

# Washington Aqueduct

# Annual Financial Report



FY 2012



# Washington Aqueduct

# Annual Financial Report

Fiscal Year 2012 October 1, 2011 through September 30, 2012

Prepared by:
Finance and Accounting Office
Washington Aqueduct

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#### Wholesale Customer Board and Washington Aqueduct Management

#### The Wholesale Customer Board

Mr. Wyatt Shields, City Manager, City of Falls Church, Virginia (Current Chair)

Mr. George S. Hawkins, General Manager, D.C. Water (Chair effective May 4, 2013)

Ms. Barbara Donnellan, County Manager, Arlington County, Virginia (Chair effective May 4, 2014)

#### **Washington Aqueduct Management**

Mr. Thomas P. Jacobus, P.E. General Manager

Ms. Patricia A. Gamby Deputy General Manager

Mr. Lloyd Stowe, P.E. Chief, Plant Operations

Mr. Nathan H. Cole, P.E. Chief, Planning and Engineering

Mr. L. Jay Nolan Chief, Maintenance Services

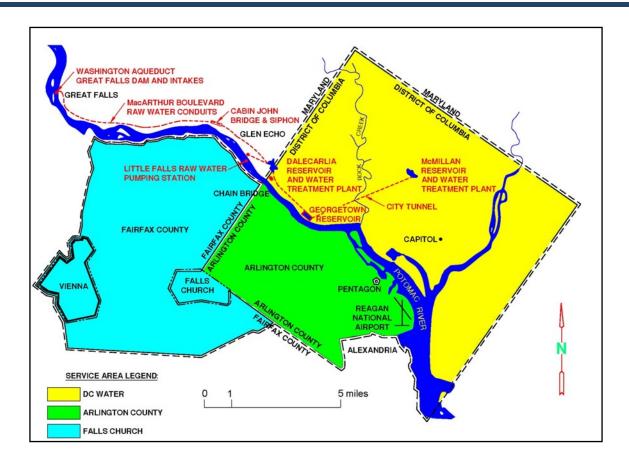
Mr. S. David Bankard Chief, Administrative Services

#### Baltimore District, U.S. Army Corps of Engineers

Colonel J. Richard Jordan, III Baltimore District Engineer

Mr. Gregory E. Johnson, P.E. Chief Financial Officer

## Service Area and Major Facilities Map



FY 2012 Key Customer Metrics						
	DC Water Arlington County City of Falls Ch					
Water Sold to Customer (MG)	36,930.38	8,318.53	5,702.40			
Peak Day Demand (MG)	142.99	34.90	23.40			
Average Day Demand (MG)	100.90	22.73	15.58			
Water Rate* (\$/MG)	\$789**	\$930**	\$950**			
Average Day Share	72.48%	16.33%	11.19%			

<sup>\*</sup> Water Rate does not include capital improvements

MG=Million Gallons

<sup>\*\*</sup> Customer rates vary due to demand from different service elevations, DC Water owning and pumping from Bryant Street Pumping Station and debt service payments

#### Message from the General Manager



Fiscal year 2012 was a very productive year for Washington Aqueduct. The startup activities at the Residuals Treatment Facilities have proceeded well, and the EPA Region 3 Administrator along with representatives of our wholesale customers and the community were present on September 12, 2012, for a ceremony to recognize this major achievement.

Our employees and our treatment facilities performed very well during two significant weather-related events in 2012. The powerful, and unexpected line of thunderstorms that passed through the DC metropolitan area on June 30 left serious damage in its wake. The water treatment facilities did not lose electrical power and employees made an extraordinary effort to get to work and stay at work to resolve problems from downed trees, debris, and serious interruptions in communications systems.

Washington Aqueduct employees stood ready to react to any damage from Hurricane Sandy, and fortunately there were no major problems locally. But both of these events have revived our thinking about having some additional emergency electrical generation capability immediately available to the treatment plants and the pumping stations. That will be a focus during fiscal year 2013 and we will work with the Wholesale Customer Board to arrive at a strategy to address this.

The quality of the water being produced remains excellent. The Future Treatment Alternatives Study has been completed and is now in the phase of Technical Committee review. During fiscal year 2013 we will make a proposal to the Wholesale Customer Board that incorporates a logical path forward in anticipation of the presence of emerging contaminants and potential new regulations.

The production of water is slightly declining even though there are more customers in the service areas. Keeping the wholesale cost of water as low as possible while at the same time maintaining and improving the infrastructure was a major management focus through fiscal year 2012 and it will remain so in fiscal year 2013.

Thomas T. Jacobus

Thomas P. Jacobus General Manager Washington Aqueduct

#### Washington Aqueduct Overview

Washington Aqueduct provides high quality water to its three wholesale customers who serve the District of Columbia, Arlington County, Virginia and the City of Falls Church service area in Virginia. It has been serving the national capital region since 1853.

It is regulated by Region 3 of the United States Environmental Protection Agency. In performing its daily functions it collaborates with other federal agencies, state and local authorities as well as neighbors and public advocacy groups. Washington Aqueduct is part of the U.S. Army Corps of Engineers. In 1998 via a memorandum of understanding, the Army and the wholesale customers agreed to form a Wholesale Customer Board for the purpose of addressing the cost, quality and availability of water furnished by Washington Aqueduct. Through the ongoing activities of the Wholesale Customer Board and Washington Aqueduct, technical and financial topics are addressed and resolved.

#### **Performance Measures**

Performance measures have been established to address nine key areas.

Goal 1: Provide an adequate supply of potable water.

Measure 1.1 Number of days water is provided as demanded by Washington, DC							
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012		
Target	366	365	365	365	366		
Actual	366	365	365	365	366		

Measure 1.2 Number of days water is provided as demanded by Arlington County, VA							
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012		
Target	366	365	365	365	366		
Actual	366	365	365	365	366		

Measure 1.3 Number of days water is provided as demanded by Falls Church, VA							
FY 2008 FY 2009 FY 2010 FY 2011 FY 2012							
Target	366	365	365	365	366		
Actual	366	365	365	365	366		

Goal 2: Protect the drinking water consumer from both microbial risk and adverse health effects due to chemicals in the the drinking water

Measure	2.1 Days Average	Filtered Water Turbio	lity is less than 0.1 NT	U (regulatory limit is 0.3 NTU)
				- (

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Target	346	346	346	346	346
Actual	366	365	359	365	365

Measure 2.2: Percentage of treated water samples in compliance with regulatory requirements

	•			1	
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Target	100	100	100	100	100
Actual	100	100	100	100	100

#### Measure 2.3: Number of chemical substances monitored for presence in the water supply system-wide

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Target	178	178	163	174	170
Actual	213	213	216	239	228

Note: FY 2011 target increased from 163 to 174 due to additional monitoring for radiologicals, asbestos and nitrosamines. FY 2012 target decreased with no requirement for additional monitoring of radiologicals.

