

Washington Aqueduct

Annual Financial Report



Safe, Reliable and Cost-Effective Water

FY 2010

Washington Aqueduct

Annual Financial Report



Fiscal Year 2010

October 1, 2009 through September 30, 2010

Prepared by:
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Chief, Financial Management Section
Washington Aqueduct

The Wholesale Customer Board

Mr. George S. Hawkins, General Manager, District of Columbia Water and Sewer Authority
(Current chair)

Ms. Barbara Donnellan, County Manager, Arlington County, Virginia
(Chair effective May 4, 2011)

Mr. Wyatt Shields, City Manager, City of Falls Church, Virginia
(Chair effective May 4, 2012)

Washington Aqueduct Management

Thomas P. Jacobus, P.E.	General Manager
Patricia A. Gamby	Deputy General Manager
Lloyd D. Stowe, P.E.	Chief, Plant Operations
Nathan H. Cole, P.E.	Chief, Engineering Services
Leo J. Nolan	Chief, Maintenance Services
Sargeant D. Bankard	Chief, Administrative Branch
Vikas Singhal, CFA, PMP	Chief, Financial Management

Baltimore District, U.S. Army Corps of Engineers

Colonel David E. Anderson	Baltimore District Engineer
Gregory E. Johnson, P.E.	Chief Financial Officer

Table of Contents

1	Message from the General Manager	- 1 -
2	Service Area and Facilities Map	- 2 -
3	Management’s Discussion and Analysis	- 3 -
3.1	Mission.....	- 3 -
3.2	Corporate Governance	- 5 -
3.3	Operating Performance	- 8 -
3.4	Water Production and Demand	- 10 -
3.5	Operating Costs Analysis.....	- 12 -
3.6	Status of Capital Projects	- 15 -
3.7	Business Risks	- 18 -
3.8	Outlook	- 19 -
3.9	Stewardship information.....	- 20 -
4	Principal Financial Statements and Notes.....	- 21 -
	Financial Manager’s Report.....	- 21 -
	Balance Sheet.....	- 22 -
	Statement of Net Costs	- 23 -
	Note 1: Significant Accounting Policies.....	- 24 -
	Note 2: Purchaser Escrow Accounts.....	- 25 -
	Note 3: Sale of Water.....	- 26 -
	Note 4: Cost Allocation	- 27 -
	Note 5: Treasury Loan	- 28 -
	Note 6: Loan Payable to DC Water	- 31 -
	Note 7: Capital Schedules.....	- 33 -

1 Message from the General Manager



The photo on the cover of this year's report was taken by a Washington Aqueduct employee, Mike Cleveland. While he is certainly a skilled photographer, Mike's "day job" is in the Facilities Maintenance and Repair unit of Maintenance Branch at Washington Aqueduct.

The photo was taken after the snow had finally stopped falling in February 2010. Two back-to-back storms seriously affected the National Capital region's ability to perform daily functions of government and commerce.

Mike didn't just happen to take the photo while passing by. He took the photo while he was doing his job of removing snow from all of the Washington Aqueduct's facilities so that the water production mission could continue. He and many of his colleagues in plant operations and maintenance spent several days at their duty station without going home between shifts.

This was necessary to ensure the sustained operations that are necessary if safe water is going to be delivered safely and reliably. During the unprecedented snows of February – and every other day of the year, the water is delivered safely and reliably.

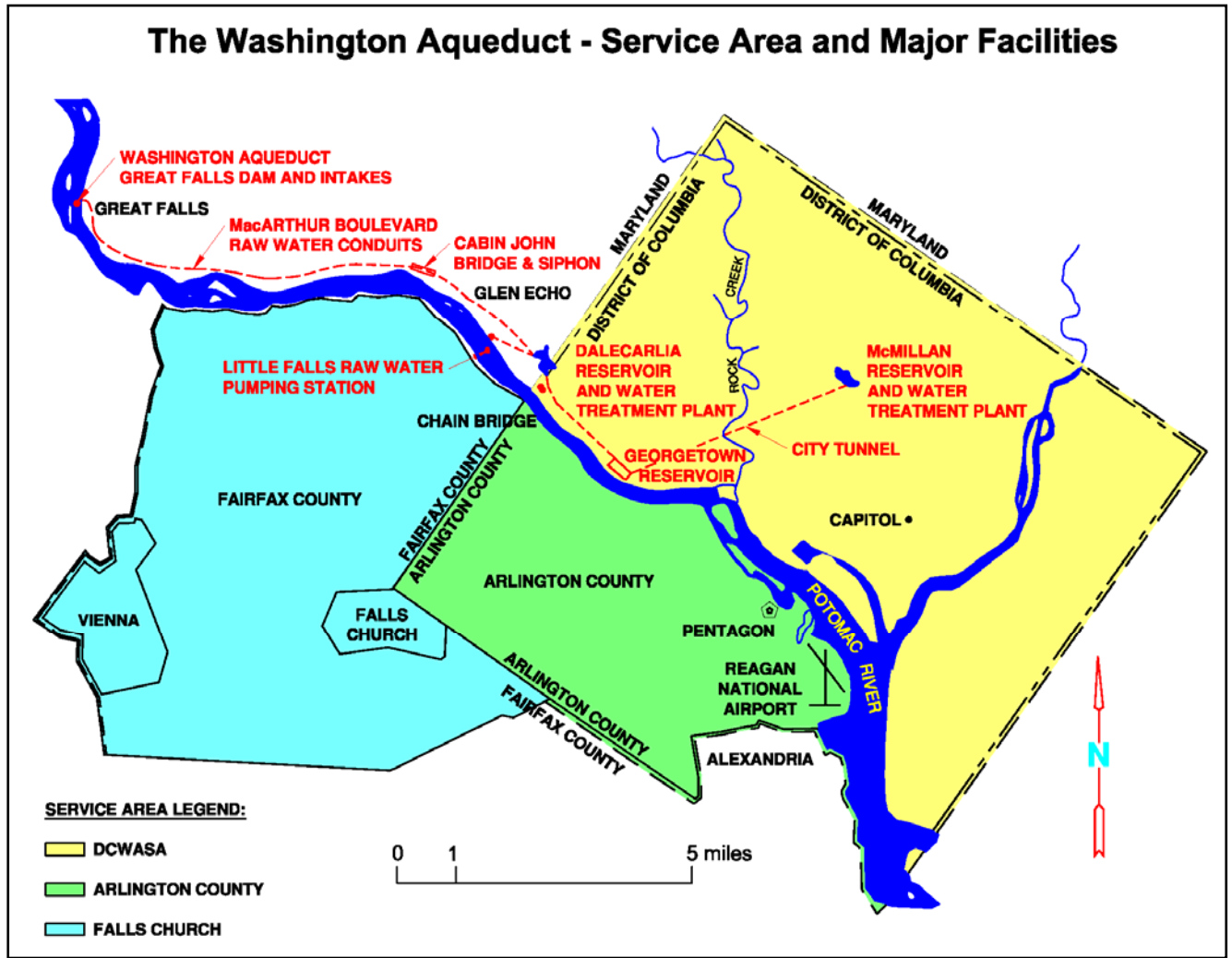
We owe a debt of gratitude to all the employees of Washington Aqueduct for their dedication and commitment to the vital water utility service that is absolutely essential for the public – especially during extraordinary situations.

Our business operations are sound as you will see in the details of this report. And you can be sure that Washington Aqueduct is committed not only to delivering safe, reliable and cost-effective water service every day, but we also are committed to finding ways to improve our operations to give the very best value to our customers.

Tom Jacobus

Tom Jacobus
Chief & GM
Washington Aqueduct
February 23, 2011

2 Service Area and Facilities Map



FISCAL YEAR 2010 - At a Glance

145.8 million gallons

Average Daily Demand

205.8 million gallons

Peak Day Demand

53,210 million gallons

Water produced and supplied

3 Management's Discussion and Analysis

3.1 Mission

Washington Aqueduct produces safe drinking water for approximately one million individuals living, working, or visiting the District of Columbia, Arlington County, Virginia, and the City of Falls Church, Virginia, and its service area. Washington Aqueduct has been serving the national capital region since 1853. Authority to supply water to Arlington County, VA was added by Public Law 119, 69th Congress, approved April 14, 1926 and Authority to supply water to the City of Falls Church, VA was added by Public Law 118, 80th Congress on June 26, 1947.

The mission of Washington Aqueduct is to reliably provide safe and cost-effective potable water in sufficient quantity to its wholesale customers. The mission is accomplished in an environmentally sustainable, economic and technical sound manner through partnerships with other governmental agencies and nongovernmental organizations.

Washington Aqueduct fulfills its mission by achieving the following strategic goals:

- Provide an adequate supply of high quality potable water.
- Protect the consumer from adverse health effects due to the containments in the drinking water.
- Produce and deliver potable water at an equitable, economical rate that covers all costs.

3.1.1 Reliable Water Service

In FY 2010, Washington Aqueduct produced and delivered 53,210 million gallons of water, with a peak-day demand of 205.9 million gallons and an average-day demand of 146 million gallons.

Washington Aqueduct operates, maintains, monitors, and upgrades its infrastructure including intake facilities on the Potomac River at Great Falls and at Little Falls, Maryland; two 10-mile long gravity conduit systems with a combined 200 million gallons per day capacity; a 525 million gallons per day raw water pumping station and transmission system; two major treatment plants with 320 million gallons per day combined capacity; one raw water and two partially-treated water booster pumping stations; a 480 million gallons per day finished water pumping station; seven finished water reservoirs; and several large diameter transmission mains.

