



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

DC Retail Water and Sewer Rates Committee

1385 Canal Street SE, Washington, DC 20003

*Tuesday, February 25, 2020
9:30 a.m.*

1. **Call to Order** **Rachna Bhatt, Chairperson**
2. **Proposed FY 2021 & FY 2022 Rates, Charges & Fees, Increasing CAP CRIAC Discount and Amend Regulations to make CAP2 Permanent** (Attachment A) **Matthew Brown**
3. **Proposed Amendment of Board Resolution #97-91 to Increase General Manager’s Authority for Abatement of Charges** (Attachment B) **Matthew Brown**
4. **Action Items** (Attachment C) **Matthew Brown**
 - **Proposed FY 2021 & FY 2022 Rates, Charges & Fees, Increasing CAP CRIAC Discount and Amend Regulations to make CAP2 Permanent** (Action Item 1)
 - **Proposed Ten-Year Financial Plan FY 2020 – FY 2029** (Action Item 2)
 - **Proposed Amendment of Board Resolution #97-91 to Increase the General Manager’s Authority for Abatement of Charges** (Action Item 3)
5. **Advanced Metering Infrastructure (AMI) Project Update** (Attachment D) **Sheena Robinson**
6. **DC Retail Water and Sewer Rates Committee Workplan** (Attachment E) **Matthew Brown**
 - **FY 2020 Proposed DC Retail Rates Committee Workplan**
7. **Agenda for March 24, 2020 Committee Meeting** (Attachment F) **Rachna Bhatt, Chairperson**
8. **Other Business** **Matthew Brown**
9. **Executive Session***
10. **Adjournment**

*The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(2); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4)(A); 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); train and develop members of a public body and staff under D.C. Official Codes § 2-575(b)(12); 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.

Attachment A



Proposed FY 2021 and FY 2022 Rates, Charges and Fees Presentation to Retail Rates Committee, February 25, 2020

District of Columbia Water and Sewer Authority



Blue Plains Advanced Wastewater Treatment Plant



Purpose

- **Seek Committees recommendation to the Board on the:**
 - **Multi-year Rate Proposal**
 - FY 2021 & FY 2022 Rates, Charges and Fees
 - **Customer Metering Fee Proposal**
 - FY 2021 & FY 2022 Customer Metering Fees
 - **FY 2020 – FY 2029 Financial Plan**
 - Projected residential water and sewer rates
 - Projected average residential customer bills
 - 10-year CIP disbursement budget
 - **Proposal to increase the Clean Rivers IAC discount for CAP customers from 50% to 75%**
 - **Proposal to amend regulations to make DC Water’s Customer Assistance Program II (CAP2) permanent**

