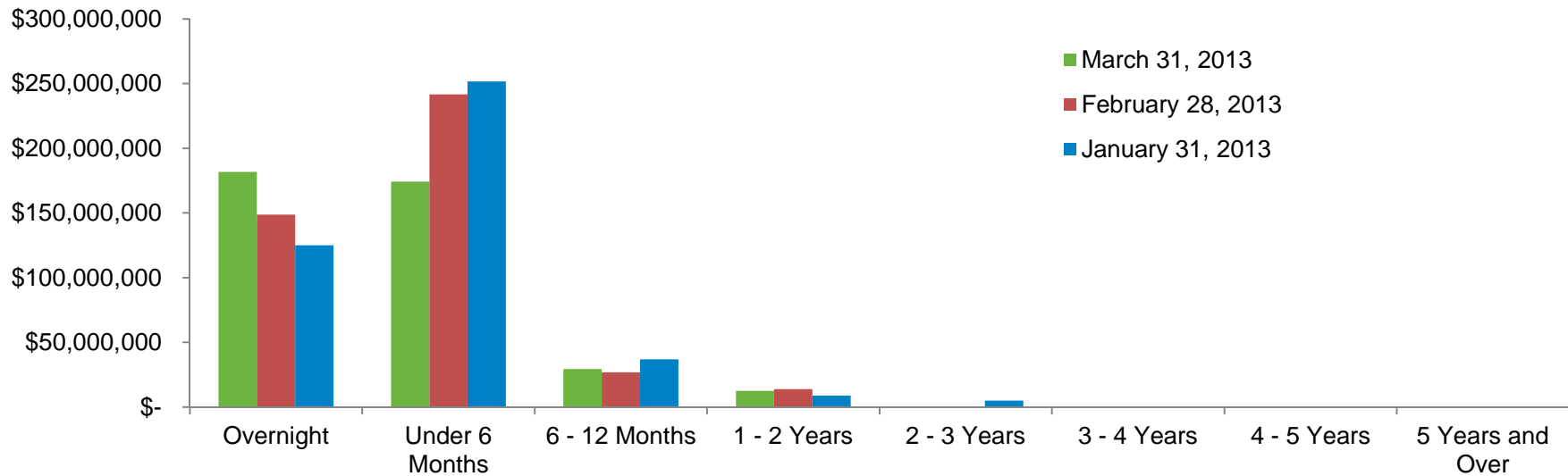


Fund Name	Book Value + Accrued Interest	Yield-to- Maturity at Cost	Effective Duration (years)	Weighted Average Maturity (days)
Total Rate Stabilization Fund	\$ 27,953,575	0.39%	0.13	48.9
Operating Reserve Accounts	\$ 165,618,835	0.70%	0.18	81.4
Total Debt Service Reserve	\$ 23,429,178	0.28%	0.55	204.2
Series 2010A Bond Construction Fund	\$ 24,540,312	0.06%	0.13	47.8
Series 2010A Bond Construction Fund- Cap I	\$ 4,565,286	0.67%	0.45	163.3
Total CSO LTCP Appropriations Account	\$ 33,767,341	0.33%	0.17	62.3
2012 Bond Construction Fund	\$ 117,723,070	0.07%	0.03	30.2
Total	\$ 397,597,597	0.39%	0.15	68.4



**DC Water
Finance Division
Investment Analysis – By Maturity**

Maturity Distribution	March 31, 2013	February 28, 2013	January 31, 2013
Overnight \$	181,628,687.57 \$	148,718,190.15 \$	124,933,693.58
Under 6 Months	174,117,595.67	241,662,078.09	251,598,607.55
6 - 12 Months	29,339,335.10	26,813,067.40	36,812,121.46
1 - 2 Years	12,511,978.25	13,929,728.41	8,929,043.29
2 - 3 Years	-	-	4,995,215.03
3 - 4 Years	-	-	-
4 - 5 Years	-	-	-
5 Years and Over	-	-	-
Totals \$	397,597,596.59 \$	431,123,064.05 \$	427,268,680.91





**DC Water
Finance Division
Investments – Issuer Allocation**

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Bank Deposits					
TD Bank		100,428,193.82	25.3%	100.0%	Yes
Premier Bank		5,031,190.21	1.3%	100.0%	Yes
Capital One Bank		5,039,114.55	1.3%	100.0%	Yes
Sub-Total Bank Deposits		110,498,498.58	27.8%	100.0%	Yes
Money Market Mutual Funds					
American Beacon MMF	AAAm	1,483,480.46	0.4%	50.0%	Yes
Williams Capital Money Market Fund	AAAm	2,500,353.65	0.6%	50.0%	Yes
Merrill Lynch MMF	AAAm	1,185,230.20	0.3%	50.0%	Yes
Wells Fargo Advantage Treasury Plus	AAAm	16,070,219.89	4.0%	50.0%	Yes
Wells Fargo Government MMF	AAAm	49,890,904.79	12.5%	50.0%	Yes
Sub-Total Money Market Mutual Funds		71,130,188.99	17.9%	100.0%	Yes
Certificates of Deposit					
CDARs - Placed by Industrial Bank	NR / NR	15,070,218.14	3.8%	30.0%	Yes
CDARs - Placed by City First Bank	NR / NR	5,015,818.96	1.3%	30.0%	Yes
Sub-Total Certificates of Deposit		20,086,037.10	5.1%	30.0%	Yes
Commercial Paper					
Bank Of Nova Scotia Ny Comm Paper	A-1 / P-1	9,996,294.40	2.5%	5.0%	Yes
Baylor University Comm Paper	A-1+ / NR	9,997,916.70	2.5%	5.0%	Yes
Fcar Owner Trust Comm Paper	A-1+ / P-1	9,999,927.80	2.5%	5.0%	Yes
Jp Morgan Chase & Co Comm Paper	A-1 / P-1	9,994,250.00	2.5%	5.0%	Yes
Mizuho Funding Llc Comm Paper	A-1 / P-1	9,994,569.40	2.5%	5.0%	Yes
Nestle Finance Intl Ltd Comm Paper	A-1+ / P-1	9,995,847.20	2.5%	5.0%	Yes
Sumitomo Mitsui Bank Ny Comm Paper	A-1 / P-1	9,994,866.70	2.5%	5.0%	Yes
University Of California Comm Paper	A-1+ / P-1	7,519,732.59	1.9%	5.0%	Yes
Wells Fargo & Company Comm Paper	A-1 / P-1	14,996,299.95	3.8%	5.0%	Yes
Sub-Total Commercial Paper		92,489,704.74	23.3%	35.0%	Yes
Federal Agencies					
Fannie Mae	AA+ / Aaa	12,801,941.98	3.2%	40.0%	Yes
Freddie Mac	AA+ / Aaa	50,198,693.14	12.6%	40.0%	Yes
Federal Home Loan Bank	AA+ / Aaa	40,392,532.06	10.2%	40.0%	Yes
Sub-Total Federal Agencies		103,393,167.18	26.0%	100.0%	Yes
Total		\$ 397,597,596.59	100.0%		



**DC Water
Finance Division
Book Value Performance
As of March 31, 2013**

The portfolio is in compliance with the Authority's Investment Policy

	Trailing 1 Months		Trailing 3 Months		Trailing 6 Months		Trailing 12 Months
	Periodic	Annualized	Periodic	Annualized	Periodic	Annualized	
Total Rate Stabilization Fund	0.02%	0.27%	0.06%	0.25%	0.15%	0.30%	0.49%
Operating Reserve Accounts	0.04%	0.43%	0.10%	0.40%	0.19%	0.39%	0.49%
Total Debt Service Reserve	0.02%	0.28%	0.07%	0.28%	0.17%	0.34%	0.43%
Total CSO LTCP Appropriations Account	0.01%	0.11%	0.02%	0.10%	0.06%	0.11%	0.15%
2010A Construction Fund	0.00%	0.05%	0.01%	0.04%	0.02%	0.04%	0.06%
2010A Capitalized Interest Fund	0.06%	0.72%	0.21%	0.86%	0.44%	0.88%	0.83%
2012 Construction Fund	0.00%	0.05%	0.01%	0.05%	0.03%	0.07%	0.09%
Short-Term	0.03%	0.39%	0.08%	0.33%	0.16%	0.32%	0.31%
Merrill Lynch 3-Month Treasury Index (Book Value) ¹	0.01%	0.11%	0.02%	0.07%	0.04%	0.08%	0.08%
Core (1+ Years)	0.04%	0.48%	0.13%	0.54%	0.34%	0.69%	0.75%
Merrill Lynch 1-3 Year Treasury Index (Book Value) ²	0.02%	0.25%	0.06%	0.26%	0.13%	0.27%	0.28%

- (1) The Merrill Lynch 3-Month Treasury Bill is an unmanaged index tracking the on-the-run Treasury Bill. The Index is produced and maintained by Merrill Lynch & Co. Performance for this index is shown on a book value basis.
- (2) The Merrill Lynch 3-Month Treasury Bill is an unmanaged index tracking a basket of U.S. Treasuries with 1 to 3 year maturities. The Index is produced and maintained by Merrill Lynch & Co. Performance for this index is shown on a book value basis.



DC Water
Finance Division
Portfolio Holdings by Fund

DESCRIPTION	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
Total Rate Stabilization Fund									
TD BANK BANK DEPOSIT	\$ 7,960,792		4/1/2013		0.90%	\$ 7,960,792	\$ 7,960,792	\$ 7,960,792	
BAYLOR UNIVERSITY COMM PAPER	10,000,000	-	5/21/2013	1/14/2013	0.15%	9,994,708	9,994,708	9,997,917	
SUMITOMO MITSUI BANK NY COMM PAPER	10,000,000	-	6/24/2013	3/26/2013	0.22%	9,994,500	9,993,950	9,994,867	
									\$ 27,953,575.07
Operating Reserve Accounts									
TD BANK BANK DEPOSIT	\$ 85,205,276		4/1/2013		0.90%	\$ 85,205,276	\$ 85,205,276	\$ 85,205,276	
CAPITAL ONE BANK	5,039,115		4/1/2013		0.50%	5,039,115	5,039,115	5,039,115	
WILLIAMS CAPITAL MONEY MARKET FUND	2,500,354		4/1/2013		0.00%	2,500,354	2,500,354	2,500,354	
FCAR OWNER TRUST COMM PAPER	10,000,000	-	4/2/2013	11/27/2012	0.26%	9,990,900	9,999,780	9,999,928	
UNIVERSITY OF CALIFORNIA COMM PAPER	7,520,000	-	4/9/2013	1/14/2013	0.16%	7,517,159	7,517,159	7,519,733	
WELLS FARGO & COMPANY COMM PAPER	15,000,000	-	6/14/2013	2/26/2013	0.12%	14,994,600	14,993,235	14,996,300	
FHLB NOTES	10,000,000	0.750	8/28/2013	5/18/2011	0.72%	10,008,025	10,053,765	10,029,838	
INDUSTRIAL BANK CDARS	5,000,000	0.600	10/17/2013	10/18/2012	0.60%	5,000,000	5,013,562	5,013,562	
FHLB TAP BONDS	10,000,000	3.125	12/13/2013	5/19/2011	0.99%	10,675,134	10,302,010	10,242,255	
INDUSTRIAL BANK CDARS	2,512,497	0.620	1/23/2014	1/24/2013	0.62%	2,512,497	2,515,396	2,515,396	
INDUSTRIAL BANK CDARS	2,500,000	0.900	1/27/2014	1/26/2012	0.90%	2,500,000	2,526,568	2,526,568	
CITY FIRST BK OF WASHINGTON, DC (CDARS)	2,500,000	0.600	3/23/2014	3/23/2012	0.60%	2,500,000	2,520,299	2,515,367	
INDUSTRIAL BANK CDARS	5,000,000	0.650	10/16/2014	10/18/2012	0.65%	5,000,000	5,014,692	5,014,692	
CITY FIRST BK OF WASHINGTON, DC (CDARS)	2,500,452	0.600	3/19/2015	3/21/2013	0.60%	2,500,452	2,500,452	2,500,452	
									\$ 165,618,834.53
Total Debt Service Reserve									
MERRILL LYNCH MMF	1,185,230		4/1/2013		0.06%	1,185,230	1,185,230	1,185,230	
WELLS FARGO GOVERNMENT MMF	2,121,753		4/1/2013		0.01%	2,121,753	2,121,753	2,121,753	
FANNIE MAE DISC NOTE	10,000,000	-	4/1/2013	12/18/2012	0.05%	9,998,556	9,999,986	10,000,000	
FHLB TAP BONDS	5,000,000	3.125	12/13/2013	5/25/2011	0.87%	5,354,034	5,151,005	5,125,361	
FEDERAL HOME LOAN BANK GLOBAL NOTES	5,000,000	0.250	2/20/2015	1/30/2013	0.30%	4,995,000	4,995,204	4,996,834	
									\$ 23,429,178.24



DC Water
Finance Division
Portfolio Holdings by Fund

DESCRIPTION	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
Series 2010A Bond Construction Fund									
WELLS FARGO ADVANTAGE TREASURY PLUS	\$ 14,544,465		4/1/2013		0.01%	\$ 14,544,465	\$ 14,544,465	\$ 14,544,465	
NESTLE FINANCE INTL LTD COMM PAPER	10,000,000	-	7/25/2013	3/26/2013	0.13%	9,995,631	9,995,710	9,995,847	
									\$ 24,540,312.20
Series 2010A Bond Construction Fund- Cap I									
WELLS FARGO GOVERNMENT MMF	\$ 237,589		4/1/2013		0.01%	\$ 237,589	\$ 237,589	\$ 237,589	
WELLS FARGO ADVANTAGE TREASURY PLUS	1,525,755		4/1/2013		0.01%	1,525,755	1,525,755	1,525,755	
FNMA NOTES	1,400,000	1.125	9/30/2013	3/16/2011	0.97%	1,412,681	1,406,957	1,401,116	
FNMA NOTES (EX-CALLABLE)	1,400,000	1.250	3/14/2014	3/16/2011	1.19%	1,402,617	1,415,091	1,400,826	
									\$ 4,565,285.60
Total CSO LTCP Appropriations Account									
TD BANK BANK DEPOSIT	\$ 7,262,126		4/1/2013		0.90%	\$ 7,262,126	\$ 7,262,126	\$ 7,262,126	
PREMIER BANK DEPOSIT	5,031,190		4/1/2013		0.24%	5,031,190	5,031,190	5,031,190	
AMERICAN BEACON MMF	1,483,480		4/1/2013		0.06%	1,483,480	1,483,480	1,483,480	
BANK OF NOVA SCOTIA NY COMM PAPER	10,000,000	-	7/2/2013	3/26/2013	0.15%	9,996,053	9,994,560	9,996,294	
JP MORGAN CHASE & CO COMM PAPER	10,000,000	-	7/25/2013	3/26/2013	0.18%	9,993,950	9,993,730	9,994,250	
									\$ 33,767,340.73
Series 2012 Bond Construction Fund									
WELLS FARGO GOVERNMENT MMF	\$ 47,531,563		4/1/2013		0.01%	\$ 47,531,563	\$ 47,531,563	\$ 47,531,563	
FHLMC GLOBAL NOTES	25,000,000	1.625	4/15/2013	2/26/2013	0.12%	25,051,062	25,203,926	25,201,915	
FREDDIE MAC DISC NOTE	25,000,000	-	5/29/2013	3/26/2013	0.08%	24,996,444	24,995,518	24,996,778	
FEDERAL HOME LOAN BANKS DISC NOTE	10,000,000	-	6/19/2013	3/26/2013	0.08%	9,998,111	9,997,414	9,998,244	
MIZUHO FUNDING LLC COMM PAPER	10,000,000	-	6/25/2013	3/26/2013	0.23%	9,994,186	9,993,860	9,994,569	
									\$ 117,723,070.22
						\$ 398,004,987.66	\$ 397,717,224.75	\$ 397,597,596.59	\$ 397,597,596.59



DC Water
Finance Division
Security Transactions
Last 6 Months

ACCOUNT	CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Purchases								
DC WASA 2010A CONSTRUCTION FUND	9127956Y2	US TREASURY BILL	20,000,000	-	12/27/12	10/24/12	0.112	\$ 19,996,088.89
DC WASA 2010A CONSTRUCTION FUND	313589DP5	FNMA DISC NOTE	10,000,000	-	03/27/13	12/28/12	0.081	\$ 9,998,022.00
DC WASA 2010A CONSTRUCTION FUND	64105RUR9	NESTLE FINANCE INTL LTD COMM PAPER	10,000,000	-	07/25/13	03/26/13	0.132	\$ 9,995,630.56
DC WASA OPERATING RESERVE ACCOUNTS	RE0937269	INDUSTRIAL BANK CDARS	5,000,000	0.650	10/16/14	10/18/12	0.659	\$ 5,000,000.00
DC WASA OPERATING RESERVE ACCOUNTS	RE0937277	INDUSTRIAL BANK CDARS	5,000,000	0.600	10/17/13	10/18/12	0.608	\$ 5,000,000.00
DC WASA OPERATING RESERVE ACCOUNTS	64105RNN6	NESTLE FINANCE INTL LTD COMM PAPER	10,000,000	-	01/22/13	11/20/12	0.132	\$ 9,997,725.00
DC WASA OPERATING RESERVE ACCOUNTS	313385BA3	FHLB DISC NOTE	10,000,000	-	01/25/13	11/20/12	0.066	\$ 9,998,808.33
DC WASA OPERATING RESERVE ACCOUNTS	313397CL3	FHLMC DISC NOTE	15,000,000	-	02/28/13	11/20/12	0.112	\$ 14,995,416.67
DC WASA OPERATING RESERVE ACCOUNTS	3024A6R20	FCAR OWNER TRUST COMM PAPER	10,000,000	-	04/02/13	11/27/12	0.264	\$ 9,990,900.00
DC WASA OPERATING RESERVE ACCOUNTS	36959HQ77	GENERAL ELEC CAP CORP COMM PAPER	10,000,000	-	03/27/13	11/27/12	0.223	\$ 9,992,666.67
DC WASA OPERATING RESERVE ACCOUNTS	59157TPR8	METLIFE SHORT TERM FUNDING COMM PAPER	5,000,000	-	02/25/13	11/27/12	0.172	\$ 4,997,875.00
DC WASA OPERATING RESERVE ACCOUNTS	7426M4QS9	PRIVATE EXPORT FUND COMM PAPER	10,000,000	-	03/26/13	11/27/12	0.183	\$ 9,994,050.00
DC WASA OPERATING RESERVE ACCOUNTS	313397DQ1	FHLMC DISC NOTE	5,000,000	-	03/28/13	11/27/12	0.122	\$ 4,997,983.33
DC WASA OPERATING RESERVE ACCOUNTS	91411SR93	UNIVERSITY OF CALIFORNIA COMM PAPER	7,520,000	-	04/09/13	01/14/13	0.162	\$ 7,517,159.11
DC WASA OPERATING RESERVE ACCOUNTS	RE0962176	INDUSTRIAL BANK CDARS	2,512,497	0.620	01/23/14	01/24/13	0.629	\$ 2,512,497.09
DC WASA OPERATING RESERVE ACCOUNTS	9497F0TE2	WELLS FARGO & COMPANY COMM PAPER	15,000,000	-	06/14/13	02/26/13	0.122	\$ 14,994,600.00
DC WASA OPERATING RESERVE ACCOUNTS	RE0962180	CITY FIRST BK OF WASHINGTON, DC (CDARS)	2,500,452	0.600	03/19/15	03/21/13	0.600	\$ 2,500,452.11
DC WASA TOTAL CSO LTCP APPROPRIATIONS	313385DB9	FEDERAL HOME LOAN BANKS DISC NOTE	10,000,000	-	03/15/13	12/18/12	0.061	\$ 9,998,550.00
DC WASA TOTAL CSO LTCP APPROPRIATIONS	313589CZ4	FANNIE MAE DISC NOTE	10,000,000	-	03/13/13	01/31/13	0.031	\$ 9,999,646.94
DC WASA TOTAL CSO LTCP APPROPRIATIONS	06416JU27	BANK OF NOVA SCOTIA NY COMM PAPER	10,000,000	-	07/02/13	03/26/13	0.147	\$ 9,996,052.78
DC WASA TOTAL CSO LTCP APPROPRIATIONS	4662JOUR1	JP MORGAN CHASE & CO COMM PAPER	10,000,000	-	07/25/13	03/26/13	0.183	\$ 9,993,950.00
DC WASA TOTAL DEBT SERVICE RESERVE	4662J0NP3	JP MORGAN CHASE & CO COMM PAPER	5,000,000	-	01/23/13	10/24/12	0.183	\$ 4,997,725.00
DC WASA TOTAL DEBT SERVICE RESERVE	313589DU4	FANNIE MAE DISC NOTE	10,000,000	-	04/01/13	12/18/12	0.051	\$ 9,998,555.56
DC WASA TOTAL DEBT SERVICE RESERVE	313381YP4	FEDERAL HOME LOAN BANK GLOBAL NOTES	5,000,000	0.250	02/20/15	01/30/13	0.299	\$ 4,995,173.61
DC WASA RATE STABILIZATION FD	313397DM0	FHLMC DISC NOTE	10,000,000	-	03/25/13	12/28/12	0.081	\$ 9,998,067.00
DC WASA RATE STABILIZATION FD	07286MSM4	BAYLOR UNIVERSITY COMM PAPER	10,000,000	-	05/21/13	01/14/13	0.152	\$ 9,994,708.33
DC WASA RATE STABILIZATION FD	86562KTQ7	SUMITOMO MITSUI BANK NY COMM PAPER	10,000,000	-	06/24/13	03/26/13	0.223	\$ 9,994,500.00
DC WASA 2012 CONSTRUCTION FUND	912828MB3	US TREASURY NOTES	35,000,000	1.125	12/15/12	10/24/12	0.135	\$ 35,190,151.13
DC WASA 2012 CONSTRUCTION FUND	912828MN7	US TREASURY NOTES	25,000,000	1.375	02/15/13	11/20/12	0.085	\$ 25,166,817.77
DC WASA 2012 CONSTRUCTION FUND	313397CB5	FHLMC DISC NOTE	15,000,000	-	02/19/13	11/20/12	0.101	\$ 14,996,208.33
DC WASA 2012 CONSTRUCTION FUND	313397DP3	FHLMC DISC NOTE	40,000,000	-	03/27/13	12/18/12	0.051	\$ 39,994,500.00
DC WASA 2012 CONSTRUCTION FUND	313589CZ4	FANNIE MAE DISC NOTE	20,000,000	-	03/13/13	01/30/13	0.025	\$ 19,999,416.67
DC WASA 2012 CONSTRUCTION FUND	9127957M7	US TREASURY BILL	25,000,000	-	03/21/13	01/31/13	0.031	\$ 24,998,945.14
DC WASA 2012 CONSTRUCTION FUND	3137EACJ6	FHLMC GLOBAL NOTES	25,000,000	1.625	04/15/13	02/26/13	0.123	\$ 25,198,891.61
DC WASA 2012 CONSTRUCTION FUND	60688FTR0	MIZUHO FUNDING LLC COMM PAPER	10,000,000	-	06/25/13	03/26/13	0.233	\$ 9,994,186.11
DC WASA 2012 CONSTRUCTION FUND	313385HB5	FEDERAL HOME LOAN BANKS DISC NOTE	10,000,000	-	06/19/13	03/26/13	0.081	\$ 9,998,111.11

Securities highlighted in **blue font** denote trades executed during the current month.



