

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

Finance and Budget Committee

Thursday, October 25, 2018

11:00 a.m.

1. **Call to Order**..... Timothy L. Firestine, Chairperson
2. **September 2018 Financial Report (Attachment 1)**..... Matthew T. Brown
3. **Path to Achieve Asset Management (Attachment 2)**..... Leonard Benson and Matthew T. Brown
4. **Agenda for November Committee Meeting (Attachment 3)**..... Timothy L. Firestine
5. **Executive Session**
6. **Adjournment**

* The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.



Fiscal Year 2018

Monthly Financial Report

Period Ending September 30, 2018

DEPARTMENT OF FINANCE, ACCOUNTING & BUDGET

Matthew T. Brown, Chief Financial Officer

Ivan Boykin, Director, Finance

Syed Khalil, Director, Rates & Revenue

John Madrid, Controller

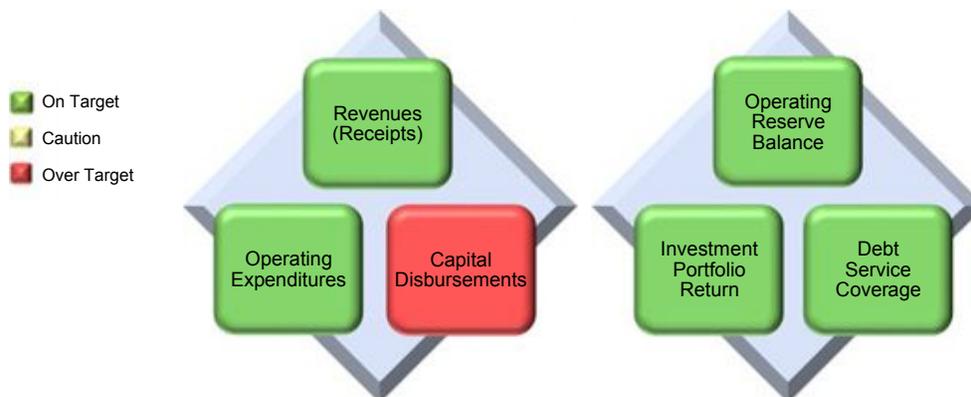
Lola Oyeyemi, Director, Budget

Monthly Financial Report

SEPTEMBER 2018

EXECUTIVE SUMMARY

DC Water ended FY 2018 favorably with estimated revenues above budget and estimated operating expenditures below budget. As previously reported, capital disbursements were higher than the revised budget in FY 2018. All other budgetary and targeted performance metrics were consistent with expectations. The actual numbers below are estimates and subject to change based on results of the annual financial statement audit.



(\$ in millions)

	Budget	Actual	Variance		Actual %
			Favorable (Unfavorable)		Budget
Revenues (Receipts)	\$620.5	\$631.2	\$10.7	1.7%	101.7%
Expenditures	\$561.9	\$553.3	\$8.7	1.5%	98.5%
Capital Disbursements	\$449.9	\$489.9	(\$40.0)	(8.9%)	108.9%

Highlights:

- DC Water received the Distinguished Budget Presentation Award from Government Finance Officers Association (GFOA) for the Approved FY 2019 Budget
- Preparation for FY 2018 financial statements audit is currently underway and will be conducted in accordance with generally accepted principles (GAAP) in the United States
- Preparation for the Green Bond Attestation is currently underway in accordance with attestation standards established by the American Institute of Certified Public Accountants
- On-going management review of Proposed FY 2020 operating budget and ten-year capital budgets. Budget workshop anticipated immediately following the Board meeting in January 2019

Matthew T. Brown, Chief Financial Officer

Monthly Financial Report

Fiscal Year-to-Date
As of September 30, 2018

Operating Revenues (\$000's)					
Category	FY 2018	ACTUAL	ACTUAL %	VARIANCE \$	VARIANCE %
	BUDGET		BUDGET	Fav/(Unfav)	Fav/(Unfav)
Res. / Comm. / Multi.	\$354,914	\$353,587	99.6%	(\$1,327)	(0.4%)
Federal	62,167	62,100	99.9%	(67)	(0.1%)
Municipal (DC Govt.)	17,312	21,362	123.4%	4,050	23.4%
DC Housing Authority	8,979	8,704	96.9%	(275)	(3.1%)
Metering Fee	10,776	11,745	109.0%	969	9.0%
Water System Replacement Fee (WSRF)	39,717	40,896	103.0%	1,179	3.0%
Wholesale	76,028	81,022	106.6%	4,994	6.6%
PILOT/ROW	21,601	21,236	98.3%	(365)	(1.7%)
All Other	28,978	30,521	105.3%	1,541	5.3%
TOTAL	\$620,472	\$631,173	101.7%	\$10,701	1.7%

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of September 2018, cash receipts totaled \$631.2 million, or 101.7 percent of the revised FY 2018 budget. Several categories of customers make payments on a quarterly basis, including the Federal Government and Wholesale customers.

Residential, Commercial and Multi-Family – Receipts for this category are slightly lower at \$353.6 million or 99.6 percent of the revised budget.

District Government – Receipts are slightly higher at \$21.4 million or 123.4 percent of the revised budget. The District Government paid the August billed amount of \$2.0 million in October 2017 (FY 2018), which resulted in higher receipts compared to the revised budget. In FY 2018, the District Government has slightly higher Clean River Impervious Area Charge (CRIAC) as compared to revised budget.

DC Housing – Receipts are slightly lower at \$8.7 million or 96.9 percent of the revised budget. As of September 30, 2018, the D.C. Housing Authority had not paid the August billed amount of \$0.8 million. The overdue amount was received in October 2018, and this will be reflected in the next month's report.

Wholesale – The Wholesale customers' actual receipts through September 2018 total \$81.0 million or 106.6 percent of the revised FY 2018 budget. The higher receipts are primarily on account of collections for MJUF (Multi-jurisdictional Use Facilities), which was not included in the budget.

Other Revenue – Receipts are slightly higher than the straight-lined budget at \$30.5 million or 105.3 percent of the budgeted category.

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Operating Expenditures (\$000's)

Category	FY 2018	ACTUAL	ACTUAL %	VARIANCE \$	VARIANCE %
	BUDGET		BUDGET	Fav/(Unfav)	Fav/(Unfav)
Personnel	\$149,193	\$157,545	105.6%	(\$8,352)	(5.6%)
Contractual Services	79,353	73,086	92.1%	6,267	7.9%
Water Purchases	30,156	28,358	94.0%	1,798	6.0%
Supplies & Chemicals	30,659	32,061	104.6%	(1,402)	(4.6%)
Utilities	29,399	26,559	90.3%	2,840	9.7%
Small Equipment	1,071	631	58.9%	440	41.1%
SUBTOTAL O&M	\$319,831	\$318,240	99.5%	\$1,591	0.5%
Debt Service	185,480	178,399	96.2%	7,081	3.8%
PILOT/ROW	21,376	21,376	100.0%	0	0.0%
Cash Financed Capital Improvements	35,260	35,260	100.0%	0	0.0%
TOTAL OPERATING	\$561,947	\$553,275	98.5%	\$8,673	1.5%
Capital Labor	(21,061)	(15,116)	71.8%	(5,945)	28.2%
TOTAL NET OPERATING	\$540,886	\$538,159	99.5%	\$2,727	0.5%

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of September 2018, operating expenditures totaled \$553.3 million, or 98.5 percent of the approved FY 2018 budget of \$561.9 million with no significant deviations from previously reported projections. These numbers include estimated incurred but unpaid invoices and are subject to revision in subsequent months after completion of the year-end financial audit.

Personnel Services – As previously reported, overspending is due to impact of the Board-ratified union labor contract and other employee salary adjustments, increased hiring efforts, estimated year-end leave accruals, coupled with high overtime spending. Year-end overtime spending of \$8.6 million, which is above the overtime budget, is mainly due to after-hour work performed in response to emergencies and historically high water main breaks experienced during the winter season, and support for the on-going Automated Meter Reader (AMR) Program. Of the 1260 positions authorized, 1165 were filled at the end of September, with a year-end vacancy rate of 8 percent.

Contractual Services – Underspending is in various operational and professional services contracts throughout the Authority. Spending is consistent with historical trends.

Water Purchases – Expenditures based on approximately 75 percent of the Washington Aqueduct's FY 2018 operating expenditures.

Supplies & Chemicals – Overspending is due to higher unit prices of some chemicals (methanol and sodium bisulfite) experienced during the early part of the fiscal year and additional chemical usage in the Tunnel Dewatering Pump Station during rain events.

Utilities – Underspending was consistent with expectation and primarily associated with onsite electricity generation from the Combined Heat and Power (CHP) project which represents approximately 6.6MW or 20 percent of Authority-wide usage.

Debt Service – Actual debt service was lower than budget primarily due to refinancing of the Authority's debt.

CFCI - 100 percent utilization for Pay-Go financing due to favorable O&M position as projected above.

Capital Labor – FY 2018 is lower than historical trends. Further analysis will be undertaken during FY 2019 to review employee time charges to capital projects.

Monthly Financial Report

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Capital Disbursements (\$000's)

Service Area	FY 2018	ACTUAL	ACTUAL %	VARIANCE \$	VARIANCE %
	BUDGET		BUDGET	Fav/(Unfav)	Fav/(Unfav)
Non Process Facilities	\$32,194	\$35,527	110.4%	(\$3,332)	(10.4%)
Wastewater Treatment	95,485	106,104	111.1%	(10,619)	(11.1%)
Combined Sewer Overflow	181,816	188,294	103.6%	(6,478)	(3.6%)
Stormwater	945	1,988	210.4%	(1,043)	(110.4%)
Sanitary Sewer	29,802	46,888	157.3%	(17,086)	(57.3%)
Water	58,044	69,006	118.9%	(10,962)	(18.9%)
SUBTOTAL: CAPITAL PROJECTS	\$398,285	\$447,805	112.4%	(\$49,521)	(12.4%)
Capital Equipment	39,898	28,929	72.5%	10,968	27.5%
Washington Aqueduct	11,768	13,194	112.1%	(1,426)	(12.1%)
SUBTOTAL: ADD'L CAPITAL PROGRAMS	\$51,665	42,123	81.5%	\$9,542	18.5%
TOTAL	\$449,950	\$489,928	108.9%	(\$39,978)	(8.9%)

VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of fiscal year 2018, capital disbursements are \$489.9 million or 108.9 percent of the FY 2018 revised budget with higher disbursements for capital projects and Washington Aqueduct. This is offset by lower disbursements in capital equipment.

Capital Projects – The detailed project performance and updated year-end projections will be reviewed as part of the quarterly CIP update by the Department of Engineering and Technical Services to the Environmental Quality & Operations and Finance & Budget Committees in November 2018.

Capital Equipment – Lower than planned disbursements are primarily due to lower than anticipated vehicle purchases pending the outcomes of the on-going Fleet Utilization Study, long lead times for procurement and delivery of specialized equipment, lag in invoices for HQO equipment needs and unused funds in the Authority-wide reserves. This is offset by higher disbursements for the new Customer Information System and Automated Meter Reading (AMR) projects, due to timing of invoice payments early in the year. Approximately 85,000 small meters for the AMR project were planned to be replaced over a two-year period through FY 2018. At the end of September 2018, 79,933 meters have been installed. The AMR project team anticipates continued installation of the remaining meters through the first quarter of FY 2019.

Washington Aqueduct (WAD) – Payment of \$5.2 million for the third and fourth quarter Paygo invoices is inclusive of prior year capital authority.

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Cash Investments (\$ in millions)

Cash Balances

Rate Stabilization Fund Balance	\$	61.5
DC Insurance Reserve Balance		1.0

<i>Operating Reserve Accounts</i>	
Renewal & Replacement Balance	35.0
O & M Reserve per Indenture	51.7
Undesignated Reserve Balance	38.8
O & M Reserve per Board Policy	125.5
Excess Above O & M Reserve	14.5
Management O & M Reserve Policy	140.0
Excess to PAY-GO	18.0
Operating Reserve Accounts	158.0
Project Billing Refunds	7.0
Excess Revenue	1.8

Operating Cash Balance Including RSF	\$	229.2
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Debt Service Reserve - Series 1998		23.5
Bond Fund - Construction 2016B		16.9
Bond Fund - Construction 2018A		115.3
Bond Fund - Construction 2018B		147.1
Series B - Commercial Paper		1.2
Fleet Relocation Fund		4.3
Total All Funds	\$	537.5

OVERALL PORTFOLIO PERFORMANCE

- The operating reserve balance was \$166.8 million as compared to the operating reserve level objective of \$125.5 million for FY 2018
- Average cash balance for the month of September was \$162.6 million
- Total investment portfolio was in compliance with the Authority's Investment Policy
- Operating funds interest income for September (on a cash basis) was \$129,807; Year-end totals \$1,972,782
- A detailed investment performance report is attached

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Cash Flow Summary (\$000's)

	Annual Budget Cash Basis	Actual Cash Oct. 1, 2017 - Sept. 30, 2018	Variance Favorable (Unfavorable)
OPERATING BUDGET			
Cash Provided			
Retail	\$493,865	\$498,394	\$4,529
Wholesale	76,028	81,022	4,994
Other	50,240	51,530	1,290
Total Cash Provided	620,133	630,946	10,813
Operating Cash Used			
Personnel Services	128,132	138,993	(10,861)
Contractual Services	79,353	73,404	5,949
Chemicals & Supplies	30,659	34,679	(4,020)
Utilities	29,399	23,414	5,985
Water Purchases	30,156	27,665	2,491
Small Equipment	1,071	606	465
Total Operating Cash Used	298,770	298,761	9
Defeasance D.S./Cash Financed Capital Construction	35,260	35,260	
Other Cash Used			
Debt Service	184,278	178,399	5,879
Payment In Lieu of Taxes/Right of Way	21,376	21,376	()
Total Other Cash Used	205,654	199,775	5,879
Total Cash Used	539,684	533,796	5,887
Net Cash Provided (Used) by Operating Act.	80,449	97,149	16,700
CAPITAL BUDGET			
Cash Provided			
Debt Proceeds	155,484	237,270	81,786
EPA Grants	23,620	25,332	1,712
CSO Grants	8,500	14,054	5,554
System Availability Fee	1,925	0	(1,925)
Transfer from Operations	101,317	35,260	(66,057)
Interest Income	1,549	1,730	181
Wholesale Capital Contributions	89,575	98,522	8,947
Total Cash Provided	381,970	447,427	65,457
Cash Used			
DC Water Capital Program	438,184	476,734	(38,550)
Washington Aqueduct Projects	11,768	13,194	(1,426)
Total Cash Used	449,952	489,928	(39,976)
Net Cash/PAYGO Provided (Used) by Cap. Act.	(\$67,982)	(\$77,761)	(\$9,779)
Beginning Balance, October 1 (Net of Rate Stab. Fund) Projected	\$147,212	\$147,212	
Plus (Less) Operating Surplus	80,449	97,149	
Wholesale Customer Refunds from Prior Years	(7,000)	8,987	
Interest Earned From Bond Reserve	339	227	
Prior Year Federal Billing Reconciliation	(9,019)	(9,019)	
Project Billing Refunds	(4,000)		
Cash Used for Capital	(67,981)	(77,761)	
Balance Attributable to O&M Reserve	\$140,000	\$166,796	
OTHER CASH RESERVES			
Rate Stabilization Fund	\$61,450		
DC Insurance Reserve	1,000		
Fleet Relocation - DC Reimbursement	4,331		

Monthly Financial Report

APPENDIX

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Operating Revenues Detail

(\$ in millions)

Revenue Category	FY 2018 Budget	Actual	Variance Favorable / (Unfavorable)		Actual % of Budget
Residential, Commercial, and Multi-family	\$354.9	\$353.6	(\$1.3)	-0.4%	99.6%
Federal	\$62.2	62.1	(0.1)	-0.1%	99.9%
District Government	\$17.3	21.4	4.1	23.4%	123.4%
DC Housing Authority	\$9.0	8.7	(0.3)	-3.1%	96.9%
Customer Metering Fee	\$10.8	11.8	1.0	9.0%	109.0%
Water System Replacement Fee (WSRF)	\$39.7	40.9	1.2	3.0%	103.0%
Wholesale	\$76.0	81.0	5.0	6.6%	106.6%
Right-of-Way Fee/PILOT	\$21.6	21.2	(0.4)	-1.7%	98.3%
Subtotal (before Other Revenues)	\$591.5	\$600.7	\$9.1	1.5%	101.6%
Other Revenue without RSF					
IMA Indirect Cost Reimb. For Capital Projects	4.5	4.5	0.0	0.0%	100.0%
DC Fire Protection Fee	10.8	10.8	0.0	0.0%	100.0%
Stormwater (MS4)	1.0	1.2	0.2	20.0%	120.0%
Interest	2.3	2.2	(0.1)	-4.3%	95.7%
Developer Fees (Water & Sewer)	6.0	8.5	2.5	41.7%	141.7%
System Availability Fee (SAF)	1.9	0.0	(1.9)	-100.0%	0.0%
Others	2.4	3.3	0.9	37.5%	137.5%
Subtotal	\$28.9	\$30.5	\$1.6	5.3%	105.3%
Rate Stabilization Fund Transfer	\$0.0	\$0.0	\$0.0	0.0%	0.0%
Other Revenue Subtotal	\$28.9	\$30.5	\$1.6	5.3%	105.3%
Grand Total	\$620.5	\$631.2	\$10.7	1.7%	101.7%

BREAKDOWN OF RETAIL RECEIPTS BY CUSTOMER CATEGORY
(\$ in 000's)

Customer Category	Water	Sewer	Clean Rivers			Total
			IAC	Metering Fee	WSRF	
Residential	\$28,812	\$45,445	\$34,877	\$5,250	\$9,404	\$123,789
Commercial	54,162	60,799	43,060	3,544	16,294	177,859
Multi-family	28,083	43,193	15,155	1,611	7,104	95,145
Federal	18,511	21,042	22,548	774	5,652	68,526
District Govt	4,666	6,313	10,383	425	1,947	23,734
DC Housing Authority	2,876	4,261	1,568	142	495	9,341
Total:	\$137,110	\$181,053	\$127,591	\$11,745	\$40,896	\$498,394

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

Clean Rivers IAC - Actual vs Budget
(\$ in 000's)

Customer Category	FY2018 Budget	Actual Received	Variance Favorable / <Unfavorable>	Variance % of YTD Budget	Actual % of Budget
Residential	\$32,563	\$34,877	\$2,314	7%	107%
Commercial	39,180	43,060	3,880	10%	110%
Multi-family	14,702	15,155	453	3%	103%
Federal	22,548	22,548	(0)	0%	100%
District Govt	9,190	10,383	1,193	13%	113%
DC Housing Authority	1,550	1,568	18	1%	101%
Total:	\$119,733	\$127,591	\$7,858	7%	107%

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Retail Accounts Receivable (Delinquent Accounts)

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

Greater Than 90 Days By Month

	\$ in millions	# of accounts
September 30, 2012	\$5.5	13,063
September 30, 2013	\$4.9	11,920
September 30, 2014	\$5.3	12,442
September 30, 2015	\$6.5	11,981
September 30, 2016	\$7.7	12,406
September 30, 2017	\$8.4	11,526
October 31, 2017	\$8.2	11,271
November 30, 2017	\$8.4	12,080
December 31, 2017	\$9.4	14,238
January 31, 2018	\$11.0	16,921
February 28, 2018	\$12.3	17,355
March 31, 2018	\$11.2	15,851
April 30, 2018	\$12.3	16,984
May 31, 2018	\$12.5	16,728
June 30, 2018	\$12.9	16,655
July 31, 2018	\$13.6	17,600
August 31, 2018	\$14.7	17,494
September 30, 2018	\$13.4	16,273

Notes: The increase in the accounts receivable over 90 days is due to the temporary suspension of collections procedures because of the new billing system VertexOne, which was implemented in December 2017.