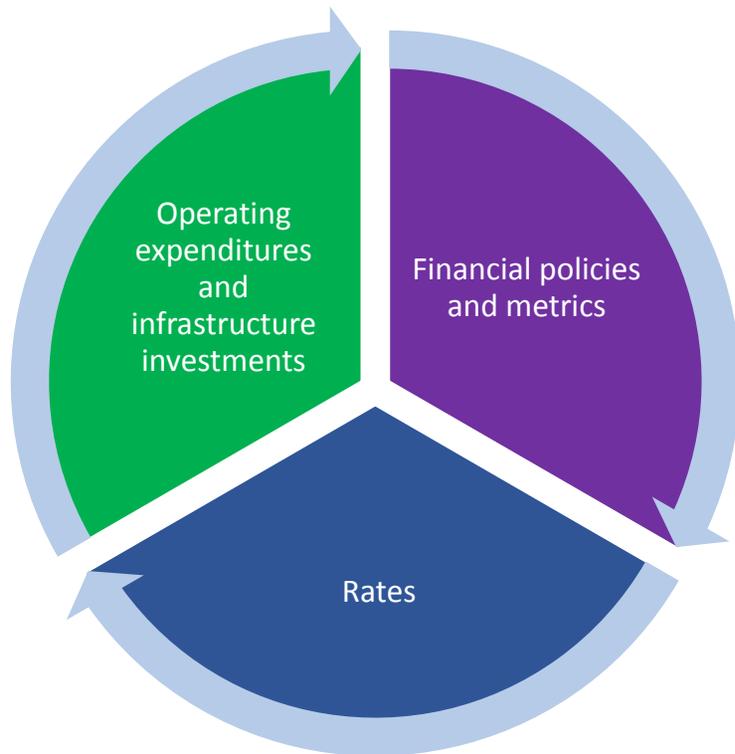


Rates, Budget, and Financial Plan

- Doubles DC Water's current investment in water and sewer infrastructure by FY2022 to reach a one percent replacement cycle, and triples the investment by FY2027 to reach a 1.5 percent replacement cycle
- Fully funds the Clean Rivers program
- Adds five positions for the DC Water Consumer Protection Amendment Act of 2018
- Increases funds for fleet purchases by 60% to ensure crews have the equipment they need
- Invests \$0.5 million in the Apprenticeship Program to support fifteen entry level positions
- Makes the CAP2 program permanent
- Advances LeadFreeDC
- Continues capital procurement reform to help ensure that the capital program is delivered at the highest quality and lowest cost for ratepayers
- Holds the line on operating budget expenses, and FY2021 budget is within the previous financial plan forecast
- Takes advantage of low interest rates and current year savings to deliver rate increases that were smaller than the previously forecasted



FY2022 Budget, Rates, CIP, and Financial Plan



- DC Water’s operating and capital budgets rely on the rates that we charge retail and wholesale customers
- DC Water does not make a profit – all funds pay for operations and infrastructure improvements
- Financial Metrics and Policies ensure that DC Water can borrow to fund infrastructure projects, like the Clean Rivers program, at very low rates



Establishment of Rates

- The Board of Directors approves the Budget and the Financial Plan that determines the revenue requirements to operate and maintain water and sewer infrastructure, upgrade our facilities, and improve the environment
- DC Water's rates are established by the Board of Directors after:
 - Presentation of Operating and Capital Costs for the applicable rate period to the Environmental Quality and Operations, Finance and Budget, and Retail Rate Committee;
 - Presentation of the Cost of Service Study, which is published on DC Water's website;
 - Publication of the rate proposal in the *D.C. Register* for public comment;
 - Holding a Public Hearing to receive comments on the rate proposal, held 45 days after publication of the rate proposal in the *D.C. Register*;
 - Review of comments received during the public comment period and during the Public Hearing, which are published on DC Water's website; and
 - Recommendation from the DC Retail Water and Sewer Rates Committee.



Establishment of Rates

- Water and sewer utilities recover costs in a variety of ways; DC Water's rates must be just, equitable, reasonable, well explained, and based on cost of service principles
 - The proposed rates are just and reasonable, and they are sufficient, equitable, and consistent in their proposed application to our customer classes
 - Rates support expenditures that have been discussed in detail at the Board's Budget Workshop, and in Environmental Quality and Operations, Finance and Budget, and Retail Rate Committee meetings
 - Raftelis conducted the most recent Cost of Service Study, and its results support our rate proposal



Independent Review of Rate Structure and CAP - Conclusions

- An independent review of DC Water's rates and rate structure found:
 - The current customer classes are appropriate and consistently seen in the industry
 - The four Ccf monthly water lifeline threshold is appropriate and consistent with benchmarked utilities
 - The cost of service study is generally consistent with industry standards for rate making
 - The current Metering Fee could be expanded to recover a greater amount of fixed operating and capital costs
 - Change proposed in current rate proposal
 - Use of the CRIAC to recover consent decree-related capital costs is appropriate
 - Use of ERU as the basis for recovering the CRIAC is appropriate
 - Given redevelopment in the District, continue to conduct parcel analysis on a regular basis. The analysis should include an evaluation of the appropriateness of 1,000 sq. ft. as the basis for the ERU for residential parcels
 - The current cost elements recovered via the CRIAC are appropriate and should not include wastewater treatment costs
 - Recover system costs, including I/I (infiltration and inflow) costs, via wastewater rates and charges as is DC Water's current practice
 - The approach used to determine the suburban cost allocation for Clean Rivers (7.1%) provides a technical basis for allocating these costs



Proposed Rates and Revenue

- Management recommends a multi-year rate proposal covering FY 2021 and FY 2022
- Cost of Service Study advanced to align with rate proposal
- Combined rate increase for average household customer lowered from 8.1% forecasted last year to 6.6% for FY 2021 and from 6.9% to 6.7% for FY 2022
 - Proposed annual water and sewer rate increase of 9.9% for FY 2021 and 7.8% FY 2022
 - Continue Shift of CRIAC to sewer volumetric of 28% and 37% for FY 2021 and FY 2022 respectively
 - Proposed CRIAC of \$19.52 per ERU in FY 2021 and \$18.40 per ERU in FY 2022
 - Water System Replacement Fee (WSRF) will remain the same
 - Customer Metering Fee for 5/8” meters will increase from \$3.86 to \$4.96 in FY 2021 and to \$7.75 for FY 2022
 - PILOT Fee for FY 2021 and FY 2022 will increase by \$0.03 and \$0.02 per Ccf respectively
 - Right-of-Way Fee will remain the same at \$0.19 per Ccf
 - CAP2 Program made permanent
 - Increase the Clean Rivers IAC discount for CAP customers from 50% to 75%



