

**DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY**

**Board of Directors**

*Finance and Budget Committee*

*Thursday, March 28, 2019*

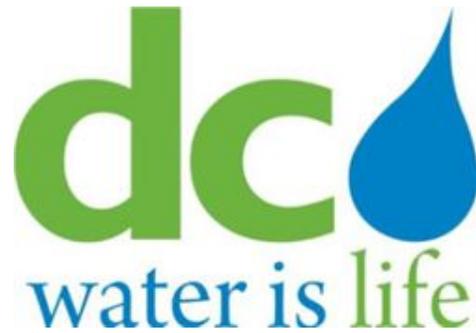
11:00 a.m.

- 1. **Call to Order**..... Sarah Motsch, Vice Chairperson
- 2. **February 2019 Financial Report (Attachment 1)**..... Lola Oyeyemi
- 3. **Solar Project Overview (Attachment 2)**..... Chris Peot
- 4. **Proposed FY 2020 Budget (Attachment 3)**..... Matthew T. Brown
- 5. **Action Items**..... Matthew T. Brown
  - A. **Recommendation for Approval of the FY 2020 Proposed Budget (Attachment 4)**
    - Action Item 4A: Fiscal Year 2020 Proposed Operating Budget
    - Action Item 4B: Fiscal Year 2019 – FY 2028 Capital Improvement Program and Lifetime Budget
    - Action Item 4C: Fiscal Year 2019 – FY 2028 Ten-Year Financial Plan
    - Action Item 4D: Intent to Reimburse Capital Expenditures with Proceeds of a Borrowing
- 6. **Agenda for April Committee Meeting (Attachment 5)**..... Sarah Motsch
- 7. **Executive Session**
- 8. **Adjournment**

**FOLLOW-UP ITEM – Follow-up items from the Joint DC Retail Water & Sewer Rates & Finance and Budget Committees meeting held February 28, 2019.**

- 1. Provide alternative Capital Improvement Program (CIP) scenarios, including the related fiscal and customer impacts, to achieve annual replacement/rehabilitation levels of 1.5%, 2.0% and 2.5% for the underfunded small diameter water mains and small sewer lines (**Sarah Motsch**)  
**Status:** Response provided in letter sent to the Board on March 7, 2019
- 2. Provide information on how DC residents’ average customer bill, based on average household income, compares to other cities (**David Franco**)  
**Status:** Response provided in letter sent to the Board on March 7, 2019
- 3. Provide website link for the criteria and certification process related to the CRIAC discount for stormwater best management practice administered by DOEE (**David Franco**)  
**Status:** <https://doee.dc.gov/service/criacrelief>
- 4. Provide website link to the City Council Hearing (**David Franco & Tony Giancola**)  
**Status:** <http://dccouncil.us/transportation-and-the-environment-3/>
- 5. Provide overview of financing plan for the Solar Project and the period the developer receives the benefits of the Solar Renewable Energy Credits (**Tommy Wells**)  
**Status:** See Attachment 2

\* 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 2019

# Monthly Financial Report

Period Ending February 28, 2019

**DEPARTMENT OF FINANCE, ACCOUNTING & BUDGET**

**Matthew T. Brown**, Executive Vice President & CFO, Finance and Procurement

**Ivan Boykin**, Director, Finance

**Syed Khalil**, Director, Rates & Revenue

**John Madrid**, Controller

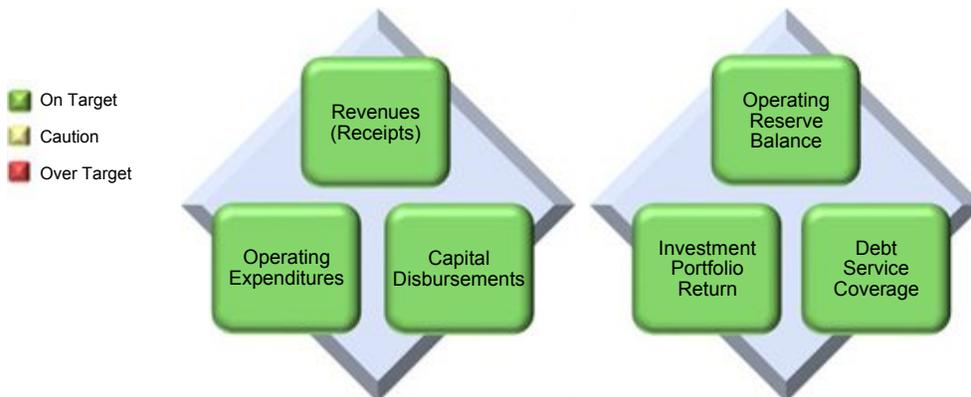
**Lola Oyeyemi**, Director, Budget

**Monthly Financial Report**

**FEBRUARY 2019**

**EXECUTIVE SUMMARY**

As of the end of February FY 2019, with approximately 42 percent of the fiscal year completed, we are on track with budgetary expectations and targeted performance metrics.



(\$ in millions)

	Budget	YTD Budget	Actual	Variance Favorable	Variance (Unfavorable)	Actual % Budget
<b>Revenues (Receipts)*</b>	\$649.5	\$270.6	\$303.2	\$32.6	12.0%	46.7%
<b>Expenditures*</b>	\$582.8	\$242.8	\$220.2	\$22.6	9.3%	37.8%
<b>Capital Disbursements</b>	\$439.1	\$230.2	\$172.0	\$58.3	25.3%	39.2%

\* *Straight-lined (5/12 of budget)*

Highlights:

- Ongoing review of the FY 2018 Inter Municipal Agreement (IMA) Operating Settlement, with completion expected by March 31, 2019
- FY 2018 Green Bond attestation has been completed and can be viewed on DC Water’s [website](#)
- FY 2019 preliminary year-end projections anticipated for Committee review in May 2019

**Matthew T. Brown**, Executive Vice President & Chief Financial Officer

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### Operating Revenues (\$000's)

Category	A	B	C	D = C/A	E = C-B	F = E/B
	FY 2019 BUDGET	YTD BUDGET*	ACTUAL	ACTUAL % BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)
Res. / Comm. / Multi.	\$373,652	\$155,688	\$164,615	44.1%	\$8,926	5.7%
Federal	67,054	27,939	32,831	49.0%	4,892	17.5%
Municipal (DC Govt.)	17,362	7,234	6,489	37.4%	(745)	(10.3%)
DC Housing Authority	9,719	4,050	4,263	43.9%	213	5.3%
Metering Fee	10,776	4,490	4,925	45.7%	435	9.7%
Water System Replacement Fee (WSRF)	39,717	16,549	17,499	44.1%	950	5.7%
Wholesale	79,237	33,015	40,496	51.1%	7,480	22.7%
PILOT/ROW	21,701	9,042	9,017	41.5%	(26)	(0.3%)
All Other	30,249	12,604	23,071	76.3%	10,467	83.0%
<b>TOTAL</b>	<b>\$649,467</b>	<b>\$270,611</b>	<b>\$303,205</b>	<b>46.7%</b>	<b>\$32,594</b>	<b>12.0%</b>

\*Straight-lined (5/12 of budget)

### VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

At the end of February 2019, cash receipts totaled \$303.2 million, or 46.7 percent of the Board-approved FY 2019 budget. Several categories of customers make payments on a quarterly basis, including the Federal Government (which made their second quarterly payment in January), and wholesale customers (who made their second quarter payment in February).

Residential, Commercial and Multi-Family – Receipts for this category are higher at \$164.6 million or 44.1 percent of the approved budget. The higher receipts are partly due to increased year-end billing of the unbilled accounts. The CRIAC receipts are also slightly higher than the budget.

Federal – Actual receipts through February 2019 total \$32.8 million or 49.0 percent of the approved budget. The Federal Government made their second quarter payment in January 2019.

District Government – Receipts are slightly lower at \$6.5 million, or 37.4 percent of the approved budget.

DC Housing – Receipts are slightly higher at \$4.3 million or 43.9 percent of the approved budget. The DC Housing Authority had not paid the August billed amount of \$0.8 million in September 2018. The overdue amount was received in October 2018, which resulted in one additional payment in FY 2019. However, DC Housing did not make January 2019 billed amount of \$0.85 million in February. The overdue amount was received on March 1, 2019, which will be reflected in the next month's report.

Wholesale – The Wholesale customers' actual receipts through January 2019 total \$40.5 million or 51.1 percent of the approved FY 2019 budget. The Wholesale customers made their second quarter payment in February 2019.

Other Revenue – Receipts are higher than the straight-line budget at \$23.1 million or 76.3 percent of the budgeted category primarily due to (i) higher Development Contractor Water and Sewer Service Fees and Fire Protection Service Fee as compared to budget and (ii) \$6.03 million payment received from the District Government for CAP2, CAP3 and CRIAC Non-Profit Relief program.

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### Operating Expenditures (\$000's)

Category	A	B	C	D=C/A	E=C-B	F=E/B
	FY 2019 BUDGET	YTD BUDGET*	ACTUAL	ACTUAL % BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)
Personnel	\$162,620	\$67,758	\$62,919	38.7%	\$4,839	7.1%
Contractual Services	81,679	34,033	30,294	37.1%	3,739	11.0%
Water Purchases	30,520	12,717	12,379	40.6%	338	2.7%
Supplies & Chemicals	32,091	13,371	14,386	44.8%	(1,014)	(7.6%)
Utilities	26,905	11,210	10,938	40.7%	272	2.4%
Small Equipment	1,240	517	169	13.6%	348	67.3%
<b>SUBTOTAL O&amp;M</b>	<b>\$335,055</b>	<b>\$139,606</b>	<b>\$131,084</b>	<b>39.1%</b>	<b>\$8,522</b>	<b>6.1%</b>
Debt Service	199,025	82,927	80,066	40.2%	2,861	3.4%
PILOT/ROW	21,702	9,043	9,043	41.7%	0	0.0%
Cash Financed Capital Improvements	26,999	11,250	0	0.0%	11,250	100.0%
<b>TOTAL OPERATING</b>	<b>\$582,781</b>	<b>\$242,825</b>	<b>\$220,193</b>	<b>37.8%</b>	<b>\$22,634</b>	<b>9.3%</b>
Capital Labor	(18,259)	(7,608)	(6,239)	34.2%	(1,369)	18.0%
<b>TOTAL NET OPERATING</b>	<b>\$564,522</b>	<b>\$235,218</b>	<b>\$213,954</b>	<b>37.9%</b>	<b>\$21,264</b>	<b>9.0%</b>

\*Straight-lined (5/12 of budget)

### VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

The total operating expenditures (including debt service and the Right-of-Way & PILOT fees) totaled \$220.2 million or 37.8 percent of the FY 2019 Board-approved budget of \$582.8 million. These numbers include estimated incurred but unpaid invoices and are subject to revision in subsequent months.

Personnel Services – YTD underspending is due to the temporary hiring freeze and lower benefit costs versus budget. A total of 1141 positions were filled at the end of February with a year-to-date vacancy rate of 6.7 percent after the elimination of aged vacancies. Overtime spending totals \$3.2 million or 43 percent of the annual budget due to increased after-hour work performed in response to emergencies and water main breaks during the winter season.

Contractual Services – Spending is in line with expectations and higher spending anticipated during the latter part of the fiscal year.

Water Purchases – Reflect DC Water's share of Washington Aqueduct expenditures with increase in consumption anticipated during the summer months.

Supplies & Chemicals – YTD overspending is due to increased chemical usage in the Tunnel Dewatering Pump Station (TDPS), higher than anticipated effluent at the Plant, and higher unit prices of major chemicals (methanol and ferric chloride).

Utilities – Presently, 5MW of the Authority's electric load is locked at an average Western hub price of \$31.40/MWh for the remainder of the year. Recent market update shows low volatility in the past weeks as we approach the end of the Winter season. As at March 15, 2019 the future market price for FY 2020 was \$33.55/MWh, which was relatively high compared to budget. Staff continues to monitor the market with plans to hedge additional loads when market conditions are favorable.

Debt Service – YTD actuals are in line with budget and debt service payment schedule.

Capital Labor – YTD spending reflects the reclassification of employee labor costs for the Department of Wastewater Engineering that was established in FY 2018. A team of staff from the Engineering and Finance departments conducted an in-depth review of how employees were charging their time for capital projects and found that these costs were not being captured as capital labor for the newly created department. This resulted in the cost reclassification of \$0.8 million to capital projects. The default job codes have been updated for the impacted employees to capture the costs appropriately.

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### Capital Disbursements (\$000's)

Service Area	A FY 2019 PROPOSED REVISED BUDGET	B YTD BUDGET	C ACTUAL	D = C/A ACTUAL % BUDGET	E = B-C VARIANCE \$ Fav/(Unfav)	F = E/B VARIANCE % Fav/(Unfav)
Non Process Facilities	\$15,309	\$10,780	\$4,627	30.2%	\$6,152	57.1%
Wastewater Treatment	69,979	37,133	22,099	31.6%	15,034	40.5%
Combined Sewer Overflow	195,350	105,455	95,609	48.9%	9,846	9.3%
Stormwater	4,220	1,321	1,027	24.3%	294	22.3%
Sanitary Sewer	44,927	22,855	17,194	38.3%	5,662	24.8%
Water	61,884	32,932	21,795	35.2%	11,136	33.8%
<b>SUBTOTAL: CAPITAL PROJECTS</b>	<b>\$391,669</b>	<b>\$210,475</b>	<b>\$162,352</b>	<b>41.5%</b>	<b>\$48,124</b>	<b>22.9%</b>
Capital Equipment*	34,518	14,382	9,023	26.1%	5,359	37.3%
Washington Aqueduct*	12,930	5,388	588	4.6%	4,799	89.1%
<b>SUBTOTAL: ADD'L CAPITAL PROGRAMS</b>	<b>\$47,448</b>	<b>\$19,770</b>	<b>9,611</b>	<b>20.3%</b>	<b>\$10,159</b>	<b>51.4%</b>
<b>TOTAL</b>	<b>\$439,116</b>	<b>\$230,245</b>	<b>\$171,963</b>	<b>39.2%</b>	<b>\$58,282</b>	<b>25.3%</b>

\*Straight-lined (5/12 of budget)

### VARIANCE ANALYSIS FOR MAJOR REPORTED ITEMS

The above annual and year-to-date budget information reflects the proposed revisions to the Board-approved FY 2019 budget. The overall budget remains the same at \$439.1 million, includes proposed adjustments within capital projects, and is consistent with the Proposed FY 2019 – FY 2028 CIP currently under review by the Board as part of the FY 2020 budget process.

At the end of February 2019, capital disbursements are \$172.0 million or 39.2 percent of the budget.

Capital Projects – YTD underspending is across all the service areas, and is anticipated to come within budget by the end of the fiscal year. Project Performance was reviewed in detail as part of the quarterly CIP update by the Department of Engineering & Technical Services to the Environmental Quality & Operations and Finance & Budget Committees in February 2019.

Capital Equipment – Lower YTD disbursements are primarily attributable to the lag in lead times for procurement and delivery of specialized Fleet equipment, the Enterprise Resource Planning (ERP) Project which is currently under the vendor selection process, and unused funds in the Authority-wide reserve.

Washington Aqueduct – YTD underspending is primarily due to delays on the McMillan Backwash Discharge to Sewer project, initially scheduled to be billed during the second quarter. The second quarter invoice of \$3.6 million is currently under review with payment anticipated in April 2019 after further discussions with the Washington Aqueduct.

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### Cash Investments (\$ in millions)

#### Cash Balances

<b>Rate Stabilization Fund Balance</b>	<b>\$</b>	<b>61.5</b>
<b>DC Insurance Reserve Balance</b>		<b>1.0</b>

<i>Operating Reserve Accounts</i>	
Renewal & Replacement Balance	35.0
O & M Reserve per Indenture	54.0
Undesignated Reserve Balance	36.5
<b>O &amp; M Reserve per Board Policy</b>	<b>125.5</b>
Excess Above O & M Reserve	14.5
<b>Management O &amp; M Reserve Level</b>	<b>140.0</b>
Project Billing Refunds	11.5
Excess Revenue	15.7
<b>Operating Reserve Accounts</b>	<b>167.2</b>

<b>Operating Cash Balance Including RSF</b>	<b>\$</b>	<b>229.6</b>
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Debt Service Reserve - Series 1998		23.4
Bond Fund - Construction 2016B		9.8
Bond Fund - Construction 2018A		76.4
Bond Fund - Construction 2018B		128.3
Series B - Commercial Paper		1.2
Fleet Relocation Fund		4.3
<b>Total All Funds</b>	<b>\$</b>	<b>473.1</b>

#### OVERALL PORTFOLIO PERFORMANCE

- The operating reserve balance was \$167.2 million as compared to the operating reserve level objective of \$140.0 million for FY 2019
- Average cash balance for the month of February was \$166.4 million
- Total investment portfolio was in compliance with the Authority's Investment Policy
- Operating funds interest income for February (on a cash basis) was \$246,201; YTD \$1,124,164
- A detailed investment performance report is attached

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### Cash Flow Summary (\$000's)

	Annual Budget Cash Basis	YTD 42% Cash Budget	YTD Actual Cash Oct. 1, 2018 - Feb. 28, 2019	Variance Favorable (Unfavorable)	
<b>OPERATING BUDGET</b>					
<b>Cash Provided</b>					
Retail	\$518,280	\$215,950	\$230,622	\$14,672	7%
Wholesale	79,237	33,015	40,496	7,480	23%
Other	51,526	21,469	31,921	10,452	49%
<b>Total Cash Provided</b>	<b>649,043</b>	<b>270,434</b>	<b>303,039</b>	<b>32,604</b>	<b>12%</b>
<b>Operating Cash Used</b>					
Personnel Services	144,361	60,150	61,101	(950)	-2%
Contractual Services	81,679	34,033	31,916	2,117	6%
Chemicals & Supplies	32,082	13,368	14,811	(1,443)	-11%
Utilities	26,915	11,215	11,313	(98)	-1%
Water Purchases	30,520	12,717	13,057	(340)	-3%
Small Equipment	1,240	517	245	271	53%
<b>Total Operating Cash Used</b>	<b>316,797</b>	<b>131,999</b>	<b>132,443</b>	<b>(444)</b>	<b>0%</b>
Defeasance D.S./Cash Financed Capital Construction	26,999	11,250	0	11,250	100%
<b>Other Cash Used</b>					
Debt Service	201,919	84,133	80,066	4,066	5%
Payment In Lieu of Taxes/Right of Way	21,702	9,042	10,851	(1,808)	-20%
Total Other Cash Used	223,620	93,175	90,917	2,258	2%
<b>Total Cash Used</b>	<b>567,416</b>	<b>236,423</b>	<b>223,360</b>	<b>13,063</b>	<b>6%</b>
<b>Net Cash Provided (Used) by Operating Act.</b>	<b>81,626</b>	<b>34,011</b>	<b>79,679</b>	<b>45,668</b>	
<b>CAPITAL BUDGET</b>					
<b>Cash Provided</b>					
Debt Proceeds	110,000	45,833	64,777	18,944	41%
EPA Grants	44,339	18,474	5,069	(13,406)	-73%
CSO Grants				0	0%
System Availability Fee	3,850	1,604	0	(1,604)	-100%
Transfer from Operations	111,922	46,634		(46,634)	-100%
Interest Income	2,981	1,242	2,311	1,069	86%
Wholesale Capital Contributions	65,851	27,438	25,799	(1,639)	-6%
<b>Total Cash Provided</b>	<b>338,943</b>	<b>141,226</b>	<b>97,955</b>	<b>(43,271)</b>	<b>-31%</b>
<b>Cash Used</b>					
DC Water Capital Program	426,188	177,578	171,375	6,204	3%
Washington Aqueduct Projects	12,930	5,388	588	4,799	89%
<b>Total Cash Used</b>	<b>439,118</b>	<b>182,966</b>	<b>171,963</b>	<b>11,003</b>	<b>6%</b>
<b>Net Cash/PAYGO Provided (Used) by Cap. Act.</b>	<b>(\$100,175)</b>	<b>(\$41,740)</b>	<b>(\$74,008)</b>	<b>(\$32,268)</b>	
<b>Beginning Balance, October 1 (Net of Rate Stab. Fund) Projected</b>	<b>\$166,796</b>		<b>\$166,796</b>		
Plus (Less) Operating Surplus	81,626	34,011	79,679		
Wholesale Customer Refunds from Prior Years	(1,500)	(625)	(2,537)		
Interest Earned From Bond Reserve	424	177	166		
Prior Year Federal Billing Reconciliation	(5,821)	(2,425)	(2,910)		
Project Billing Refunds	(4,000)	(1,667)			
Cash Used for Capital	(88,773)	(36,989)	(74,008)		
<b>Balance Attributable to O&amp;M Reserve</b>	<b>\$148,752</b>		<b>\$167,186</b>		
<b>OTHER CASH RESERVES</b>					
	<b>Current Balance</b>				
<b>Rate Stabilization Fund</b>	\$61,450				
<b>DC Insurance Reserve</b>	1,000				
<b>Fleet Relocation - DC Reimbursement</b>	4,331				

**Monthly Financial Report**

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APPENDIX

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Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

Operating Revenues Detail

(\$ in millions)

Revenue Category	FY 2019 Budget	YTD Budget	Actual	Variance Favorable / (Unfavorable)	Actual % of Budget
Residential, Commercial, and Multi-family	\$373.7	\$155.7	\$164.6	\$8.9	5.7%
Federal	67.1	28.0	32.8	4.8	17.5%
District Government	17.4	7.3	6.5	(0.8)	-10.3%
DC Housing Authority	9.7	4.1	4.3	0.2	5.3%
Customer Metering Fee	10.8	4.5	4.9	0.4	9.7%
Water System Replacement Fee (WSRF)	39.7	16.5	17.5	1.0	5.7%
Wholesale	79.2	33.0	40.5	7.5	22.7%
Right-of-Way Fee/PILOT	21.7	9.0	9.0	0.0	0.3%
<b>Subtotal (before Other Revenues)</b>	<b>\$619.3</b>	<b>\$258.0</b>	<b>\$280.1</b>	<b>\$22.1</b>	<b>8.6%</b>
Other Revenue without RSF					
IMA Indirect Cost Reimb. For Capital Projects	3.2	1.3	2.2	0.9	69.2%
DC Fire Protection Fee	10.8	4.5	6.3	1.8	40.0%
Stormwater (MS4)	1.0	0.4	0.6	0.2	50.0%
Interest	3.1	1.3	1.3	0.0	41.9%
Developer Fees (Water & Sewer)	6.0	2.5	4.6	2.1	84.0%
System Availability Fee (SAF)	3.9	1.6	0.2	(1.4)	-87.5%
Others	2.2	0.9	7.9	7.0	777.8%
<b>Subtotal</b>	<b>\$30.2</b>	<b>\$12.6</b>	<b>\$23.1</b>	<b>\$10.5</b>	<b>83.0%</b>
Rate Stabilization Fund Transfer	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
<b>Other Revenue Subtotal</b>	<b>\$30.2</b>	<b>\$12.6</b>	<b>\$23.1</b>	<b>\$10.5</b>	<b>83.0%</b>
<b>Grand Total</b>	<b>\$649.5</b>	<b>\$270.6</b>	<b>\$303.2</b>	<b>\$32.6</b>	<b>12.0%</b>

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

Customer Category	Water	Sewer	Clean Rivers			WSRF	Total
			IAC	Metering Fee			
Residential	14,867	23,450	13,710	2,161	3,908	58,095	
Commercial	25,662	28,995	16,635	1,455	6,691	79,438	
Multi-family	13,916	21,403	5,978	678	3,006	44,981	
Federal	9,391	10,675	12,764	393	2,888	36,112	
District Govt	1,038	1,404	4,048	179	820	7,488	
DC Housing Authority	1,471	2,179	614	58	186	4,508	
<b>Total:</b>	<b>66,343</b>	<b>88,105</b>	<b>53,749</b>	<b>4,925</b>	<b>17,499</b>	<b>230,622</b>	

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	FY2019 Budget	Year-To-Date Budget	Actual Received	Variance Favorable / <Unfavorable>	Variance % of YTD Budget	Actual % of Budget
Residential	29,078	12,116	13,710	1,594	13%	47%
Commercial	32,251	13,438	16,635	3,197	24%	52%
Multi-family	12,391	5,163	5,978	816	16%	48%
Federal	25,529	10,637	12,764	2,127	20%	50%
District Govt	8,280	3,450	4,048	598	17%	49%
DC Housing Authority	1,416	590	614	24	4%	43%
<b>Total:</b>	<b>108,945</b>	<b>45,394</b>	<b>53,749</b>	<b>8,355</b>	<b>18%</b>	<b>49%</b>

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### 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
September 30, 2018	\$13.4	16,273
October 31, 2018	\$14.4	14,890
November 30, 2018	\$13.9	14,091
December 31, 2018	\$14.6	14,373
January 31, 2019	\$13.6	12,153
February 28, 2019	\$12.5	11,732

#### Greater Than 90 Days by Customer

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.

	Number of Accounts			Month of February (All Categories)				Total Delinquent				
	W & S	Impervious Only	Total No. of	Active		Inactive		January		February		
				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	9,041	2,456	11,497	1,016	\$3,873,357	154	\$181,954	1,196	\$4,406,530	1,170	\$4,055,311	33%
Multi-family	8,340	358	8,698	817	\$3,789,845	70	\$63,083	895	\$4,279,810	887	\$3,852,928	31%
Single-Family Residential	105,686	3,122	108,808	8,858	\$4,379,694	817	\$185,645	10,062	\$4,899,863	9,675	\$4,565,339	37%
<b>Total</b>	<b>123,067</b>	<b>5,936</b>	<b>129,003</b>	<b>10,691</b>	<b>\$12,042,897</b>	<b>1,041</b>	<b>\$430,681</b>	<b>12,153</b>	<b>\$13,586,203</b>	<b>11,732</b>	<b>\$12,473,578</b>	<b>100%</b>

Notes: Included in the above \$12.47M (or 11,732 accounts) of the DC Water Over 90 days delinquent accounts, \$4,280,999.97 (or 1,977 accounts) represents Impervious only accounts over 90 days delinquent.

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

## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

### Overtime by Department

Department	FY 2019			
	Budget	YTD Actual	YTD Actual % of Budget	% of Regular Pay
Office of the Board Secretary	\$9,000	\$4,275	47.5%	3.8%
General Manager	9,000	0	0.0%	0.0%
General Counsel*	3,000	2,096	69.9%	0.2%
External Affairs	5,000	951	19.0%	0.2%
Internal Audit	-	0	0.0%	0.0%
Information Technology	15,000	4,617	30.8%	0.3%
Procurement	30,000	5,408	18.0%	0.4%
Customer Service **	311,000	199,674	64.2%	5.1%
Finance, Accounting & Budget	40,000	16,925	42.3%	0.7%
Assistant General Manager - Administrative Services	1,000	0	0.0%	0.0%
Office of Emergency Management	-	0	0.0%	0.0%
Human Capital Management	6,000	503	8.4%	0.0%
Occupational Safety and Health	1,000	75	7.5%	0.0%
Facilities Management	300,000	101,060	33.7%	7.1%
Department of Security	-	185	0.0%	0.1%
Wastewater Engineering	36,000	1,890	0.0%	0.2%
Water Quality and Technology	30,000	974	0.0%	0.1%
Distribution and Conveyance System	800,000	260,030	32.5%	8.4%
Engineering and Technical Services	864,000	310,226	35.9%	4.9%
Water Services ***	1,522,000	752,406	49.4%	14.2%
Clean Rivers	-	0	0.0%	0.0%
Sewer Services ****	1,068,000	613,735	57.5%	21.4%
Wastewater Treatment - Operations	1,831,000	702,466	38.4%	15.1%
Wastewater Treatment - Process Engineering	45,000	21,794	48.4%	1.5%
Maintenance Services	545,000	232,946	42.7%	7.4%
Permit Operations	99,000	8,096	8.2%	1.0%
Fleet Management	4,000	1,160	29.0%	0.4%
<b>Total DC WATER</b>	<b>\$7,575,000</b>	<b>\$3,241,492</b>	<b>42.8%</b>	<b>7.0%</b>

\* General Counsel charged overtime hours erroneously and will be removed during the next cycle

\*\* Customer Service is experiencing high overtime to complete meter reader replacement project

\*\*\* Water Services is experiencing high overtime for after hours and emergency repairs

\*\*\*\* Sewer Services is experiencing high overtime for after hours and emergency repairs