#### Measure 2.4: Number of months per year EPA water quality report is completed by the 10th of the month

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Target	10	10	10	10	10
Actual	12	12	12	12	12

# Measure 2.5: Number of months per year required bacteriological samples are analyzed within holding times and with appropriate quality control

	FY 2008	FY 2009	FY 2010	FY 2010 FY 2011			
Target	12	12	12	12	12		
Actual	12	12	12	12	12		

# Measure 2.6: Number of months per year required chemical samples are analyzed within holding times and with appropriate quality control

	FY 2008	FY 2009	FY 2010	FY 2012	
Target	12	12	12	12	12
Actual	12	12	12	12	12

#### Water Demand and Supply to Wholesale Customers:

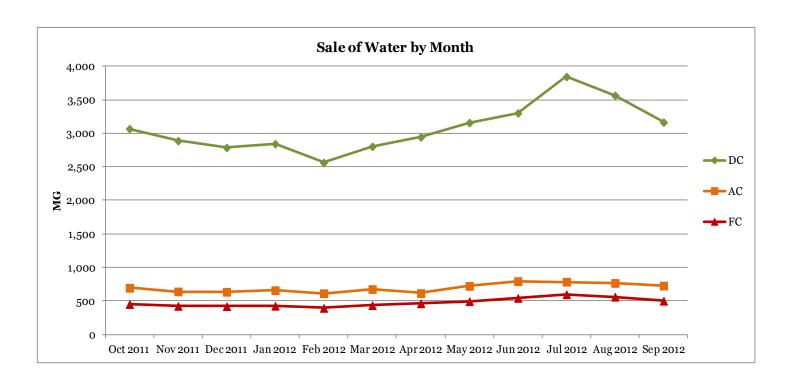
Demand for water has declined slightly. During fiscal year 2012, Washington Aqueduct produced and delivered 50,951 million gallons of water. This production was just over 1% lower compared to fiscal year 2011.

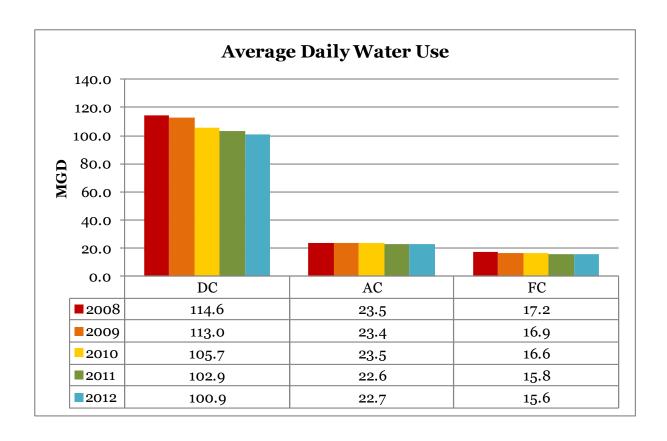
Water demand varies by month with the period of highest consumption being the summer months. Water purchased by each wholesale customer can change due to population

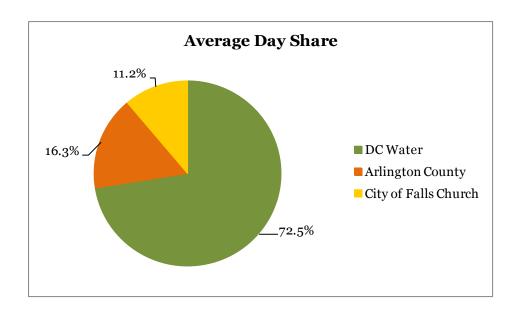
changes, water conservation practices, consumer habits, reliability of transmission infrastructure and other factors. Water demand varies by month and this variation in can be seen in the chart below. Water purchased by each customer can change over time, the change in demand over time can be seen on the opposite page

#### Water Delivered to Customers (MG)

	DC	AC	FC	Total
FY 2012	36,930.29	8,318.53	5,702.40	50,951.22
FY 2011	37,556.24	8,259.04	5,772.92	51,588.20
Change	-1.7%	+0.7%	-1.2%	-1.2%







#### **Operations and Maintenance Cost Analysis**

Washington Aqueduct's total operations and maintenance (O&M) expenditures were \$39,978,066 for FY 2012. The fiscal year 2012 operating budget was approved at \$47.2 million. This budget was revised due to additional cost information to \$44.5 million while setting water rates. Fiscal year 2012 expenditures were \$5.0 million lower than the revised

budget, attribution is shown on the chart on the opposite page.

O&M expenses were lower by \$0.7 million compared to FY 2011. This level of stability is due to fixed cost of energy through 2013, relatively stable chemical prices, level costs associated with service agreements and good predictability based on historical data.