Customer Metering Fee

- In FY 2019, the Metering Fee recovered \$11.6 million
 - In FY 2003, established Metering Fee at \$2.01 for 5/8" meter
 - In FY 2011, increased Metering Fee to \$3.86 for 5/8" meter
 - Originally fee amount set to cover the capital costs of the original Automated Meter Infrastructure (AMI) system and meter purchase and installation (debt service) plus about \$4 million of Customer Service costs
- Current Cost of Service Study recommends recovering \$24.1 million in FY 2022, consistent with independent rate review recommendation
 - Includes costs associated with metering and billing
 - Customer assistance, shutoff/restore, and leak adjustment etc. remain in the volumetric charges
 - Proposed FY 2021 fee recovers \$15.4 million, all the debt service and coverage plus about half of the full Customer Service O&M allocation (\$4.96 for a 5/8" meter)
 - Proposed FY 2022 fee adds the additional half of Customer Service allocation for a total of about \$24.1 million (\$7.75 for a 5/8" meter)



CAP Expansion

- 💧 CAP is being expanded to increase the CRIAC discount from 50% to 75%
 - 💧 Reduces bill for customers with average household consumption to 1.7% of Area Median Income (AMI)
 - 💧 Change consistent with Independent Rate Review recommendation
- 💧 CAP2 to be made permanent
- 💧 DC Water asked District Government to keep CAP3 and CRIAC Non-Profit Relief programs