Greater than 90 Days by Customer

	Number of Accounts			Month of September (All Categories)				Total Delinquent				
	W & S	Impervious Only	Total No. of	Active		Inactive		August		September		
				No. of	Amount	No. of	Amount	No. of	Amount	No. of	Amount	
a/c	a/c	a/c	a/c	(\$)	a/c	(\$)	a/c	(\$)	a/c	(\$)	%	
Commercial	9,028	2,497	11,525	1,202	\$3,937,993	141	\$88,915	1,468	\$4,231,433	1,343	\$4,026,908	30%
Multi-family	8,332	349	8,681	873	\$3,397,920	173	\$68,798	1,131	\$3,910,367	1,046	\$3,466,718	26%
Single-Family Residential	105,430	3,234	108,664	11,757	\$5,567,134	2,127	\$321,211	14,895	\$6,571,686	13,884	\$5,888,345	44%
Total	122,790	6,080	128,870	13,832	\$12,903,047	2,441	\$478,924	17,494	\$14,713,486	16,273	\$13,381,971	100%

Notes: Included in the above \$13.38M (or 16,273 accounts) of the DC Water Over 90 days delinquent accounts, \$4,320,906.81 (or 2,279 accounts) represents Impervious only accounts -Reportable delinquencies do not include balances associated with a long standing dispute between DC Water and a large commercial customer.

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Overtime by Department

Department	FY 2018			
	Budget	YTD Actual	YTD Actual % of Budget	% of Regular Pay
Office of the Board Secretary	\$8,000	\$10,277	128.5%	3.6%
General Manager	9,000	4,156	46.2%	0.2%
General Counsel	2,000	2,778	138.9%	0.2%
External Affairs	27,000	521	1.9%	0.0%
Internal Audit	-	-	0.0%	0.0%
Information Technology	15,000	8,136	54.2%	0.3%
Procurement	30,000	29,074	96.9%	0.9%
Customer Service*	260,000	585,282	225.1%	6.2%
Finance, Accounting & Budget	40,000	32,311	80.8%	0.6%
Assistant General Manager - Support Services	-	-	0.0%	0.0%
Human Capital Management	4,000	3,296	82.4%	0.1%
Occupational Safety and Health	1,000	814	81.4%	0.1%
Facilities Management	238,000	188,246	79.1%	5.2%
Department of Security	-	409	0.0%	0.1%
Wastewater Engineering	24,000	7,638	0.0%	0.6%
Water Quality and Technology	30,000	2,225	0.0%	0.1%
Distribution and Conveyance System **	541,000	925,901	171.1%	12.6%
Engineering and Technical Services	1,000,000	906,046	90.6%	5.9%
Water Services***	1,017,000	1,889,777	185.8%	14.6%
Clean Rivers	-	-	0.0%	0.0%
Sewer Services ****	900,000	1,663,613	184.8%	23.8%
Wastewater Treatment - Operations *****	1,463,300	1,670,048	114.1%	15.6%
Wastewater Treatment - Process Engineering	64,000	19,904	31.1%	0.6%
Maintenance Services	500,000	611,363	122.3%	8.2%
Permit Operations*****	2,000	27,886	1394.3%	1.8%
Fleet Management	3,000	1,974	65.8%	0.3%
Total DC WATER	\$6,178,300	\$8,591,675	139.1%	8.0%

* Increased overtime to support the on-going Automated Meter Reader (AMR) project

** Emergency repairs including shift coverage for operators at the Swirl Facility and PRV (Pressure Relief Valve) Monitoring at Bryant Street for Brentwood Reservoir main

breaks experienced during the winter season (Bomb Cyclone)

**** Sewer Services has experienced similar overtime resulting from emergency backups that are also caused by rain events. In addition, shift coverage is also a major contributor, particularly since crews are not regularly assigned to work on rotational shifts or weekends and are deployed on an on-call/emergency basis

***** OT was needed to address plant maintenance needs beyond what could be addressed within the normal work week

***** High spending due to additional staff time needed to process increase in permit applications to support development in the District

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Capital Disbursements Detail by Program (\$000's)

Service Areas	Budget	Actual			Variance		
	ANNUAL	Oct 2017 - Aug 2018	Sep 2018	YTD ACTUAL	ACTUAL % BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)
NON PROCESS FACILITIES							
Facility Land Use	\$32,194	\$33,498	\$2,029	\$35,527	110.4%	(\$3,332)	(10.4%)
Subtotal	32,194	33,498	2,029	35,527	110.4%	(3,332)	(10.4%)
WASTEWATER TREATMENT							
Liquid Processing	18,554	20,632	958	21,590	116.4%	(3,037)	(16.4%)
Plantwide	12,099	16,679	970	17,649	145.9%	(5,550)	(45.9%)
Solids Processing	11,229	8,416	236	8,652	77.1%	2,576	22.9%
Enhanced Nitrogen Removal Facilities	53,603	55,812	2,401	58,213	108.6%	(4,609)	(8.6%)
Subtotal	95,485	101,539	4,565	106,104	111.1%	(10,619)	(11.1%)
COMBINED SEWER OVERFLOW							
D.C. Clean Rivers	168,314	163,794	12,080	175,874	104.5%	(7,560)	(4.5%)
Program Management	1,934	3,189	280	3,469	179.4%	(1,535)	(79.4%)
Combined Sewer	11,568	8,886	65	8,951	77.4%	2,617	22.6%
Subtotal	181,816	175,869	12,425	188,294	103.6%	(6,477)	(3.6%)
STORMWATER							
Local Drainage	92	37	0	37	39.7%	56	60.3%
On-Going	375	663	28	691	184.2%	(316)	(84.2%)
Pumping Facilities	69	719	55	774	1129.6%	(706)	(1029.6%)
DDOT	0	0	0	0	0.0%	0	0.0%
Research and Program Management	314	370	34	405	128.8%	(90)	(28.8%)
Trunk/Force Sewers	95	81	0	81	85.9%	13	14.1%
Subtotal	945	1,870	118	1,988	210.4%	(1,043)	(110.4%)
SANITARY SEWER							
Collection Sewers	4,488	12,022	164	12,186	271.5%	(7,697)	(171.5%)
On-Going	10,001	13,700	183	13,884	138.8%	(3,883)	(38.8%)
Pumping Facilities	1,294	1,694	18	1,711	132.2%	(417)	(32.2%)
Program Management	2,999	2,366	129	2,495	83.2%	504	16.8%
Interceptor/Trunk Force Sewers	11,019	15,795	818	16,613	150.8%	(5,594)	(50.8%)
Subtotal	29,802	45,575	1,312	46,888	157.3%	(17,086)	(57.3%)
WATER							
Distribution Systems	28,353	27,509	499	28,008	98.8%	345	1.2%
Lead Program	3,422	5,167	444	5,610	164.0%	(2,189)	(64.0%)
On-Going	11,079	13,908	298	14,207	128.2%	(3,128)	(28.2%)
Pumping Facilities	3,286	3,220	121	3,341	101.7%	(55)	(1.7%)
DDOT	904	942	0	942	104.2%	(38)	(4.2%)
Storage Facilities	7,560	12,071	735	12,807	169.4%	(5,247)	(69.4%)
Program Management	3,441	4,064	27	4,091	118.9%	(650)	(18.9%)
Subtotal	58,044	66,881	2,124	69,006	118.9%	(10,961)	(18.9%)
Capital Projects	\$398,285	\$425,232	\$22,573	\$447,805	112.4%	(49,519)	(12.4%)
CAPITAL EQUIPMENT	39,898	27,888	1,042	28,929	72.5%	10,968	27.5%
WASHINGTON AQUEDUCT	11,768	7,952	5,242	13,194	112.1%	(1,426)	(12.1%)
Additional Capital Programs	51,665	35,840	6,284	42,123	81.5%	9,542	18.5%
Total	\$449,950	\$461,072	\$28,857	\$489,928	108.9%	(39,978)	(8.9%)

Monthly Financial Report

Fiscal Year-to-Date
As of September 30, 2018

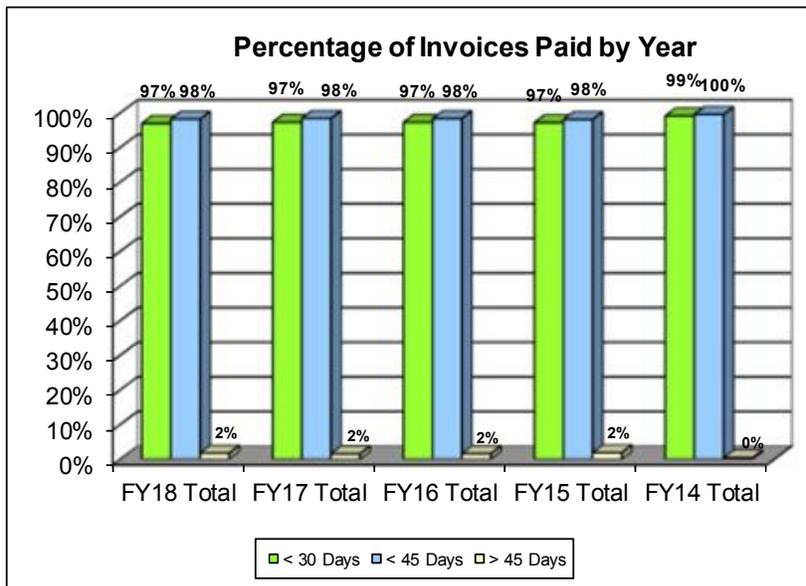
Accounts Payable

Cumulative performance for the twelve-month period ending September FY 2018, a total of 20,546 vendor payments were processed and paid within 30 days compared to 20,247 in FY 2017 (as shown in the table below) and with a dollar value of \$706.3 million compared to \$788.0 million for FY 2017.

At the end of FY 2018, approximately 96.9% of the invoices were paid within 30 days compared to 97.2% for FY 2017. The Authority’s goal is to pay 97% of all undisputed invoices within 30 days.

Accounts Payable Performance				
Days	FY 2018		FY 2017	
	Number	Percent	Number	Percent
Less than 30	20,546	96.9%	20,247	97.2%
Less than 45	20,816	98.2%	20,486	98.4%
Greater than 45	382	1.8%	341	1.6%
Sub-Total	21,198	100%	20,827	100%
Retainage/Dispute	300		198	
Total	21,498		21,025	

The chart below shows cumulative year to date historical performance for FY 2014 through FY 2018



Monthly Financial Report

Fiscal Year-to-Date
As of September 30, 2018

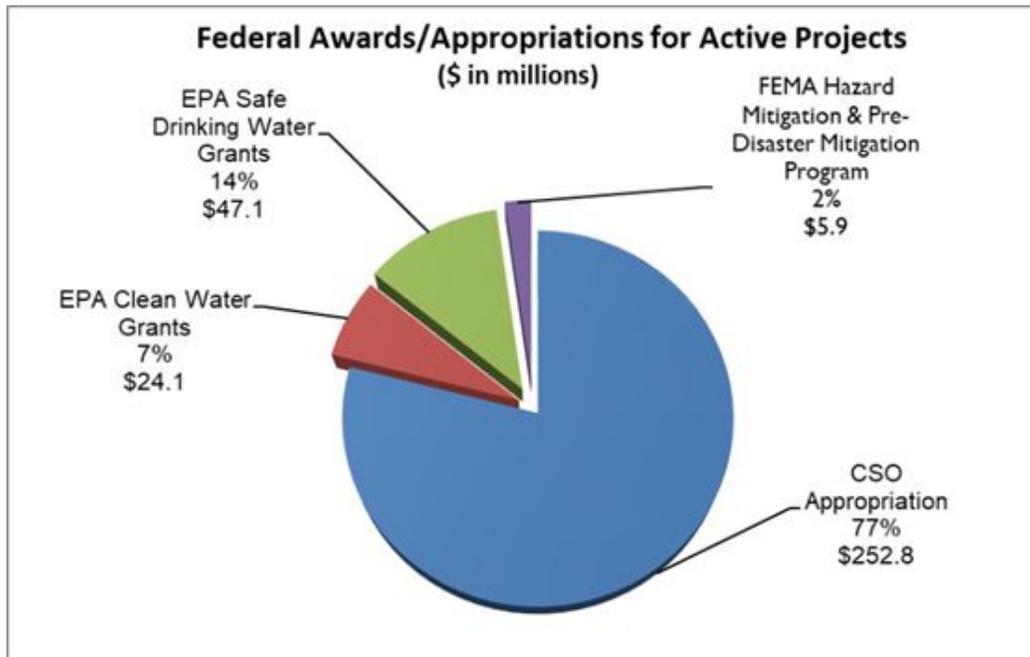
Grants Report

The Authority currently receives grants to fund portions of its capital project costs from the U.S. Environmental Protection Agency (EPA) and the Federal Emergency Management Agency (FEMA).

The EPA grants are issued under two acts, the Clean Water Act of 1972 and the Safe Drinking Water Act of 1974.

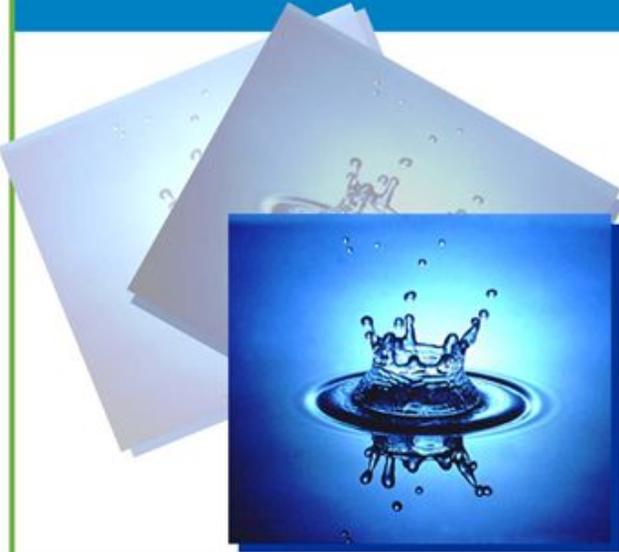
The FEMA mitigation grants are issued under the Robert T. Stafford Disaster Relief and Emergency Assistance Act through the Hazard Mitigation Grant Program (HMGP) Act of 1993 and the Pre-Disaster Mitigation Grant Program (PDM) Act of 2000.

As of September 30, 2018, DC Water has \$329.9 million in total federal funds for active projects, as indicated below:



The remaining balance of the EPA funding as of September 30, 2018 is \$26.1 million. FEMA grants have a balance of \$5.6 million as of September 30, 2018.

DC Water has received nineteen separate Congressional CSO appropriations totaling \$252.8 million plus accrued interest of \$12.4 million, resulting in total CSO funding of \$265.2 million. Of this amount, \$14.0 million appropriated for FY 2018 under Public Law 115-41 was received from the Treasury in May 2018. The cumulative CSO appropriation life-to-date cash disbursement is \$265.2 million, based on requested reimbursement through September 30, 2018. The remaining CSO balance as of September 30, 2018 is \$518 which represents interest earned on CSO funds through the month of September.



DC Water
Investment Performance Report – September 2018



dc water is life

Investment Performance Report – September 2018

**DC Water
Finance Division
Economic Update**

ECONOMIC COMMENTARY

- The third reading of second quarter GDP increased at an annual rate of 4.2%, remaining unchanged from the second estimate.
- During the month of September, the unemployment rate decreased to 3.7%, the lowest unemployment rate since December of 1969. The labor force participation rate remained unchanged at 62.7%. The U.S. labor market added 134,000 jobs in September, falling short of the 185,000 expectation.
- During the Federal Open Market Committee’s meeting on September 25-26, the Federal Reserve followed its plan to raise rates. The federal funds target rate increased from 2.00% to 2.25%.
- As of the beginning of October, the probability implied by market participants suggested a 77% likelihood that a 0.25% rate hike will occur at the Federal Open Market Committee’s (“FOMC’s”) meeting in December.
- The U.S. Treasury yield curve increased during the month of September. Yields at the short-term end of the curve experienced modest increases while yields at the long-term end of the curve experienced larger increases. The yield on the 3-year U.S. Treasury note increased from 2.71% to 2.90% during the month of September.

PORTFOLIO RECAP

- The portfolio is diversified among Bank Deposits, U.S. Treasuries, Federal Agencies, Supranational Bonds, Commercial Paper, Negotiable CDs, Corporate Notes/Bonds, Municipal Bonds, FDIC Insured CDs, and SEC registered money market funds.
- The overall yield-to-maturity on cost of the portfolio is 1.99%.