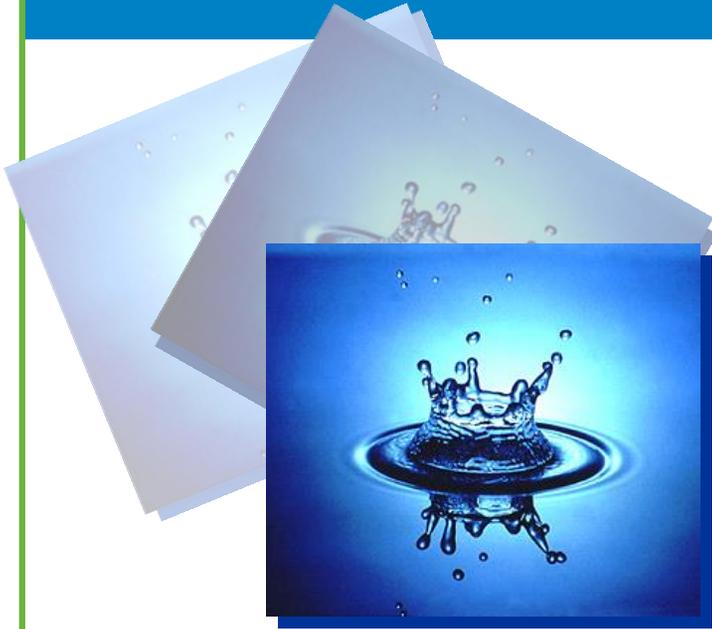
## Monthly Financial Report

Fiscal Year-to-Date  
As of February 28, 2019

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

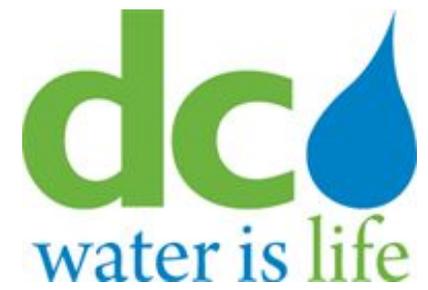
Service Areas	Budget		Actual			Variance		
	FY 2019* PROPOSED BUDGET	YTD BUDGET	Oct 2018 - Jan 2019	Feb. 2019	YTD	ACTUAL % BUDGET	VARIANCE \$ Fav/(Unfav)	VARIANCE % Fav/(Unfav)
<b>NON PROCESS FACILITIES</b>								
Facility Land Use	\$15,309	10,780	\$4,260	\$368	\$4,627	30.2%	\$6,152	57.1%
<b>Subtotal</b>	<b>15,309</b>	<b>10,780</b>	<b>4,260</b>	<b>368</b>	<b>4,627</b>	<b>30.2%</b>	<b>6,152</b>	<b>57.1%</b>
<b>WASTEWATER TREATMENT</b>								
Liquid Processing	21,488	11,835	8,199	352	8,552	39.8%	3,283	27.7%
Plantwide	15,777	5,612	4,038	510	4,548	28.8%	1,064	19.0%
Solids Processing	6,672	1,855	302	272	574	8.6%	1,281	69.0%
Enhanced Nitrogen Removal Facilities	26,042	17,831	7,294	1,131	8,425	32.4%	9,406	52.7%
<b>Subtotal</b>	<b>69,979</b>	<b>37,133</b>	<b>19,833</b>	<b>2,266</b>	<b>22,099</b>	<b>31.6%</b>	<b>15,034</b>	<b>40.5%</b>
<b>COMBINED SEWER OVERFLOW</b>								
D.C. Clean Rivers	187,859	101,978	82,100	9,784	91,884	48.9%	10,094	9.9%
Program Management	1,685	725	1,003	55	1,058	62.8%	(334)	-46.0%
Combined Sewer	5,805	2,752	2,638	29	2,667	45.9%	85	3.1%
<b>Subtotal</b>	<b>195,350</b>	<b>105,455</b>	<b>85,741</b>	<b>9,868</b>	<b>95,609</b>	<b>48.9%</b>	<b>9,846</b>	<b>9.3%</b>
<b>STORMWATER</b>								
Local Drainage	8	4	-	-	-	0.0%	4	100.0%
On-Going	1,056	186	276	451	727	68.9%	(541)	-291.2%
Pumping Facilities	1,996	693	267	-	267	13.4%	426	61.5%
DDOT	-	-	-	-	-	0.0%	-	0.0%
Research and Program Management	1,078	-	-	-	-	0.0%	-	0.0%
Trunk/Force Sewers	82	438	33	-	33	40.1%	405	92.5%
<b>Subtotal</b>	<b>4,220</b>	<b>1,321</b>	<b>576</b>	<b>451</b>	<b>1,027</b>	<b>24.3%</b>	<b>294</b>	<b>22.3%</b>
<b>SANITARY SEWER</b>								
Collection Sewers	5,434	4,474	1,980	461	2,441	44.9%	2,033	45.4%
On-Going	13,653	5,641	4,561	306	4,867	35.6%	774	13.7%
Pumping Facilities	2,248	1,085	484	88	572	25.4%	513	47.3%
Program Management	3,321	1,766	1,399	52	1,451	43.7%	315	17.8%
Interceptor/Trunk Force Sewers	20,270	9,889	4,761	3,102	7,863	38.8%	2,026	20.5%
<b>Subtotal</b>	<b>44,927</b>	<b>22,855</b>	<b>13,185</b>	<b>4,009</b>	<b>17,194</b>	<b>38.3%</b>	<b>5,662</b>	<b>24.8%</b>
<b>WATER</b>								
Distribution Systems	30,729	16,572	7,741	2,846	10,587	34.5%	5,985	36.1%
Lead Program	4,338	2,279	1,332	251	1,583	36.5%	695	30.5%
On-Going	10,080	4,659	3,500	286	3,786	37.6%	873	18.7%
Pumping Facilities	1,199	934	62	96	158	13.2%	777	83.1%
DDOT	992	425	-	-	-	0.0%	425	100.0%
Storage Facilities	9,384	6,595	3,015	347	3,362	35.8%	3,233	49.0%
Program Management	5,163	1,468	1,885	434	2,320	44.9%	(851)	-58.0%
<b>Subtotal</b>	<b>61,884</b>	<b>32,932</b>	<b>17,535</b>	<b>4,260</b>	<b>21,795</b>	<b>35.2%</b>	<b>11,136</b>	<b>33.8%</b>
<b>Capital Projects</b>	<b>391,669</b>	<b>210,475</b>	<b>141,130</b>	<b>21,222</b>	<b>162,352</b>	<b>41.5%</b>	<b>48,124</b>	<b>22.9%</b>
<b>CAPITAL EQUIPMENT</b>	<b>34,518</b>	<b>14,382</b>	<b>8,347</b>	<b>676</b>	<b>9,023</b>	<b>26.1%</b>	<b>5,359</b>	<b>37.3%</b>
<b>WASHINGTON AQUEDUCT</b>	<b>12,930</b>	<b>5,388</b>	<b>588</b>	<b>-</b>	<b>588</b>	<b>4.6%</b>	<b>4,799</b>	<b>89.1%</b>
<b>Additional Capital Programs</b>	<b>47,448</b>	<b>19,770</b>	<b>8,936</b>	<b>676</b>	<b>9,611</b>	<b>20.3%</b>	<b>10,159</b>	<b>51.4%</b>
<b>Total</b>	<b>\$439,116</b>	<b>\$230,245</b>	<b>\$150,065</b>	<b>\$21,898</b>	<b>\$171,963</b>	<b>39.2%</b>	<b>\$58,282</b>	<b>25.3%</b>

\*The FY 2019 budget reflects changes within the service areas and consistent with the annual estimate reflected in the Proposed FY 2019 – FY 2028 CIP



# DC Water

*Investment Performance Report – February 2019*



**DC Water  
Finance Division  
Economic Update**

### ECONOMIC COMMENTARY

- The first reading of fourth quarter GDP showed that the U.S. economy grew at an annual rate of 2.6%, decreasing from the third quarter reading of 3.4%. Fourth quarter GDP growth reflected positive contributions from consumer spending and a rise in imports which were offset by a decrease in governmental spending. For the year, 2018 real GDP increased by 2.9%.
- The U.S. labor market added 20,000 jobs in February versus the market's expectations of 175,000 jobs. The unemployment rate fell to 3.8% in February from 4.0% in January. The labor force participation rate remained at 63.2% in February.
- In prepared remarks to Congress, Federal Reserve Chairman Powell stated that although the Fed "view[s] current economic conditions as healthy and the economic outlook as favorable, over the past few months there have been some crosscurrents and conflicting signals". According to Powell, financial conditions are now "less supportive of growth than they were earlier this year", along with uncertainty in foreign markets amid slowing global growth, Brexit and ongoing trade negotiations.
- The U.S. Treasury yields increased during the month of February. The yield on the 6-month U.S. Treasury bill increased from 2.46% to 2.50% and the yield on the 2-year Treasury note increased from 2.46% to 2.52%. The yield curve remained partially inverted with the 1-year Treasury yielding 2.54% and 3-year Treasury yielding 2.51%.

### 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 2.11%.

#### Operating Reserve

- PFM purchased \$2.9 million of 2 to 3-year Treasuries at an average yield of 2.44%.

#### Debt Service Reserve

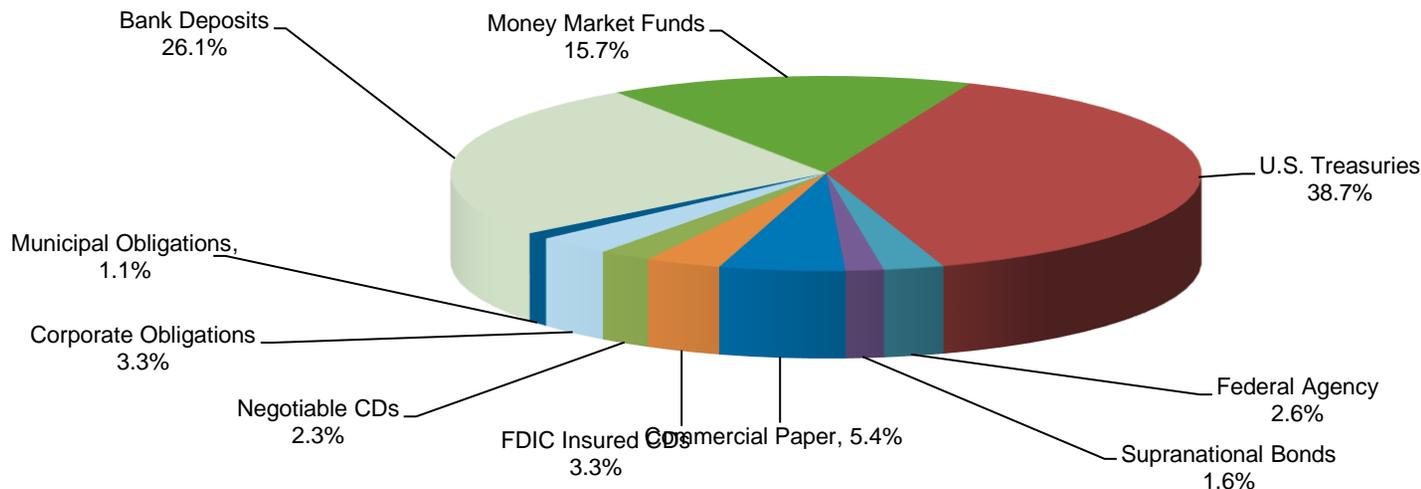
- PFM purchased \$7.5 million of 1-year Treasuries at a yield of 2.56%.

#### 2018A Construction Fund

- PFM purchased \$36 million of 1 to 2-month Treasuries at an average yield of 2.45%.



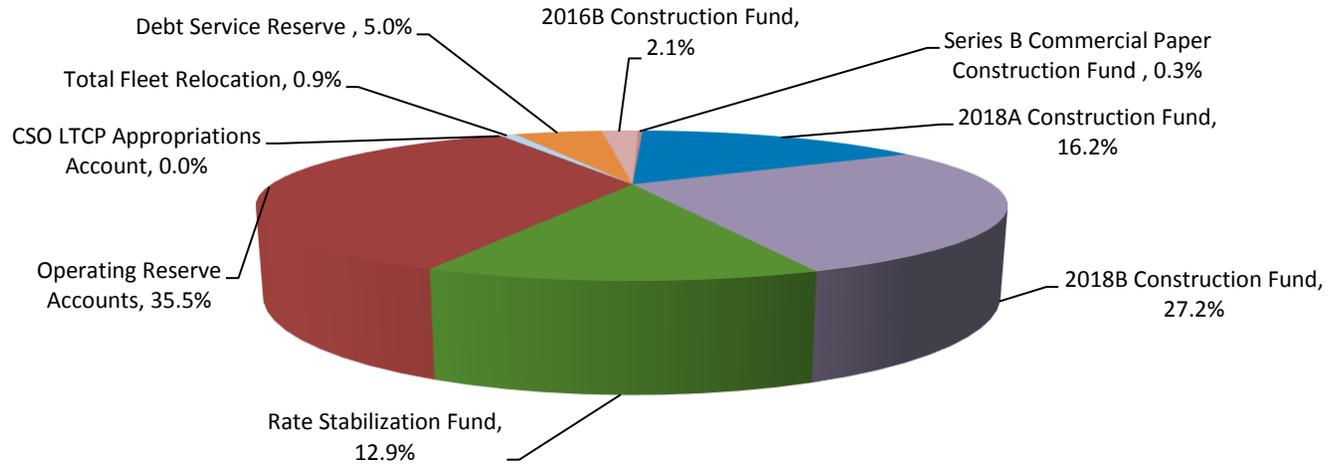
**DC Water  
Finance Division  
Investments - By Security Type  
As of February 28, 2019**



Security Type	Book Value + Accrued Interest	Asset Allocation	Permitted By Policy
Bank Deposits	124,100,409	26.1%	100.0%
Money Market Funds	74,508,452	15.7%	100.0%
U.S. Treasuries	183,848,739	38.7%	100.0%
Federal Agency	12,287,340	2.6%	80.0%
Supranational Bonds	7,750,804	1.6%	30.0%
Commercial Paper	25,662,220	5.4%	35.0%
FDIC Insured CDs	15,475,386	3.3%	30.0%
Negotiable CDs	10,713,885	2.3%	30.0%
Corporate Obligations	15,466,161	3.3%	30.0%
Municipal Obligations	5,158,862	1.1%	20.0%
<b>Total</b>	<b>\$ 474,972,259</b>	<b>100.0%</b>	



**DC Water  
Finance Division  
Investment Analysis – By Fund  
As of February 28, 2019**



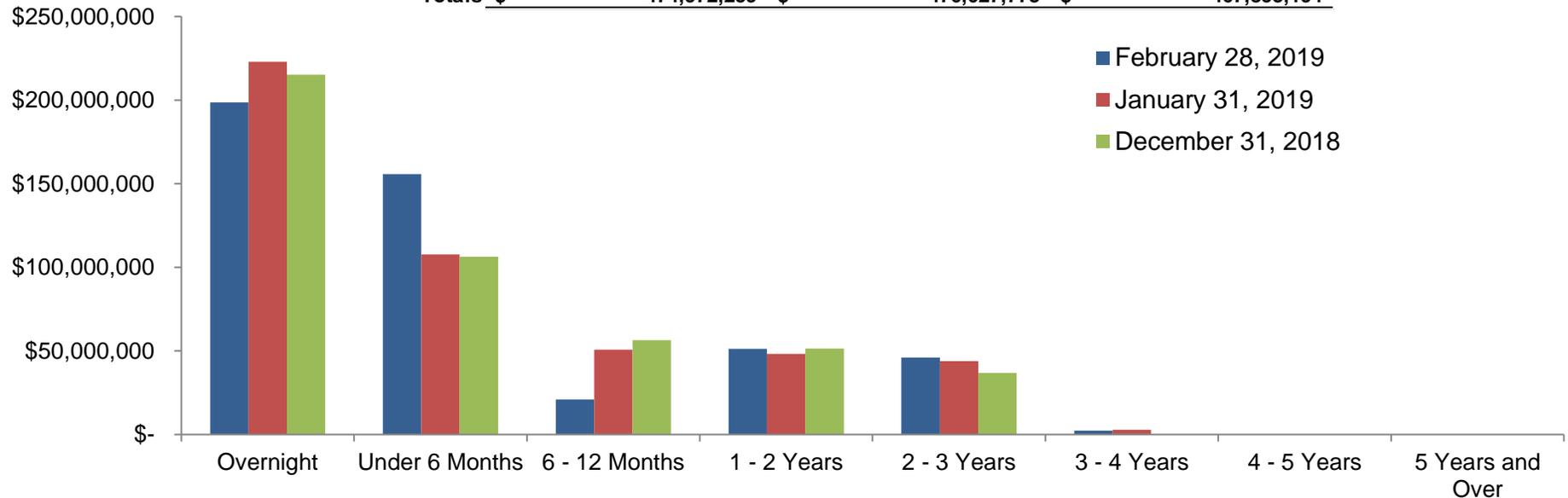
Fund Name	Book Value + Accrued Interest	Yield-to- Maturity at Cost	Effective Duration (years)	Weighted Average Maturity (days)
Rate Stabilization Fund	\$ 61,450,000	1.95%	0.00	1.0
Operating Reserve Accounts	\$ 168,787,096	1.80%	1.06	406.5
CSO LTCP Appropriations Account	\$ 523	2.34%	0.00	1.0
Fleet Relocation	\$ 4,331,000	0.90%	0.00	1.0
Debt Service Reserve	\$ 23,634,330	2.27%	1.10	419.1
Series B Commercial Paper Construction Fund	\$ 1,218,634	1.85%	0.00	1.0
2016B Construction Fund	\$ 9,824,995	2.26%	0.00	1.0
2018A Construction Fund	\$ 76,710,912	2.41%	0.09	33.1
2018B Construction Fund	\$ 129,014,769	2.38%	0.22	80.6
<b>Total</b>	<b>\$ 474,972,259</b>	<b>2.10%</b>	<b>0.51</b>	<b>192.7</b>

**Investment Performance Report – February 2019**



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

Maturity Distribution	February 28, 2019	January 31, 2019	December 31, 2018
Overnight	\$ 198,608,860.88	\$ 222,824,880.30	\$ 215,127,424.99
Under 6 Months	155,737,328.09	107,659,503.78	106,253,211.40
6 - 12 Months	20,850,020.68	50,774,637.04	56,459,331.92
1 - 2 Years	51,299,670.23	48,162,866.40	51,414,090.60
2 - 3 Years	46,114,181.64	43,803,507.51	36,785,894.57
3 - 4 Years	2,362,197.34	2,802,378.10	1,853,240.26
4 - 5 Years	-	-	-
5 Years and Over	-	-	-
<b>Totals</b>	<b>\$ 474,972,259</b>	<b>\$ 476,027,773</b>	<b>\$ 467,893,194</b>



## Investment Performance Report – February 2019



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

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
<b>Bank Deposits</b>					
TD Bank		124,100,408.65	26.1%	100.0%	Yes
<b>Sub-Total Bank Deposits</b>		<b>124,100,408.65</b>	<b>26.1%</b>	100.0%	Yes
<b>Money Market Mutual Funds</b>					
Wells Fargo Treasury Plus MMF	AAAm	73,117,152.12	15.4%	50.0%	Yes
Wells Fargo Government MMF	AAAm	172,666.22	0.0%	50.0%	Yes
First American Treasury	AAAm	1,218,633.89	0.3%	50.0%	Yes
<b>Sub-Total Money Market Mutual Funds</b>		<b>74,508,452.23</b>	<b>15.7%</b>	100.0%	Yes
<b>U.S. Treasuries</b>					
Treasury Note	AA+ / Aaa	183,848,739.14	38.7%	100.0%	Yes
<b>Sub-Total Treasuries</b>		<b>183,848,739.14</b>	<b>38.7%</b>	100.0%	Yes
<b>Federal Agencies</b>					
Fannie Mae	AA+ / Aaa	6,911,239.83	1.5%	40.0%	Yes
Federal Home Loan Bank	AA+ / Aaa	5,376,100.29	1.1%	40.0%	Yes
Freddie Mac	AA+ / Aaa	-	0.0%	40.0%	Yes
<b>Sub-Total Federal Agencies</b>		<b>12,287,340.12</b>	<b>2.6%</b>	80.0%	Yes
<b>Supranational Bonds</b>					
African Development Bank	AAA / Aaa	1,852,055.48	0.4%	5.0%	Yes
Asian Development Bank	AAA / Aaa	701,317.30	0.1%	5.0%	Yes
Inter-American Development Bank	AAA / Aaa	1,994,284.66	0.4%	5.0%	Yes
International Bank for Reconstruction and Development	AAA / Aaa	2,266,980.24	0.5%	5.0%	Yes
International Finance Corporation Note	AAA / Aaa	936,166.60	0.2%	5.0%	Yes
<b>Sub-Total Supranational Bonds</b>		<b>7,750,804.28</b>	<b>1.6%</b>	30.0%	Yes
<b>Commercial Paper</b>					
BNP Paribas NY Branch	A-1 / P-1	3,500,000.00	0.7%	5.0%	Yes
Cooperatieve Radobank U.A.	A-1 / P-1	2,380,000.00	0.5%	5.0%	Yes
JP Morgan Securities LLC	A-1 / P-1	13,000,000.00	2.7%	5.0%	Yes
MUFG Bank Ltd. NY	A-1 / P-1	1,491,040.01	0.3%	5.0%	Yes
Toyota Motor Credit Corporation	A-1+ / P-1	5,291,180.00	1.1%	5.0%	Yes
<b>Sub-Total Commercial Paper</b>		<b>25,662,220.01</b>	<b>5.4%</b>	35.0%	Yes

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



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

	Credit Ratings S&P / Moody's	Book Value		Investment Policy Limit	Compliance with Investment Policy
<b>FDIC Insured Certificates of Deposit</b>					
CDARS - Placed by Industrial Bank	NR / NR	15,475,386.48	3.3%	5.0%	Yes
<b>Sub-Total FDIC-Insured Certificates of Deposit</b>		<b>15,475,386.48</b>	<b>3.3%</b>	30.0%	Yes
<b>Negotiable Certificates of Deposit</b>					
Bank of Montreal Chicago	A+ / Aa2	942,212.71	0.2%	5.0%	Yes
Bank of Nova Scotia Houston	A+ / Aa2	931,580.59	0.2%	5.0%	Yes
Canadian Imperial Bank NY	A+ / Aa2	1,406,188.19	0.3%	5.0%	Yes
Goldman Sachs Bank USA	A-1 / P-1	1,421,777.78	0.3%	5.0%	Yes
Nordea Bank AB NY	A-1+ / P-1	1,851,537.56	0.4%	5.0%	Yes
Royal Bank of Canada NY	AA- / Aa2	705,292.00	0.1%	5.0%	Yes
Swedbank NY	AA- / Aa2	931,124.27	0.2%	5.0%	Yes
UBS AG Stamford CT	A+ / Aa2	1,622,942.22	0.3%	5.0%	Yes
Westpac Banking Corp NY	AA- / Aa3	901,230.00	0.2%	5.0%	Yes
<b>Sub-Total Negotiable Certificates of Deposit</b>		<b>10,713,885.32</b>	<b>2.3%</b>	30.0%	Yes
<b>Corporate Obligations</b>					
3M Company	AA- / A1	344,138.38	0.1%	5.0%	Yes
Apple	AA+ / Aa1	498,311.43	0.1%	5.0%	Yes
Bank of Montreal	A+ / Aa2	475,192.01	0.1%	5.0%	Yes
Bank of New York Mellon	A / A1	925,118.27	0.2%	5.0%	Yes
Bank of Nova Scotia	A+ / Aa2	927,536.30	0.2%	5.0%	Yes
Blackrock	AA- / Aa3	931,816.72	0.2%	5.0%	Yes
Coca-Cola	A+ / A1	381,912.86	0.1%	5.0%	Yes
Johnson & Johnson	AAA / Aaa	196,053.30	0.0%	5.0%	Yes
JP Morgan	A- / A2	932,069.19	0.2%	5.0%	Yes
Merck & Co.	AA / A1	442,587.39	0.1%	5.0%	Yes
Pfizer Inc.	AA / A1	1,480,722.85	0.3%	5.0%	Yes
Royal Bank of Canada	AA- / Aa2	878,906.04	0.2%	5.0%	Yes
Toronto Dominion Bank NY	AA- / Aa1	1,869,482.91	0.4%	5.0%	Yes
Total Capital	A+ / Aa3	883,150.96	0.2%	5.0%	Yes
Toyota	AA- / Aa3	1,856,473.91	0.4%	5.0%	Yes
Wal-Mart Stores Inc.	AA / Aa2	1,508,157.99	0.3%	5.0%	Yes
Westpac Banking	AA- / Aa3	934,530.23	0.2%	5.0%	Yes
<b>Sub-Total Corporate Obligations</b>		<b>15,466,160.74</b>	<b>3.3%</b>	30.0%	Yes

*CDARS holdings are not managed by PFMAM, and we therefore cannot guarantee the accuracy of holdings information provided.*



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

	<b>Credit Ratings S&amp;P / Moody's</b>	<b>Book Value</b>		<b>Investment Policy Limit</b>	<b>Compliance with Investment Policy</b>
<b>Municipal Obligations</b>					
California State	AA- / Aa3	1,087,563.97	0.2%	5.0%	Yes
Connecticut State	A / A1	985,897.72	0.2%	5.0%	Yes
Florida State	AA / Aa3	1,806,489.00	0.4%	5.0%	Yes
NYC Transitional Finance Authority	AAA / Aa1	543,528.00	0.1%	5.0%	Yes
New York State	NR / Aa1	392,350.83	0.1%	5.0%	Yes
University of California	AA / Aa2	343,032.37	0.1%	5.0%	Yes
<b>Sub-Total Municipal Obligations</b>		<b>5,158,861.89</b>	<b>1.1%</b>	20.0%	Yes
<b>Grand Total</b>		<b>\$ 474,972,258.86</b>	<b>100.0%</b>		

*CDARS holdings are not managed by PFMAM, and we therefore cannot guarantee the accuracy of holdings information provided.*



**DC Water  
Finance Division  
Book Value Performance  
As of February 28, 2019**

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

	Trailing 1 Month		Trailing 3 Months		Trailing 6 Months		Trailing 12 Months	Trailing 24 Months
	Periodic	Annualized	Periodic	Annualized	Periodic	Annualized		
Rate Stabilization Fund	0.15%	1.97%	0.48%	1.97%	0.97%	1.97%	1.62%	1.13%
Operating Reserve Accounts	0.23%	3.08%	0.37%	1.50%	0.80%	1.61%	1.46%	1.40%
Debt Service Reserve	0.17%	2.21%	0.54%	2.22%	1.04%	2.12%	1.81%	1.43%
2018A Construction Fund	0.18%	2.32%	0.51%	2.09%	1.01%	4.17%	n/a	n/a
2018B Construction Fund	0.18%	2.40%	0.57%	2.34%	1.17%	4.81%	n/a	n/a
<b>Short-Term</b>	<b>0.15%</b>	<b>2.00%</b>	<b>0.50%</b>	<b>2.04%</b>	<b>0.99%</b>	<b>2.00%</b>	<b>1.78%</b>	<b>1.45%</b>
ICE BoAML 3-Month Treasury Index (Book Value) <sup>1</sup>	0.19%	2.45%	0.60%	2.44%	1.17%	2.36%	2.12%	1.66%
<b>Core (1+ Years)</b>	<b>0.18%</b>	<b>2.41%</b>	<b>0.58%</b>	<b>2.39%</b>	<b>1.15%</b>	<b>2.33%</b>	<b>2.13%</b>	<b>1.84%</b>
ICE BoAML 1-3 Year Treasury Index (Book Value) <sup>2</sup>	0.19%	2.53%	0.62%	2.54%	1.33%	2.70%	2.61%	2.19%

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



**DC Water  
Finance Division  
Portfolio Holdings by Fund**

DESCRIPTION	CUSIP	PAR AMOUNT	COUPON RATE	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	MARKET VALUE + ACCRUED INTEREST	AMORTIZED COST + ACCRUED INTEREST	TOTAL VALUE
<b>Rate Stabilization Fund</b>										
TD BANK BANK DEPOSIT		\$ 61,450,000		3/1/2019		1.95%	\$ 61,450,000	\$ 61,450,000	\$ 61,450,000	\$ 61,450,000.00
<b>Operating Reserve Accounts</b>										
TD BANK BANK DEPOSIT		\$ 57,318,886		3/1/2019		0.90%	\$ 57,318,886	\$ 57,318,886	\$ 57,318,886	
DC RESERVES TD BANK DEPOSIT		1,000,000		3/1/2019		2.34%	1,000,000	1,000,000	1,000,000	
WELLS FARGO GOVERNMENT MMF		172,666		3/1/2019		2.28%	172,666	172,666	172,666	
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	1,803,591	1,806,489	
GOLDMAN SACHS BANK USA CERT DEPOS	40054PAE5	1,400,000	2.800	8/5/2019	8/13/2018	2.80%	1,400,000	1,422,556	1,421,778	
CT ST TXBL GO BONDS	20772JD2	985,000	1.300	8/15/2019	8/17/2016	1.23%	987,128	976,931	985,898	
INDUSTRIAL BANK CDARS		5,077,888	0.500	10/10/2019	10/11/2018	0.50%	5,077,888	5,087,705	5,087,705	
INDUSTRIAL BANK CDARS		5,110,912	1.500	11/7/2019	11/8/2018	1.51%	5,110,912	5,134,701	5,134,701	
PFIZER INC CORP NOTE	717081EB5	595,000	1.700	12/15/2019	11/21/2016	1.72%	594,572	592,630	597,022	
PFIZER INC CORP NOTE	717081EB5	300,000	1.700	12/15/2019	11/21/2016	1.73%	299,775	298,805	301,017	
INDUSTRIAL BANK CDARS		2,640,952	2.000	1/16/2020	1/17/2019	2.02%	2,640,952	2,647,181	2,647,181	
INDUSTRIAL BANK CDARS		2,599,667	2.000	1/16/2020	1/17/2019	2.02%	2,599,667	2,605,799	2,605,799	
NORDEA BANK AB NY CD	65590ASN7	1,850,000	2.720	2/20/2020	2/22/2018	2.72%	1,850,000	1,855,332	1,851,538	
US TREASURY NOTES	912828J50	2,625,000	1.375	2/29/2020	9/1/2017	1.38%	2,624,897	2,594,643	2,625,057	
UBS AG STAMFORD CT LT CD	90275DHG8	1,600,000	2.900	3/2/2020	3/6/2018	2.93%	1,600,000	1,627,867	1,622,942	
WESTPAC BANKING CORP NOTES	961214DJ9	925,000	2.150	3/6/2020	3/6/2017	2.16%	924,602	928,797	934,530	
AFRICAN DEVELOPMENT BANK NOTE	00828ECA5	1,035,000	1.875	3/16/2020	3/16/2017	1.93%	1,033,468	1,033,234	1,043,353	
CANADIAN IMP BK COMM NY FLT CERT DEPOS	13606BVF0	1,400,000	3.183	4/10/2020	4/10/2018	2.78%	1,400,000	1,409,968	1,406,188	
TOYOTA MOTOR CREDIT CORP	89236TDU6	630,000	1.950	4/17/2020	4/17/2017	1.97%	629,710	628,483	634,462	
TOYOTA MOTOR CREDIT CORP	89236TDU6	295,000	1.950	4/17/2020	4/17/2017	1.94%	295,089	294,289	297,175	
US TREASURY NOTES	912828K58	2,750,000	1.375	4/30/2020	4/5/2017	1.53%	2,737,646	2,725,363	2,757,884	
US TREASURY NOTES	912828K58	1,575,000	1.375	4/30/2020	4/10/2017	1.55%	1,566,879	1,560,890	1,579,098	
NYC TRANS FIN AUTH, NY TXBL REV BONDS	64971W5W6	540,000	1.960	5/1/2020	6/29/2017	1.96%	540,000	538,106	543,528	
US TREASURY NOTES	912828VF4	1,650,000	1.375	5/31/2020	5/23/2018	2.58%	1,611,070	1,631,760	1,631,385	
BANK OF NOVA SCOTIA HOUSTON CD	06417GU22	925,000	3.080	6/5/2020	6/7/2018	3.10%	924,649	937,692	931,581	
WAL-MART STORES INC CORP NOTES	931142EG4	925,000	2.850	6/23/2020	6/27/2018	2.87%	924,713	932,263	929,788	
TOTAL CAPITAL SA CORP NOTES	89152UAD4	850,000	4.450	6/24/2020	4/10/2017	2.07%	912,492	875,088	883,151	
US TREASURY NOTES	912828X48	1,825,000	1.625	6/30/2020	6/16/2017	1.51%	1,830,988	1,807,601	1,832,580	
US TREASURY NOTES	912828X48	3,650,000	1.625	6/30/2020	6/28/2017	1.50%	3,663,117	3,615,202	3,665,726	
BANK OF NOVA SCOTIA HOUSTON CORP BOND	064159JX5	925,000	2.150	7/14/2020	7/14/2017	2.15%	924,871	919,607	927,536	
FNMA NOTES	3135G0T60	1,850,000	1.500	7/30/2020	9/1/2017	1.49%	1,850,481	1,825,868	1,852,629	
US TREASURY NOTES	912828XM7	825,000	1.625	7/31/2020	7/7/2017	1.60%	825,516	815,407	826,317	
BANK OF MONTREAL CHICAGO CERT DEPOS	06370REU9	925,000	3.190	8/3/2020	8/3/2018	3.23%	925,000	945,321	942,213	
WESTPAC BANKING CORP NY CD	96121T4A3	900,000	2.050	8/3/2020	8/7/2017	2.05%	900,000	894,341	901,230	
INTL BANK OF RECONSTRUCTION AND DEV NOTE	45905UP32	925,000	1.561	9/12/2020	9/19/2017	1.64%	922,780	916,250	930,624	
TORONTO-DOMINION BANK	89114QC71	925,000	3.150	9/17/2020	9/17/2018	3.16%	924,806	941,756	938,123	
FHLB NOTES	3130ACE26	965,000	1.375	9/28/2020	9/8/2017	1.48%	961,902	953,185	969,024	
FANNIE MAE NOTES	3135G0U84	1,850,000	2.875	10/30/2020	11/6/2018	2.95%	1,847,373	1,876,853	1,865,518	
US TREASURY NOTES	912828L99	250,000	1.375	10/31/2020	10/17/2017	1.71%	247,539	246,354	249,785	
INTER-AMERICAN DEVELOPMENT BANK	4581X0CD8	915,000	2.125	11/9/2020	10/10/2017	1.81%	923,481	913,052	925,759	
JOHNSON & JOHNSON CORP NOTE	478160CH5	195,000	1.950	11/10/2020	11/10/2017	1.99%	194,791	193,870	196,053	
COCA-COLA CO/THE GLOBAL NOTES	191216AR1	370,000	3.150	11/15/2020	9/12/2017	1.78%	385,584	376,008	381,913	
SWEDBANK (NEW YORK) CERT DEPOS	87019U6D6	925,000	2.270	11/16/2020	11/17/2017	2.30%	925,000	920,702	931,124	