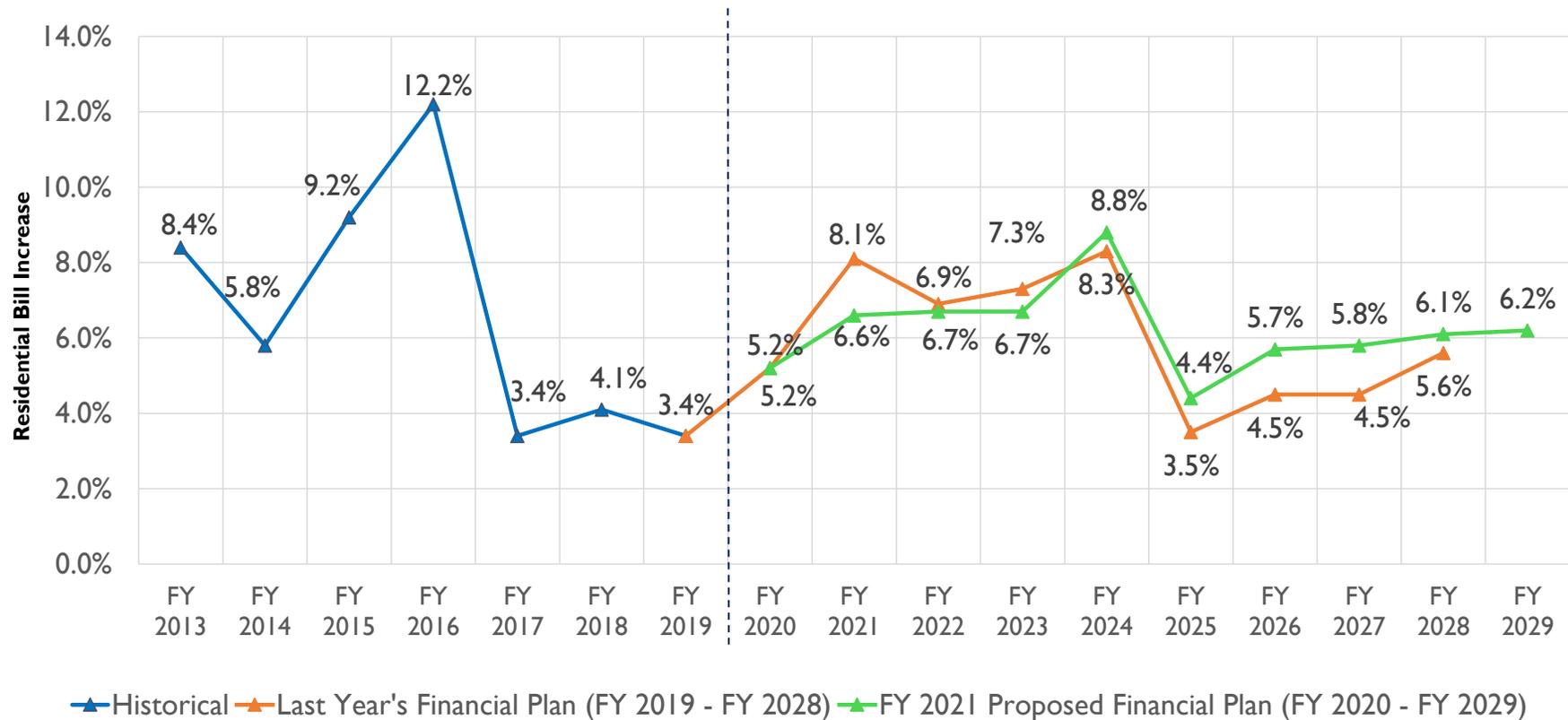


Rate Stabilization Fund

- 💧 Budget proposes \$13 million withdrawal over FY 2021 and FY 2022
 - \$8 million in debt service savings in the current fiscal year, plus remaining \$5 million withdrawal from Rate Stabilization Fund to be deposited in FY 2020
 - Budget makes CAP2 program permanent
- 💧 Apply \$2.5 million in FY 2021 and \$10.5 million in FY 2022
- 💧 Management recommends a Rate Stabilization Fund target that is ten percent of overall revenues