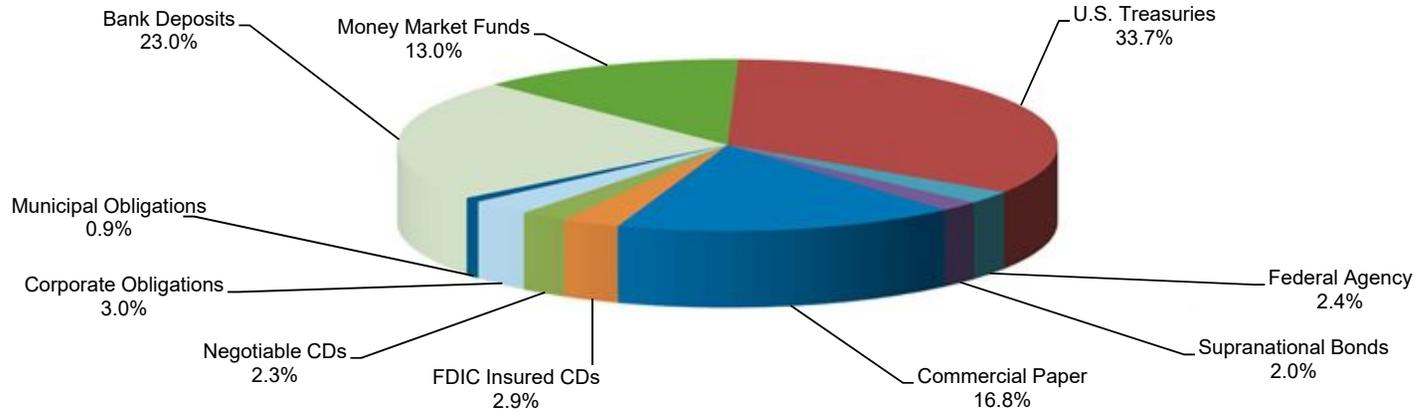
Operating Reserve

- PFM purchased \$4.5 million of 3-year U.S. Treasuries at a yield of 2.75%. We also purchased \$1.8 million of 2 to 3-year corporate notes at a weighted average yield of 3.08% and \$925,000 of federal agencies at 3.00%.
- PFM sold \$1.6 million of 8-month U.S. Treasuries, \$3.1 million of 4 to 11-month of corporate notes, \$1.8 million of 4-month negotiable CDs, and \$825,000 of federal agencies.



Investment Performance Report – September 2018

**DC Water
Finance Division
Investments - By Security Type
As of September 30, 2018**

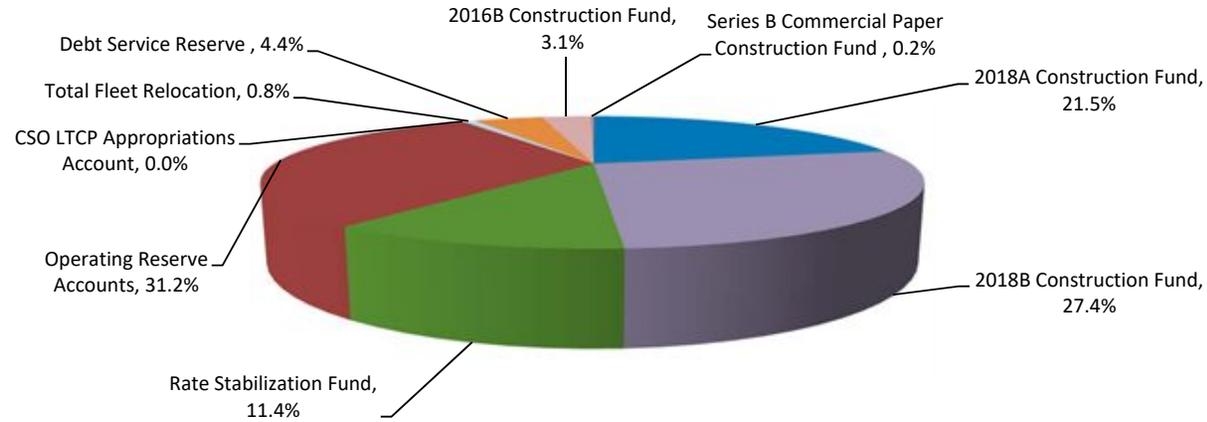


Security Type	Book Value + Accrued Interest	Asset Allocation	Permitted By Policy
Bank Deposits	124,331,965	23.0%	100.0%
Money Market Funds	70,373,686	13.0%	100.0%
U.S. Treasuries	181,900,386	33.7%	100.0%
Federal Agency	12,922,175	2.4%	80.0%
Supranational Bonds	10,617,946	2.0%	30.0%
Commercial Paper	90,472,594	16.8%	35.0%
FDIC Insured CDs	15,392,651	2.9%	30.0%
Negotiable CDs	12,535,230	2.3%	30.0%
Corporate Obligations	16,289,702	3.0%	30.0%
Municipal Obligations	4,772,796	0.9%	20.0%
Total	\$ 539,609,132	100.0%	



Investment Performance Report – September 2018

**DC Water
Finance Division
Investment Analysis – By Fund
As of September 30, 2018**



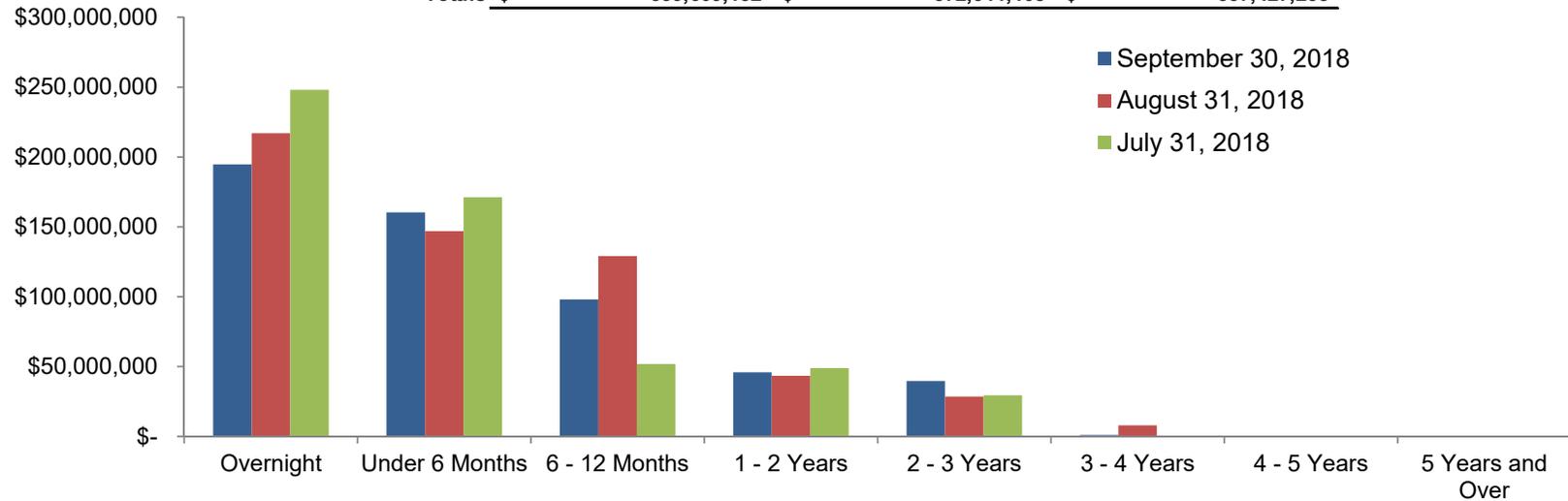
Fund Name	Book Value + Accrued Interest	Yield-to- Maturity at Cost	Effective Duration (years)	Weighted Average Maturity (days)
Rate Stabilization Fund	\$ 61,450,000	1.95%	0.00	1.0
Operating Reserve Accounts	\$ 168,294,275	1.55%	0.97	373.5
CSO LTCP Appropriations Account	\$ 518	1.74%	0.00	1.0
Fleet Relocation	\$ 4,331,000	0.90%	0.00	1.0
Debt Service Reserve	\$ 23,729,729	1.99%	0.95	361.2
Series B Commercial Paper Construction Fund	\$ 1,174,328	1.56%	0.00	1.0
2016B Construction Fund	\$ 16,941,210	1.94%	0.00	1.0
2018A Construction Fund	\$ 115,978,009	2.20%	0.18	65.0
2018B Construction Fund	\$ 147,710,062	2.36%	0.48	179.4
Total	\$ 539,609,132	1.99%	0.52	195.6



Investment Performance Report – September 2018

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

Maturity Distribution	September 30, 2018	August 31, 2018	July 31, 2018
Overnight \$	194,705,650.77 \$	217,026,752.47 \$	248,058,903.79
Under 6 Months	160,356,805.47	146,912,824.11	171,232,537.83
6 - 12 Months	98,066,531.49	129,136,564.82	51,867,579.41
1 - 2 Years	45,909,352.17	43,338,399.17	48,930,357.71
2 - 3 Years	39,635,960.10	28,551,704.26	29,410,340.17
3 - 4 Years	934,831.87	7,944,862.69	7,927,539.57
4 - 5 Years	-	-	-
5 Years and Over	-	-	-
Totals \$	\$ 539,609,132	\$ 572,911,108	\$ 557,427,258



Investment Performance Report – September 2018



DC Water
Finance Division
Investments – Issuer Allocation

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Bank Deposits					
TD Bank		124,331,964.88	23.0%	100.0%	Yes
Sub-Total Bank Deposits		124,331,964.88	23.0%	100.0%	Yes
Money Market Mutual Funds					
Wells Fargo Treasury Plus MMF	AAAm	69,095,455.20	12.8%	50.0%	Yes
Wells Fargo Government MMF	AAAm	103,902.26	0.0%	50.0%	Yes
First American Treasury	AAAm	1,174,328.43	0.2%	50.0%	Yes
Sub-Total Money Market Mutual Funds		70,373,685.89	13.0%	100.0%	Yes
U.S. Treasuries					
Treasury Note	AA+ / Aaa	181,900,385.95	33.7%	100.0%	Yes
Sub-Total Treasuries		181,900,385.95	33.7%	100.0%	Yes
Federal Agencies					
Fannie Mae	AA+ / Aaa	7,762,714.71	1.4%	40.0%	Yes
Federal Home Loan Bank	AA+ / Aaa	2,906,991.28	0.5%	40.0%	Yes
Freddie Mac	AA+ / Aaa	2,252,469.38	0.4%	40.0%	Yes
Sub-Total Federal Agencies		12,922,175.37	2.4%	80.0%	Yes
Supranational Bonds					
African Development Bank	AAA / Aaa	2,534,891.67	0.5%	5.0%	Yes
Asian Development Bank	AAA / Aaa	1,630,937.51	0.3%	5.0%	Yes
Inter-American Development Bank	AAA / Aaa	3,263,111.96	0.6%	5.0%	Yes
International Bank for Reconstruction and Development	AAA / Aaa	2,263,089.80	0.4%	5.0%	Yes
International Finance Corporation Note	AAA / Aaa	925,915.44	0.2%	5.0%	Yes
Sub-Total Supranational Bonds		10,617,946.38	2.0%	30.0%	Yes

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Investment Performance Report – September 2018



DC Water
Finance Division
Investments – Issuer Allocation

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Commercial Paper					
Bank of Montreal Chicago	A-1 / P-1	7,848,500.65	1.5%	5.0%	Yes
BNP Paribas NY Branch	A-1 / P-1	7,837,708.55	1.5%	5.0%	Yes
Canadian Imperial Holding	A-1 / P-1	4,377,507.42	0.8%	5.0%	Yes
Cooperatieve Radobank U.A.	A-1 / P-1	11,738,513.86	2.2%	5.0%	Yes
Credit Agricole CIB NY	A-1 / P-1	7,834,047.07	1.5%	5.0%	Yes
Dexia Credit Local SA NY	A-1+ / P-1	7,819,455.08	1.4%	5.0%	Yes
JP Morgan Securities LLC	A-1 / P-1	12,862,044.65	2.4%	5.0%	Yes
MUFG Bank Ltd. NY	A-1 / P-1	9,291,688.59	1.7%	5.0%	Yes
Natixis NY Branch	A-1 / P-1	7,841,133.27	1.5%	5.0%	Yes
Toyota Motor Credit Corporation	A-1+ / P-1	13,021,995.33	2.4%	5.0%	Yes
Sub-Total Commercial Paper		90,472,594.47	16.8%	35.0%	Yes
FDIC Insured Certificates of Deposit					
CDARS - Placed by Industrial Bank	NR / NR	15,392,651.32	2.9%	5.0%	Yes
Sub-Total FDIC-Insured Certificates of Deposit		15,392,651.32	2.9%	30.0%	Yes
Negotiable Certificates of Deposit					
Bank of Montreal Chicago	A+ / Aa2	929,835.95	0.2%	5.0%	Yes
Bank of Nova Scotia Houston	A+ / Aa2	933,724.29	0.2%	5.0%	Yes
Canadian Imperial Bank NY	A+ / A1	1,408,816.48	0.3%	5.0%	Yes
Goldman Sachs Bank USA	A+ / A1	1,405,335.56	0.3%	5.0%	Yes
Nordea Bank AB NY	AA- / Aa3	1,855,730.89	0.3%	5.0%	Yes
Royal Bank of Canada NY	AA- / Aa2	707,119.00	0.1%	5.0%	Yes
Skandinav Enskilda Banken NY	A-1 / P-1	1,855,371.06	0.3%	5.0%	Yes
Swedbank NY	AA- / Aa2	933,049.04	0.2%	5.0%	Yes
UBS AG Stamford CT	A+ / Aa2	1,603,480.00	0.3%	5.0%	Yes
Westpac Banking Corp NY	AA- / Aa3	902,767.50	0.2%	5.0%	Yes
Sub-Total Negotiable Certificates of Deposit		12,535,229.77	2.3%	30.0%	Yes

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Investment Performance Report – September 2018



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

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
Corporate Obligations					
3M Company	AA- / A1	339,795.23	0.1%	5.0%	Yes
Bank of Montreal	A+ / Aa2	476,331.67	0.1%	5.0%	Yes
Bank of New York Mellon	A / A1	925,413.38	0.2%	5.0%	Yes
Bank of Nova Scotia	A+ / A1	929,175.65	0.2%	5.0%	Yes
Coca-Cola	A+ / Aa3	384,918.66	0.1%	5.0%	Yes
Exxon Mobil	AA+ / Aaa	928,023.28	0.2%	5.0%	Yes
General Electric Capital	A / A2	446,444.53	0.1%	5.0%	Yes
Johnson & Johnson	AAA / Aaa	196,341.42	0.0%	5.0%	Yes
JP Morgan	A- / A3	934,831.87	0.2%	5.0%	Yes
Microsoft	AAA / Aaa	446,121.83	0.1%	5.0%	Yes
Pfizer Inc.	AA / A1	1,474,608.17	0.3%	5.0%	Yes
Procter & Gamble	AA- / Aa3	443,253.88	0.1%	5.0%	Yes
Royal Bank of Canada	AA- / A1	881,142.58	0.2%	5.0%	Yes
Toronto Dominion Bank NY	AA- / Aa1	1,859,668.60	0.3%	5.0%	Yes
Total Capital	A+ / Aa3	894,440.38	0.2%	5.0%	Yes
Toyota	AA- / Aa3	1,858,114.93	0.3%	5.0%	Yes
Wal-Mart Stores Inc.	AA / Aa2	1,944,887.94	0.4%	5.0%	Yes
Westpac Banking	AA- / Aa3	926,188.25	0.2%	5.0%	Yes
Sub-Total Corporate Obligations		16,289,702.25	3.0%	30.0%	Yes
Municipal Obligations					
California State	AA- / Aa3	1,088,069.95	0.2%	5.0%	Yes
Connecticut State	A / A1	987,263.70	0.2%	5.0%	Yes
Florida State	AA / Aa3	1,809,733.50	0.3%	5.0%	Yes
NYC Transitional Finance Authority	AAA / Aa1	544,410.00	0.1%	5.0%	Yes
University of California	AA / Aa2	343,318.44	0.1%	5.0%	Yes
Sub-Total Municipal Obligations		4,772,795.59	0.9%	20.0%	Yes
Grand Total		\$ 539,609,131.87	100.0%		

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Investment Performance Report – September 2018

**DC Water
Finance Division
Book Value Performance
As of September 30, 2018**

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

	Trailing 1 Months		Trailing 3 Months		Trailing 6 Months		Trailing 12 Months	Trailing 24 Months
	Periodic	Annualized	Periodic	Annualized	Periodic	Annualized		
Rate Stabilization Fund	0.17%	2.03%	0.45%	1.80%	0.76%	1.53%	1.02%	0.80%
Operating Reserve Accounts	0.07%	0.88%	0.37%	1.47%	0.63%	1.27%	1.25%	1.25%
Debt Service Reserve	0.16%	1.93%	0.43%	1.70%	0.82%	1.64%	1.36%	1.14%
2018A Construction Fund	0.18%	2.27%	0.55%	2.22%	n/a	n/a	n/a	n/a
2018B Construction Fund	0.22%	2.69%	0.56%	2.24%	n/a	n/a	n/a	n/a
Short-Term	0.17%	2.03%	0.47%	1.86%	0.85%	1.70%	1.40%	1.16%
Merrill Lynch 3-Month Treasury Index (Book Value) ¹	0.18%	2.19%	0.52%	2.08%	0.98%	1.97%	1.67%	1.23%
Core (1+ Years)	0.19%	2.29%	0.54%	2.17%	1.02%	2.05%	1.79%	1.59%
Merrill Lynch 1-3 Year Treasury Index (Book Value) ²	0.23%	2.84%	0.68%	2.72%	1.30%	2.60%	2.30%	1.84%

(1) The Merrill Lynch 3-Month Treasury Bill is an unmanaged index tracking the on-the-run Treasury Bill. The Index is produced and maintained by Merrill Lynch & Co. Performance for this index is shown on a book value basis.