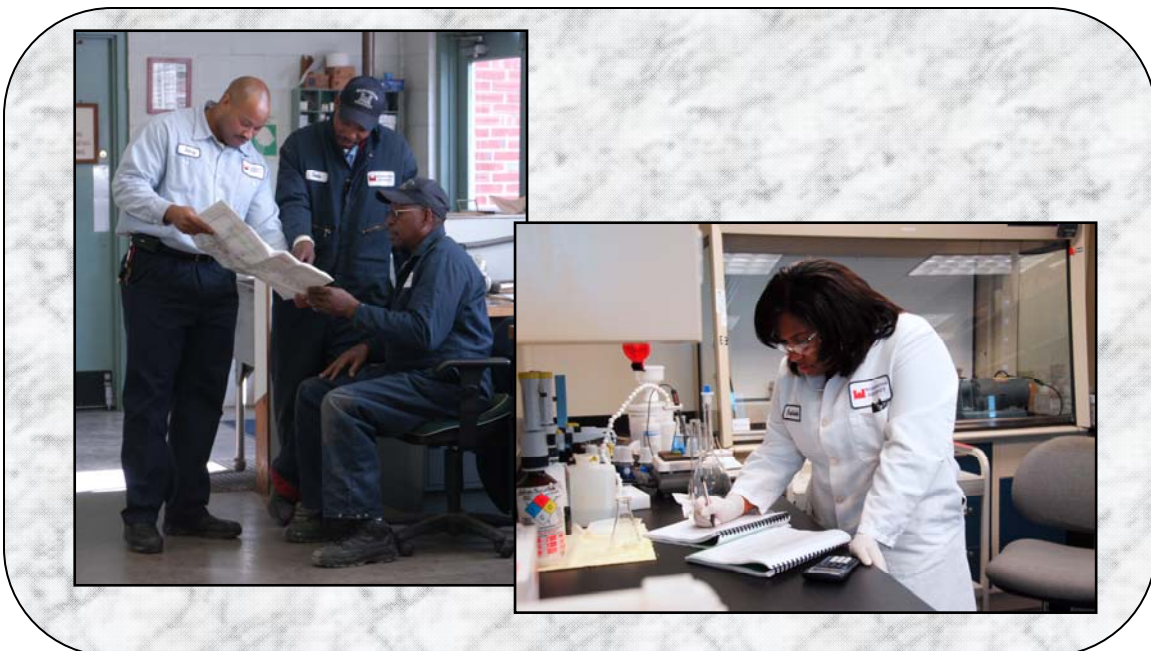
3.1.2 Safe Water

The Safe Drinking Water Act (originally passed in 1974, amended 1986 and 1996) is the main federal law that ensures the quality of Americans' drinking water. Washington Aqueduct meets all requirements of the Safe Drinking Water Act. It aggressively also supports other requirements, which include source water protection, operator training, water system improvements, and public information. Washington Aqueduct has well-established treatment process and a laboratory equipped with highly qualified, trained and educated laboratory scientists. In FY 2010, Laboratory performed more than 61,000 analyses to ensure microbial and chemical safety of the supplied water.

3.1.3 Cost Effective

FY 2010 actual cost of water production (including collection of raw water, treatment and pumping) was \$992 per million gallons (all-inclusive of Operations and maintenance, treasury loan and capital costs excluding any financing costs by customers). Washington Aqueduct's all-inclusive wholesale water rates remain one of the lowest nationwide, despite being in a high cost area. Low water rates are attributed to:

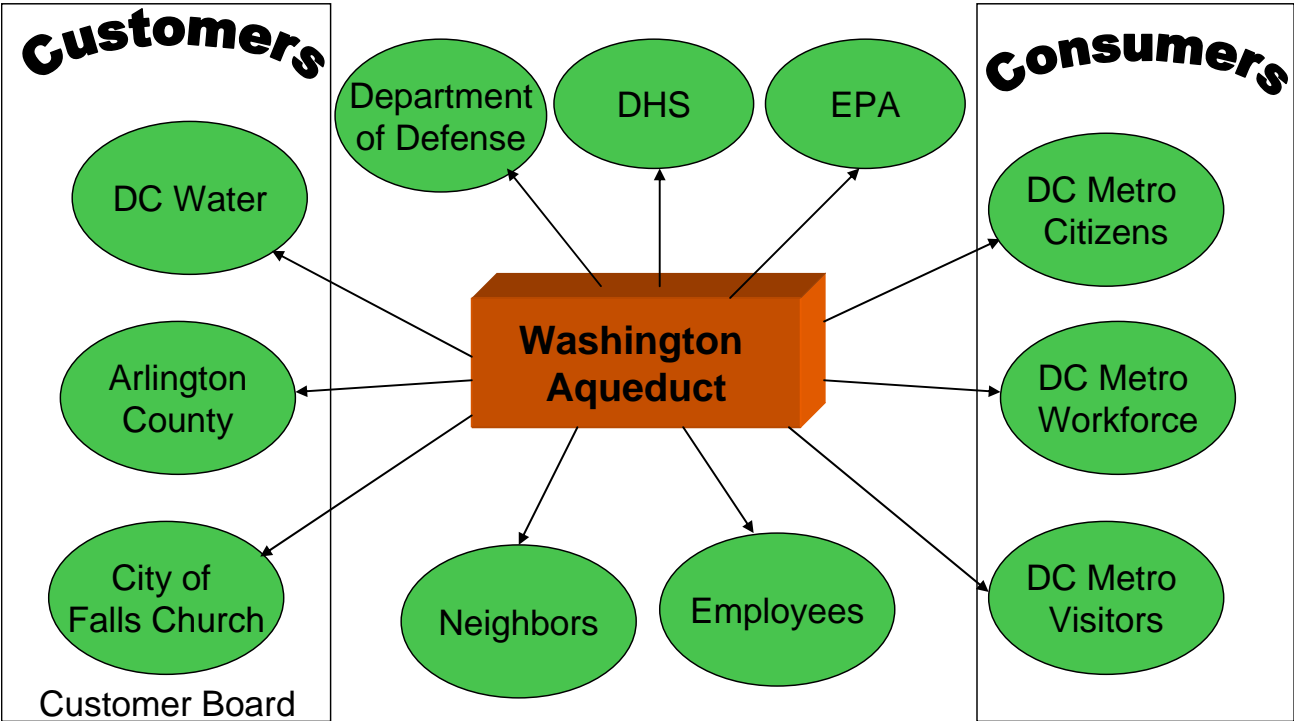
- Use of gravity to collect raw water
- Close proximity to the source of water
- Being a tax-exempt entity
- Ability to get preferred rates through General Services Administration
- Relatively low debt-service payments
- Shared services from the U.S. Army Corps of Engineers



3.2 Corporate Governance

Washington Aqueduct is owned and operated by the U.S. Army Corps of Engineers. Washington Aqueduct sells water to three wholesale customers: the District of Columbia Water and Sewer Authority; Arlington County, Virginia; and the City of Falls Church, Virginia. Its stakeholders include customers, consumers, neighbors, employees and some of federal agencies.

3.2.1 Stakeholders



Customers

Washington Aqueduct is the sole supplier of potable water to its customers: DC Water, Arlington County, Virginia and City of Falls Church, Virginia. Operating and maintenance costs are charged to customers as a water rate. In addition, each customer pays a capital component.

Customer Board

The Washington Aqueduct Wholesale Customer Board was established in 1998 by a memorandum of understanding. The Board has approval authority over Washington Aqueduct’s capital improvement and operations budgets. The Board members are the General Manager of D.C. Water, the County Manager of Arlington County, Virginia and the City Manager of the City of Falls Church, Virginia. The chair rotates annually effective May 4. A Wholesale Customer Technical Committee, including financial,

operations and engineering staff from each of the three customers, meets at least quarterly and may meet more often with Washington Aqueduct management to consider factors such as cost, quality, and reliability of the water service. At the September meeting each year, Wholesale Customer Board Principals approve the operations budget as well as the capital improvements budget.

Consumers

While all funding for operations, maintenance and capital improvements come from customers (either as water rate or capital component), ultimate beneficiaries are consumers, living, working or visiting the Washington Aqueduct service area. Washington Aqueduct needs to make sure that water is safe for drinking for all consumers.

EPA

Washington Aqueduct is regulated by EPA Region 3. Washington Aqueduct collaborates with EPA on various topics.

Neighbors

Washington Aqueduct is committed to ensuring safe and harmonious living conditions for its neighbors.

Employees

Washington Aqueduct is responsible for providing safe working conditions to its employees.

3.2.2 Washington Aqueduct as a Federal Entity

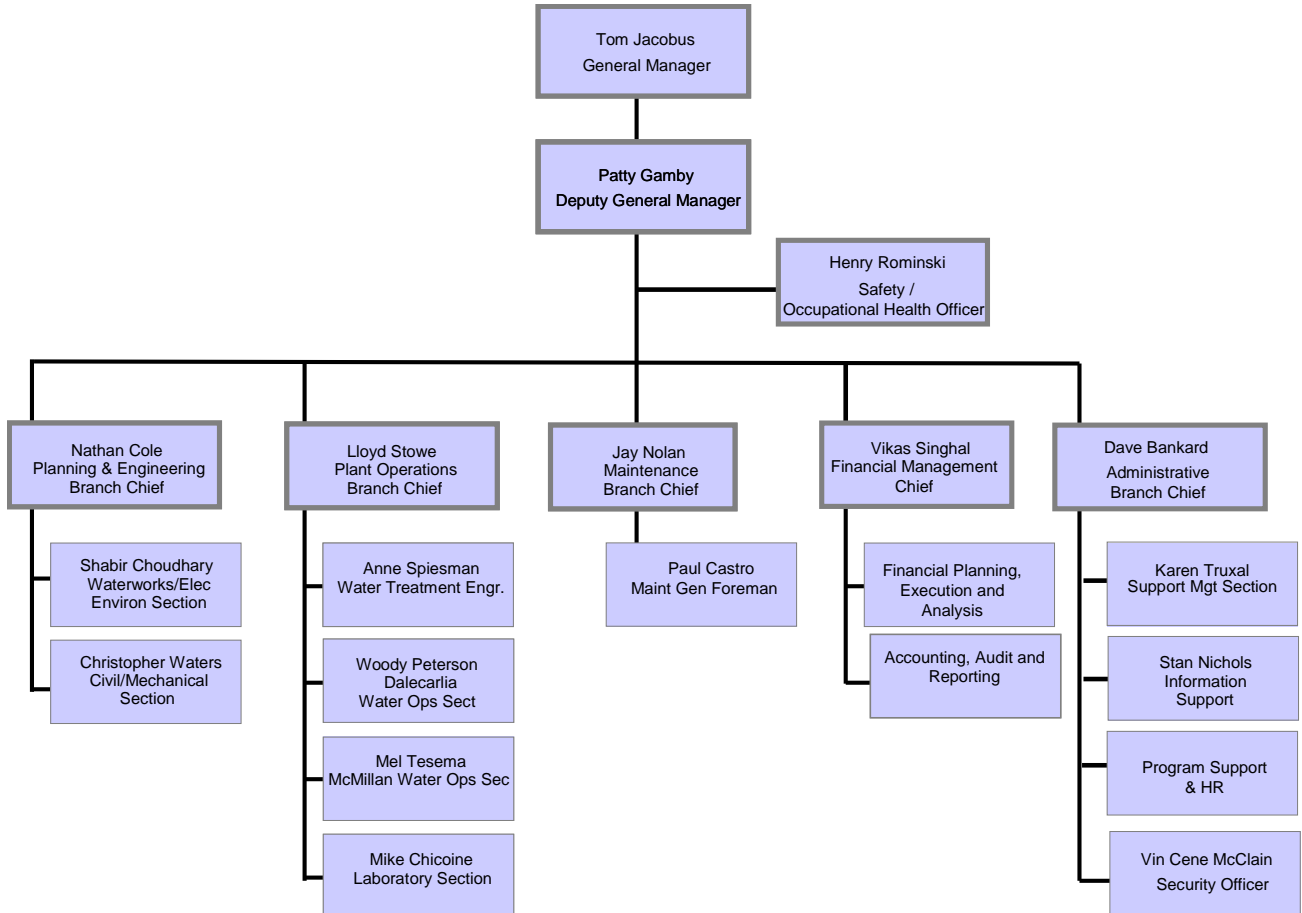
Being a federal entity, Washington Aqueduct is charged with following:

- Operating and maintaining Critical Water Infrastructure in National Capital Area.
- As a leader in source water protection by forming alliances with other organizations, participating in projects and influencing strategies leading to long term sustainability.
- Ensuring fairness to all jurisdictions in terms of water chemistry, water rates and equal voice to customers.
- Administering the allocation plan as per low flow agreement and collaborating in the regional use of water supply assets (e.g. Jennings Randolph Reservoir and Little Seneca Reservoir).
- Key player in water research related to emerging issues.