 - During the last recession, from 2007 through 2011, there was a \$41.8 million reduction in Rate Stabilization Fund balance as the Board drew funds to reduce the impact of rising rates



Historical and Projected Combined Rate Increases for Average Residential Customer

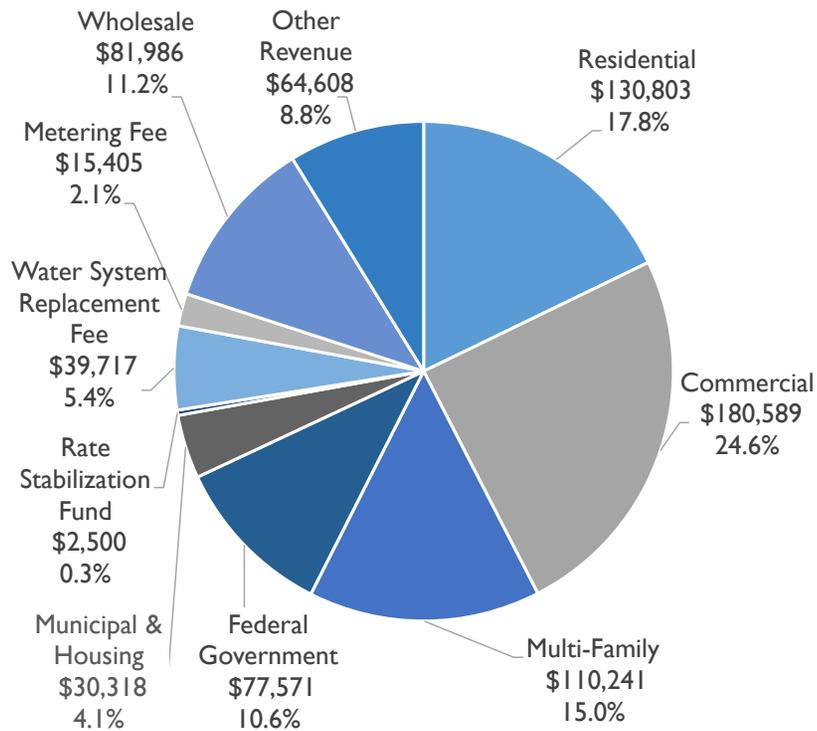




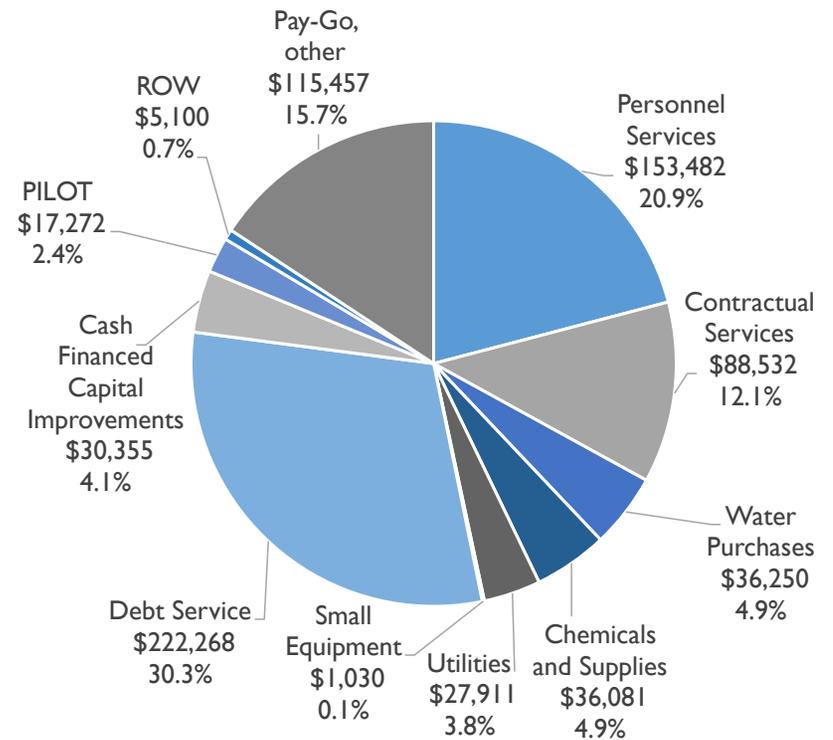
FY 2021 Operating: Sources and Uses of Funds