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**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
<b>Operating Reserve Accounts</b>										
US TREASURY NOTES	912828M98	3,000,000	1.625	11/30/2020	11/3/2017	1.77%	2,986,992	2,964,962	3,004,706	
US TREASURY NOTES	912828N48	1,975,000	1.750	12/31/2020	12/5/2017	1.91%	1,965,588	1,952,800	1,975,048	
US TREASURY NOTES	912828N48	975,000	1.750	12/31/2020	12/6/2017	1.96%	968,830	964,041	974,099	
ASIAN DEVELOPMENT BANK NOTE	045167EF6	700,000	2.250	1/20/2021	1/19/2018	2.29%	699,251	697,037	701,317	
US TREASURY NOTES	912828N89	1,750,000	1.375	1/31/2021	1/4/2018	2.05%	1,715,000	1,713,919	1,729,816	
US TREASURY NOTES	912828N89	800,000	1.375	1/31/2021	1/4/2018	2.08%	783,188	783,506	790,258	
US TREASURY NOTES	912828P87	1,100,000	1.125	2/28/2021	2/16/2018	2.42%	1,058,707	1,070,084	1,072,508	
INTERNATIONAL FINANCE CORPORATION NOTE	45950VLQ7	925,000	2.635	3/9/2021	3/16/2018	2.66%	924,306	935,191	936,167	
NY ST DORM AUTH PITS TXBL REV BONDS	64990FJN5	390,000	3.100	3/15/2021	12/21/2018	3.10%	390,000	394,040	392,351	
AFRICAN DEVELOPMENT BANK NOTE	00828ECZ0	800,000	2.625	3/22/2021	3/22/2018	2.66%	799,176	808,953	808,703	
CA ST TXBL GO BONDS	13063DGA0	1,075,000	2.800	4/1/2021	4/25/2018	2.80%	1,075,043	1,090,605	1,087,564	
TOYOTA MOTOR CREDIT CORP	89236TCZ6	475,000	1.900	4/8/2021	3/6/2018	2.82%	462,223	469,479	469,773	
BANK OF MONTREAL CHICAGO CORP NOTES	06367T4W7	470,000	3.100	4/13/2021	4/13/2018	3.14%	469,450	476,806	475,192	
TOYOTA MOTOR CREDIT CORP NOTES	89236TEU5	290,000	2.950	4/13/2021	4/13/2018	2.96%	289,884	294,034	293,197	
TOYOTA MOTOR CREDIT CORP NOTES	89236TEU5	160,000	2.950	4/13/2021	4/13/2018	2.93%	160,082	162,225	161,868	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406FAA1	515,000	2.500	4/15/2021	2/16/2018	2.93%	508,300	515,357	515,310	
BANK OF NEW YORK MELLON CORP (CALLABLE)	06406FAA1	410,000	2.500	4/15/2021	2/16/2018	2.99%	404,022	410,284	409,808	
INTER-AMERICAN DEVELOPMENT BANK NOTE	4581X0DB1	1,060,000	2.625	4/19/2021	4/19/2018	2.70%	1,057,668	1,069,660	1,068,526	
ROYAL BANK OF CANADA CORP NOTES	78013XKG2	870,000	3.200	4/30/2021	4/30/2018	3.23%	869,382	885,347	878,906	
US TREASURY N/B NOTES	9128284P2	1,900,000	2.625	5/15/2021	2/11/2019	2.45%	1,907,348	1,918,910	1,921,800	
UNIV OF CAL TXBL REV BONDS	91412HBH5	340,000	3.029	5/15/2021	6/5/2018	3.03%	340,000	344,797	343,032	
US TREASURY NOTES	912828WN6	975,000	2.000	5/31/2021	6/6/2018	2.62%	957,671	969,020	966,689	
ROYAL BANK OF CANADA NY CD	78012UEE1	700,000	3.240	6/7/2021	6/8/2018	3.24%	700,000	711,247	705,292	
TORONTO DOMINION BANK CORP NOTES	89114QBZ0	925,000	3.250	6/11/2021	6/12/2018	3.27%	924,584	937,356	931,360	
FANNIE MAE NOTES	3135G0U35	1,320,000	2.750	6/22/2021	6/25/2018	2.76%	1,319,696	1,332,942	1,326,720	
WAL-MART STORES INC CORP NOTES	931142EJ8	575,000	3.125	6/23/2021	6/27/2018	3.13%	574,971	584,092	578,370	
INTL BANK OF RECONSTRUCTION AND DEV NOTE	459058GH0	1,335,000	2.750	7/23/2021	7/25/2018	2.83%	1,331,876	1,343,597	1,336,356	
US TREASURY NOTES	9128284W7	3,500,000	2.750	8/15/2021	9/7/2018	2.72%	3,502,871	3,523,956	3,506,173	
US TREASURY NOTES	9128284W7	1,100,000	2.750	8/15/2021	9/28/2018	2.91%	1,095,316	1,107,529	1,097,161	
US TREASURY NOTES	9128284W7	450,000	2.750	8/15/2021	10/4/2018	2.89%	448,295	453,080	449,013	
US TREASURY NOTES	9128284W7	425,000	2.750	8/15/2021	10/11/2018	2.97%	422,443	427,909	423,236	
3M COMPANY	88579YBA8	340,000	3.000	9/14/2021	9/14/2018	3.07%	339,303	347,631	344,138	
PFIZER INC CORP NOTE	717081EM1	575,000	3.000	9/15/2021	9/7/2018	3.05%	574,224	587,011	582,683	
FEDERAL HOME LOAN BANKS NOTES (CALLABLE)	3130AEXV7	925,000	3.000	9/20/2021	9/20/2018	3.00%	925,000	939,234	937,410	
FEDERAL HOME LOAN BANKS NOTES	3130AF5B9	1,850,000	3.000	10/12/2021	11/6/2018	3.02%	1,848,927	1,892,009	1,870,484	
FEDERAL HOME LOAN BANKS NOTES	3130AF5B9	1,575,000	3.000	10/12/2021	12/12/2018	2.85%	1,581,395	1,610,764	1,599,182	
UNITED STATES TREASURY NOTES	9128285F3	1,000,000	2.875	10/15/2021	12/12/2018	2.77%	1,002,852	1,018,985	1,012,259	
FANNIE MAE NOTES	3135G0U92	935,000	2.625	1/11/2022	1/11/2019	2.65%	934,327	939,846	937,766	
FANNIE MAE NOTES	3135G0U92	925,000	2.625	1/11/2022	1/31/2019	2.62%	925,241	929,794	928,607	
UNITED STATES TREASURY NOTES	9128285V8	4,600,000	2.500	1/15/2022	1/31/2019	2.55%	4,593,352	4,614,834	4,607,826	
UNITED STATES TREASURY NOTES	9128285V8	1,000,000	2.500	1/15/2022	2/11/2019	2.43%	1,001,992	1,003,225	1,005,068	
US TREASURY NOTES	912828V72	3,800,000	1.875	1/31/2022	1/9/2019	2.50%	3,730,828	3,739,356	3,739,617	
MERCK & CO INC CORP NOTES	58933YAQ8	450,000	2.350	2/10/2022	1/16/2019	2.99%	441,639	446,134	442,587	
APPLE INC CORP NOTES	037833BF6	500,000	2.700	5/13/2022	1/10/2019	3.08%	494,015	502,382	498,311	
BLACKROCK INC CORP NOTES	09247XAJ0	925,000	3.375	6/1/2022	11/9/2018	3.41%	923,909	945,284	931,817	
JPMORGAN CHASE & CO CORP NOTES	46647PAS5	925,000	3.514	6/18/2022	6/26/2018	3.50%	925,564	941,197	932,069	
										\$ 168,787,096.44

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Investment Performance Report – February 2019



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
<b>Debt Service Reserve</b>										
WELLS FARGO TREASURY PLUS MMF		\$ 14,752		3/1/2019		2.26%	\$ 14,752	\$ 14,752	\$ 14,752	
US TREASURY NOTES	912828C65	3,850,000	1.625	3/31/2019	10/2/2018	2.39%	3,835,563	3,873,557	3,873,719	
US TREASURY NOTES	912828W97	5,175,000	1.250	3/31/2019	10/10/2017	1.45%	5,160,041	5,196,977	5,201,170	
US TREASURY N/B NOTES	9128284C1	7,475,000	2.250	3/31/2020	2/6/2019	2.56%	7,449,013	7,521,290	7,520,702	
US TREASURY NOTES	912828F21	7,025,000	2.125	9/30/2021	4/2/2018	2.49%	6,940,206	7,021,204	7,023,988	
										\$ 23,634,330.38
<b>CSO LTCP Appropriations Account</b>										
TD BANK BANK DEPOSIT		\$ 523		3/1/2019		2.34%	\$ 523	\$ 523	\$ 523	
										\$ 523.04
<b>Fleet Relocation Account</b>										
TD BANK BANK DEPOSIT		\$ 4,331,000		3/1/2019		0.90%	\$ 4,331,000	\$ 4,331,000	\$ 4,331,000	
										\$ 4,331,000.00
<b>Series B Commercial Paper Construction Fund</b>										
FIRST AMERICAN FUNDS TREASURY MMF		\$ 1,218,634		3/1/2019		1.85%	\$ 1,218,634	\$ 1,218,634	\$ 1,218,634	
										\$ 1,218,633.89
<b>2016B Construction Fund</b>										
WELLS FARGO TREASURY PLUS MMF		\$ 9,824,995		3/1/2019		2.26%	\$ 9,824,995	\$ 9,824,995	\$ 9,824,995	
										\$ 9,824,994.60
<b>2018A Construction Fund</b>										
WELLS FARGO TREASURY PLUS MMF		\$ 19,962,517		3/1/2019		2.26%	\$ 19,962,517	\$ 19,962,517	\$ 19,962,517	
BNP PARIBAS NY BRANCH COMM PAPER	09659CQ19	3,500,000	-	3/1/2019	6/7/2018	2.48%	3,436,662	3,499,769	3,500,000	
COOPERATIEVE RABOBANK U.A. COMM PAPER	21687BQ12	2,380,000	-	3/1/2019	6/8/2018	2.44%	2,337,795	2,379,843	2,380,000	
JP MORGAN SECURITIES LLC COMM PAPER	46640QQ12	5,750,000	-	3/1/2019	6/7/2018	2.58%	5,642,106	5,749,615	5,750,000	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HQ15	2,300,000	-	3/1/2019	6/7/2018	2.52%	2,257,866	2,299,853	2,300,000	
US TREASURY NOTES	912828W97	16,080,000	1.250	3/31/2019	3/1/2019	2.47%	16,063,669	16,148,288	16,147,603	
US TREASURY NOTES	912828D23	19,950,000	1.625	4/30/2019	3/1/2019	2.44%	19,922,725	20,030,750	20,031,086	
US TREASURY NOTES	912828XS4	4,795,000	1.250	5/31/2019	6/7/2018	2.34%	4,744,802	4,795,187	4,797,121	
US TREASURY NOTES	912828D80	1,850,000	1.625	8/31/2019	8/28/2018	2.45%	1,834,896	1,841,627	1,842,586	
										\$ 76,710,911.94
<b>2018B Construction Fund</b>										
WELLS FARGO TREASURY PLUS MMF		\$ 43,314,889		3/1/2019		2.26%	\$ 43,314,889	\$ 43,314,889	\$ 43,314,889	
JP MORGAN SECURITIES LLC COMM PAPER	46640QQ12	7,250,000	-	3/1/2019	6/7/2018	2.58%	7,113,960	7,249,514	7,250,000	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HQ15	1,500,000	-	3/1/2019	6/7/2018	2.52%	1,472,521	1,499,904	1,500,000	
MUFG BANK LTD/NY COMM PAPER	62479MSQ7	1,500,000	-	5/24/2019	8/28/2018	2.61%	1,471,307	1,490,951	1,491,040	
TOYOTA MOTOR CREDIT CORP COMM PAPER	89233HSQ8	1,500,000	-	5/24/2019	8/28/2018	2.57%	1,471,755	1,491,377	1,491,180	
US TREASURY NOTES	912828XS4	27,200,000	1.250	5/31/2019	8/28/2018	2.37%	26,972,625	27,201,061	27,209,748	
US TREASURY NOTES	912828WS5	14,000,000	1.625	6/30/2019	8/31/2018	2.40%	13,911,406	13,996,687	14,002,015	
US TREASURY NOTES	912828K5	4,660,000	1.375	7/31/2019	8/28/2018	2.42%	4,615,766	4,643,287	4,644,939	
US TREASURY NOTES	912828D80	28,225,000	1.625	8/31/2019	8/31/2018	2.46%	27,994,569	28,097,258	28,110,958	
										\$ 129,014,768.57
							<b>\$ 472,952,180.66</b>	<b>\$ 474,712,361.95</b>	<b>\$ 474,972,258.86</b>	<b>\$ 474,972,258.86</b>

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

Investment Performance Report – February 2019



DC Water  
Finance Division  
Security Purchases  
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
<b>Operating Reserve Accounts</b>							
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
9128284W7	US TREASURY NOTES	450,000.00	2.75	8/15/2021	10/4/2018	2.89	449,976.31
	INDUSTRIAL BANK CDARS	5,077,887.90	0.50	10/10/2019	10/11/2018	0.51	5,077,887.90
9128284W7	US TREASURY NOTES	425,000.00	2.75	8/15/2021	10/11/2018	2.97	424,253.65
3130AF5B9	FEDERAL HOME LOAN BANKS NOTES	1,850,000.00	3.00	10/12/2021	11/6/2018	3.02	1,852,627.00
3135G0U84	FANNIE MAE NOTES	1,850,000.00	2.88	10/30/2020	11/6/2018	2.95	1,848,111.72
	INDUSTRIAL BANK CDARS	5,110,911.79	1.50	11/7/2019	11/8/2018	1.52	5,110,911.79
09247XAJ0	BLACKROCK INC CORP NOTES	925,000.00	3.38	6/1/2022	11/9/2018	3.41	937,610.06
3130AF5B9	FEDERAL HOME LOAN BANKS NOTES	1,575,000.00	3.00	10/12/2021	12/12/2018	2.85	1,589,269.50
9128285F3	UNITED STATES TREASURY NOTES	1,000,000.00	2.88	10/15/2021	12/12/2018	2.77	1,007,432.60
64990FJN5	NY ST DORM AUTH PITS TXBL REV BONDS	390,000.00	3.10	3/15/2021	12/21/2018	3.10	390,000.00
912828V72	US TREASURY NOTES	3,800,000.00	1.88	1/31/2022	1/9/2019	2.50	3,762,193.62
037833BF6	APPLE INC CORP NOTES	500,000.00	2.70	5/13/2022	1/10/2019	3.08	496,152.50
3135G0U92	FANNIE MAE NOTES	935,000.00	2.63	1/11/2022	1/11/2019	2.65	934,326.80
58933YAQ8	MERCK & CO INC CORP NOTES	450,000.00	2.35	2/10/2022	1/16/2019	2.99	446,221.50
	INDUSTRIAL BANK CDARS	2,640,951.83	2.00	1/16/2020	1/17/2019	2.02	2,640,951.83
	INDUSTRIAL BANK CDARS	2,599,666.74	2.00	1/16/2020	1/17/2019	2.02	2,599,666.74
3135G0U92	FANNIE MAE NOTES	925,000.00	2.63	1/11/2022	1/31/2019	2.62	926,589.46
9128285V8	UNITED STATES TREASURY NOTES	4,600,000.00	2.50	1/15/2022	1/31/2019	2.55	4,598,434.43
9128284P2	US TREASURY N/B NOTES	1,900,000.00	2.63	5/15/2021	2/11/2019	2.45	1,919,471.97
9128285V8	UNITED STATES TREASURY NOTES	1,000,000.00	2.50	1/15/2022	2/11/2019	2.43	1,003,856.83
<b>Total Debt Service Reserve</b>							
912828C65	US TREASURY NOTES	11,325,000.00	1.63	3/31/2019	10/2/2018	2.39	11,283,542.41
9128284C1	US TREASURY N/B NOTES	7,475,000.00	2.25	3/31/2020	2/6/2019	2.56	7,508,617.61
<b>2018A Construction Fund</b>							
912828D23	US TREASURY NOTES	19,950,000.00	1.625	4/30/2019	3/1/2019	2.44	20,031,085.63
912828W97	US TREASURY NOTES	16,080,000.00	1.250	3/31/2019	3/1/2019	2.47	16,147,602.82

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

Investment Performance Report – February 2019



DC Water  
Finance Division  
Security Sales  
Last 6 Months

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	YTM	TRANSACTION AMOUNT
<b>Operating Reserve Accounts</b>							
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
594918BV5	MICROSOFT CORP NOTES	445,000.00	1.85	2/6/2020	10/4/2018	2.80	440,830.60
36962G4R2	GENERAL ELECTRIC CAPITAL CORP CORP NOTE	425,000.00	4.38	9/16/2020	10/11/2018	3.60	432,347.48
3130A8DB6	FHLB GLOBAL NOTE	1,015,000.00	1.13	6/21/2019	11/6/2018	2.60	1,010,035.38
3137EAEB1	FHLMC REFERENCE NOTE	1,250,000.00	0.88	7/19/2019	11/6/2018	2.63	1,238,038.37
458182DX7	INTER-AMERICAN DEVELOPMENT BANK	1,260,000.00	1.00	5/13/2019	11/6/2018	2.63	1,255,496.20
3137EAEB1	FHLMC REFERENCE NOTE	1,000,000.00	0.88	7/19/2019	11/9/2018	2.66	990,433.61
3135G0P49	FNMA NOTES	1,450,000.00	1.00	8/28/2019	12/10/2018	2.67	1,436,998.33
3135G0P49	FNMA NOTES	975,000.00	1.00	8/28/2019	12/10/2018	2.67	966,257.50
3135G0P49	FNMA NOTES	375,000.00	1.00	8/28/2019	12/19/2018	2.71	371,776.25
912828G61	US TREASURY NOTES	2,325,000.00	1.50	11/30/2019	1/9/2019	2.62	2,306,127.34
3135G0P49	FNMA NOTES	625,000.00	1.00	8/28/2019	1/9/2019	2.56	621,155.56
00828EBQ1	AFRICAN DEVELOPMENT BANK NOTE	700,000.00	1.13	9/20/2019	1/9/2019	2.70	694,831.38
912828H52	US TREASURY NOTES	500,000.00	1.25	1/31/2020	1/10/2019	2.60	495,756.62
912828H52	US TREASURY NOTES	925,000.00	1.25	1/31/2020	1/11/2019	2.61	917,108.90
931142DY6	WAL-MART STORES INC CORP NOTE	430,000.00	1.75	10/9/2019	1/16/2019	2.71	429,056.27
30231GAG7	EXXON MOBIL (CALLABLE) CORP NOTE	925,000.00	1.91	3/6/2020	1/31/2019	2.68	924,473.78
742718EZ8	THE PROCTER & GAMBLE CO CORP NOTES	440,000.00	1.75	10/25/2019	1/31/2019	2.70	439,026.13
3135G0T29	FNMA NOTES	1,150,000.00	1.50	2/28/2020	1/31/2019	2.62	1,143,692.25
912828H52	US TREASURY NOTES	2,050,000.00	1.25	1/31/2020	1/31/2019	2.60	2,022,773.44
045167DT7	ASIAN DEVELOPMENT BANK NOTE	925,000.00	1.75	1/10/2020	1/31/2019	2.66	918,165.02
83050FXT3	SKANDINAVISKA ENSKILDA BANKEN NY CD	1,850,000.00	1.84	8/2/2019	2/11/2019	2.63	1,843,599.00
912828J50	US TREASURY NOTES	725,000.00	1.38	2/29/2020	2/11/2019	2.54	720,850.22
912828J50	US TREASURY NOTES	275,000.00	1.38	2/29/2020	2/11/2019	2.54	273,425.94
<b>Debt Service Reserve</b>							
912828C65	US TREASURY NOTES	7,475,000.00	1.63	3/31/2019	2/6/2019	2.47	7,508,704.24

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

## Investment Performance Report – February 2019



**DC Water  
Finance Division  
Security Maturities  
Last 6 Months**

CUSIP	DESCRIPTION	PAR	COUPON	MATURITY DATE	SETTLE DATE	TRANSACTION AMOUNT
<b>Operating Reserve Accounts</b>						
	INDUSTRIAL BANK CDARS	5,035,025.80	0.50	10/11/2018	10/11/2018	5,060,131.96
	INDUSTRIAL BANK CDARS	5,085,490.22	0.50	11/8/2018	11/8/2018	5,110,848.01
	INDUSTRIAL BANK CDARS	2,614,746.18	1.00	1/17/2019	1/17/2019	2,640,822.00
	INDUSTRIAL BANK CDARS	2,573,870.75	1.00	1/17/2019	1/17/2019	2,599,538.94
<b>Total Debt Service Reserve</b>						
912828RH5	US TREASURY NOTES	4,975,000.00	1.38	9/30/2018	9/30/2018	4,975,000.00
912828T42	US TREASURY NOTES	6,460,000.00	0.75	9/30/2018	9/30/2018	6,460,000.00
<b>2018A Construction Fund</b>						
06366HK48	BANK OF MONTREAL CHICAGO COMM PAPER	3,450,000.00	-	10/4/2018	10/4/2018	3,450,000.00
912828T83	US TREASURY NOTES	29,380,000.00	0.75	10/31/2018	10/31/2018	29,380,000.00
22533UL19	CREDIT AGRICOLE CIB NY COMM PAPER	3,450,000.00	-	11/1/2018	11/1/2018	3,450,000.00
89233HL10	TOYOTA MOTOR CREDIT CORP COMM PAPER	3,450,000.00	-	11/1/2018	11/1/2018	3,450,000.00
21687BLW9	COOPERATIEVE RABOBANK U.A. COMM PAPER	3,375,000.00	-	11/30/2018	11/30/2018	3,375,000.00
63873KLV5	NATIXIS NY BRANCH COMM PAPER	3,500,000.00	-	11/30/2018	11/30/2018	3,500,000.00
912828A34	US TREASURY NOTES	7,370,000.00	1.25	11/30/2018	11/30/2018	7,370,000.00
912828U40	US TREASURY N/B	14,590,000.00	1.00	11/30/2018	11/30/2018	14,590,000.00
62479MM34	MUFG BANK LTD/NY COMM PAPER	3,450,000.00	-	12/3/2018	12/3/2018	3,450,000.00
<b>25214PHP1</b>	<b>DEXIA CREDIT LOCAL SA NY COMM PAPER</b>	<b>3,500,000.00</b>	<b>-</b>	<b>2/26/2019</b>	<b>2/26/2019</b>	<b>3,500,000.00</b>
<b>2018B Construction Fund</b>						
06366HK48	BANK OF MONTREAL CHICAGO COMM PAPER	4,400,000.00	-	10/4/2018	10/4/2018	4,400,000.00
89233HKS2	TOYOTA MOTOR CREDIT CORP COMM PAPER	4,350,000.00	-	10/26/2018	10/26/2018	4,350,000.00
22533UL19	CREDIT AGRICOLE CIB NY COMM PAPER	4,400,000.00	-	11/1/2018	11/1/2018	4,400,000.00
62479MM34	MUFG BANK LTD/NY COMM PAPER	4,400,000.00	-	12/3/2018	12/3/2018	4,400,000.00
13607FMH6	CANADIAN IMPERIAL HOLDING COMM PAPER	4,400,000.00	-	12/17/2018	12/17/2018	4,400,000.00
21687BMT5	COOPERATIEVE RABOBANK U.A. COMM PAPER	6,055,000.00	-	12/27/2018	12/27/2018	6,055,000.00
09659CMX3	BNP PARIBAS NY BRANCH COMM PAPER	4,400,000.00	-	12/31/2018	12/31/2018	4,400,000.00
<b>25214PHP1</b>	<b>DEXIA CREDIT LOCAL SA NY COMM PAPER</b>	<b>4,400,000.00</b>	<b>-</b>	<b>2/26/2019</b>	<b>2/26/2019</b>	<b>4,400,000.00</b>
<b>63873KPU5</b>	<b>NATIXIS NY BRANCH COMM PAPER</b>	<b>4,400,000.00</b>	<b>-</b>	<b>2/28/2019</b>	<b>2/28/2019</b>	<b>4,400,000.00</b>
<b>912828C24</b>	<b>US TREASURY NOTES</b>	<b>830,000.00</b>	<b>1.50</b>	<b>2/28/2019</b>	<b>2/28/2019</b>	<b>830,000.00</b>

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

Investment Performance Report – February 2019



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

DATE	TRANSACTION	CUSIP	DESCRIPTION	COUPON	MATURITY DATE	PAR VALUE/SHARES	PRINCIPAL	INTEREST	TOTAL
03/01/19	MATURITY	09659CQ19	BNP PARIBAS NY BRANCH COMM PAPER	0.000	03/01/19	3,500,000.00	3,500,000.00	0.00	3,500,000.00
03/01/19	MATURITY	46640QQ12	JP MORGAN SECURITIES LLC COMM PAPER	0.000	03/01/19	5,750,000.00	5,750,000.00	0.00	5,750,000.00
03/01/19	MATURITY	21687BQ12	COOPERATIEVE RABOBANK U.A. COMM PAPER	0.000	03/01/19	2,380,000.00	2,380,000.00	0.00	2,380,000.00
03/01/19	MATURITY	89233HQ15	TOYOTA MOTOR CREDIT CORP COMM PAPER	0.000	03/01/19	2,300,000.00	2,300,000.00	0.00	2,300,000.00
03/01/19	MATURITY	89233HQ15	TOYOTA MOTOR CREDIT CORP COMM PAPER	0.000	03/01/19	1,500,000.00	1,500,000.00	0.00	1,500,000.00
03/01/19	MATURITY	46640QQ12	JP MORGAN SECURITIES LLC COMM PAPER	0.000	03/01/19	7,250,000.00	7,250,000.00	0.00	7,250,000.00
03/04/19	INTEREST	90275DHG8	UBS AG STAMFORD CT LT CD	2.900	03/02/20	1,600,000.00	0.00	23,328.89	23,328.89
03/06/19	INTEREST	961214DJ9	WESTPAC BANKING CORP NOTES	2.150	03/06/20	925,000.00	0.00	9,943.75	9,943.75
03/09/19	INTEREST	45950VLQ7	INTERNATIONAL FINANCE CORPORATION NOTE	2.635	03/09/21	925,000.00	0.00	12,186.88	12,186.88
03/12/19	INTEREST	45905UP32	INTL BANK OF RECONSTRUCTION AND DEV NOTE	1.561	09/12/20	925,000.00	0.00	7,219.63	7,219.63
03/14/19	INTEREST	88579YBA8	3M COMPANY	3.000	09/14/21	340,000.00	0.00	5,100.00	5,100.00
03/15/19	INTEREST	64990FJN5	NY ST DORM AUTH PITS TXBL REV BONDS	3.100	03/15/21	390,000.00	0.00	2,821.00	2,821.00
03/15/19	INTEREST	717081EM1	PFIZER INC CORP NOTE	3.000	09/15/21	575,000.00	0.00	9,008.33	9,008.33
03/17/19	INTEREST	89114QC71	TORONTO-DOMINION BANK	3.150	09/17/20	925,000.00	0.00	14,568.75	14,568.75
03/20/19	INTEREST	3130AEXV7	FEDERAL HOME LOAN BANKS NOTES (CALLABLE)	3.000	09/20/21	925,000.00	0.00	13,875.00	13,875.00
03/22/19	INTEREST	00828ECZ0	AFRICAN DEVELOPMENT BANK NOTE	2.625	03/22/21	800,000.00	0.00	10,500.00	10,500.00
03/28/19	INTEREST	3130ACE26	FHLB NOTES	1.375	09/28/20	965,000.00	0.00	6,634.38	6,634.38
03/31/19	MATURITY	912828C65	US TREASURY NOTES	1.625	03/31/19	3,850,000.00	3,850,000.00	31,281.25	3,881,281.25
03/31/19	INTEREST	912828F21	US TREASURY NOTES	2.125	09/30/21	7,025,000.00	0.00	74,640.63	74,640.63
03/31/19	MATURITY	912828W97	US TREASURY NOTES	1.250	03/31/19	5,175,000.00	5,175,000.00	32,343.75	5,207,343.75
03/31/19	MATURITY	912828W97	US TREASURY NOTES	1.250	03/31/19	16,080,000.00	16,080,000.00	100,500.00	16,180,500.00
03/31/19	INTEREST	912828F39	US TREASURY NOTES	1.750	09/30/19	14,250,000.00	0.00	124,687.50	124,687.50

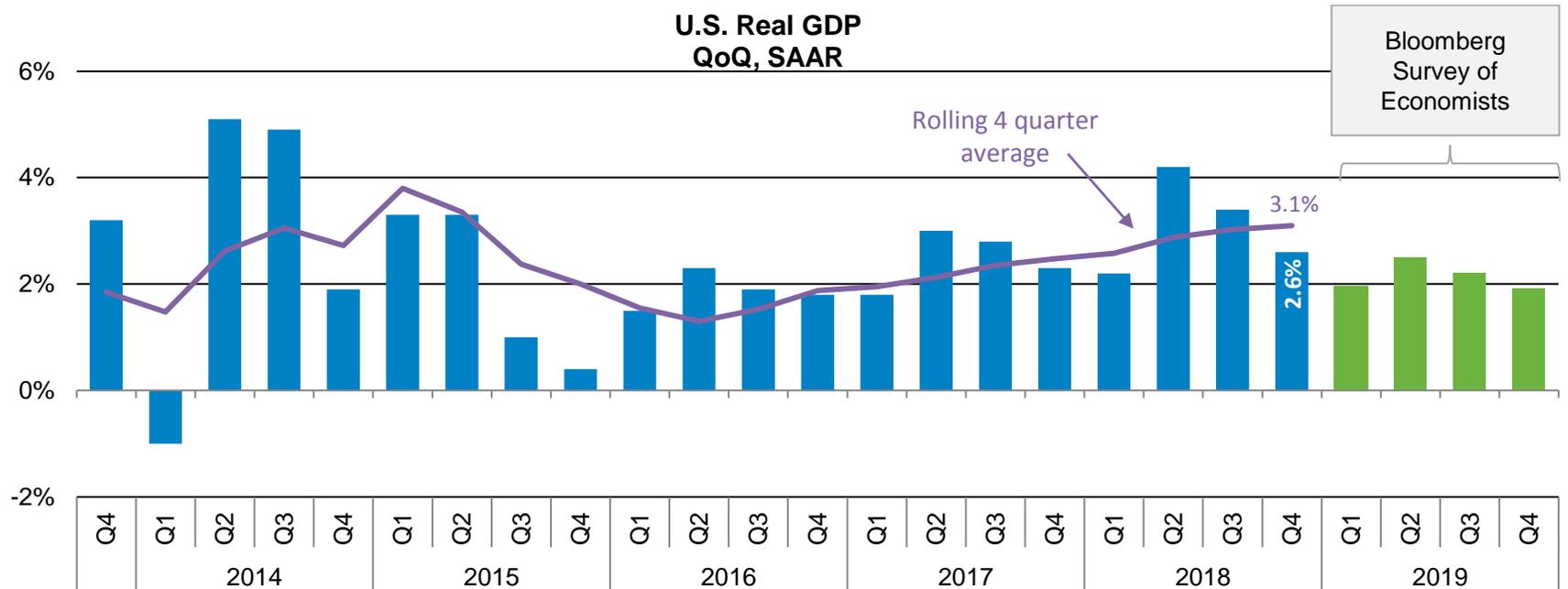


# Appendix: Economic Update



# Economic Growth Slows in the Fourth Quarter

- U.S. economic activity experienced moderate growth during the fourth quarter
- GDP grew at a 2.6% annual rate, marking a slowdown from the 2nd and 3rd quarters, which were the best back-to-back quarters since 2014
- This slowing GDP growth occurred as the impact of the 2018 tax cuts and increased federal government spending waned
- Growth is projected to further decline in 2019
- Potential imbalances, including a growing budget deficit, and challenges over trade and border security funding lead to uncertainty surrounding future growth



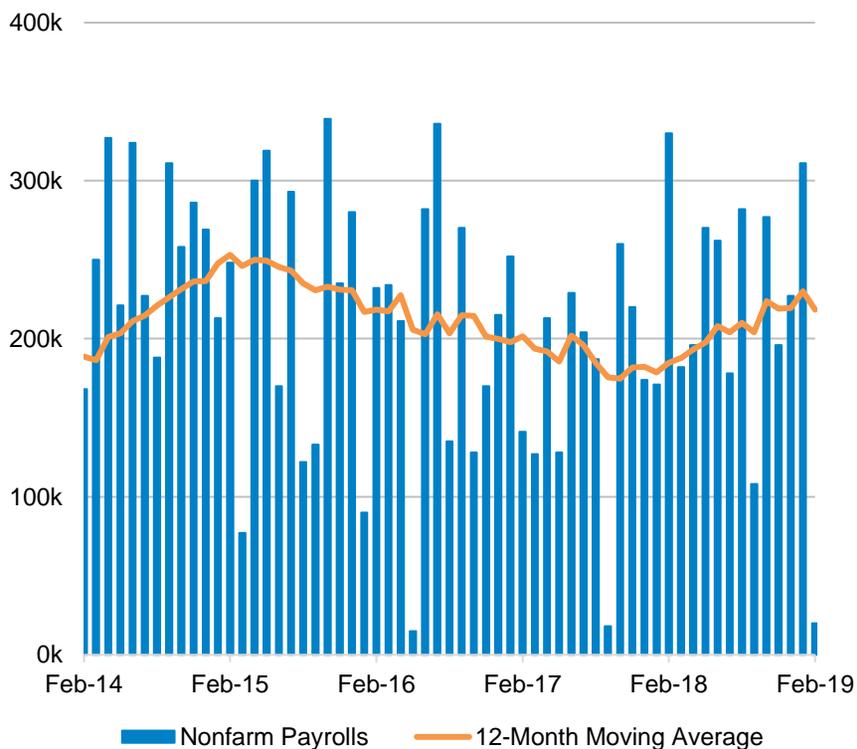
Source: Bloomberg, as of Q4 2018. SAAR is seasonally adjusted annualized rate. Purple denotes rolling four-quarter averages



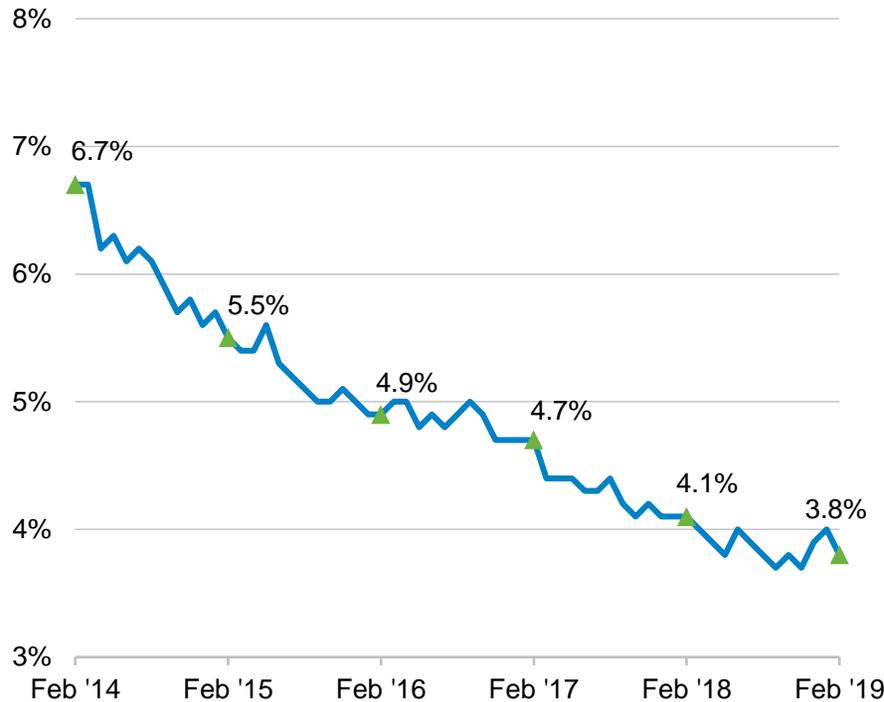
# Labor Market Growth Falls Short in February

- The U.S. economy added only 20,000 jobs in February, falling far below the expected 175,000.
- Despite February experiencing the fewest jobs added since September of 2017, the unemployment rate fell to 3.8% by the end of the month.