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

Investment Performance Report – September 2018



DC Water
Finance Division
Portfolio Holdings by Fund

DESCRIPTION	CUSIP	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
Rate Stabilization Fund										
TD BANK BANK DEPOSIT		\$ 61,450,000		10/1/2018		1.95%	\$ 61,450,000	\$ 61,450,000	\$ 61,450,000	\$ 61,450,000.00
Operating Reserve Accounts										
TD BANK BANK DEPOSIT		\$ 57,550,447		10/1/2018		0.90%	\$ 57,550,447	\$ 57,550,447	\$ 57,550,447	
DC RESERVES TD BANK DEPOSIT		\$ 1,000,000		10/1/2018		1.91%	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	
WELLS FARGO GOVERNMENT MMF		103,902		10/1/2018		1.93%	103,902	103,902	103,902	
INDUSTRIAL BANK CDARS		5,035,026	0.500	10/11/2018	10/12/2017	0.50%	5,035,026	5,059,442	5,059,442	
INDUSTRIAL BANK CDARS		5,085,490	0.500	11/8/2018	11/9/2017	0.50%	5,085,490	5,108,201	5,108,201	
INDUSTRIAL BANK CDARS		2,614,746	1.000	1/17/2019	1/18/2018	1.00%	2,614,746	2,633,085	2,633,085	
INDUSTRIAL BANK CDARS		2,573,871	1.000	1/17/2019	1/18/2018	1.00%	2,573,871	2,591,923	2,591,923	
INTER-AMERICAN DEVELOPMENT BANK	458182DX7	1,260,000	1.000	5/13/2019	4/12/2016	1.10%	1,256,220	1,252,376	1,264,064	
FHLB GLOBAL NOTE	3130A8DB6	1,015,000	1.125	6/21/2019	6/3/2016	1.14%	1,014,574	1,007,856	1,018,069	
FL ST BOARD ADMIN FIN CORP TXBL REV BD	341271AA2	1,800,000	2.163	7/1/2019	3/8/2016	2.16%	1,800,000	1,803,614	1,809,734	
FHLMC REFERENCE NOTE	3137EAEB1	2,250,000	0.875	7/19/2019	7/20/2016	0.96%	2,244,555	2,224,337	2,252,469	
SKANDINAV ENSKILDA BANKEN NY CD	83050FXT3	1,850,000	1.840	8/2/2019	8/4/2017	1.85%	1,849,279	1,843,685	1,855,371	
GOLDMAN SACHS BANK USA CERT DEPOS	40054PAE5	1,400,000	2.800	8/5/2019	8/13/2018	2.80%	1,400,000	1,405,660	1,405,336	
CT ST TXBL GO BONDS	20772J3D2	985,000	1.300	8/15/2019	8/17/2016	1.23%	987,128	969,192	987,264	
FNMA NOTES	3135G0P49	1,450,000	1.000	8/28/2019	9/2/2016	1.05%	1,447,738	1,430,430	1,450,634	
FNMA NOTES	3135G0P49	1,975,000	1.000	8/28/2019	10/5/2016	1.02%	1,973,815	1,948,345	1,976,436	
AFRICAN DEVELOPMENT BANK NOTE	00828EBQ1	700,000	1.125	9/20/2019	9/20/2016	1.16%	699,258	689,419	699,998	
WAL-MART STORES INC CORP NOTE	931142DY6	430,000	1.750	10/9/2019	10/20/2017	1.75%	429,991	429,715	433,590	
THE PROCTER & GAMBLE CO CORP NOTES	742718EZ8	440,000	1.750	10/25/2019	10/25/2017	1.77%	439,846	438,791	443,254	
US TREASURY NOTES	912828G61	2,325,000	1.500	11/30/2019	12/5/2016	1.45%	2,328,633	2,304,842	2,338,155	
PFIZER INC CORP NOTE	717081EB5	595,000	1.700	12/15/2019	11/21/2016	1.72%	594,572	589,967	597,806	
PFIZER INC CORP NOTE	717081EB5	300,000	1.700	12/15/2019	11/21/2016	1.73%	299,775	297,462	301,411	
ASIAN DEVELOPMENT BANK NOTE	045167DT7	925,000	1.750	1/10/2020	1/12/2017	1.77%	924,464	916,380	928,410	
US TREASURY NOTES	912828H52	3,475,000	1.250	1/31/2020	1/5/2017	1.52%	3,447,309	3,414,990	3,470,161	
MICROSOFT CORP NOTES	594918BV5	445,000	1.850	2/6/2020	2/6/2017	1.87%	444,702	440,860	446,122	
NORDEA BANK AB NY CD	65590ASN7	1,850,000	2.720	2/20/2020	2/22/2018	2.72%	1,850,000	1,848,089	1,855,731	
FNMA NOTES	3135G0T29	1,150,000	1.500	2/28/2020	2/28/2017	1.52%	1,149,264	1,131,914	1,151,232	
US TREASURY NOTES	912828J50	725,000	1.375	2/29/2020	2/3/2017	1.58%	720,610	712,034	723,806	
US TREASURY NOTES	912828J50	2,900,000	1.375	2/29/2020	9/1/2017	1.38%	2,899,887	2,848,135	2,903,350	
UBS AG STAMFORD CT LT CD	90275DHG8	1,600,000	2.900	3/2/2020	3/6/2018	2.93%	1,600,000	1,607,310	1,603,480	
EXXON MOBIL (CALLABLE) CORP NOTE	30231GAG7	925,000	1.912	3/6/2020	4/28/2017	1.77%	928,635	915,138	928,023	
WESTPAC BANKING CORP NOTES	961214DJ9	925,000	2.150	3/6/2020	3/6/2017	2.16%	924,602	914,533	926,188	
AFRICAN DEVELOPMENT BANK NOTE	00828ECA5	1,035,000	1.875	3/16/2020	3/16/2017	1.93%	1,033,468	1,021,049	1,035,053	
CANADIAN IMP BK COMM NY FLT CERT DEPOS	13606BVF0	1,400,000	2.731	4/10/2020	4/10/2018	2.78%	1,400,000	1,412,354	1,408,816	
TOYOTA MOTOR CREDIT CORP	89236TDU6	630,000	1.950	4/17/2020	4/17/2017	1.97%	629,710	626,082	635,445	
TOYOTA MOTOR CREDIT CORP	89236TDU6	295,000	1.950	4/17/2020	4/17/2017	1.94%	295,089	293,165	297,667	
US TREASURY NOTES	912828K58	2,750,000	1.375	4/30/2020	4/5/2017	1.53%	2,737,646	2,706,204	2,759,391	
US TREASURY NOTES	912828K58	1,575,000	1.375	4/30/2020	4/10/2017	1.55%	1,566,879	1,549,917	1,579,814	
NYC TRANS FIN AUTH, NY TXBL REV BONDS	64971W5W6	540,000	1.960	5/1/2020	6/29/2017	1.96%	540,000	536,089	544,410	
US TREASURY NOTES	912828VF4	1,650,000	1.375	5/31/2020	5/23/2018	2.58%	1,611,070	1,619,661	1,625,458	
BANK OF NOVA SCOTIA HOUSTON CD	06417GU22	925,000	3.080	6/5/2020	6/7/2018	3.10%	924,649	938,489	933,724	
WAL-MART STORES INC CORP NOTES	931142EG4	925,000	2.850	6/23/2020	6/27/2018	2.87%	924,713	932,197	931,633	
TOTAL CAPITAL SA CORP NOTES	89152UAD4	850,000	4.450	6/24/2020	4/10/2017	2.07%	912,492	881,006	894,440	
US TREASURY NOTES	912828XH8	1,825,000	1.625	6/30/2020	6/16/2017	1.51%	1,830,988	1,795,852	1,835,973	
US TREASURY NOTES	912828XH8	3,650,000	1.625	6/30/2020	6/28/2017	1.50%	3,663,117	3,591,705	3,672,685	

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Investment Performance Report – September 2018



DC Water
Finance Division
Portfolio Holdings by Fund

DESCRIPTION	CUSIP	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
Operating Reserve Accounts										
BANK OF NOVA SCOTIA HOUSTON CORP BOND	064159JX5	925,000	2.150	7/14/2020	7/14/2017	2.15%	924,871	913,786	929,176	
FNMA NOTES	3135G0T60	1,850,000	1.500	7/30/2020	9/1/2017	1.49%	1,850,481	1,812,596	1,855,011	
US TREASURY NOTES	912828XM7	825,000	1.625	7/31/2020	7/7/2017	1.60%	825,516	809,792	827,571	
BANK OF MONTREAL CHICAGO CERT DEPOS	06370REU9	925,000	3.190	8/3/2020	8/3/2018	3.23%	925,000	928,649	929,836	
WESTPAC BANKING CORP NY CD	96121T4A3	900,000	2.050	8/3/2020	8/7/2017	2.05%	900,000	889,849	902,768	
INTL BANK OF RECONSTRUCTION AND DEV NOTE	45905UP32	925,000	1.561	9/12/2020	9/19/2017	1.64%	922,780	901,465	924,299	
GENERAL ELECTRIC CAPITAL CORP CORP NOTE	36962G4R2	425,000	4.375	9/16/2020	8/31/2017	1.84%	456,790	434,969	446,445	
TORONTO-DOMINION BANK	89114QC71	925,000	3.150	9/17/2020	9/17/2018	3.16%	924,806	927,188	925,943	
FHLB NOTES	3130ACE26	965,000	1.375	9/28/2020	9/8/2017	1.48%	961,902	937,941	963,074	
US TREASURY NOTES	912828L99	250,000	1.375	10/31/2020	10/17/2017	1.71%	247,539	244,085	249,739	
INTER-AMERICAN DEVELOPMENT BANK	4581XDCD8	915,000	2.125	11/9/2020	10/10/2017	1.81%	923,481	907,686	928,520	
JOHNSON & JOHNSON CORP NOTE	478160CH5	195,000	1.950	11/10/2020	11/10/2017	1.99%	194,791	192,548	196,341	
COCA-COLA CO/THE GLOBAL NOTES	191216AR1	370,000	3.150	11/15/2020	9/12/2017	1.78%	385,584	375,483	384,919	
SWEDBANK (NEW YORK) CERT DEPOS	87019UD66	925,000	2.270	11/16/2020	11/17/2017	2.30%	925,000	914,844	933,049	
US TREASURY NOTES	912828M98	3,000,000	1.625	11/30/2020	11/3/2017	1.77%	2,986,992	2,939,859	3,007,164	
US TREASURY NOTES	912828N48	1,975,000	1.750	12/31/2020	12/5/2017	1.91%	1,965,588	1,936,828	1,976,802	
US TREASURY NOTES	912828N48	975,000	1.750	12/31/2020	12/6/2017	1.96%	968,830	956,156	974,761	
ASIAN DEVELOPMENT BANK NOTE	045167EF6	700,000	2.250	1/20/2021	1/19/2018	2.29%	699,251	692,040	702,527	
US TREASURY NOTES	912828N89	1,750,000	1.375	1/31/2021	1/4/2018	2.05%	1,715,000	1,695,744	1,727,315	
US TREASURY NOTES	912828N89	800,000	1.375	1/31/2021	1/4/2018	2.08%	783,188	775,197	789,007	
US TREASURY N/B	912828P87	1,100,000	1.125	2/28/2021	2/16/2018	2.42%	1,058,707	1,056,759	1,067,956	
INTERNATIONAL FINANCE CORPORATION NOTE	45950VLQ7	925,000	2.635	3/9/2021	3/16/2018	2.66%	924,306	918,128	925,915	
AFRICAN DEVELOPMENT BANK NOTE	00828EC20	800,000	2.625	3/22/2021	3/22/2018	2.66%	799,176	793,295	799,841	
CA ST TXBL GO BONDS	13063DGA0	1,075,000	2.800	4/1/2021	4/25/2018	2.80%	1,075,043	1,084,474	1,088,070	
TOYOTA MOTOR CREDIT CORP	89236TCZ6	475,000	1.900	4/8/2021	3/6/2018	2.82%	462,223	464,494	468,837	
BANK OF MONTREAL CHICAGO CORP NOTES	06367T4W7	470,000	3.100	4/13/2021	4/13/2018	3.14%	469,450	474,923	476,332	
TOYOTA MOTOR CREDIT CORP NOTES	89236TEU5	290,000	2.950	4/13/2021	4/13/2018	2.96%	289,884	292,663	293,894	
TOYOTA MOTOR CREDIT CORP NOTES	89236TEU5	160,000	2.950	4/13/2021	4/13/2018	2.93%	160,082	161,469	162,272	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406FAA1	515,000	2.500	4/15/2021	2/16/2018	2.93%	508,300	511,606	515,521	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406FAA1	410,000	2.500	4/15/2021	2/16/2018	2.99%	404,022	407,298	409,893	
INTER-AMERICAN DEVELOPMENT BANK NOTE	4581X0DB1	1,060,000	2.625	4/19/2021	4/19/2018	2.70%	1,057,668	1,062,891	1,070,527	
ROYAL BANK OF CANADA CORP NOTES	78013XKG2	870,000	3.200	4/30/2021	4/30/2018	3.23%	869,382	880,075	881,143	
UNIV OF CAL TXBL REV BONDS	91412HBH5	340,000	3.029	5/15/2021	6/5/2018	3.03%	340,000	343,271	343,318	
US TREASURY NOTES	912828WN6	975,000	2.000	5/31/2021	6/6/2018	2.62%	957,671	959,768	966,022	
ROYAL BANK OF CANADA NY CD	78012JEE1	700,000	3.240	6/7/2021	6/8/2018	3.24%	700,000	710,888	707,119	
TORONTO DOMINION BANK CORP NOTES	89114QB20	925,000	3.250	6/11/2021	6/12/2018	3.27%	924,584	933,802	933,726	
FANNIE MAE NOTES	3135G0U35	1,320,000	2.750	6/22/2021	6/25/2018	2.76%	1,319,696	1,323,306	1,329,402	
WAL-MART STORES INC CORP NOTES	931142EJ8	575,000	3.125	6/23/2021	6/27/2018	3.13%	574,971	580,845	579,665	
INTL BANK OF RECONSTRUCTION AND DEV NOTE	45905BGH0	1,335,000	2.750	7/23/2021	7/25/2018	2.83%	1,331,876	1,333,488	1,338,791	
US TREASURY NOTES	9128284W7	3,500,000	2.750	8/15/2021	9/7/2018	2.72%	3,502,871	3,499,304	3,515,101	
US TREASURY NOTES	9128284W7	1,100,000	2.750	8/15/2021	9/28/2018	2.91%	1,095,316	1,099,781	1,099,193	
3M COMPANY	88579YBA8	340,000	3.000	9/14/2021	9/14/2018	3.07%	339,303	339,904	339,795	
PFIZER INC CORP NOTE	717081EM1	575,000	3.000	9/15/2021	9/7/2018	3.05%	574,224	576,022	575,391	
FEDERAL HOME LOAN BANKS NOTES (CALLABLE)	3130AEXV7	925,000	3.000	9/20/2021	9/20/2018	3.00%	925,000	923,773	925,848	
JPMORGAN CHASE & CO CORP NOTES	46647PAS5	925,000	3.514	6/18/2022	6/26/2018	3.50%	925,564	935,260	934,832	
									\$	168,294,274.70

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Investment Performance Report – September 2018



DC Water
Finance Division
Portfolio Holdings by Fund

DESCRIPTION	CUSIP	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
Debt Service Reserve										
WELLS FARGO TREASURY PLUS MMF		\$ 11,607,391		10/1/2018		1.94%	\$ 11,607,391	\$ 11,607,391	\$ 11,607,391	
US TREASURY N/B	912828W97	5,175,000	1.250	3/31/2019	10/10/2017	1.45%	5,160,041	5,144,857	5,170,093	
US TREASURY NOTES	912828F21	7,025,000	2.125	9/30/2021	4/2/2018	2.49%	6,940,206	6,871,738	6,952,245	
										\$ 23,729,729.08
CSO LTCP Appropriations Account										
TD BANK BANK DEPOSIT		\$ 518		10/1/2018		1.91%	\$ 518	\$ 518	\$ 518	
										\$ 518.26
Fleet Relocation Account										
TD BANK BANK DEPOSIT		\$ 4,331,000		10/1/2018		1.91%	\$ 4,331,000	\$ 4,331,000	\$ 4,331,000	
										\$ 4,331,000.00
Series B Commercial Paper Construction Fund										
COMMERCIAL PAPER		\$ 1,174,328		10/1/2018		1.56%	\$ 1,174,328	\$ 1,174,328	\$ 1,174,328	
										\$ 1,174,328.43
2016B Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 16,941,210		10/1/2018		1.94%	\$ 16,941,210	\$ 16,941,210	\$ 16,941,210	
										\$ 16,941,209.80
2017A Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ -		10/1/2018		1.94%	\$ -	\$ -	\$ -	
										\$ -
2017B Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ -		10/1/2018		1.94%	\$ -	\$ -	\$ -	
										\$ -
2018A Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 20,046,077		10/1/2018		1.94%	\$ 20,046,077	\$ 20,046,077	\$ 20,046,077	
BANK OF MONTREAL CHICAGO COMM PAPER	06366HK48	3,450,000	-	10/4/2018	6/6/2018	2.31%	3,423,642	3,448,730.40	3,449,341	
US TREASURY NOTES	912828T83	29,380,000	0.750	10/31/2018	6/7/2018	2.09%	29,225,066	29,440,980.74	29,440,376	
CREDIT AGRICOLE CIB NY COMM PAPER	22533UL19	3,450,000	-	11/1/2018	6/7/2018	2.38%	3,416,754	3,442,982.70	3,442,989	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HL10	3,450,000	-	11/1/2018	6/7/2018	2.35%	3,417,176	3,442,851.60	3,443,078	
COOPERATIVE RABOBANK U.A. COMM PAPER	21687BLW9	3,375,000	-	11/30/2018	6/8/2018	2.34%	3,337,102	3,361,824.00	3,362,006	
US TREASURY N/B	912828U40	14,590,000	1.000	11/30/2018	6/7/2018	2.13%	14,511,351	14,611,208.84	14,612,220	
NATIXIS NY BRANCH COMM PAPER	63873KLW5	3,500,000	-	11/30/2018	7/5/2018	2.38%	3,466,042	3,486,360.50	3,486,233	
US TREASURY NOTES	912828A34	7,370,000	1.250	11/30/2018	8/28/2018	2.10%	7,353,878	7,389,897.67	7,390,669	
MUFG BANK LTD/NY COMM PAPER	62479MM34	3,450,000	-	12/3/2018	6/7/2018	2.45%	3,408,487	3,435,579.00	3,435,389	
DEXA CREDIT LOCAL SA NY COMM PAPER	25214PH1	3,500,000	-	2/26/2019	6/7/2018	2.53%	3,436,347	3,464,429.50	3,464,316	
JP MORGAN SECURITIES LLC COMM PAPER	46640QQ12	5,750,000	-	3/1/2019	6/7/2018	2.58%	5,642,106	5,688,728.00	5,688,981	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HQ15	2,300,000	-	3/1/2019	6/7/2018	2.52%	2,257,866	2,275,815.50	2,276,171	
BNP PARIBAS NY BRANCH COMM PAPER	09659CQ19	3,500,000	-	3/1/2019	6/7/2018	2.48%	3,436,662	3,463,288.50	3,464,179	
COOPERATIVE RABOBANK U.A. COMM PAPER	21687BQ12	2,380,000	-	3/1/2019	6/8/2018	2.44%	2,337,795	2,354,576.84	2,356,041	
UNITED STATES TREASURY NOTES	912828XS4	4,795,000	1.250	5/31/2019	6/7/2018	2.34%	4,744,802	4,775,435.54	4,781,073	
US TREASURY NOTES	912828D80	1,850,000	1.625	8/31/2019	8/28/2018	2.45%	1,834,896	1,835,735.71	1,838,868	
										\$ 115,978,009.33