\$ in thousands

Sources - \$733.7 Million



Uses - \$733.7 Million

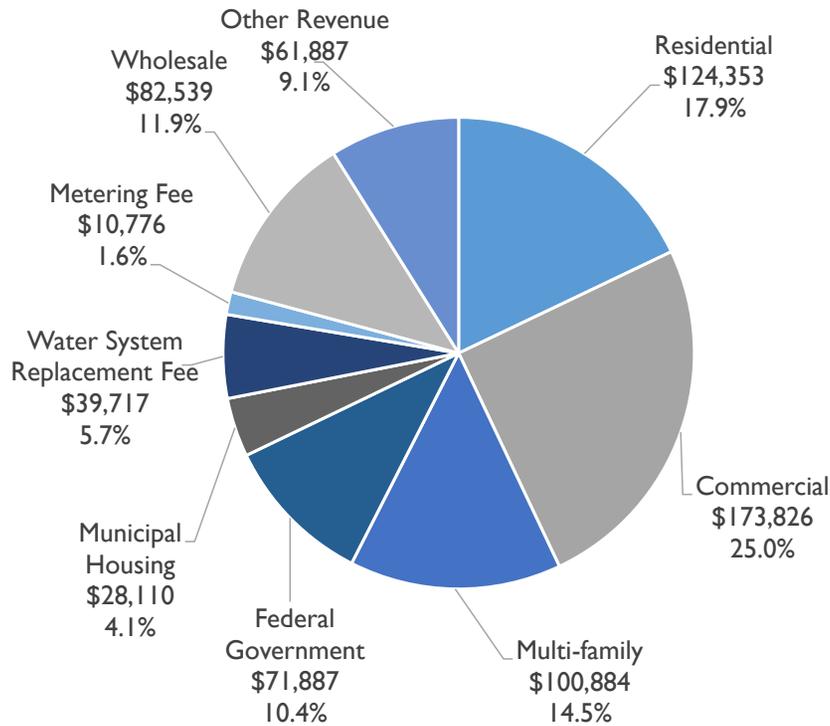




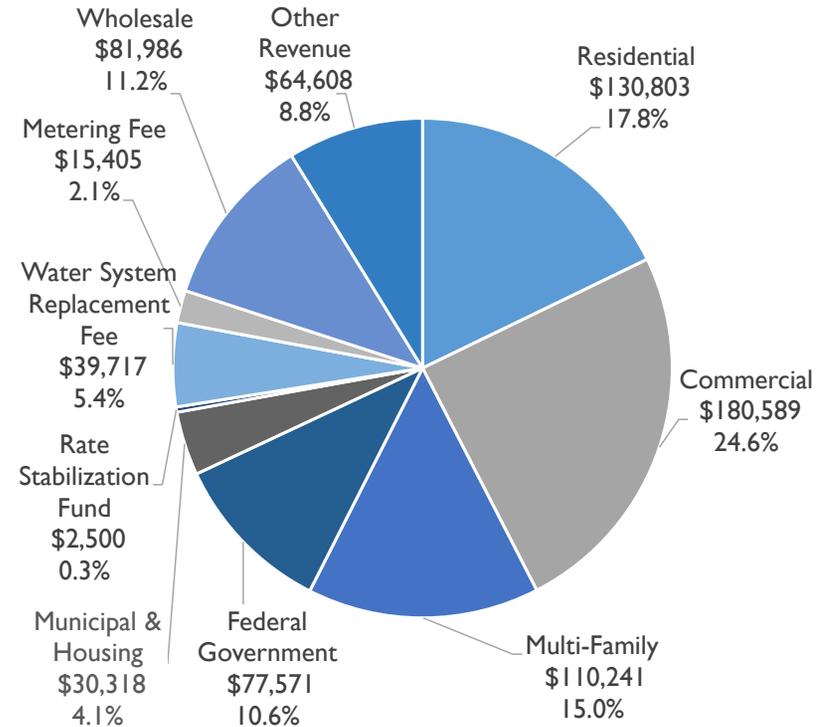
FY 2020 vs. FY 2021 Operating Revenues

\$ in thousands

Approved FY 2020
\$693,979



Proposed FY 2021
\$733,738





Revenue Comparison by Customer Class

- 💧 Total revenue is projected to increase by \$39.8 million or 5.7% for FY 2021 and \$32.6 million or 4.4% for FY 2022 mainly due to rate increases
- 💧 Retail revenue is projected to increase by \$35.1 million or 6.4% for FY 2021 and \$23.0 million or 3.9% for FY 2022 due to rate increases for both years
- 💧 Wholesale revenue is projected to decrease by \$0.6 million or -0.7% for FY 2021 due to low flows and increase by \$2.5 million or 3.0% for FY 2022 due to 3.0 percent escalation

<i>\$ in thousands</i>	Approved FY 2020	Proposed FY 2021	Proposed FY 2022	FY 2021 vs FY 2020		FY 2022 vs FY 2021	
				Incr/(Decr) \$	%	Incr/(Decr) \$	%
	Retail Revenue	\$549,553	\$584,644	\$607,652	\$35,091	6.4%	\$23,008
Wholesale Revenue							
Potomac Interceptor (PI)	2,715	3,547	3,547	832	30.6%	-	-
Loudoun County Sanitation Authority (LCSA)	7,758	7,648	7,983	-110	-1.4%	335	4.4%
Washington Suburban Sanitary Commission (WSSC)	57,284	55,952	57,630	-1,332	-2.3%	1,678	3.0%
Fairfax County	14,782	14,839	15,285	57	0.4%	446	3.0%
Total Wholesale Revenue	\$82,539	\$81,986	\$84,445	-\$553	-0.7%	\$2,459	3.0%
Other Revenue	61,887	64,608	63,701	2,721	4.4%	-907	-1.4%
Rate Stabilization Fund	-	2,500	10,500	2,500	-	8,000	320.0%
Total Revenues	\$693,979	\$733,738	\$766,298	\$39,759	5.7%	\$32,560	4.4%



Proposed FY 2021 & FY 2022 Rates, Charges & Fees

	Units	Approved FY 2020	Proposed FY 2021	Proposed FY 2022	Incr. /(Decr.) FY 2021		Incr. /(Decr.) FY 2022	
					\$	%	\$	%
DC Water Retail Rates – Water:								
Residential – Lifeline (0- 4 Ccf)	Ccf	\$3.06	\$3.49	\$3.63	\$0.43	14.1%	\$0.14	4.0%
Residential – (> 4 Ccf)	Ccf	4.10	4.50	4.74	0.40	9.8	0.24	5.3
Multi-family	Ccf	3.54	3.96	4.15	0.42	11.9	0.19	4.8
Non-Residential	Ccf	4.25	4.65	4.91	0.40	9.4	0.26	5.6
DC Water Retail Rates – Sewer	Ccf	8.89	9.77	10.64	0.88	9.9	0.87	8.9
DC Water Clean Rivers IAC	ERU	20.94	19.52	18.40	-1.42	-6.8	-1.12	-5.7
DC Water Customer Metering Fee	5/8”	3.86	4.96	7.75	1.10	28.5	2.79	56.3
DC Water System Replacement Fee	5/8”	6.30	6.30	6.30	-	-	-	-
District of Columbia PILOT Fee	Ccf	0.51	0.54	0.56	0.03	5.9	0.02	3.7
District of Columbia Right of Way Fee	Ccf	0.19	0.19	0.19	-	-	-	-
District of Columbia Stormwater Fee	ERU	2.67	2.67	2.67	-	-	-	-



Average Residential Customer Monthly Bill

	Units	Current FY 2020	Proposed FY 2021	Proposed FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 66.25	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC ⁽²⁾	ERU	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	4.96	7.75
DC Water Water System Replacement Fee ⁽⁴⁾	5/8"	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 97.35	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	1.03	1.03	1.03
District of Columbia Stormwater Fee ⁽³⁾	ERU	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.46	\$ 6.63	\$ 6.74
Total Amount Appearing on DC Water Bill		\$ 103.81	\$ 110.71	\$ 118.11
Increase / Decrease Over Prior Year		\$ 5.11	\$ 6.90	\$ 7.40
Percent Increase in Total Bill		5.2%	6.6%	6.7%