DC Water
Finance Division
Upcoming Transaction Cash Flows
Next 30 Days

DATE	TRANSACTION	CUSIP	DESCRIPTION	COUPON	MATURITY DATE	PAR VALUE/SHARES	PRINCIPAL	INTEREST	TOTAL
<u>Operating Reserve Accounts</u>									
04/02/13	MATURITY	3024A6R20	FCAR OWNER TRUST COMM PAPER		04/02/13	10,000,000	9,990,900.00	9,100.00	10,000,000.00
04/09/13	MATURITY	91411SR93	UNIVERSITY OF CALIFORNIA COMM PAPER		04/09/13	7,520,000	7,517,159.11	2,840.89	7,520,000.00
<u>Total Debt Service Reserve</u>									
04/01/13	MATURITY	313589DU4	FANNIE MAE DISC NOTE		04/01/13	10,000,000	9,998,555.56	1,444.44	10,000,000.00
<u>Series 2012 Bond Construction Fund</u>									
04/15/13	MATURITY	3137EACJ6	FHLMC GLOBAL NOTES	1.625	04/15/13	25,000,000	25,000,000.00	203,125.00	25,203,125.00

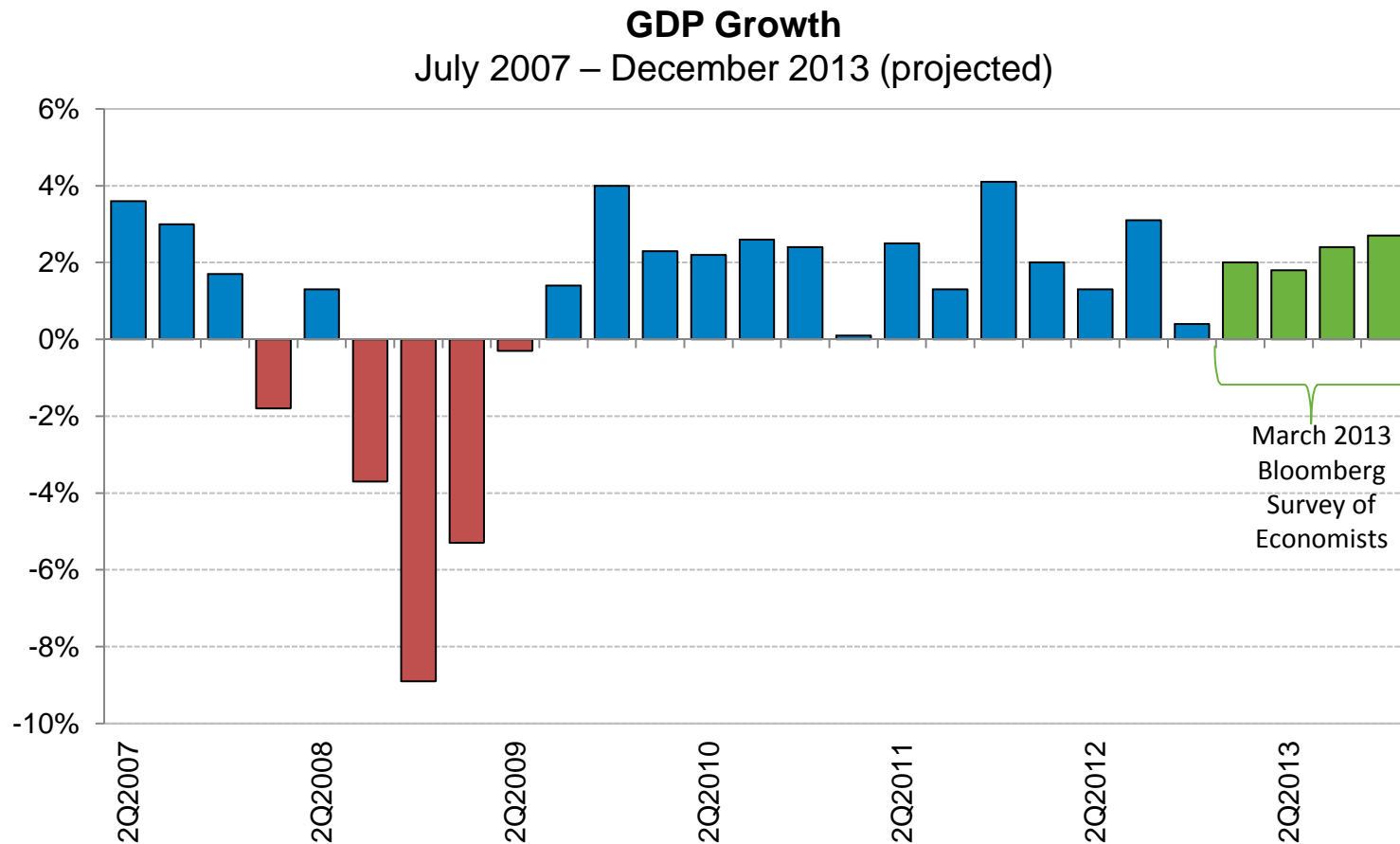


Appendix: Economic Update



Minimal GDP Growth in the Fourth Quarter

- Fourth quarter U.S. gross domestic product (GDP) growth was 0.4%. 2013 GDP growth is projected at 1.9%.



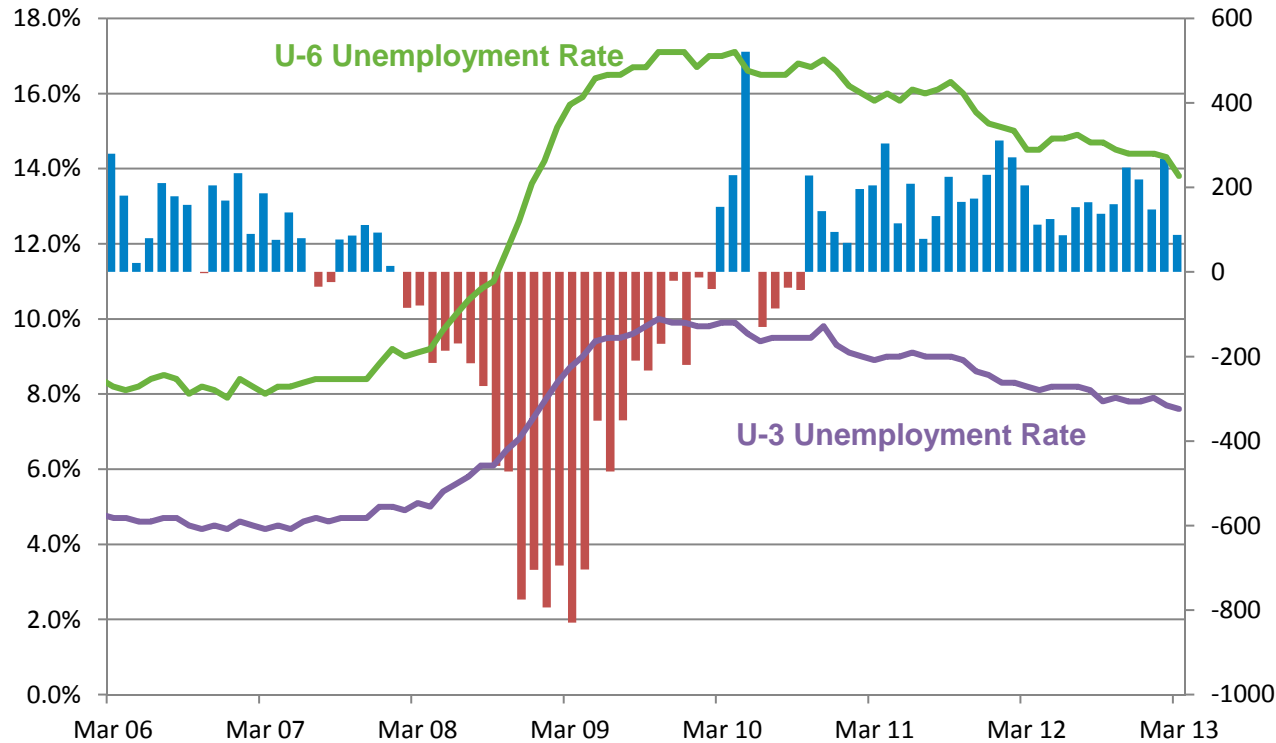
Source: Bloomberg



Weak Employment Report

- While the headline unemployment rate fell 0.1% to 7.6%, this was largely due to a significant drop in the labor force participation rate, which has fallen to 63.3%, the lowest level since 1979.
- The U.S. economy only added 88,000 jobs in March.

Unemployment vs. Non-Farm Payrolls
March 2006 – March 2013



Source: Bloomberg



Concerns in Europe and Asia Resurface

Italy

- Inconclusive elections may force a re-polling.
- Protests against the nation's "austerity" party raises stability concerns.
- Fitch cut Italy's credit rating from A- to BBB+.

Cyprus

- The European Union withheld bailout funds until Cyprus agreed to contribute to the rescue package.
- The final agreement has uninsured depositors with the Cyprus Popular Bank losing up to 80% and Bank of Cyprus uninsured savers losing up to 60%.
- There was a fear that other distressed European countries would be forced to accept similar terms.



Japan

- On April 3, Haruhiko Kuroda, Governor of the Bank of Japan, announced an "unprecedented degree of monetary stimulus."
- The BOJ has committed to purchase \$1.4 trillion through an open-ended asset buying program. The BOJ will buy long-term government bonds, exchange-traded funds (ETFs) and real estate investment trusts (REITs).
- Quantitative easing is being used to achieve 2 percent inflation in 2 years.

European Central Bank

"Against this overall background our monetary policy stance will remain accommodative for as long as needed. In the coming weeks, we will monitor very closely all incoming information on economic and monetary developments and assess any impact on the outlook for price stability."

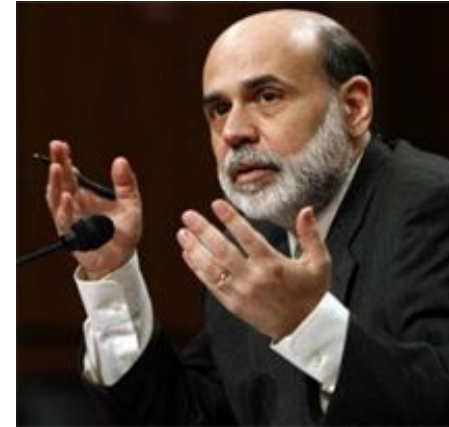
- Mario Draghi, ECB President



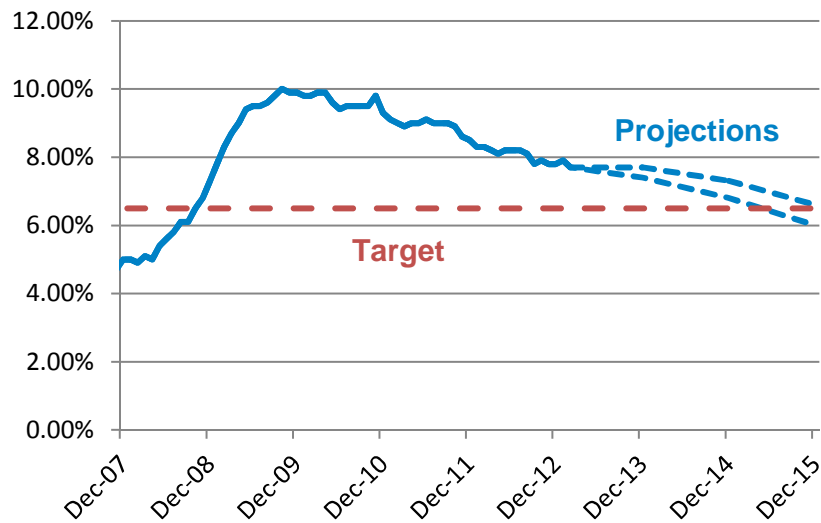
Federal Reserve Remains the Focus

From the FOMC’s statement from its March 2013 meeting:

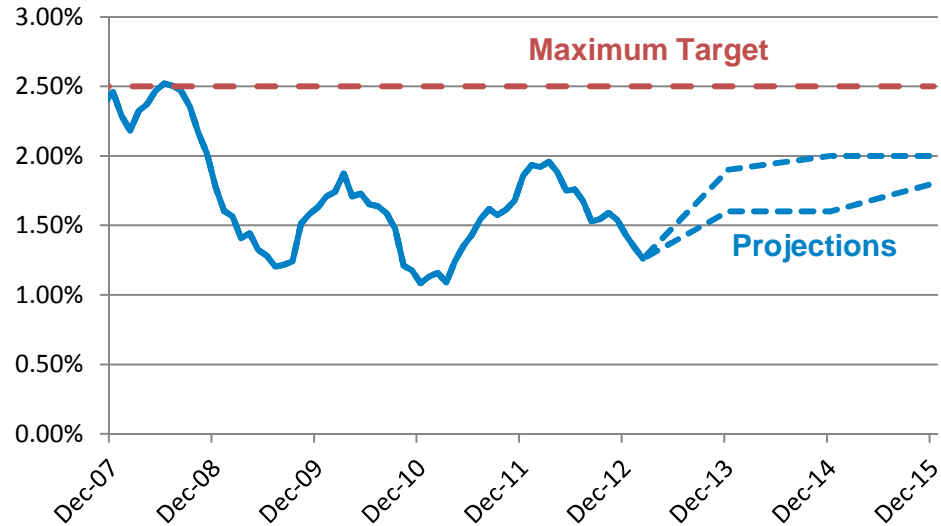
“The Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least **as long as the unemployment rate remains above 6-1/2 percent**, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.”



Unemployment Rate



Core Inflation (PCE Price Index)

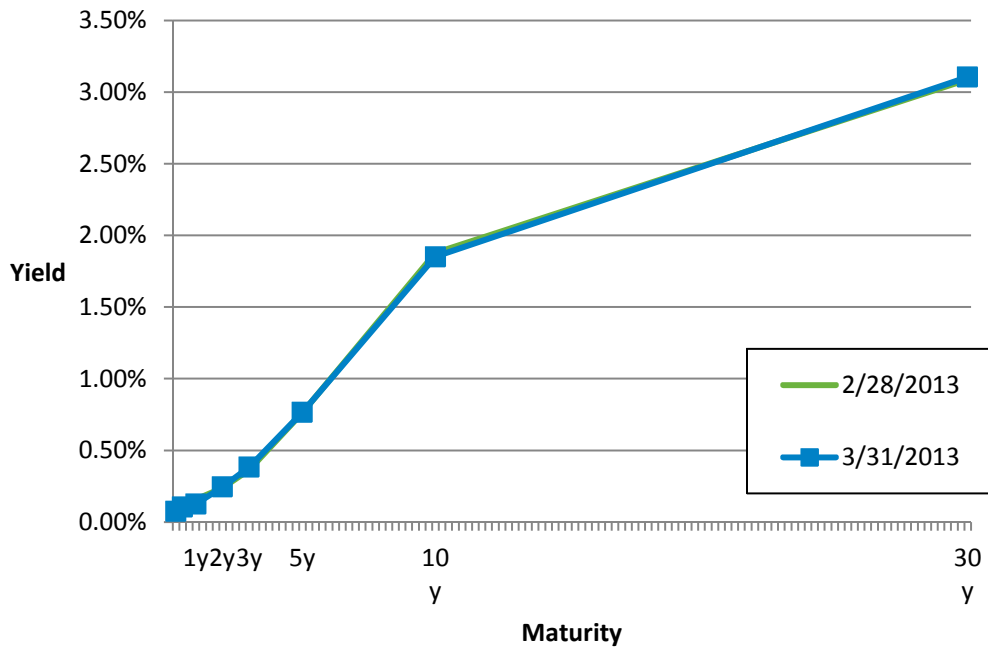


Source: Bloomberg



Yield Curve Largely Unchanged in March

U.S. Treasury Yield Curve
February 28, 2013 versus March 31, 2013



	2/28/2013	3/31/2013	Change
3 month	0.10%	0.07%	-0.03%
6 month	0.12%	0.10%	-0.02%
1 year	0.16%	0.12%	-0.03%
2 year	0.24%	0.24%	0.01%
3 year	0.36%	0.38%	0.02%
5 year	0.76%	0.77%	0.00%
10 year	1.88%	1.85%	-0.03%
30 year	3.09%	3.10%	0.02%

Source: Bloomberg



Disclosure

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District of Columbia Water and Sewer Authority
George S. Hawkins, General Manager

Facilities Master Plan Update on the:

Management Proposal to Revise the Master Facilities Plan and Build HQ

Presented to the DC Water Board of Directors

Finance & Budget Committee

***Chairman, Timothy Firestine
April 25, 2013***



Update on the Facilities Master Plan

Agenda for the Presentation

- ***Highlights of the Management Proposal***
- ***Analysis of Current Needs***
- ***Management Proposal to Revise the Non-Process Facilities Master Plan***
- ***Next Steps***



Update on the Facilities Master Plan

Highlights of the Proposal

HQ provides for a centrally-located, sustainable work environment where all of DC Water’s administrative personnel will be located in the same place for the first time! Improving operational efficiencies, our interactions with the community that we serve, and making the highest/best use of our very valuable property.

CURRENT FACILITY NEEDS = \$105M	PROPOSAL FOR REVISED MASTER FACILITIES PLAN = \$98M
NO ADDITIONAL SPACE AT BLUE PLAINS FOR NEW PROCESSES OR OTHER NEEDS	1 ACRE (40,000 SQ.FT.) OF SPACE MADE AVAILABLE WITHOUT BUILDING UP
PARKING/TRAFFIC PRESSURES AT BLUE PLAINS CONTINUE TO GROW AS ALL ADMINISTRATIVE FUNCTIONS REMAIN	ALLEVIATES PARKING & TRAFFIC CONCERNS AT BLUE PLAINS BY ELIMINATING NON-ESSENTIAL PERSONNEL FROM THE PLANT
DC WATER ENGINEERING STAFF SPREAD ACROSS 3 BLUE PLAINS FACILITIES AND SEPARATED FROM CONTRACTORS	DC WATER ENGINEERING STAFF CONSOLIDATED INTO 1 FACILITY, RETURNING COF TO ITS ORIGINAL PURPOSE AS A WASTEWATER OPERATIONS CENTER
WATER & SEWER ADMINISTRATIVE OPERATIONS NOT CONSOLIDATED, WOULD REQUIRE LEASED OFFICE SPACE	WATER & SEWER ADMINISTRATIVE OPERATIONS CONSOLIDATED, ELIMINATES NEED FOR ANY FUTURE LEASED OFFICE SPACE
CUSTOMER SERVICE & COMMAND CENTER REMAIN IN LEASED SPACE	CUSTOMER SERVICE & COMMAND CENTER INCORPORATED INTO HQ, ELIMINATES NEED FOR ANY FUTURE LEASED OFFICE SPACE



Update on the Facilities Master Plan

\$105M of current needs

LIMITATIONS & CONCERNS WITH SCOPE JUST EXPANDING EXISTING PROJECTS

Limited scope of planned expansion/renovation would not alleviate growing space problems at the plant; removal of IT Trailer is insufficient to meet growing demand

Next round of NPDES permits commence in 2015, in addition to ongoing TMDL development, and there is currently no space for any new processes or technologies

Construction projects and related laydown areas have taken up all available land at Blue Plains – we are storing materials on the docks

Waste Gas/Biofuel opportunities can't be taken advantage of because we project no space for safe operations – revenue generating potential is limited

Drastic differences in office space / work conditions not addressed

Does not diversify employee commuting options at Blue Plains, which is an increasingly congested area of the District (St. Elizabeth's/DHS, Bolling AFB, etc.)



Update on the Facilities Master Plan

\$98M Proposal

BENEFITS OF REVISING THE SCOPE AND MASTER FACILITIES PLAN STRATEGY

Reserves space/facilities at Blue Plains for expansion of water treatment processes, allowing for safe and efficient use of the plant well into the future. Focus on engineering oversight/quality control at Blue Plains

Optimizes operational efficiencies and improve response time to our customers; Reserve space and facilities for strategically placed Water & Sewer satellite field operations by consolidating all of Water & Sewer Administrative functions in one location.

DC Water is better suited on it's own land, with full control over building design & operations

Bringing in the same quality fixtures and furnishings to all departments creates a feeling of unity across DC Water, improves morale, and should result in increased performance.

Limit exposure to the largest industrial complex in DC to essential personnel only, nonessential administrative employees should be located at a different location than the treatment plant

O&M savings of almost \$2M per year from not leasing space for Customer Service (\$750,000 per year @ 80M Street SE) and Water & Sewer Administration (estimated at \$1M per year based on 80M St. rates) to offset debt service costs.

Expands commuting options, leveraging existing Metro transit/bus routes in a central DC location.



Update on the Facilities Master Plan

Issues with Operational Efficiency

- Original Plan for COF contained a very limited Scope of Work – It Does Not:
 - consolidate DETS for efficiency of operations
 - provide space for expanded and consolidated IT Department
 - free up any new space at Blue Plains for training or new processes
- The Plan directive did not consolidate administrative functions of Customer Service and Water & Sewer Operations
 - By mixing administrative and field operations at various locations the Plan was not utilizing our facilities outside of Blue Plains for their highest and best use

SPACE = \$



Update on the Facilities Master Plan

Space Needs Analysis Risks Identified

- Construction projects have taken up most of the available land at Blue Plains – limited availability for future process improvements if required by permit or desired for innovation
- Have limited ability at Blue Plains to manage risks and mitigate accidents or safety problems caused by operations or natural disasters.
- No available room for expansion of non-process facilities at Blue Plains.
- Red-flags raised by the DC Historic Preservation Office (SHPO) include but are not limited to:
 - long-term use of the Old Anacostia P.S. for office facility with off-street parking nearly impossible.
 - Bryant Street being treated as historic structure, potential to get additional parking adjacent to reservoir is highly unlikely



Update on the Facilities Master Plan

Space Needs Analysis – Blue Plains

2011 Google Earth
Overview of
Blue Plains
space
constraints...

Notice the
lack of any
significant
space!