3.2.3 Organization Structure

Washington Aqueduct employed 152 federal civilian employees in Fiscal Year 2010. They conduct plant operations, maintenance of infrastructure, engineering and project management of construction projects, and administration, business and financial management of the organization.

Organization Chart



3.3 Operating Performance

FY 2010 Customer Statistics

	DC Water	Arlington County	City of Falls Church
Water Sold to Customer	38,589 MG	8,566 MG	6,054 MG
Peak Day Demand	147.8 MGD	37.0 MGD	25.8 MGD
Average Demand	105.7 MGD	23.5 MGD	16.6 MGD
Water Billing Rate	\$748.72/MG	\$900.00/MG	\$890.00/MG
Water Purchase Share	72.52%	16.10%	11.38%

*Water Billing Rate does not include capital improvements.

MG = Million gallons

MGD = Million gallons per day

Key Performance Measures

Performance is measured by Key Results Measures that capture the achievement of goals versus targets. Washington Aqueduct has nine performance measures.

Goal 1: Provide an adequate supply of potable water

Measure 1.1: Number of days water is provided as demanded by Washington, DC

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	365	365	365	366	365	365	365
Actual	365	365	365	366	365	365	

Measure 1.2: Number of days water is provided as demanded by Arlington County, VA

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	365	365	365	366	365	365	365
Actual	365	365	365	366	365	365	

Measure 1.3: Number of days water is provided as demanded by Falls Church, VA

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	365	365	365	366	365	365	365
Actual	365	365	365	366	365	365	

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

Measure 2.1: Days Average Filtered Water Turbidity is less than 0.1 NTU (Regulatory limit is 0.3 NTU)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	346	346	346	346	346	346	346
Actual	362	361	363	366	365	359	

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

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	100	100	100	100	100	100	100
Actual	100	100	100	100	100	100	

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

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	163	163	163	178	178	163	174
Actual	178	177	213	213	213	216	

Note: FY2008 & 2009 target increased due to additional monitoring required by Unregulated Contaminant Monitoring Rule 2. FY2011 target increased from 163 to 174 due to additional monitoring for radiologicals, asbestos, and nitrosamines.

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

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	10	10	10	10	10	10	10
Actual	12	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 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	12	12	12	12	12	12	12
Actual	12	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 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Target	12	12	12	12	12	12	12
Actual	12	12	12	12	12	12	

3.4 Water Production and Demand

During FY 2010, Washington Aqueduct produced and delivered 53,210 million gallons of water. This production was 4.9% lower as compared to FY 2009, resulting from lower water demand and process water accounting.

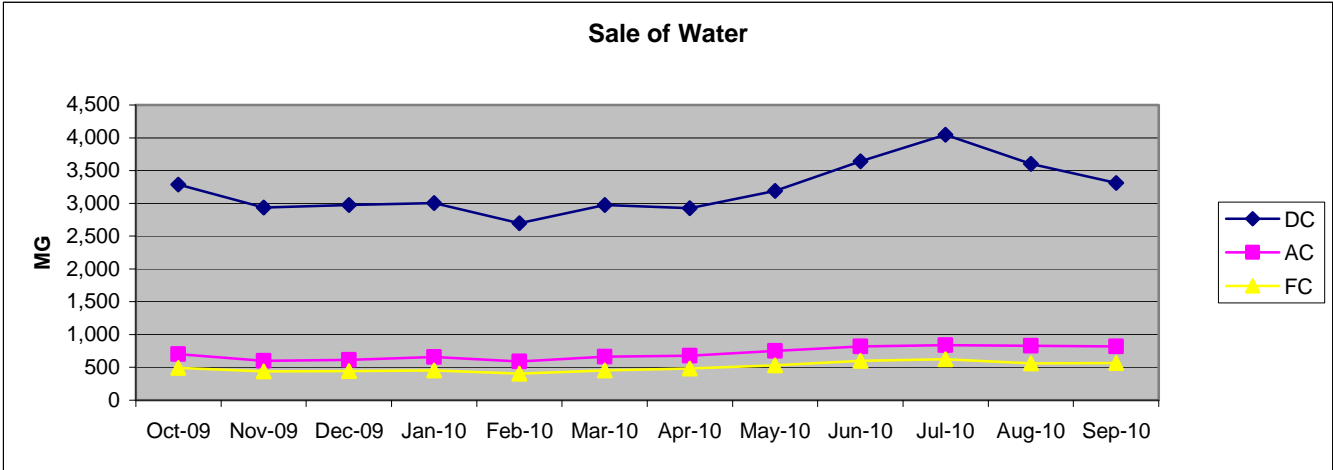
- Peak-day demand was 205.8 million gallons (on July 7, 2010), higher than FY 2009 peak day of 195.6 million gallons. This was primarily driven by above average temperature and below average rainfall.
- Overall average daily demand was 145.8 million gallons. Average monthly demand was 3,216 million gallons, 714 million gallons and 505 million gallons for DC Water, Arlington County, VA and City of Falls Church, VA respectively.

Water Delivered to Customers (MG)

	<u>DC</u>	<u>AC</u>	<u>FC</u>	<u>Total</u>
FY 2010	38,589.00	8,566.45	6,054.90	53,210.35
FY 2009	41,245.20	8,531.21	6,153.87	55,930.28
Change	-6.4%	0.4%	-1.6%	-4.9%

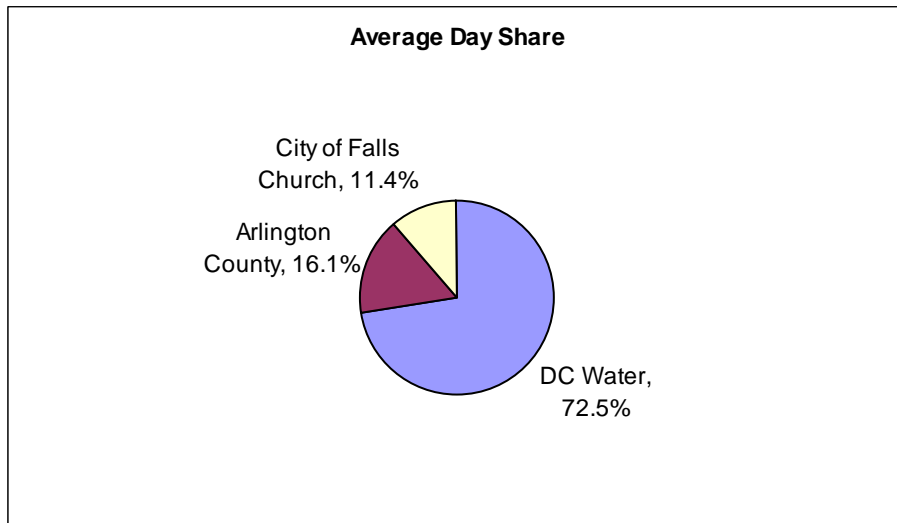
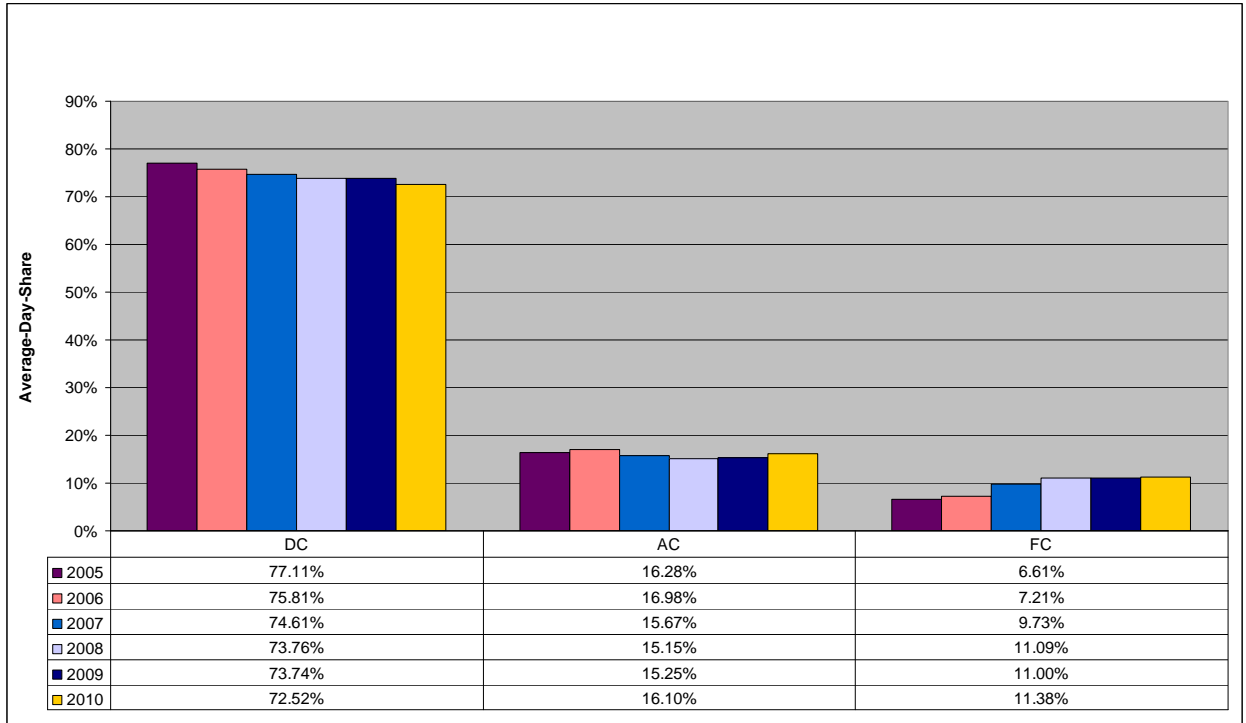
- Water demand varies by the month as consumers tend to use more water in summer months.