**Monthly Change in Nonfarm Payrolls**



**Unemployment Rate**



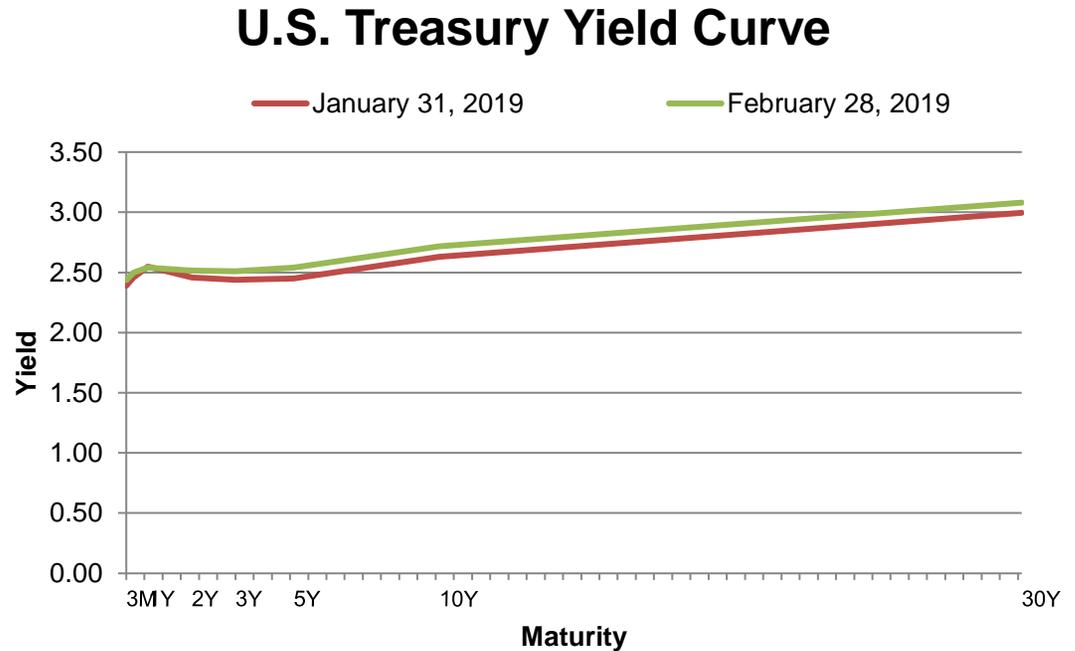
Source: Bloomberg, as of February 2019.



## U.S. Treasury Yield Curve

- The U.S. Treasury yield curve continues to exhibit a slight inversion.
- Interest rates increased modestly during the month of February.

	<u>1/31/19</u>	<u>2/28/19</u>	<u>Change</u>
3 month	2.39%	2.44%	0.05%
6 month	2.46%	2.50%	0.04%
1 year	2.55%	2.54%	-0.01%
2 year	2.46%	2.52%	0.06%
3 year	2.44%	2.51%	0.07%
5 year	2.45%	2.54%	0.09%
10 year	2.63%	2.72%	0.09%
30 year	3.00%	3.08%	0.09%

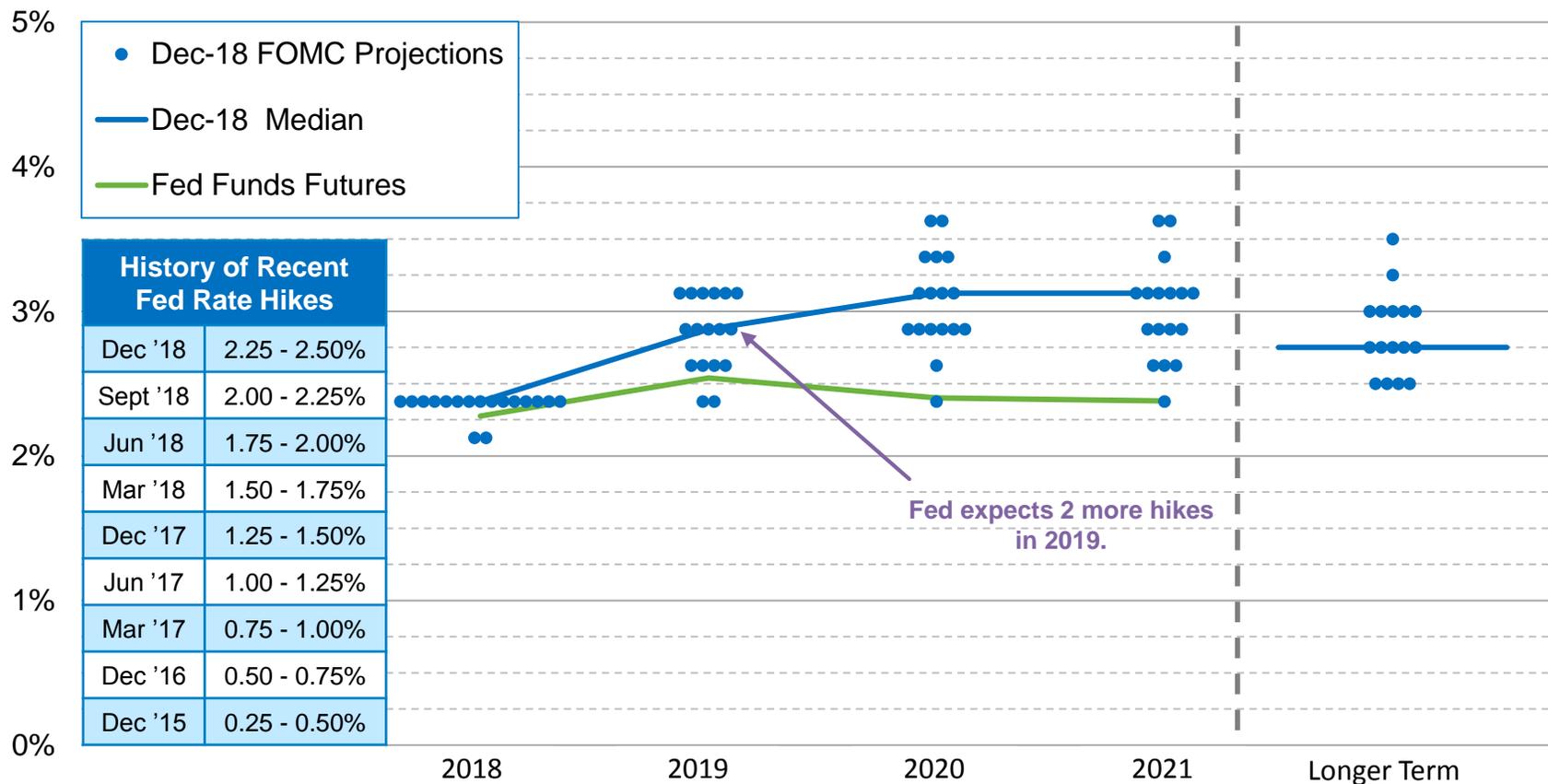


Source: Bloomberg



# FOMC's "Dot Plot" Appears Mixed For 2019

## Fed Participants' Assessments of 'Appropriate' Monetary Policy



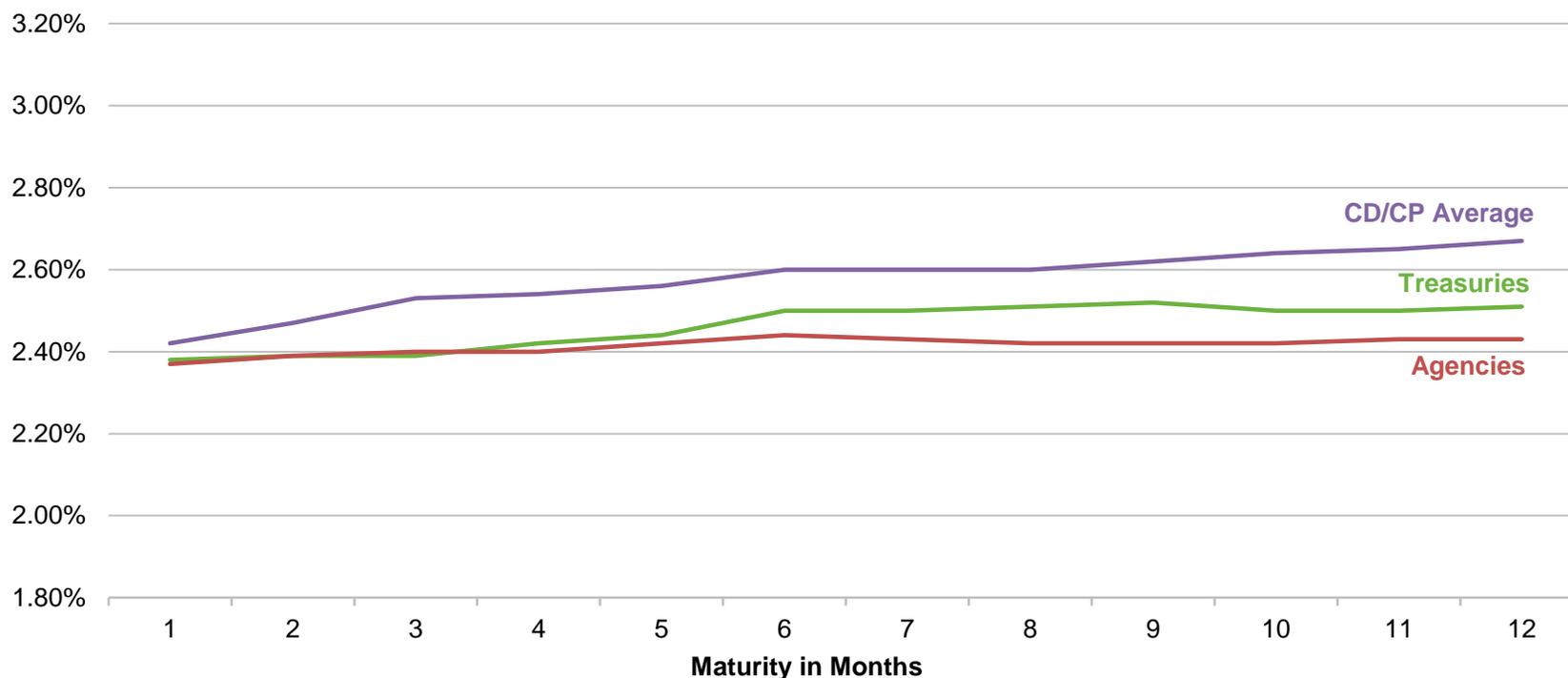
Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members' judgement of the midpoint of the appropriate target range for the federal funds rate at each year-end. Fed funds futures as of 12/19/18.



## Current Short-Term Credit Environment

- After widening considerably at the end of 2018, commercial paper and bank certificate of deposit (CP/CD) yield spreads have narrowed considerable, reaching near 2018 lows.
- Treasuries continue to be relatively attractive versus agency discount notes, especially in 6-12 month maturities where agency supply is very limited.

**Money Market Yield Curves**



Source: Bloomberg, PFMAM Trading Desk, as of 2/28/19. Not a specific recommendation.



*This material is based on information obtained from sources generally believed to be reliable and available to the public, however PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some but not all of which are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.*

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



# Blue Plains Solar Project Evaluation

DC Water Board of Directors, Finance and Budget Committee

March 28th, 2019

Chris Peot, P.E., BCEE  
Director of Resource Recovery

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District of Columbia Water and Sewer Authority

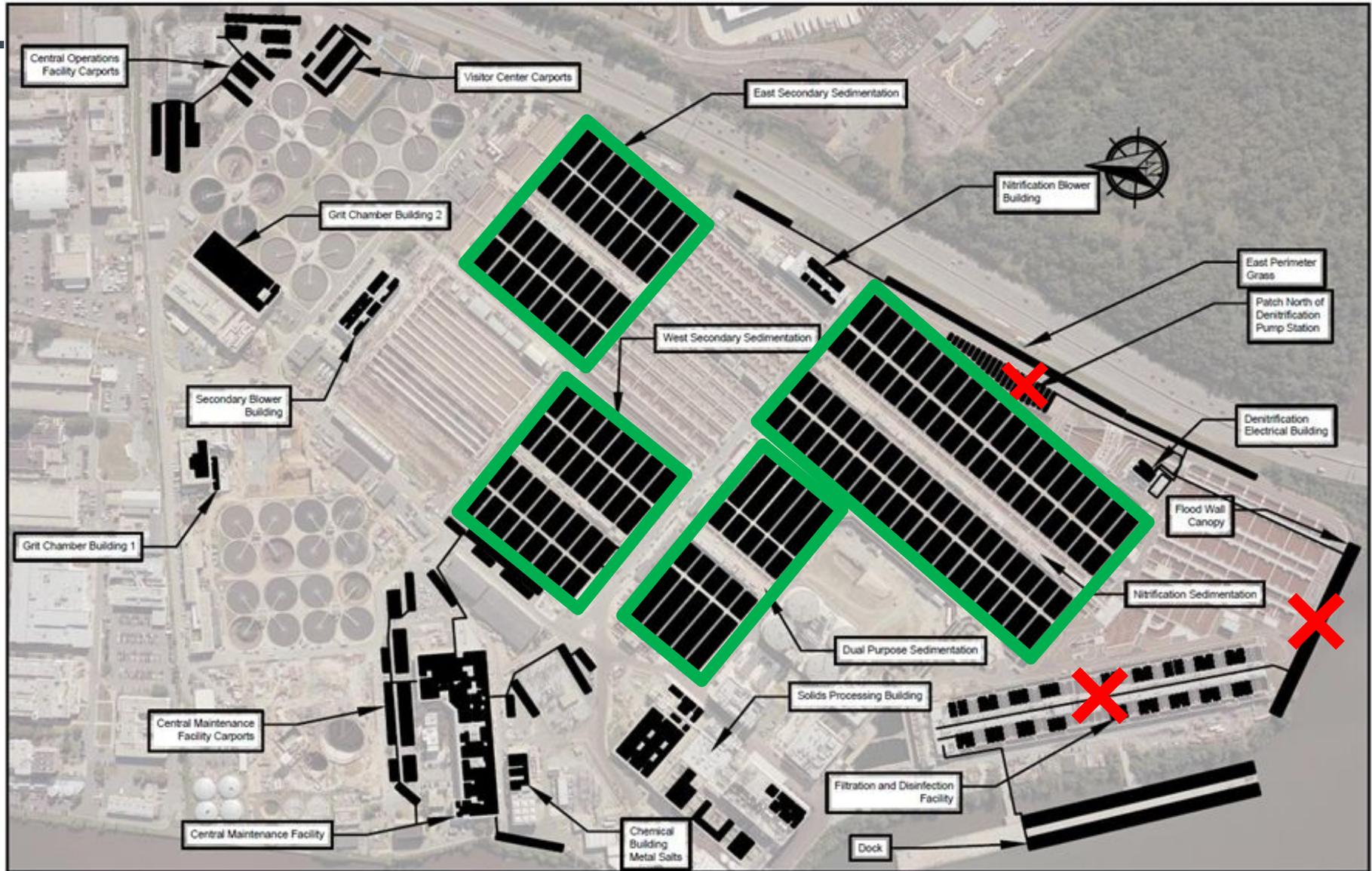


# Project Summary

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- Phase I is over parking lots and building roofs, will generate an estimated 4.5 MW of power during daylight hours.
- Phase I is currently under design and early construction planning, is scheduled to come on line in the first quarter of CY20.
- Phase II is over settling tanks and will generate ~10.5 MW.
- DC Water procured a long-term partner for Phase I of this project with the goal of reducing energy costs and hedging against future grid energy cost increases.
- Includes 3 roof recovers, and 2 roof replacements, and a 60% design for Phase II.

# Solar Project for Blue Plains



3

Phase I – building roofs and parking lots (currently under design)  
Phase II – settling tanks (green outline)

# Three RFP Scenarios

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Through an RFP process, each firm submitted price proposals for the following three separate financial scenarios:

- The solar provider retains all solar renewal energy credits (SRECs).
- The solar provider retains SRECs for the first 5 years of the contract and DC Water retains SRECs thereafter.
- DC Water retains all SRECs.

# Winning PPA Bid Summary

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The winning bidder had the following prices for the three scenarios:

- Scenario 1: \$0.025/kwhr (< a third of existing grid power price),
- Scenario 2: \$0.084/kwhr (= existing grid price), and
- Scenario 3: \$0.198/kwhr (> twice the grid price).

Scenario 1 best met the goals of reduced power cost and a hedge against future increases.

# Power Purchase Agreement (PPA) with Ameresco

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- Ameresco responsible for capital investment, operations, and maintenance of the panels for 20 yrs,
- DC Water committed to buy the power for that period at a price of \$0.025/kwhr (with 1% annual increases)
- This represents a substantial savings over our predicted grid power price at start-up (\$0.085/kwhr, with 2% annual increases). Average annual savings for Phase I of the project is \$500K, for a total savings of \$10M over 20 years.
- DC Water decided not to pursue the SRECs for Phase I because of the substantial savings, low risk, and \$0 capital investment.
- The Ameresco contract also includes buyout options for DC Water at year 6 (\$9M) and year 9 (\$4M), giving DC Water the option to own the power and the SRECs at these dates.

# Project Value

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- Over the life of the Phase I PPA, DC Water sees \$10M worth of savings (plus value of roofing)
- Under the DC renewable energy portfolio standards at the time of contract signing, Ameresco stood to recoup approximately \$18M of SRECs and \$4M in PPA power fees.
- This assumes the SRECs hold their value for the life of the project – a risk DC Water was, at the time, unwilling to take.
- Ameresco will now, again assuming the SRECs hold their value, recoup an additional \$6M in SREC value.
- The supply of DC SRECs does not meet the demand, so the value will likely hold, and DC Water should assess the risk/reward ratio for Phase II closely.

# Phase I Value Analysis

Phase I Project Evaluation at Time of Award

		Phase I		4.5 MW		Phase II		10.5 MW	
		estimated 2020 grid power cost		\$ 0.085 / kwhr		PPA annual increase		1%	
		grid power annual increase		2%					
		Phase I							
	year	PPA price \$/kwhr	grid price \$/kwhr	SACP \$	SREC value 50%	power savings \$	SREC value \$	PPA fee \$	
2020	1	\$ 0.0250	\$ 0.0850	\$ 500	\$ 250	\$ 393,120	\$ 1,642,500	\$ 164,250	
2021	2	\$ 0.0253	\$ 0.0867	\$ 500	\$ 250	\$ 402,620	\$ 1,642,500	\$ 165,893	
2022	3	\$ 0.0255	\$ 0.0884	\$ 500	\$ 250	\$ 412,327	\$ 1,642,500	\$ 167,551	
2023	4	\$ 0.0258	\$ 0.0902	\$ 500	\$ 250	\$ 422,245	\$ 1,642,500	\$ 169,227	
2024	5	\$ 0.0260	\$ 0.0920	\$ 400	\$ 200	\$ 432,377	\$ 1,314,000	\$ 170,919	
2025	6	\$ 0.0263	\$ 0.0938	\$ 400	\$ 200	\$ 442,729	\$ 1,314,000	\$ 172,628	
2026	7	\$ 0.0265	\$ 0.0957	\$ 400	\$ 200	\$ 453,305	\$ 1,314,000	\$ 174,355	
2027	8	\$ 0.0268	\$ 0.0976	\$ 400	\$ 200	\$ 464,110	\$ 1,314,000	\$ 176,098	
2028	9	\$ 0.0271	\$ 0.0996	\$ 400	\$ 200	\$ 475,149	\$ 1,314,000	\$ 177,859	
2029	10	\$ 0.0273	\$ 0.1016	\$ 300	\$ 150	\$ 486,425	\$ 985,500	\$ 179,638	
2030	11	\$ 0.0276	\$ 0.1036	\$ 300	\$ 150	\$ 497,945	\$ 985,500	\$ 181,434	
2031	12	\$ 0.0279	\$ 0.1057	\$ 300	\$ 150	\$ 509,714	\$ 985,500	\$ 183,249	
2032	13	\$ 0.0282	\$ 0.1078	\$ 300	\$ 150	\$ 521,735	\$ 985,500	\$ 185,081	
2033	14	\$ 0.0285	\$ 0.1100	\$ 50	\$ 25	\$ 534,016	\$ 164,250	\$ 186,932	
2034	15	\$ 0.0287	\$ 0.1122	\$ 50	\$ 25	\$ 546,560	\$ 164,250	\$ 188,801	
2035	16	\$ 0.0290	\$ 0.1144	\$ 50	\$ 25	\$ 559,374	\$ 164,250	\$ 190,689	
2036	17	\$ 0.0293	\$ 0.1167	\$ 50	\$ 25	\$ 572,463	\$ 164,250	\$ 192,596	
2037	18	\$ 0.0296	\$ 0.1190	\$ 50	\$ 25	\$ 585,833	\$ 164,250	\$ 194,522	
2038	19	\$ 0.0299	\$ 0.1214	\$ 50	\$ 25	\$ 599,490	\$ 164,250	\$ 196,467	
2039	20	\$ 0.0302	\$ 0.1238	\$ 50	\$ 25	\$ 613,439	\$ 164,250	\$ 198,432	
		DC Water estimated average annual savings		\$ 496,249					
		DC Water estimated total savings		\$ 9,924,978					
		AmareSCO estimated average annual SREC and PPA revenues		\$ 911,588		\$ 180,831			
		AmareSCO estimated total SREC and PPA revenues		\$ 18,231,750		\$ 3,616,621			
		AmareSCO total		\$ 21,848,371					

Phase I Project Evaluation at Present

		Phase I		4.5 MW		Phase II		10.5 MW	
		estimated 2020 grid power cost		\$ 0.085 / kwhr		PPA annual increase		1%	
		grid power annual increase		2%					
		Phase I							
	year	PPA price \$/kwhr	grid price \$/kwhr	SACP \$	SREC value 50%	power savings \$	SREC value \$	PPA fee \$	
2020	1	\$ 0.0250	\$ 0.0850	\$ 500	\$ 250	\$ 393,120	\$ 1,642,500	\$ 164,250	
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		DC Water estimated average annual savings		\$ 496,249					
		DC Water estimated total savings		\$ 9,924,978					
		AmareSCO estimated average annual SREC and PPA revenues		\$ 1,199,025		\$ 180,831			
		AmareSCO estimated total SREC and PPA revenues		\$ 23,980,500		\$ 3,616,621			
		AmareSCO total		\$ 27,597,121					





- On December 18<sup>th</sup>, 2018 the DC city council approved the clean energy omnibus bill, which commits DC to achieving 100% renewable power by 2032. 10% of which will be solar.
- This is an update to the Clean Energy DC Plan of 2016. The recent council action increased the renewable energy target from 50% to 100% and stretched the SREC market to 2041.

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# Highlights of New Act

- SREC market will extend beyond 2032 and will expand more quickly than the 2016 Clean Energy Plan established. Was initially capped at 5% and ended at 2032.
- Central column is the new percentage. The SREC carve out will grow incrementally from 2032 until it reaches 10% by 2041
- REC lifetime increased from 3 years to 5 years, (e.g. can sell 2019 SRECs to cover 2024 demand). Increases SREC value.

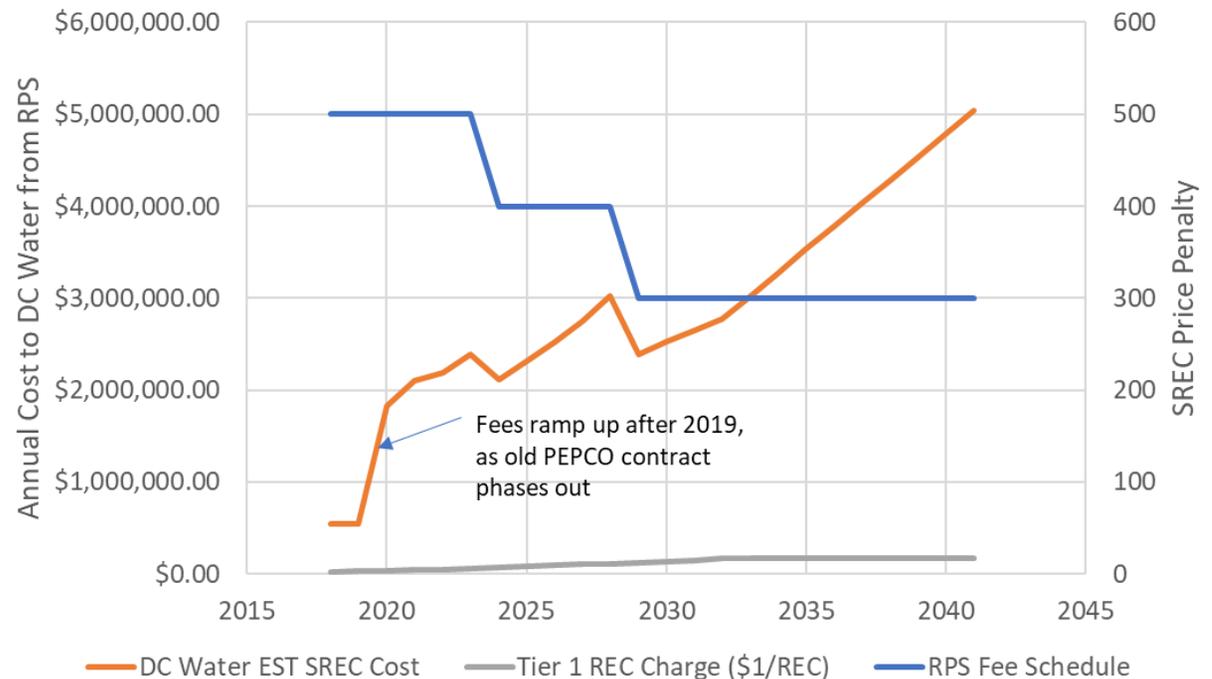
Year	Legacy Solar Carve Out	Proposed Solar Carve Out	Alternative Compliance Penalty
2019	1.35%	1.85%	\$500
2020	1.58%	2.18%	\$500
2021	1.85%	2.50%	\$500
2022	2.18%	2.60%	\$500
2023	2.50%	2.85%	\$500
2024	2.60%	3.15%	\$400
2025	2.85%	3.45%	\$400
2026	3.15%	3.75%	\$400
2027	3.45%	4.10%	\$400
2028	3.75%	4.50%	\$400
2029	4.10%	4.75%	\$300
2030	4.50%	5.00%	\$300
2031	4.75%	5.25%	\$300
2032	5.00%	5.50%	\$300
2033	-	6.00%	\$300
2034	-	6.50%	\$300
2035	-	7.00%	\$300
2036	-	7.50%	\$300
2037	-	8.00%	\$300
2038	-	8.50%	\$300
2039	-	9.00%	\$300
2040	-	9.50%	\$300
2041	-	10.00%	\$300

Omnibus carve out grows until at 10%

# Impact on DC Water Electricity Bills

- REC fees on DC Water PEPCO bill currently amounts to \$0.00324/KW (≈\$550,000/yr), will ramp up substantially post September 2019 as old PEPCO contract expires (old contracts allowed to grandfather RPS schedule previous to 2016).
- 2020 Electricity bill to increase by >\$2M and will continue to rise.
- Cost increase for DC Water from new bill ≈\$60 million over next 20 years.
  - *Can be avoided if DC Water pursues path towards energy neutrality.*

DC Water Fees from RPS (if no solar is built)  
EST Monthly Power usage (14 million kwh)



# SREC Sustainability

During the evaluation period for the solar project, there were concerns shared by some team members about the sustainability of the SREC market. Since there was not unanimous agreement about the SREC market, it drove us toward the certainty of the power savings.

As can be seen in the following graph below, the prices for SRECS are rebounding, the result of two issues: 1) the end of many of the grandfathered legacy contracts - DC Water's last option year ends in 2024, and 2) the implementation of the new SACP schedule by the DC Council in December 2018 (red bar).