Update on the Facilities Master Plan

Space Needs Analysis – Blue Plains



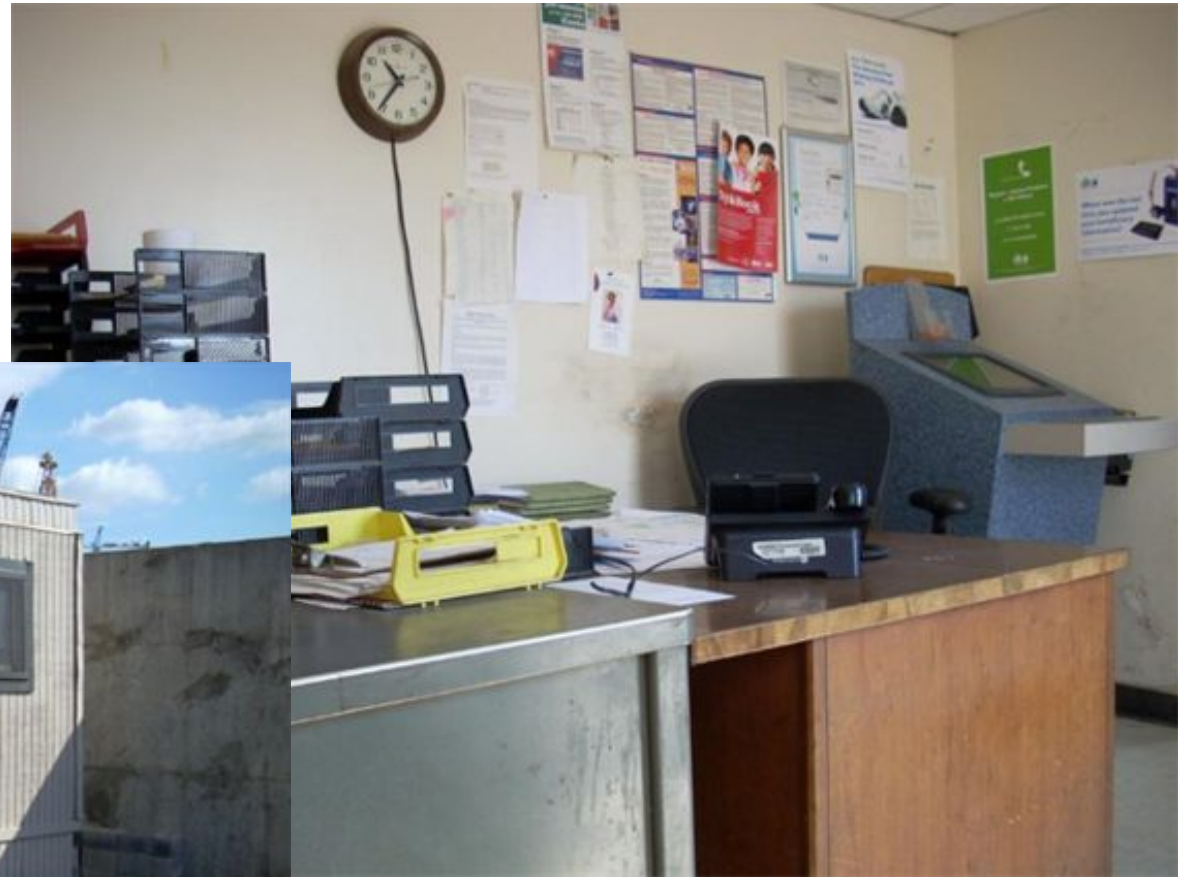
East Perimeter Rd. no longer open for thru-traffic; is now a laydown area for ENRF



Update on the Facilities Master Plan

Space Needs Analysis – Customer Ops

***Office conditions and
space constraints
outside the fence...***





Update on the Facilities Master Plan

Space Needs Analysis – Customer Ops





Update on the Facilities Master Plan

Lack of standardization across DC Water workplaces results in design challenges, reduced morale and increased maintenance costs





Concerns about Long-Term Financial Viability

- Space at all of our facilities is extremely valuable, but more importantly...

SPACE AT BLUE PLAINS IS PRICELESS!

- Current needs at COF are significantly greater than originally estimated – \$8.9M to renovate less than 25,000 GSF would not be a wise investment at this point.
- Due to concerns raised by SHPO about the historic character of the Old Anacostia P.S. – Customer Service and the Command Center continue to lease office space.



Update on the Facilities Master Plan

Concerns about Long-Term Financial Viability

2011 Analysis of Master Plan Needs at Blue Plains & Customer Care			% Cost Allocation* (pending final reconciliation)				Approximate Cost Per User	
Activity Group	Project Name	Funding Needed	District	WSSC	Fairfax	Loudon / PI	District	Wholesale
DD	Main & O Pump Sta. Development	\$1,000,000	100.00%	0.00%	0.00%	0.00%	\$1,000,000	\$0
DS	New WASA Headquarters	\$460,000	100.00%	0.00%	0.00%	0.00%	\$460,000	\$0
HC	New Warehouse Facility	\$16,361,600	41.22%	45.84%	8.38%	4.56%	\$6,744,252	\$9,617,348
HD	Conversion of Anacostia PS for Customer Service	\$5,980,500	100.00%	0.00%	0.00%	0.00%	\$5,980,500	\$0
HK	CMF Renovations & Consolidation (FY16 \$)	\$4,032,000	68.35%	24.75%	4.53%	2.37%	\$2,755,872	\$1,276,128
HG	New Sewer/Field Ops Facility - East (FY16 \$)	\$9,434,000	100.00%	0.00%	0.00%	0.00%	\$9,434,000	\$0
HH	New Fleet Facility (FY16 \$)	\$9,669,000	100.00%	0.00%	0.00%	0.00%	\$9,669,000	\$0
HJ	COF Renovations & Additions: 116,205 Sq.ft. (FY16 \$)	\$42,000,000	58% - 78%	22% - 42%			\$24,360,000 - \$32,760,000	\$9,240,000 - \$17,640,000
HE	New parking @ Bryant, Field Ops Facility - Central, W&S Admin (FY16 \$)	\$13,546,000	100.00%	0.00%	0.00%	0.00%	\$13,546,000	\$0
HF	Ft Reno Field Ops Facility - West (FY16 \$)	\$2,966,000	100.00%	0.00%	0.00%	0.00%	\$2,966,000	\$0
TOTAL MASTER PLAN CIP =		\$105,449,100	ESTIMATED COST ALLOCATIONS BASED ON CURRENT NEEDS =				\$76,915,624 - \$85,315,624	\$20,133,476 - \$28,533,476



Update on the Facilities Master Plan

Management Proposal Revised Master Facilities Plan

Principles to align with the Board's New Strategic Plan

- Optimize operational efficiency and the best use of DC Water land and facilities.
- Reduction of Risk at our facilities by maximizing flexibility for future treatment needs, distribution system operations and innovative opportunities.
- Financial Viability, long-term facilities planning with a 50-year outlook not just 10 or 20 years
- World-Class Utility - the safest, most sustainable & efficient Wastewater Treatment Plant in the World.

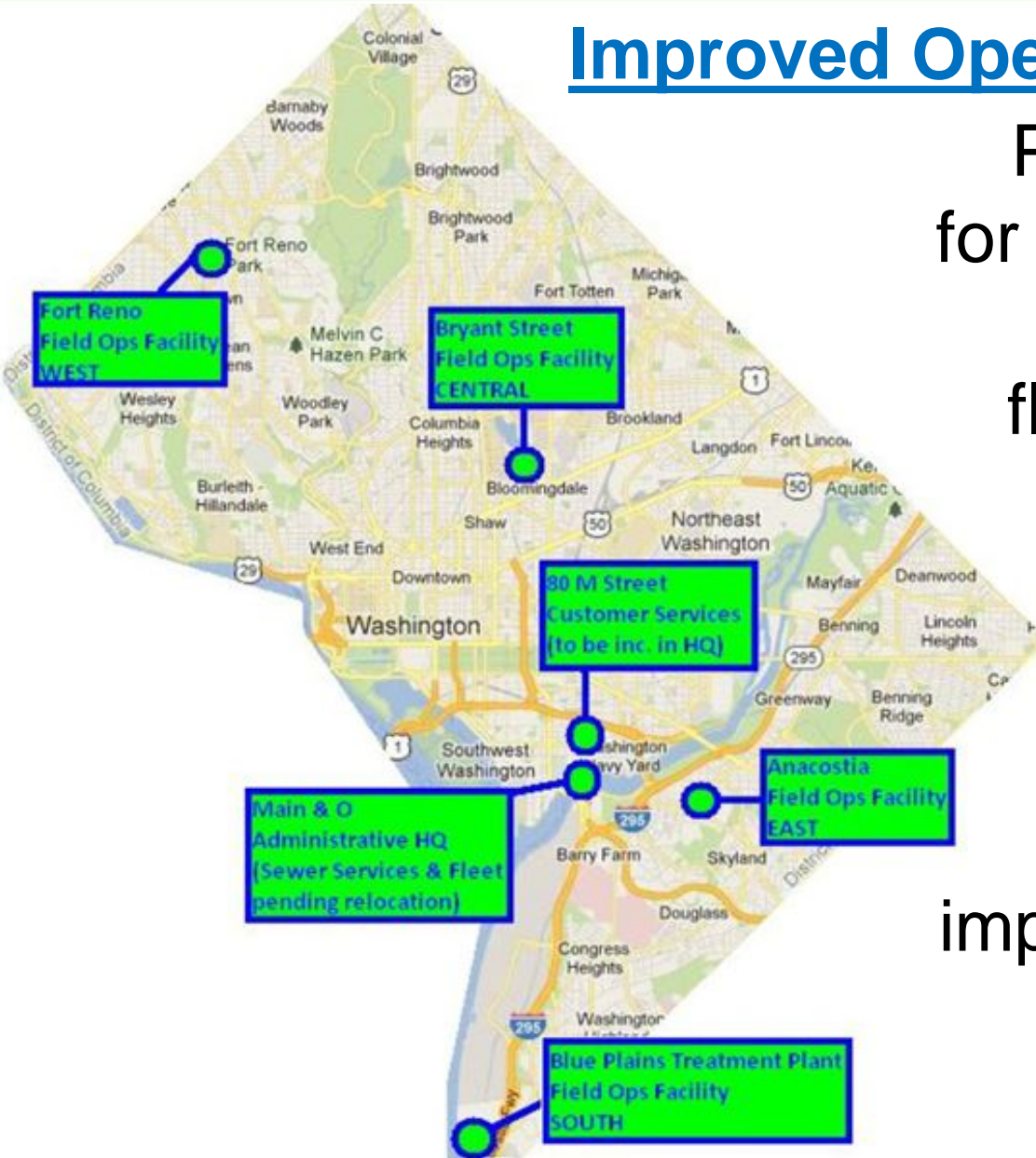


Update on the Facilities Master Plan

Improved Operational Efficiency

Preserves space for strategic growth and allows for flexibility in using DC Water land

Optimizes operational efficiencies and improves response time to our customers





Update on the Facilities Master Plan

Reduction of Risk

- Ensures essential personnel with industrial experience and training are located on the Plant for operations and emergencies
 - Removes all non-essential administrative staff off of the Wastewater Plant
- Relocation of Consultant groups from trailers into CMF and COF eliminating trailers – opening up areas for future process improvements and/or innovations
- Allows DC Water to develop a holistic plan for all facilities outside the fence in accordance with the directive from SHPO, to take strategic advantage of our facilities around the District.



Update on the Facilities Master Plan

Enhanced Financial Viability

- HQ provides space for DETS to be housed in one location in COF, and frees up almost an acre of valuable land at Blue Plains.
- Provides greatest flexibility in the use of our facilities at Blue Plains AND outside the fence for Customer Care and Operations.
- Leverages operating dollars currently going towards leased space for debt service, resulting in minimal impact to the ratepayers





Update on the Facilities Master Plan

Enhanced Financial Viability

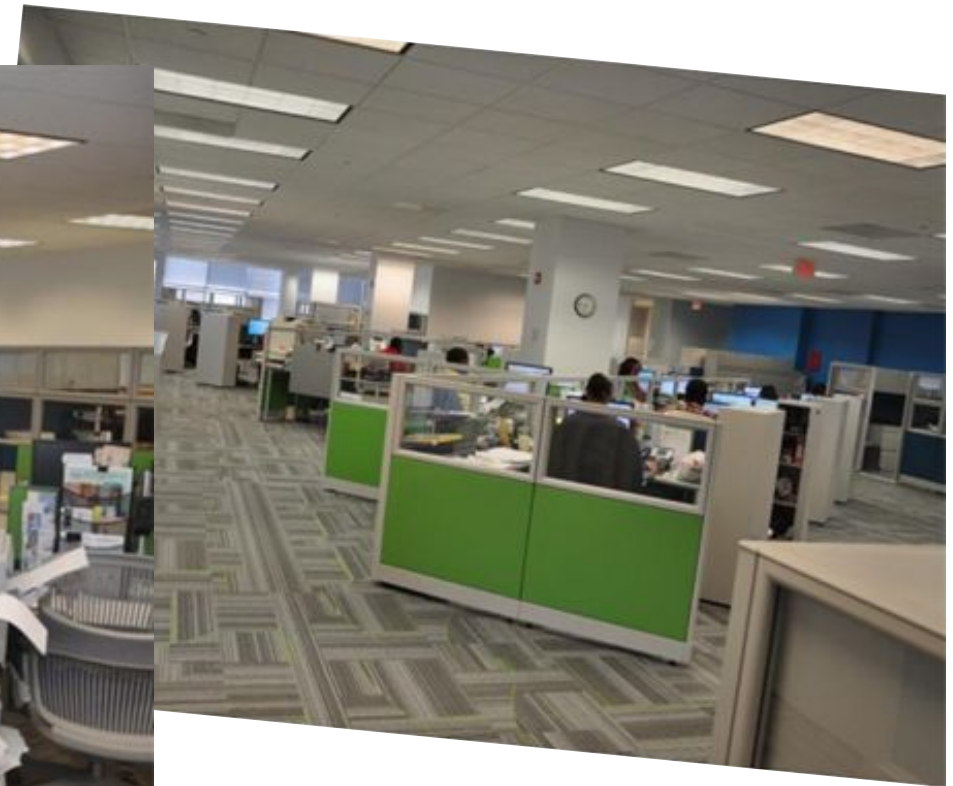
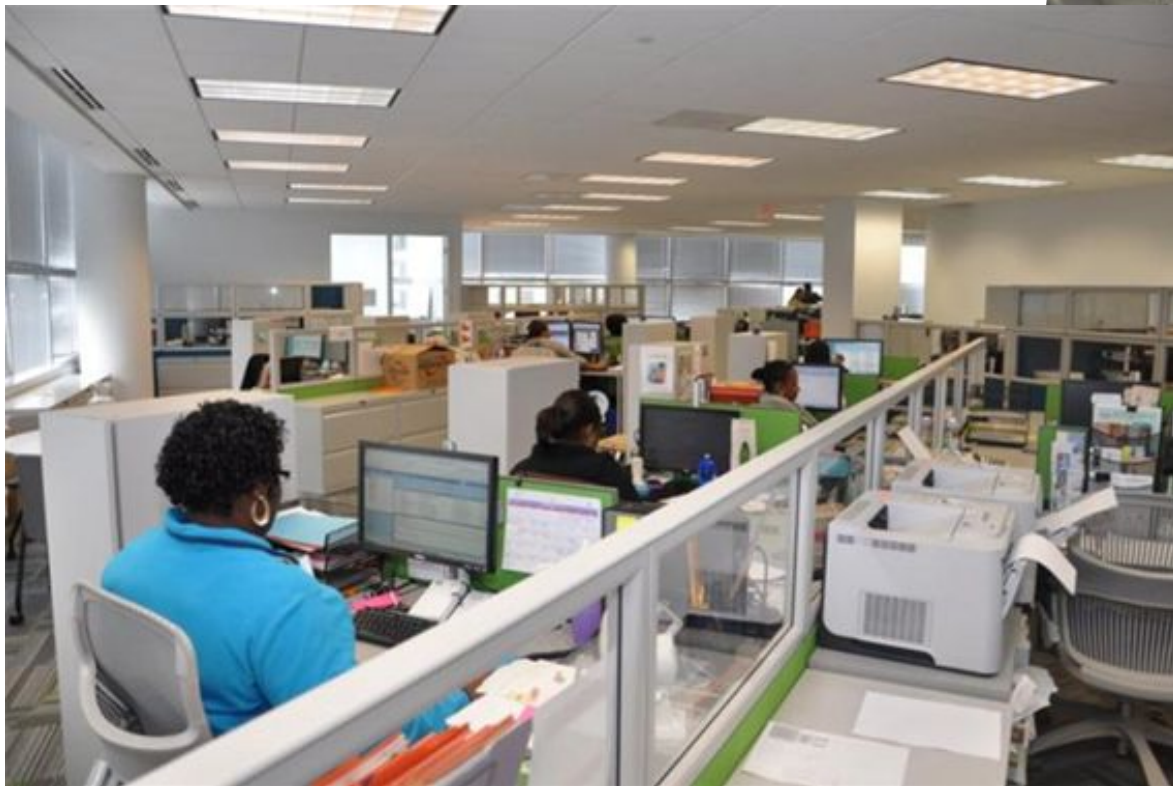
REVISED 2013 MASTER PLAN PROPOSAL			Funding Chg from Needs Analysis	% Cost Allocation** (pending final reconciliation)				Approximate Cost Per User based on Revised Proposal	
Activity Group	Project Name	Amount in Proposed CIP		District	WSSC	Fairfax	Loudon / PI	District	Wholesale
DD	Main & O Pump Sta. Development	\$1,000,000	\$0	100.00%	0.00%	0.00%	0.00%	\$1,000,000	\$0
DS	New DC Water Headquarters (inc. \$3M for envelope upgrades to O Street P.S.)	\$63,000,000	\$62,540,000	80% - 88%	12% - 20%			\$50,400,000 - \$55,440,000	\$7,560,000 - \$12,600,000
HC	New Warehouse Facility (inc. visitor & security center)	\$16,361,600	\$0	41.22%	45.84%	8.38%	4.56%	\$6,744,252	\$9,617,348
HD	Anacostia PS Field Ops Facility - East	\$3,000,000	(\$2,980,500)	100.00%	0.00%	0.00%	0.00%	\$3,000,000	\$0
HK	CMF Renovations & Consolidation (FY16 \$)	\$3,000,000	(\$1,032,000)	68.35%	24.75%	4.53%	2.37%	\$2,050,500	\$949,500
HG	New Sewer/Field Ops Facility	\$0	(\$9,434,000)					\$0	\$0
HH	New Fleet Facility	\$0	(\$9,669,000)					\$0	\$0
HJ	COF Renovations: Existing Structure (FY16 \$)	\$5,100,000	(\$36,900,000)	58% - 78%	22% - 42%			\$2,958,000 - \$3,978,000	\$1,122,000 - \$2,142,000
HE	Bryant, Field Ops Facility - Central (FY16 \$)	\$3,000,000	(\$10,546,000)	100.00%	0.00%	0.00%	0.00%	\$3,000,000	\$0
HF	Ft Reno Field Ops Facility - West (FY16 \$)	\$2,966,000	\$0	100.00%	0.00%	0.00%	0.00%	\$2,966,000	\$0
TOTAL REVISED MASTER PLAN CIP =		\$97,427,600	-\$8,021,500	TOTAL COSTS BASED ON REVISED PROPOSAL =				\$72,118,752 - \$78,178,752	\$19,248,848 - \$25,308,848



Update on the Facilities Master Plan

World-Class Utility

Changing the culture and striving towards a safe, sustainable and world-class workplace environment for all employees.





Update on the Facilities Master Plan

Highlights of the Proposal

HQ provides for a centrally-located, sustainable work environment where all of DC Water’s administrative personnel will be located in the same place for the first time! Improving operational efficiencies, our interactions with the community that we serve, and making the highest/best use of our very valuable property.

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DC WATER ENGINEERING STAFF SPREAD ACROSS 3 BLUE PLAINS FACILITIES AND SEPARATED FROM CONTRACTORS	DC WATER ENGINEERING STAFF CONSOLIDATED INTO 1 FACILITY, RETURNING COF TO ITS ORIGINAL PURPOSE AS A WASTEWATER OPERATIONS CENTER
WATER & SEWER ADMINISTRATIVE OPERATIONS NOT CONSOLIDATED, WOULD REQUIRE LEASED OFFICE SPACE	WATER & SEWER ADMINISTRATIVE OPERATIONS CONSOLIDATED, ELIMINATES NEED FOR ANY FUTURE LEASED OFFICE SPACE
CUSTOMER SERVICE & COMMAND CENTER REMAIN IN LEASED SPACE	CUSTOMER SERVICE & COMMAND CENTER INCORPORATED INTO HQ, ELIMINATES NEED FOR ANY FUTURE LEASED OFFICE SPACE



Update on the Facilities Master Plan

Next Steps

- Approval of the Sense of the Board resolution to revise the Master Facilities Plan in accordance with the Management Proposal
- Full and complete revision of the Master Facilities Plan to incorporate new information and Board's strategic goals related to operational excellence and sustainability
- DC Water to begin public outreach to various stakeholders throughout the community, such as Council, ANCs, and the Capitol Riverfront BID, as well as District agencies
- Provide updates to DC Water Board Committees as requested



BOND FINANCING UPDATE

Presentation to the Finance and Budget Committee

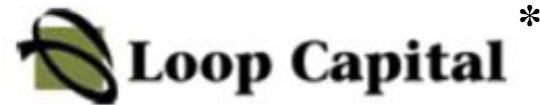
Mark Kim, Chief Financial Officer

April 25, 2013

BANKING UNDERWRITER SELECTIONS – TEAM BLUE!