Monthly Water Sale to Customers



- Share of water purchase by each customer can change due to population changes, water conservation practices, consumer habits, reliability of transmission systems etc. The relative share of each customer, along with historic data, is given below:

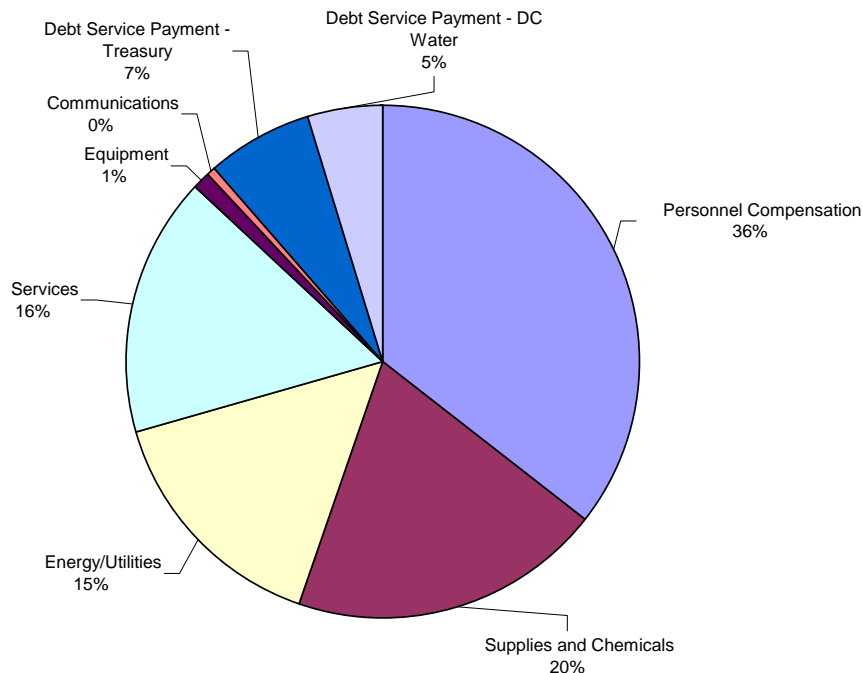
Relative Share of Water Purchase



3.5 Operating Costs Analysis

Washington Aqueduct's total operating expenditures were \$38,261,757 for FY 2010. Major components were personnel compensation (36%), supplies and chemicals (20%), services (16%) and energy (15%).

Expenses by Category



Total operating expenditures were \$38.3 million as compared to the budget authority of \$46.1 million. This represents 86% execution rate.

Category	FY 2010 Approved Budget	Revised FY 2010 Budget (for Water Rates)	FY 2010 Actuals	% Used	overrun/(underrun)
Personnel	\$ 15,743,000	\$ 15,743,000	\$ 13,652,261	86.7%	\$ (2,090,739)
Supplies and Material	\$ 11,648,000	\$ 10,611,000	\$ 7,480,367	70.5%	\$ (3,130,633)
Energy	\$ 7,094,000	\$ 6,594,000	\$ 5,866,395	89.0%	\$ (727,605)
Services	\$ 7,900,000	\$ 7,900,000	\$ 6,231,362	78.9%	\$ (1,668,638)
Equipment	\$ 450,000	\$ 450,000	\$ 464,451	103.2%	\$ 14,451
Communications	\$ 202,000	\$ 202,000	\$ 189,934	94.0%	\$ (12,066)
Total O&M Expenses	\$ 43,037,000	\$ 41,500,000	\$ 33,884,770	81.7%	\$ (7,615,230)
Debt Service Payment - US Treasury	\$ 1,308,000	\$ 1,308,000	\$ 2,616,479		\$ 1,308,479
Debt Service Payment - DC Water	\$ 1,760,508	\$ 1,760,508	\$ 1,760,508		\$ -
Total Operating Expenses	\$ 46,105,508	\$ 44,568,508	\$ 38,261,757	85.8%	\$ (6,306,751)

3.5.1 Personnel

Washington Aqueduct ended the fiscal year with 152 full-time employees. The authorized strength was 179. This variance is attributed to recruitment shortfalls for hard-to-fill positions and unexpected retirements. In order to maintain a sustainable organization, optimally meet mission requirements and serve customer needs, attracting and retaining talent remains a key priority in the coming year and beyond.

3.5.2 Supplies and Material

Supplies and material primarily consist of chemicals, parts/supplies, small IT purchases and other miscellaneous items. Washington Aqueduct spent \$7,480,367 as compared to the budget of \$11,648,000 and FY 2009 costs of \$7,806,344, due to a lower cost of chemicals and delay in hypochlorite implementation. These chemicals are used in coagulation/flocculation (alum, polymer), disinfection (liquid chlorine, ammonia) and corrosion control (phosphoric acid, lime). Other uses of chemicals are for filtration aid (polyaluminum chloride), algae control (sodium permanganate, copper sulfate), dental prophylaxis (hydrofluosilicic acid) and taste/odor control (carbon). Washington Aqueduct continues to monitor chemical prices and takes actions to acquire better chemical pricing, when appropriate.

3.5.3 Energy

Energy costs consist of electricity, natural gas, heating oil, diesel fuel and gasoline. Electrical expenses were \$5,866,395 as compared to budgeted \$7,094,000. This is attributed to improvement in electricity prices as we procured a government-negotiated rate, which includes at least 5% electricity from renewable sources. Washington Aqueduct has adopted a three-prong approach towards energy: lower costs, lower indirect emissions and optimized usage.

3.5.4 Equipment

Equipment consists of fixed equipment (circuit boards, machining equipment, pumps, analyzers, turbidity 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 \$464,451 was spent with no major variance.

3.5.5 Services

Washington Aqueduct spent \$6,231,362 in services. These costs represent regional water agreements, administrative services, Architect/Engineer services and operations & maintenance services. A breakdown of the Services expenditure follows.

Category	Definition	Costs
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.	\$ 579,081
Shared Administrative Services	Accounting systems, human resources, payroll support, procurement, audit, internet hosting, software licenses, office of counsel and worker's compensation claims.	\$1,363,003
Facilities Services	Guards contract, grounds maintenance, janitorial contract, trash and disposal contracts.	\$1,342,199
AE Services/ Studies/Engineering projects	Architect and engineer services for feasibility studies. Engineering projects.	\$ 1,502,536
Operations and Maintenance Services	O&M contracts for laboratory equipments, leased vehicles, external analyses, transportation, rental of equipment, software and hardware maintenance contracts, emergency repairs, HVAC and other miscellaneous maintenance contracts.	\$1,444,542

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. If Washington Aqueduct were to setup its own accounting systems, human resources, payroll, procurement, audit, Internet hosting, software licenses, office of counsel, the total cost would far exceed \$1,363,003.

3.5.6 Communications

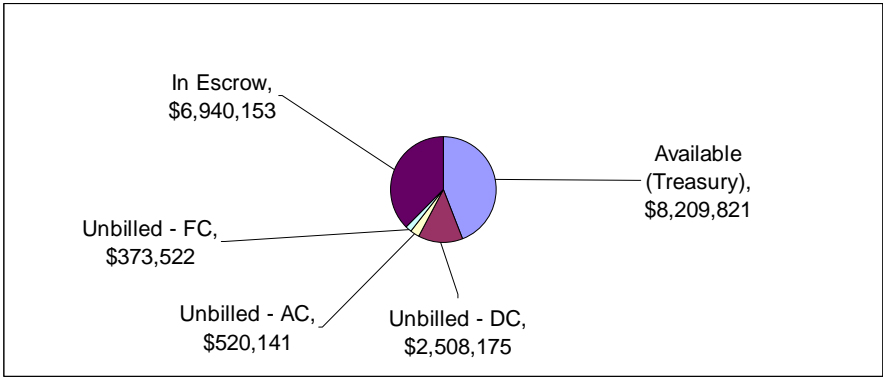
Communication services include local, long distance, mobile phone services provided by General Services Administration contractors and private companies. Communication costs have been stable with no major variances.

3.6 Status of Capital Projects

All financing of capital projects is provided by the customers using a “pay-as-you-go” process. Washington Aqueduct bills customers every quarter for the amount it expects to obligate in the coming quarter. This allows customers to keep budgeted funds in their possession until the contracts are advertised. This way, customers can plan and time the funding mechanism to fund capital projects.

In FY 2010, customers provided \$16,455,268 most of which was allocated to the Residuals Treatment Facilities, Security Improvements and the Hypochlorite and Associated Facilities projects. Overall, \$18.6 million of budget authority remains uncommitted. This includes \$3,401,837 unbilled to customers.

Status of Uncommitted Funds by Source



Status of Uncommitted Funds by Projects

	Uncommitted
1a: Legal Obligations	
Residuals Collection and Treatment Facility	\$ 6,577,623
1b: Safe Water in a Safe Manner	
Dalecarlia Hypochlorite/Caustic Soda Imps	\$ 843,295
McMillan Hypochlorite/Caustic Soda Imps	\$ 46,800
Security Improvements, Dalecarlia	\$ 4,494,614
Security Improvements, McMillan	\$ 1,182,888
2: Process Improvements and Public Confidence	
None	\$ -
3a: Reliable Water Service	
Booster Pumping Station Renovation	\$ 301,810
Little Falls Motor Control Upgrades	\$ 200,000
McMillan P. S. Motor Drives upgrades	\$ 2,121,028
3b: Sustain Infrastructure	
McMillan Flume and Gatehouse Improvements	\$ 917,675
DPS HVAC Improvements	\$ 1,866,078
Total	<u>\$ 18,551,811</u>

The following projects remain active under the Capital Improvements Program.

- **Booster Pumping Station Renovation:** The Booster Pumping Station is used to pump raw water that has entered the Forebay via the conduits to the main body of the Dalecarlia Reservoir. This project involves the replacement of the building's slate roofing system, exhaust fans, windows, doors and lighting, the installation of a concrete access pad, a new ventilation system, security upgrades and painting. It also involves work in the adjacent electrical substation and includes electrical upgrades; conversion of motors to brushless excitation, the replacement of transformers, switchgears, feeder cables and the installation of a new 600 KW emergency generator. The project is currently 70% complete. It started in October 2009, with completion expected in March 2011. This work will add substantial reliability to the operations of this Pumping Station.
- **Dalecarlia Pumping Station HVAC Improvements:** The Dalecarlia Pumping Station was built in the 1960s. The HVAC system that serves this building is original and so is over 50 years old and in need of upgrade. This project involves the replacement of all four air handling units, duct cleaning, asbestos abatement, re-insulation of air ducts and pipes, painting and labeling of piping in the basement and the tie-in of the chiller discharge to the raw water conduit. This project has been awarded with the Notice to Proceed (NTP) issued in Jan 2011.
- **Hypochlorite System & Associated Facilities:** This project will affect treatment changes at both the McMillan Water Treatment Plant (WTP) and the Dalecarlia WTP. It will enable Washington Aqueduct to switch the form of chlorine used for disinfection from gaseous chlorine to bulk sodium hypochlorite and to add caustic soda for pH trimming. At the Dalecarlia WTP a new building for the hypochlorite and caustic soda storage and feed systems has been constructed adjacent to the existing chlorine building. Conversion to sodium hypochlorite and use of caustic soda is planned for early 2011. At the McMillan WTP, the existing Chloramines building has been converted to store and feed sodium hypochlorite and the switch to bulk sodium hypochlorite was made in May 2010. Currently, the existing chlorine storage room is being converted to store and feed caustic soda. The construction started in November 2008, with completion at both facilities expected in May 2011. The overall project is currently 90% complete. Completion of this project will enhance the safety of employees as well as that of the surrounding communities.
- **McMillan Flume and Gatehouse Building Improvements:** The North Clearwell gatehouse, South Clearwell gatehouse and the Flume Building are structures that provide access to and contain monitoring equipment for the McMillan clearwells. These structures date back to 1905 and the roof structural steel is showing signs of significant deterioration. This project involves amongst other things, roof repair and replacement, brick wall repair and repointing and extensive electrical conduit re-routing. The project is currently on hold due to a funding shortfall. This project will be combined with the McMillan Transformer/Switchgear Building Renovation project, scheduled for execution in FY 2013.