This graph is protected by copyright laws and contains material proprietary to SRECTrade, Inc. All bid pricing and notes included are indicative and subject to change. Please contact us for most current markets. If a market is not quoted herein, please contact us directly for further information. Usage policy [Get more data](#)

# Offsetting Costs and Generating Revenue with Solar

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- 11.5 MW – Phase 2 Solar
  - Capital EST – AECOM (2015) 44.8M (\$4.1/watt), NREL estimate for similar sized solar project (15 -25M; \$1.5-\$2/watt)
  - Revenue (SREC@\$385): 6.46M/year
  - Electricity Savings: 1.41M/year
  - ROI: 6.1 years @ 2016 AECOM estimate, 3.3 years @ industry estimates
  
- 1055 KW Solar Roof – curing pad (when financed internally):
  - Capital – \$2.1 Million
  - Revenue (SREC@385): \$637K/year
  - Savings (Electricity) – \$131K/year
  - Simplified ROI – 2.91 years

# Offsite Solar Potential



**FORT STANTON : 2.0-2.5 ACRES (500kW)**



**FORT RENO : 6.0-7.8 ACRES (1 MW+)**



**BRENTWOOD RESERVOIR: 2.0-2.75 ACRES (500kW+)**

# Lessons Learned

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- SREC value appears more reliable
- Partnering with solar companies for financing results in SREC loss. Need to finance internally or get capital independent of solar companies to capture full value of solar.
- Funding with bond money possible without negatively affecting rating due to fast ROI.
- Organizational need to better communicate solar value across silos.

# Opportunities

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## Projects:

- Phase II at Blue Plains
  - Curing Pad w/Solar –remains cash positive if funded with Tier 1 REC \$
  - Offsite solar on reservoirs
  - RNG injection
- DC Water Board can assist in overcoming internal fears regarding market certainty and by apportioning capital to revenue projects.
  - Revenue from projects can potentially close DC Water’s capital \$200M shortfall in the 2020s. If financed internally RNG injection and all solar will provided \$30-40M in revenue per year after 2-3 year capital payback.
  - Solar revenue can fund needed operational and maintenance shortfalls to reduce risk of permit violations.

# Barriers

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- Communicating SREC market certainty and value internally
- Raising internal capital
  - DC Water CIP does not enable revenue projects like this to be considered for capital investment due to existing criteria focusing primarily on permit compliance.
  - Financing rules do not allow for non bond capital raising, thus projects are restricted to CIP, effectively ensuring they will not happen due to above mentioned criteria.
- New non-permit related operations are viewed as a burden, and will remain so without access to revenue to reduces operational risks

# Next Steps

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- DC Water board can provide direction to organization to pursue best value potential over least risk.
  - Enable DC Water to take on financial risk for solar and RNG projects
- Consider self financing for Phase II that calls for design build without calling financing.
  - Several local solar EPCs can do design/construction, will not bid on projects that ask for financing without wanting SRECs.
- Develop pathway for revenue projects independent of existing CIP
- Direct finance to develop rules for sending revenues to non general fund sectors of the organization.

# Conclusions

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- More market certainty and longevity for generators of SRECs
- Higher prices for tier 1 RECs/SRECs
- Higher price floor for DC generated SRECs (demand was already shown to outstrip supply at existing RPS percentage, which will now double).
- High cost if DC Water does not generate renewable power onsite from RPS fees.

**There is no such thing as waste,  
only wasted resources.**

**[www.dewater.com](http://www.dewater.com)**

**Chris Peot PE, BCEE**

# Phase II Preliminary Evaluation

Phase II Project Evaluation at Present -Assumes DC Water Builds and Owns							
			Phase I	4.5	MW		
			Phase II	10.5	MW		
		estimated 2020 grid power cost	\$	0.085	/ kwhr		
		PPA annual increase		1%			
		grid power annual increase		2%			
						<b>Phase II</b>	
		<b>PPA price</b>	<b>grid price</b>	<b>SACP</b>	<b>SREC value</b>	<b>power savings</b>	<b>SREC value</b>
	<b>year</b>	<b>\$/kwhr</b>	<b>\$/kwhr</b>	<b>\$</b>	<b>75%</b>	<b>\$</b>	<b>\$</b>
2020	1	\$ -	\$ 0.0850	\$ 500	\$ 375	\$ 1,299,480	\$ 5,748,750
2021	2	\$ -	\$ 0.0867	\$ 500	\$ 375	\$ 1,325,470	\$ 5,748,750
2022	3	\$ -	\$ 0.0884	\$ 500	\$ 375	\$ 1,351,979	\$ 5,748,750
2023	4	\$ -	\$ 0.0902	\$ 500	\$ 375	\$ 1,379,019	\$ 5,748,750
2024	5	\$ -	\$ 0.0920	\$ 400	\$ 300	\$ 1,406,599	\$ 4,599,000
2025	6	\$ -	\$ 0.0938	\$ 400	\$ 300	\$ 1,434,731	\$ 4,599,000
2026	7	\$ -	\$ 0.0957	\$ 400	\$ 300	\$ 1,463,426	\$ 4,599,000
2027	8	\$ -	\$ 0.0976	\$ 400	\$ 300	\$ 1,492,694	\$ 4,599,000
2028	9	\$ -	\$ 0.0996	\$ 400	\$ 300	\$ 1,522,548	\$ 4,599,000
2029	10	\$ -	\$ 0.1016	\$ 300	\$ 225	\$ 1,552,999	\$ 3,449,250
2030	11	\$ -	\$ 0.1036	\$ 300	\$ 225	\$ 1,584,059	\$ 3,449,250
2031	12	\$ -	\$ 0.1057	\$ 300	\$ 225	\$ 1,615,740	\$ 3,449,250
2032	13	\$ -	\$ 0.1078	\$ 300	\$ 225	\$ 1,648,055	\$ 3,449,250
2033	14	\$ -	\$ 0.1100	\$ 300	\$ 225	\$ 1,681,016	\$ 3,449,250
2034	15	\$ -	\$ 0.1122	\$ 300	\$ 225	\$ 1,714,636	\$ 3,449,250
2035	16	\$ -	\$ 0.1144	\$ 300	\$ 225	\$ 1,748,929	\$ 3,449,250
2036	17	\$ -	\$ 0.1167	\$ 300	\$ 225	\$ 1,783,908	\$ 3,449,250
2037	18	\$ -	\$ 0.1190	\$ 300	\$ 225	\$ 1,819,586	\$ 3,449,250
2038	19	\$ -	\$ 0.1214	\$ 300	\$ 225	\$ 1,855,977	\$ 3,449,250
2039	20	\$ -	\$ 0.1238	\$ 300	\$ 225	\$ 1,893,097	\$ 3,449,250
						DC Water estimated average annual savings	\$ 1,578,697
						DC Water estimated total savings	\$ 31,573,946
						estimated average annual SRECs	\$ 4,196,588
						estimated total SREC revenues	\$ 83,931,750
						Project total value	\$ 115,505,696



# dc Overview of FY 2020 Budget

Presentation to the Finance and Budget Committee on March 28, 2019



STEWARDSHIP

ACCOUNTABILITY

SUSTAINABILITY





# Agenda

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- Provide update on the budget process, including committee reviews and recommendations
- Review management budget proposal
- Obtain committee's actions on the following
  - Proposed FY 2020 Operating Budget
  - Proposed FY 2019 – FY 2028 Capital Improvement Program (disbursements and lifetime)
  - Proposed FY 2019 – FY 2028 financial plan



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# Executive Summary



# Budget Update

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- **Board Briefing:** Management budget proposal (Baseline)
  - FY 2020 total operating expenditure of \$614.5 million mainly in personnel, chemicals, water purchase and debt service
  - FY 2019 – FY 2028 CIP disbursement of \$4.96 billion, an increase of \$0.95 billion over previously approved plan (modified baseline)
  - FY 2020 total operating revenue of \$694.0 million includes
    - Shift of 18% of Clean Rivers expenditures to volumetric rate, providing ratepayers more control over their bills
    - Increase from 4% to 20% CRIAC discount for Stormwater Best Management Practices
- **Committee Discussions:** Management presented alternative scenarios for
  - Increased investments in the small diameter water mains and sewer lines and related customer impacts from FY 2021 – FY 2028
    - 1.5% (CIP of \$5.2 billion; Average residential customer monthly bill of \$124 - \$191)
    - 2.0% (CIP of \$5.5 billion; Average residential customer monthly bill of \$125 - \$199)
    - 2.5% (CIP of \$5.8 billion; Average residential customer monthly bill of \$125 - \$208)
  - Phased-in approach for CRIAC shift to sewer volumetric with 18% in FY 2020, 28% in FY 2021, and 37% in FY 2022 and beyond, under each of the scenarios



## Budget Update, cont.

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- **Management Recommendation:** After extensive deliberation with the Board, commitment to addressing infrastructural challenges, continued focus on balancing needs with customer affordability, the following are management's recommendations for the FY 2020 budgets:
  - Operating – Remains at the proposed budget of \$614.5 million
  - Capital – Remaining at the modified baseline of \$4.96 billion and funds the 1% annual replacement /replacement for the small diameter water mains and sewer lines
  - Revenues – Phase - in shift from Clean Rivers Impervious Area Charge to Sewer Volumetric rate of 18% in FY 2020, 28% in FY 2021 and 37% in FY 2022 and beyond



# Budget Adoption Calendar

Timeline (2019)	Activity	Status
<b>February 7</b>	<b>Budget Workshop with Board of Directors</b>	✓
February 8	Wholesale Customer Briefing	✓
	<b>Committee Discussions &amp; Reviews</b>	
February 21	Environmental Quality & Operations	✓
February 28	D.C. Retail Water & Sewer Rates	✓
February 28	Joint D.C. Retail Water & Sewer Rates and Finance & Budget	✓
March 7	Board Meeting ( <i>No Board Action Required</i> )	
	<b>Committee Reviews &amp; Recommendations</b>	
March 21	Environmental Quality & Operations	✓
March 26	D.C. Retail Water & Sewer Rates	
<b>March 28</b>	Finance & Budget	
<b>April 4</b>	<b>Board Adoption</b>	
April	Submit budget via the District to U.S. Congress	
May	Publish budget book	





# **Proposed FY 2019 – FY 2028 Capital Improvement Program**



The proposed 10-year disbursements (FY 2019 - FY 2028) of \$4.96 billion increases investment in our aging infrastructure

## 💧 Capital Construction Projects - \$4.43 billion

- \$1.34 billion fully funds the DC Clean Rivers' project to meet Consent Decree requirements
- Increase of \$44.2 million fully funds Stormwater pump stations, \$68.6 million over ten-years
- \$424.6 million increase in the Sewer Service area to fully fund the pump station requirements, and ramp up to the annual 1% rehabilitation (17.5 mi/year) by FY 2023 for the small sewer lines, ten-year total of \$957 million
- Adds \$214.3 million in the Water Service area for the full replacement of small diameter water mains to achieve 1% per year, totaling \$945 million
- Adds \$122.8 million in the Wastewater Service area to fully fund major rehabilitation for the liquids and biosolids processing projects and meet the NPDES permit, totaling \$978.7 million
- \$138 million to fund Non Process Facilities, like HVAC, Roofs, and Fleet/Sewer Services relocation

## 💧 Additional Capital Programs - \$527 million

- \$340 million for capital equipment items to meet purchases/replacement of mechanical equipment, operational facilities, vehicle equipment, office renovations, and IT software/hardware
- \$187 million for DC Water's share of WAD's infrastructure improvements to achieve established service levels



# 10-Year Engineering CIP Options Compared

Service Area	Current Baseline \$3.8B	Modified Baseline \$4.4B	Asset Management \$5.4B
<b>Clean Rivers</b>	<b>Fully funded</b> to meet Consent Decree	<b>Fully funded</b> to meet Consent Decree	<b>Fully funded</b> to meet Consent Decree
<b>Wastewater</b>	<b>Generally funded</b> to meet NPDES Permit and established levels of service	<b>Fully funded</b> to meet NPDES Permit and established levels of service	<b>Fully funded</b> to meet NPDES Permit and established levels of service
<b>Stormwater</b>	<b>Underfunded</b>	<b>Fully funded</b>	<b>Fully funded</b>
<b>Water</b>			
Pump Stations & Storage Facilities	<b>Generally funded</b> to current service levels	<b>Generally funded</b>	<b>Fully funded</b>
Small Diameter WMs	<b>Underfunded; (Funded to meet 1% replacement/rehab goal [11 mi/year]), but only 0.7% a year at full replacement</b>	<b>Underfunded; (Funded to meet 1% per year replacement level - increased cost is due to switch to full replacement [11 mi/year])</b>	<b>Fully funded to ramp up to 2% replacement level [22 mi/year]</b>
Large Diameter WMs	<b>Generally funded</b>	<b>Generally funded</b>	<b>Generally funded</b>
<b>Sewer</b>			
Pump Stations	<b>Underfunded</b>	<b>Fully funded</b>	<b>Fully funded</b>
Sewer Lines < 60" dia.	<b>Substantially underfunded [0.35%; 6.2 mi/year]</b>	<b>Underfunded (Funded to ramp up to 1.0% per year rehabilitation level [17.5 mi/year] by FY23)</b>	<b>Fully funded to ramp up to 2.3% rehabilitation level [40 mi/year]</b>
Sewer Lines ≥ 60"	<b>Generally Funded</b>	<b>Generally Funded</b>	<b>Generally Funded</b>
<b>Non Process</b>	<b>Fully funded</b> for HQ, Fleet and Sewer Operations Facilities, Otherwise <b>Underfunded</b>	<b>Fully funded</b>	<b>Fully funded</b>

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



# 10-Year CIP Disbursements

## Modified Baseline CIP

- 1) FY19 & FY20 Total spending for each year has been kept at FY18-27 board approved baseline levels to remain congruent with previously approved rate increases
- 2) Ramp-up to modified Baseline CIP beginning in FY21

Service Area (\$000's)	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	10-Yr Total	Lifetime Budget
Non-Process Facilities	15,309	36,002	26,793	20,665	6,831	11,058	10,396	3,901	3,553	3,560	138,067	212,833
Wastewater Treatment	69,979	66,620	76,510	97,635	110,047	82,434	81,249	133,338	137,575	123,351	978,738	3,566,060
Clean Rivers	187,859	147,208	139,786	191,573	151,411	64,415	55,689	144,295	97,067	83,286	1,262,589	2,764,255
Combined Sewer	7,491	4,219	9,444	8,015	8,646	13,520	8,852	5,800	5,593	7,598	79,178	269,293
Stormwater	4,220	8,571	8,118	8,586	3,725	4,987	7,564	7,494	5,239	10,102	68,608	123,574
Sanitary Sewer	44,927	43,646	57,249	85,588	97,220	98,194	115,011	140,020	134,664	140,615	957,135	2,070,599
Water	61,884	71,720	96,300	101,039	84,395	96,491	103,325	106,145	105,338	118,378	945,015	2,204,622
<b>CAPITAL PROJECTS</b>	<b>391,669</b>	<b>377,987</b>	<b>414,200</b>	<b>513,102</b>	<b>462,275</b>	<b>371,098</b>	<b>382,087</b>	<b>540,993</b>	<b>489,029</b>	<b>486,890</b>	<b>4,429,330</b>	<b>11,211,236</b>
Capital Equipment	34,518	26,823	36,907	33,086	32,725	36,680	35,540	35,426	34,339	34,279	340,324	340,324
Washington Aqueduct	12,930	15,532	15,909	15,536	35,006	14,830	32,731	9,034	12,298	23,321	187,127	187,127
<b>ADDITIONAL CAPITAL PROGRAMS</b>	<b>47,448</b>	<b>42,355</b>	<b>52,816</b>	<b>48,622</b>	<b>67,731</b>	<b>51,509</b>	<b>68,272</b>	<b>44,461</b>	<b>46,637</b>	<b>57,600</b>	<b>527,450</b>	<b>527,450</b>
LABOR												<b>389,258</b>
<b>TOTAL CIP</b>	<b>439,117</b>	<b>420,342</b>	<b>467,016</b>	<b>561,724</b>	<b>530,006</b>	<b>422,608</b>	<b>450,358</b>	<b>585,454</b>	<b>535,665</b>	<b>544,490</b>	<b>4,956,780</b>	<b>12,127,945</b>
Last Years CIP (Increase)/Decrease	439,118 1	420,342 (0)	402,681 (64,335)	445,647 (116,077)	385,312 (144,694)	326,284 (96,324)	318,360 (131,998)	439,427 (146,027)	375,004 (160,661)		4,002,126 (954,655)	11,131,895 (996,051)



# Alternative Small Sewer and Water Pipe Replacement/Rehab CIP Scenarios

	Modified Baseline		Alternative Scenarios					
Annual Replacement/Rehabilitation Ten-Year Capital Projects	1%		1.5%		2.0%		2.5%	
	\$4.4 Billion		\$4.70 Billion		\$4.97 Billion		\$5.24 Billion	
<b>CIP Analysis</b>	<u>Miles/year</u>	<u>Sweet Spot # of Years *</u>	<u>Miles/year</u>	<u>Sweet Spot # of Years *</u>	<u>Miles/year</u>	<u>Sweet Spot # of Years *</u>	<u>Miles/year</u>	<u>Sweet Spot # of Years *</u>
Small Diameter Water Mains (replacement)	11.0 mi	91	16.5 mi	45	22.0 mi	28	27.5 mi	20
Sewer Lines <60" dia. (rehabilitation)	17.5 mi	94	26.0 mi	49	34.7 mi	31	43.4 mi	23
Ten-year increase vs. Modified Baseline			\$271 million		\$542 million		\$814 million	
Ten-year increase vs. Approved Baseline	\$745 million		\$1.0 billion		\$1.3 billion		\$1.6 billion	

\*The point in time remaining service life of the pipe system as a whole is about 50% of the expected service life.



# Overview of Additional Capital Programs

## Capital Equipment

- \$142.2 million increase over the ten-year period is to right-size the latter years for projected needs which were previously underfunded

## Washington Aqueduct

- \$67.1 million increase is for DC Water’s proportionate share of WAD’s infrastructure improvements to achieve established service levels. These excludes the Federally Owned Water Mains, Travillah Quarry Acquisition Outfitting and Advanced Treatment projects

Cash Disbursements, in \$000’s

Years	Capital Equipment			Washington Aqueduct			Total Additional Capital Programs		
	Approved	Proposed	(Inc)/Dec	Approved	Proposed	(Inc)/Dec	Approved	Proposed	(Inc)/Dec
FY 2019	\$ 34,518	\$ 34,518	\$ 0	\$ 12,930	\$ 12,930	\$ -	\$ 47,448	\$ 47,448	\$ 0
FY 2020	29,383	26,823	2,560	12,944	15,532	(2,588)	42,327	42,355	(28)
FY 2021	27,998	36,907	(8,909)	13,039	15,909	(2,870)	41,037	52,816	(11,779)
FY 2022	9,579	33,086	(23,507)	13,039	15,536	(2,497)	22,618	48,622	(26,004)
FY 2023	10,306	32,725	(22,419)	12,312	35,006	(22,694)	22,618	67,731	(45,113)
FY 2024	10,850	36,680	(25,830)	11,768	14,830	(3,062)	22,618	51,509	(28,892)
FY 2025	11,177	35,540	(24,363)	11,441	32,731	(21,291)	22,618	68,272	(45,654)
FY 2026	12,122	35,426	(23,305)	10,496	9,034	1,462	22,618	44,461	(21,843)
FY 2027	12,303	34,339	(22,037)	10,315	12,298	(1,983)	22,617	46,637	(24,019)
FY 2028	39,898	34,279	5,619	11,768	23,321	(11,553)	51,666	57,600	(5,935)
<b>Ten-Year Total</b>	<b>\$ 198,133</b>	<b>\$ 340,324</b>	<b>\$ (142,191)</b>	<b>\$ 120,052</b>	<b>\$ 187,127</b>	<b>\$ (67,074)</b>	<b>\$ 318,185</b>	<b>\$ 527,450</b>	<b>\$ (209,265)</b>



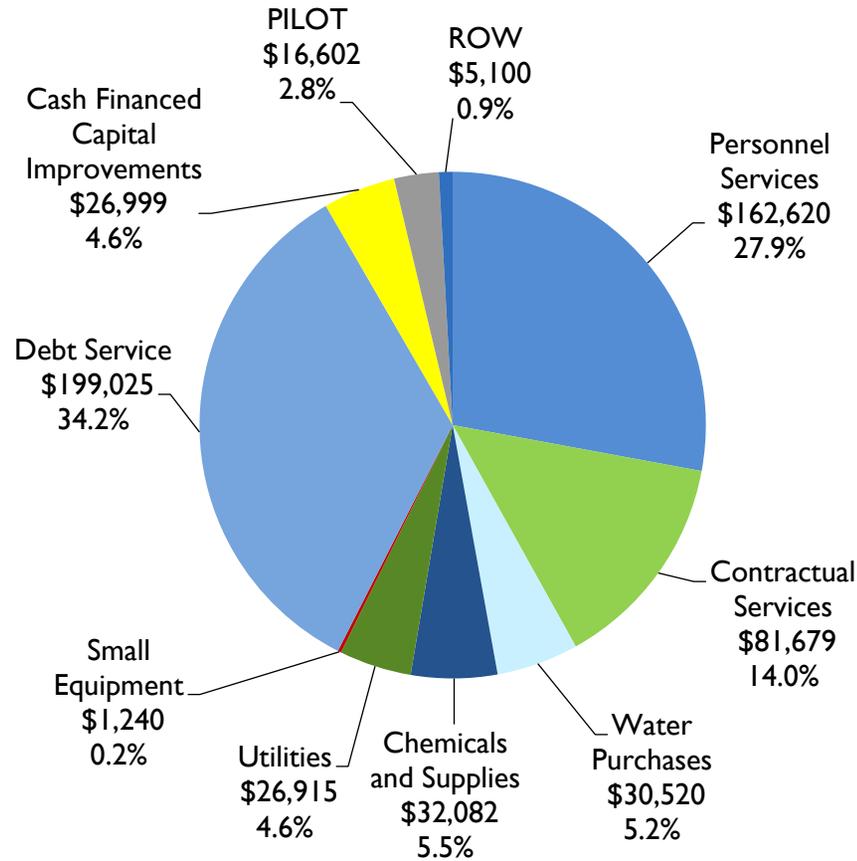
# Operating Expenditure



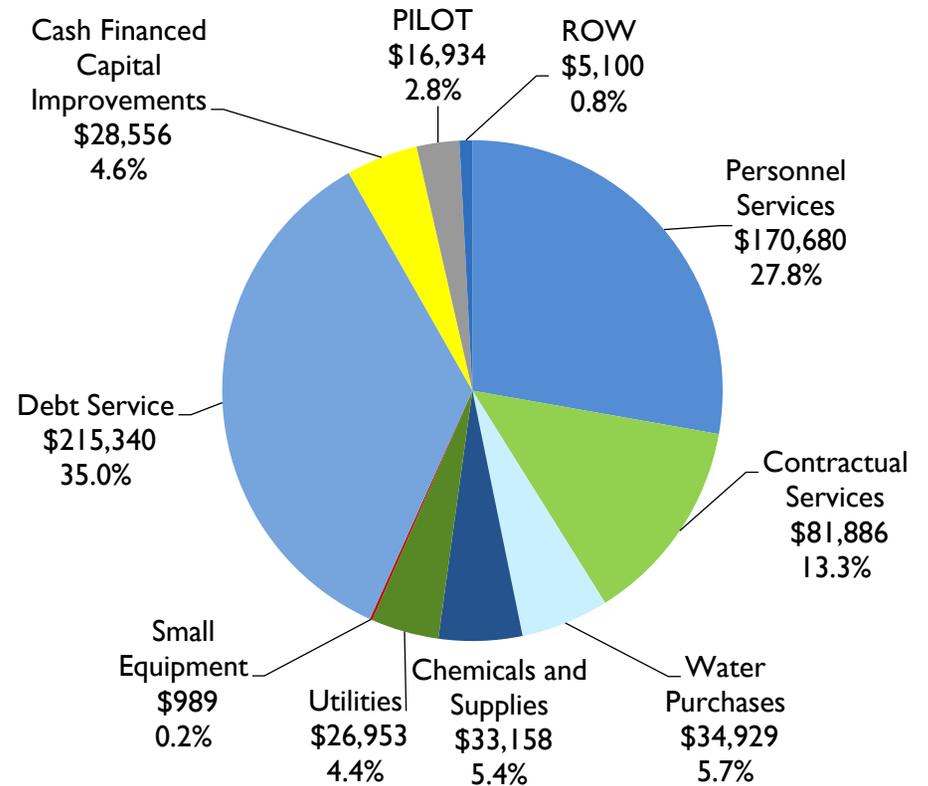
# FY 2019 vs. FY 2020 Expenditure Budgets

\$ in thousands

## Approved FY 2019 \$582,781



## Proposed FY 2020 \$614,523





## Comparison by Cost Category

- Total operating expenditure is projected to increase by \$31.7 million or 5.4 percent
- Total O&M expenditure is projected to increase by \$13.5 million or 4.0 percent

(\$000's)	FY 2018 Approved	FY 2018 Actual	FY 2018 Variance	FY 2019 Approved	FY 2020 Proposed	(Increase)/ Decrease	
Total Personnel Services	\$ 149,193	\$ 157,635	\$ (8,442)	\$ 162,620	\$ 170,680	\$ (8,060)	-5.0%
Non-Personnel Services							
Chemicals & Supplies	30,658	30,482	176	32,082	33,157	(1,075)	-3.4%
Utilities	29,399	26,158	3,241	26,915	26,953	(38)	-0.1%
Contractual Services	79,354	74,914	4,440	81,679	81,886	(207)	-0.3%
Water Purchases	30,156	28,357	1,799	30,520	34,929	(4,409)	-14.4%
Small Equipment	1,071	700	371	1,240	989	251	20.2%
Total Non-Personnel Services	170,638	160,610	10,028	172,435	177,914	(5,479)	-3.2%
Total Operations & Maintenance	\$ 319,831	\$ 318,245	\$ 1,586	\$ 335,055	\$ 348,594	\$ (13,539)	-4.0%
Debt Service	185,480	178,399	7,081	199,025	215,340	(16,315)	-8.2%
PILOT & ROW	21,376	21,376	-	21,702	22,034	(332)	-1.5%
Cash Financed Capital Improvements	35,260	35,260	-	26,999	28,556	(1,557)	-5.8%
Total Non-O&M	242,116	235,035	7,081	247,726	265,929	(18,203)	-7.3%
Total Operating Expenditure	\$ 561,947	\$ 553,279	\$ 8,667	\$ 582,781	\$ 614,523	\$ (31,742)	-5.4%
Capital Labor Charges	(21,061)	(15,527)	(5,534)	(18,259)	(22,748)	4,489	-24.6%
Net Operating Expenditure	\$ 540,886	\$ 537,752	\$ 3,133	\$ 564,522	\$ 591,775	\$ (27,253)	-4.8%

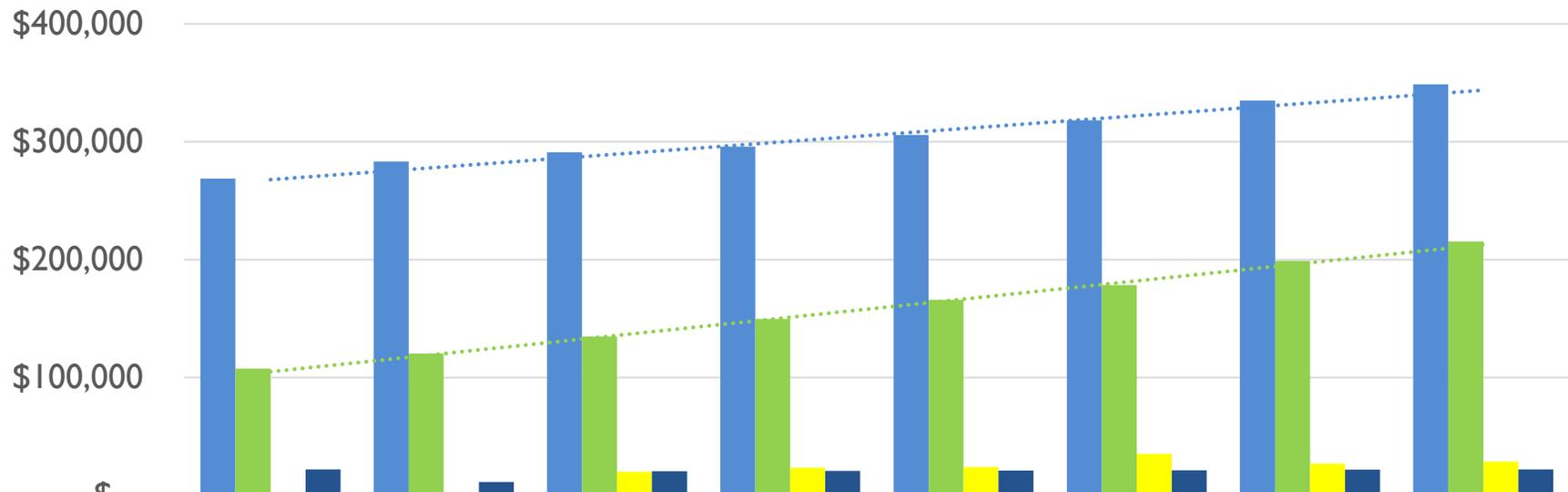


# Efficient Operations

- Constrained annual growth of operations and maintenance budget offset by 10.4 percent annual average growth in debt service costs

FY 2013 – FY 2020 Historical & Projected Operating Expenditure

\$ in thousands



	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
■ Core O & M	\$268,630	\$283,316	\$290,970	\$295,888	\$305,851	\$318,263	\$335,055	\$348,594
■ Debt Service	\$107,700	\$120,165	\$134,845	\$149,781	\$165,836	\$178,399	\$199,025	\$215,340
■ CFCI	\$-	\$-	\$20,058	\$23,475	\$24,199	\$35,260	\$26,999	\$28,556
■ District Payments	\$21,982	\$11,458	\$20,437	\$20,744	\$21,057	\$21,376	\$21,702	\$22,034