## **Expenses by Category** Debt Service Payment - DC **Debt Service** Water Payment - Treasury. 2% 2% Communications. 1% Equipment. <1% Personnel Compensation Services 37% 25% Energy/Utilities 12% Supplies and Chemicals

21%

	FY	12 Approved	1	evised FY 12 Budget (for			Actual-to-		Overrun/
Category		Budget	V	Vater Rates)		Actuals	Budget		(Underrun)
Revenue (Water Sales)	\$	47,277,854	\$	44,521,557	\$	42,291,512	95%	\$	(2,230,045)
<b>Operating Expenses</b>									
Personnel	\$	16,286,789	\$	15,851,083	\$	14,787,477	93%	\$	(1,063,606)
	•	44.000.000		0.500.000	_	0.407.700	000/		(1.000.101)
Supplies and Material	\$	11,200,000	\$	9,500,000	\$	8,407,509	89%	\$	(1,092,491)
Energy	\$	6,823,200	\$	6,623,200	\$	4,641,365	70%	\$	(1,981,835)
Livigy	Ψ	0,025,200	Ψ	0,020,200	Ψ	4,041,000	7070	Ψ	(1,701,000)
Services	\$	10,134,243	\$	10,134,243	\$	10,071,606	99%	\$	(62,637)
Set need	Ψ	10,10 1,2 10	Ψ	10,10 1,2 10	Ψ	10,071,000	<i>3371</i> <b>0</b>	Ψ	(02,007)
Equipment	\$	598,800	\$	598,800	\$	51,306	9%	s	(547,494)
Equipment	Ψ	270,000	Ψ	250,000	Ψ	21,000	770	Ψ	(317,151)
Telecommunications	\$	250,000	\$	250,000	\$	182,379	73%	\$	(67,621)
TOTO COMMISSIONS	Ψ	200,000	-	200,000	Ψ	102,019	10 / 0		(07,021)
Total O&M Expenses	\$	45,293,032	\$	42,957,326	\$	38,141,642	89%	\$	(4,815,684)
Tom. Our Emperator	Ψ	,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ψ	.2,707,020	¥		0770	-	(1,010,001)
Debt Service Payment - US Treasury	\$	1,079,100	\$	658,509	\$	464,206	70%	\$	(194,303)
Desired raphene of freading	Ψ	1,077,100	Ψ	030,307	Ψ	707,200	10/0	Ψ	(174,000)
Debt Service Payment - DC Water	\$	905,722	\$	905,722	\$	905,722	100%	\$	-
<b>Total Operating Expenses</b>	\$	47,277,854	\$	44,521,557	\$	39,511,570	89%	\$	(5,009,987)

**Personnel:** As of September 30, 2012, Washington Aqueduct employed 149 full-time employees. The authorized strength was 179. In order to maintain a sustainable organization, optimally meet mission requirements and enhance capabilities in certain area, attracting and retaining talent remains a key priority in the coming year and beyond.

**Supplies and Material:** Supplies and material primarily consist of chemicals, parts, small IT purchases and other miscellaneous items. Washington Aqueduct spent \$8,407,509 as compared to the budget of \$9,500,000 and FY 2011 costs of \$7,952,151. The increase from FY 2011 is primarily due to a full year of hypochlorite operations.

The chemicals purchased by the Washington Aqueduct are used for: coagulation/flocculation (alum, polymer), disinfection (liquid chlorine, ammonia) and corrosion control (lime, sodium hydroxide, phosphoric acid, ). Other uses of chemicals are for filtration aid (sodium hypochlorite), algae control (sodium permanganate, copper sulfate), dental prophylaxis (hydrofluosilicic acid) and taste/odor control

(powder activated carbon). Washington Aqueduct continues to monitor chemical prices and takes actions to acquire better chemical pricing, when appropriate.

**Energy:** Energy costs consist of electricity, natural gas, heating oil, diesel fuel and gasoline. Energy expenses were \$4,641,365 compared to budgeted \$6,623,200. This is attributed to improvement in electricity prices as we procured a lower government-negotiated rate, which includes at least 5 percent electricity from renewable sources.

**Equipment:** Equipment consists of fixed equipment (circuit boards, machining equipment, pumps, analyzers, meters, etc.); IT equipment (SCADA RTUs, servers, large-scale printers and Laboratory Information Management System equipment); and various other equipment (safety devices, hand tools, process equipment, gauges, survey equipment, laboratory instruments etc.) A total of \$51,306 was spent this year, this variance is attributed to lower than expected purchases of new equipment.

**Services:** Washington Aqueduct spent \$10,071,606 in services. These costs represent regional water agreements, administrative services, Architect/Engineer services and operations and maintenance services. The shared administrative services arrangement with the US Army Corps of Engineers provides the best value to our wholesale customers while complying with

federal regulations. A breakdown of the Services expenditures can be seen below.

**Communications:** Communication services include local, long distance, mobile phone services provided by General Services Administration contractors and private companies. Communication costs have been stable with no major variances.

Category	Definition	Cost
Regional water agreements and water related programs	Regional water agreements with upstream organizations including U.S. Army Corps of Engineers (for Jennings Randolph Reservoir), Washington Suburban Sanitary Commission (for Little Seneca Reservoir), Allegany County (for Savage River Reservoir) and Interstate Commission on the Potomac River Basin. Water Research Foundation membership on behalf of all three customers and participation in the Association of Metropolitan Water Agencies	\$559,600
Shared admin services	Accounting systems, human resources, payroll support, procurement, audit, internet hosting, software licenses, office of counsel and worker's compensation claims	\$1,315,567
Facilities services	Guard contract, grounds maintenance, janitorial contract, trash and disposal contracts	\$1,497,625
AE services/studies	Architect and engineer services for feasibility studies.	\$349,307
Operations and maintenance services	O&M contracts for dredging, laboratory equipment, leased vehicles, external analyses, transportation, rental of equipment, software and hardware maintenance contracts, emergency repairs, HVAC and other miscellaneous maintenance contracts.	\$6,349,507

# Principal Financial Statements and Notes

#### Balance Sheet

As of Sep 30, 2012 (Nearest dollar)

		\$	32,482,86
Cash or Cash Equivalents (Note 2) Funds with U.S. Treasury		J	32,402,00
Accounts Receivable:		\$	7,010,58
Water Bill(s) - DC Water	\$ 2,737,142		
Water Bill(s) - Arlington County	\$ -		
Water Bill(s) - City of Falls Church	\$ -		
Treasury loan due from Arlington County	\$ 1,949,570		
Treasury loan due from City of Falls Church	\$ 2,323,625		
Misc	\$ 250		
Travel Advances		\$	2,7
Inventory (Warehouse Stock)		\$	47,4
Property, Plant and Equipment			
Land		\$	1,264,6
Construction-in-Progress:		\$	143,915,00
In-house	\$ 979,118		
Contractors	\$ 125,043,491		
Other Government Activities	\$ 17,892,394		
Buildings, Improvements and Renovations		\$	86,197,68
Acquisition Cost	\$ 167,094,876		, ,
Accumulated Depreciation	\$ (80,897,194)		
Other Structures and Facilities		\$	47,958,78
Acquisition Cost	\$ 127,717,894		, , .
Accumulated Depreciation	\$ (79,759,114)		
Equipment		\$	939,28
Acquisition Cost	\$ 2,668,935	-	, .
Accumulated Depreciation	\$ (1,729,654)		
Total Assets		\$	319,818,95
ties			
Treasury Loan (Note 5)		\$	4,273,19
Accounts Payable		\$	1,574,81
Contract Holdbacks		\$	180,30
Misc		\$	70,89
Total Liabilities		\$	6,099,20