The Board approved the following list of bond underwriters for a period of up to five years on April 4, 2013

Senior Managers



Co-Managers

Fidelity Capital Markets
Morgan Stanley
Siebert Brandford Shank*

Jefferies
J.P.Morgan
TD Securities
Wells Fargo

Lebenthal*
Raymond James
U.S. Bancorp

* MBE / WBE

BANKING UNDERWRITER SELECTIONS – SYNDICATE

Based on the proposals, oral presentations and further analysis received from the senior underwriters, management recommends the following syndicate for the upcoming 2013 bond financing proposed for July

Co-Bookrunners

- Barclays Capital
- Loop Capital*

Co-Senior Managers

- Bank of America Merrill Lynch
- Goldman Sachs
- Ramirez & Co.*

Co-Managers

- Jefferies
- Lebenthal & Co.*
- Raymond James/Morgan Keegan

* MBE / WBE

2013 BOND FINANCING – PROPOSED PLAN OF FINANCE

(DRAFT)

- Up to \$400 million
- Fixed rate subordinate lien
- No debt service reserve fund
- 10 year par call
- Potential enhancements
 - Coupon strategy
 - Amortization schedule
 - Final maturity



FINANCIAL POLICIES: AN UPDATE AND REVIEW

Presentation to the Finance & Budget Committee

Mark Kim, Chief Financial Officer

April 25, 2013

DC WATER FINANCIAL POLICIES (APPROVED JULY 2009)

- Through Board Resolution #09-86 approved on July 2, 2009, the Board of Directors revised the existing financial policies which includes various operating reserves (among other things) as follow:
 - Maintenance of strong levels of operating cash reserves equivalent to at least 120 days of budgeted O&M expenses with the objective of maintaining a minimum balance in the reserve of \$125.5 million
 - Evaluation of the operating reserve requirements within the Master Indenture of Trust (the “indenture”) every five (5) years by an independent consultant
 - The operating reserve will include, at a minimum, at least 60 days of operating costs, renewal and replacement reserve of \$35 million (to be evaluated every 5 years in conjunction with the indenture-required system assessment) and a DC general obligation debt reserve equal to 10% of DC Water’s share of subsequent year’s DC GO bond debt service
- In accordance with DC Water Board policy, Amawalk Consulting Group LLC was engaged to perform an independent consultant evaluation of the Operating Cash Reserve and the Renewal and Replacement reserve requirements

OPERATING CASH RESERVES

- Purpose of the Operating Cash Reserve is to enable DC Water to respond to unanticipated events or emergencies which result in an extraordinary increase in expenses
- Based on the review and recommendation of the consultants, Management recommends that the Board re-affirm the current policy as follows:
 1. Maintain the Operating Cash Reserve Requirement of 120 days of budgeted O&M expenses or \$125.5 million; and
 2. Review that determination at least every 5 years by DC Water's independent rate consultant in conjunction with the indenture required system assessment.

RENEWAL AND REPLACEMENT RESERVES

- The purpose of the reserve is to fund emergency capital improvements or repairs upon authorization of the Board
- DC Water bond indenture established the Renewal and Replacement Reserve and defines it as an amount equal to 2% of the original cost value of plant in service or such other amount as determined by a Qualified Independent Consultant, which such amount shall be subject to approval by the Board of Directors
 - Current policy adopted in FY 2008 is to maintain the Renewal and Replacement Reserve at \$35 million and review that determination at least every 5 years by DC Water's independent rate consultant in conjunction with the indenture required system assessment.
- Based on the review and recommendation of the consultants, Management recommends that the Board re-affirm the current policy and maintain the Renewal and Replacement Reserve at \$35 million and review that determination at least every five years

OTHER COMMENTS

- The current DC Water Financial Policies require a reserve amount equal to 10 % of the DC Water share of subsequent year's D.C. general obligation bond debt service
- As this debt service was extinguished in FY 2012, the value of this reserve is \$0
 - Based upon this, Management recommends that the Board remove the requirement for a D.C General Obligation Debt Reserve
- It is also noted that the 2009 policy has not been updated to reflect the use of "DC Water".
 - Based upon this, Management recommends that the Financial Policies be updated to replace "WASA" with "DC Water"

RECOMMENDATIONS FOR REVISIONS TO THE DC WATER FINANCIAL POLICIES

- Reaffirm the Operating Cash Reserve Requirement of 120 days of budgeted Operating and Maintenance expenses (inclusive of 60 days of O&M expenses required by the bond indenture) or \$125.5 million, to be reviewed at least every 5 years by an independent rate consultant
- Reaffirm the Renewal and Replacement Reserve requirement of \$35 million, to be reviewed at least every 5 years by an independent rate consultant
- Remove the requirement for a District of Columbia General Obligation Debt Reserve
- Revise and replace (as necessary) “WASA” with “DC Water”

District of Columbia Water and Sewer Authority

Report on the Operating Reserves of the Authority



March 29, 2013

Amawalk
Consulting Group LLC

Report on the Operating Reserves of the Authority

1. Executive Summary

1.1 Background

Large water and sewer utilities such as the District of Columbia Water and Sewer Authority (the "Authority" or "DC Water") set their customer rates and charges based on multiple financial policies and guidelines. It is a common practice in the industry for financial policies to include the maintenance of various reserve funds, including a reserve for operations and maintenance ("O&M") expenses, referred to as an O&M reserve or an operating reserve. The purpose of an operating reserve is to provide contingency funds that enable the utility to respond to unanticipated events or emergencies which result in an extraordinary increase in the utility's expenses. Determining an appropriate level for the operating reserve should be based on the requirements of the utility's bond indenture, utility-specific risks, the relative strength of the utility's cash flows and financial policies, industry practices and other information.

DC Water's Master Indenture of Trust (the "Indenture") requires the Authority to maintain an Operating Reserve Fund with a minimum balance of 60 days of annual O&M expenses as well as a Renewal and Replacement ("R&R") Reserve (defined herein). The current policy and practice of DC Water, which was enacted in FY 2009, is to maintain an operating reserve that is equivalent to at least 120 days of O&M expenses with the objective of maintaining a minimum balance in the reserve of \$125.5 million. Undesignated moneys are added to the Operating Reserve Fund and the R&R Reserve in compliance with Board policy to yield the Total Operating Reserves of the Authority. DC Water has exceeded the minimum balance in each year since that time.

DC Water periodically reassesses its policies regarding the operating reserve requirement and has requested that the Amawalk Consulting Group ("Amawalk") prepare this Study to consider the appropriate level of its Total Operating Reserves for Fiscal Year ("FY") 2013 and subsequent years. As noted above, it is important to consider other financial policies when evaluating the reasonableness of the operating reserve. Simultaneously with the preparation of this analysis, a report is being prepared by Amawalk regarding the adequacy of the R&R Reserve that is funded and maintained by DC Water.

1.2 Scope and Study Methodology

The financial strength of a water and wastewater utility is measured through a number of parameters including, but not limited to: debt service coverage, strength and stability of cash flows, liquidity, the availability of reserves, reasonableness of customer rates and the condition of the utility infrastructure. The availability, size and uses of operating reserves are just a few key components of the overall availability of reserves. There is no set formula for determining the amount of funds that should be kept in an operating reserve. As a result, this analysis considers the following factors in evaluating an appropriate level for an operating reserve for DC Water:

- The availability of other reserves which, when added to operating reserves, yield the total reserves;

- The stability of revenues;
- The predictability of expenditures;
- Liquidity requirements;
- Insurance and other resources;
- The relative strength of DC Water with regard to other financial measurements;
- Rating agency perspectives on DC Water including the availability of reserves; and
- Operating reserves and coverage requirements of other comparable systems.

This report examines DC Water's practices and performance with respect to these factors and presents comparison with peer utilities. The Study considers each of these factors in order to assess the appropriateness of the Authority's Total Operating Reserves.

Unless otherwise noted, figures or percentages that are cited in the report have been calculated based on reported values in the FY 2012 Comprehensive Annual Financial Report ("CAFR") for DC Water. Figures for FY 2013 and subsequent years are derived from the Authority's Financial Plan.

1.3 Findings

DC Water has a strong track record of financial performance as illustrated by the data presented in the report. A brief summary of our findings is presented below.

- Revenues and expenditures are reasonably predictable and liquidity is strong;
- The customer base of DC Water is dependable;
- There are sources of funds available to the Authority for unanticipated increases in operating expenses or capital costs;
- With only two exceptions among the surveyed utilities (Philadelphia Water and Louisville Water, as shown in Figure 8 of the report), DC Water has the highest level of operating reserves (based on the number of days of O&M expenses);
- Recognizing the current strength of DC Water's Total Operating Reserves, the level of reserves as a percentage of revenues and as a percentage of expenses will decline from FY 2013 through FY 2017 – however, the required reserves will still be well above the minimum requirements of both the Indenture and Board policy as illustrated in Table 1 of the report;
- DC Water's current strong credit rating is based on a variety of factors that are considered by the credit rating agencies and investors including the level of operating reserves. If DC Water were interested in changing the operating reserve level (upward or downward from the current policy), it should take into consideration the desire of the Board and management to maintain or enhance DC Water's credit rating.

Table 1 shows the FY 2012 results as well as the projected operating reserves for FY 2013 through FY 2017. It is anticipated that the Authority will maintain compliance with the current Board policy concerning reserves throughout this period.

DC Water

Report on Operating Reserves – 03/29/13

Table 1 Projected Operating Reserves
(All Figures Except Days are in \$000)

Line No	2012	2013	2014	2015	2016	2017
1 Operating Expenses	266,136	302,302	311,295	304,976	310,711	320,565
2 Less: PILOT/ROW (A.)	17,514	21,982	25,181	26,285	27,556	28,904
3 Less: Stormwater	763	1,000	1,000	1,000	1,000	1,000
4 Net O&M Expenses	247,859	279,320	285,114	277,691	282,154	290,661
Available Reserves						
5 60 Day Reserve (B.)	41,514	41,119	46,720	47,686	46,449	47,192
6 R&R Reserve (C.)	35,000	35,000	35,000	35,000	35,000	35,000
7 10% of next year GO DS	0	0	0	0	0	0
8 Base Amount of Reserves	76,514	76,119	81,720	82,686	81,449	82,192
9 Days of Net O&M (D.)	112	99	104	108	104	102
10 120 Days of O&M Expenses (line 4 times 120/360)	82,620	93,107	95,038	92,564	94,051	96,887
11 Value of greater of 120 Day Reserves or \$125.5M	125,500	125,500	125,500	125,500	125,500	125,500
12 Amount Above Base Attributable to 120 Day Reserve or \$125.5M	48,986	49,381	43,780	42,814	44,051	43,308

Notes

(A.) Payments are subordinate to other expenses.

(B.) FY 2012 Reserve is the beginning of year balance; FY 2013 Reserve is balance on hand as of 02/28/13.

(C.) Source: DC Water projections; assumed to remain constant.

(D.) Base amount of reserves divided by net O&M expenses times the number of days each year.

(E.) All calculations assume 360 days in a year.

(F.) The O&M expense for 2015 is less than the prior year due to anticipated operating savings from the new digester facilities.

1.4 Recommendations

Based on our studies, we are pleased to offer the following recommendations:

1. It is recommended that DC Water maintain its current operating reserve policy to require a minimum balance of the greater of \$125.5 million or 120 days of budgeted O&M expenses.
2. Since DC Water's operating environment continues to change over time, it is suggested that operating reserve requirement be reassessed at least every five years in conjunction with the Indenture-required system assessment.
3. Given the positive views of the rating agencies towards the reserve requirements, we suggest that DC Water and its financial advisor monitor the rating agencies assessment of the Total Operating Reserves on an ongoing basis. The purpose of such monitoring

would be to ensure that the rating agencies remain comfortable with the level of the Total Operating Reserves, recognizing that the reserve requirement is just one part of the overall credit assessment of DC Water.

In the references to future operations or conditions in this Report, the Amawalk Consulting Group LLC has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. We are of the opinion that these assumptions are reasonable and attainable as of the date of this report, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

2. Background

2.1 Introduction

This Section of the report provides background information concerning the financial policies of the Authority, the basis for the reserves, current levels of reserves and the potential impact of the reserve requirements. It is presented in four (4) parts:

- DC Water Financial Policies
- Purpose of Each Reserve Fund and Available Cash
- Current Operating Reserves and Available Cash
- Impact of Financial Policies on Rate-Setting

2.2 DC Water Financial Policies

The Board of Directors of DC Water (the “Board”) has adopted the following statement of financial policies (all references to WASA in the policies have been changed to DC Water):

1. DC Water will maintain financial practices and policies that result in high quality investment grade bond ratings so as to ensure the lowest practical cost of debt necessary to finance DC Water's long-term capital program.
2. DC Water will maintain strong levels of operating cash reserves, equivalent to 120 days of budgeted operations and maintenance costs, calculated on an average daily balance basis, with the objective of maintaining at least \$125.5 million in operating reserves. The annual reserve amount will be formally approved by the Board as part of its annual approval of the operating and capital budgets and ten-year plan. The operating reserve requirement will be evaluated every five years by DC Water’s independent rate consultant in conjunction with the Indenture-required system assessment.
3. The operating reserve will, at a minimum, include any reserve requirements contained in DC Water's Master Indenture of Trust, excluding any debt service reserve funds and the rate stabilization fund, as follows:
 - a. Operating Reserve - equivalent to 60 days' operating costs.
 - b. Renewal & Replacement Reserve - \$35 million. This reserve requirement will be evaluated every five years by DC Water’s independent rate consultant in conjunction with the Indenture-required system assessment.
 - c. District of Columbia General Obligation Debt Reserve - equivalent to 10 percent of DC Water's share of the subsequent year’s District general obligation bond debt service.
4. DC Water will maintain senior debt service coverage of 140 percent, in excess of DC Water's Indenture requirement of 120 percent. Senior debt service coverage will be calculated in accordance with DC Water's Indenture.
5. In general, DC Water will utilize operating cash in excess of the Board's reserve requirement and any other significant one-time cash infusions for capital financing or for repayment of higher cost debt.
6. DC Water will whenever possible use the least costly type of financing for capital projects, based on a careful evaluation of DC Water's capital and operating requirements and financial position for each year.

7. DC Water will attempt to match the period of debt repayment, in total, with the lives of the assets financed by any such debt.

The Master Indenture of Trust or Indenture that is referred to in the financial policies and in this report is the document authorized by DC Water that makes representations and pledges to bondholders and other parties that the Authority will repay its debt obligations and take other actions to support its pledge to repay its debts.

It should be noted that the 60 day operating reserve requirement under the Indenture is retrospective, i.e., calculated based on operating costs during the prior year. In addition, the District of Columbia General Obligation debt was paid in full in FY 2012 and will no longer require a debt service reserve.

DC Water adds an undesignated reserve (i.e., moneys that are not tied to any particular obligation or required use of the funds) to the reserves required under the Indenture (i.e., Operating Reserve of 60 days plus the Renewal and Replacement Reserve) in order to equal total operating reserves of 120 days of budgeted operating expenses or at least \$125.5 million in cash. This action enables the Authority to comply with item number 2 of the seven financial policies presented above. The requirements of the Indenture are fixed and are not reviewed as part of this analysis. This analysis and report solely considers the appropriate size for what we define as the Total Operating Reserves; i.e., the sum of the Indenture - required reserves plus the undesignated reserves mandated by Board policy.

DC Water maintains other reserve funds as well as cash balances to support its operations. The next part of this Section describes the individual categories of the available moneys.

2.3 Purpose of Each Reserve Fund and Cash Balances

The following is a concise summary of the primary purpose of each of the reserve funds as well as available cash that is not part of a specific reserve. The summary does not necessarily describe all of the potential uses for each fund or available cash.

- Debt Service Reserve Fund – The Indenture creates a Debt Service Reserve Fund and a Subordinate Debt Service Reserve Fund. The Indenture permits, but does not require, the Authority to specify a debt service reserve requirement for each issuance of Senior Debt or Subordinate Debt and to make provision for the means by which any such reserve requirements will be met. The supplemental bond indenture associated with each bond issue requires DC Water to maintain a debt service reserve fund for its Series 1998 senior lien bonds; the Series 1998 reserve was funded with bond proceeds. This reserve, which is in addition to the Operating Reserve (as defined in the Indenture), is held by DC Water’s trustee and can only be used in the event that net revenues are insufficient to meet the next debt service payment. Moneys on deposit in the Debt Service Reserve Fund are not intended to be used on a routine basis, cannot be used to pay operating expenses or obligations other than debt service or debt and must be replenished if there was ever a withdrawal. These funds are not considered part of the Total Operating Reserves.

- Operating Reserves (Required by Indenture) – The Indenture creates an Operating Reserve Fund in which the Authority must maintain a balance equal to at least 60 days of operation and maintenance ("O&M") expenses. Moneys in the Operating Reserve Fund will be used to pay, to the extent necessary, O&M expenses of the Authority. In addition, to the extent that moneys on deposit in the Bond Fund (which holds funds to be used to pay debt service) are insufficient to make the required interest and principal payments, moneys in the Operating Reserve Fund shall be used prior to any withdrawal from the Debt Service Reserve Fund to satisfy any such deficiencies. The 60 day operating reserve is available for emergency conditions but should not be counted-on as a routinely available reserve for unexpected O&M expenses or revenue losses. If the Authority were to make withdrawals from the required Operating Reserve Fund, it would have an obligation to replenish this Fund to achieve the 60 day minimum.
- Renewal/Replacement Reserve – The Indenture creates an R&R Reserve Fund to be held by the Authority to provide funding for unforeseen or emergency needs. Moneys in the R&R Reserve Fund may be used to pay for any capital expenditures related to the System. In addition, to the extent that moneys on deposit in the Bond Fund and the Operating Reserve Fund are insufficient to make the required interest and principal payments, moneys in the R&R Reserve Fund will be used prior to any withdrawal from the Debt Service Reserve Fund, to satisfy any deficiencies. The Indenture requires an amount equal to 2% of original plant in service cost, or some other amount as approved by the Board. The Board has elected to set the required reserve at \$35 million, based on the recommendations of prior studies. The R&R Reserve Fund is not expected to be used routinely, but can be accessed in very unusual situations and subsequently replenished to the required levels. To date, DC Water has never utilized this Reserve Fund.
- Undesignated Operating Reserve (required by Board Policy) – DC Water adds an undesignated reserve to the reserves required under the Indenture (i.e., Operating Reserve of 60 days plus the Renewal and Replacement Reserve) in order to equal Total Operating Reserves of 120 days of budgeted operating expenses or at least \$125.5 million in cash. As of February 28, 2013, DC Water had approximately \$49.4 million in cash on hand as the Undesignated Operating Reserve. As a complement to these funds, DC Water has additional cash for liquidity and other purposes; the term ("Additional Cash") is defined later in this part of the report. Thus, the total reserves of DC Water exceed the \$125.5 million policy requirement.
- Rate Stabilization Fund – The Indenture creates a Rate Stabilization Fund to be held by the Authority, the moneys in which may be transferred by the Authority to the Revenue Fund at any time. The Rate Stabilization Fund has no minimum balance requirements. Board policy concerning the Rate Stabilization Fund is stated below.

To the extent annual revenues exceed costs, the Board's policy will continue to utilize all available options to mitigate future customer impacts and annual increases, including transferring some or all of such excess funds to the Rate Stabilization Fund.

The Board decides in its annual rate-setting when and how much to withdraw in order to help mitigate rate increases. Since it is expected that the Rate Stabilization Fund will be drawn down over time and further deposits are not defined or mandatory in future years,

the Rate Stabilization Fund is not considered to be part of the Total Operating Reserves of the Authority.

- DC Insurance Reserve – The Authority purchases insurance for its facilities, operations and employees as described later in the report. The Authority is self-insured for an initial amount under its various insurance coverages. This Fund is not considered to be part of the Total Operating Reserves of the Authority.
- DC PILOT Reserve – DC Water is in discussions with the District concerning the components of the annual Payment in Lieu of Taxes that the Authority pays to the District as well as the amounts to be paid. This reserve is not required by the Indenture or Board policy but is rather intended to accommodate disputed balances with the District. Since it can be drawn down over time, this Fund is not considered to be part of the Total Operating Reserves of the Authority.
- Additional Cash - The Authority retains additional cash to provide liquidity for both its operations and its capital program. It is prudent for any utility of the size of DC Water not to draw upon reserves to pay its employees, vendors or suppliers but rather to keep a reasonable amount of cash on hand to accommodate routine fluctuations in cash receipts or expenses to be paid. As of February 28, 2013, DC Water had approximately \$24.9 million in cash on hand. This amount can fluctuate from month to month depending upon the timing of wholesale customer payments and federal payments, and other factors. Although the moneys are not considered to be part of the Total Operating Reserves of the Authority, the presence of such funds should be a consideration in assessing the reasonableness of the Total Operating Reserves.

A separate report is being prepared regarding the appropriate level of funding for the R&R Reserve Fund. For purposes of this report, it is assumed that the R&R Reserve Fund is maintained at the current funding level of \$35.0 million.

To summarize our understanding of the sequence of how cash and reserves would be used in the event of extraordinary financial conditions at DC Water, the following list is presented in order of how funds would be applied:

1. Additional cash on hand
2. Undesignated Operating Reserves
3. Required Operating Reserves
4. R&R Reserves

It is noted that additional cash on hand can be supplemented by borrowing under the Authority's commercial paper program. This option is discussed in Section 3 of the report.

The Debt Service Reserve Fund (not listed above) would be tapped only if the preceding funds were fully utilized.

2.4 Current Operating Reserves and Available Cash

Table 2 summarizes the Authority's cash balance as of February 28, 2013 including that portion which is considered the Total Operating Reserves.

Table 2: Actual Reserves

DC WATER & SEWER AUTHORITY
Summary of Reserve Requirements and
Total System Funds on Hand
As of February 28, 2012

CASH BALANCE PER BANK:	\$ 193,811,665
RESERVE REQUIREMENTS:	
Operating Reserve 60 days of prior year O&M Expenses	\$ 41,119,000
Renewal / Replacement Reserve \$35,000,000 per Board policy	35,000,000
TOTAL DESIGNATED OPERATING RESERVES Required to satisfy 60 - day policy + R/R Reserve policy	<u>\$ 76,119,000</u>
TOTAL UNDESIGNATED OPERATING RESERVES Amount when combined with TOTAL DESIGNATED OPERATING RESERVES is needed to achieve the Board policy of 120 days of O&M Expenses (A.)	\$ 16,988,000
Amount when combined with TOTAL DESIGNATED OPERATING RESERVES plu (A.) above is needed to achieve the Board policy of \$125.5 million (B.)	32,393,000
TOTAL OPERATING & MAINTENANCE RESERVES (C.) Established by the Board to approximate 120 days O&M expenses or \$125.5 million, whichever is greater	<u>\$ 125,500,000</u>
ADDITIONAL CASH (D.) Maintained by DC Water for liquidity purposes and an additional reserve	\$ 24,886,076
OTHER RESERVES	
Rate Stabilization Fund	\$ 27,950,000
DC Insurance Reserve	\$ 1,000,000
DC PILOT	14,475,589
TOTAL OF OTHER RESERVES (E.)	<u>\$ 43,425,589</u>
TOTAL CASH BALANCE = (C.) + (D.) + (E.)	\$ 193,811,665

2.5 Impact of Financial Policies on the Board's Rate-Setting Process

In the rate-setting process for an upcoming year, an initial consideration is to calculate rates that are sufficient to produce annual revenues that exceed the budgeted annual expenditures for debt service, O&M expenses and other obligations. Drawdowns from the Rate Stabilization Fund can be used to meet this initial test and the current Financial Plan assumes that draws will be made from that Fund in FY 2013 and FY 2014. Additional checks on rate adequacy that are performed include: 1) whether the 120 day or minimum of \$125.5 million reserve requirement is met (based on prior year costs), and 2) whether the 140% senior debt service coverage target and the senior lien and junior lien debt service coverage requirement of the Indenture are met.