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Investment Performance Report – September 2018



DC Water
Finance Division
Portfolio Holdings by Fund

DESCRIPTION	CUSIP	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
2018B Construction Fund										
WELLS FARGO TREASURY PLUS MMF		\$ 20,500,777		10/1/2018		1.94%	\$ 20,500,777	\$ 20,500,777	\$ 20,500,777	
BANK OF MONTREAL CHICAGO COMM PAPER	06366HK48	4,400,000	-	10/4/2018	6/6/2018	2.31%	4,366,384	4,398,381	4,399,160	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HKS2	4,350,000	-	10/26/2018	6/7/2018	2.35%	4,310,303	4,342,601	4,342,961	
CREDIT AGRICOLE CIB NY COMM PAPER	22533JL19	4,400,000	-	11/1/2018	6/7/2018	2.38%	4,357,599	4,391,050	4,391,058	
MUFG BANK LTD/NY COMM PAPER	62479MM34	4,400,000	-	12/3/2018	6/7/2018	2.45%	4,347,056	4,381,608	4,381,366	
CANADIAN IMPERIAL HOLDING COMM PAPER	13607FMH6	4,400,000	-	12/17/2018	6/7/2018	2.42%	4,343,623	4,377,578	4,377,507	
COOPERATIEVE RABOBANK U.A. COMM PAPER	21687BMT5	6,055,000	-	12/27/2018	6/8/2018	2.39%	5,974,818	6,019,730	6,020,466	
BNP PARIBAS NY BRANCH COMM PAPER	09659CMX3	4,400,000	-	12/31/2018	6/7/2018	2.41%	4,339,786	4,373,516	4,373,529	
DEXIA CREDIT LOCAL SA NY COMM PAPER	25214PHP1	4,400,000	-	2/26/2019	6/7/2018	2.53%	4,319,979	4,355,283	4,355,140	
NATIXIS NY BRANCH COMM PAPER	63873KPU5	4,400,000	-	2/28/2019	8/28/2018	2.49%	4,344,677	4,353,589	4,354,900	
US TREASURY NOTES	912828C24	830,000	1.500	2/28/2019	8/31/2018	2.27%	826,855	828,083	828,460	
JP MORGAN SECURITIES LLC COMM PAPER	46640QQ12	7,250,000	-	3/1/2019	6/7/2018	2.58%	7,113,960	7,172,744	7,173,063	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HQ15	1,500,000	-	3/1/2019	6/7/2018	2.52%	1,472,521	1,484,228	1,484,460	
MUFG BANK LTD/NY COMM PAPER	62479MSQ7	1,500,000	-	5/24/2019	8/28/2018	2.61%	1,471,307	1,473,810	1,474,933	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HSQ8	1,500,000	-	5/24/2019	8/28/2018	2.57%	1,471,755	1,474,148	1,475,325	
UNITED STATES TREASURY NOTES	912828XS4	27,200,000	1.250	5/31/2019	8/28/2018	2.37%	26,972,625	27,089,019	27,114,692	
US TREASURY NOTES	912828WS5	14,000,000	1.625	6/30/2019	8/31/2018	2.40%	13,911,406	13,963,427	13,977,844	
US TREASURY NOTES	912828K5	4,660,000	1.375	7/31/2019	8/28/2018	2.42%	4,615,766	4,624,740	4,630,961	
US TREASURY NOTES	912828D80	28,225,000	1.625	8/31/2019	8/31/2018	2.46%	27,994,569	28,007,373	28,053,459	
										\$ 147,710,062.27
							\$ 537,721,377.60	\$ 538,287,268.55	\$ 539,609,131.87	\$ 539,609,131.87

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Investment Performance Report – September 2018



DC Water
Finance Division
Security Purchases
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Reserve Accounts							
13606BVF0	CANADIAN IMP BK COMM NY FLT CERT DEPOS	1,400,000.00	2.73	4/10/2020	4/10/2018	2.82	1,400,000.00
06367T4W7	BANK OF MONTREAL CHICAGO CORP NOTES	470,000.00	3.10	4/13/2021	4/13/2018	3.14	469,450.10
89236TEU5	TOYOTA MOTOR CREDIT CORP NOTES	290,000.00	2.95	4/13/2021	4/13/2018	2.96	289,884.00
89236TEU5	TOYOTA MOTOR CREDIT CORP NOTES	160,000.00	2.95	4/13/2021	4/13/2018	2.93	160,081.60
4581X0DB1	INTER-AMERICAN DEVELOPMENT BANK NOTE	1,060,000.00	2.63	4/19/2021	4/19/2018	2.70	1,057,668.00
13063DGA0	CA ST TXBL GO BONDS	1,075,000.00	2.80	4/1/2021	4/25/2018	2.80	1,075,043.00
78013XKG2	ROYAL BANK OF CANADA CORP NOTES	870,000.00	3.20	4/30/2021	4/30/2018	3.23	869,382.30
912828VF4	US TREASURY NOTES	1,650,000.00	1.38	5/31/2020	5/23/2018	2.58	1,621,915.43
91412HBH5	UNIV OF CAL TXBL REV BONDS	340,000.00	3.03	5/15/2021	6/5/2018	3.03	340,000.00
912828WN6	US TREASURY NOTES	3,250,000.00	2.00	5/31/2021	6/6/2018	2.62	3,193,301.90
06417GU22	BANK OF NOVA SCOTIA HOUSTON CD	925,000.00	3.08	6/5/2020	6/7/2018	3.10	924,648.50
78012UEE1	ROYAL BANK OF CANADA NY CD	700,000.00	3.24	6/7/2021	6/8/2018	3.24	700,000.00
89114QBZ0	TORONTO DOMINION BANK CORP NOTES	925,000.00	3.25	6/11/2021	6/12/2018	3.27	924,583.75
3135G0U35	FANNIE MAE NOTES	1,320,000.00	2.75	6/22/2021	6/25/2018	2.76	1,319,696.40
46647PAS5	JPMORGAN CHASE & CO CORP NOTES	925,000.00	3.51	6/18/2022	6/26/2018	3.50	926,286.57
931142EG4	WAL-MART STORES INC CORP NOTES	925,000.00	2.85	6/23/2020	6/27/2018	2.87	924,713.25
931142EJ8	WAL-MART STORES INC CORP NOTES	575,000.00	3.13	6/23/2021	6/27/2018	3.13	574,971.25
459058GH0	INTL BANK OF RECONSTRUCTION AND DEV NOTE	1,335,000.00	2.75	7/23/2021	7/25/2018	2.83	1,331,876.10
06370REU9	BANK OF MONTREAL CHICAGO CERT DEPOS	925,000.00	3.19	8/3/2020	8/3/2018	3.20	925,000.00
40054PAE5	GOLDMAN SACHS BANK USA CERT DEPOS	1,400,000.00	2.80	8/5/2019	8/13/2018	2.84	1,400,000.00
717081EM1	PFIZER INC CORP NOTE	575,000.00	3.00	9/15/2021	9/7/2018	3.05	574,223.75
9128284W7	US TREASURY NOTES	3,500,000.00	2.75	8/15/2021	9/7/2018	2.72	3,508,886.72
88579YBA8	3M COMPANY	340,000.00	3.00	9/14/2021	9/14/2018	3.07	339,303.00
89114QC71	TORONTO-DOMINION BANK	925,000.00	3.15	9/17/2020	9/17/2018	3.16	924,805.75
3130AEXV7	FEDERAL HOME LOAN BANKS NOTES (CALLABLE)	925,000.00	3.00	9/20/2021	9/20/2018	3.00	925,000.00
9128284W7	US TREASURY NOTES	1,100,000.00	2.75	8/15/2021	9/28/2018	2.91	1,098,933.26
Total Debt Service Reserve							
912828F21	US TREASURY NOTES	7,025,000.00	2.125	9/30/2021	4/2/2018	2.488	6,941,021.79

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



Investment Performance Report – September 2018

DC Water
Finance Division
Security Purchases
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
2018A Construction Fund							
06366HK48	BANK OF MONTREAL CHICAGO COMM PAPER	3,450,000.00	0.000	10/4/2018	6/6/2018	2.342	3,423,642.00
912828T83	US TREASURY NOTES	29,380,000.00	0.750	10/31/2018	6/7/2018	2.089	29,247,819.94
912828U40	US TREASURY N/B	18,065,000.00	1.000	11/30/2018	6/7/2018	2.132	17,971,073.41
912828XS4	UNITED STATES TREASURY NOTES	4,795,000.00	1.250	5/31/2019	6/7/2018	2.336	4,745,948.69
22533UL19	CREDIT AGRICOLE CIB NY COMM PAPER	3,450,000.00	0.000	11/1/2018	6/7/2018	2.416	3,416,753.50
25214PHP1	DEXIA CREDIT LOCAL SA NY COMM PAPER	3,500,000.00	0.000	2/26/2019	6/7/2018	2.551	3,436,346.67
46640QQ12	JP MORGAN SECURITIES LLC COMM PAPER	5,750,000.00	0.000	3/1/2019	6/7/2018	2.604	5,642,106.04
62479MM34	MUFG BANK LTD/NY COMM PAPER	3,450,000.00	0.000	12/3/2018	6/7/2018	2.484	3,408,486.92
89233HL10	TOYOTA MOTOR CREDIT CORP COMM PAPER	3,450,000.00	0.000	11/1/2018	6/7/2018	2.385	3,417,176.13
89233HQ15	TOYOTA MOTOR CREDIT CORP COMM PAPER	2,300,000.00	0.000	3/1/2019	6/7/2018	2.541	2,257,865.92
09659CQ19	BNP PARIBAS NY BRANCH COMM PAPER	3,500,000.00	0.000	3/1/2019	6/7/2018	2.510	3,436,661.67
21687BLW9	COOPERATIEVE RABOBANK U.A. COMM PAPER	3,375,000.00	0.000	11/30/2018	6/8/2018	2.369	3,337,101.56
21687BQ12	COOPERATIEVE RABOBANK U.A. COMM PAPER	2,380,000.00	0.000	3/1/2019	6/8/2018	2.468	2,337,794.67
63873KLW5	NATIXIS NY BRANCH COMM PAPER	3,500,000.00	0.000	11/30/2018	7/5/2018	2.416	3,466,042.22
912828A34	US TREASURY NOTES	7,370,000.00	1.250	11/30/2018	8/28/2018	2.100	7,376,280.11
912828D80	US TREASURY NOTES	1,850,000.00	1.625	8/31/2019	8/28/2018	2.450	1,849,682.66
2018B Construction Fund							
06366HK48	BANK OF MONTREAL CHICAGO COMM PAPER	4,400,000.00	0.000	10/4/2018	6/6/2018	2.342	4,366,384.00
912828S68	US TREASURY N/B	9,920,000.00	0.750	7/31/2018	6/7/2018	1.874	9,929,439.16
912828RE2	US TREASURY NOTES	44,620,000.00	1.500	8/31/2018	6/7/2018	1.968	44,751,253.13
13607FMH6	CANADIAN IMPERIAL HOLDING COMM PAPER	4,400,000.00	0.000	12/17/2018	6/7/2018	2.453	4,343,622.56
22533UL19	CREDIT AGRICOLE CIB NY COMM PAPER	4,400,000.00	0.000	11/1/2018	6/7/2018	2.416	4,357,598.67
25214PHP1	DEXIA CREDIT LOCAL SA NY COMM PAPER	4,400,000.00	0.000	2/26/2019	6/7/2018	2.551	4,319,978.67
46640QQ12	JP MORGAN SECURITIES LLC COMM PAPER	7,250,000.00	0.000	3/1/2019	6/7/2018	2.604	7,113,959.79
62479MM34	MUFG BANK LTD/NY COMM PAPER	4,400,000.00	0.000	12/3/2018	6/7/2018	2.484	4,347,055.78
89233HKS2	TOYOTA MOTOR CREDIT CORP COMM PAPER	4,350,000.00	0.000	10/26/2018	6/7/2018	2.384	4,310,302.63
89233HQ15	TOYOTA MOTOR CREDIT CORP COMM PAPER	1,500,000.00	0.000	3/1/2019	6/7/2018	2.541	1,472,521.25
09659CMX3	BNP PARIBAS NY BRANCH COMM PAPER	4,400,000.00	0.000	12/31/2018	6/7/2018	2.443	4,339,786.00
21687BMT5	COOPERATIEVE RABOBANK U.A. COMM PAPER	6,055,000.00	0.000	12/27/2018	6/8/2018	2.422	5,974,818.34
9128282K5	US TREASURY NOTES	4,660,000.00	1.375	7/31/2019	8/28/2018	2.420	4,620,641.68
912828XS4	UNITED STATES TREASURY NOTES	27,200,000.00	1.250	5/31/2019	8/28/2018	2.370	27,055,302.60
62479MSQ7	MUFG BANK LTD/NY COMM PAPER	1,500,000.00	0.000	5/24/2019	8/28/2018	2.635	1,471,306.67
63873KP05	NATIXIS NY BRANCH COMM PAPER	4,400,000.00	0.000	2/28/2019	8/28/2018	2.526	4,344,677.33
89233HSQ8	TOYOTA MOTOR CREDIT CORP COMM PAPER	1,500,000.00	0.000	5/24/2019	8/28/2018	2.593	1,471,755.00
912828C24	US TREASURY NOTES	830,000.00	1.500	2/28/2019	8/31/2018	2.266	826,855.08
912828D80	US TREASURY NOTES	28,225,000.00	1.625	8/31/2019	8/31/2018	2.457	27,994,569.34
912828WS5	US TREASURY NOTES	14,000,000.00	1.625	6/30/2019	8/31/2018	2.397	13,949,735.05

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

Investment Performance Report – September 2018



DC Water
Finance Division
Security Sales
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
Operating Reserve Accounts							
13606A5Z7	CANADIAN IMPERIAL BANK NY CD	1,800,000.00	1.76	11/30/2018	4/10/2018	2.58	1,801,331.20
3135G0J53	FNMA BENCHMARK NOTE	300,000.00	1.00	2/26/2019	4/13/2018	2.16	297,403.67
3135G0J53	FNMA BENCHMARK NOTE	150,000.00	1.00	2/26/2019	4/13/2018	2.18	148,676.33
3135G0J53	FNMA BENCHMARK NOTE	1,050,000.00	1.00	2/26/2019	4/19/2018	2.19	1,041,056.33
3135G0J53	FNMA BENCHMARK NOTE	275,000.00	1.00	2/26/2019	4/25/2018	2.20	272,733.69
3135G0J53	FNMA BENCHMARK NOTE	810,000.00	1.00	2/26/2019	4/25/2018	2.20	803,324.70
78012KRK5	ROYAL BANK OF CANADA CORP NOTES	900,000.00	1.50	7/29/2019	4/30/2018	2.78	889,408.50
3135G0J53	FNMA BENCHMARK NOTE	15,000.00	1.00	2/26/2019	6/6/2018	2.26	14,907.42
3135G0J53	FNMA BENCHMARK NOTE	1,425,000.00	1.00	2/26/2019	6/6/2018	2.26	1,416,204.58
3137EADZ9	FREDDIE MAC NOTES	1,700,000.00	1.13	4/15/2019	6/6/2018	2.29	1,685,964.38
037833BQ2	APPLE INC CORP NOTES	545,000.00	1.70	2/22/2019	6/7/2018	2.42	544,935.21
037833CB4	APPLE INC CORP NOTES	375,000.00	1.10	8/2/2019	6/7/2018	2.54	370,319.38
912828D23	US TREASURY NOTES	700,000.00	1.63	4/30/2019	6/8/2018	2.31	696,994.56
89114QBJ6	TORONTO DOMINION BANK NY CORP NOTES	900,000.00	1.45	8/13/2019	6/12/2018	2.76	890,858.75
912828D23	US TREASURY NOTES	15,000.00	1.63	4/30/2019	6/12/2018	2.31	14,938.83
912828WN6	US TREASURY NOTES	1,340,000.00	2.00	5/31/2021	6/25/2018	2.66	1,316,862.63
912828WN6	US TREASURY NOTES	935,000.00	2.00	5/31/2021	6/26/2018	2.65	919,198.93
912828D23	US TREASURY NOTES	750,000.00	1.63	4/30/2019	6/27/2018	2.32	747,584.91
912828D23	US TREASURY NOTES	225,000.00	1.63	4/30/2019	6/27/2018	2.32	224,275.48
912828D23	US TREASURY NOTES	525,000.00	1.63	4/30/2019	6/27/2018	2.32	523,309.44
459058FK4	INTL BANK OF RECON AND DEV SN NOTE	900,000.00	0.88	8/15/2019	7/25/2018	2.57	887,673.00
912828D23	US TREASURY NOTES	325,000.00	1.63	4/30/2019	7/25/2018	2.35	324,444.17
06367THQ6	BANK OF MONTREAL	900,000.00	1.50	7/18/2019	8/3/2018	2.69	890,473.50
084664CG4	BERKSHIRE HATHAWAY INC NOTES	130,000.00	1.70	3/15/2019	8/13/2018	2.36	130,406.76
19416QEF3	COLGATE-PALMOLIVE COMPANY CORP NOTES	925,000.00	1.75	3/15/2019	8/13/2018	2.44	927,917.86
912828D23	US TREASURY NOTES	250,000.00	1.63	4/30/2019	8/13/2018	2.35	249,879.84
037833CB4	APPLE INC CORP NOTES	525,000.00	1.10	8/2/2019	9/7/2018	2.58	518,651.88
594918BN3	MICROSOFT CORP NOTES	595,000.00	1.10	8/8/2019	9/7/2018	2.53	587,839.04
86958JHB8	SVENSKA HANDELSBANKEN NY CD	1,800,000.00	1.89	1/10/2019	9/7/2018	2.00	1,802,616.55
912828D23	US TREASURY NOTES	800,000.00	1.63	4/30/2019	9/7/2018	2.35	800,873.64
912828D23	US TREASURY NOTES	245,000.00	1.63	4/30/2019	9/10/2018	2.36	245,300.01
166764BH2	CHEVRON CORP NOTES	900,000.00	1.56	5/16/2019	9/14/2018	2.51	898,934.95
912828D23	US TREASURY NOTES	340,000.00	1.63	4/30/2019	9/14/2018	2.37	340,489.67
3130A8DB6	FHLB GLOBAL NOTE	825,000.00	1.13	6/21/2019	9/20/2018	2.49	818,945.53
912828D23	US TREASURY NOTES	110,000.00	1.63	4/30/2019	9/20/2018	2.39	110,183.27
94974BFQ8	WELLS FARGO & COMPANY NOTES	1,103,000.00	2.15	1/15/2019	9/28/2018	2.55	1,106,474.14
2018A Construction Fund							
912828U40	US TREASURY N/B	3,475,000.00	1.00	11/30/2018	7/5/2018	2.07	3,463,391.45