- **McMillan Pumping Station Upgrades:** The McMillan Pumping Station contains three 900 HP induction motors manufactured by Yaskawa. The existing motor drives and power recovery system are over 20 years old and the original manufacturer is no longer in business. Hence, parts have become increasingly difficult to obtain. In order to ensure the reliability of the pumping station, a new drive system is required. This project involves the replacement of the building's clay tile roof system, doors, windows, valve actuator system, the installation of HVAC and new variable frequency drives. Construction bids opened in September 2010 with the low bidder at \$2.1M. The contract has been awarded and the Notice to Proceed (NTP) issued.
- **Residuals Collection & Treatment Facility:** Under the Washington Aqueduct's NPDES permit and a related Federal Facilities Compliance Agreement (FFCA - the federal agency equivalent of an administrative order), Washington Aqueduct will no longer be permitted to return the sediment and coagulant to the Potomac River. The FFCA deadline for compliance was November 30, 2010. However the Washington Aqueduct has received an extension of this deadline to September 30, 2011. This project involves the construction of new residuals processing facility and several associated structures and facilities. With the construction of these facilities, sedimentation basin cleanings and discharges to the Potomac River will be eliminated. As of September 30, 2010, this project was 75% complete. The construction started in April 2008 and completion is expected in September 2011.
- **Security System Upgrades, Phase II** This project includes security improvements to the main entrances at both the Dalecarlia and McMillan water treatment plants as well as security upgrades at the Great Falls Intake and Little Falls Pumping Station buildings. The project also includes security hardening at these facilities and the high service reservoirs with security surveillance and cameras using intelligent video. Completion of this project will allow for real-time monitoring of all Washington Aqueduct facilities from centralized locations. Construction bids opened in September 2010 with the low bidder at \$5.1M. The contract has been awarded and the Notice to Proceed (NTP) issued.
- **Visitors Center Exhibits (Renovation of Old Dalecarlia Pumping Station):** This project is a lower priority than other capital projects and is presently on hold. It includes the design and construction of displays for the newly renovated Visitors Center. Construction on this project is not expected until FY 2015.
- **Little Falls Pumping Station Motor Control Upgrades:** This project will provide funds for upgrades the Little Falls Pumping Station operations. The project will involve the replacement of the oil accumulator system, air compressor system, SCADA communication lines, conversion of the motors to brushless excitation, the installation of an emergency generator, etc. A design scope of work is being prepared so that contract documents can be completed this fiscal year (FY) and construction can commence in FY 2012.

3.7 Business Risks

Washington Aqueduct's constant focus is to produce safe, reliable, and cost effective water for delivery to its customers. Like every water utility in the country, Washington Aqueduct is not free from operational and business risks. Some of the business risks are listed below:

- Electronic alerts and procedures for personal notification are in place to detect and mitigate any operational excursion due to equipment malfunction, external environmental effects of weather, or of accidental or intentional external interference with the quality of the source water or the treatment process.
- Aging workforce, federal pay freeze, competitive job market, and DC being high cost area creates management challenges in retaining a talented workforce, executing effective succession planning and capturing and institutionalizing the wealth of individual knowledge that could otherwise be lost. Washington Aqueduct considers its relationships with employee union as co-operative and effective.
- Stricter regulation may require process changes that could be costly to the wholesale customers and ultimately to consumers.
- Significant investments are required to identify, evaluate, and maintain existing water infrastructure. The infrastructure must be revitalized at a constant rate to ensure it is not compromised. New projects need to be studied, designed and implemented in a timely fashion. Additional economic costs will accrue by postponing investment in aging infrastructure.
- Washington Aqueduct as a federal entity carries no insurance and in the case of a catastrophic event would rely on its customers and the federal government for the financial means to recover.
- Operating reserves are carried in escrow accounts to mitigate any short term customer financial issues.

Washington Aqueduct is aware of the range of business risks and takes necessary action to mitigate them. Not all risks can be fully mitigated internally.

3.8 Outlook

Washington Aqueduct is a well-run, knowledge-based highly efficient organization with a very capable management team; a staff of dedicated professional, technical as well as trades and crafts employees; and outstanding operational and funding support by its customers. Washington Aqueduct looks forward to implementing infrastructure upgrades, maintaining regulatory compliance and the security and safety of its employees as well as the surrounding neighborhoods. Some major milestones Washington Aqueduct anticipates are discussed below:

- Completion of the **Residuals Collection & Treatment Facilities** will enable the Washington Aqueduct to stop periodic sediment discharges to the Potomac River. Implementation of this project constitutes a best management practice using state of the art technology to protect the environment and will have a positive impact on water quality and reliability.
- Completion of the **Sodium Hypochlorite System & Associated Facilities** will enable the Washington Aqueduct to switch from liquid chlorine to sodium hypochlorite for disinfection. The switch to this safer form of chlorine will result in the increased safety of its employees and the surrounding community. Completion of this project will also introduce the use of caustic soda in addition to lime, currently used for pH adjustment. This will allow tighter control of the finished water pH thereby further optimizing corrosion control and providing process redundancy at the Dalecarlia Water Treatment Plant.
- Completion of the **Future Treatment Alternatives Study** will give the Washington Aqueduct a look into the future with a forecast for regulatory and emerging issues that could pose a challenge to the current treatment operations. With the completion of this study, Washington Aqueduct in consultation with various stakeholders will have developed water treatment objectives in a rational and scientific manner and will have a comprehensive roadmap that lists, ranks and screens new or additional treatment processes that may be implemented in order to meet the developed objectives. The goal is to work with nationally recognized water experts to develop an inclusive plan that educates and addresses stakeholder concerns while striking a sustainable balance between the available technologies, the incremental benefit obtained and the associated cost.
- With the completion of the **Lead Pipe Loop Study – Phase II**, the Washington Aqueduct will have gone through a process that provides a thorough literature review, bench scale testing and a review of corrosion control technology. This information will be used to update the Washington Aqueduct corrosion control strategy for long-term effective corrosion control and reduction of associated aesthetic issues.
- Washington Aqueduct's participation in **Water Research Projects** illustrates its commitment to the water industry. Research projects in which Washington Aqueduct is actively participating are:
 - EDC/PPCP Benchmarking and Monitoring for Drinking Water Utilities

- Water Utility Framework for Responding to Emerging Contaminant Issues
- Developing a Roadmap and a Vision for Source Water Protection for U.S. Drinking Water Utilities
- Building a National Utility Network to Address EDCs/PPCPs Issues
- Minimizing Water Treatment Residuals Discharges to Surface Water
- Cause of Coagulant Changeover on Release of Lead From Plumbing Materials

3.9 Stewardship Information

Heritage assets are items of historical, natural, cultural, educational, or artistic significance, and items with significant architectural characteristics. Heritage assets are expected to be preserved indefinitely. As of September 30, 2010, the following heritage assets are shown on the National Register of Historic Places.

Heritage Asset	Address	City	County	State	Certification Date
Washington Aqueduct	5900 MacArthur Blvd., NW	Washington	District of Columbia	DC	8-Sep-73
Cabin John Bridge	MacArthur Blvd. over Cabin John Creek and Cabin John Pkwy.	Glen Echo	Montgomery	MD	28-Feb-73
Georgetown Castle Gatehouse	Near jct. of Reservoir Rd. and MacArthur Blvd., NW.	Washington	District of Columbia	DC	13-Mar-75



4 Principal Financial Statements and Notes

Financial Manager's Report

Washington Aqueduct adheres to policies, principles and procedures established in regulation 40 USC 95 and ER 37-1-30 Ch 10. The Resource Management Office of the Baltimore District and the U. S. Army Corps of Engineers Finance Center provide oversight and assistance on the financial programs in use at the Washington Aqueduct.

Financial Management Section of Washington Aqueduct has a goal of providing fact-based timely analysis and reporting to customers, management and other stakeholders, to help achieve sound and meaningful business decisions. We are committed to run Washington Aqueduct as a world class organization: transparency of operating and capital expense, full compliance with U.S. GAAP, support internal and external audit, adherence with applicable laws and regulations, fair and equitable treatment of all customers. We will continue to ensure that all customers' interests are protected and water rates and cost allocations are based on "one-plant" and "average-day model".

Washington Aqueduct participated in U.S Army Corps of Engineers-wide audit, which was conducted by Department of Defense Inspector General and KPMG. We supported more than 100 samples related to accruals, revenue recognition, non-fed funding, prompt-payment act, cost accounting, undelivered orders, property plant and equipment (PPE) and construction-in-progress arena. The Agency ("USACE") obtained an unqualified "clean" opinion. Memo from Auditor, report on internal controls and compliance with laws and regulation can be found in U.S. Army Corps of Engineers – Civil works annual report, which can be downloaded from USACE website.

The financial statements in this report were prepared using multiple reports extracted from the Corps of Engineers Financial Management System (CEFMS), Project Management System (P2), bank statements from Wells Fargo Bank and various internal reports. They are truthful and represent the best information available.

Vikas Singhal

Vikas Singhal, CFA, PMP
Chief, Financial Management Section
February 15, 2011

Balance Sheet

As of Sep 30, 2010
(Nearest dollar)

Assets

Cash or Cash Equivalents (Note 2)		\$ 53,910,364
Funds with U.S. Treasury		
Accounts Receivable:		\$ 11,816,468
Water Bill(s) - DC Water	\$ 4,883,045	
Water Bill(s) - Arlington County	\$ 738,585	
Water Bill(s) - City of Falls Church	\$ 503,206	
Treasury loan due from Arlington County	\$ 2,368,607	
Treasury loan due from City of Falls Church	\$ 3,265,498	
Misc	\$ 57,527	
Inventory (Warehouse Stock)		\$ 500,159
Property, Plant and Equipment		
Land		\$ 1,264,636
Construction-in-Progress:		\$ 111,601,830
In-house	\$ 833,948	
Contractors	\$ 94,991,896	
Other Government Activities	\$ 15,775,986	
Buildings, Improvements and Renovations		\$ 75,062,361
Acquisition Cost	\$ 142,993,484	
Accumulated Depreciation	\$ (67,931,123)	
Other Structures and Facilities		\$ 50,555,268
Acquisition Cost	\$ 127,717,894	
Accumulated Depreciation	\$ (77,162,626)	
Equipment		\$ 1,136,033
Acquisition Cost	\$ 2,629,827	
Accumulated Depreciation	\$ (1,493,794)	
<u>Total Assets</u>		<u>\$ 305,847,120</u>

Liabilities

Treasury Loan (Note 5)		\$ 5,634,104
Accounts Payable:		\$ 5,505,631
Intragovernmental	\$ 188,951	
Public	\$ 4,977,089	
Contract Holdbacks	\$ 339,591	
Misc		\$ 41,323
<u>Total Liabilities</u>		<u>\$ 11,181,059</u>