DC Water

Report on Operating Reserves – 03/29/13

If the analysis performed during the rate-setting showed that the Authority would not meet the 120 day or minimum of \$125.5 million reserve policy, the Board could transfer funds from other sources (if available) and/or consider increasing rates until sufficient revenues are raised to achieve the level required under Board policy. Table 1 in the Executive Summary shows that the \$125.5 million minimum balance is much higher than the amount required under the alternative of 120 days of operating expenses. As a result, if the minimum balance of \$125.5 million is retained, the Board policy is not expected to have an impact on rate-setting through FY 2017.

Table 3 illustrates the actual Total Operating Reserves at the beginning of each year for the period of FY 2007 through FY 2012. The results show that DC Water exceeded the objectives of the Board policy during those years by maintaining a balance above \$125.5 million. Table 3 also shows the revenues and O&M expenses for the budgeted and projected period of FY 2013 through FY 2017. The results show that on a budgeted and projected basis, DC Water expects to continue to meet the current Board policy on Total Operating Reserves.

Table 3 also shows that the Total Operating Reserves as a percentage of revenues and as a percentage of expenses will decline from FY 2013 through FY 2017 if the current reserve policy is maintained for this period. The budgeted and projected figures presented in Table 3 are based, in part, on expectations and assumptions, including future increases in rates that are not described in this report, and are subject to change. It is important to note that DC Water has historically incurred actual expenses that are less than budgeted expenses.

Table 3: Budgeted and Projected Revenues, Expenses & Total Operating Reserves
(All Figures Except % are in \$000)

(\$ Million)	Historical				Projected				
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Total Operating Revenues	302.31	329.70	369.86	393.16	415.50	446.87	472.86	506.46	536.03
Total Operating Expenses	252.57	258.39	269.80	266.14	302.30	311.29	304.98	310.71	320.56
O&M Reserves at Beginning of the Year (BOY)	139.05	131.30	132.00	150.04	140.25	125.50	125.50	125.50	125.50
O&M Reserves as % of Revenues	46%	40%	36%	38%	34%	28%	27%	25%	23%
O&M Reserves as % of Expenses	55%	51%	49%	56%	46%	40%	41%	40%	39%

* FY 2013 BOY O&M reserves reflect actual balance as of October 1, 2012.

Source: BOY O&M Reserve balances through FY 2012 are from CAFR;
BOY FY 2013 balance was provided by DC Water.
BOY FY 2014-17 is from the DC Water Rate Model.

3. Analysis of the Authority's Operating Reserve Policy

3.1 Introduction

Section 2 presented the financial policies relating to operating reserves, and the recent and anticipated levels of compliance with those policies. In Section 3, we examine the factors that should be considered in assessing the appropriateness of the current operating reserve policies. There is no mathematical formula that can be used to calculate a specific recommendation for the amount of reserve funds that a utility such as DC Water should maintain. Each water and wastewater utility typically has similarities as well as differences in system characteristics, operating conditions and financial practices. For example, some utilities may have lower operating reserves relative to system revenues and expenses but higher levels of debt service coverage. Once again, there is no set formula for determining the value of greater coverage or higher or lower levels of reserves in arriving at an impact on the credit rating of a utility.

The factors that are discussed in this Section do not necessarily include all potential variables and risks that DC Water faces, and it is possible that future conditions could include circumstances that are very different or more adverse to the revenues and expenditures than DC Water has experienced before (e.g., the impacts on annual customer demand and revenues of a severe and prolonged drought). However, many of the circumstances that water and sewer utilities may encounter that could affect decision-making on reserve levels are briefly described herein.

Following the Introduction, this Section of the report is presented in the following parts:

- Stability of Revenues
- Predictability of Expenditures
- Insurance and Other Resources
- Liquidity Requirements
- Operating Reserve Requirements of Peer Utilities
- Rating Agency Perspectives

3.2 Stability of Revenues

The stability and predictability of revenues is important to a water and sewer utility. One of the key reasons to maintain operating reserves is to cover an unplanned shortfall in revenues. This part of the report reviews the sources of revenues, customer demand, the affordability of user charges, the ability to raise rates, billing and collection, the track record of DC Water in predicting revenues, and other related considerations.

3.2.1 Reliability of Revenue Sources

- Payments from wholesale customers are expected to be more than eighteen percent (18%) or about 2 months of annual operating revenues in FY 2013 and are paid in advance of usage. Reconciliations are performed after each year is over and credits or additional charges are applied in subsequent years.
- DC Water provides the Federal government with estimated billing amounts two years in advance so that the amounts can be included in federal budgets. Federal payments are expected to be over ten percent (10%) of total operating revenues in FY 2013. Federal

law requires the timely payment (unadjusted) of each bill once it is included within an approved federal budget. Thus, about 10% of DC Water's operating revenues are backed by the Federal government, which has one of the highest credit rating in the country, and again pre-determined in advance of the upcoming year. In addition, in the event that billings are overestimated, the Federal government will receive a credit against its future payment as opposed to a refund. This ensures that DC Water will not have a payment liability in the future.

- DC Water's retail customer base is substantially residential from a revenue perspective. The customer base includes a relatively small number of large non-residential customers. Given these characteristics, the revenue risk is limited if large customers decided to leave the service area or implement cutbacks that affect water use due to a poor economy or other business considerations. No single non-governmental customer in FY 2012 generated more than 1% of retail revenues. The four largest non-governmental customers are comprised of three universities and one commercial customer.

3.2.2 *Customer Demand*

- Revenues that are dependent on water use by customers will, of course, vary with changes in consumption. DC Water has experienced a slow long-term decline in aggregate retail customer water sales, consistent with the general experience in cities such as New York and Boston. The average annual rate of decline in retail demand from FY 2008 through FY 2012 was 2%, recognizing that consumption declined in three of the four years and increased in the other year. The largest single year to year decline was 4.3% from FY 2008 to FY 2009 and the best year showed an increase from the prior year of 0.6% from FY 2010 to FY 2011. The economic recession was likely a significant factor contributing to the decline from FY 2008 to FY 2009. It is likely that the replacement of older plumbing fixtures and water-using large appliances with more efficient units is a major factor contributing to the long-term decline in use. The projected revenues for DC Water include an assumed decline in retail water sales of 2.24% in FY 2013 and 1% per year thereafter. Each 1% change in retail consumption equates to approximately \$2.85 million in annual revenues in FY 2013. It is possible that the rate of decline in a given year can exceed the assumed rate of decline, e.g., with the decline of 4.3% instead of the 1% assumed reduction, the incremental effect on revenues would be \$9.4 million. Such a change would not have a substantial impact relative to the Authority's total revenues (about 2.1%).
- Another factor relating to the predictability of revenues and expenses is the low variation in demand throughout the year (measured by the ratio of highest- or peak- day to average day use). For the past four years, DC Water's peak to average ratio has been: 1.37 (FY 2009), 1.39 (FY 2010), 1.40 (FY 2011) and 1.42 (FY 2012). This relatively low demand variation throughout the year means that it is less likely that DC Water will experience large and unexpected variations in demand.
- Revenues can be affected by droughts and resulting limitations on water use. The experience with the severe drought a few years ago in Atlanta and other communities in the southeast U.S. shows the potential effects of drought situations on the revenues of water and sewer utilities. Historically, the District has been little affected by droughts or water limitations due to multiple reservoir agreements with the Washington Aqueduct. While past experience is not a guarantee for the future, it seems to indicate that the

relationship of the District with the U.S. Army Corps of Engineers and the Washington Aqueduct has historically enabled the District to be less prone to changes in available water supply even if there are significant fluctuations in precipitation.

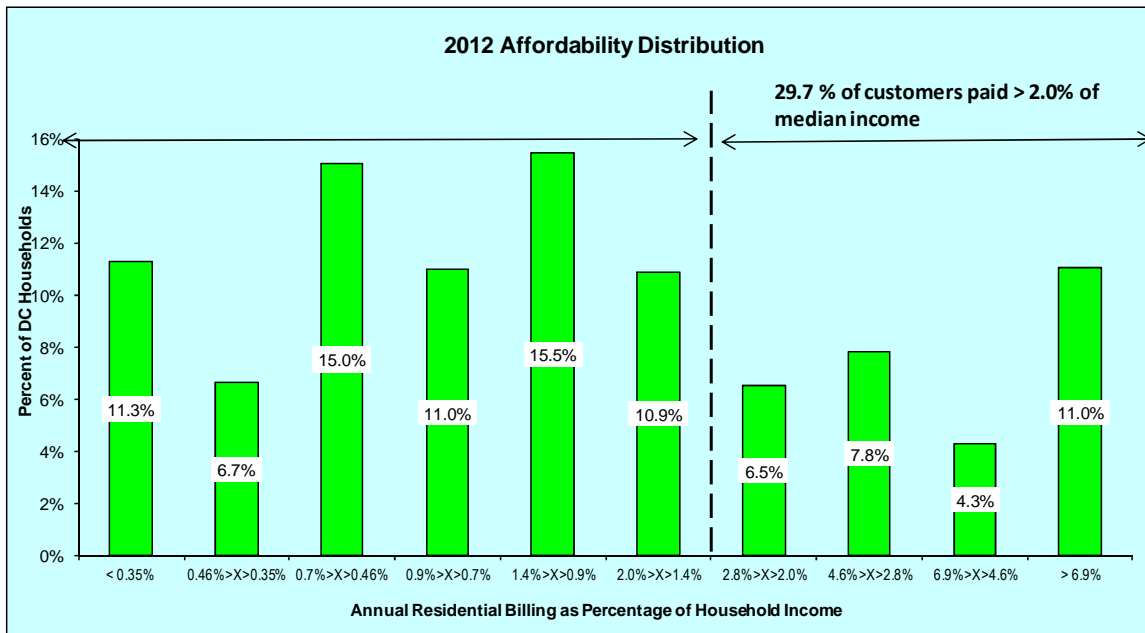
- A significant economic downturn resulting in a rise in unemployment and/or foreclosures could affect the ability of some customers to pay their bills. The Washington, D.C. area economy, being heavily dependent on the Federal sector, has historically been less sensitive to economic downturns than other regions of the country. While the nature of the area's economy has historically helped mitigate this risk, nonetheless, there is some risk that revenues could be negatively affected under such conditions. In addition, there has been recent discussion about potentially reducing federal staffing which, if such a situation were to occur, could reduce long-term federal water consumption and sewer use (although meter fees and the Impervious Area Charges presumably would be unaffected if federal properties remained the same). A factor that significantly delays the risk of federal staff reductions is the two-year advance billing of the federal government by DC Water. If federal reductions were implemented, DC Water would have time to prepare.

3.2.3 *Affordability of User Charges*

- Another factor that could affect the reliability of revenues is the affordability of user charges. If customers are having difficulty paying water and sewer bills, presumably the rate of bill collection would be affected. There has been little change in the high rate of bill collection that has been attained by DC Water.
- While recognizing that there is no single measure of affordability, we have plotted an affordability distribution for DC Water based on 2011 Census data for household income and the Authority's FY 2013 rate schedule. Figure 1 shows that over 70% of DC Water households have median incomes such that the water and sewer bill is less than 2% of household income. USEPA guidance typically sets an affordability threshold for sewer charges alone at 2% of median household income ("MHI"). While we believe that the USEPA approach is simplistic by looking at a single percentage instead of the distribution presented in Figure 1, the federal guidance would presumably use a combined water and sewer affordability threshold of about 4% of MHI. On that basis, less than 23% of households would have affordability concerns under the presumed federal guidance.

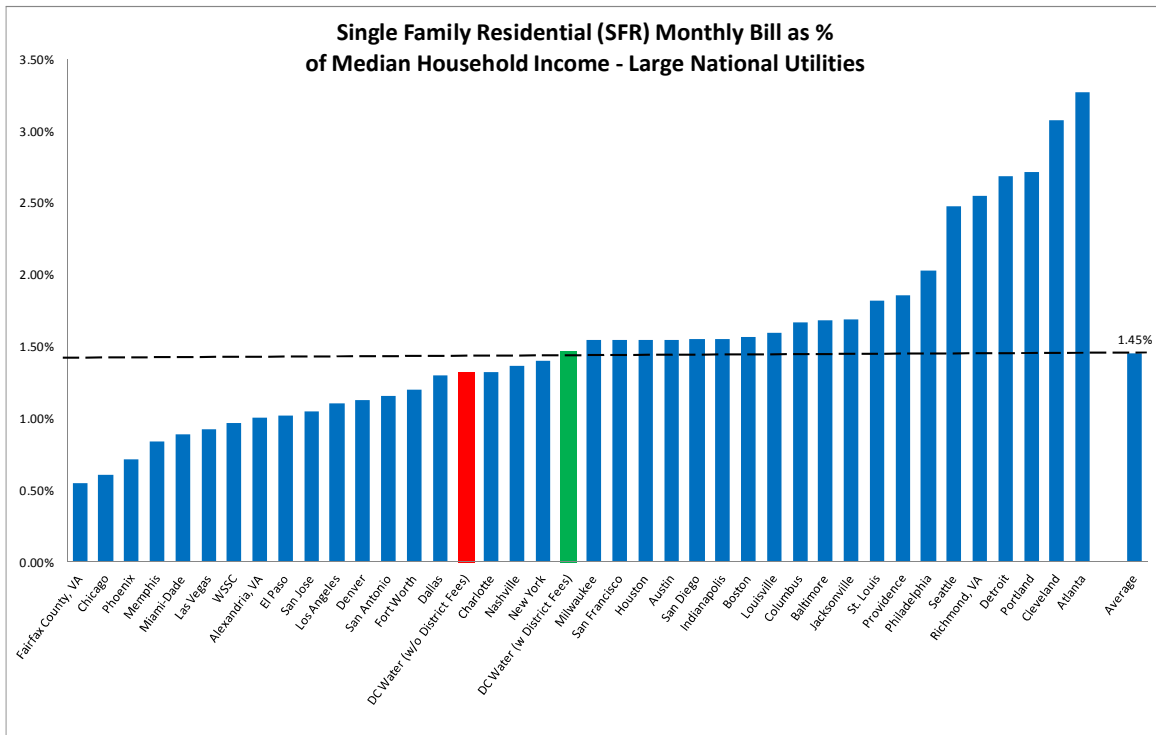
Not all of the households in Figure 1 will be property owners that will directly pay a water and sewer bill. Many users of the system live in multi-family rental properties with a single meter for water and sewer billing purposes. For those customers who receive a bill directly from DC Water with qualifying low incomes, DC Water offers the Customer Assistance Program ("CAP") program which helps reduce the bill of a customer. The CAP provides eligible customers with a discount of up to 400 cubic feet of water and up to 400 cubic feet of sewer services per month (as well as a reduction in the PILOT/ROW fees), a current savings of up to \$33.04 for water and sewer services. This program helps make water and sewer service much more affordable for low income customers.

Figure 1



- Excluding District pass-through fees, in comparison to 38 other large utilities and regional systems, DC Water’s charges are more affordable than the average large water and sewer utility. After adding the District pass-through fees, DC Water’s charges are comparable to the average large utility. Both measures are computed on the basis of the total annual charge for services divided by the median household income.

Figure 2



3.2.4 **Billing and Collection for Services**

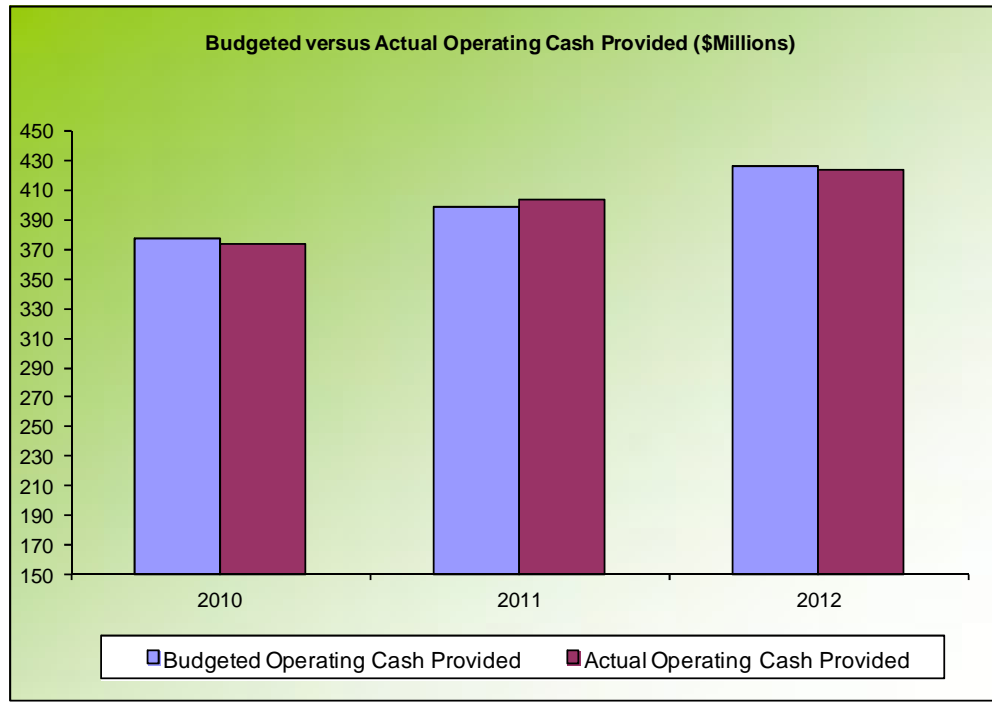
- Utilities that bill quarterly and rely on meter readers who may have to estimate the readings for a certain percentage of meters are subject to a greater degree of revenue risk than those utilities that bill more frequently and read their meters electronically. Retail customers of DC Water are billed monthly. With the use of its fixed network automated meter reading (“AMR”) system, DC Water polls its customers’ meters for usage data twice a day. Higher than average meter readings will generate a phone call to registered customers. Requests for relief or extension of time to pay due to a high bill are much less likely as a result.
- From a bill collection perspective, DC Water has been effective over the long-term in reducing delinquencies and expects to continue its efforts to minimize the number and amount of bills that are not paid. In FY 2001, retail accounts receivable over 90 days stood at about \$26.5 million. At the end of FY 2012, the amount was approximately \$5.5 million. As a percentage of billed retail revenue, this amount is less than 2% which represents a high level of performance in the water and sewer industry. It is reasonable to conclude that DC Water is very effective in its collection of payments for water and sewer bills.

Figure 3

3.2.5 Track Record in Projecting Revenues

The predictability of revenues is also evidenced by the track record of DC Water's revenue forecasts for both retail and wholesale customers. As illustrated in Figure 4, operating revenue on a cash basis has been very close to the budgeted amounts for each of the past three years: 1) actual operating cash provided was less than projections by \$4.6 million and \$2.3 million in FY 2010 and FY 2012, respectively; and 2) actual operating cash provided exceeded projections by \$5.2 million in FY 2011. In the year-to-date for FY 2013 through November 2012, operating cash provided has exceeded the budgeted amount for the first two months.

Figure 4



3.2.6 Ability and Willingness to Raise Rates

- The ability and willingness of DC Water to raise rates when needed is a factor that can mitigate revenue variability. The Board has enacted annual rate increases in recent years and projects future annual rate increases for a period of ten years. If a revenue shortfall were developing in a given year, the Board has the ability to modify rates during the year to help address a shortfall. Figure 5 illustrates adopted and proposed percentage increases in consumption-based rates in the FY 2013 Revised FY 2014 Approved Financial Plan. Figure 6 shows the actual and projected monthly Impervious Area Charge (“IAC”) per Equivalent Residential Unit (“ERU”) for FY 2011 through FY 2021.