#### Statement of Net Costs

For period ending September 30, 2012 (Nearest dollar)

Operating and Maintenance Costs:  Personnel Compensation Supplies and Chemicals Energy/Utilities Services  Regional Water Agreements & Water related programs Administrative Support Facilities related services Architect/Engineering Services Operation, Maintenance and Engineering undertakings Equipment Communications	\$ \$ \$ \$	559,600 1,315,567 1,497,625 349,307 6,349,507	\$ \$ \$ \$	14,787,477 8,407,509 4,641,365 10,071,606 51,306 182,379
			Φ.	20 4 44 642
Subtotal			\$	38,141,642
Financing Costs:  Debt Service Payment - Treasury  Debt Service Payment - DC Water			\$ \$	930,702 905,722
Subtotal			\$	1,836,424
Capital Improvements:  Residuals Processing Facilities Security Improvements Phase II DPS HVAC Improvements Sodium Hypochlorite and Casutic Soda McMillan PS Motor Upgrades LFPS Motor Upgrades McMillan Chemical Building Renovations 1st High Service Reservoir Improvements DPS Building Renovations Sample Line Replacement Booster Pumping Station Upgrades McMillan HVAC Improvements  Subtotal			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,530,154 4,066,714 1,262,570 923,610 766,524 311,909 195,481 182,926 182,464 160,252 70,606 100

Overall Costs (O&M, Capital and Financing)	\$ 56,631,276
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#### **Note 1: Significant Accounting Policies**

#### **Basis of Presentation**

These financial statements have been prepared to report the financial position and results of operations, cost allocation and status of capital program of the Washington Aqueduct, as required by the Memorandum of Understanding of Wholesale Customer Board. The financial statements have been prepared from the books and records of the U.S. Army Corps of Engineers in accordance with the Department of Defense (DoD) Financial Management Regulation (FMR) and are presented on the accrual basis of accounting as required by GAAP for federal entities governed by Federal Accounting Standards Advisory Board (FASAB).

#### **Basis of Accounting**

These financial statements are prepared from Corps of Engineers Financial Management System (CEFMS) and uses United States Standard General Ledger (USSGL) which provides a uniform Chart of Accounts and technical guidance to be used in standardizing accounting of a federal agency. CEFMS meets all of the requirements for accrual accounting. All transactions are recorded on an accrual accounting basis required by GAAP. Under the accrual method, revenues are recognized when earned and expenses are recognized when a liability is incurred without regard to receipt or payment of cash. Budgetary accounting is accomplished through specific general ledger accounts to facilitate compliance with legal and internal control requirements associated with the use of federal funds.

#### **Property, Plant and Equipment**

Property, Plant, and Equipment are capitalized at the

historical acquisition cost plus capitalized improvements when an asset has a useful life of two or more years and the acquisition cost exceeds \$25,000. Construction in Progress (CIP) is used to accumulate the cost of construction or additions and betterments to fixed assets. Project costs are transferred from CIP to the placed-in-service accounts when an asset or addition or betterment is determined to be substantially complete and contributing to the mission. Accumulated costs remain in CIP until these criteria are met.

#### **Unexpended Obligations**

Washington Aqueduct obligates funds to provide goods and services for outstanding orders not yet delivered. The financial statements do not reflect this liability for payment for goods and services not yet delivered, unless title passes to the government.

#### **Fund Accounting**

Washington Aqueduct does not receive federal funding. Washington Aqueduct generates its O&M funding by sale of water to its three wholesale customers. Capital funding also comes from wholesale customers who share in project costs according to the formulas established by the Water Rate Model. In 1996, the U.S. Army Corps of Engineers received one-time borrowing authority from the U.S. Treasury to finance capital improvements at Washington Aqueduct in fiscal years 1997 through 1999.

Washington Aqueduct uses fund accounting to track budget, obligations and expenditures of different streams. These appropriation symbols are summarized below:

Department	Transfer Dept.	Appropriation Fiscal Year	Symbol	Purpose
99	N/A	X	9829	Operations and Maintenance
99	N/A	X	9883	Capital Improvements
99	N/A	X	3128	Treasury Loan
96	N/A	X	4902	Payroll Reconciliations

#### **Note 2: Purchaser Escrow Account**

As part of the water sales agreements, escrow accounts were established with each customer. Escrow accounts are not only a mechanism to mitigate financial risks but also allow customers to earn interest on balances. Washington Aqueduct has sole withdrawal authority on these accounts and withdraws funds for operations and capital improvements. Customers own the initial deposits and interest earned on balances. Collective balance as of September 30, 2012 was \$12,648,659 and is not

shown as an asset on balance sheet. This table gives information on withdrawals from escrow accounts as well as ending balances as of September 30, 2012.

Escrow balances along with O&M true-up plays an important role in setting water rates for next year. Washington Aqueduct works with customers to ensure that water rate increases are gradual and continuous with no major spikes.