<u>Net Position/ Cumulative Results of Operations</u>		<u>\$ 294,666,061</u>
--	--	------------------------------

Statement of Net Costs

For period ending September 30, 2010
(Nearest dollar)

Operating and Maintenance Costs:

Personnel Compensation		\$	13,652,261
Supplies and Chemicals		\$	7,480,367
Energy/Utilities		\$	5,866,395
Services		\$	6,231,362
Regional Water Agreements & Water related programs	\$	579,081	
Administrative Support	\$	1,363,003	
Facilities related services	\$	1,342,199	
Architect/Engineering Services	\$	1,502,536	
Operations and Maintenance services	\$	1,444,542	
Equipment		\$	464,451
Communications		\$	189,934

Subtotal **\$ 33,884,770**

Financing Costs:

Debt Service Payment - Treasury	\$	2,616,479
Debt Service Payment - DC Water	\$	1,760,508

Subtotal **\$ 4,376,987**

Capital Improvements:

Residuals Processing Facilities	\$	39,399,713
Sodium Hypochlorite and Casutic Soda	\$	9,159,189
Booster Pumping Station Upgrades	\$	887,665
Security Improvements Phase II	\$	710,986
McMillan HVAC Improvements	\$	421,306
McMillan PS Motor Upgrades	\$	335,616
McMillan Filter Media/Valve Replacement	\$	127,515
DPS HVAC Improvements	\$	22,049
Dalecarlia SCADA	\$	8,332
McMillan Flume and Gatehouse Improvements	\$	2,300
McMillan PACL	\$	1,900

Subtotal **\$ 51,076,570**

Overall Costs (O&M, Capital and Financing) \$ 89,338,328

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 USACE 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).

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:

Appropriation Dept	Transfer Dept	Appropriation FY	Symbol	Purpose
99	NA	X	9829	Operations and Maintenance
99	NA	X	9883	Capital Improvements
96	NA	X	3128	Treasury Loan

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.

Note 2: Purchaser Escrow Accounts

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, 2010 was \$23,186,935 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, 2010.

Statement of Funding

(for period ending Sep 30, 2010)

	DC Water	Arlington County	City of Falls Church	Total
Operating withdrawals				
10/2/2009	\$ 2,123,965.20	\$ 630,082.50	\$ 490,933.69	\$ 3,244,981.39
11/9/2009	\$ 2,229,746.53	\$ 627,502.50	\$ 455,904.80	\$ 3,313,153.83
12/2/2009	\$ 1,938,678.58	\$ 541,515.00	\$ 399,760.40	\$ 2,879,953.98
1/4/2010	\$ 2,312,978.45	\$ 630,522.00	\$ 439,126.00	\$ 3,382,626.45
2/4/2010	\$ 2,049,458.96	\$ 541,476.00	\$ 388,663.00	\$ 2,979,597.96
2/22/2010	\$ 2,079,999.24	\$ 551,124.00	\$ 394,626.00	\$ 3,025,749.24
3/25/2010	\$ 2,103,089.77	\$ 590,949.00	\$ 404,594.00	\$ 3,098,632.77
4/22/2010	\$ 1,872,528.93	\$ 531,792.00	\$ 359,649.00	\$ 2,763,969.93
6/1/2010	\$ 2,080,485.91	\$ 598,068.00	\$ 405,395.00	\$ 3,083,948.91
7/1/2010	\$ 2,045,198.74	\$ 610,794.00	\$ 427,912.00	\$ 3,083,904.74
8/9/2010	\$ 2,240,554.76	\$ -	\$ -	\$ 2,240,554.76
Total	\$ 23,076,685.06	\$ 5,853,825.00	\$ 4,166,563.89	\$ 33,097,073.95
Treasury loan related withdrawals				
12/8/2009	\$ -	\$ 1,217,797.43	\$ 903,843.49	\$ 2,121,640.92
3/8/2010	\$ -	\$ 65,805.95	\$ 99,140.10	\$ 164,946.05
6/1/2010	\$ -	\$ 65,805.95	\$ 99,140.09	\$ 164,946.04
9/8/2010	\$ -	\$ 65,805.96	\$ 99,140.09	\$ 164,946.05
Total	\$ -	\$ 1,415,215.29	\$ 1,201,263.77	\$ 2,616,479.06
Capital related withdrawals				
11/9/2009	\$ 1,313,880.35	\$ 262,811.80	\$ 209,927.85	\$ 1,786,620.00
3/25/2010	\$ 5,683,535.03	\$ 1,136,861.58	\$ 908,098.13	\$ 7,728,494.74
Total	\$ 6,997,415.38	\$ 1,399,673.38	\$ 1,118,025.98	\$ 9,515,114.74
Total Fiscal Year Withdrawals	\$ 30,074,100.44	\$ 8,668,713.67	\$ 6,485,853.64	\$ 45,228,667.75

Escrow Account Balance (as of 9/30/2010)	\$ 16,073,215.34	\$ 3,963,395.11	\$3,150,324.19	\$ 23,186,934.64
Capital Reserves	\$ 5,113,000	\$ 1,049,016	\$ 778,137	\$ 6,940,153
Operating Reserves	\$ 10,960,215	\$ 2,914,379	\$ 2,372,187	\$ 16,246,782
Operating Coverage (in months)	5.3	5.0	5.7	5.3

Escrow balances along with O&M trueup 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.

Note 3: Sale of Water

Sale of Water/Statement of Revenue

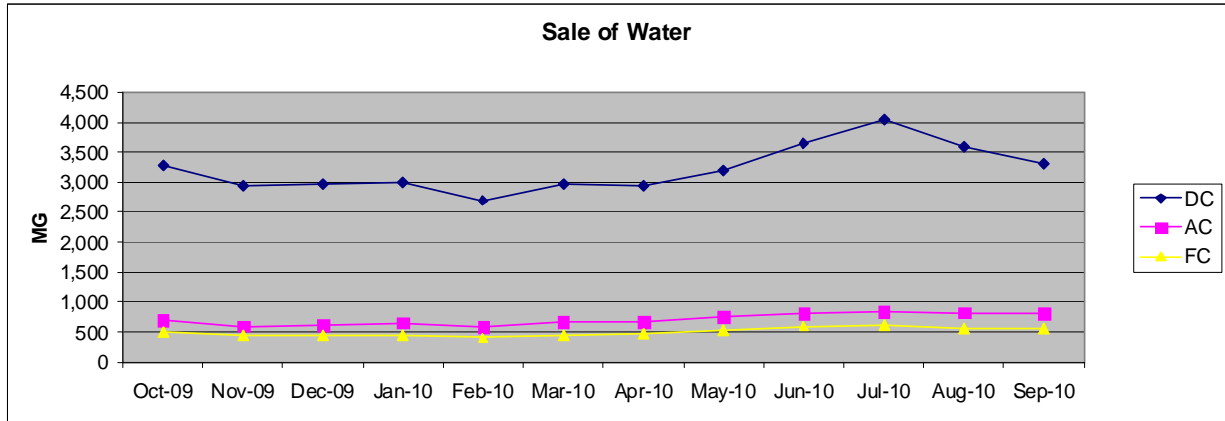
(for period ending Sep 30, 2010)

Water Sold (MG)				
	DC	AC	FC	Total
Oct-09	3,285.19	700.58	493.40	4,479.17
Nov-09	2,933.23	601.64	436.70	3,971.57
Dec-09	2,974.02	612.36	443.40	4,029.78
Jan-10	3,004.86	656.61	454.60	4,116.07
Feb-10	2,696.92	590.88	404.10	3,691.90
Mar-10	2,974.67	664.52	455.50	4,094.69
Apr-10	2,927.54	678.66	480.80	4,087.00
May-10	3,188.46	753.16	533.60	4,475.22
Jun-10	3,642.86	816.95	601.20	5,061.01
Jul-10	4,047.50	840.47	625.50	5,513.47
Aug-10	3,601.01	829.97	560.70	4,991.68
Sep-10	3,312.74	820.65	565.40	4,698.79

Revenue				
	DC	AC	FC	Total
	\$ 2,459,687.46	\$ 630,522.00	\$ 439,126.00	\$ 3,529,335.46
	\$ 2,196,167.97	\$ 541,476.00	\$ 388,663.00	\$ 3,126,306.97
	\$ 2,226,708.25	\$ 551,124.00	\$ 394,626.00	\$ 3,172,458.25
	\$ 2,249,798.78	\$ 590,949.00	\$ 404,594.00	\$ 3,245,341.78
	\$ 2,019,237.94	\$ 531,792.00	\$ 359,649.00	\$ 2,910,678.94
	\$ 2,227,194.92	\$ 598,068.00	\$ 405,395.00	\$ 3,230,657.92
	\$ 2,191,907.75	\$ 610,794.00	\$ 427,912.00	\$ 3,230,613.75
	\$ 2,387,263.77	\$ 677,844.00	\$ 474,904.00	\$ 3,540,011.77
	\$ 2,727,482.14	\$ 735,255.00	\$ 535,068.00	\$ 3,997,805.14
	\$ 3,030,444.20	\$ 756,423.00	\$ 556,695.00	\$ 4,343,562.20
	\$ 2,696,148.21	\$ 746,973.00	\$ 499,023.00	\$ 3,942,144.21
	\$ 2,480,314.69	\$ 738,585.00	\$ 503,206.00	\$ 3,722,105.69

	DC	AC	FC	Total
FY 2010	38,589.00	8,566.45	6,054.90	53,210.35
FY 2009	41,245.20	8,531.21	6,153.87	55,930.28
	72.5%	16.1%	11.4%	
Change	-6.4%	0.4%	-1.6%	-4.9%

\$ 28,892,356.08 \$ 7,709,805.00 \$ 5,388,861.00 \$ 41,991,022.08



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.

Customer Share

	Cost Allocation			
	DC Water	Arlington County	City of Falls Church	
Total Operating & Maintenance Expenses	\$ 33,884,770	\$ 23,696,816	\$ 6,098,662	\$ 4,089,292
		69.9%	18.0%	12.1%
Debt Service:				
Debt Service Payment - Treasury	\$ 2,616,479	\$ -	\$ 1,415,215	\$ 1,201,264
Debt Service Payment - DC Water	\$ 1,760,508	\$ 1,337,986	\$ 264,076	\$ 158,446
Total Operating Expenses (Revenue Required)	\$ 38,261,757	\$ 25,034,802	\$ 7,777,953	\$ 5,449,002
Debt Service payment to DC Water		\$ (1,760,508)		
Customer Share		\$ 23,274,294	\$ 7,777,953	\$ 5,449,002

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 trueup positions, gives the end-of-the-year true up position, which represents existing obligations and commitments, for the year ahead.