## FY 2019 vs FY 2020

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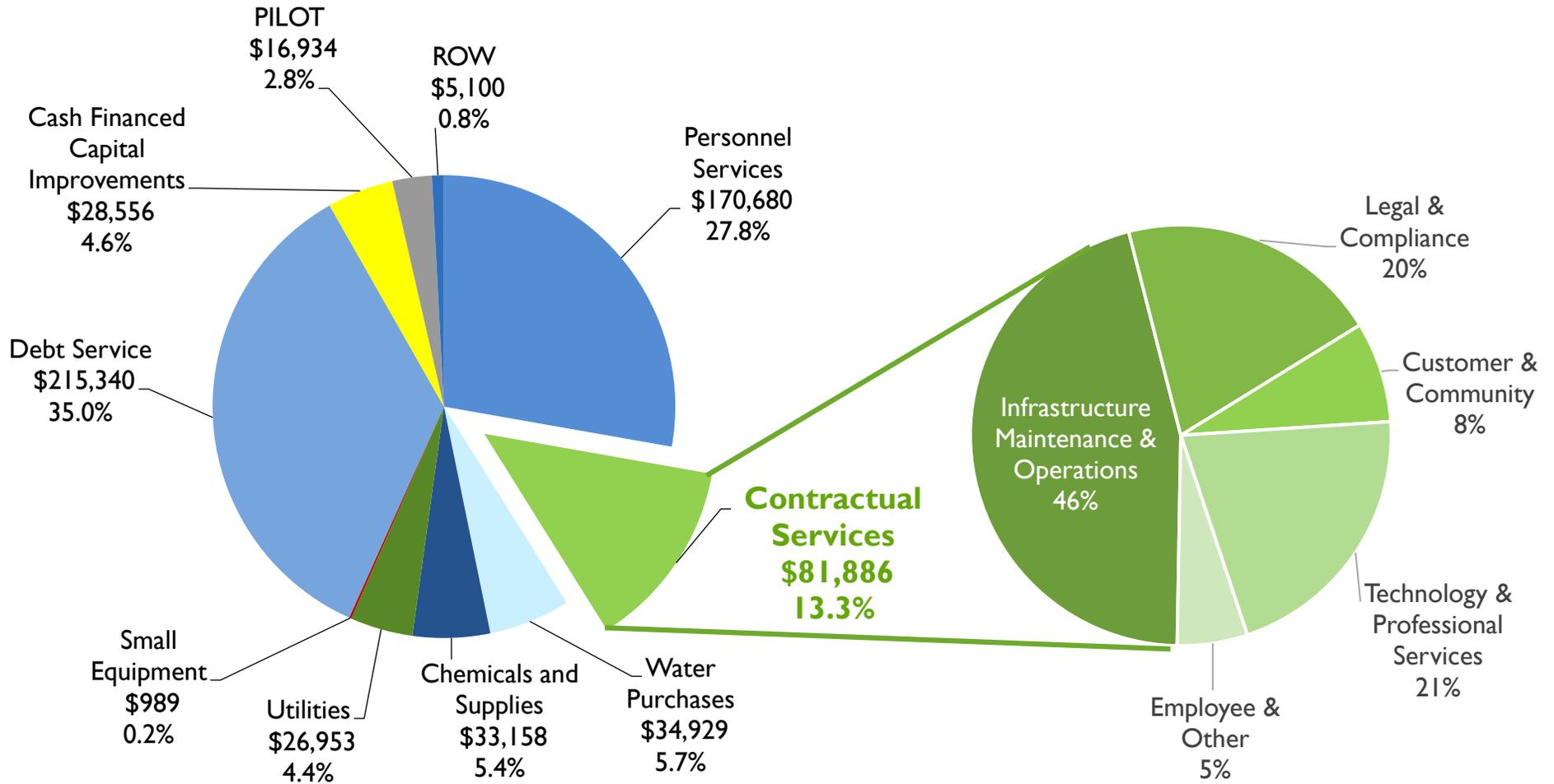
- 💧 **Personnel Services** - \$8.1 million increase mainly for annualized impact of salary adjustments, vacancies, overtime, and other employee-related benefits. This budget eliminates 63 aged/hard to fill positions, saving ratepayers \$7.4 million a year; and adds 12 new positions for in-house support of various operational requirements for water quality compliance, automotive parts, permits and other strategic programs
- 💧 **Chemicals & Supplies** - \$1.6 million increase mainly due to unit prices for major chemicals (methanol and sodium bisulfite) and high chemical usage in the Tunnel Dewatering Pump Station during rain events
- 💧 **Utilities** - Relatively flat compared to FY 2019 budget and assumes onsite electric generation of 8MW from the Combined Heat & Power (CHP) facility
- 💧 **Water Purchases** - \$4.4 million increase fully funds the appropriation O&M requirement for Washington Aqueduct. Approved FY 2019 budget level was based on historical budget performance of 90%
- 💧 **Contracts** - Relatively flat compared to FY 2019 levels with cost adjustments for major programs offset by cost reductions in various professional services



# Breakdown of Contractual Services

\$ in thousands

**Proposed FY 2020  
\$614,523**





## Breakdown of Contractual Services, cont.

\$ in thousands

- Approximately 66 percent of the contracts budget is for infrastructure maintenance, legal and compliance requirements

Description	FY 2019 Approved	FY 2020 Proposed	(Incr.)/ Decr.	FY 2020 Allocation
Maintenance & Repairs - Wastewater Treatment Operations	\$ 7,818	\$ 7,041	\$ 777	9%
Maintenance & Repairs - Water & Sewer Operations	6,587	6,395	192	8%
Maintenance & Repairs - Automotive	3,688	3,679	9	4%
Maintenance & Repairs - Others	924	1,066	(142)	1%
Combined Heat & Power - Operations & Maintenance Cost	4,800	4,800	-	6%
Biosolids & BLOOM Related	5,716	5,274	442	6%
Research & Development	1,835	1,600	235	2%
Facility & Security Management	8,965	7,594	1,371	9%
<b>Subtotal</b>	<b>40,333</b>	<b>37,449</b>	<b>2,884</b>	<b>46%</b>
Legal, Compliance & Strategic	12,205	13,401	(1,196)	16%
Insurance Premiums	3,361	3,141	220	4%
<b>Subtotal</b>	<b>15,566</b>	<b>16,542</b>	<b>(976)</b>	<b>20%</b>
Customer Support	4,115	3,803	312	5%
Credit Card Fees	750	1,558	(808)	2%
Community Outreach Programs	984	984	0	1%
<b>Subtotal</b>	<b>5,849</b>	<b>6,345</b>	<b>(496)</b>	<b>8%</b>
Technology - Professional Services	4,228	3,821	407	5%
Technology - Software Maintenance	6,303	6,626	(323)	8%
Professional Services - Others	3,945	6,678	(2,733)	8%
<b>Subtotal</b>	<b>14,476</b>	<b>17,125</b>	<b>(2,649)</b>	<b>21%</b>
Employee Related	3,819	3,069	750	4%
Refreshments (representation, official meetings, employment events and engagement)	202	143	59	0%
Others (Transportation, advertisement, printing, etc.)	1,434	1,214	220	1%
<b>Subtotal</b>	<b>5,454</b>	<b>4,426</b>	<b>1,029</b>	<b>5%</b>
<b>TOTAL</b>	<b>\$ 81,678</b>	<b>\$ 81,886</b>	<b>\$ (207)</b>	<b>100%</b>

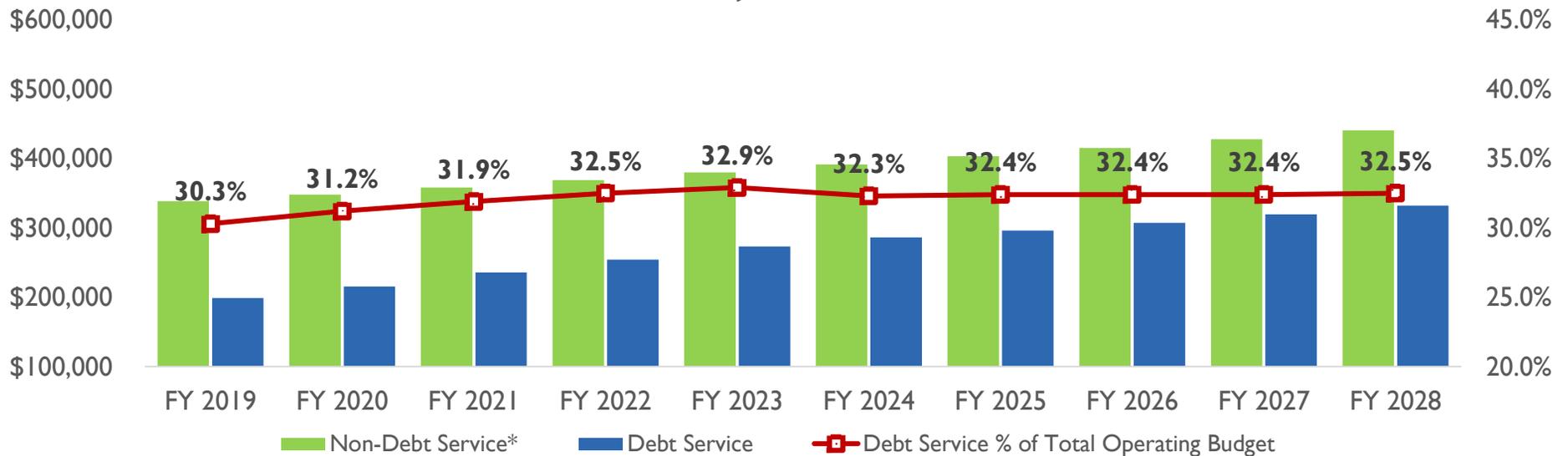


# Debt Service

- 💧 New Bond Issuance - \$300 million anticipated during late Summer 2019
- 💧 Debt Service - Overall increase is to support the capital program
  - Represents 30% and 31% of the total operating budget in FY 2019 and FY 2020, respectively
  - Projected to grow from \$198.8 million in FY 2019 to \$332.1 million by FY 2028 (approx. 67% increase)
  - Projected ten-year average of 32% of total operating budget

\$ in thousands

**FY2019 - FY2028 Projected Debt Service Costs**



\* Non-Debt Service includes O&M, PILOT, ROW and CFCI estimates



# Budget Risks

Category	Description
Personnel	Union contract expires September 30, 2019, overtime requirements during winter season, healthcare, staffing needs
Chemicals	Unit prices (major chemicals), and increased usage for treatment based on higher loads, higher flows and rain events from the tunnels, and process optimization
Utilities	CHP optimization, solar project output & timeline
New facilities	Parts, equipment and maintenance requirement for tunnels, Fleet & Sewer Services and other additional facilities
Biosolids/BLOOM	Increased hauling costs in lieu of marketing of 65,000 tons of BLOOM
Litigation and Insurance	Impacts of unanticipated legal cases and insurance policy requirements
Enterprise Resource Planning (ERP) System	Project implementation and Go-live pending outcome of RFP review and contract negotiation
Clean Energy DC Act	Impact of the Clean Energy DC Omnibus Amendment Act of 2018 on energy, building energy performance requirements and transportation initiatives to reduce carbon emissions



# Operating Revenue



## Proposed FY 2020 Budget

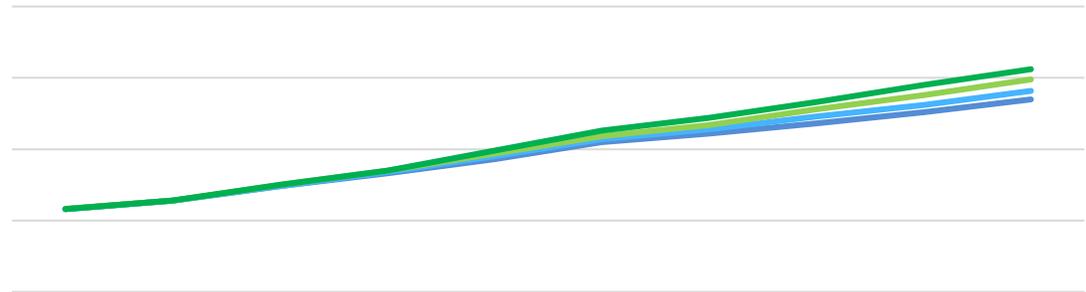
- Overall household charges increase 5.7%, the same as previously forecasted for FY2020
- Proposed change in the way that Clean Rivers costs are recovered
  - \$122.0 million in FY2020 for Clean Rivers; after 18% CRIAC shift, \$99.1 million for Clean Rivers and \$22.9 million for sewer volumetric
  - Proposal to phase-in CRIAC shift of 18% in FY 2020, 28% in FY 2021 and 37% in FY 2022 and beyond to Sewer Volumetric Rate
    - Based on methodology that allocates volume of Sanitary Wastewater, Stormwater runoff and CSO
  - The proposed budget:
    - Decreases the Clean Rivers Impervious Area Charge (CRIAC) from projected \$25.58 in FY 2020 to \$20.94 per ERU, per month
    - Increases the Water & Sewer rate by 11.5% in FY 2020
    - Average household charge changes from \$114.48 to \$114.49
    - Provides customers ability to reduce their bills
- Increase from 4% to 20% CRIAC discount from Stormwater Best Management Practices



# Proposed FY 2020 Budget, cont.

- The Baseline CIP Plan Phase-in approach for CRIAC shift to Sewer Volumetric with 18% in FY 2020, 28% in FY 2021 and 37% in FY 2022 and beyond is recommended because it balances infrastructure investment with growth in rates
- Under the previous financial plan, water and sewer charges would increase 5% a year, and the average household charge would increase 5.1% each year of the ten-year plan
  - The current proposal increases water and sewer rates an average of 8.6% and the average household charge an average of 7.1% over the ten year period
  - The Modified Baseline Plan with the 1.5%, 2.0% and 2.5% replacement of water and sewer lines would have increased the average household bill an average of 7.6%, 8.4% and 9.1% respectively over the ten year period

Average Household Charge



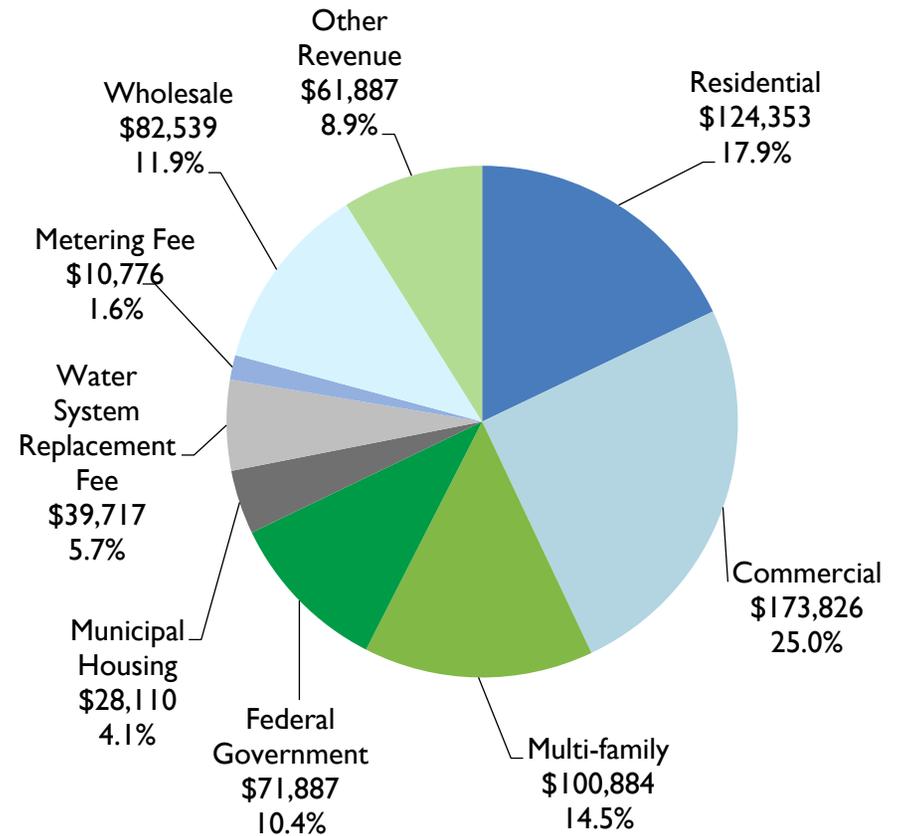
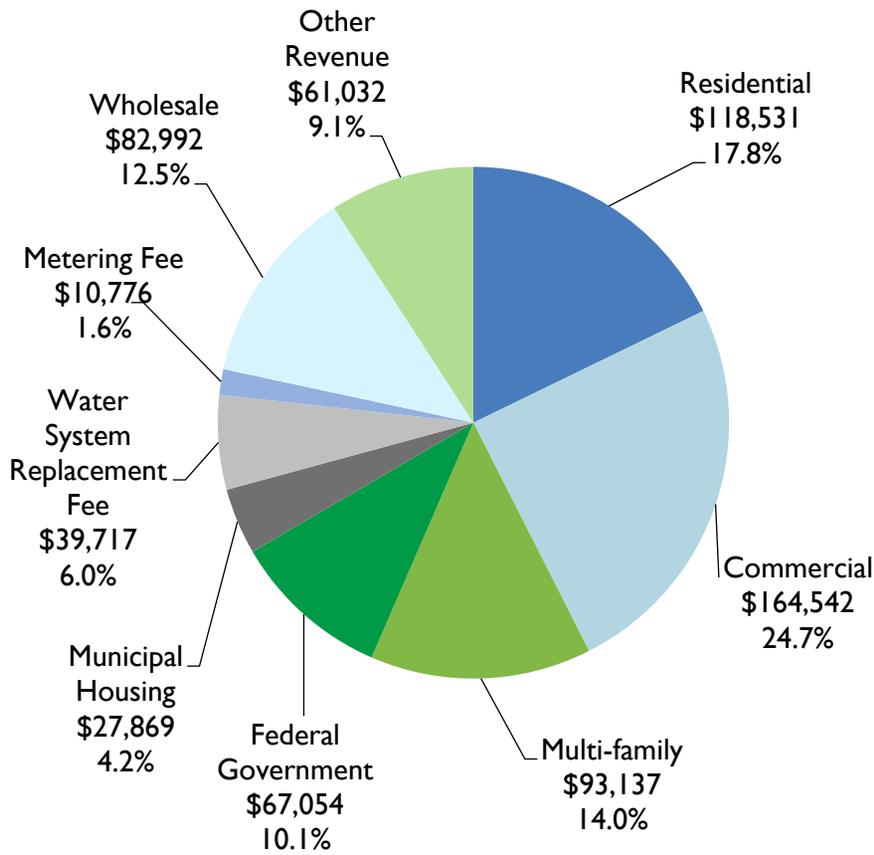
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Baseline: Phase-In Shift CRIAC(18%-28%-37%)	\$108	\$114	\$124	\$133	\$143	\$155	\$161	\$168	\$176	\$185
1.5% W & S Lines Replacement	\$108	\$114	\$124	\$134	\$145	\$157	\$164	\$173	\$181	\$191
2.0 % W & S Lines Replacement	\$108	\$114	\$125	\$135	\$147	\$159	\$167	\$178	\$188	\$199
2.5 % W & S Lines Replacement	\$108	\$114	\$125	\$135	\$149	\$163	\$172	\$183	\$195	\$206

# dc FY 2019 vs. FY 2020 Operating Revenues

**Revised FY 2019**  
**\$665,650**

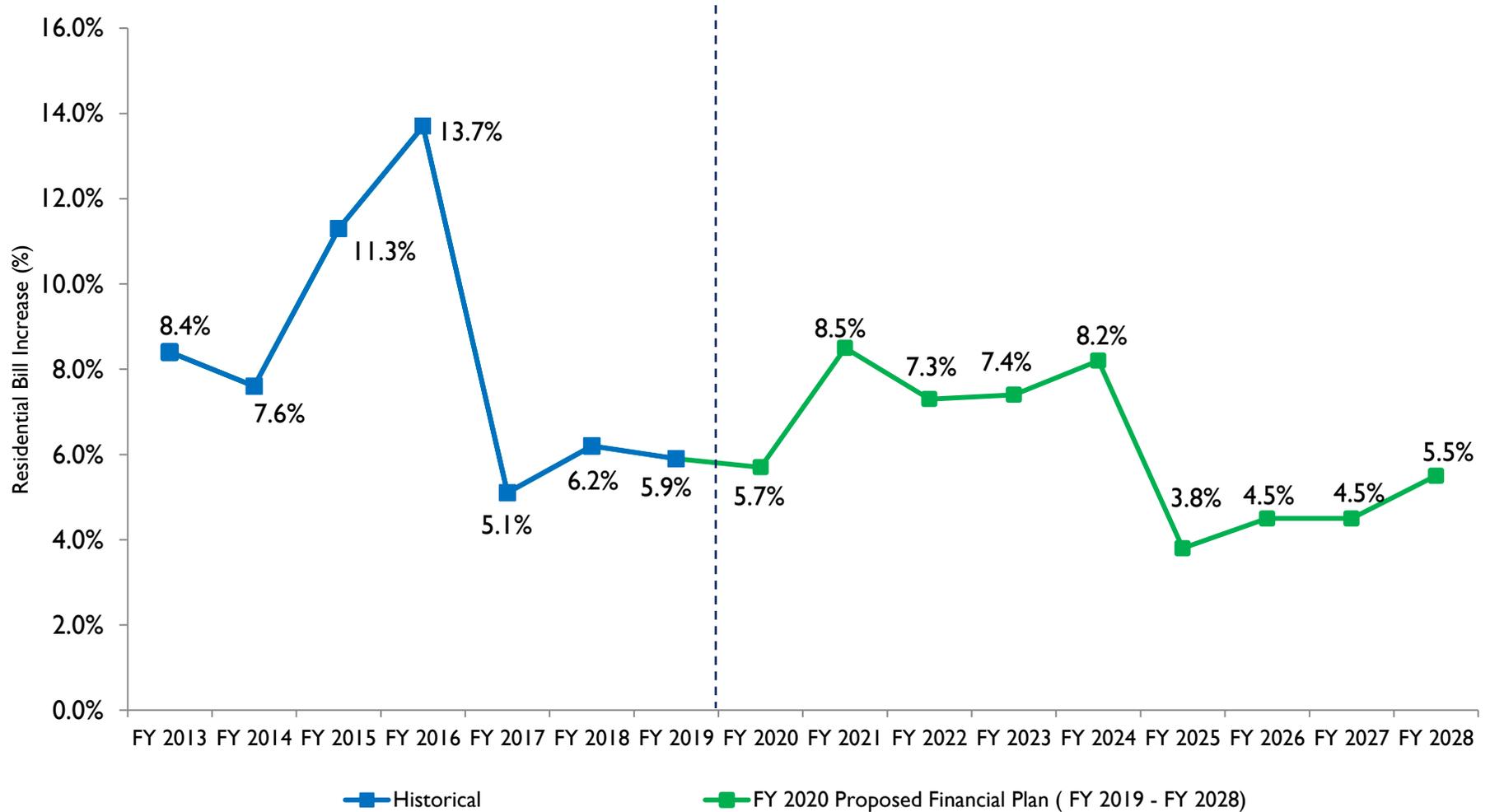
(\$000's)

**Proposed FY 2020**  
**\$693,979**

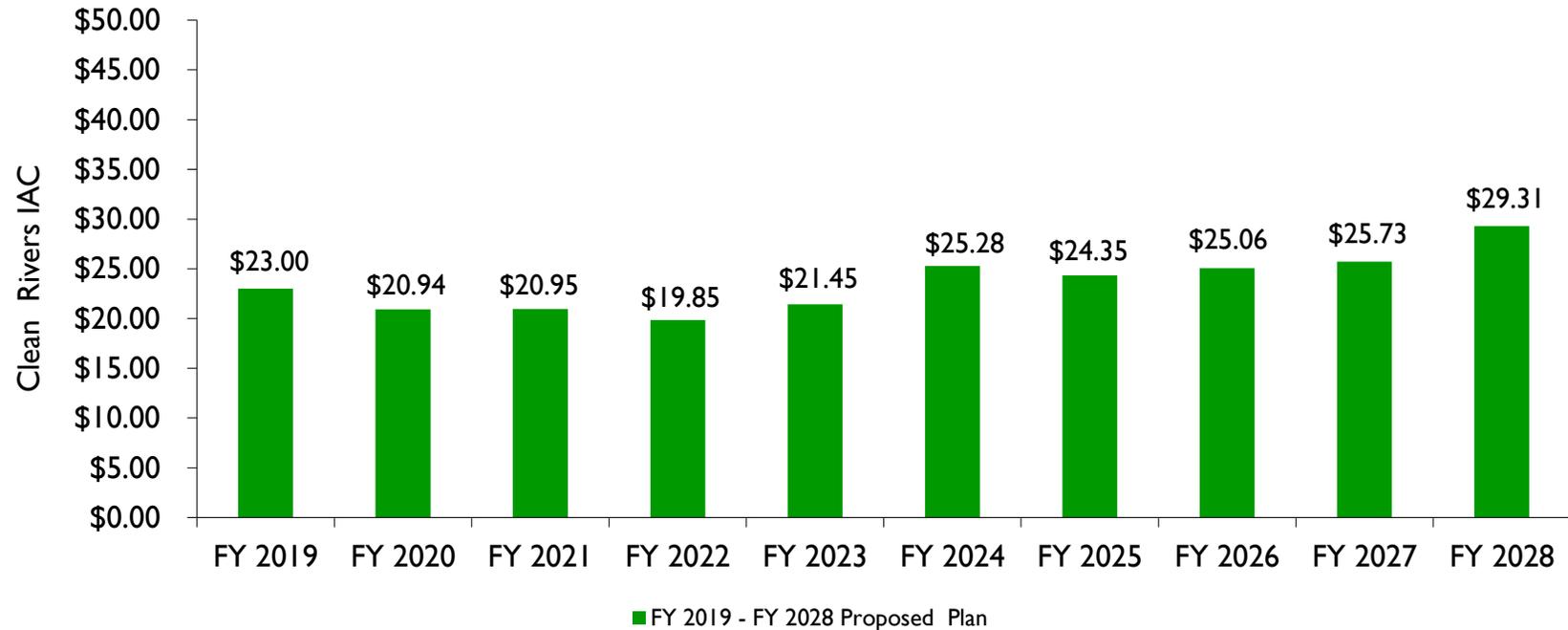




# Historic and Projected Combined Household Increases for Residential Customers



# dc Projected Clean Rivers Impervious Area Charge



- Charges are driven by debt service costs necessary to support the \$2.7 billion Clean Rivers Project
- The annual Clean Rivers Project costs for the average residential customer (700 – 2,000 sq. ft. of impervious area) is projected to increase from \$251.28 in FY 2020 to \$351.72 in FY 2028



# Shifting Cost from CRIAC to Sewer Volumetric Rate

## 💧 Shifting Cost from CRIAC to Sewer Volumetric Rate:

- 18% Shift:
  - Calculated based on pollutant concentrations in sanitary wastewater, stormwater runoff and CSO
  - Uses average of following pollutants: total suspended solids (TSS), biochemical oxygen demand (BOD), total nitrogen (TN) and total phosphorus (TP)
  - Variability in results based on underlying variability in pollutant concentrations from multiple sources
- 37% Shift:
  - Calculated based on volume of sanitary wastewater, stormwater runoff and CSO
  - Uses collection system computer model for average rainfall year to predict volume of each component
  - Model applied for same conditions used to design the Clean Rivers Project and obtain regulatory determination that plan will meet District water quality standards

## 💧 Impact of a Shift to Volumetric:

- Shifting some of the Clean Rivers cost recovery to the volumetric rate gives customers more control over the amount that they pay towards the project
- As a class, Multi-family and Commercial would pay more while Federal Government would pay less
- Small volume customers in every class would generally pay less
- Average Residential customers would pay about the same
- Shift could be phased-in



# Shifting Cost from CRIAC to Sewer Volumetric Rate

## Alternative 1: 18% of CRIAC Shift to Sewer Volumetric, Phase-in Year One

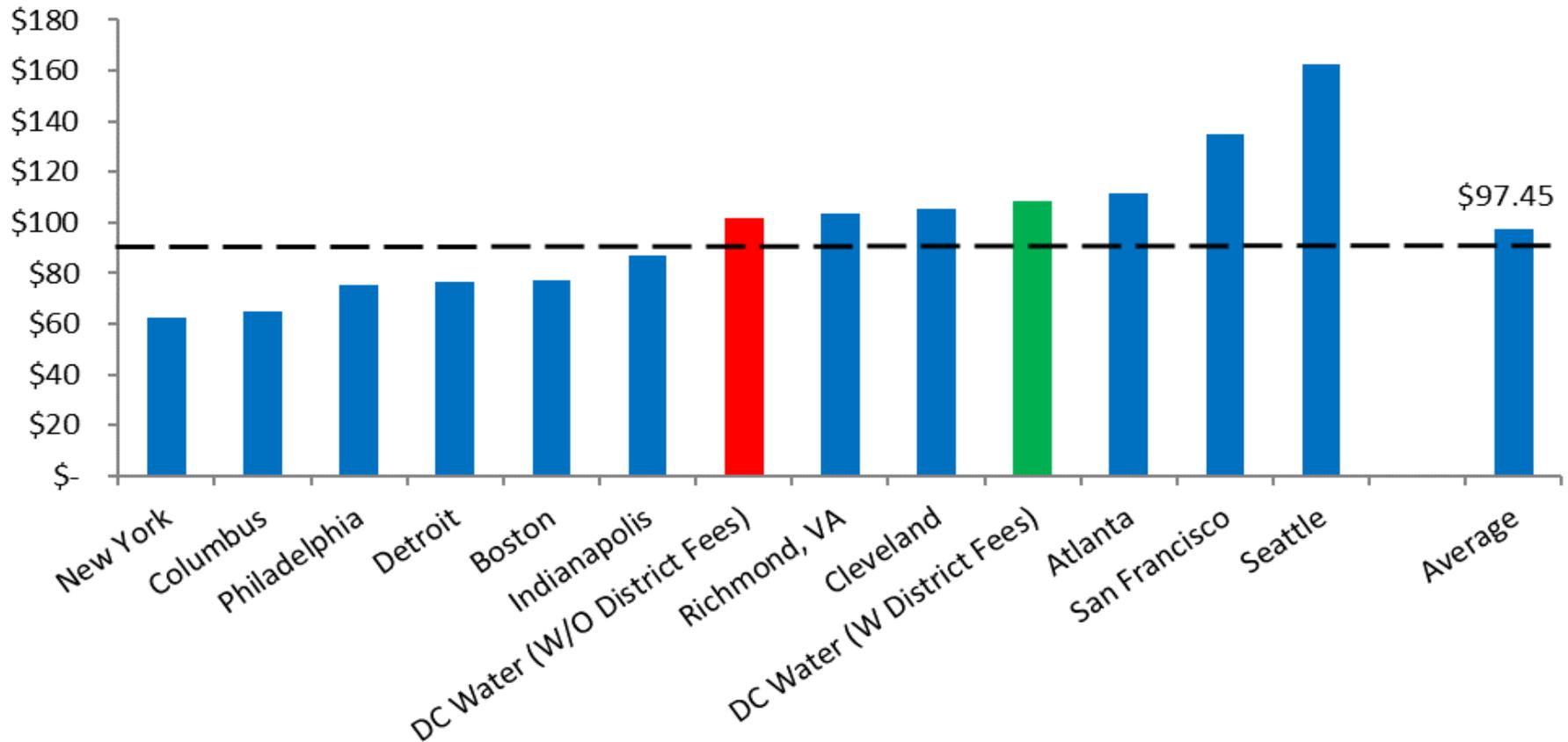
Monthly	Average Household	Average Multi-Family	Sample Commercial	Sample Cemetery	Sample Non Profit (High Con)	Sample Non Profit (Low Con)
Monthly CCF	6.2	92.6	4,478	4.0	876	9.42
ERU	1	6.3	52.2	115.1	128.6	59.2
FY2020 Monthly Total Bill	\$114	\$1,373	\$62,315	\$3,314	\$15,812	\$1,887
FY 2020 Estimated Total Bill with 18% IAC recovered through Volumetric Charge	\$114	\$1,413	\$65,431	\$2,783	\$15,873	\$1,619

## Alternative 2: 37% of CRIAC Shift to Sewer Volumetric, No Phase-in

Monthly	Average Household	Average Multi-Family	Sample Commercial	Sample Cemetery	Sample Non Profit (High Con)	Sample Non Profit (Low Con)
Monthly CCF	6.2	92.6	4,478	4.0	876	9.42
ERU	1	6.3	52.2	115.1	128.6	59.2
FY2020 Monthly Total Bill	\$114	\$1,373	\$62,315	\$3,314	\$15,812	\$1,887
FY 2020 Estimated Total Bill with 37% IAC recovered through Volumetric Charge	\$114	\$1,454	\$68,671	\$2,228	\$15,932	\$1,340

# dc DC Water Compared to CSO Communities

DC Water is implementing an expensive consent decree program, \$2.7 billion paid for by 700,000 residents (or 125,000 customer accounts)



\* Assumes average residential consumption of 6.20 Ccf, or 4,638 gallons, per month. Ccf = hundred cubic feet, or 748 gallons  
 Reflects rates and fees in place as of November 1, 2018



# This Budget continues the CAP Program

💧 CAP customers would receive a discount of 58.8%

	Units	Current FY 2019	Proposed FY 2020
DC Water Water and Sewer Retail Rates <sup>(1)</sup>	Ccf	\$ 68.27	\$ 76.38
DC Water Clean Rivers IAC	ERU	23.00	20.94
DC Water Customer Metering Fee	5/8"	3.86	3.86
DC Water Water System Replacement Fee	5/8"	6.30	6.30
<b>Subtotal DC Water Rates &amp; Charges</b>		<b>\$ 101.43</b>	<b>\$ 107.48</b>
Increase / Decrease		\$ 5.96	\$ 6.05
District of Columbia PILOT Fee <sup>(1)</sup>	Ccf	\$ 3.10	\$ 3.16
District of Columbia Right-of-Way Fee <sup>(1)</sup>	Ccf	1.12	1.18
District of Columbia Stormwater Fee <sup>(4)</sup>	ERU	2.67	2.67
<b>Subtotal District of Columbia Charges</b>		<b>\$ 6.89</b>	<b>\$ 7.01</b>
<b>Total Amount</b>		<b>\$ 108.32</b>	<b>\$ 114.49</b>
Increase / Decrease Over Prior Year		\$ 6.02	\$ 6.17
<b>Percent Increase in Total Bill</b>		<b>5.9%</b>	<b>5.7%</b>
Less: CAP Discount (4 Ccf per month) <sup>(1), (2)</sup>		(45.36)	(50.60)
Water System Replacement Fee (WSRF) <sup>(3)</sup>		(6.30)	(6.30)
Clean Rivers IAC <sup>(5)</sup>		(11.50)	(10.47)
<b>Total Amount Appearing on DC Water Bill</b>		<b>\$ 45.16</b>	<b>\$ 47.12</b>
Increase / Decrease Over Prior Year		\$ 1.99	\$ 1.96
<b>CAP Customer Discount as a Percent of Total Bill</b>		<b>-58.3%</b>	<b>-58.8%</b>