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

Investment Performance Report – September 2018



DC Water
Finance Division
Security Maturities
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
<u>Operating Reserve Accounts</u>							
06406HDB2	BANK OF NEW YORK MELLON CORP (CALLABLE)	1,800,000.00	1.60	5/22/2018	5/22/2018	0.00	1,800,000.00
<u>Total Debt Service Reserve</u>							
912828RH5	US TREASURY NOTES	4,975,000.00	1.38	9/30/2018	9/30/2018	0.00	4,975,000.00
912828T42	US TREASURY NOTES	6,460,000.00	0.75	9/30/2018	9/30/2018	0.00	6,460,000.00
<u>2018B Construction Fund</u>							
912828S68	US TREASURY N/B	9,920,000.00	0.75	7/31/2018	7/31/2018	0.00	9,920,000.00
912828RE2	US TREASURY NOTES	44,620,000.00	1.50	8/31/2018	8/31/2018	0.00	44,620,000.00

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

Investment Performance Report – September 2018



**DC Water
Finance Division
Upcoming Transaction Cash Flows
Next 30 Days**

DATE	TRANSACTION	CUSIP	DESCRIPTION	COUPON	MATURITY DATE	PAR VALUE/SHARES	PRINCIPAL	INTEREST	TOTAL
10/01/18	INTEREST	13063DGA0	CA ST TXBL GO BONDS	2.800	04/01/21	1,075,000.00	0.00	13,043.33	13,043.33
10/08/18	INTEREST	89236TCZ6	TOYOTA MOTOR CREDIT CORP	1.900	04/08/21	475,000.00	0.00	4,512.50	4,512.50
10/09/18	INTEREST	931142DY6	WAL-MART STORES INC CORP NOTE	1.750	10/09/19	430,000.00	0.00	3,762.50	3,762.50
10/10/18	INTEREST	13606BVF0	CANADIAN IMP BK COMM NY FLT CERT DEPOS	2.731	04/10/20	1,400,000.00	0.00	9,794.02	9,794.02
10/11/18	MATURITY	RE0959834	INDUSTRIAL BANK CDARS	0.500	10/11/18	5,035,026.00	5,035,025.80	25,175.13	5,060,200.93
10/13/18	INTEREST	06367T4W7	BANK OF MONTREAL CHICAGO CORP NOTES	3.100	04/13/21	470,000.00	0.00	7,285.00	7,285.00
10/13/18	INTEREST	89236TEU5	TOYOTA MOTOR CREDIT CORP NOTES	2.950	04/13/21	160,000.00	0.00	2,360.00	2,360.00
10/13/18	INTEREST	89236TEU5	TOYOTA MOTOR CREDIT CORP NOTES	2.950	04/13/21	290,000.00	0.00	4,277.50	4,277.50
10/15/18	INTEREST	06406FAA1	BANK OF NEW YORK MELLON CORP (CALLABLE)	2.500	04/15/21	410,000.00	0.00	5,125.00	5,125.00
10/15/18	INTEREST	06406FAA1	BANK OF NEW YORK MELLON CORP (CALLABLE)	2.500	04/15/21	515,000.00	0.00	6,437.50	6,437.50
10/17/18	INTEREST	89236TDU6	TOYOTA MOTOR CREDIT CORP	1.950	04/17/20	295,000.00	0.00	2,876.25	2,876.25
10/17/18	INTEREST	89236TDU6	TOYOTA MOTOR CREDIT CORP	1.950	04/17/20	630,000.00	0.00	6,142.50	6,142.50
10/19/18	INTEREST	4581X0DB1	INTER-AMERICAN DEVELOPMENT BANK NOTE	2.625	04/19/21	1,060,000.00	0.00	13,912.50	13,912.50
10/25/18	INTEREST	742718EZ8	THE PROCTER & GAMBLE CO CORP NOTES	1.750	10/25/19	440,000.00	0.00	3,850.00	3,850.00
10/30/18	INTEREST	78013XKG2	ROYAL BANK OF CANADA CORP NOTES	3.200	04/30/21	870,000.00	0.00	13,920.00	13,920.00
10/31/18	INTEREST	912828K58	US TREASURY NOTES	1.375	04/30/20	1,575,000.00	0.00	10,828.13	10,828.13
10/31/18	INTEREST	912828K58	US TREASURY NOTES	1.375	04/30/20	2,750,000.00	0.00	18,906.25	18,906.25
10/31/18	INTEREST	912828L99	US TREASURY NOTES	1.375	10/31/20	250,000.00	0.00	1,718.75	1,718.75

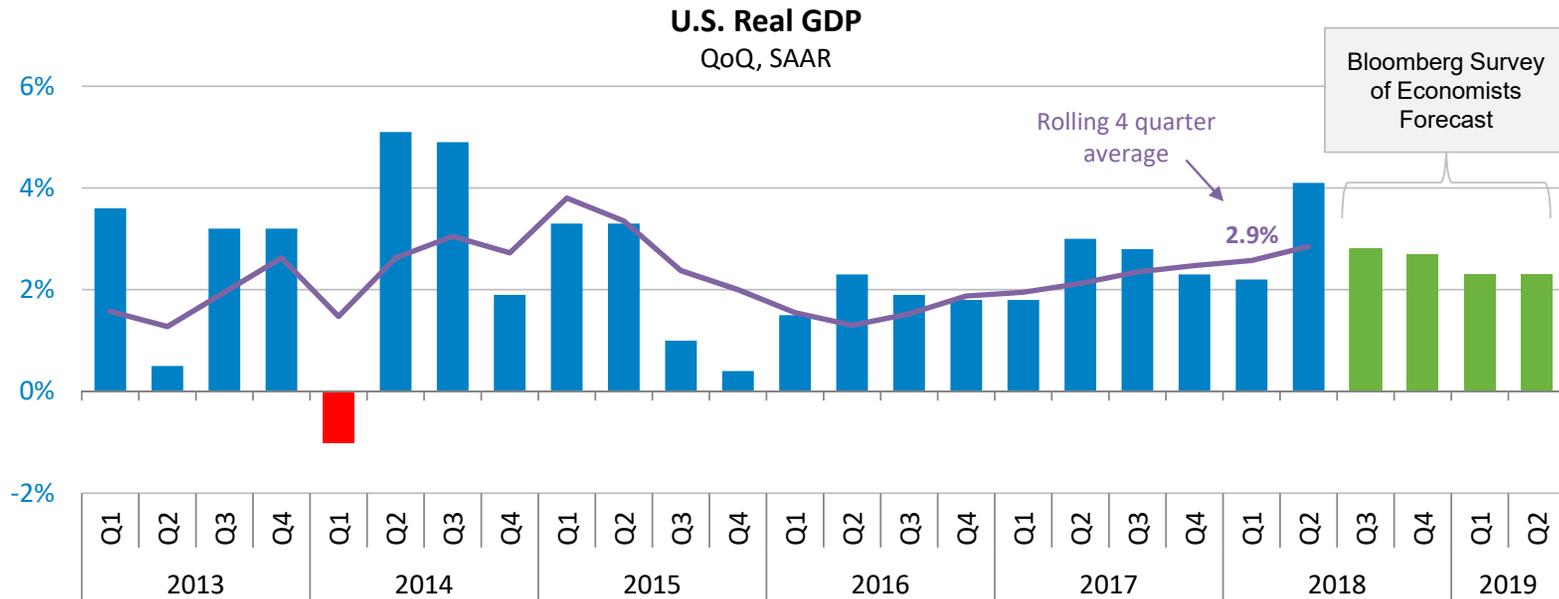


Appendix: Economic Update



Economic Growth Accelerated in Second Quarter

- U.S. economic activity expanded at a strong pace in the second quarter.
- The Gross Domestic Product (GDP) remained unchanged for the third second quarter reading at 4.2%.
- Contributors to the unchanged GDP reading include a slight downward revision to private inventory investment and a small upward revision to most of the remaining GDP components.
- The surge in growth in second quarter is not expected to be sustainable, reflected in moderate future growth forecasts.

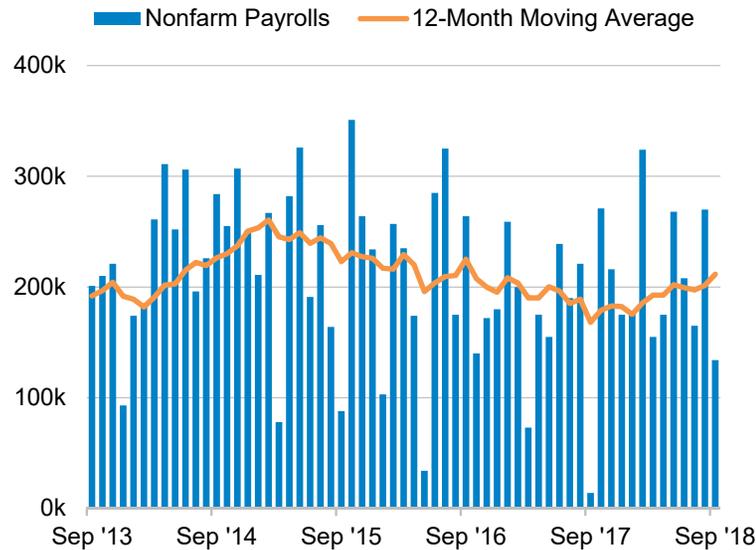




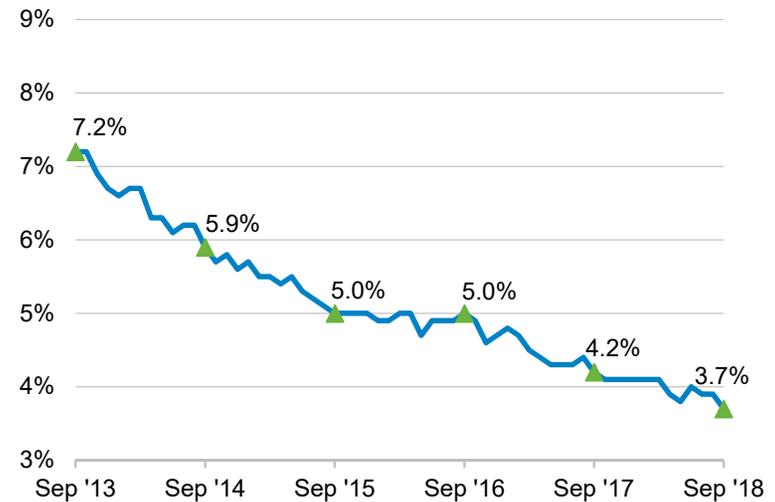
Labor Market Remains Strong in September

- The U.S. economy added 134,000 jobs in September, falling short of expectations.
- Job gains have averaged 208,000 per month so far this year
- The unemployment rate fell to 3.7% in September, the lowest level since 1969.
- Average hourly earnings – a key measure of wage growth – slightly decelerated from the cyclical high of 2.9% in August to 2.8% in September.

Monthly Change in Nonfarm Payrolls



Unemployment Rate

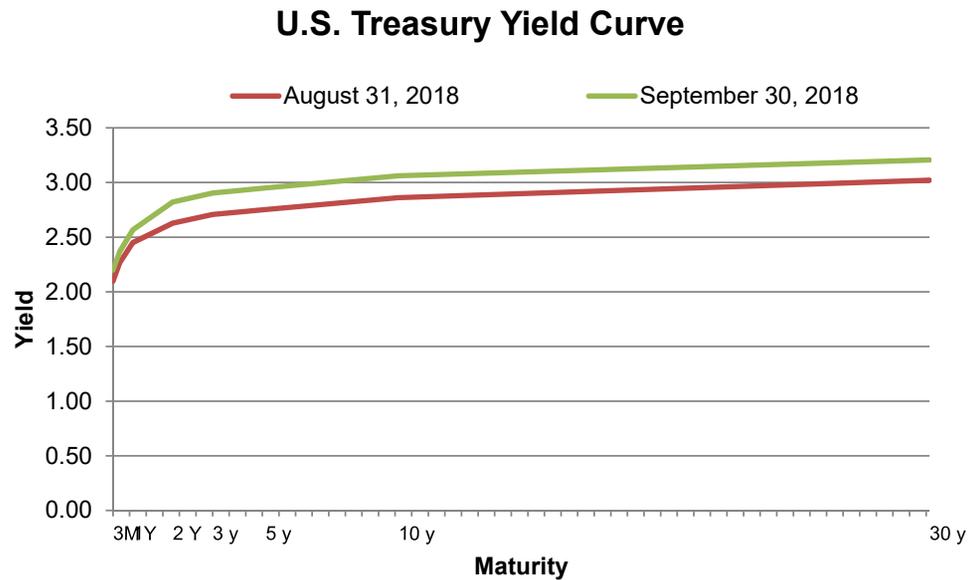


Source: Bloomberg, as of September 2018.



U.S. Treasury Yield Curve Increases

	<u>8/31/2018</u>	<u>9/30/18</u>	<u>Change</u>
3 month	2.10%	2.20%	0.10%
6 month	2.27%	2.37%	0.10%
1 year	2.45%	2.57%	0.12%
2 year	2.63%	2.82%	0.19%
3 year	2.71%	2.90%	0.19%
5 year	2.75%	2.95%	0.20%
10 year	2.86%	3.06%	0.20%
30 year	3.02%	3.21%	0.19%

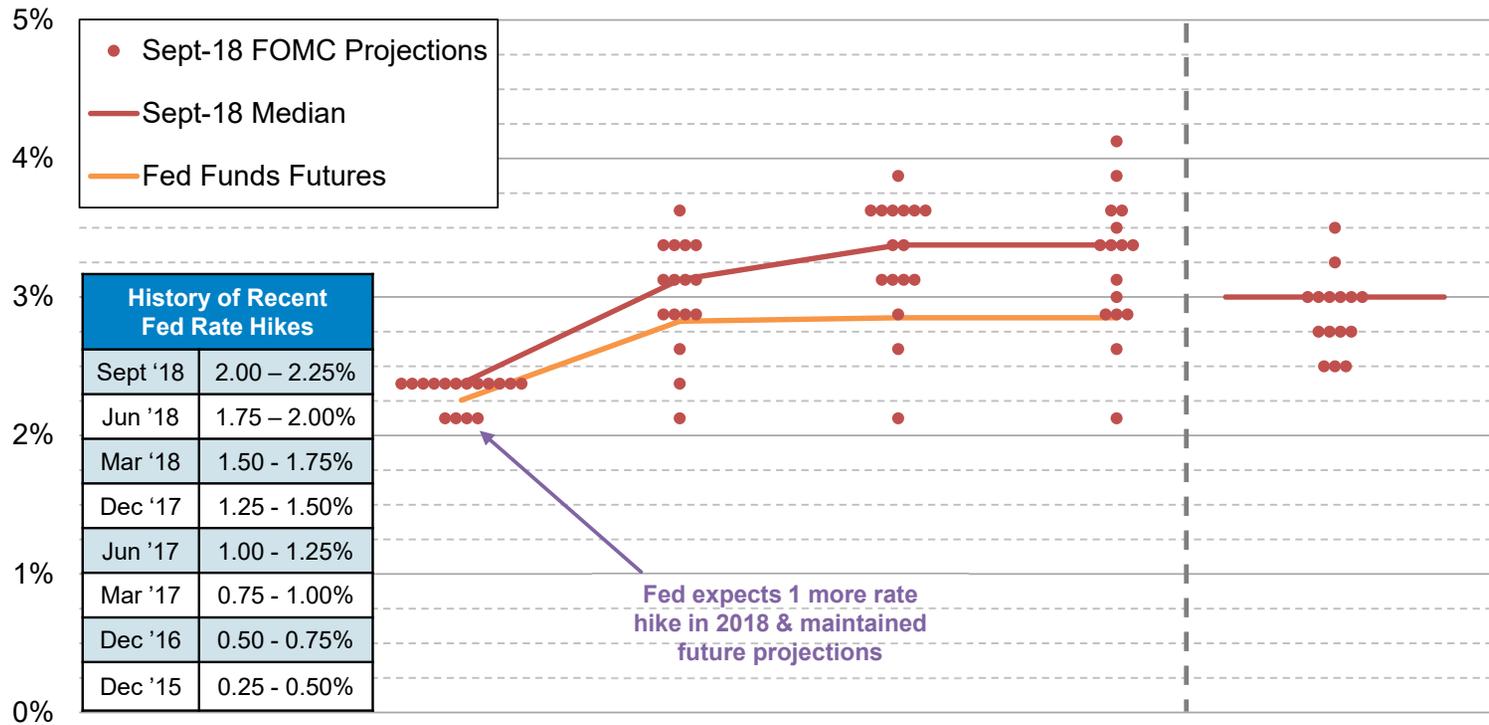


Source: Bloomberg



FOMC's September "Dot Plot" Projects One More Rate Hike in 2018

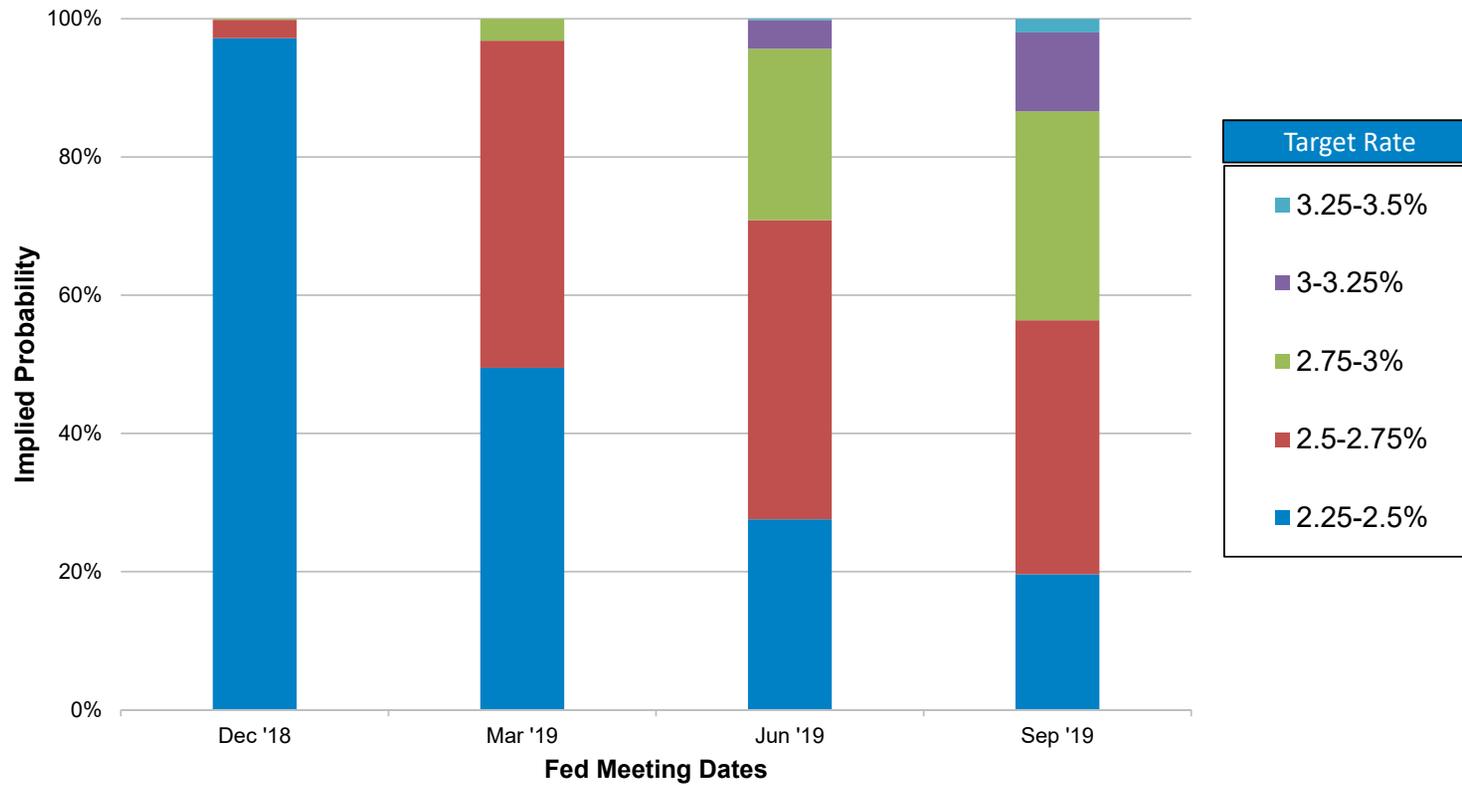
Fed Participants' Assessments of 'Appropriate' Monetary Policy



Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members' judgement of the midpoint of the appropriate target range for the federal funds rate at each year-end. Fed funds futures as of 9/26/18.



Federal Reserve Rate Hike Probabilities

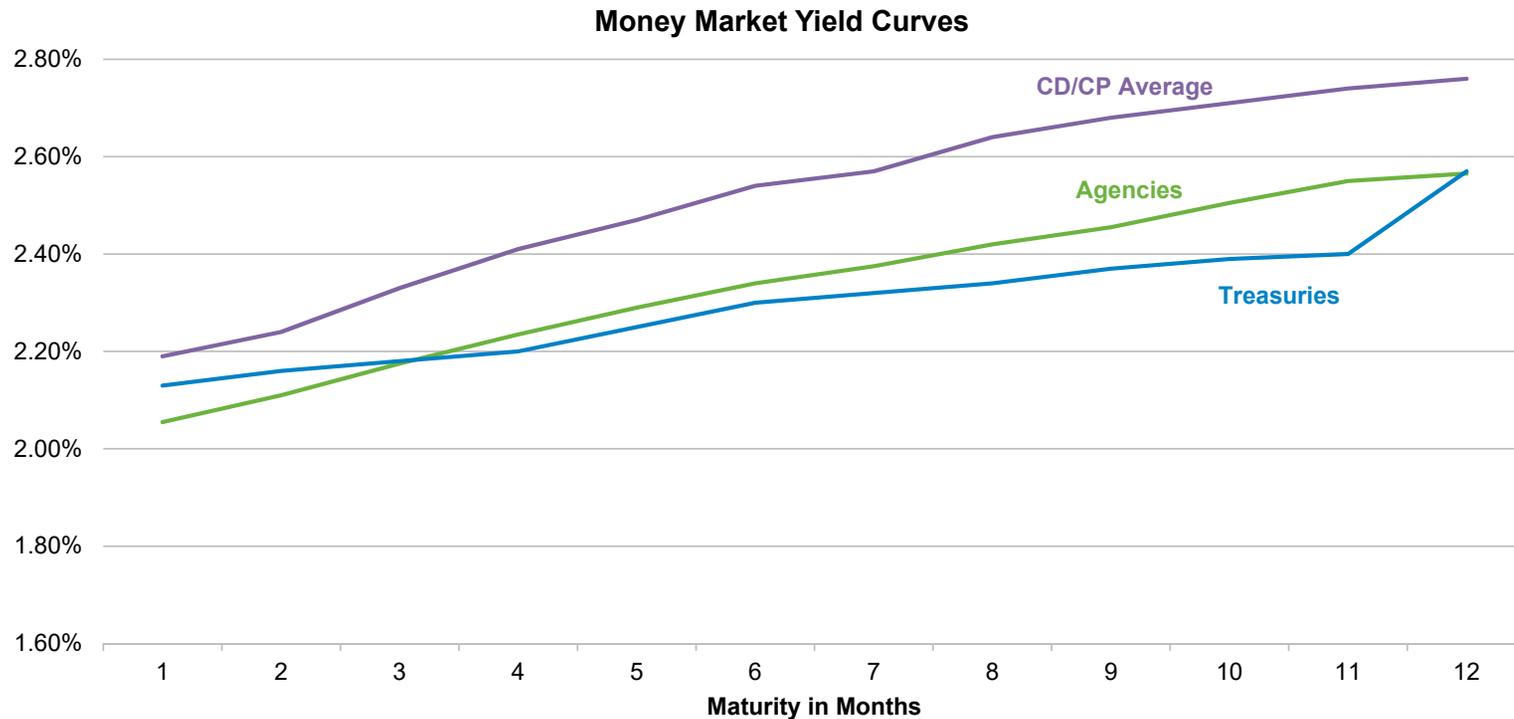


Source: Bloomberg, as of 9/28/18.



Current Short-Term Credit Environment

- Commercial paper and negotiable bank CDs remain attractive alternatives to short-term Treasuries, agencies, bank deposits, and government money market funds.



Source: Bloomberg, PFMAM Trading Desk, as of 9/28/18. Not a specific recommendation.



Disclosure

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CDARS holdings and Bank Deposits are not managed by PFMAM, and therefore we cannot guarantee the accuracy of holdings.



PATH TO ACHIEVE ASSET MANAGEMENT FY 2019 – FY 2028 CAPITAL IMPROVEMENT PROGRAM

Presentation to the Finance and Budget Committee
October 25, 2018

District of Columbia Water and Sewer Authority



Grit Chamber Effluent Sluice Gate



SDWM unlined Cast Iron pipe tuberculation



Vitrified Clay Pipe collapsed Small Dia. sewer

Identifying Asset Risks & Capital Investment Needs



Agenda

- I. Review Path to Asset Management Presentations
- II. Overview of CIP Options
 - I. Current Approved Funding (FY18-27 Baseline)
 - II. FY19-28 Modified Baseline CIP (Run3e)
 - III. Asset Management CIP
- III. Challenges of Baseline Program CIP
- IV. Modified Baseline Program & Risks
- V. Conclusions
- VI. Additional Background Slides



Path to Asset Management Presentations

Committee	Meeting Date	Topic Title
EQ & Ops	15-Mar-18	Path to Asset Management Work Plan
Finance & Budget	22-Mar-18	Proposed Workplan - Path to Asset Management CIP
EQ & Ops	19-Apr-18	Path to Asset Management - Benchmarking with PEER Utilities
EQ & Ops	17-May-18	Site visit to Blue Plains
Finance & Budget	24-May-18	Update on Pathway to Asset Management
EQ & Ops	21-Jun-18	Path to Asset Management - Cost of Proactive Action vs Reactive Action
EQ & Ops	19-Jul-18	Path to Asset Management Work Plan - Sewer & Storm Water Pump Stations
EQ & Ops	20-Sep-18	Site visits to Sewer and Stormwater Pump Stations
EQ & Ops	18-Oct-18	FY19-28 CIP Path to Asset Management



Rolling 10 year CIP Options Compared

Service Area	Current Baseline	Modified Baseline	Asset Management
DCCR	Fully funded to meet Consent Decree	Fully funded to meet Consent Decree	Fully funded to meet Consent Decree
Wastewater	Generally funded to meet NPDES Permit and established levels of service	Fully funded to meet NPDES Permit and established levels of service	Fully funded to meet NPDES Permit and established levels of service
Stormwater	Underfunded	Fully funded	Fully funded
Water			
Pump Stations & Storage Facilities	Generally funded to current service levels	Generally funded	Fully funded
Small Diameter WMs	Underfunded; (Funded to meet 1% replacement/rehab goal [11 mi/year])	Underfunded; (Funded to meet 1% per year replacement level - increased cost is due to switch to full replacement [11 mi/year])	Fully funded to ramp up to 2% replacement level [22 mi/year]
Large Diameter WMs	Generally funded	Generally funded	Generally funded
Sewer			
Pump Stations	Underfunded	Fully funded	Fully funded
Sewer Lines < 60” dia.	Substantially underfunded [0.35%; 6.2 mi/year]	Underfunded (Funded to ramp up to 1.0% per year rehabilitation level [17.5 mi/year] by FY23)	Fully funded to ramp up to 2.3% rehabilitation level [40 mi/year]
Sewer Lines ≥ 60”	Generally Funded	Generally Funded	Generally Funded
Non Process	Fully funded for HQ, Fleet and Sewer Operations Facilities	Fully funded for HQ, Fleet and Sewer Operations Facilities	Fully funded for HQ, Fleet and Sewer Operations Facilities

DC Water

‘Generally Funded’ = What we know or expect to find can be repaired ‘Underfunded’ = What we know or expect to find is not all funded ‘Fully Funded’ = All needs known or expected are met



Rolling 10 year CIP Options

x1000's	Current Baseline \$4.1 Billion	Modified Baseline \$5.0 Billion	Asset Management \$6.5 Billion
Engineering CIP Total	<u>\$3,764,107</u>	<u>\$4,435,378</u>	<u>\$ 5,417,230</u>
Capital Equipment	Underfunded	Generally Funded	Fully Funded
	\$170,539	\$347,529	\$370,434
Washington Aqueduct	Generally Funded	Fully Funded except Federally Owned Water Main (FOWM) and Advanced Treatment	Fully Funded
	\$118,600	\$187,303	\$670,827
Additional Capital Programs Total	<u>\$289,139</u>	<u>\$534,832</u>	<u>\$1,041,261</u>
TOTAL	<u>\$4,053,246</u>	<u>\$4,970,211</u>	<u>\$ 6,458,490</u>



Summary of CIP Options by Program

\$ in thousands

Approved Baseline (+FY28) \$4.1 Billion	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10 yr Total
Non Process Facilities	33,107	18,907	7,860	1,551	25	6,615	7,773	-	-	4,000	79,838
Wastewater Treatment	74,617	77,853	87,960	89,820	69,560	51,607	62,172	117,623	129,252	117,551	878,014
Combined Sewer Overflow	200,343	160,554	148,121	203,086	164,508	79,692	65,611	135,797	92,819	91,453	1,341,984
Stormwater	4,909	2,400	2,312	5,839	1,212	1,784	1,642	1,276	2,133	9,845	33,353
Sanitary Sewer	32,947	34,046	53,050	74,492	73,917	75,912	58,882	60,769	38,672	137,088	639,776
Water	45,747	84,256	62,341	48,241	53,471	88,055	99,661	101,344	89,510	118,514	791,143
Engineering CIP Total	391,670	378,015	361,644	423,029	362,694	303,666	295,742	416,809	352,386	478,452	3,764,107
Additional Capital Programs	47,448	42,327	41,037	22,618	22,618	22,618	22,618	22,618	22,618	22,619	289,139
Approved Total CIP	439,118	420,342	402,681	445,647	385,312	326,284	318,360	439,427	375,004	501,071	4,053,246

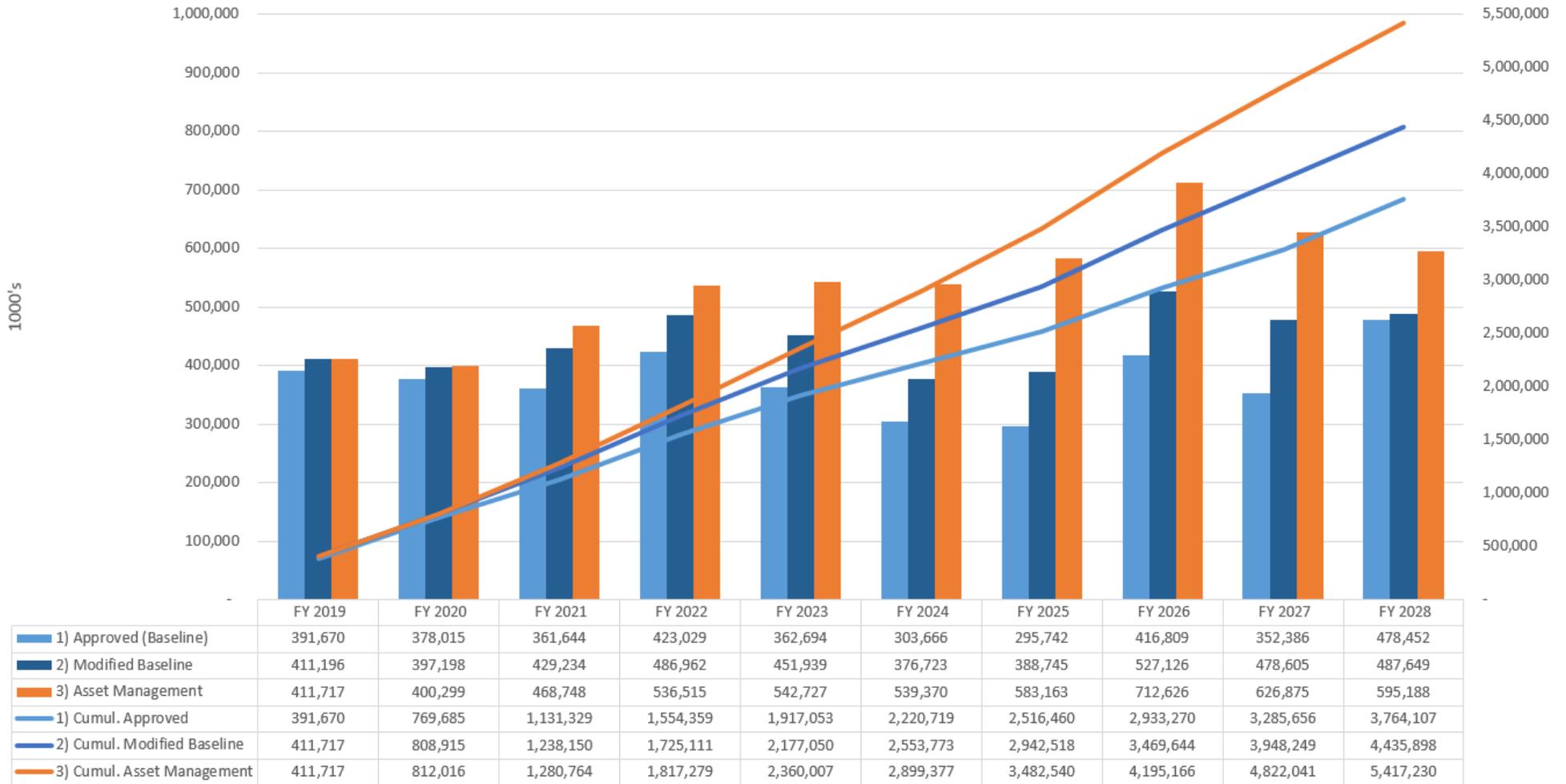
Modified Baseline Program \$5.0 Billion	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10 yr Total
Non Process Facilities	16,199	42,778	25,341	13,765	7,379	12,159	11,181	4,618	4,201	-	137,621
Wastewater Treatment	82,299	68,754	91,798	95,749	97,391	74,295	82,081	132,586	136,626	122,192	983,771
Combined Sewer Overflow	196,349	153,703	147,502	198,384	157,582	76,745	64,354	150,798	102,978	90,974	1,339,369
Stormwater	7,513	8,495	2,741	7,865	3,679	4,935	7,485	7,452	5,204	10,020	65,390
Sanitary Sewer	41,926	41,324	46,858	74,412	103,622	105,173	114,705	124,868	126,915	145,502	925,305
Water	66,911	82,143	114,995	96,786	82,287	103,415	108,939	106,804	102,681	118,961	983,923
Engineering CIP Total	411,196	397,198	429,234	486,962	451,939	376,723	388,745	527,126	478,605	487,649	4,435,378
Additional Capital Programs	47,624	52,740	50,165	48,408	67,416	51,509	68,272	44,461	46,637	57,600	534,832
Total Modified Baseline CIP	458,821	449,939	479,400	535,369	519,355	428,232	457,017	571,587	525,242	545,250	4,970,211
Increases vs Approved CIP	19,703	29,596	76,718	89,722	134,043	101,948	138,657	132,159	150,237	44,179	916,964

Asset Management \$6.5 Billion	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	10 yr Total
Non Process Facilities	29,858	25,023	24,844	13,827	7,368	14,819	8,474	4,699	4,203	4,209	137,324
Wastewater Treatment	79,332	61,577	90,835	95,631	98,586	101,248	128,046	165,588	138,019	117,551	1,076,413
Combined Sewer Overflow	194,678	156,246	151,227	202,584	159,117	73,113	61,239	151,243	102,210	91,453	1,343,109
Stormwater	6,076	10,216	5,957	12,393	10,502	11,957	14,056	14,873	13,625	9,845	109,502
Sanitary Sewer	39,661	65,672	73,524	106,648	141,754	169,990	189,267	196,194	192,779	192,746	1,368,234
Water	62,113	81,566	122,361	105,433	125,400	168,242	182,081	180,030	176,039	179,383	1,382,647
Engineering CIP Total	411,717	400,299	468,748	536,515	542,727	539,370	583,163	712,626	626,875	595,188	5,417,230
Additional Capital Programs	51,996	53,202	56,493	76,500	89,975	121,266	81,928	58,231	395,774	55,895	1,041,261
Total AM CIP	463,712	453,501	525,241	613,015	632,703	660,636	665,091	770,857	1,022,650	651,083	6,458,490
Increases vs Approved CIP	24,595	33,159	122,560	167,367	247,391	334,353	346,732	331,430	647,646	150,013	2,405,244