(1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 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



Low Income CAP Customer Monthly Bill

	Units	Current FY 2020	Proposed FY 2021	Proposed FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 66.25	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC	ERU	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	4.96	7.75
DC Water Water System Replacement Fee	5/8"	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 97.35	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	1.03	1.03	1.03
District of Columbia Stormwater Fee ⁽⁴⁾	ERU	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.46	\$ 6.63	\$ 6.74
Total Amount		\$ 103.81	110.71	118.11
Increase / Decrease Over Prior Year		\$ 5.11	\$ 6.90	\$ 7.40
Percent Increase in Total Bill		5.2%	6.6%	6.7%
Less: CAP Discount (4 Ccf per month) ^{(1), (2)}		(50.60)	(55.96)	(60.08)
Water System Replacement Fee (WSRF) ⁽³⁾		(6.30)	(6.30)	(6.30)
Clean Rivers IAC ⁽⁵⁾		(10.47)	(14.64)	(13.80)
Total Amount Appearing on DC Water Bill		\$ 36.44	33.81	37.93
Increase / Decrease Over Prior Year		\$ 0.90	\$ (2.63)	\$ 4.12
CAP Customer Discount as a Percent of Total Bill		-64.9%	-69.5%	-67.9%

(1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 gallons)

(2) Expansion of CAP program in FY 2009 assumes discount 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 FY2020 and 75% discount for FY2021 and FY2022 for the Clean Rivers IAC



Financial Plan Objectives

- 💧 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+



Ten-Year Financial Plan Assumptions

- Maintain Debt Service as a percentage of revenue equal to 33.0 percent or less
- Maintain combined coverage of 160 percent
- Maintain 250 days of cash including Rate Stabilization Fund
- FY 2019 actual consumption declined by 1.8 percent. Assumed 1.5 percent conservation each for FY 2020 and FY 2021 and 1.0 percent in FY 2022 and onwards
- FY 2019 Debt Service was lower as compared to budget due to deferring bond issuance as well as achieving lower interest than projected. The new plan assumed lower interest rates with slightly lower Debt Service projections



Ten-Year Financial Plan

\$ in thousands

OPERATING	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Retail*	\$ 571,666	\$ 607,107	\$ 630,495	\$ 669,848	\$ 723,657	\$ 752,224	\$ 791,988	\$ 833,503	\$ 879,616	\$ 928,122
Wholesale*	82,539	81,986	84,445	86,978	89,588	92,275	95,044	97,895	100,832	103,857
Other	44,774	42,145	40,858	44,081	46,959	51,637	54,692	54,970	56,935	57,752
RSF	-	2,500	10,500	-	-	-	-	-	-	-
Operating Receipts ⁽¹⁾	\$ 698,979	\$ 733,738	\$ 766,298	\$ 800,907	\$ 860,204	\$ 896,136	\$ 941,724	\$ 986,368	\$ 1,037,383	\$ 1,089,731
Operating Expenses	(347,881)	(365,658)	(376,303)	(387,553)	(399,149)	(411,101)	(423,421)	(436,120)	(449,209)	(462,701)
Debt Service	(205,137)	(222,268)	(240,497)	(257,460)	(271,238)	(286,756)	(299,489)	(315,321)	(332,807)	(348,316)
Cash Financed Capital Improvement	\$ (28,556)	\$ (30,355)	\$ (37,830)	\$ (46,889)	\$ (50,656)	\$ (60,178)	\$ (71,279)	\$ (75,015)	\$ (79,165)	\$ (83,531)
Net Revenues After Debt Service	\$ 117,405	\$ 115,456	\$ 111,668	\$ 109,005	\$ 139,161	\$ 138,101	\$ 147,535	\$ 159,912	\$ 176,202	\$ 195,183
Operating Reserve-Beg Balance	186,764	180,000	185,000	194,000	201,000	205,000	215,000	220,000	230,000	240,000
Other Misc (Disbursements)/Receipts										
Wholesale/Federal True Up	(5,372)	(3,184)	(5,490)	-	-	-	-	-	-	-
Project Billing Refunds	(4,000)	(4,000)	-	-	-	-	-	-	-	-
Transfers To RSF	(13,000)	-	-	-	-	-	-	-	-	-
Pay-Go Financing	(101,797)	(103,272)	(97,178)	(102,005)	(135,161)	(128,101)	(142,535)	(149,912)	(166,202)	(185,183)
Operating Reserve - Ending Balance	\$ 180,000	\$ 185,000	\$ 194,000	\$ 201,000	\$ 205,000	\$ 215,000	\$ 220,000	\$ 230,000	\$ 240,000	\$ 250,000
Rate Stabilization Fund Balance RSF ⁽²⁾	\$ (74,450)	\$ (71,950)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)
Senior Debt Service Coverage	459%	502%	533%	513%	616%	647%	632%	618%	660%	769%
Combined Debt Service Coverage	171%	172%	169%	170%	179%	177%	181%	182%	184%	187%
Actual/Projected Water/Sewer Rate Increases	11.5%	9.9%	7.8%	8.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
*Operating Receipts \$ Increase/Decrease										
Retail	7,460	35,441	23,388	39,353	53,809	28,567	39,764	41,514	46,113	48,507
Wholesale	423	(554)	2,460	2,533	2,609	2,688	2,768	2,851	2,937	3,025
*Operating Receipts % Increase/Decrease										
Retail	1.3%	6.2%	3.9%	6.2%	8.0%	3.9%	5.3%	5.2%	5.5%	5.5%
Wholesale	0.5%	-0.7%	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 2021 planned transfers of \$0.0 million to Rate Stabilization Fund and \$2.5 million utilization will bring the total fund balance to \$71.95 million