#### **Statement of Funding**

(for period ending Sep 30, 2012)

		DC Water	Ai	rlington County	(	City of Falls Church		Total
Operating withdrawals								
10/4/2010	\$	2,712,226.94	\$	783,506.01	\$	566,602.90	\$	4,062,335.85
10/24/2011	\$	2,594,677.90	\$	708,529.92	\$	502,314.74	\$	3,805,522.56
11/28/2011	\$	2,401,620.44	\$	560,528.22	\$	-	\$	2,962,148.66
12/28/2011	\$	2,345,080.50	\$	645,801.30	\$	428,545.00	\$	3,419,426.80
1/13/2012	\$	-	\$	594,465.30	\$	-	\$	594,465.30
1/28/2012	\$	2,203,455.00	\$	-	\$	401,755.00	\$	2,605,210.00
2/16/2012	\$	2,122,677.18	\$	589,908.30	\$	398,430.00	\$	3,111,015.48
3/23/2012	\$	2,167,815.87	\$	545,879.27	\$	314,564.81	\$	3,028,259.95
4/12/2012	\$	1,946,777.52	\$	569,941.20	\$	373,920.00	\$	2,890,638.72
5/25/2012	\$	2,136,705.60	\$	627,629.10	\$	412,205.00	\$	3,176,539.70
6/27/2012	\$	2,246,944.68	\$	511,529.07	\$	354,233.03	\$	3,112,706.78
7/24/2012	\$	2,416,485.00	\$	671,004.30	\$	469,015.00	\$	3,556,504.30
8/16/2012	\$	2,529,564.48	\$	677,391.16	\$	431,535.31	\$	3,638,490.95
9/4/2012		-	\$	729,120.00		567,625.00	\$	1,296,745.00
9/19/2012	\$	2,958,291.30		-		<u>-</u>	\$	2,958,291.30
9/19/2012	Ť	-	\$	712,370.70	\$	532,475.00	\$	1,244,845.70
Subtotal	\$	30,782,322.41	\$	8,927,603.85	\$	5,753,220.79	\$	45,463,147.05
Treasury loan related withdrawals								
11/29/2011	\$	-	\$	65,679.44	\$	421,482.90	\$	487,162.34
3/5/2012	\$	-	\$	65,679.43	\$	89,280.19	\$	154,959.62
6/8/2012	\$	-	\$	60,141.93	\$	84,476.97	\$	144,618.90
9/1/2012	\$	-	\$	59,931.44	\$	84,029.69	\$	143,961.13
Subtotal	\$	-	\$	251,432.24	\$	679,269.75	\$	930,701.99
Capital related withdrawals	r.	016 750 00	r.	102 750 00	r.	120 500 00	Ф	1 250 000 00
1/10/2012 3/26/2012	\$ \$	916,750.00 2,519,190.00	\$ \$	193,750.00 544,755.00	\$ \$	139,500.00 386,055.00	\$ \$	1,250,000.00 3,450,000.00
6/28/2012	\$	2,920,800.00	\$	631,600.00	\$	447,600.00	\$	4,000,000.00
Total Fiscal Year Withdrawals	\$	37,139,062.41	\$	10,549,141.09	\$	7,405,645.54	\$	55,093,849.04
Escrow Account Balance	\$	9,423,471.17	\$	1,950,615.14	\$	1,274,573.07	\$	12,648,659.38
Monthly Costs	\$	2,246,739.75	\$	578,282.25	\$	431,006.67	\$	3,256,028.67
Operating Coverage (in months)		4.2		3.4		3.0		

#### **Note 3: Sale of Water**

#### Sale of Water/Statement of Revenue

(for period ending Sep 30, 2012)

Water Sold (MG)										
	DC	AC	FC	Total						
Oct 2011	3,068	694	451	4,213						
Nov 2011	2,888	639	423	3,950						
Dec 2011	2,786	634	419	3,840						
Jan 2012	2,843	658	425	3,926						
Feb 2012	2,563	613	394	3,570						
Mar 2012	2,804	675	434	3,913						
Apr 2012	2,944	615	462	4,020						
May 2012	3,158	722	494	4,374						
Jun 2012	3,302	793	543	4,637						
Jul 2012	3,845	784	598	5,227						
Aug 2012	3,565	766	561	4,891						
Sep 2012	3,165	726	500	4,391						
FY 2012	36,930.37	8,318.53	5,702.40	50,951.30						
FY 2011	37,556.24	8,259.04	5,772.92	51,588.20						
Change	-1.7%	0.7%	-1.2%	-1.2%						

	Rev	enue	
DC	AC	FC	Total
\$2,420,557.32	\$645,801.30	\$428,545.00	\$3,494,903.62
\$2,278,931.82	\$594,465.30	\$401,755.00	\$3,275,152.12
\$2,198,154.00	\$589,908.30	\$398,430.00	\$3,186,492.30
\$2,243,292.69	\$611,558.70	\$403,845.00	\$3,258,696.39
\$2,022,254.34	\$569,941.20	\$373,920.00	\$2,966,115.54
\$2,212,182.42	\$627,629.10	\$412,205.00	\$3,252,016.52
\$2,322,421.50	\$571,671.00	\$438,710.00	\$3,332,802.50
\$2,491,961.82	\$671,004.30	\$469,015.00	\$3,631,981.12
\$2,605,041.30	\$737,322.60	\$515,565.00	\$3,857,928.90
\$3,033,768.12	\$729,120.00	\$567,625.00	\$4,330,513.12
\$2,812,619.31	\$712,370.70	\$532,475.00	\$4,057,465.01
\$2,496,877.29	\$675,440.40	\$475,190.00	\$3,647,507.69
\$29,138,061.93	\$7,736,232.90	\$5,417,280.00	\$42,291,574.83

#### **Note 4: Cost Allocation**

Operating costs were allocated to customers using the average-day model (also known as 100% commodity) and one-plant model. This model was adopted effective October 1, 2009. In this model, peak day is not a factor, rates are more predictable and cost of the treated water is uniformly distributed no matter which plant is used for production. Adoption of this new model increases customer satisfaction and is expected to benefit all three customers in the long run.

Once costs are allocated to customers and their share is determined (including any debt service payments), total costs are compared against withdrawals from escrow account. This approach ensures that escrow withdrawals are consistent with customer share. Combining customer share, escrow withdrawals, and beginning of the year true-up positions, gives the end-of-the-year true-up position, which is a factor in rate setting for the next fiscal year.