O&M Trueup

	DC Water	Arlington County	City of Falls Church
Start of year position (as of 10/1/2009)	\$ 2,124,142	\$ 191,191	\$ 859,439
Customer Share (from Above)	\$ (23,274,294)	\$ (7,777,953)	\$ (5,449,002)
Operating Withdrawals (see statement of escrow)	\$ 23,076,685	\$ 5,853,825	\$ 4,166,564
Treasurer Loan Withdrawals (see statement of escrow)	\$ -	\$ 1,415,215	\$ 1,201,264
End of year position (as of 9/30/2010)	\$ 1,926,533	\$ (317,722)	\$ 778,265

Note 5: Treasury Loan

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 U.S. Army Corps of Engineers entered into agreements with the District of Columbia, Arlington County and the City of Falls Church, Virginia to provide funding to 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

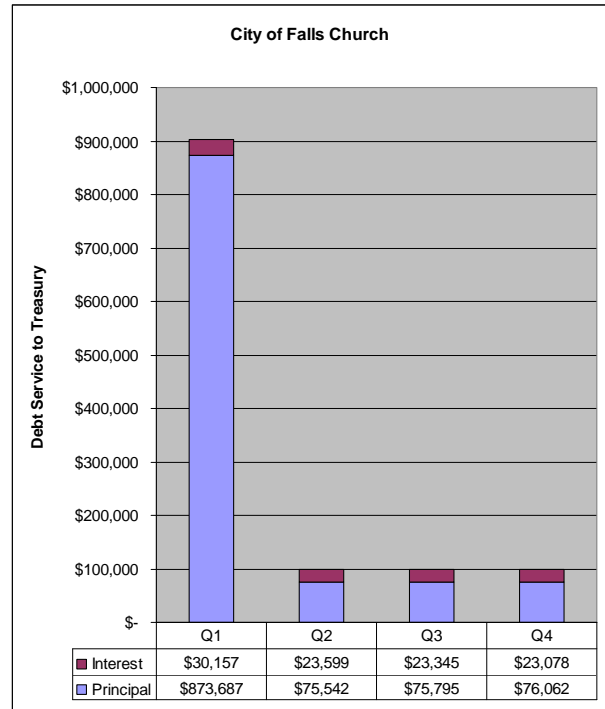
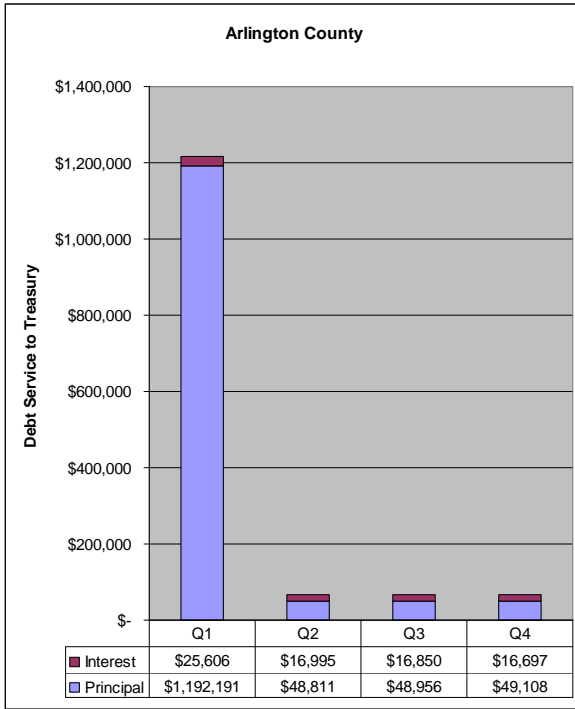
as of
9/30/2010

	Principal		
	Original	Repaid	UPB
DC Water			
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			
FY 97 Note	\$ 4,196,067.80	\$ 4,196,067.80	\$ -
FY 98 Note	\$ 3,657,819.91	\$ 2,210,761.67	\$ 1,447,058.24
FY 99 Note	\$ 3,090,999.00	\$ 2,169,450.64	\$ 921,548.36
Subtotal	\$ 10,944,886.71	\$ 8,576,280.11	\$ 2,368,606.60
Falls Church			
FY 97 Note	\$ 2,558,033.22	\$ 1,205,688.51	\$ 1,352,344.71
FY 98 Note	\$ 2,190,859.80	\$ 921,825.37	\$ 1,269,034.43
FY 99 Note	\$ 2,153,799.60	\$ 1,509,680.92	\$ 644,118.68
Subtotal	\$ 6,902,692.62	\$ 3,637,194.80	\$ 3,265,497.82
Totals			
FY97 Note	\$ 28,926,006.65	\$ 27,573,661.94	\$ 1,352,344.71
FY98 Note	\$ 23,970,000.00	\$ 21,253,907.33	\$ 2,716,092.67
FY99 Note	\$ 22,000,000.00	\$ 20,434,332.96	\$ 1,565,667.04
Total	\$ 74,896,006.65	\$ 69,261,902.23	\$ 5,634,104.42

Key notes about treasury loan are:

- The outstanding principal at the end of Fiscal Year 2010 was \$5,634,104. 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 2023. A roll-off profile is included in the financing schedules.
- Weighted average cost of these borrowings was 2.74% in year FY 2010. This is based on credit worthiness rating of Arlington County and City of Falls Church as determined by rating agencies.

- In FY 2010, total payments of \$2,616,479 were made. Total principal payments were \$2,440,150 and there was no capitalized interest.



- Additionally, \$1,125,566 and \$786,244 of loan was retired on behalf of Arlington County and City of Falls Church respectively. This strategy of early retirement of debt brings down water rates for future years and helps Arlington County and City of Falls Church at large.

9/30/2010

Treasury Loan Roll-off Profile

	Matures 2018	Matures 2019	Matures 2020	Matures 2021	Matures 2022	Matures 2023	Totals
1997 Loan							
Total Borrowed	\$ 12,100,668.00	\$ 12,004,937.00	\$ 433,815.00	\$ 4,386,586.65	\$ -	\$ -	\$ 28,926,006.65
Principal Repaid	<u>\$ 11,582,927.89</u>	<u>\$ 11,435,093.15</u>	<u>\$ 411,526.89</u>	<u>\$ 4,144,114.01</u>			<u>\$ 27,573,661.94</u>
Unpaid Principal	\$ 517,740.11	\$ 569,843.85	\$ 22,288.11	\$ 242,472.64	\$ -	\$ -	\$ 1,352,344.71
1998 Loan							
Total Borrowed	\$ 506,000.00	\$ 7,709,534.00	\$ 7,574,500.00	\$ 7,600,418.00	\$ 579,548.00	\$ -	\$ 23,970,000.00
Principal Repaid	<u>\$ 483,530.84</u>	<u>\$ 7,332,441.80</u>	<u>\$ 6,506,294.66</u>	<u>\$ 6,446,878.39</u>	<u>\$ 484,761.64</u>	<u>\$ -</u>	<u>\$ 21,253,907.33</u>
Unpaid Principal	\$ 22,469.16	\$ 377,092.20	\$ 1,068,205.34	\$ 1,153,539.61	\$ 94,786.36	\$ -	\$ 2,716,092.67
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
Principal Repaid		<u>\$ 267,051.05</u>	<u>\$ 1,895,101.08</u>	<u>\$ 7,028,180.83</u>	<u>\$ 9,714,000.00</u>	<u>\$ 1,530,000.00</u>	<u>\$ 20,434,332.96</u>
Unpaid Principal		\$ 38,948.95	\$ 302,898.92	\$ 1,223,819.17	\$ -	\$ -	\$ 1,565,667.04
Totals							
Total Borrowed	\$ 12,606,668.00	\$ 20,020,471.00	\$ 10,206,315.00	\$ 20,239,004.65	\$ 10,293,548.00	\$ 1,530,000.00	\$ 74,896,006.65
Principal Repaid	<u>\$ 12,066,458.73</u>	<u>\$ 19,034,586.00</u>	<u>\$ 8,812,922.63</u>	<u>\$ 17,619,173.23</u>	<u>\$ 10,198,761.64</u>	<u>\$ 1,530,000.00</u>	<u>\$ 69,261,902.23</u>
Unpaid Principal	\$ 540,209.27	\$ 985,885.00	\$ 1,393,392.37	\$ 2,619,831.42	\$ 94,786.36	\$ -	\$ 5,634,104.42

Note 6: Loan Payable to DC Water

Washington Aqueduct also makes a debt service payment to DC Water. This loan covers all capital financing required for the Washington Aqueduct before 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 2010, Washington Aqueduct issued \$146,709.01 monthly credit to DC Water in the water bills.
- Starting in FY 2015, only Jennings Randolph’s debt service remains in 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 is shown below:

Debt Service (payable to DC Water)

Fiscal Year	Total Debt Service	Customer Allocation			Monthly Credit (to DC Water)
		DC Water 76%	Arlington County 15%	City of Falls Church 9%	
2010	\$ 1,760,508.11	\$ 1,337,986.16	\$ 264,076.22	\$ 158,445.73	\$ 146,709.01
2011	\$ 1,305,603.37	\$ 992,258.56	\$ 195,840.51	\$ 117,504.30	\$ 108,800.28
2012	\$ 905,721.86	\$ 688,348.61	\$ 135,858.28	\$ 81,514.97	\$ 75,476.82
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

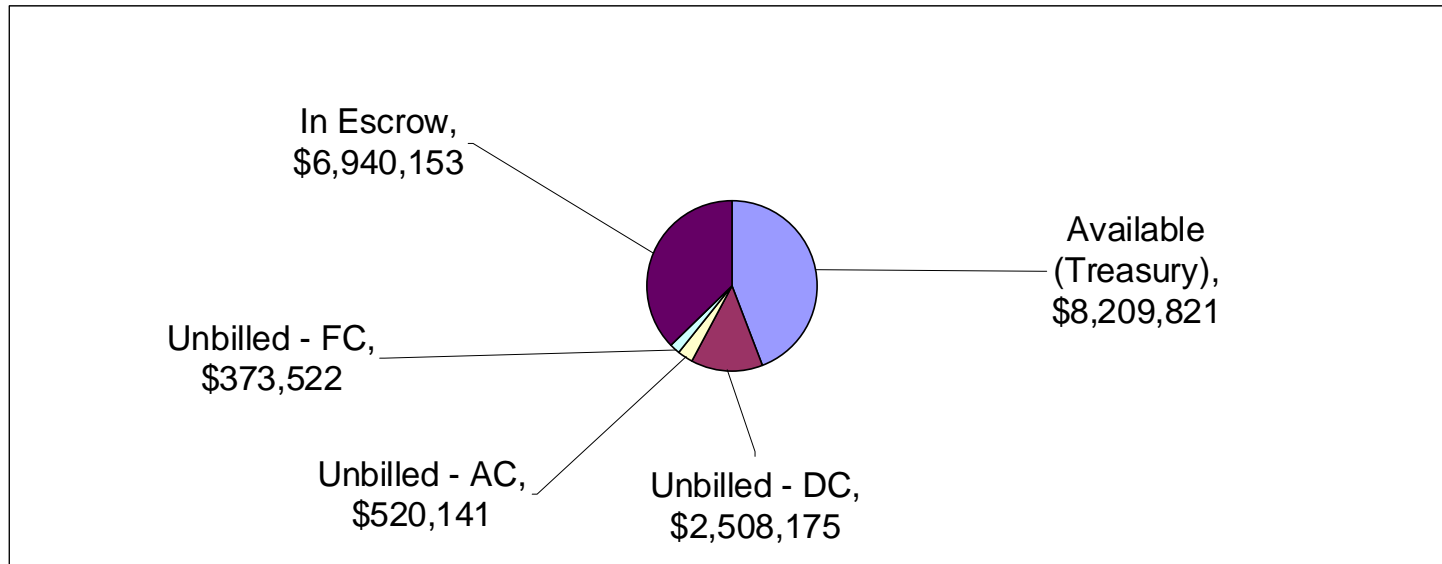
Note 7: Capital Schedules

CIP Status (by Year)