Figure 5

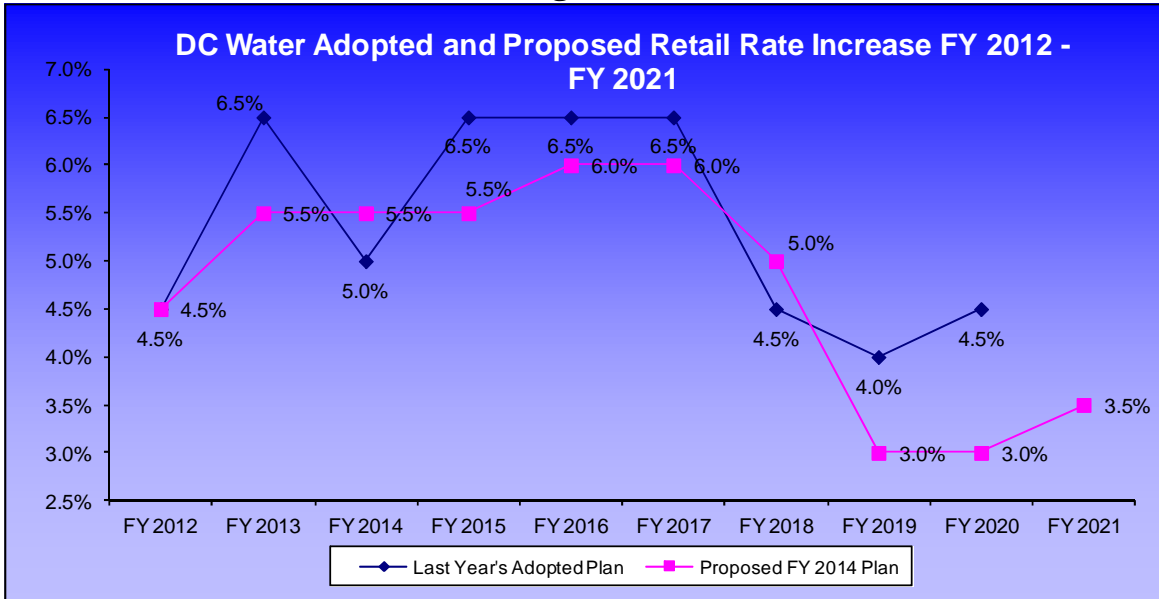
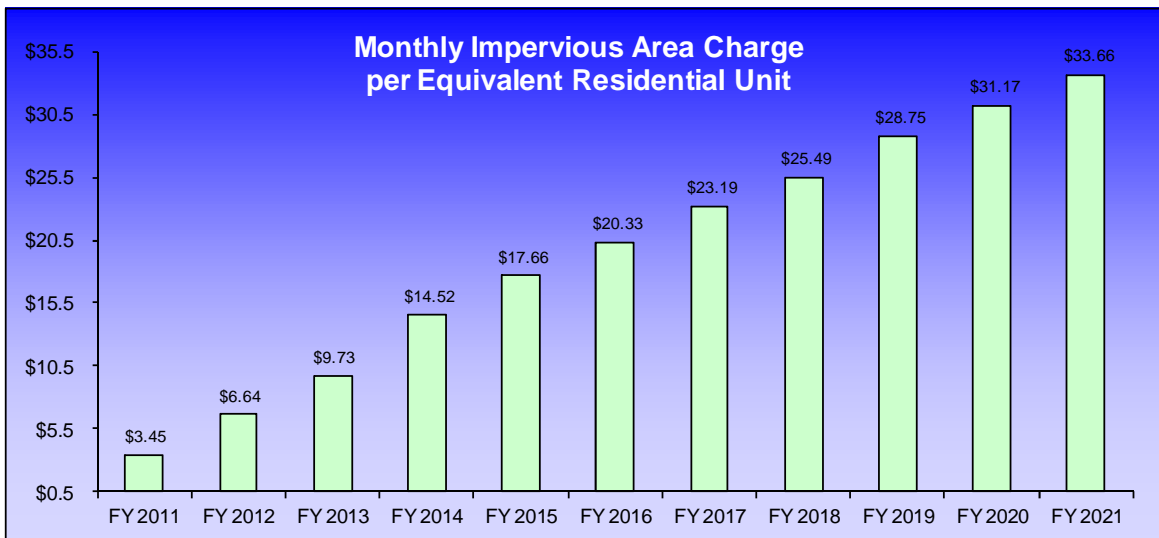


Figure 6



3.2.7 Summary

Based on the track record of DC Water in revenue collection, the history of rate increases, planned increases for the future and the ability to increase rates, during a year if necessary, and other factors discussed herein, we conclude that the risk of significant changes in revenues during each year is relatively low.

3.3 Predictability of Expenditures

Another reason to maintain operating reserves is to cover unplanned increases in expenditures. Thus, the stability and predictability of annual O&M expenses as well as capital outlays is important. This part of the report reviews financial planning for expenditures, potential variations in expenses, potential variations in capital expenditures, management control and performance, potential operating risks, the track record of DC Water in predicting expenditures and related matters.

3.3.1 *Financial Planning for Expenditures*

- DC Water utilizes a 10-year financial planning cycle for its operating expenses. This long-term perspective is consistent with industry practices although some agencies use shorter planning cycles. Allowances are included in the projections for future years for changes due to the effects of inflation as well as the anticipated effects of the new digester facilities.

3.3.2 *Potential Variations in Expenses*

- Approximately one-third of the budgeted Authority O&M expenses in FY 2013 are for the cost of personnel. Since the number of employees will be relatively consistent throughout each year and Authority overtime is not a large percentage of total labor costs, labor-related expenses are typically not subject to significant fluctuation in the course of a year.
- The Authority takes a proactive approach to meeting its energy needs from a pricing perspective. In FY 2011, the Authority was successful in purchasing electricity for an estimated average cost of \$87.87 per megawatt hour from the wholesale market compared to an estimated average cost of \$154.77 per megawatt hour had Authority purchased electricity through the PEPCO Standard Service Offer. The Authority's Department of Finance and Budget monitors the energy market on a continuous basis. Since the Authority typically locks-in most or all of the rates for electricity in each year, the payments for utilities and rent, which make-up 11.3% of the Authority budgeted O&M expenses in FY 2013 are also not subject to significant change from the annual budgeted amounts.
- There are the ongoing discussions between DC Water and the District government concerning the annual PILOT payments. Recognizing these discussions, the amount to be paid or reserved (for potential future payment) in each year (which is about 7.3% of the FY 2013 budgeted expenses) will typically not change from the budgeted amount.
- DC Water is party to an agreement with the U.S. Army Corps of Engineers ("COE") for the purchase of water. Water purchases are about 10.3% of budgeted operating expenses in FY 2013 and have not shown significant fluctuations in the past. DC Water is a member of the Customer Board which approves the budget for water supply and the resulting rates are negotiated based on the approved budget.
- The remaining categories of O&M expense are Small Equipment (less than \$1 million annually), Chemicals and Supplies, and Contractual Services. Past experience has shown that the cost of chemicals can fluctuate significantly in a short period of time, although recently the prices have been much more stable. The actual cost of Chemicals and Supplies in FY 2011 and in FY 2012 was less than the costs in FY 2009 and FY 2010.

- Contractual Services includes a wide variety of services purchased by the Authority. It includes the cost of biosolids disposal which is currently about \$19 million annually. The cost of Contractual Services increased in FY 2010 and FY 2011 relative to the FY 2009 costs but actually decreased in FY 2012 to a level that is below the costs in FY 2010 and FY 2011. The FY 2012 actual costs were \$2.8 million or 4.2% higher than the spending in FY 2009. The rate of change (in both dollars and percentage) is not very substantial relative to the total annual operating expenses of DC Water.

3.3.3 *Potential Variations in Expenditures for the Capital Improvement Program (“CIP”)*

- DC Water also utilizes a 10-year financial planning cycle for its CIP. Variations in capital expenditures due to higher than expected bid prices, change orders and other factors would be expected to be covered through the proceeds of the commercial paper program or bond issues and would not be expected to impact day-to-day needs for cash from revenues or available reserves.

3.3.4 *Management Control and Resulting Performance*

- As a rule of thumb, well-managed operations would be expected to display less expenditure volatility (most expenditures are under management’s control) than organizations that are not as well-managed. The Independent Budget Review analyzed the overall effectiveness of DC Water management and divisions and rated the organization very high in its performance. The most recent reports by each of the three bond rating agencies cite the strong management of the Authority in their ratings assessment of DC Water.

3.3.5 *Potential Operating Risks*

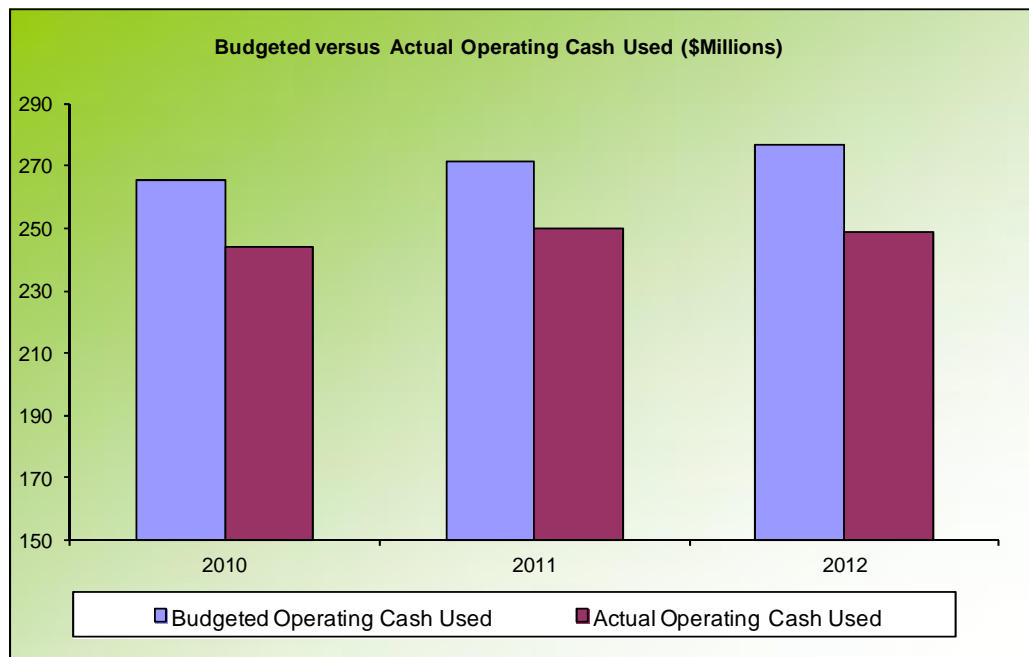
- Natural hazards can be a potential source of expenditure volatility for some utilities, although the historical experience of DC Water has not shown such hazards to be a significant factor affecting expenditures. The federally-owned water treatment plant from which DC Water receives water and the Blue Plains wastewater treatment plant are adjacent to waterways that have flooded in the past; however, DC Water has advised that there has yet to be a flooding event that has caused any substantial rise in expenditures. Historical information indicates that the Washington, D.C. metro area has not been particularly prone to earthquakes or damaging winds. The recent experience of wastewater utilities in New York and New Jersey with Superstorm Sandy does highlight the fact that wastewater utilities are not immune to potential damage and increased costs from severe weather conditions (costs included the repair and replacement of damaged equipment, overtime for personnel and reductions in usage by relocated customers).
- Man-made hazards are also a potential source of expenditure volatility for utilities. DC Water has addressed such risks to a large degree through the use of insurance. Water utilities have the risk of paying judgments and claims associated with main breaks. DC Water’s long-term experience with judgments and claims has been very reasonable. Man-made hazards resulting from terrorist acts are a concern for the Nation’s Capital. The risk is somewhat higher than in most other areas of the country and due to this fact, DC Water has done more planning for adverse events than most utilities.

- The risks associated with wastewater facilities include potential regulatory fines and penalties for permit violations. The risk of a major penalty occurring on short notice is most likely small based on the Authority’s track record.

3.3.6 Track Record in Predicting Expenses

- Recent experience has shown that DC Water reliably and conservatively forecasts its annual O&M expenses. As illustrated in Figure 7, operating cash used has been below the budgeted amounts for each of the past three years: \$21.7 million, \$21.6 million and \$28.1 million in FY 2010, FY 2011 and FY 2012, respectively. For the FY 2013 year-to-date through November 2012, operating cash used is less than the budget by \$2.5 million.

Figure 7



3.3.7 Summary

- Based on the track record of DC Water and other factors discussed herein, we conclude that, absent extraordinary circumstances, the risk of significant changes in O&M expenses during each year is relatively low.
- The preceding discussion in 3.3.1 through 3.3.6 is not intended to identify, assess or quantify all of the risks associated with DC Water’s operations, facilities and related matters. It is provided to assist in the consideration of the appropriate level of reserves to be maintained by DC Water.

3.4 Insurance and Other Resources

The availability of insurance can help mitigate part of the need for cash that is held in reserve. The Authority has developed a comprehensive risk management and insurance program which is

annually reviewed and periodically bid by management and their independent insurance advisors through qualified brokers and direct insurance writers. Since the passage of the Terrorism Risk Insurance Act of 2002 (“TRIA”), terrorism coverage is included under all insurance policies.

The following text is excerpted from the Official Statement for the 2012 Bonds of the Authority. Commercial property insurance is maintained by the Authority for its facilities above a self-funded level of \$1 million on most events, with maximum coverage per occurrence of \$1 billion. The insurance coverage includes various sub-limits as follows: (i) \$100 million of flood coverage, with a sublimit of \$25 million for locations in a 100-year flood zone; (ii) \$100 million for earthquake coverage; and (iii) \$600 million for terrorism.

The Authority maintains its liability insurance for coverage of claims for damages or injuries caused by automobile accidents, broken water and sewer lines, construction and other operational activities. The Authority self-funds the first \$1 million of each loss, and has liability insurance coverage of up to \$100 million.

The Authority is self-insured to meet its workers’ compensation statutory requirements for work-related injuries. The Authority has purchased excess workers’ compensation coverage for full statutory benefits in excess of a \$1 million self-funded level. A third party administrator is retained by the Authority to assist in managing its workers’ compensation, general liability and auto liability claims.

The Authority also maintains a \$120 million public officials’ liability insurance policy to cover the Authority directors and officers for management errors and omissions. A deductible of \$250,000 applies on this coverage. The Authority maintains \$100 million employment-related liability coverage, with a deductible of \$1 million per occurrence. In addition, the Authority maintains crime and fiduciary policies.

DC Water completed its eighth year of the rolling owner-controlled insurance program (ROCIP) and third year of ROCIP II under which DC Water procures general liability and workers’ compensation insurance coverage for the majority of our construction contractors. The result is substantially higher insurance coverage levels for all contracts and significant cost savings. At the end of FY 2012, 65 projects, and 393 contractors were enrolled in the ROCIP I program, and 50 projects and 404 contractors were enrolled in the ROCIP II program. Preliminary savings are estimated in the range of \$4 to \$5 million for ROCIP I and in the \$6 million range for ROCIP II. A major reason for the cost savings is the implementation of a uniformly strong safety program for all contractors. The ROCIP II is a three year insurance program that will support an estimated \$688 million of planned construction. Given the success of ROCIP I and II, DC Water plans to move forward with the third ROCIP in fiscal year 2013. ROCIP III is a three year insurance program that will support an estimated \$1.4 billion of planned construction.

One point to bear in mind is that the receipt of insurance proceeds could lag significantly behind the actual expenditure of funds. For example, if there is a dispute between the Authority and its insurers over a claim, it may take a significant amount of time to receive reimbursement and the amount actually received may be less than what was claimed.

3.5 Liquidity Requirements

Water and wastewater utilities that experience high levels of variability in revenues and expenditures, and mismatches in cash inflows and outflows have to be concerned with their ability to have sufficient cash on hand (liquidity) to meet day-to-day obligations. As noted in 3.2 and 3.3 of this Section, DC Water's actual revenues generally exhibit relatively small fluctuations relative to budgeted revenues and O&M expenses are reasonably predictable and typically well below budgeted amounts. This part of Section 3 addresses the operating cash flow and capital cash flow of the Authority.

3.5.1 Operating Cash Flow

- A review of the Authority's monthly operating cash inflows and outflows for FY 2010, FY 2011, FY 2012 and FY 2013 year-to-date shows that, while not every month is cash positive, the year-to-date cash inflows less outflows were positive from October through to the following September in each of the last three years, including the effects of the Rate Stabilization Fund transfers. This recent experience together with the available cash that the Authority retains shows that DC Water has sufficient working capital for its operating expenses during the course of each year.
- Table 4 illustrates the budgeted and actual operating cash flow for FY 2012. The total operating receipts were about \$2.3 million under budget, which is more than made up by the \$28.1 million in savings in operating expenses compared to the budget amount.

3.5.2 Capital Cash Flow

- The Authority finances its capital improvements through the proceeds of bonds and commercial paper, payments from wholesale customers, funds provided by USEPA and CSO grants, the proceeds of capital equipment financing, cash from system revenues (pay-as-you-go financing) and interest income. As is the case for many large water and sewer utilities, DC Water does not typically issue debt for individual projects; it raises sufficient funds on a timely basis to meet the cash flow requirements of all outstanding capital contracts and related obligations. The Authority monitors its cash draw downs and adjusts the timing and amount of debt issuance, as necessary, as to provide funds to meet the cash flow needs. If a significant increase in the cost of a capital project were to occur, the Authority has the ability to adjust portions of its CIP in order to accommodate the change and remain relatively consistent with its planned level of spending. While the Authority has the flexibility to draw upon available cash to address immediate cash flow needs for the CIP, it is not expected that the Authority reserve funds would have to be drawn down to pay for any portion of the CIP.
- Funding for emergency repairs and replacements can be provided from the R&R Reserve Fund. For example, if there were a collapse of a major trunk sewer that required substantial and immediate funding, the R&R Reserve Fund could be tapped for such a purpose. The specific R&R Reserve Fund requirements are addressed in a separate report.

Table 4: Budget to Actual Cash Flow FY 2012 (\$000)

	Revised Budget	Actual Cash	Variance Fav / (Unfav)
OEPRATING			
Operating Cash Provided			
Retail	324,549	295,247	(29,302)
Wholesale	74,361	75,240	879
Other	27,250	46,884	19,634
Transfer from Rate Stabilization Fund	-	6,500	6,500
Total Operating Cash Provided	426,160	423,871	(2,289)
Operating Cash Used			
Personnel Services	97,114	96,989	125
Contractual Services	79,746	68,748	10,998
Water Purchases	29,946	28,973	973
Chemicals & Supplies	37,447	24,730	12,717
Utilities & Rent	31,517	28,287	3,230
Small Equipment	995	894	101
Subtotal Operating Cash Used	276,765	248,622	28,143
Debt Service	100,776	99,272	1,504
PILOT & ROW	22,365	17,514	4,851
Subtotal Other Cash Used	123,141	116,786	6,355
Total Cash Used	399,906	365,408	34,498
Net Cash Provided (Used) by Operating	26,254	58,463	(36,787)
CAPITAL			
Capital Cash Provided			
Debt Proceeds	259,307	188,153	(71,154)
Capital Equipment financing	8,184	7,500	(684)
EPA Grants	25,455	24,560	(895)
CSO Grants	31,332	27,990	(3,342)
Interest Income	93	529	436
Wholesale Capital Contributions	175,242	174,259	(983)
Total Cash Provided	499,613	422,991	(76,622)
Capital Cash Used			
DC Water Capital Program	520,368	451,326	69,042
Washington Aqueduct Projects	11,373	11,286	87
Total Capital Cash Used	531,741	462,612	69,129
Net Cash / PAYGO Provided (Used) by Capital	(32,128)	(39,621)	(145,751)

Note: The opening balance in the Construction Fund in FY 2012 was \$132 million which significantly exceeds the net cash used in FY 2012.

3.6 Operating Reserve Requirements of Other Comparable Systems

In addition to the role that the operating reserve has in sound utility management, the size of the operating reserve is one of many factors involved in bond ratings. A brief survey was conducted to compare DC Water to other large utilities that generally have similar underlying (i.e., not

insured) ratings. The results are summarized in Figure 8. The credit ratings shown are based on published information from one or more of the recognized credit rating agencies at a specific point in time and are subject to change. Debt service coverage requirements are presented as either the coverage requirements and/or actual results for a particular year, as noted in the Figure. Except where noted for coverage, the information shown in Figure 8 does not reflect actual performance of the utilities nor does it address the other factors that are considered in arriving at bond ratings. Many utilities, including DC Water, achieve actual results that easily surpass the minimum requirements of their respective bond indentures and financial policies.

Figure 8

Utility	Operating Reserve (Days)	Bond Rating	Coverage	Notes
Boston Water and Sewer Commission	See note	2012 Fitch: AA+; 2012 Moody's: Aa1; and 2012 S&P: AA+	1.25 required	The Operating Reserve Fund is required to be funded at not less than 1/6 of BWSC's annual direct operating expenses and the Massachusetts Water Resources Authority assessments.
City of Baltimore Department of Public Works	See note	2011 (Water and Wastewater) S&P: AA; Moody's: Aa2	Resolution (both water and wastewater): 1.15 senior, 1.10 subordinate	Both water and wastewater is required to maintain minimum reserve of 8% of operating expenses. This is approximately 29 days.
Dallas Water Utilities	30	2012 S&P: AAA; 2012 Moody's: Aa1	1.25; Internal policy requires 1.50x maximum debt service at year end and 1.30x maximum debt service at all times	An unrestricted cash balance will be maintained such that it provides a minimum quick ratio of 1.50 and at least 30 days of budgeted O&M.
Denver Water	See note	2012 Fitch: AAA; 2012 Moody's: Aa1	Resolution requirement: 2.20	The Board's practice is to maintain reserves that are sufficient to provide: 25% of the next year's operating costs; the greater of average annual amortization cost and 2 % of current total capital assets (before depreciation) for replacement capital and equipment purchases; 50% of expected annual debt service for next year; \$10 million in exposure reserve.
Detroit Water and Sewer Management	45 (See note)	2012 Moody's: Baa2 (senior) and Baa3 (2nd Lien); 2012 Fitch: A- (senior) and BBB+ (2nd lien)	1.20 required for senior lien revenue bonds; 1.10 for second lien revenue bonds combined; and 1.00 for SRF junior lien bonds; must maintain coverage of 1.00.	Plans to increase its operating reserve by about 5 additional days each year starting in 2013 until reaches a balance of over 60 days of O&M. Uses its Extraordinary Repair and Replacement Reserve Fund to pay for major emergency repairs and replacements in the system that exceed \$1 million in cost. It is not to exceed 15% of budgeted O&M of the sewage disposal system.
District of Columbia Water and Sewer Authority	120 days (see note)	2012 Fitch: AA-; 2012 Moody's: Aa3; and 2012 S&P: AA	1.20 required for Senior Debt and 1.00 required for Subordinate Debt; Board policy requires 1.40	Board policy requires operating reserves equal to 120 days of budgeted O&M costs with the objective of maintaining at least \$125.5 million.
Louisville Water Company	See note	2011 Moody's: Aaa; 2011 S&P: AAA	Indenture: 1.3; 2011 actual: 2.13; 2010 actual: 2.30	Targeted funding level is 200 days of funded operations (considering cash and unrestricted fund reserves) and 60 days of cash funded operations (considering only cash).
NYC Municipal Water Finance Authority	See note	2012 (senior) S&P: AAA; Moody's: Aa1; Fitch: AA+; 2013 (2nd lien) S&P: AA+; Moody's: Aa2; Fitch: AA+	Bond resolution: 1.15 senior, 1.10 combined; gross revenue pledge has significantly higher actual coverage	Operating reserve requirement is set at 1/6th of operating expenses. In addition, there is an extraordinary pledge of the City to operate system, without reimbursement for operating expenses or payment of rental, in the event of a revenue shortfall.
Philadelphia Water Department	See note	2012 Fitch: A+; 2012 Moody's: A1; 2012 S&P: A	1.20 required for senior; 1.00 required for combined	Rate stabilization fund serves as an operating reserve. It was created in 1993 to offset future deficits or rate increases in the operating fund. Balance as of 6/30/2011 is \$157 million.
San Francisco Public Utilities Commission	See note	2012 Water Moody's: Aa3; 2012 Water S&P: AA-; 2013 Wastewater Moody's: Aa3	Requires 1.25	Requires Operating Fund Balance Reserves to meet at least one of the following: 15% of annual revenues; 15% of annual expenditures; and the balance resulting in coverage of 1.25.
Upper Occoquan Sewage Authority	See note	2010 Fitch: AA+; 2010 Moody's: Aa1; and 2010 S&P: AAA	Resolution: 1.25	UOSA uses a reserve maintenance fund for the cost of replacements that do not increase capacity. The fund balance is required to be at least the greater of: \$2 million, the estimated cost of replacements and improvements that do not increase the capacity (\$4 million in 2010), or amounts certified by consulting engineering.
Washington Suburban Sanitary Commission (WSSC)	See note	2012 Fitch: AAA; 2012 Moody's: Aaa; 2012 S&P: AAA	N/A – revenues are backed by property taxes. Has a goal of limiting the amount of rate-supported water and sewer debt to 30% or less of total water and sewer operating expenditures. It's 2012 estimate is 32.3%.	The Commission's policy is to maintain a reserve based on a percentage of budgeted water and sewer operating revenues. Its goal is to achieve an operating reserve of 10%.