			Cost Allocation		
		DC Water	Arlington County	Ci	ty of Falls Church
Total Operating & Maintenance Expenses	\$ 38,141,642	\$ 27,178,250	\$ 6,552,097	\$	4,411,295
		71.3%	17.2%		11.6%
Debt Service:					
Debt Service Payment - Treasury	\$ 930,702	\$ -	\$ 251,432	\$	679,270
Debt Service Payment - DC Water	\$ 905,722	\$ 688,348.61	135,858.28		81,514.97
Allocated Customer Share	\$ 39,978,066	\$ 27,866,599	\$ 6,939,387	\$	5,172,080
Debt Service payment to DC Water	\$ (905,722)	\$ (905,722)			
Customer Share (net of Debt Service to DC Water)	\$ 39,072,344	\$ 26,960,877	\$ 6,939,387	\$	5,172,080

#### **Note 5: Treasury Loan**

The U.S. Army Corps of Engineers received borrowing authority from the U.S. Treasury to finance FY 1997, FY 1998 and FY 1999 capital improvements through amendments to the Safe Drinking Water Act. Three promissory notes totaling \$75.0 million were executed. In turn, the District of Columbia,

Arlington County and the City of Falls Church, Virginia entered into agreements with the U.S. Army Corps of Engineers to repay the debt. Washington Aqueduct continues to pay Treasury loan on behalf of Arlington County and City of Falls Church. DC Water has fully paid their portion of the debt.

#### Status of Treasury Loan

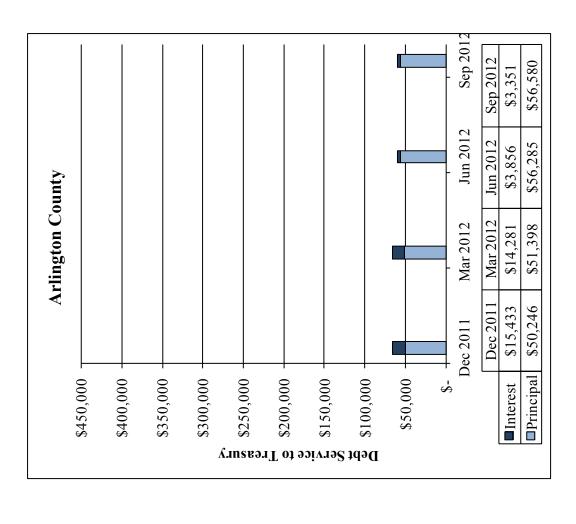
as of 9/30/2012

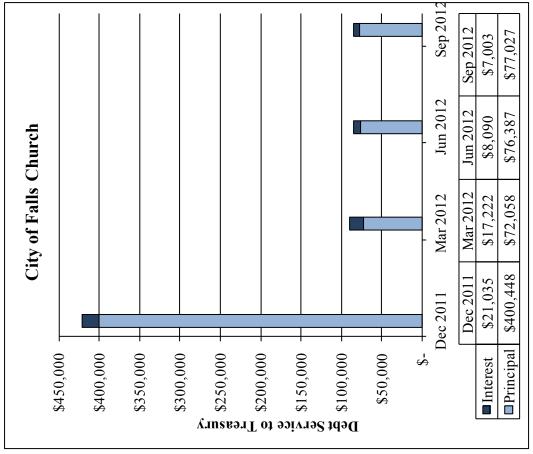
7/30/2012						
				Principal		
		<u>Original</u>		<u>Repaid</u>		<u>UPB</u>
WASA						
FY 97 Note	\$	22,171,905.63	\$	22,171,905.63	\$	-
FY 98 Note	\$	18,121,320.29	\$	18,121,320.29	\$	-
FY 99 Note	\$	16,755,201.40	\$	16,755,201.40	\$	-
Subtotal	\$	57,048,427.32	\$	57,048,427.32	\$	-
Arlington County	О	riginal	Re	epaid	U	PB
FY 97 Note	\$	4,196,067.80	\$	4,196,067.80	\$	-
FY 98 Note	\$	3,657,819.91	\$	2,468,710.89	\$	1,189,109.02
FY 99 Note	\$	3,090,999.00	\$	2,330,538.01	\$	760,460.99
Subtotal	\$	10,944,886.71	\$	8,995,316.70	\$	1,949,570.01
Falls Church						
FY 97 Note	\$	2,558,033.22	\$	1,497,187.23	\$	1,060,845.99
FY 98 Note	\$	2,190,859.80	\$	1,161,366.55	\$	1,029,493.25
FY 99 Note	\$	2,153,799.60	\$	1,920,513.56	\$	233,286.04
Subtotal	\$	6,902,692.62	\$	4,579,067.34	\$	2,323,625.28
Totals						
FY97 Note	\$	28,926,006.65	\$	27,865,160.66	\$	1,060,845.99
FY98 Note	\$	23,970,000.00	\$	21,751,397.73	\$	2,218,602.27
FY99 Note	\$	22,000,000.00	\$	21,006,252.97	\$	993,747.03
Total	\$	74,896,006.65	\$	70,622,811.36	\$	4,273,195.29

#### Key notes about treasury loan are:

- •The outstanding principal at the end of Fiscal Year 2012 was \$4,273,195.29. This amount is shown as receivables from Arlington County and City of Falls Church, Virginia. DC Water does not have any remaining Treasury loan debt.
- •The remaining debt balance is scheduled to be paid off in FY 2022. A roll-off profile is included in the financing schedule.
- •Average cost of these borrowings was 1.86% in Fiscal Year 2012. This is based on credit worthiness rating of Arlington County and City of Falls Church as determined by rating agencies.
- •In FY 2012, total payments of \$930,702 were made. Total principal payments were \$840,430 and there was no capitalized interest.