(1) Assumes average monthly consumption of 6.2 Ccf, or (4,638 gallons)

(2) Expansion of CAP program in FY 2009 to first 4 Ccf of Water and Sewer and to first 4 Ccf of PILOT and ROW in FY 2011

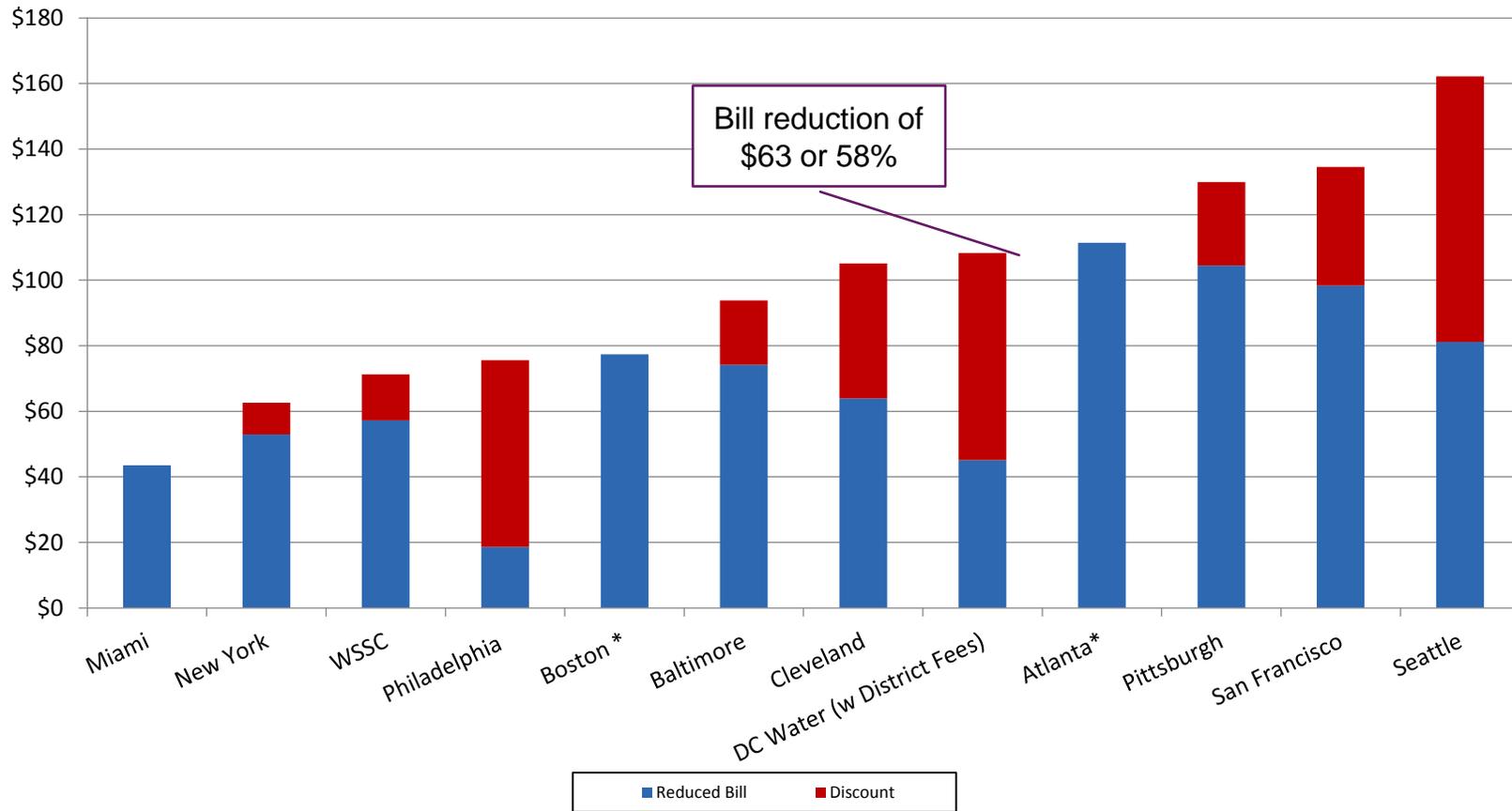
(3) Assumes 100 percent discount for Water System Replacement Fee (WSRF) to CAP customers effective October 1, 2015

(4) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010

(5) Assumes 50 percent discount for the Clean Rivers IAC effective May 1, 2017



# SFR Monthly Bills – Comparison of Charges With & With Out Income-Based Affordability Programs

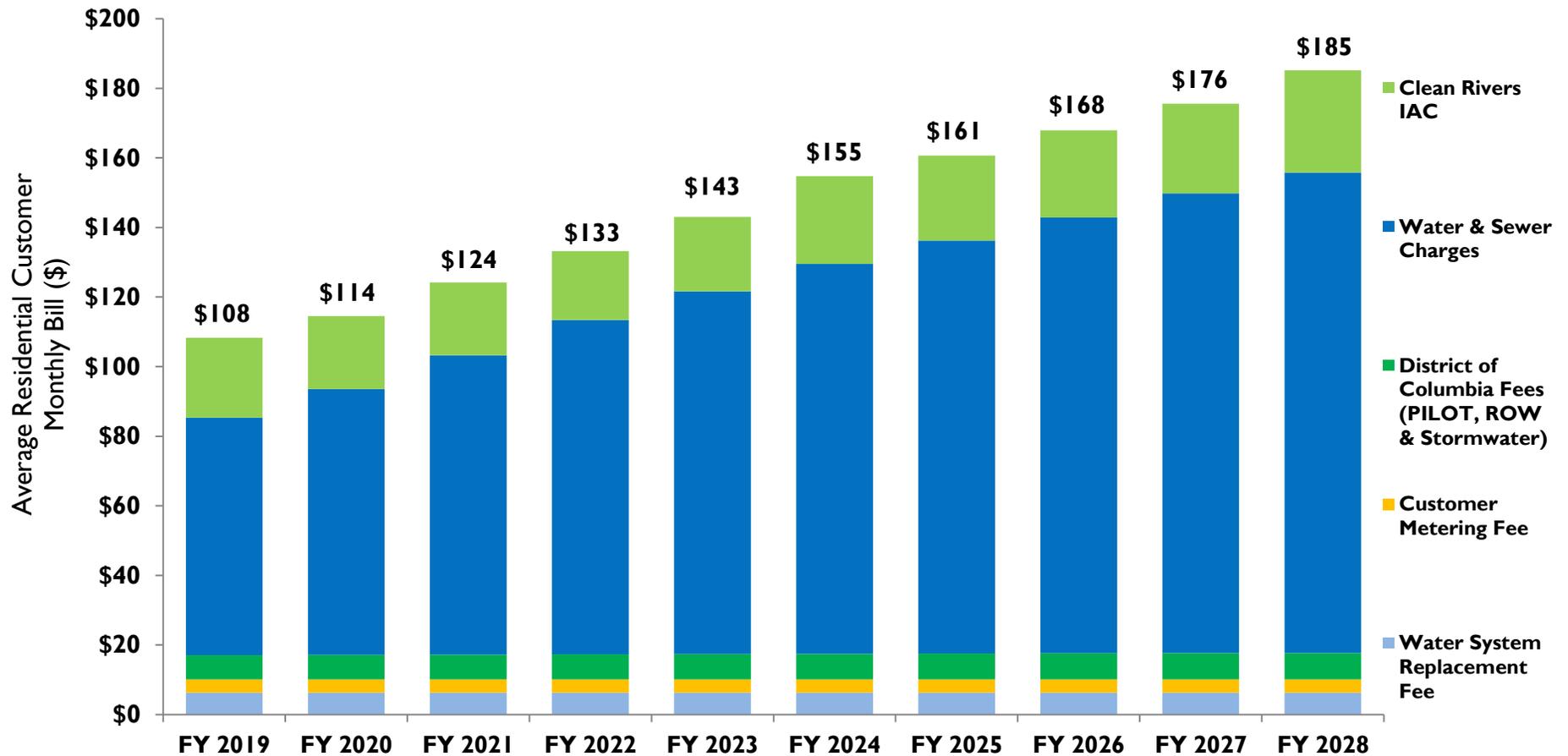


\* Boston provides a 30% discount on water bills for senior citizens or fully disabled customers with no income eligibility requirement. Atlanta provides a 30% discount on bills for seniors citizens who meet income eligibility requirement.



# Projected Average Residential Customer Bill

Projected average monthly residential customer bill ranges from \$108 in FY 2019 to \$185 in FY 2028





## Revenue Comparison by Customer Class

- 💧 Total revenue is projected to increase by \$28.3 million or 4.3%
- 💧 Retail revenue is projected to increase by \$27.9 million or 5.4%
- 💧 Wholesale revenue is projected to decrease by \$0.5 million or 0.5% because of flows

(\$000's)	Revised FY 2019	Proposed FY 2020	FY 2020 vs FY 2019	
			Incr/(Decr) \$	%
Retail Revenue	\$521,626	\$549,553	\$27,927	5.4%
Wholesale Revenue				
Potomac Interceptor (PI)	2,715	2,715	-	-
Loudoun County Sanitation Authority (LCSA)	7,541	7,758	217	2.9%
Washington Suburban Sanitary Commission (WSSC)	58,335	57,284	(1,051)	(1.8%)
Fairfax County	14,401	14,782	381	2.6%
Total Wholesale Revenue	\$82,992	\$82,539	(\$453)	(0.5%)
Other Revenue	61,032	61,887	855	1.4%
Rate Stabilization Fund	-	-	-	-
Total Revenues	\$665,650	\$693,979	\$28,329	4.3%



## Current Forecast of Customer Impacts

<b>Residential – Avg. 6.2 Ccf / IERU Baseline \$5.0B Phase-In 18%-28%-37%</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$108	\$114	\$124	\$133	\$143	\$155	\$161	\$168	\$176	\$185
Avg. Customer Bill (%)	5.9%	5.7%	8.5%	7.3%	7.4%	8.2%	3.8%	4.5%	4.5%	5.5%

<b>Multi-family – Avg. 92.6 Ccf / 6.3 ERU Baseline \$5.0B Phase-In 18%-28%-37%</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,303	\$1,413	\$1,558	\$1,704	\$1,837	\$1,981	\$2,077	\$2,180	\$2,289	\$2,403
Avg. Customer Bill (%)	9.2%	8.5%	10.3%	9.4%	7.8%	7.8%	4.8%	5.0%	5.0%	4.9%

<b>Commercial – Avg. 114 Ccf / 13.1 ERU Baseline \$5.0B Phase-In 18%-28%-37%</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,850	\$1,978	\$2,164	\$2,345	\$2,527	\$2,732	\$2,852	\$2,990	\$3,134	\$3,299
Avg. Customer Bill (%)	7.7%	6.9%	9.4%	8.3%	7.7%	8.1%	4.4%	4.8%	4.8%	5.2%



# Financial Plan



# Financial Plan Objectives

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- 💧 DC Water's 10-year financial plan serves as the fiscal roadmap to achieve the Board's strategic plan
- 💧 It is one of management's key tools to monitor progress in meeting financial goals and targets
- 💧 It also ensures meeting or exceeding all debt-related legal and policy requirements, as well as maintaining sufficient liquidity to meet all current financial obligations
- 💧 DC Water's financial plan objectives focus on:
  - minimizing rate increases while meeting all financial obligations;
  - satisfying all indenture requirements and Board policies; and
  - maintaining the DC Water's current credit ratings of AAA/Aa1/AA



# Financial Plan Assumptions

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- Assumptions for Proposed FY 2019 - FY 2028 Financial Plan include:
  - CRIAC cost shift of 18% , 28% and 37% to Sewer Volumetric
  - Combined coverage of 1.60
  - Debt Service as a percent of Operating Revenue of 33% or less
  - Days of cash (including RSF) of 250
  - Increase in Revenue of \$2.0 million for Engineering and Permit Fee
  - Additional Revenue of \$1.5 million for new Fat, Oil and Grease (FOG) and Back Flow Preventer ( BFP)
  - County Refunds increase of approximately \$9.5 million in FY 2019
  - Project Billing amount increase of \$7.0 million in FY 2019
  - Transfer of \$6.0 million from the RSF for one-time CAP2 program in FY 2019

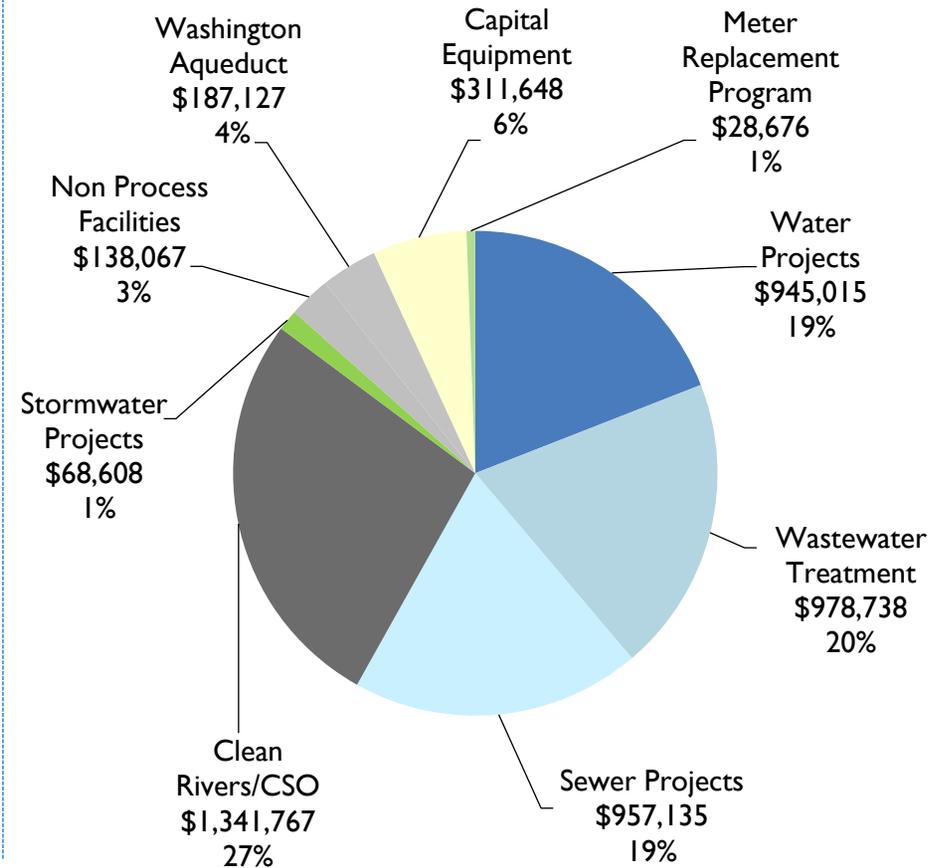
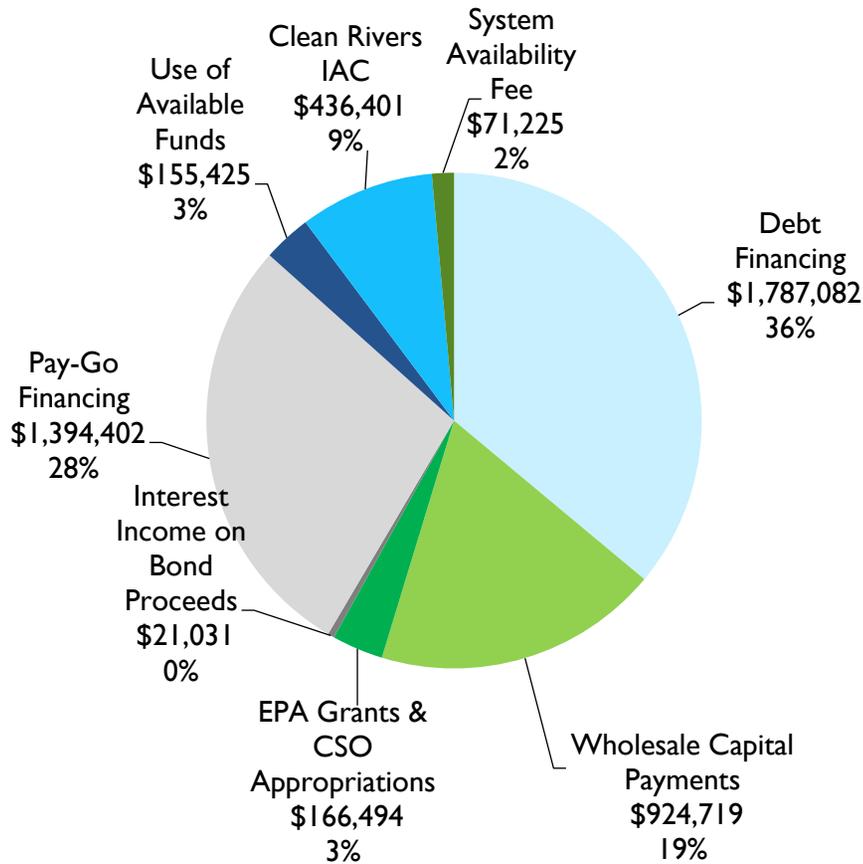


# Ten Year CIP: Sources and Uses of Funds

## Sources \$4.96 Billion

(\$000's)

## Uses \$4.96 Billion





# Ten Year Financial Plan

\$ in thousands

<b>OPERATING</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>
<i>Retail*</i>	\$ 543,327	\$ 571,666	\$ 618,152	\$ 659,845	\$ 704,304	\$ 756,859	\$ 780,566	\$ 810,514	\$ 841,471	\$ 879,686
<i>Wholesale*</i>	82,992	82,539	85,015	87,566	90,193	92,898	95,685	98,556	101,513	104,558
<i>Other</i>	33,331	39,774	46,805	51,271	53,758	53,445	54,361	57,081	57,391	58,349
<i>RSF</i>	6,000	-	-	-	-	-	-	-	-	-
<b>Operating Receipts (1)</b>	<b>\$ 665,650</b>	<b>\$ 693,979</b>	<b>\$ 749,972</b>	<b>\$ 798,682</b>	<b>\$ 848,255</b>	<b>\$ 903,202</b>	<b>\$ 930,612</b>	<b>\$ 966,151</b>	<b>\$ 1,000,375</b>	<b>\$ 1,042,593</b>
<b>Operating Expenses</b>	<b>(338,499)</b>	<b>(347,881)</b>	<b>(358,264)</b>	<b>(368,967)</b>	<b>(379,998)</b>	<b>(391,369)</b>	<b>(403,089)</b>	<b>(415,169)</b>	<b>(427,622)</b>	<b>(440,458)</b>
<b>Debt Service</b>	<b>(198,754)</b>	<b>(215,340)</b>	<b>(235,421)</b>	<b>(254,235)</b>	<b>(272,838)</b>	<b>(285,693)</b>	<b>(295,505)</b>	<b>(306,629)</b>	<b>(318,969)</b>	<b>(331,609)</b>
<b>Cash Financed Capital Improvement</b>	<b>\$ (26,999)</b>	<b>\$ (28,556)</b>	<b>\$ (30,907)</b>	<b>\$ (39,591)</b>	<b>\$ (49,301)</b>	<b>\$ (52,980)</b>	<b>\$ (62,445)</b>	<b>\$ (72,946)</b>	<b>\$ (75,732)</b>	<b>\$ (79,172)</b>
<b>Net Revenues After Debt Service</b>	<b>\$ 101,398</b>	<b>\$ 102,202</b>	<b>\$ 125,380</b>	<b>\$ 135,889</b>	<b>\$ 146,118</b>	<b>\$ 173,160</b>	<b>\$ 169,573</b>	<b>\$ 171,407</b>	<b>\$ 178,052</b>	<b>\$ 191,354</b>
<b>Operating Reserve-Beg Balance</b>	<b>166,796</b>	<b>165,000</b>	<b>180,000</b>	<b>185,000</b>	<b>194,000</b>	<b>201,000</b>	<b>205,000</b>	<b>215,000</b>	<b>220,000</b>	<b>230,000</b>
<b>Other Misc (Disbursements)/Receipts</b>										
<b>Wholesale/Federal True Up</b>	<b>(16,803)</b>	<b>(2,131)</b>	<b>-</b>	<b>-</b>						
<b>Project Billing Refunds</b>	<b>(11,000)</b>	<b>(4,000)</b>	<b>(4,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Transfers To RSF</b>	<b>-</b>	<b>-</b>								
<b>Pay-Go Financing</b>	<b>(75,391)</b>	<b>(81,071)</b>	<b>(116,380)</b>	<b>(126,890)</b>	<b>(139,118)</b>	<b>(169,161)</b>	<b>(159,573)</b>	<b>(166,407)</b>	<b>(168,052)</b>	<b>(181,356)</b>
<b>Operating Reserve - Ending Balance</b>	<b>\$ 165,000</b>	<b>\$ 180,000</b>	<b>\$ 185,000</b>	<b>\$ 194,000</b>	<b>\$ 201,000</b>	<b>\$ 205,000</b>	<b>\$ 215,000</b>	<b>\$ 220,000</b>	<b>\$ 230,000</b>	<b>\$ 240,000</b>
<b>Rate Stabilization Fund Balance RSF (2)</b>	<b>\$ (55,450)</b>	<b>\$ (55,450)</b>								
<b>Senior Debt Service Coverage</b>	<b>425%</b>	<b>438%</b>	<b>461%</b>	<b>508%</b>	<b>505%</b>	<b>593%</b>	<b>611%</b>	<b>598%</b>	<b>585%</b>	<b>614%</b>
<b>Combined Debt Service Coverage</b>	<b>162%</b>	<b>168%</b>	<b>174%</b>	<b>178%</b>	<b>180%</b>	<b>187%</b>	<b>187%</b>	<b>188%</b>	<b>187%</b>	<b>189%</b>
<b>Actual/Projected Water/Sewer Rate Increases</b>	<b>13.0%</b>	<b>11.5%</b>	<b>12.5%</b>	<b>11.5%</b>	<b>8.5%</b>	<b>7.5%</b>	<b>6.0%</b>	<b>5.5%</b>	<b>5.5%</b>	<b>4.5%</b>
<b>*Operating Receipts \$ Increase/Decrease</b>										
Retail	23,697	28,339	46,486	41,693	44,459	52,555	23,707	29,948	30,957	38,215
Wholesale	1,970	(453)	2,476	2,551	2,627	2,705	2,787	2,871	2,957	3,045
<b>*Operating Receipts % Increase/Decrease</b>										
Retail	4.6%	5.2%	8.1%	6.7%	6.7%	7.5%	3.1%	3.8%	3.8%	4.5%
Wholesale	2.4%	-0.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

(1) Includes interest earnings on senior lien revenue bonds' debt service reserve fund

(2) FY 2020 planned transfers of \$0.0 million to Rate Stabilization Fund will maintain the total fund balance at \$55.45 million



# FY 2019 – FY 2028 Average Residential Customer Monthly Bill

## District of Columbia Water & Sewer Authority Average Residential Customer Monthly Bill FY 2019 - FY 2028

	Units	Proposed									
		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
DC Water Water and Sewer Retail Rates <sup>(1)</sup>	Ccf	\$ 68.27	\$ 76.38	\$ 86.00	\$ 96.08	\$ 104.23	\$ 112.02	\$ 118.73	\$ 125.25	\$ 132.14	\$ 138.08
DC Water Clean Rivers IAC <sup>(2)</sup>	ERU	23.00	20.94	20.95	19.85	21.45	25.28	24.35	25.06	25.73	29.31
DC Water Customer Metering Fee	5/8"	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86
DC Water Water System Replacement Fee <sup>(4)</sup>	5/8"	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30
<b>Subtotal DC Water Rates &amp; Charges</b>		<b>\$ 101.43</b>	<b>\$ 107.48</b>	<b>\$ 117.11</b>	<b>\$ 126.09</b>	<b>\$ 135.84</b>	<b>\$ 147.46</b>	<b>\$ 153.24</b>	<b>\$ 160.47</b>	<b>\$ 168.03</b>	<b>\$ 177.55</b>
Increase / Decrease		\$ 5.96	\$ 6.05	\$ 9.63	\$ 8.98	\$ 9.75	\$ 11.62	\$ 5.78	\$ 7.23	\$ 7.56	\$ 9.52
<b>Percent Increase in DC Water Portion of Bill</b>		<b>6.2%</b>	<b>6.0%</b>	<b>9.0%</b>	<b>7.7%</b>	<b>7.7%</b>	<b>8.6%</b>	<b>3.9%</b>	<b>4.7%</b>	<b>4.7%</b>	<b>5.7%</b>
District of Columbia PILOT Fee <sup>(1)</sup>	Ccf	\$ 3.10	\$ 3.16	\$ 3.22	\$ 3.29	\$ 3.35	\$ 3.41	\$ 3.47	\$ 3.53	\$ 3.60	\$ 3.66
District of Columbia Right-of-Way Fee <sup>(1)</sup>	Ccf	1.12	1.18	1.18	1.18	1.18	1.24	1.24	1.24	1.24	1.24
District of Columbia Stormwater Fee <sup>(3)</sup>	ERU	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
<b>Subtotal District of Columbia Charges</b>		<b>\$ 6.89</b>	<b>\$ 7.01</b>	<b>\$ 7.07</b>	<b>\$ 7.14</b>	<b>\$ 7.20</b>	<b>\$ 7.32</b>	<b>\$ 7.38</b>	<b>\$ 7.44</b>	<b>\$ 7.51</b>	<b>\$ 7.57</b>
<b>Total Amount Appearing on DC Water Bill</b>		<b>\$ 108.32</b>	<b>\$ 114.49</b>	<b>\$ 124.18</b>	<b>\$ 133.23</b>	<b>\$ 143.04</b>	<b>\$ 154.78</b>	<b>\$ 160.62</b>	<b>\$ 167.91</b>	<b>\$ 175.54</b>	<b>\$ 185.12</b>
Increase / Decrease Over Prior Year		\$ 6.02	\$ 6.17	\$ 9.69	\$ 9.05	\$ 9.81	\$ 11.74	\$ 5.84	\$ 7.29	\$ 7.63	\$ 9.58
<b>Percent Increase in Total Bill</b>		<b>5.9%</b>	<b>5.7%</b>	<b>8.5%</b>	<b>7.3%</b>	<b>7.4%</b>	<b>8.2%</b>	<b>3.8%</b>	<b>4.5%</b>	<b>4.5%</b>	<b>5.5%</b>

(1) Assumes average monthly consumption of 6.2 Ccf, or (4,638 gallons)

(2) Assumes average 1 Equivalent Residential Unit (ERU)

(3) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010

(4) DC Water "Water System Replacement Fee" of \$6.30 for 5/8" meter size effective October 1, 2015



# Retail Rates, Charges and Fees

**District of Columbia Water & Sewer Authority  
Retail Rates, Charges and Fees  
FY 2019 - FY 2028**

	Units	Proposed									
		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
DC Water Retail Rates Water (Residential Lifeline 0 - 4 Ccf)	Ccf	\$ 2.91	\$ 3.06	\$ 3.32	\$ 3.60	\$ 3.91	\$ 4.20	\$ 4.45	\$ 4.69	\$ 4.95	\$ 5.17
DC Water Retail Rates Water (Residential > 4 Ccf)	Ccf	\$ 3.90	\$ 4.10	\$ 4.45	\$ 4.83	\$ 5.24	\$ 5.63	\$ 5.97	\$ 6.30	\$ 6.65	\$ 6.95
DC Water Retail Rates Water (Multi-Family)	Ccf	\$ 3.37	\$ 3.54	\$ 3.84	\$ 4.17	\$ 4.52	\$ 4.86	\$ 5.15	\$ 5.43	\$ 5.73	\$ 5.99
DC Water Retail Rates Water (Non-Residential)	Ccf	\$ 4.05	\$ 4.25	\$ 4.61	\$ 5.00	\$ 5.43	\$ 5.84	\$ 6.19	\$ 6.53	\$ 6.89	\$ 7.20
DC Water Retail Rates Sewer	Ccf	\$ 7.75	\$ 8.89	\$ 10.15	\$ 11.46	\$ 12.43	\$ 13.36	\$ 14.16	\$ 14.94	\$ 15.76	\$ 16.47
DC Water Clean Rivers IAC	ERU	\$ 23.00	\$ 20.94	\$ 20.95	\$ 19.85	\$ 21.45	\$ 25.28	\$ 24.35	\$ 25.06	\$ 25.73	\$ 29.31
DC Water Customer Metering Fee	5/8"	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86	\$ 3.86
DC Water Water System Replacement Fee	5/8"	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30	\$ 6.30
District of Columbia PILOT Fee	Ccf	\$ 0.50	\$ 0.51	\$ 0.52	\$ 0.53	\$ 0.54	\$ 0.55	\$ 0.56	\$ 0.57	\$ 0.58	\$ 0.59
District of Columbia Right-of-Way Fee	Ccf	\$ 0.18	\$ 0.19	\$ 0.19	\$ 0.19	\$ 0.19	\$ 0.20	\$ 0.20	\$ 0.20	\$ 0.20	\$ 0.20
District of Columbia Stormwater Fee	ERU	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67	\$ 2.67



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# CRIAC Discount Analysis



## CRIAC Discount

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- Resolution #13-80 – DC Water established the Clean Rivers Impervious Surface Area Charge (CRIAC) Incentive Program
  - 4% maximum incentive credit
  - Concern about ensuring that DC Water has sufficient resources to pay mandated Clean Rivers costs
  
- The Incentive Program
  - Customers who manage stormwater on their property through the use of approved best management practices such as rain gardens, rain barrels, pervious paving, green roofs, bioretention practices, and stormwater
  - Eligibility determinations are made by the District Department of Energy and the Environment
  
- This budget proposes an increase from 4% to 20% for stormwater best management practices



# Next Steps



# Management Recommendations

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Management recommends the approval of the following -

- Proposed FY 2019 – FY 2028 Capital Disbursements of \$4.96 billion and Lifetime Project Budget of \$12.13 billion
- Proposed FY 2020 Operating Expenditure Budget of \$614.5 million
- Proposed FY 2019 – FY 2028 Financial Plan, including the revenue requirements to support the operating and capital budgets



# Committee Recommendations & Actions

Committee	Environmental Quality & Operations	DC Retail Water & Sewer Rates	Finance & Budget
FY 2019 - FY 2028 Capital Budget (Disbursements & Lifetime)	Action Taken		Action Required
Intent to Reimburse Capital Expenditures with Proceeds of a Borrowing			Action Required
FY 2020 Operating Budget			Action Required
FY 2019 – FY 2028 Financial Plan		Action Required	Action Required
FY 2020 Rates, Charges & Fees		Action Required	