(As of 9/30/2010)

Year	Authorized	Expended	Undelivered Orders	% Obligated	Uncommitted	Unbilled
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	\$ 10,142,749	\$ -	95.2%	\$ 507,251	\$ -
2004	\$ 16,400,000	\$ 16,016,932	\$ 305,554	99.5%	\$ 77,514	\$ -
2005	\$ 9,700,000	\$ 6,866,013	\$ 1,685,111	88.2%	\$ 1,148,877	\$ -
2006	\$ 11,600,000	\$ 11,600,000	\$ -	100.0%	\$ -	\$ -
2007	\$ 105,480,000	\$ 88,361,081	\$ 16,316,997	99.2%	\$ 801,922	\$ -
2008	\$ 10,000,000	\$ 5,499,198	\$ 4,079,774	95.8%	\$ 421,028	\$ -
2009	\$ 15,992,000	\$ 2,158,343	\$ 6,488,437	54.1%	\$ 7,345,220	\$ -
2010	\$ 8,250,000	\$ -	\$ -	0.0%	\$ 8,250,000	\$ 3,401,837
Totals	\$ 208,766,141	\$ 161,338,456	\$ 28,875,874		\$ 18,551,811	\$ 3,401,837

Status of uncommitted funds (thru FY 2010)



Capital Allocation/Authorizations

(As of 9/30/2010)

	Authorizations											Total	
	prior	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		2010
Completed projects													
Prior projects till 2004	1,644,092	6,250,184	4,735,949	7,415,841	9,459,259	5,558,378							\$ 35,063,705
1a: Legal Obligations													
None													
1b: Safe Water in a Safe Manner													
None													
2: Process Improvements and Public Confidence													
30 MG Clearwell Cleaning									822,702				\$ 822,702
McM Filter Media & Valve Replacement							316,492	3,800,000	284,375				\$ 4,400,867
Process Testing & Studies							708,151						\$ 708,151
McMillan Instrumentation (PACL)							100,000		367,173				\$ 467,173
Dalecarlia Instrumentation								100,000		70,754			\$ 170,754
3a: Reliable Water Service													
DPS SCADA Upgrade								255,920					\$ 255,920
Dale SCADA upgrade								223,368					\$ 223,368
Little Falls P.S. Electrical Renovation			\$ 84,499	\$ 275,634	\$ 99,467	\$ 2,689,621							\$ 3,149,221
3b: Sustain Infrastructure													
Traveling Water Screen Replacement (Scope)								1,400					\$ 1,400
Subtotal	1,644,092	6,250,184	4,820,448	7,691,476	9,558,726	8,247,999	1,605,332	3,900,000	1,474,250	70,754	0	0	\$ 45,263,262
Active projects													
1a: Legal Obligations													
Residuals Collection and Treatment Facility					334,938	7,232,507	2,565,000	1,000,000	97,380,000	5,992,000	8,092,000	3,125,000	\$ 125,721,445
1b: Safe Water in a Safe Manner													
Dalecarlia Hypochlorite/Caustic Soda Imps								88,408	4,400,000	4,225,638	1,865,000	2,000,000	\$ 12,579,047
McMillan Hypochlorite/Caustic Soda Imps								2,300,000	1,400,000	1,243,000	2,000,000		\$ 6,943,000
Security Improvements, Dalecarlia				31,260		230,987	50,000				1,300,000	3,605,000	\$ 5,217,247
Security Improvements, McMillan				12,492			185,000				600,000	1,070,000	\$ 1,867,492
Fire Alarm System Improvements - Study							11,592						\$ 11,592
2: Process Improvements and Public Confidence													
Visitor Center Exhibits								337,452					\$ 337,452
3a: Reliable Water Service													
Booster Pumping Station Renovation	49	49,816	29,552	164,772	165,479	258,515	2,105,931		200,000	300,000			\$ 3,274,113
Little Falls Motor Control Upgrades												200,000	\$ 200,000
McMillan P. S. Motor Drives upgrades							15,026			529,246	2,000,000		\$ 2,544,272
3b: Sustain Infrastructure													
McMillan - HVAC Improvements								1,808,092					\$ 1,808,092
McMillan Flume and Gatehouse Improvements								626,629		422,814			\$ 1,049,443
DPS HVAC Improvements					590,857	77,514	654,016		377,298			250,000	\$ 1,949,685
Subtotal	49	49,816	29,552	208,524	1,091,274	8,152,001	8,094,668	7,700,000	104,005,750	9,929,246	15,992,000	8,250,000	\$ 163,502,879
	1,644,141	6,300,000	4,850,000	7,900,000	10,650,000	16,400,000	9,700,000	11,600,000	105,480,000	10,000,000	15,992,000	8,250,000	\$ 208,766,141

Status of Capital Projects (Cumulative)

(As of 9/30/2010)

Category	Project	Authorized	Expended	Undelivered Orders	Uncommitted	% Complete	Unbilled	PM Comments	Target completion
Completed projects									
	Prior projects till 2004	\$ 35,063,705	\$ 35,063,705	\$ -	\$ -	100%		Completed	
1a: Legal Obligations									
	None								
1b: Safe Water in a Safe Manner									
	None								
2: Process Improvements and Public Confidence									
	30 MG Clearwell Cleaning (Dale WTP)	\$ 822,702	\$ 822,702	\$ -	\$ -	100%		Completed	
	McMillan Filter Media & Valve Replacement	\$ 4,400,867	\$ 4,316,243	\$ 84,624	\$ -	98%		In closeout	
	Process Testing & Studies (Mixing Improvements)	\$ 708,151	\$ 706,013	\$ 2,138	\$ -	100%		In closeout	
	McMillan Instrumentation (PACL)	\$ 467,173	\$ 467,073	\$ 100	\$ -	100%		In closeout	
	Dalecarlia Instrumentation	\$ 170,754	\$ 168,701	\$ 2,053	\$ -	99%		In closeout	
3a: Reliable Water Service									
	Little Falls P.S. Electrical Renovation	\$ 3,149,221	\$ 3,146,751	\$ 2,470	\$ -	100%		In closeout	
	Dale SCADA	\$ 223,368	\$ 223,368	\$ -	\$ -	100%		Completed	
	DPS SCADA	\$ 255,920	\$ 255,920	\$ -	\$ -	100%		Completed	
3b: Sustain Infrastructure									
	Traveling Water Screen Replacement (Scope)	\$ 1,400	\$ 1,400	\$ -	\$ -			Planned in out years	
Active projects									
1a: Legal Obligations									
	Residuals Collection and Treatment Facility	\$ 125,721,445	\$ 94,478,762	\$ 24,665,060	\$ 6,577,623	75%	\$ 2,705,981	Under construction	Sep 2011
1b: Safe Water in a Safe Manner									
	Dalecarlia Hypochlorite/Caustic Soda Imps	\$ 12,579,047	\$ 10,897,751	\$ 838,001	\$ 843,295	87%		Under construction.	May 2011
	McMillan Hypochlorite/Caustic Soda Imps	\$ 6,943,000	\$ 6,179,678	\$ 716,522	\$ 46,800	89%		Under construction.	May 2011
	Security Improvements, Dalecarlia	\$ 5,217,247	\$ 681,348	\$ 41,285	\$ 4,494,614	13%		Construction Contract awarded - Oct 2010	Aug 2012
	Security Improvements, McMillan	\$ 1,867,492	\$ 431,352	\$ 253,251	\$ 1,182,888	23%		Construction Contract awarded - Oct 2010	Aug 2012
	Fire Alarm System Improvements	\$ 11,592	\$ 11,592	\$ -	\$ -	-		Planned to resume in FY2011.	Sep 2012
2: Process Improvements and Public Confidence									
	Visitor Center Exhibits	\$ 337,452	\$ 34,368	\$ 303,084	\$ -	10%		On-hold	TBD
3a: Reliable Water Service									
	Booster Pumping Station Renovation	\$ 3,274,113	\$ 1,161,064	\$ 1,811,239	\$ 301,810	61%		Construction underway.	Mar 2011
	Little Falls Motor Control Upgrades	\$ 200,000	\$ -	\$ -	\$ 200,000	0%		Planned to start in FY 2011.	TBD
	McMillan P. S. Motor Drives upgrades	\$ 2,544,272	\$ 337,123	\$ 86,121	\$ 2,121,028	13%		Construction Contract awarded - Oct 2010	Dec 2011
3b: Sustain Infrastructure									
	McMillan - HVAC Improvements	\$ 1,808,092	\$ 1,742,241	\$ 65,851	\$ 0	96%		Near completion	Near Completion
	McMillan Flume and Gatehouse Improvements	\$ 1,049,443	\$ 127,696	\$ 4,073	\$ 917,675	12%	\$ 695,857	Design 90% completed.	TBD
	DPS HVAC Improvements	\$ 1,949,685	\$ 83,606	\$ -	\$ 1,866,078	4%		Construction Contract awarded - Nov 2010	Oct 2011
Totals		\$ 208,766,141	\$ 161,338,456	\$ 28,875,874	\$ 18,551,811		\$ 3,401,838		

Status of Capital Billing

(for period ending Sep 30, 2010)

	DC Water	Arlington County	City of Falls Church	Total
Unbilled Capital Authority (as of 9/30/2009)	\$ 8,535,865.07	\$ 1,707,405.16	\$ 1,363,834.85	\$ 11,607,105.08
FY 2010 portion of capital authority	\$ 6,082,725.00 73.73%	\$ 1,261,425.00 15.29%	\$ 905,850.00 10.98%	\$ 8,250,000.00
PAY GO Q1	\$ 1,313,880.35	\$ 262,811.80	\$ 209,927.85	\$ 1,786,620.00
PAY GO Q2	\$ 5,683,535.03	\$ 1,136,861.58	\$ 908,098.13	\$ 7,728,494.74
PAY GO Q3	\$ -	\$ -	\$ -	\$ -
PAY GO Q4	\$ 5,113,000.03	\$ 1,049,015.85	\$ 778,137.12	\$ 6,940,153.00
Unbilled Capital Authority (as of 9/30/2010)	\$ 2,508,174.66	\$ 520,140.93	\$ 373,521.75	\$ 3,401,837.34



WASHINGTON AQUEDUCT

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