Treasury Loan Payments





	9/30/2012			Tre	Treasury Loan Roll-off Profile	l-of	f Profile							
		Z	Matures 2018	Σ	Matures 2019		Matures 2020	Z	Matures 2021	<b>A</b>	Matures 2022	F	Matures 2023	Totals
	1997 Loan Total Borrowed Principal Repaid	<del>∞</del> ∞	12,100,668.00	<b>↔ ↔</b>	12,004,937.00	<del>\$</del> \$	433,815.00	<b>↔ ↔</b>	4,386,586.65	↔	1	<b>↔</b>	· ·	28,926,006.65
	Unpaid Principal	<b>↔</b>	392,316.44	<b>↔</b>	448,923.54	<b>∽</b>	18,090.60	↔	201,515.41	<b>↔</b>		↔		1,060,845.99
	1998 Loan Total Borrowed	€	206,000,00	€	7.709.534.00	8	7.574.500.00	€	7.600.418.00	€	579.548.00	€	99 1	23.970.000.00
	Principal Repaid	· <del>\$</del>	488,974.07	<b>∽</b>	7,412,460.40	<b>∽</b>	6,708,160.51	<b>∽</b>	6,642,491.93	<b>∽</b>	499,310.82	<b>∽</b>	- \$	21,751,397.73
	Unpaid Principal	↔	17,025.93	↔	297,073.60	↔	866,339.49	8	957,926.07	↔	80,237.18	↔	<del>S</del>	2,218,602.27
	1999 Loan Total Borrowed			€	306,000,00	€	2.198.000.00	€	8.252.000.00	€	9.714.000.00	€	1.530.000.00	22,000,000,00
18	Principal Repaid			8	275,339.22	8	1,952,330.57	8	7,534,583.18	S	9,714,000.00	~		21,006,252.97
	Unpaid Principal			↔	30,660.78	↔	245,669.43	<b>↔</b>	717,416.82	↔	•	↔		993,747.03
	Totals													
	Total Borrowed	↔	12,606,668.00	↔	20,020,471.00	S	10,206,315.00	S	20,239,004.65	8	10,293,548.00	<b>∽</b>	1,530,000.00 \$	74,896,006.65
	Principal Repaid	\$	12,197,325.63	S	19,243,813.08	S	9,076,215.48	S	18,362,146.35	S	10,213,310.82	S	1,530,000.00	70,622,811.36
	Unpaid Principal	\$	409,342.37	<b>∽</b>	776,657.92	<b>⇔</b>	1,130,099.52	<b>∞</b>	1,876,858.30	<b>⇔</b>	80,237.18	<b>∽</b>	· ·	4,273,195.29

#### Note 6: Loan Payable to DC Water

Washington Aqueduct also makes a debt service payment to DC Water. This loan covers all capital financing provided to the Washington Aqueduct before the treasury loan was issued. Key features of these debt service payments follow.

- •The loan payment, payable to DC Water, is charged to all three customers as part of their calculated water rate. This loan is allocated as: DC Water (76%), Arlington County (15%) and the City of Falls Church (9%).
- •In FY 2012, Washington Aqueduct issued \$75,476.82 monthly credit to DC Water in the water bills for debt service payment.
- •Starting in FY 2015, only Jennings Randolph's debt service remains on DC Water's books. This loan is paid by DC Water to the US Army Corps of Engineers (Baltimore District) on an annual basis. This will conclude in FY 2041.

A detailed schedule of customer allocation and monthly credit to DC Water is shown below:

	_ [	Total Debt							
Fiscal Year		Service		Cı	us tomer Allocat	ion		Moi	nthly Credit
			DC Water	Ar	lington County	Cit	y of Falls Church	(to	DC Water)
			76%		15%		9%		
2013	\$	859,268.42	\$ 653,044.00	\$	128,890.26	\$	77,334.16	\$	71,605.70
2014	\$	837,293.23	\$ 636,342.85	\$	125,593.98	\$	75,356.39	\$	69,774.44
2015	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2016	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2017	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2018	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2019	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2020	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2021	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2022	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2023	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2024	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2025	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2026	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2027	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2028	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2029	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2030	\$	805,191.29	\$ 611,945.38	\$	120,778.69	\$	72,467.22	\$	67,099.27
2031	\$	805,191.18	\$ 611,945.30	\$	120,778.68	\$	72,467.21	\$	67,099.27
2032	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2033	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2034	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2035	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2036	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2037	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2038	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2039	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2040	\$	669,171.23	\$ 508,570.13	\$	100,375.68	\$	60,225.41	\$	55,764.27
2041	\$	669,171.85	\$ 508,570.61	\$	100,375.78	\$	60,225.47	\$	55,764.32

## **Note 7: Capital Schedules**

# CIP Status (by Year) (As of 9/30/2012)

Year	Authorized	Expended	Undelivered Orders	% Obligated	Uncommitted
Prior	\$ 1,644,141	\$ 1,644,141	-	100.0%	\$
2000	\$ 6,300,000	\$ 6,300,000	-	100.0%	- - -
2001	\$ 4,850,000	\$ 4,850,000	-	100.0%	- - -
2002	\$ 7,900,000	\$ 7,900,000		100.0%	· \$
2003	\$ 10,650,000	\$ 10,650,000	-	100.0%	· •
2004	\$ 16,400,000	\$ 16,397,530	\$ 2,470	100.0%	· \$
2005	\$ 9,700,000	\$ 9,697,861	\$ 2,139	100.0%	· •
2006	\$ 11,600,000	\$ 11,600,000		100.0%	· •
2007	\$ 105,480,000	\$ 105,406,456	\$ 73,544	100.0%	· •
2008	\$ 10,000,000	\$ 9,980,491	\$ 19,508	100.0%	· •
2009	\$ 15,992,000	\$ 15,758,035	\$ 171,227	%9.66	\$ 62,738
2010	\$ 8,250,000	\$ 7,864,604	\$ 334,804	99.4%	\$ 50,593
2011	\$ 10,770,000	\$ 6,489,806	\$ 2,063,576	79.4%	\$ 2,216,618
2012	\$ 14,200,000	\$ 1,748,791	\$ 1,272,160	21.3%	\$ 11,179,049
Fotals	\$ 233,736,141	\$ 216,287,716	\$ 3,939,427		\$ 13,508,998