3.7 Rating Agency Perspectives

The Appendix to this Report presents excerpts from the most recent ratings reports. The information presented is just a small portion of the overall reports and the reader is encouraged to review the complete reports for all information presented by the rating agencies.

The text from the reports generally refers to the DC Water reserves as a major positive for the Authority bond rating. While the Standard & Poor's emphasis in the last paragraph is on the debt service reserve, we wish to point out the reference that the agency makes to continuing to monitor the reserves of the Authority.

4. Conclusions and Recommendations

4.1 Concluding Comments

A water and sewer utility could choose to maintain substantial reserves to mitigate the potential risks of building and operating its assets and delivering services to customers. However, the maintenance of very large reserves may upset a number of utility stakeholders, particularly ratepayers who will argue that rates and charges could have been kept lower if the reserve levels were more modest. The challenge that every water utility faces is the selection of the appropriate amount of reserves to: run and protect the business (including managing its risks), satisfy the rating agencies and balance the concerns of ratepayers.

Based on our studies, we find that the projected Total Operating Reserve under the current financial policy of the Board should provide DC Water with adequate financial and rate-setting flexibility in FY 2013 through FY 2017 at which time the levels of reserve will be re-evaluated in accordance with current Board policy. The current policy compares favorably with the practices of highly-rated peer utilities (the level of reserves maintained by DC Water is higher than the reserve levels of most of the utilities that we surveyed) and the rating agencies view the reserves as a key strength of DC Water. .

4.2 Recommendations

Based on our findings, we are pleased to offer the following recommendations:

1. It is recommended that DC Water maintain its current operating reserve policy to require a minimum balance of the greater of \$125.5 million or 120 days of budgeted O&M expenses.
2. Since DC Water's operating environment continues to change over time, it is suggested that the current policy regarding reserve funds be maintained; i.e., to reassess the operating reserve requirement at least every five years in conjunction with the Indenture-required system assessment.
3. Given the positive views of the rating agencies towards the reserve requirements and the anticipated decline in the Total Operating Reserve as a percentage of revenue and expenses over time, we suggest that DC Water and its financial advisor monitor the rating agencies assessment of the Total Operating Reserve on an ongoing basis. The purpose of such monitoring would be to ensure that the rating agencies remain comfortable with the level of the reserves, recognizing that the reserve requirement is just one part of the overall credit assessment of DC Water.

In addition to the above, it is recommended that DC Water consider having wholesale customers provide a proportionate share of the contributions required for the operating reserve.

In the references to future operations or conditions in this Report, the Amawalk Consulting Group has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. We are of the opinion that these assumptions are reasonable and

attainable as of the date of this report, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

Appendix – Excerpts from the Reports of the Bond Rating Agencies**Fitch**

STABLE FINANCIAL PERFORMANCE: The authority continues to generate strong coverage of senior lien debt service while maintaining satisfactory reserves and adequate coverage of subordinate lien obligations. Acceptable operating results for the given rating category are expected over the medium term based on the authority's financial forecast.

The authority maintains satisfactory reserves well in excess of board imposed and indenture required amounts. Fiscal 2011 ended with almost 270 days cash on hand, significantly more than the 120 days of cash reserves required by board policy.

Moodys**STRENGTHS**

-- Adequate bondholder legal protections that include an indenture requirement to maintain rates equal to at least 1.2 times senior lien debt service coverage and 1.0 times on all outstanding debt, and maintenance of a 60-day operating reserve. Those requirements are buttressed by board policies to maintain senior coverage of at least 1.4 times, and a 120-day operating reserve.

OUTLOOK

The outlook is stable, reflecting the authority's continued willingness to proactively manage its finances and to implement timely rate increases as necessary to maintain satisfactory debt service coverage and a sound cash position.

Standard & Poors

DC Water's financial profile remains a strength. Senior-lien debt service coverage (DSC) is typically at or above 3x each year, and coverage of all liens is no worse than 1.4x. Debt coverage is strong despite the wholesale sewer treatment service to Montgomery and Prince George's counties in Maryland, and Fairfax and Loudoun counties in Virginia; wholesale revenues comprise about 20% of operating revenues and are generated on a cost-of-service basis. DC Water's management sets its rates to achieve at least 1.4x DSC on its senior-lien debt and maintain the greater of at least 120 days' cash on hand or \$125.5 million in working capital. For fiscal 2011, DC Water had \$166.7 million in available cash, including \$16.7 million in its rate stabilization fund.

The more recent series of subordinate bonds do not have debt service reserves. The reserves are specific to each series of bonds and are not available for shortfalls on other series. Given the authority's current cash level and debt service reserves available to the other series of bonds, the issuance of the series 2012 bonds without a reserve is not a credit concern currently. Standard & Poor's will continue to monitor reserves and evaluate the effect of issuing additional debt without funding debt service reserves on a case-by-case basis.

District of Columbia Water and Sewer Authority

Report on the Renewal & Replacement Reserve Fund of the Authority



March 29, 2013

Amawalk
Consulting Group LLC

In association with



Report on the Renewal & Replacement Reserve Fund

1. Background

1.1 Introduction

The District of Columbia Water & Sewer Authority's ("DC Water's" or the "Authority's") Master Indenture of Trust requires the Authority to maintain a Renewal and Replacement ("R&R") Reserve Fund in an amount equal to 2% of the original cost of plant in service or other such amounts as approved by the Board of Directors of DC Water (the "Board") following a review by an independent consultant. The R&R Reserve Fund is intended to fund emergency capital improvements or repairs upon authorization of the Board.

The R&R Reserve Fund provides an additional level of protection for the holders of the Authority's bonds (beyond the other pledges that are offered) given that DC Water will have a readily available source of certain funds for urgent, unplanned capital improvements if the need should arise. From the bondholder's perspective, the Authority's assets should be able to continuously provide water and sewer service that will generate revenues so that principal and interest payments to the purchasers of bonds can be paid on a timely basis. The R&R Reserve Fund provides an immediately available source of funds which, when combined with other available funding sources, can be used to implement significant repairs or replacements for the assets of the Authority.

From Fiscal Year ("FY") 1998 to FY 2004, the R&R Reserve Fund requirement was set at 2% of the original cost of the Authority's plant in service; i.e., the cost of acquiring and constructing DC Water's water and sewer assets as recorded in its accounting records. During FY 2004, upon recommendation of an independent consultant, the Board established the level of the R&R Reserve Fund in the amount of \$35.0 million and directed that the designated amount be reviewed every five years in conjunction with an assessment of the condition of the Authority's facilities. The most recent analysis of the R&R Reserve Fund was conducted in FY 2008, the results of which supported the Board's decision in FY 2004 to maintain the balance in the Fund at \$35.0 million.

The original cost of the Authority's assets has increased significantly since FY 2004 as DC Water made significant capital investments in its water system and sewer system. As of September 30, 2012 (the end of FY 2012), the original cost of plant in service was about \$3.71 billion. Had the Authority maintained a reserve of 2% of the original cost of the plant in service, the reserve requirement in FY 2013 would have been approximately \$74.2 million, an increase of about \$39.2 million over the current level. With the additional capital investments that are being made by DC Water in each year (which increases the original cost of plant in service), the reserve requirement would increase to an amount above \$74.2 million in FY 2014 based on the asset value as of September 30, 2013 (the end of FY 2013) and would continue to increase in each year thereafter.

It is also important to note that the Indenture requirement is based on a specified amount or

original cost, not replacement cost. If a key asset of DC Water had to be replaced on an emergency basis, the new cost would likely be much higher than the original cost of the asset due to inflation in the cost of planning, design and construction that has occurred since the initial asset installation took place. As a result, we believe that it is more important to consider the reasonableness of the specified amount in lieu of a percentage of original cost.

The purpose of this analysis and report is to examine the reasonableness of the amount on deposit in the R&R Reserve Fund and to make recommendations to the Authority for the value of the Fund for the next 5-year period of FY 2013 through FY 2017.

1.2 Study Methodology and Report Structure

The methodology that was used in conducting our analysis included the consideration of both the characteristics of DC Water as well as industry practices. The analysis considers the condition of the Authority's infrastructure, the practices and experience of DC Water in maintenance and capital improvements, the recent experience of the Authority in handling emergency events, the Authority's ability to fund capital repairs and improvements from other available resources, industry practices and other factors as discussed herein.

Each of the preceding factors is addressed in Section 2 of the report. The discussion that is included with each of the above points is not intended to identify, assess or quantify all of the risks associated with DC Water's operations, facilities and related matters. It is provided to assist in the consideration of the appropriate level of reserves to be maintained by DC Water.

Ideally, a large water and sewer utility would maintain substantial reserves to mitigate numerous potential risks. However, such an approach is not practical. The challenge that every water and sewer utility faces is the selecting the appropriate amount of reserves to accomplish the following:

- 1) Reasonably operate and protect the business (including keeping sufficient reserves for unexpected events and to manage risks);
- 2) Maintain strong credit ratings to optimize the cost of borrowing money; and
- 3) Accommodate the concerns of ratepayers that a utility should not overfund its reserves (since it is the ratepayers that pay for the reserves).

Following our assessment of the factors, Section 3 provides a concise summary of our findings and our recommendations for consideration by the Authority.

In the references to future operations or conditions in this Report, the Amawalk Consulting Group has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. We are of the opinion that these assumptions are reasonable and attainable as of the date of this report, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

2. Analysis of the R&R Reserve Fund

2.1 Introduction

In Section 2, we examine the factors that were considered in assessing the appropriateness of the current R&R Reserve Fund policies. As stated in the Report on the Operating Reserves of the Authority, there is no mathematical formula that can be used to calculate a specific recommendation for the amount of reserve funds that a utility such as DC Water should maintain. Each water and wastewater utility typically has similarities as well as differences in system characteristics, operating conditions and financial practices. There is also no formula for determining the value of higher or lower levels of reserves or other characteristics of a water and sewer utility in arriving at the resulting impact on the credit rating of a utility.

The factors that are discussed in this Section do not necessarily include all potential variables and risks that DC Water faces, and it is possible that future conditions could include circumstances that are very different or more adverse to the assets and expenditures than DC Water has experienced before (e.g., a collapse of a large section of interceptor sewer). However, some of the circumstances that water and sewer utilities may encounter that could affect decision-making on reserve levels are briefly described herein.

Following the Introduction, this Section of the report is presented in the following parts:

- Independent Condition Assessment;
- Operation and Maintenance Practices;
- Capital Planning, Prioritization and Implementation Practices;
- DC Water's Recent Experience With Unforeseen Expenditures;
- Availability of Funds for Emergency Renewals and Replacements;
- Access to the Proceeds of Insurance;
- Industry Practices; and
- Rating Agency Perspectives.

Our analysis and findings for each of the above factors is presented herein.

2.2 Independent Condition Assessment

Johnson, Mirmiran & Thompson, Inc. ("JMT") is currently performing the independent assessment of the condition of DC Water's facilities pursuant to the Indenture requirement. The resulting report will comment on the state of the Authority's water system and sewer system including the adequacy of maintenance and the ability of the Capital Improvement Program ("CIP") to maintain and enhance the assets of DC Water. The initial feedback provided by JMT at the time of this report is the Authority's water system and sewer system are functional, the Authority is achieving or surpassing all requirements of the regulatory permits, and the CIP is at appropriate levels. Certain assets of the Authority are in need of improvement or replacement as of the date of this report; JMT believes that the CIP makes reasonable provisions for the funding of such improvements or replacements.

2.3 Operation & Maintenance Practices

A utility that has a good history of operation and maintenance ("O&M") practices would be expected to have fewer emergency repairs and replacements for the same or similar facilities and equipment than an organization with similar types of assets but a poor history of maintenance. This part of our analysis considers the O&M practices of DC Water as a factor to consider when assessing the appropriateness of the R&R Reserve Fund level.

In the period since the 2008 Report on R&R Reserve Fund, the Authority has demonstrated its ability to manage and maintain its assets, anticipate its capital needs (thereby reducing the likelihood of potential emergencies) and to fund urgent needs should they arise without resorting to withdrawals from reserve funds. There are needed improvements in the water system and sewer system and JMT believes that the Authority is reasonably addressing the needs of the systems. Information regarding the experience and practices of the Authority is provided below.

- ***Asset Management***

Asset management is a comprehensive business program advocated by the US EPA and the utility industry to optimize infrastructure sustainability. DC Water manages assets that are worth billions of dollars with an added \$3.6 billion in assets coming on-line in the next 10 years. A comprehensive asset management program is being implemented by DC Water with the purpose of preserving these investments by incorporating best practices, improved service life and lower life cycle costs. Characteristics of asset management include:

- The practice of managing infrastructure capital assets to minimize the total cost of acquiring, operating and maintaining them, while improving service levels;
- Incorporates detailed asset inventories, data management, related business processes and long-range financial planning to drive decision-making; and
- Optimizes ability to prioritize capital program projects and preventative maintenance work.

- ***Maintenance Practices***

The Authority has emphasized improvement in its maintenance practices as an important element in preserving its assets and minimizing costly disruptions. Refinements in maintenance management practices have been achieved with the updating to the most recent version of MAXIMO asset management software system. The following is an illustration of a sample of the capabilities of the system: DC Water staff can view the location and condition of each asset on a detailed map and can quickly access asset history, total asset cost, number of problems in specific areas, and water quality issues by type and area. This is vital in enabling staff to identify patterns and make informed decisions regarding which infrastructure assets to repair, which to replace and when to do so.

- ***Trenchless Technologies***

DC Water plans to excavate only where it must do so, and in other instances is leveraging advanced 'trenchless' technologies. One of these technologies, cured-in-place piping

(CIPP), uses a resin-lined tube pulled inside the damaged pipe, then heated with steam or hot water. The heat “cures” the resin, creating a form-fitting, jointless, rehabilitated pipe. This process reduces the need for digging, since all of the pipe need not be exposed. Robotically controlled cutting devices and closed-circuit television are used for the service laterals. A significant advantage to such techniques is to minimize the impact to citizens and to traffic.

- ***Health & Safety and Security***

In FY 2011, the Authority reorganized the Facilities Management and Safety and Security departments into two new departments, Facilities & Security Management and Occupational Safety and Health (“OSH”). Creating a standalone department for OSH is intended to allow for a greater focus on the health and safety of DC Water’s employees and customers. In addition, the restructuring transferred security functions to facilities management to better protect the Authority’s facilities and assets.

- ***Compliance With Permits and Consent Decrees***

The Authority has indicated that it is in compliance with all applicable permits issued by the regulatory agencies as well as its Consent Decrees. At the time of this report, JMT believes that there are no indications that, in the foreseeable future, permit compliance or Consent Decree compliance is in jeopardy.

- ***Awards***

The National Association of Clean Water Agencies (“NACWA”) presented awards for achievements to DC Water in 2010. The National Environmental Achievement Award recognized the development of innovative technology with global application and the Platinum Peak Performance Award acknowledged the five-year record for Blue Plains in achieving outstanding compliance with U.S. Environmental Protection Agency (“USEPA”) standards for improving water quality in the Potomac River and Chesapeake Bay.

The National Environmental Achievement Award was won by DC Water for creating new research and technology design and operating criteria for enhanced nitrogen removal from wastewater in 2009 and 2010. The focus of this particular research is to turn solid nitrogen in wastewater into nitrogen gas, thereby rendering it harmless to the receiving waters. In their assessment, the personnel at Blue Plains concluded this to be a compact and cost-effective environmental technology that gives an alternative solution to utilities across the country. The innovation by the DC Water team has the potential for global impact in protecting aquatic life in waterways that receive wastewater discharges. When employed at Blue Plains Advanced Wastewater Treatment Plant, these technologies are expected to help protect the Potomac River and Chesapeake Bay.

NACWA also presented DC Water with the Platinum Peak Performance Award for five consecutive years of 100 percent annual National Pollutant Discharge Elimination System (“NPDES”) permit compliance. The NPDES permit, issued by the USEPA, regulates the effluent, or treated wastewater, that Blue Plains discharges to the Potomac River. Blue

Plains is held to one of the most stringent permits in the country. This is the first time that Blue Plains has received the Platinum Award.

- ***Automated Meter Reading***

DC Water was one of the first utilities to automate its meter reading program (“AMR”) which has been noted as a best practice in the industry. The automated meters use radio frequency and cell phone technology to send daily water usage information from the meter to DC Water. In addition, an application was developed in-house entitled: High Use Notification Application (“HUNA”). This tool analyzes daily water consumption and provides monthly and yearly averages on an account. It also allows customers access to daily meter readings via the web and has advanced features which alert customers of metering anomalies.

- ***Summary***

Although past experience does not guarantee that there will not be operating difficulties or unexpected expenses in future years, the culture of performance in operating the water system and the sewer system that DC Water has exhibited over the years indicates that the risk of extraordinary increases in O&M expenses for the repair or replacement of assets is relatively low.

2.4 Capital Planning and Implementation Practices

Similar to operation and maintenance, a utility that has a strong track record in capital planning practices and the implementation of those plans may have less of a need for large reserve funds than a similar utility organization with a poor history. This part of our analysis considers the capital planning and implementation practices of DC Water as factors to consider when assessing the appropriateness of the R&R Reserve Fund level.

- ***Facility Planning***

The Authority has undertaken facility planning studies which it has used to develop its CIP. Examples include:

- *Facilities Master Plan;*
- *Biosolids Management Plan;*
- *Combined Sewer Overflow Long-Term Control Plan (“CSO LTCP”) (also known as the DC Clean Rivers Project);*
- *Enhanced Nitrogen Removal Facilities Plan;*
- *Sewer System Facility Plan;* and
- *Water System Facility Plan.*

These plans and other studies provide the framework for planning, designing and implementing near-term and long-term investments in capital assets.

- ***Capital Improvement Program (CIP)***

The Authority's current CIP has programmed capital expenditures of approximately \$3.8 billion in the ten-year period from FY 2012 through FY 2021. This includes part of the DC Clean Rivers Project, which covers the federally-mandated CSO LTCP and the nine

minimum controls program, totaling \$2.6 billion over a 20-year period. JMT is reviewing the CIP as part of the Independent Condition Assessment and has concluded that the CIP is comprehensive in addressing the mandated and non-mandated improvement needs of the water system and the sewer system. Very importantly, the CIP planning process allows for the reassessment of priorities and funding needs on an annual basis and the flexibility to reprogram projects so that if new needs arise, DC Water can consider rescheduling non-mandated initiatives in order to accommodate more urgent needs. An illustration of reprogramming is the roof at the Blue Plains wastewater treatment facility that was planned for replacement in future years but is being replaced much earlier due to damage during the 2011 earthquake. Additional examples are provided in Section 2.5.

- ***Technology***

One illustration of the Authority's use of technology is in biosolids processing and disposal. DC Water's Biosolids Management Program has been recognized by the USEPA for its outstanding operations, technological advances, and promotion of the beneficial uses of municipal wastewater biosolids. The Authority's approach includes the construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. The option produces power from digester gas that is expected to meet over one-third of DC Water's electric demand at Blue Plains. The digestion process is anticipated to destroy nearly one half of the biosolids which will result in lower reuse costs.

- ***Green Investments***

The Authority pursues innovative techniques to enhance the performance of its facilities while attempting to minimize its costs. In December 2012, the USEPA, the District of Columbia, and DC Water joined in a partnership agreement to use green techniques for wet weather pollution control in the District. The "Clean Rivers, Green District" agreement outlines the collaborative steps to support green infrastructure to achieve sustainable stormwater management, more livable communities, and other environmental improvements in the District, reducing the extent of gray infrastructure (tunnels) required to achieve the CSO goals for the District of Columbia.

DC Water has proposed expanding its commitment to the use of green infrastructure as a supplement to its investments in a series of tunnels for the control of combined sewer overflows in the District. These projects will be used to evaluate the effectiveness of green infrastructure to retain and control rainwater using techniques that mimic natural control measures to meet water quality goals. If successful, these techniques could be used to help address the combined sewer overflow problems in the District.

The agreement also commits the parties to work together to implement a Green Design Challenge to engage private sector participation in demonstrating and advancing green infrastructure technology in an urban setting. The agreement also seeks to enlist participation by public and private organizations in a collaborative effort to develop next generation green infrastructure designs, and facilitate participation by academic institutions in various aspects of the project. Throughout this initiative, DC Water,

USEPA, and the District will work together to assess the water quality benefits and impacts of alternative green controls to ensure that they meet USEPA expectations and Clean Water Act requirements.

- **Summary**

DC Water has demonstrated its ability to effectively plan, design and implement improvements to its assets such that the level of service provided has met or surpassed regulatory requirements. This does not rule out the possibility that repair or replacement emergencies will arise but it does reduce the risk of such events. Major capital emergencies caused by external factors such as acts of war or terrorism remain possible. The Authority has taken important steps to reduce its exposure to terrorism through improved access control, improvements to the system security, and monitoring capabilities.

2.5 Recent Experience of DC Water With Unforeseen Expenditures

As stated in Section 1, the R&R Reserve Fund is intended to fund emergency capital improvements or repairs upon authorization of the use of such funds by the Board. An important question to ask is: “What is the recent experience of DC Water with unanticipated capital expenditures?” During the last five years, the two largest situations that were encountered did not require funding from the R&R Reserve Fund. Each was handled with timely planning, design, reprioritization and reprogramming of funds, and implementation using conventional sources of funding for Authority capital projects. A brief explanation of the two events is provided below. The two examples of capital expenditures are followed by a discussion of O&M expenses.