Summary of CIP Plan Options

Summary of 10-yr CIP Plans Options (FY19-28)





Challenges of Baseline Program CIP

- Project & Program needs defined by the Asset Management process are essential and do not go away
 - Projects are deferred, delayed or phased to meet fiscal constraints

- When capital improvements are deferred, delayed or phased
 - Risk exposure increases
 - Permit Compliance
 - Health and Safety
 - System Reliability
 - Public Confidence/DC Water Reputation (“Priceless”)
 - Boiled Water

 - Cost increases
 - Likelihood of emergency repairs (x10 increase compared to planned work)
 - Operations & Maintenance
 - Escalation over time



Modified Baseline Program

- Restores funding for several projects currently being deferred due to budget and/or spending concerns
- Increased funding for wastewater and stormwater pumping stations based on recent assessments
- Includes funding for accelerated work on the Potomac Interceptor and Anacostia Force Main based on recent assessments
- Increased funding for 1%, 11 miles/year water main replacement to cover increased costs, in particular the increased cost due to elimination cleaning and lining rehabilitation
- Includes funding to ramp up to 1%, 17.5 miles/year rehabilitation for sewers
- Increased funding for Non-Process facilities in out years



Modified Baseline Program - Risks/Vulnerabilities

💧 Linear

- Small Diameter Water Mains replacement underfunded compared to asset management needs (11 miles/year vs 22 miles/year)
- Sewer Rehabilitation underfunded compared to asset management needs (17 miles/year vs 40 miles/year)

💧 Vertical:

- Complete Blue Plains Odor control master plan recommendations not included
- Mainstream Deammonification
- Water pumping – variable speed pressure management



Conclusions



Conclusions

- 💧 Investments made by DC Water are driven by environmental impact and reliability—excellent results (Clean Rivers and Blue Plains)
- 💧 However, due to funding, the sewer collection and water distribution systems have become less reliable, jeopardize the environment and public health & safety
- 💧 Band aid solutions and emergency response are growing and will only accelerate causing more service issues and frustration with both our customers and internally with our operations and engineering team
 - Public confidence liability
 - Employee morale
- 💧 Asset management provides the framework for identifying Asset Risk and True Capital Investment Needs
- 💧 At this time, the Modified Baseline CIP balances infrastructure risks and impacts on the financial plan
- 💧 Rate impacts will be further analyzed and presented at November committee meetings



Budget Adoption Calendar

- 💧 Financial Plan Impacts – **November (Retail Rates Committee)**
- 💧 CEO & Executive Team Recommendations – **January**
- 💧 Committee Reviews, Recommendations – **January/February**
- 💧 Wholesale Customer Briefing – **February/March**
- 💧 Budget Adoption – **March**



Additional Background Slides



CIP – Asset Management (Preferred)

💧 AM Includes the Modified Baseline Program, Plus;

- Linear
 - Funding to ramp up to 2%, 22 miles/year for water main replacement (vs 11 miles/year)
 - Funding to ramp up to 2.3%, 40 miles/year for sewer rehabilitation on recent assessments (vs 17 miles/year)
- Vertical
 - Water pumping facilities: addresses variable speed pressure management (\$17M starting 2023)



CIP Risks/Sensitivities

Regulatory/Consent Decree/Permitting:

- E. Coli Total Maximum Daily Load (TMDL) – lawsuit by environmental groups seeking more restrictive TMDL
- MS4 permit - repair of Stormwater Outfalls, total scope and cost unknown (currently \$5M approved)
- National Parks Service permitting requirements for sewer projects
- Anacostia River Sediment Clean-up



CIP Risks/Sensitivities (cont.)

Regulatory/Consent Decree/Permitting, cont.:

- Chesapeake Bay TMDL – Phase 3 Watershed Implementation Plans being prepared, possible TMDL reassessment in the future
- Green Infrastructure (GI) Practicability Assessment - Clean Rivers practicability assessment of GI to be performed in 2020. Currently, construction of GI in the District is higher than originally estimated
- SSOs – risk of SSO Consent Decree
- Blue Plains Odor Control (\$250M)



CIP Risks/Sensitivities (cont.)

Blue Plains Process Optimization & Revenue Opportunities

- Full Plant Deammonification (>\$60M)
- Resource Recovery (Hot Water Heating Loop; Sludge Drying)

Other:

- Pepco DC Power Line Undergrounding (DC PLUG) – (\$57M, DC Water Share is 50% = \$28M)
- Condition assessment of large sewers could lead to additional CIP needs
- Washington Aqueduct –
 - FY2019-2030 Proposed CIP (\$291M, DC Water share = \$218M)
 - Federally Owned Water Main Repairs (\$86M, all DC Water)
 - Travilah Quarry Acquisition & Outfitting (\$284M, cost sharing unknown)
 - Advanced Treatment Facilities (\$540M, DC Water share = \$405M)
unknown



Challenges of Fiscal Constraints - Sewer Linear



Sewer sinkhole ,14th Street blocked between New York and Pennsylvania Avenues NW



Montana Ave 18" VCP, deformed, blocked



10" VCP Sewer pipe, installed in 1914, near Morrow Dr NW, located in Rock Creek Park.



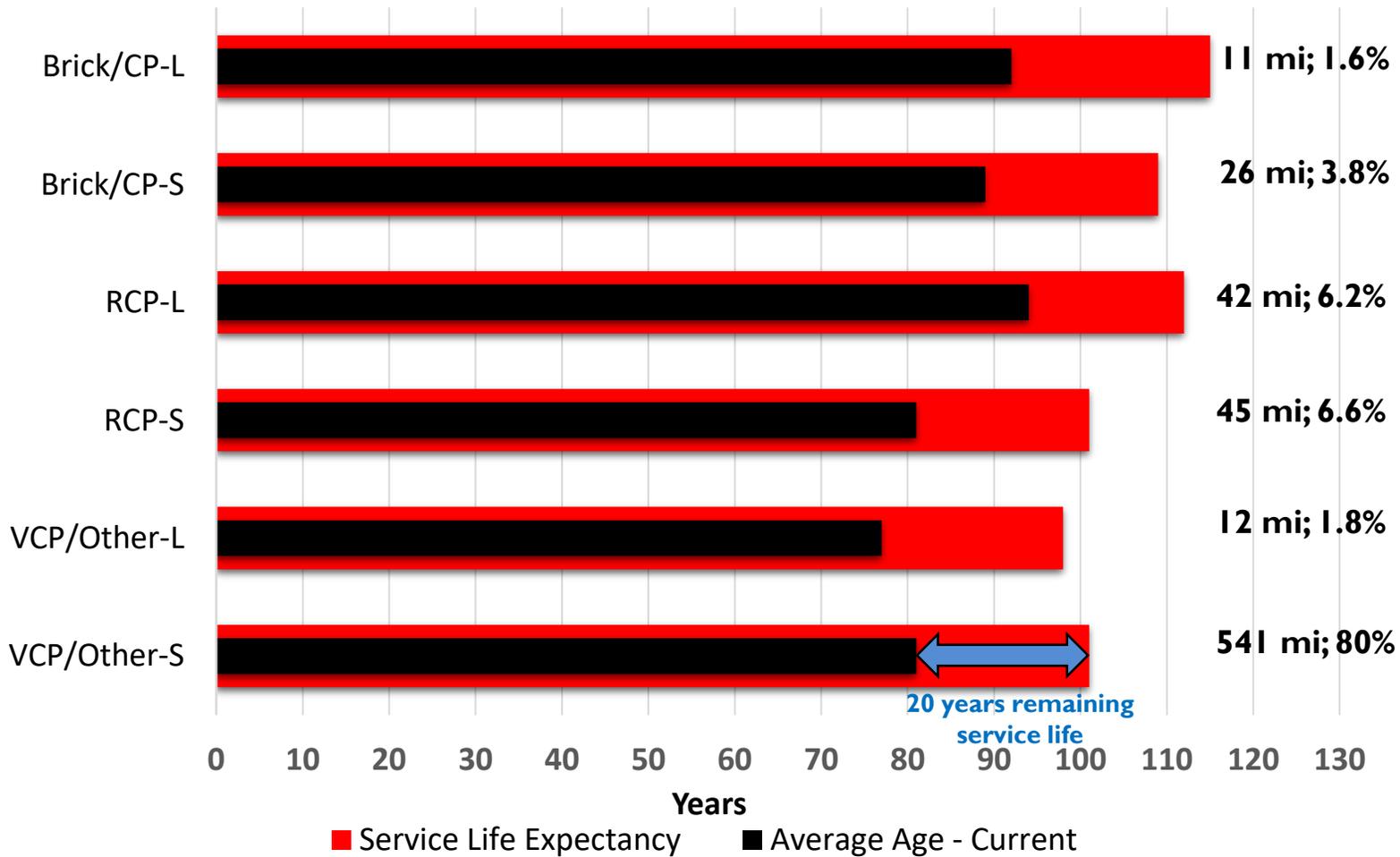
10th St at Otis St, NE (10" VCP, deformed, broken



Service Life Expectancies & Projected Renewal Requirements for the District Sewers

Average Age and Service Life Expectancies by Sanitary Sewer Material Type - FY2018

Average Age: 82 years





Challenges of Fiscal Constraints - Water Linear



30-inch Tuberculated cast iron pipe (Rhode Island Ave)



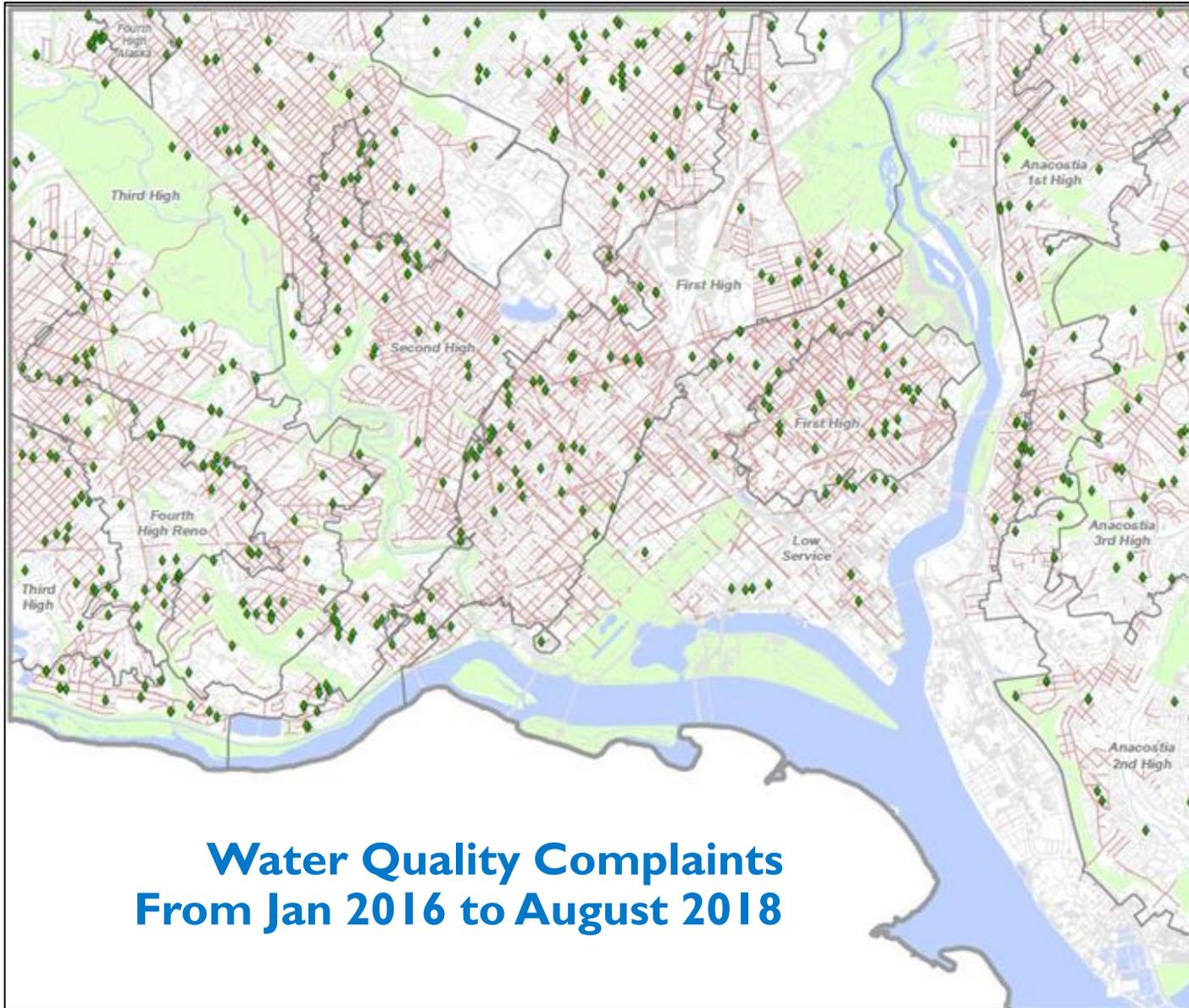
Q St. NW Rupture of 30" cast iron pipe c1860,



Pipe break, 8-inch tuberculated cast iron pipe Colonial Village

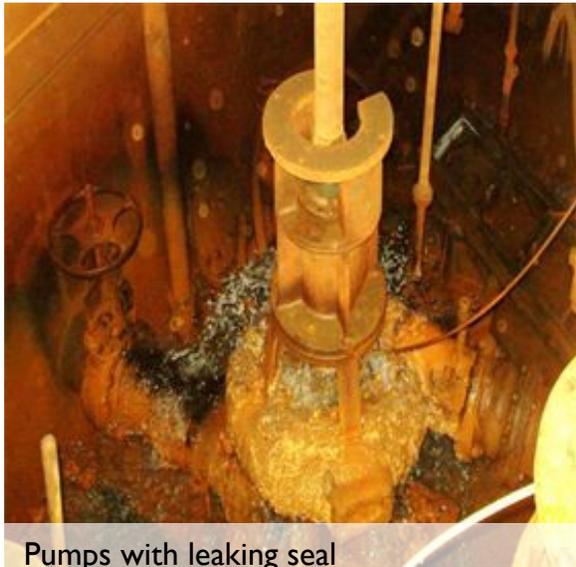


Water Quality Complaints





Challenges of Fiscal Constraints - Pump Stations



Pumps with leaking seal



Stormwater Discharge Conduit



Failed Stormwater Pumps



Lack of conveyance, washing and compacting



Influent Pumping Stations and Headworks



RWWPS I 1930s Original Motor



RWWPS I Worn out Pump



Influent Structures Corrosion



Grit Chamber Building I Concrete Corrosion



Grit Chamber I, Effluent Sluice Gate Corrosion



Influent Structures Corrosion

Influent structures gather and equalize plant influent before RWWPS I & 2 wet wells

Headworks remove debris and grit, protecting and improving downstream equipment and performance

Influent Structures	
Brick Lined Sewer	1,500 SF
Box Conduit	68,000 SF
Access Slabs	82,000 lb
RWWPS I/Grit Chamber Building 1	
Pumps	3 @ 400 hp (80mgd) 2 @ 300 hp (60 mgd) 1 @ 200 hp (40 mgd)
Fine Bar Screens	4 total; 3 duty
Aerated Grit Tanks	4 total; 3 duty
RWWPS 2/Grit Chamber Building 2	
Pumps	4 @ 560 hp (100 mgd) 5 @ 500 hp (100 mgd)
Fine Bar Screens	9 total
Aerated Grit Tanks	12 total; 10 duty

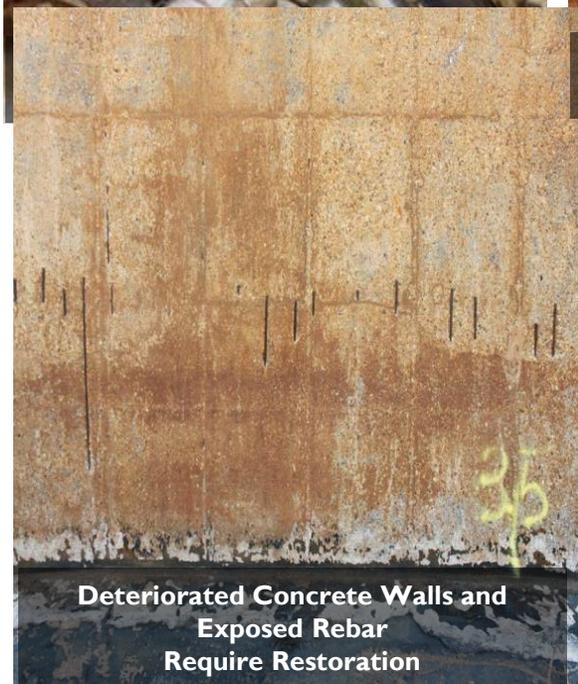
Risk Level - HIGH



Gravity Thickening



Rusted Weir Plate, Scum Baffle, and Embedded Connection Angle Require Replacement



Deteriorated Concrete Walls and Exposed Rebar Require Restoration



Unsettled Sludge Buildup on Surface Damaging Collector Mechanisms

Gravity Thickening reduces the volume and increases the solids concentration in the sludge that requires further treatment for beneficial reuse

Gravity Thickening	
Gravity Thickeners	10 Originally installed 6 Operable 4 Inoperable
Degritter Feed Pumps	6 @ 75 hp EA
GT Sludge Pumps	12 Total 8 @ 30 hp EA 4 @ 25 hp EA
GT Scum Pumps	8 @ 40 hp EA
Primary Sludge Screens	4 @ 1,200 gpm EA
Primary Sludge Degritting	8 Hydrocyclones originally installed 4 Classifiers originally installed

Risk Level - HIGH



Discussion



ATTACHMENT 3

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

**Thursday, November 13, 2018; 11:00 a.m.
Blue Plains Wastewater Treatment Plant
5000 Overlook Avenue, SW, DC
AGENDA**

Call to Order	Chairman
October 2018 Financial Report	Chief Financial Officer
Agenda for December Committee Meeting	Chairman
Adjournment	Chairman

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