# Capital Allocation/Authorizations (As of 9/30/2012)

					Authorizations				
	Prior	2006		2007	2008 20	2009 2010	0 2011		2012 Total
Active projects									
1a: Legal Obligations									
Residuals Collection and Processing Facilities	\$10,132,445	\$10,132,445.32 \$1,000,000.00	\$97,380,000.00	\$5,992,000.00	\$8,092,000.00	\$3,125,000.00	\$4,050,000.00	\$4,600,000.00	\$134,371,445.32
1b: Safe Water in a Safe Manner									
L.F.P.S. Motor Control Upgrades				\$51,339.63		\$200,000.00	\$500,000.00	\$1,900,000.00	\$2,651,339.63
Reservoir Maintenance & Improvements - 1st High							\$1,069,000.00	\$6,750,000.00	\$7,819,000.00
DPS Building Renovation (Incl Roof)							\$700,000.00		\$700,000.00
Hypochlorite/Caustic Soda Imps, Dalecarlia Hypochlorite/Caustic Soda Imps, McMillan	\$88,408	\$88,408.32 \$4,400,000.00 \$2,300,000.00	\$4,225,638.44 \$1,400,000.00	\$1,865,135.00 \$1,243,000.00	\$1,954,834.25 \$2,045,165.75		\$1,261,000.00		\$13,795,016.01 \$6,988,165.75
Security Improvements Ph II, Dalecarlia Security Improvements Ph II, McMillan	\$600,666.09 \$197,491.72	.09	\$258,855.91		\$1,300,000.00	\$3,579,089.99 \$1,095,910.01	\$700,000.00 \$540,000.00	\$300,000.00	\$6,179,756.08 \$2,992,257.64
Fire Alarm System Improvements	\$11,591.68	89:							\$11,591.68
2: Process Improvements and Public Confidence									
None									
3a: Reliable Water Service									
McMilan P. S. Motor Upgrades McMilan Chemical Building Renovations McMilan East Shaft Pumping Station Renovation McMilan Sample Line Replacement	\$513,593.58	28	\$163,958.00	\$529,245.78	\$2,000,000.00		\$600,000.00	\$600,000.00 \$50,000.00	\$3,206,797.36 \$1,200,000.00 \$50,000.00 \$200,000.00
Dalecarlia Sample Line Replacement							\$1,150,000.00		\$1,150,000.00
3b: Sustain Infrastructure									
DPS HVAC Improvements	\$1,322,387.09	60:	\$377,297.51			\$250,000.00			\$1,949,684.60
	\$57,444,141.06	\$11,600,000.00	\$105,480,000.00	\$10,000,000.00	\$15,992,000.00	\$8,250,000.00	\$10,770,000.00	\$14,200,000.00	\$233,736,141.06

# Status of Capital Projects (Cumulative) [As of 9/30/2012]

						ċ	
Category Project	Authorized	Expend	Expended Undelivered Orders	rs Uncommitted % Complete	% Complete	Status	Target completion
1a: Legal Obligations							
Residuals Collection and Processing Facilities	\$134,371,445.32	\$131,520,236.09	\$570,851.78	\$2,280,357.45	%66	Construction underway	Dec 2012
1b: Safe Waterin a Safe Manner							
Reservoir Maintenance & Improvements - 1st High	\$7,819,000.00	\$183,706.52	\$292,981.93	\$7,342,311.55	15%	Design underway	Dec 2013
DPS Building Renovation (Incl Roof)	\$700,000.00	\$182,464.07	\$209,073.26	\$308,462.67	24%	Design underway	Jun 2013
L.F.P.S. Motor Control Upgrades	\$2,651,339.63	\$365,923.10	\$80,816.11	\$2,204,600.42	70%	Design underway	Aug 2013
Fire Alarm System Improvements	\$11,591.68	\$11,591.68	s		%0		
Hypochlorite/Caustic Soda Imps, Dalecarlia Hypochlorite/Caustic Soda Imps, McMillan	\$13,795,016.01 \$6,988,165.75	\$13,790,968.13 \$6,972,279.75	\$2,203.00 \$15,886.00	\$1,844.88 \$0.00	100%	In closeout In closeout	
Security Improvements Ph II, Dalecarlia Security Improvements Ph II, McMillan	\$6,179,756.08 \$2,992,257.64	\$5,706,838.69 \$1,828,329.03	\$440,868.69 \$1,083,974.61	\$32,049.00 \$79,954.00	92% 61%	Construction underway Construction underway	Oct 2012 Oct 2012
2: Process Improvements and Public Confidence							
None							
3a: Reliable Water Service							
McMillan Chemical Building Renovations	\$1,200,000.00	\$211,765.54	\$869,496.50	\$118,737.96	100%	Awaiting Award	Dec 2013
McMillan East Shaft Pumping Station Renovations	\$50,000.00	s	· •	\$50,000.00	%0	Planning	Sep 2013
McMillan P. S. Motor Upgrades	\$3,206,797.36	\$2,988,718.74	\$155,340.56	\$62,738.06	93%	Construction underway	Sep 2012
Sample Line Replacement, Dalecarlia Sample Line Replacement, McMillan	\$1,150,000.00 \$200,000.00	\$263,252.03 \$	\$26,686.10 \$82,712.00	\$860,061.87 \$117,288.00	63%	Des ign underway Des ign underway	Dec 2013 Dec 2013
3b: Sustain Infrastructure							
DPS HVAC Improvements	\$1,949,684.60	\$1,888,216.74	\$10,875.00	\$50,592.86	%56	In Closeout	
Subtotal - Completed Projects Subtotal - Active Projects	\$37.711.677.44 $$183.265.054.07$	\$33,650,368,65 \$165,914,290.11	\$2,688,042.46 \$3,841,765.54	\$ \$13,508,998.72			
Grand Total - All Projects	\$233,736,141.06	\$216,287,715.66	\$3,939,426.98	\$13,508,998.72			

# Status of Capital Billing (As of 9/30/2012)

		DC Water	Arlington County	City of Falls Church	ls Church	Total
Unbilled Carryover Authority (as of 8/31/2011)	<b>∻</b>	916,749.99 \$	193,750.00 \$	∳	139,500.01 \$	1,250,000.00
FY 2012 portion of capital authority	↔	10,368,840.00 \$	2,242,180.00 \$	<del>≶</del>	1,588,980.00 \$	14,200,000.00
PAY GO Q1	<b>↔</b> •	(916,750.00) \$	(193,750.00) \$	<del>∽</del> ↔	(139,500.00) \$	(1,250,000.00)
PAY GO Q3	<del>s</del>	(2,920,800.00) \$	(631,600.00)	<del>•</del> •	(447,600.00) \$	(3,+50,000.00) $(4,000,000,000.00)$
PAY GO Q4	S	(4,928,850.00) \$	(1,065,825.00)	\$	(755,325.00) \$	(6,750,000.00)
Total Billing FY 2012	€	(11,285,590.00) \$	(2,435,930.00)	<b>∞</b>	(1,728,480.00) \$	(15,450,000.00)
Unbilled Carryover Authority (as of 9/30/2012)	્∻		,	€9.	<b>€</b>	,



## WASHINGTON AQUEDUCT

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