- ***Crosstown Water Tunnel Rehabilitation***

In 2008, a leak was discovered in the 7-foot diameter Crosstown Tunnel. The engineering investigation, utilizing closed circuit televised inspection (“CCTV”), developed a plan to line the tunnel with 725 linear feet of steel lining and replace an existing valve with a new DC Water-supplied 72-inch gate valve. The tunnel is approximately 120-feet deep. A construction contract was awarded in 2011 through the bidding process for \$4,972,000. Subsequent to the initial investigation, a project was created within the CIP. Funds for the Crosstown Tunnel were assigned to the project by reprioritizing existing projects within the CIP and reprogramming associated funding. This experience highlights the ability of DC Water to amend the CIP when necessary and to accommodate the need for capital funds through the sources of funds for the CIP.

- ***Flooding of Bloomingdale and LeDroit Park***

During the summer of 2012, multiple occasions of heavy rain caused flooding in two neighborhoods. The DC Clean Rivers Project (DCCR) includes future tunnels, beyond the current downstream projects of the Blue Plains and Anacostia River Tunnels, originally scheduled to be completed in FY 2025. The active response to the acute flooding required the expediting of a solution, which resulted in accelerating capital funding programmed in the CIP for the Bloomingdale neighborhood. Short-term, medium-term and long-term phases entail operating and capital activities: 1) storm drain modifications, retention measures and rain barrels, 2) the McMillan stormwater storage & First Street NW Tunnel

projects, and 3) the Northeast Boundary Tunnel. The capital cost through 2016 for the short-term and medium-term measures is estimated to be approximately \$160 million. In the current fiscal year, approximately \$16 million will be reprogrammed from lower priority activities to move the effort forward under authority available to the General Manager. The remaining funds will be programmed in the next budget cycle, with the reprioritization of other projects throughout the CIP.

- ***O&M Expenses for Unexpected Repairs and Renewals***

Representatives of DC Water advised JMT that there have been no major unanticipated expenses for repairs and renewals in recent years. This perspective is supported by the fact that the Authority traditionally spends less than its annual budgeted amount for O&M expenses as highlighted in the Report on the Operating Reserves of the Authority. Thus, there has been no need to draw dollars from the R&R Reserve Fund for unexpected O&M expenses. The historical experience of spending less than the budgeted amount for O&M expenses also demonstrates that in the event there is an unexpected increase in O&M expenses, the first line of funding is to utilize moneys within the O&M expense budget to pay for such an increase rather than seeking other sources of funds. In addition, DC Water has the regulatory flexibility to respond to emergencies through the use of available O&M funds.

2.6 Availability of Funds for Emergency Renewals and Replacements

The Authority has achieved and maintained a track record of strong financial performance that is reflected in its bond ratings for senior lien bonds of Aa2 / AA+ / AA from Moody's, Standard & Poor's and Fitch, respectively. The corresponding ratings for subordinate lien bonds are Aa3 / AA- / AA-, respectively. The strong ratings enhance the Authority's ability to borrow money at competitive interest rates. DC Water funds its capital improvements through the proceeds of debt, as well as federal grants, capital contributions from wholesale customers and cash from operations.

In the event of an emergency need for cash to pay for unplanned capital improvements, the Authority will have access to funds from several sources:

- The Authority can use the proceeds of Commercial Paper Notes to fund capital needs on a short-term basis, followed by the issuance of long-term revenue bonds to retire outstanding Commercial Paper Notes and provide permanent, long-term financing for CIP costs. The value of the Commercial Paper Notes outstanding at any time is expected to be amended shortly to an amount that cannot exceed \$200 million. This program includes: Series A which is \$75 million tax exempt, of which none has been drawn down as of February 28, 2013; Series B which is \$50 million tax exempt, of which \$12.0 million has been drawn down as of February 28, 2013; and Series C which is \$75 million in taxable commercial paper, of which \$29.2 million has been drawn down as of February 28, 2013. In the event of an emergency need for capital funds, the Authority could access short-term financing relatively quickly under this program (subject to the permitted capacities noted above).

- The Authority may have the ability to reprogram some of its capital projects to respond to an emergency, depending upon the size and urgency of the capital need as well as whether ongoing projects have mandates for completion. The three projects mentioned earlier were addressed using this approach. Annual capital spending is budgeted to average \$522.9 million per year from FY 2012 through FY 2016 and \$246.6 million from FY 2017 through FY 2021.¹
- As of February 28, 2013, the Authority's Total Operating Reserves were \$-150.4 million, including the \$35.0 million on deposit in the R&R Reserve Fund. This amount is well above the Board's requirement to maintain cash on hand equal to 120 days of operating expenses with a minimum of \$125.5 million. These funds exceed the 60-day operating reserve requirement established by the Authority's Indenture. The Total Operating Reserves equal the 60-day operating reserve requirement of \$41.1 million, the R&R Reserve Fund of \$35.0 million plus \$49.4 million in undesignated cash reserves on hand; collectively these funds equal \$125.5 million. The undesignated cash reserves would be available to the Board in the event of an urgent need for capital funds because they are not required by the Indenture. At a subsequent point in time, these funds would have to be restored to the Total Operating Reserves to remain in compliance with Board policy. There was also an additional \$24.9 million in undesignated cash reserves on hand as of February 28, 2013 which, when added to the Board-required reserves, equals \$150.4 million. It is noted that the additional amount can fluctuate from month to month depending on the timing of wholesale customer payments and other factors.
- The Authority could draw down part or all of the \$35 million in the R&R Reserve Fund. At a subsequent point in time, these funds would have to be restored to the R&R Reserve Fund to remain in compliance with the Indenture.

2.7 Access to the Proceeds of Insurance

In addition to cash and ready access to credit, the Authority maintains insurance coverage that could be used to cover certain unforeseen repairs, replacements or expenses that were due to circumstances covered by insurance. The Authority has developed a comprehensive risk management and insurance program which is annually reviewed. The Authority's insurance policies include liability insurance and workers' compensation, property, equipment, crime, fiduciary, public officials' and employment practices liability. Since the passage of the Terrorism Risk Insurance Act of 2002 ("TRIA"), terrorism coverages are included under all insurance policies. Additional information concerning the insurance coverage of the Authority is provided in the Report on the Operating Reserves of the Authority.

A point that was mentioned in the Report on the Operating Reserves of the Authority is that the receipt of insurance proceeds could lag significantly behind the actual expenditure of funds. For example, if there is a dispute between the Authority and its insurers over a claim, it may take a significant amount of time to receive reimbursement and the amount actually received may be less than what was claimed.

¹ FY2012 -FY 2021 Capital Improvement Plan

2.8 Industry Practices

Many water and wastewater utilities maintain a renewal and replacement reserve fund. The amount on deposit in each of these funds is established using a variety of approaches; examples of which are provided below.

- Percentage of the utility's original cost or net asset value (i.e., original cost less depreciation);
- Percentage of operating and maintenance expenses;
- Percentage of renewal and replacement expenditures; and
- Specific amounts recommended by independent consultants.

Examples of the above approaches are presented in Table 1.

Table 1: Examples of Renewal and Replacement Funding Levels

Utility	Approach to Setting Renewal and Replacement Reserve Fund
Detroit Water and Sewer Department	At least 15% of budgeted O&M and to be used for major unanticipated repairs and replacement to the system with actual or anticipated cost exceeding \$1 million.
Boston Water and Sewer Commission	Set to 25% or more of current budgeted R&R expenditure. The Fund is to provide additional funds for R&R projects if there are insufficient funds in the R&R Account to pay for these projects.
DC Water and Sewer Authority	Currently set at \$35 million based on either 2% of original cost of assets or an amount recommended by an independent consultant.
Loudoun Water (and Sewer)	Annual contribution to a newly created capital replacement reserve account will gradually increase until annual transfer reaches target of 50% of depreciation of the water and sewer assets by FY18. Fund is intended to address the need for system reinvestment.
Massachusetts Water Resources Authority	Current R&R requirement of \$35 million is being amended to require \$10 million in cash; amounts needed above that would be funded through available commercial paper or other sources; adequacy reassessed every third fiscal year by the consulting engineer. Fund is to be used to fund emergency repairs or capital improvements when funds are not otherwise available.
Philadelphia Water Department	Renewals and replacements are funded from at least two funds including the new Special Water Infrastructure Account - there does not appear to be a minimum balance requirement or reserve.

Not all utilities are required to fund a renewal and replacement reserve fund. The New York City Municipal Water Finance Authority and the Washington Suburban Sanitary Commission are examples of utilities that do not have such a reserve requirement.

Table 2 presents a comparison of the dollar values of the renewal and replacement reserve requirements for several utilities and the Authority.

Table 2: Comparison of Representative R&R Fund Levels (\$ Millions)

Utility	Plant Value	Annual O&M	R&R Fund	R&R as a % of Plant Value	R&R as a % of O&M
Boston Water and Sewer Commission	1,372	53	3.2	0.2%	6.1%
DC Water and Sewer Authority	3,548	249	35.0	1.0%	14.0%
Detroit Water and Sewer Department	7,384	378	57.4	0.8%	15.2%
Loudoun Water	1,226	36	3.1	0.2%	8.5%
Massachusetts Water Resources Authority - Previous	8,888	241	35.0	0.4%	14.5%
Massachusetts Water Resources Authority - Proposed	8,888	241	10.0	0.1%	4.2%

2.9 Rating Agency Perspectives

The Appendix to the Report on the Operating Reserves of the Authority presents excerpts from the most recent ratings reports. Portions of the rating agency comments from that Appendix are presented below. The information presented is just a small part of the overall reports and the reader is encouraged to review the complete reports for all information presented by the rating agencies.

The text from the reports generally refers to the DC Water reserves as a major positive for the Authority bond rating. While the Standard & Poor's emphasis in the last paragraph is on the debt service reserve, we wish to point out the reference that the agency makes to continuing to monitor the reserves of the Authority.

Fitch

STABLE FINANCIAL PERFORMANCE: The authority continues to generate strong coverage of senior lien debt service while maintaining satisfactory reserves and adequate coverage of subordinate lien obligations. Acceptable operating results for the given rating category are expected over the medium term based on the authority's financial forecast.

The authority maintains satisfactory reserves well in excess of board imposed and indenture required amounts. Fiscal 2011 ended with almost 270 days cash on hand, significantly more than the 120 days of cash reserves required by board policy.

Moody's

STRENGTHS

-- Adequate bondholder legal protections that include an indenture requirement to maintain rates equal to at least 1.2 times senior lien debt service coverage and 1.0 times on all outstanding debt, and maintenance of a 60-day operating reserve. Those requirements are buttressed by board policies to maintain senior coverage of at least 1.4 times, and a 120-day operating reserve.

OUTLOOK

The outlook is stable, reflecting the authority's continued willingness to proactively manage its finances and to implement timely rate increases as necessary to maintain satisfactory debt service coverage and a sound cash position.

Standard & Poor's

DC Water's management sets its rates to achieve at least 1.4x DSC on its senior-lien debt and maintain the greater of at least 120 days' cash on hand or \$125.5 million in working capital. For fiscal 2011, DC Water had \$166.7 million in available cash, including \$16.7 million in its rate stabilization fund.

Standard & Poor's will continue to monitor reserves and evaluate the effect of issuing additional debt without funding debt service reserves on a case-by-case basis.

3. Conclusions and Recommendations

3.1 Concluding Comments

Based on our analysis of the R&R Reserve Fund, we offer the following conclusions:

- The preliminary findings of JMT show that the Authority's assets overall are in adequate condition;
- The preliminary findings of JMT indicate that the capital investment program is comprehensive and built upon detailed studies and plans yet with administrative flexibility to balance urgent needs with less urgent CIP projects;
- It is noted that the level of reserves relative to annual revenues and expenses will decline over time if the reserves are maintained at the recommended level while revenues and expenses increase.
- The current R&R Reserve Fund policy compares favorably with the practices of highly-rated peer utilities and the rating agencies view the collective reserves of the Authority as a key strength of DC Water; and
- The Renewal and Replacement Reserve Fund would fund most urgent capital needs and would be complimented by funds from other sources available to the Authority.

We found that the projected R&R Reserve under the current financial policy of the Board should provide DC Water with adequate financial and rate-setting flexibility in FY 2013 through FY 2017; i.e., the five-year period for the review of the Renewal & Replacement Reserve policy.

3.2 Recommendations

Based on our findings, we are pleased to offer the following recommendations:

1. It is recommended that DC Water maintain its current R&R Reserve Fund policy to require a balance of \$35.0 million.
2. Since DC Water's operating environment continues to change over time, it is suggested that the R&R Reserve Fund requirement be reassessed at least every five years in conjunction with the Indenture-required system assessment.
3. Given the positive views of the rating agencies towards the reserve requirements, we suggest that DC Water and its financial advisor monitor the rating agencies assessment of the Total Operating Reserves (including the R&R Reserve Fund) on an ongoing basis. The purpose of such monitoring would be to ensure that the rating agencies remain comfortable with the level of the reserves, recognizing that the reserve requirement is just one part of the overall credit assessment of DC Water.

In addition to the above, it is recommended that DC Water consider having wholesale customers provide a proportionate share of the contributions required for the R&R Reserve Fund.

DC Water

Report on Renewal & Replacement Reserve – 03/29/13

In the references to future operations or conditions in this Report, the Amawalk Consulting Group has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. We are of the opinion that these assumptions are reasonable and attainable as of the date of this report, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

ATTACHMENT 4

**FINANCE & BUDGET COMMITTEE
REVISED FINANCIAL POLICIES**

**ACTION ITEM 6-A: OPERATING CASH RESERVE, RENEWAL AND
REPLACEMENT RESERVE, DC GO DEBT AND NAME CHANGES TO THE
STATEMENT OF FINANCIAL POLICIES**

The Board will be asked to approve a resolution to revise the current Statement of Financial Policies to:

- reaffirm the amount of the current Board adopted Operating Cash Reserve requirement (60 days of Operating and Maintenance expenses required by the bond indenture) of 120 days of budgeted Operating and Maintenance expenses or \$125.5 million and to review that determination at least every five years by DC Water's independent rate consultant in conjunction with the indenture required system assessment. This Reserve Fund is intended to provide contingency funds that enable DC Water to respond to unanticipated events or emergencies which result in an extraordinary increase in expenses.
- reaffirm the amount of the current Board adopted Renewal and Replacement Reserve requirement (bond indenture requires an amount equal to 2% of the original cost value of plant in service or such other amount as determined by a Qualified Independent Consultant, which such amount shall be subject to approval by the Board of Directors) of \$35 million. This Reserve Fund is intended to fund emergency capital improvements or repairs upon authorization of the Board.
- where necessary change "WASA" to "DC Water".
- and delete the requirement for the District of Columbia General Obligation Debt Reserve.

DISTRICT OF COLUMBIA WATER & SEWER AUTHORITY
STATEMENT OF FINANCIAL POLICIES

The following are the basic finance policies that will guide ~~WASA's-DC Water's~~ use of debt financing and development of ~~DC Water~~~~WASA's~~ ten year plan.

- ~~WASADC Water~~ will maintain financial practices and policies that result in high-quality investment grade bond ratings so as to ensure the lowest practical cost of debt necessary to finance ~~DC Water~~~~WASA's~~ long-term capital program.
- ~~WASADC Water~~ will maintain strong levels of operating cash reserves, equivalent to 120 days of budgeted operations and maintenance costs calculated on an average daily balance basis, with the objective of maintaining at least \$125.5 million in operating reserves.
 - The annual reserve amount will be formally approved by the Board as part of its annual approval of the operating and capital budgets.
 - The operating reserve requirement will be evaluated every five years by ~~DC Water~~~~WASA's~~ independent rate consultant in conjunction with the Indenture-required system assessment.

The operating reserve will, at a minimum, include any reserve requirements contained in ~~WASADC Water's~~ Master Indenture of Trust (the "Indenture"), excluding any debt service reserve funds and the rate stabilization fund, as follows:

- Operating Reserve – equivalent to sixty days' operating costs
 - Renewal & Replacement Reserve - \$35 million. This reserve requirement will be evaluated every five years by ~~WASADC Water's~~ independent rate consultant in conjunction with the Indenture-required system assessment
 - ~~— District of Columbia General Obligation Debt Reserve – equivalent to 10 percent of WASA's share of subsequent year's D.C. general obligation bond debt service~~
- ~~WASADC Water~~ will maintain senior debt service coverage of 140 percent, in excess of ~~WASADC Water's~~ Indenture requirement of 120 percent. Senior debt service coverage will be calculated in accordance with ~~WASADC Water's~~ Indenture.
 - In general, ~~WASADC Water~~ will utilize operating cash in excess of the Board's reserve requirement and any other significant one-time cash infusions for capital financing or for repayment of higher cost debt.
 - ~~WASADC Water~~ will whenever possible use the least costly type of financing for capital projects, based on a careful evaluation of ~~WASADC Water's~~ capital and operating requirements and financial position for each year.
 - ~~WASADC Water~~ will attempt to match the period of debt repayment, in total, with the lives of the assets financed by any such debt.

DC WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET

ACTION REQUESTED

GOODS AND SERVICES CONTRACT OPTION:

**Rolling Owner Controlled Insurance Program (ROCIP) Insurance Broker Services
(Joint Use – Indirect Cost)**

Approval to execute option four for ROCIP Insurance Broker Services in the amount of \$1,108,712.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Aon Risk Services, Inc. 1120 20 th Street, NW, Suite 600 Washington, DC 20036-3419	SUBS: MFL Consulting 1619 13 th Street, NW Washington, DC 20009	PARTICIPATION: LBE - 30%
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DESCRIPTION AND PURPOSE

Original Contract Value:	\$404,218.00
Original Contract Dates:	July 1, 2009 – June 30, 2010
Number of Option Years in Contract:	4
Option Years (01- 03) Value:	\$2,127,719.00
Option Years (01- 03) Dates:	July 1, 2010 – June 30, 2013
Modification Nos. (01 - 02) Value:	\$249,935
Modification Nos. (01- 02) Dates:	March 1, 2012 – July 31, 2012
Fourth Option Year Value:	\$1,108,712.00
Fourth Option Year Dates:	July 1, 2013 – June 30, 2014

Purpose of Contract:

To contract for ROCIP Insurance Broker Services for the District of Columbia Water and Sewer Authority’s (DC Water) Risk Management department.

Contract Scope:

The scope of services requires that insurance brokerage and project administration services be provided for the ROCIP, that include claims management coordination, safety/loss control and contractor worker’s compensation and general liability insurance enrollment.

Spending Previous Years:

Cumulative Contract Value:	07-01-2009 – 04-25-2013 - \$2,781,872.00
Cumulative Contract Spending:	07-01-2009 – 03-31-2013 - \$2,748,218.00

Contractor’s Past Performance:

The Contractor has been the incumbent contractor since June 2009 and has been providing satisfactory services.

Note: The cost for option years two (2) and three (3) increased due to the addition of safety staff to accommodate DC Water’s Long Term Control Plan (LTCP) and the extension of option year two (2) for a period of one (1) month. The costs anticipated for the fourth (4th) option year also include an increase for safety staff. Procurement recommends exercising the fourth (4th) option year.

PROCUREMENT INFORMATION

Contract Type:	Requirements with fixed prices	Award Based On:	Highest Score Firm
Commodity:	Services	Contract Number:	WAS-09-014-AA-GA
Contractor Market:	Open Market with LBE/LSBE Preference Points		

BUDGET INFORMATION

Funding:	Capital	Department:	Office of the Chief Finance Officer – Risk Management
Project Area:	DC Water-Wide	Department Head:	Mark Kim

USER SHARE INFORMATION

	Share %*	Dollar Amount
District of Columbia	81.85%	\$907,480.77
Washington Suburban Sanitary Commission	13.24%	\$146,793.47
Fairfax County	3.37%	\$37,363.59
Loudoun County	1.33%	\$14,745.87
Other(s)	.21%	\$2,328.30
Total Estimated Dollar Amount	100.00%	\$1,108,712.00

*Actual amounts will be reconciled and billed to customers accordingly.

 / 4/18/13
 Katy Chang Date
 Acting Procurement Director

 / 4/18/13
 Yvette Downs Date
 Director, Finance and Budget

 / 4/18/13
 Mark Kim Date
 Chief Finance Officer

_____/_____
 George S. Hawkins Date
 General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT MODIFICATION:

**Legal Services
(Non-Joint Use)**

Approval to add funding to continue providing legal services in the amount of \$700,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Douglas & Boykin PLLC 1850 M Street, NW Washington, DC 20036-5839	N/A	N/A

DESCRIPTION AND PURPOSE

Original Contract Value: \$308,696.74
 Original Contract Dates: 10-01-2011—09-30-2012
 No. of Option Years in Contract: N/A
 Option Year Values: N/A
 Option Year Dates: N/A
 This Contract Modification Value: \$700,000.00
 This Contract Modification Dates: 10-01-2012—09-30-2014

Purpose of the Contract:

To contract for legal services for the Office of General Counsel.

Spending Previous Year:

Cumulative Contract Value: 10-01-2011 to 03-31-2013—\$378,485.23
 Cumulative Contract Spending: 10-01-2011 to 03-31 -2013—\$378,485.23

Contractor's Past Performance:

The contractor's past performance has been satisfactory.

PROCUREMENT INFORMATION

Contract Type:	Hourly Rate	Award Based On:	N/A
Commodity:	Legal Services	Contract Number:	N/A
Contractor Market:	N/A		

BUDGET INFORMATION

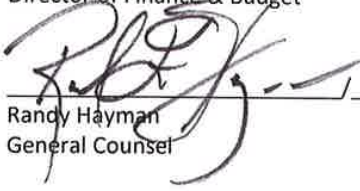
Funding:	Operating	Department:	General Counsel
Service Area:	District of Columbia	Department Head:	Randy Hayman

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100%	\$ 700,000.00
Washington Suburban Sanitary Commission	%	\$
Fairfax County	%	\$
Loudoun County	%	\$
Potomac Interceptor	%	\$
TOTAL ESTIMATED DOLLAR AMOUNT		100.00% \$ 700,000.00

 4/19/13
 Katy Chang Date
 Acting Director of Procurement

 4/19/13
 Yvette Downs Date
 Director of Finance & Budget

 4/22/13
 Randy Hayman Date
 General Counsel

 George S. Hawkins Date
 General Manager



D.C. WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS
FINANCE & BUDGET
MAY COMMITTEE MEETING

Thursday, May 23, 2013; 11:00 a.m.
Blue Plains Wastewater Treatment Plant
5000 Overlook Avenue, SW, DC
AGENDA

Call to Order	Chairman
April 2013 Financial Report	Director of Finance & Budget
Action Items	Chairman
Agenda for June Committee Meeting	Chairman
Adjournment	Chairman

*Detailed agenda can be found on DC Water's website at www.dewater.com/about/board_agendas.cfm