# Appendix



# Detailed 10-Year CIP

## Capital Improvement Program

10-Year Disbursement Plan - projected annual cash disbursements, \$ in thousands

Attachment A-1

	FY 2019 - FY 2028 Proposed Disbursement Plan										10-Yr Total	Lifetime Budget
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
<b>NON PROCESS FACILITIES</b>												
Facility Land Use	15,309	36,002	26,793	20,665	6,831	11,058	10,396	3,901	3,553	3,560	138,067	\$212,833
Subtotal: Facility Land Use	15,309	36,002	26,793	20,665	6,831	11,058	10,396	3,901	3,553	3,560	138,067	212,833
<b>WASTEWATER TREATMENT</b>												
Liquid Processing	21,488	30,915	37,087	48,495	36,646	38,979	41,124	84,082	107,253	107,354	553,422	1,166,818
Plantwide	15,777	20,223	18,885	25,882	39,576	24,810	17,052	25,410	20,726	7,341	215,681	494,048
Solids Processing	6,672	10,511	19,988	22,645	30,530	15,286	12,862	3,899	1,186	8,304	131,883	906,481
Enhanced Nitrogen Removal Facilities	26,042	4,972	549	614	3,295	3,359	10,211	19,947	8,411	351	77,751	998,714
Subtotal	69,979	66,620	76,510	97,635	110,047	82,434	81,249	133,338	137,575	123,351	978,738	3,566,060
<b>COMBINED SEWER OVERFLOW</b>												
DC Clean Rivers	187,859	147,208	139,786	191,573	151,411	64,415	55,689	144,295	97,067	83,286	1,262,589	2,764,255
Program Management	1,685	1,241	743	1,482	2,653	4,046	4,310	2,871	1,745	2,718	23,494	77,756
Combined Sewer	5,805	2,978	8,701	6,533	5,994	9,473	4,542	2,930	3,848	4,880	55,684	191,538
Subtotal	195,350	151,427	149,230	199,588	160,057	77,935	64,541	150,095	102,660	90,884	1,341,767	3,033,549
<b>STORMWATER</b>												
Local Drainage	8	17	244	822	770	768	1,410	769	156	3,084	8,048	20,225
On-Going	1,056	511	598	929	706	742	451	735	713	919	7,360	10,511
Pumping Facilities	1,996	7,877	6,966	6,429	1,909	3,218	5,492	5,792	4,100	5,773	49,553	61,204
DDOT	-	-	-	-	-	-	-	-	-	-	-	3,237
Research and Program Management	1,078	84	223	319	341	260	212	198	269	326	3,310	12,889
Trunk/Force Sewers	82	82	87	86	-	-	-	-	-	-	337	15,510
Subtotal	4,220	8,571	8,118	8,587	3,725	4,987	7,564	7,494	5,239	10,102	68,608	123,574
<b>SANITARY SEWER</b>												
Collection Sewers	5,434	2,476	10,012	20,547	21,664	24,747	33,310	42,591	44,337	36,594	241,712	498,192
On-Going	13,653	12,842	13,483	13,711	13,667	14,185	15,019	15,253	15,111	15,312	142,239	219,540
Pumping Facilities	2,248	1,619	4,868	6,649	6,495	4,935	9,975	10,882	12,457	29,612	89,739	270,778
Program Management	3,321	2,452	4,752	6,868	5,073	3,942	3,127	3,334	4,126	4,923	41,919	119,035
Interceptor/Trunk Force Sewers	20,270	24,257	24,133	37,813	50,321	50,384	53,579	67,961	58,633	54,174	441,526	963,054
Subtotal	44,927	43,646	57,249	85,588	97,220	98,194	115,011	140,020	134,664	140,615	957,135	2,070,599
<b>WATER</b>												
Distribution Systems	30,729	40,948	63,054	58,127	49,881	61,921	68,714	62,636	60,526	82,102	578,638	1,359,993
Lead Program	4,338	5,928	6,723	6,307	6,715	7,438	6,544	5,830	6,654	6,706	63,182	243,414
On-Going	10,080	10,238	10,126	12,297	13,351	15,199	16,789	18,583	20,447	22,981	150,091	215,064
Pumping Facilities	1,199	2,513	6,282	8,110	2,850	3,947	3,095	3,502	3,523	1,974	36,993	123,911
DDOT	992	76	3	5	-	-	-	-	-	-	1,076	33,933
Storage Facilities	9,384	5,223	2,549	8,940	7,526	3,913	3,770	8,779	7,098	-	57,181	137,364
Program Management	5,163	6,795	7,562	7,255	4,073	4,414	6,815	7,089	4,614	-	57,854	90,944
Subtotal	61,884	71,720	96,300	101,039	84,395	96,491	103,325	106,145	105,338	118,377	945,015	2,204,622
<b>CAPITAL PROJECTS</b>												
	391,669	377,987	414,200	513,102	462,275	371,098	382,087	540,993	489,029	486,890	4,429,330	11,211,236
<b>CAPITAL EQUIPMENT</b>												
ONGOING METER REPLACEMENT	2,618	2,618	2,930	2,930	2,930	2,930	2,930	2,930	2,930	2,930	28,676	
ERP PROJECT (Financial & HCM)	4,500	7,100	3,950	500	500	-	-	-	-	-	16,550	
SUBTOTAL - CAPITAL EQUIPMENT	34,518	26,823	36,907	33,086	32,725	36,680	35,540	35,426	34,339	34,279	340,324	340,324
WASHINGTON AQUEDUCT	12,930	15,532	15,909	15,536	35,006	14,830	32,731	9,034	12,298	23,321	187,127	187,127
ADDITIONAL CAPITAL PROGRAMS	47,448	42,355	52,816	48,622	67,731	51,509	68,272	44,461	46,637	57,600	527,450	527,450
<b>LABOR</b>												
												389,258
<b>TOTAL CAPITAL BUDGETS</b>	<b>\$439,117</b>	<b>\$420,342</b>	<b>\$467,016</b>	<b>\$561,724</b>	<b>\$530,006</b>	<b>\$422,607</b>	<b>\$450,358</b>	<b>\$585,454</b>	<b>\$535,666</b>	<b>\$544,490</b>	<b>\$4,956,780</b>	<b>\$12,127,945</b>



## Average Residential Customer Water & Sewer Lines Replacement (1.0%-1.5%-2.0%-2.5%)

### Baseline: Phase-In Shift CRIAC (18%-28%-37%)

Residential - Avg. 6.2 Ccf / I ERU Mod. Baseline \$5.0B Phase-In Shift CRIAC	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$108	\$114	\$124	\$133	\$143	\$155	\$161	\$168	\$176	\$185
Avg. Customer Bill (%)	5.9%	5.7%	8.5%	7.3%	7.4%	8.2%	3.8%	4.5%	4.5%	5.5%

### Scenario: 1.5% Water & Sewer Lines Replacement

Residential - Avg. 6.2 Ccf / I ERU Mod. Baseline - \$5.2B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	12.0%	9.5%	8.0%	7.0%	6.5%	6.0%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$108	\$114	\$124	\$134	\$145	\$157	\$164	\$173	\$181	\$191
Avg. Customer Bill (%)	5.9%	5.7%	8.5%	7.7%	8.1%	8.6%	4.5%	5.3%	4.9%	5.4%



## Average Residential Customer Water & Sewer Lines Replacement (1.0%-1.5%-2.0%-2.5%) cont.

### Scenario: 2.0% Water & Sewer Lines Replacement

Residential - Avg. 6.2 Ccf / 1 ERU Mod. Baseline - \$5.5B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	13.0%	12.5%	11.0%	7.5%	8.0%	7.5%	7.0%	5.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$108	\$114	\$125	\$135	\$147	\$159	\$167	\$178	\$188	\$199
Avg. Customer Bill (%)	5.9%	5.7%	8.8%	8.1%	9.2%	8.2%	5.3%	6.1%	5.7%	6.2%

### Scenario: 2.5% Water & Sewer Lines Replacement

Residential - Avg. 6.2 Ccf / 1 ERU Mod. Baseline - \$5.8B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	13.0%	13.0%	13.0%	8.5%	8.5%	8.0%	8.0%	5.0%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$108	\$114	\$125	\$135	\$149	\$163	\$172	\$183	\$195	\$206
Avg. Customer Bill (%)	5.9%	5.7%	8.8%	8.4%	10.6%	8.9%	5.7%	6.5%	6.5%	5.8%



## Average Multi-family Customer Water & Sewer Lines Replacement (1.0%-1.5%-2.0%-2.5%)

### Baseline: Phase-In Shift CRIAC (18%-28%-37%)

Multi-family - Avg. 92.6 Ccf / 6.3 ERU Mod. Baseline \$5.0B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,303	\$1,413	\$1,558	\$1,704	\$1,838	\$1,981	\$2,077	\$2,180	\$2,289	\$2,403
Avg. Customer Bill (%)	9.2%	8.5%	10.3%	9.4%	7.8%	7.8%	4.8%	5.0%	5.0%	4.9%

### Scenario: 1.5% Water & Sewer Lines Replacement

Multi-family - Avg. 92.6 Ccf / 6.3 ERU Mod. Baseline - \$5.2B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	12.0%	9.5%	8.0%	7.0%	6.5%	6.0%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,303	\$1,413	\$1,558	\$1,171	\$1,860	\$2,013	\$2,129	\$2,254	\$2,376	\$2,493
Avg. Customer Bill (%)	9.2%	8.5%	10.3%	9.8%	8.7%	8.3%	5.7%	5.9%	5.4%	4.9%



## Average Multi-family Customer Water & Sewer Lines Replacement (1.0%-1.5%-2.0%-2.5%) cont.

### Scenario: 2.0% Water & Sewer Lines Replacement

Multi-family - Avg. 92.6 Ccf / 6.3 ERU Mod. Baseline - \$5.5B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	13.0%	12.5%	11.0%	7.5%	8.0%	7.5%	7.0%	5.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,303	\$1,413	\$1,565	\$1,724	\$1,897	\$2,045	\$2,180	\$2,327	\$2,475	\$2,617
Avg. Customer Bill (%)	9.2%	8.5%	10.8%	10.2%	10.0%	7.8%	6.6%	6.7%	6.4%	5.8%

### Scenario: 2.5% Water & Sewer Lines Replacement

Multi-famil – Avg. 92.6 Ccf / 6.3 ERU Mod. Baseline - \$5.8B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	13.0%	13.0%	13.0%	8.5%	8.5%	8.0%	8.0%	5.0%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,303	\$1,413	\$1,565	\$1,731	\$1,934	\$2,101	\$2,250	\$2,412	\$2,587	\$2,725
Avg. Customer Bill (%)	9.2%	8.5%	10.8%	10.6%	11.7%	8.7%	7.1%	7.2%	7.2%	5.3%



## Average Commercial Customer Water & Sewer Lines Replacement (1.0%-1.5%-2.0%-2.5%)

### Baseline: Phase-In Shift CRIAC (18%-28%-37%)

Commercial - Avg. 114 Ccf / 13.1 ERU Mod. Baseline \$5.0B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,850	\$1,978	\$2,164	\$2,345	\$2,527	\$2,732	\$2,852	\$2,990	\$3,134	\$3,299
Avg. Customer Bill (%)	7.7%	6.9%	9.4%	8.3%	7.7%	8.1%	4.4%	4.8%	4.8%	5.2%

### Scenario: 1.5% Water & Sewer Lines Replacement

Commercial - Avg. 114 Ccf / 13.1 ERU Mod. Baseline - \$5.2B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	12.5%	12.0%	9.5%	8.0%	7.0%	6.5%	6.0%	4.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,850	\$1,978	\$2,164	\$2,353	\$2,555	\$2,773	\$2,918	\$3,083	\$3,246	\$3,415
Avg. Customer Bill (%)	7.7%	6.9%	9.4%	8.7%	8.6%	8.5%	5.2%	5.7%	5.3%	5.2%



## Average Commercial Customer Water & Sewer Lines Replacement (1.0%-1.5%-2.0%-2.5%) cont.

### Scenario: 2.0% Water & Sewer Lines Replacement

Commercial - Avg. 114 Ccf / 13.1 ERU Mod. Baseline - \$5.5B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	13.0%	12.5%	11.0%	7.5%	8.0%	7.5%	7.0%	5.5%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,850	\$1,978	\$2,172	\$2,371	\$2,603	\$2,814	\$2,984	\$3,178	\$3,373	\$3,576
Avg. Customer Bill (%)	7.7%	6.9%	9.8%	9.2%	9.8%	8.1%	6.0%	6.5%	6.1%	6.0%

### Scenario: 2.5% Water & Sewer Lines Replacement

Commercial - Avg. 114 Ccf / 13.1 ERU Mod. Baseline - \$5.8B	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Water & Sewer Rate (%)	13.0%	11.5%	13.0%	13.0%	13.0%	8.5%	8.5%	8.0%	8.0%	5.0%
CRIAC (\$/ERU)	\$23.00	\$20.94	\$20.95	\$19.85	\$21.45	\$25.28	\$24.35	\$25.06	\$25.73	\$29.31
Avg. Customer Bill (\$)	\$1,850	\$1,978	\$2,172	\$2,379	\$2,651	\$2,887	\$3,075	\$3,289	\$3,519	\$3,716
Avg. Customer Bill (%)	7.7%	6.9%	9.8%	9.5%	11.4%	8.9%	6.5%	6.9%	7.0%	5.6%

**ATTACHMENT 4**

**FINANCE & BUDGET COMMITTEE**

***ACTION ITEMS***

**FY 2020 BUDGET**

**FINANCE AND BUDGET COMMITTEE  
FISCAL YEAR 2020 PROPOSED OPERATING BUDGET ACTION ITEM**

**ACTION ITEM 4A: Proposed FY 2020 Operating Budget**

The Proposed FY 2020 Operating Budget to be considered by the Board of Directors totals \$614,523,000.

<b>Operations &amp; Maintenance Expenditures</b>	<b>\$348,594,000</b>
Debt Service	215,340,000
Cash Financed Capital Improvements (CFCI)	28,556,000
Payment In Lieu of Taxes (PILOT)	16,934,000
Right of Way Fee (ROW)	<u>5,100,000</u>
<b>Subtotal (Debt Service/CFCI/PILOT/ROW)</b>	<b>\$265,929,000</b>
 <b>Proposed FY 2020 Operating Budget</b>	 <b><u><u>\$614,523,000</u></u></b>

**FINANCE AND BUDGET COMMITTEE  
FISCAL YEAR 2019 – 2028  
PROPOSED CAPITAL IMPROVEMENT PROGRAM  
ACTION ITEM**

**ACTION ITEM 4B: FY 2019 – FY 2028 Proposed Capital Improvement Program (10-Year Disbursement Plan and Lifetime Budget)**

DC Water presents its capital improvement program on two different bases:

- a. **10-Year Disbursement Plan** – The cash disbursement-based capital plan is utilized to forecast the timing and amount of capital financing, which is the primary basis for projected retail rate increases. As shown in Attachment A-1, the Board of Directors will be asked to approve a 10-year disbursement plan of \$4.96 billion.
- b. **Lifetime Budget** – The project lifetime budget reflects the total costs of each project active during the 10-year planning period. These costs include historical and projected spending, project contingencies, and labor (listed as separate line item). As shown in Attachment A-1, the Board of Directors will be asked to approve a lifetime budget of \$12.1 billion.

Capital Improvement Program

10-Year Disbursement Plan - projected annual cash disbursements, \$ in thousands

Attachment A-I

	FY 2019 - FY 2028 Proposed Disbursement Plan										10-Yr Total	Life time Budget
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
<b>NON PROCESS FACILITIES</b>												
Facility Land Use	15,309	36,002	26,793	20,665	6,831	11,058	10,396	3,901	3,553	3,560	138,067	\$212,833
Subtotal: Facility Land Use	15,309	36,002	26,793	20,665	6,831	11,058	10,396	3,901	3,553	3,560	138,067	212,833
<b>WASTEWATER TREATMENT</b>												
Liquid Processing	21,488	30,915	37,087	48,495	36,646	38,979	41,124	84,082	107,253	107,354	553,422	1,166,818
Plantwide	15,777	20,223	18,885	25,882	39,576	24,810	17,052	25,410	20,726	7,341	215,681	494,048
Solids Processing	6,672	10,511	19,988	22,645	30,530	15,286	12,862	3,899	1,186	8,304	131,883	906,481
Enhanced Nitrogen Removal Facilities	26,042	4,972	549	614	3,295	3,359	10,211	19,947	8,411	351	77,751	998,714
Subtotal	69,979	66,620	76,510	97,635	110,047	82,434	81,249	133,338	137,575	123,351	978,728	3,566,060
<b>COMBINED SEWER OVERFLOW</b>												
DC Clean Rivers	187,859	147,208	139,786	191,573	151,411	64,415	55,689	144,295	97,067	83,286	1,262,589	2,764,255
Program Management	1,685	1,241	743	1,482	2,653	4,046	4,310	2,871	1,745	2,718	23,494	77,756
Combined Sewer	5,805	2,978	8,701	6,533	5,994	9,473	4,542	2,930	3,848	4,880	55,684	191,538
Subtotal	195,350	151,427	149,230	199,588	160,057	77,935	64,541	150,095	102,660	90,884	1,341,767	3,033,549
<b>STORMWATER</b>												
Local Drainage	8	17	244	822	770	768	1,410	769	156	3,084	8,048	20,225
On-Going	1,056	511	598	929	706	742	451	735	713	919	7,360	10,511
Pumping Facilities	1,996	7,877	6,966	6,429	1,909	3,218	5,492	5,792	4,100	5,773	49,553	61,204
DDOT	-	-	-	-	-	-	-	-	-	-	-	3,237
Research and Program Management	1,078	84	223	319	341	260	212	198	269	326	3,310	12,889
Trunk/Force Sewers	82	82	87	86	-	-	-	-	-	-	337	15,510
Subtotal	4,220	8,571	8,118	8,587	3,725	4,987	7,564	7,494	5,239	10,102	68,608	123,574
<b>SANITARY SEWER</b>												
Collection Sewers	5,434	2,476	10,012	20,547	21,664	24,747	33,310	42,591	44,337	36,594	241,712	498,192
On-Going	13,653	12,842	13,483	13,711	13,667	14,185	15,019	15,253	15,111	15,312	142,239	219,540
Pumping Facilities	2,248	1,619	4,868	6,649	6,495	4,935	9,975	10,882	12,457	29,612	89,739	270,778
Program Management	3,321	2,452	4,752	6,868	5,073	3,942	3,334	4,126	4,923	4,126	41,919	119,035
Interceptor/Trunk Force Sewers	20,270	24,257	24,133	37,813	50,321	50,384	53,579	67,961	58,633	54,174	441,526	963,054
Subtotal	44,927	43,646	57,249	85,588	97,220	98,194	115,011	140,020	134,664	140,615	957,135	2,070,599
<b>WATER</b>												
Distribution Systems	30,729	40,948	63,054	58,127	49,881	61,921	68,714	62,636	60,526	82,102	578,638	1,359,993
Lead Program	4,338	5,928	6,723	6,307	6,715	7,438	6,544	5,830	6,654	6,706	63,182	243,414
On-Going	10,080	10,238	10,126	12,297	13,351	15,199	16,789	18,583	20,447	22,981	150,091	215,064
Pumping Facilities	1,199	2,513	6,282	8,110	2,850	3,947	3,095	3,502	3,523	1,974	26,993	123,911
DDOT	992	76	3	5	-	-	-	-	-	-	1,076	33,933
Storage Facilities	9,384	5,223	2,549	8,940	7,526	3,913	3,770	8,779	7,098	-	57,181	137,364
Program Management	5,163	6,795	7,562	7,255	4,073	4,414	6,815	7,089	4,614	-	57,854	90,944
Subtotal	61,884	71,720	96,300	101,039	84,395	96,491	103,325	106,145	105,338	118,377	945,015	2,204,622
<b>CAPITAL PROJECTS</b>												
	391,669	377,987	414,200	513,102	462,275	371,098	382,087	540,993	489,029	486,890	4,429,330	11,211,236
<b>CAPITAL EQUIPMENT</b>												
ONGOING METER REPLACEMENT	2,618	2,618	2,930	2,930	2,930	2,930	2,930	2,930	2,930	2,930	28,676	
ERP PROJECT (Financial & HCM)	4,500	7,100	3,950	500	-	-	-	-	-	-	16,550	
SUBTOTAL - CAPITAL EQUIPMENT	34,518	26,823	36,907	33,086	32,725	36,680	35,540	35,426	34,339	34,279	340,324	340,324
WASHINGTON AQUEDUCT	12,930	15,532	15,909	15,536	35,006	14,830	32,731	9,034	12,298	23,321	187,127	187,127
ADDITIONAL CAPITAL PROGRAMS	47,448	42,355	52,816	48,622	67,731	51,509	68,272	44,461	46,637	57,600	527,450	527,450
<b>LABOR</b>												
												389,258
<b>TOTAL CAPITAL BUDGETS</b>	<b>\$439,117</b>	<b>\$420,342</b>	<b>\$467,016</b>	<b>\$561,724</b>	<b>\$530,006</b>	<b>\$422,607</b>	<b>\$450,358</b>	<b>\$585,454</b>	<b>\$535,666</b>	<b>\$544,490</b>	<b>\$4,956,780</b>	<b>\$12,127,945</b>

**FINANCE AND BUDGET COMMITTEE  
FISCAL YEAR 2019– 2028 TEN-YEAR FINANCIAL PLAN ACTION ITEM**

**ACTION ITEM 4C: FY 2019 – FY 2028 Ten-Year Financial Plan**

1. Attached is a summary of the 10-year Financial Plan, which is based on the following key assumptions for FY 2020:

**FY 2020**

- Operating receipts totaling \$694.0 million, an increase of \$28.3 million over FY 2019 funded through;
  - Retail Revenue – increase of \$27.9 million
  - Wholesale Revenue – decrease of \$0.5 million
  - Other Revenue – increase of \$0.9 million
- Operating disbursements of \$614.5 million in FY 2020; and
- A ten-year capital improvement plan (FY 2019 – FY 2028) of \$5.0 billion on a cash disbursement basis.

The FY 2019 – FY 2028 Financial Plan is projected to meet the Board’s policy requirement of senior debt coverage of 140 percent and an operating reserve of 120 days of budgeted operations and maintenance costs with the objective of maintaining at least \$125.5 million in operating reserves.

**District of Columbia Water & Sewer Authority**  
**FY 2019 – 2028 Financial Plan**  
**(In 000's)**

OPERATING	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Retail*	\$ 543,327	\$ 571,666	\$ 618,152	\$ 659,845	\$ 704,304	\$ 756,859	\$ 780,566	\$ 810,514	\$ 841,471	\$ 879,686
Wholesale*	82,992	82,539	85,015	87,566	90,193	92,898	95,685	98,556	101,513	104,558
Other	33,331	39,774	46,805	51,271	53,758	53,445	54,361	57,081	57,391	58,349
RSF	6,000	-	-	-	-	-	-	-	-	-
Operating Receipts (1)	\$ 665,650	\$ 693,979	\$ 749,972	\$ 798,682	\$ 848,255	\$ 903,202	\$ 930,612	\$ 966,151	\$ 1,000,375	\$ 1,042,593
Operating Expenses	(338,499)	(347,881)	(358,264)	(368,967)	(379,998)	(391,369)	(403,089)	(415,169)	(427,622)	(440,458)
Debt Service	(198,754)	(215,340)	(235,421)	(254,235)	(272,838)	(285,693)	(295,505)	(306,629)	(318,969)	(331,609)
Cash Financed Capital Improvement	\$ (26,999)	\$ (28,556)	\$ (30,907)	\$ (39,591)	\$ (49,301)	\$ (52,980)	\$ (62,445)	\$ (72,946)	\$ (75,732)	\$ (79,172)
Net Revenues After Debt Service	\$ 101,398	\$ 102,202	\$ 125,380	\$ 135,889	\$ 146,118	\$ 173,160	\$ 169,573	\$ 171,407	\$ 178,052	\$ 191,354
Operating Reserve-Beg Balance	166,796	165,000	180,000	185,000	194,000	201,000	205,000	215,000	220,000	230,000
Other Misc (Disbursements)/Receipts										
Wholesale/Federal True Up	(16,803)	(2,131)	-	-	-	-	-	-	-	-
Project Billing Refunds	(11,000)	(4,000)	(4,000)	-	-	-	-	-	-	-
Transfers To RSF	-	-	-	-	-	-	-	-	-	-
Pay-Go Financing	(75,391)	(81,071)	(116,380)	(126,890)	(139,118)	(169,161)	(159,573)	(166,407)	(168,052)	(181,356)
Operating Reserve - Ending Balance	\$ 165,000	\$ 180,000	\$ 185,000	\$ 194,000	\$ 201,000	\$ 205,000	\$ 215,000	\$ 220,000	\$ 230,000	\$ 240,000
Rate Stabilization Fund Balance RSF (2)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)	\$ (55,450)
Senior Debt Service Coverage	425%	438%	461%	508%	505%	593%	611%	598%	585%	614%
Combined Debt Service Coverage	162%	168%	174%	178%	180%	187%	187%	188%	187%	189%
Actual/Projected Water/Sewer Rate Increases	13.0%	11.5%	12.5%	11.5%	8.5%	7.5%	6.0%	5.5%	5.5%	4.5%
*Operating Receipts \$ Increase/Decrease										
Retail	23,697	28,339	46,486	41,693	44,459	52,555	23,707	29,948	30,957	38,215
Wholesale	1,970	(453)	2,476	2,551	2,627	2,705	2,787	2,871	2,957	3,045
*Operating Receipts % Increase/Decrease										
Retail	4.6%	5.2%	8.1%	6.7%	6.7%	7.5%	3.1%	3.8%	3.8%	4.5%
Wholesale	2.4%	-0.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

(1) Includes interest earnings on senior lien revenue bonds' debt service reserve fund  
(2) FY 2020 planned transfers of \$0.0 million to Rate Stabilization Fund will maintain the total fund balance at \$55.45 million

**District of Columbia Water & Sewer Authority  
Average Residential Customer Monthly Bill  
FY 2019 - FY 2028**

Units	Proposed										
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	
DC Water Water and Sewer Retail Rates <sup>(1)</sup>	Ccf	\$ 68.27	\$ 76.38	\$ 86.00	\$ 96.08	\$ 104.23	\$ 112.02	\$ 118.73	\$ 125.25	\$ 132.14	\$ 138.08
DC Water Clean Rivers IAC <sup>(2)</sup>	ERU	23.00	20.94	20.95	19.85	21.45	25.28	24.35	25.06	25.73	29.31
DC Water Customer Metering Fee	5/8"	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86
DC Water Water System Replacement Fee <sup>(4)</sup>	5/8"	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30
<b>Subtotal DC Water Rates &amp; Charges</b>		<b>\$ 101.43</b>	<b>\$ 107.48</b>	<b>\$ 117.11</b>	<b>\$ 126.09</b>	<b>\$ 135.84</b>	<b>\$ 147.46</b>	<b>\$ 153.24</b>	<b>\$ 160.47</b>	<b>\$ 168.03</b>	<b>\$ 177.55</b>
Increase / Decrease		\$ 5.96	\$ 6.05	\$ 9.63	\$ 8.98	\$ 9.75	\$ 11.62	\$ 5.78	\$ 7.23	\$ 7.56	\$ 9.52
<b>Percent Increase in DC Water Portion of Bill</b>		<b>6.2%</b>	<b>6.0%</b>	<b>9.0%</b>	<b>7.7%</b>	<b>7.7%</b>	<b>8.6%</b>	<b>3.9%</b>	<b>4.7%</b>	<b>4.7%</b>	<b>5.7%</b>
District of Columbia PILOT Fee <sup>(1)</sup>	Ccf	\$ 3.10	\$ 3.16	\$ 3.22	\$ 3.29	\$ 3.35	\$ 3.41	\$ 3.47	\$ 3.53	\$ 3.60	\$ 3.66
District of Columbia Right-of-Way Fee <sup>(1)</sup>	Ccf	1.12	1.18	1.18	1.18	1.18	1.24	1.24	1.24	1.24	1.24
District of Columbia Stormwater Fee <sup>(3)</sup>	ERU	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
<b>Subtotal District of Columbia Charges</b>		<b>\$ 6.89</b>	<b>\$ 7.01</b>	<b>\$ 7.07</b>	<b>\$ 7.14</b>	<b>\$ 7.20</b>	<b>\$ 7.32</b>	<b>\$ 7.38</b>	<b>\$ 7.44</b>	<b>\$ 7.51</b>	<b>\$ 7.57</b>
<b>Total Amount Appearing on DC Water Bill</b>		<b>\$ 108.32</b>	<b>\$ 114.49</b>	<b>\$ 124.18</b>	<b>\$ 133.23</b>	<b>\$ 143.04</b>	<b>\$ 154.78</b>	<b>\$ 160.62</b>	<b>\$ 167.91</b>	<b>\$ 175.54</b>	<b>\$ 185.12</b>
Increase / Decrease Over Prior Year		\$ 6.02	\$ 6.17	\$ 9.69	\$ 9.05	\$ 9.81	\$ 11.74	\$ 5.84	\$ 7.29	\$ 7.63	\$ 9.58
<b>Percent Increase in Total Bill</b>		<b>5.9%</b>	<b>5.7%</b>	<b>8.5%</b>	<b>7.3%</b>	<b>7.4%</b>	<b>8.2%</b>	<b>3.8%</b>	<b>4.5%</b>	<b>4.5%</b>	<b>5.5%</b>

(1) Assumes average monthly consumption of 6.2 Ccf, or (4,638 gallons)

(2) Assumes average 1 Equivalent Residential Unit (ERU)

(3) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010

(4) DC Water "Water System Replacement Fee" of \$6.30 for 5/8" meter size effective October 1, 2015

**District of Columbia Water & Sewer Authority  
Retail Rates, Charges and Fees  
FY 2020**

	<b>Units</b>		<b>FY 2019</b>	<b>Proposed FY 2020</b>
DC Water Retail Rates Water (Residential Lifeline 0 - 4 Ccf)	Ccf	\$	2.91	\$ 3.06
DC Water Retail Rates Water (Residential > 4 Ccf)	Ccf	\$	3.90	\$ 4.10
DC Water Retail Rates Water (Multi-Family)	Ccf	\$	3.37	\$ 3.54
DC Water Retail Rates Water (Non-Residential)	Ccf	\$	4.05	\$ 4.25
DC Water Retail Rates Sewer	Ccf	\$	7.75	\$ 8.89
DC Water Clean Rivers IAC	ERU	\$	23.00	\$ 20.94
DC Water Customer Metering Fee	5/8"	\$	3.86	\$ 3.86
DC Water Water System Replacement Fee	5/8"	\$	6.30	\$ 6.30
District of Columbia PILOT Fee	Ccf	\$	0.50	\$ 0.51
District of Columbia Right-of-Way Fee	Ccf	\$	0.18	\$ 0.19
District of Columbia Stormwater Fee	ERU	\$	2.67	\$ 2.67

## **FINANCE AND BUDGET COMMITTEE**

### **INTENT TO REIMBURSE CAPITAL EXPENDITURES WITH PROCEEDS OF A BORROWING ACTION ITEM**

#### **ACTION ITEM 4D: Capital Projects Reimbursement Resolution**

The Board will be asked to approve a reimbursement resolution, which would allow for reimbursement of eligible capital project expenditures from bond proceeds. The action under consideration is to utilize the proceeds of tax-exempt bonds, taxable bonds or notes (the “bonds”) or other debt in an amount not currently expected to exceed \$340,716,000 to pay the costs of capital projects. These costs include amounts heretofore unreimbursed pursuant to Resolution 19-05 of the Board adopted on February 7, 2019, plus amounts projected to be reimbursed during Fiscal Year 2019 and through Fiscal Year 2020.

#### **EXHIBIT A – LIST OF PROJECTS**

- Blue Plains Plantwide Projects
- Blue Plains Enhanced Nitrogen Removal Facilities
- Blue Plains Liquid and Solids Processing Projects
- Sanitary Sewer System Projects
- Combined Sewer System Projects
- DC Clean Rivers Project
- Stormwater Sewer System Projects
- Water Pumping, Distribution and Storage Projects
- Metering and Capital Equipment
- Washington Aqueduct Projects



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

**Thursday, April 25, 2019; 11:00 a.m.  
1385 Canal Street, SE, Boardroom  
AGENDA**

<b>Call to Order</b>	Chairman
<b>March 2019 Financial Report</b>	Chief Financial Officer
<b>Agenda for May Committee Meeting</b>	Chairman
<b>Adjournment</b>	Chairman

\*Detailed agenda can be found on DC Water's website at [www.dcwater.com/about/board\\_agendas.cfm](http://www.dcwater.com/about/board_agendas.cfm)