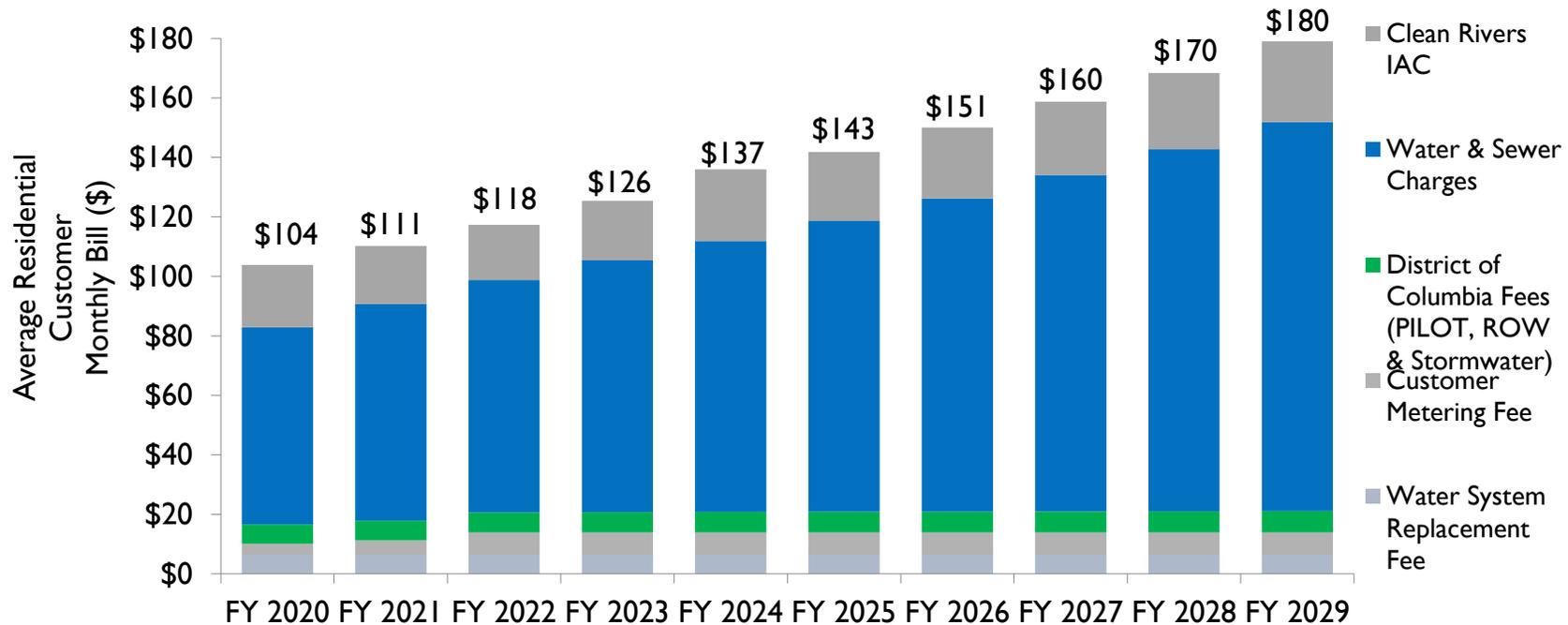
Financial Metrics

Metrics	Indenture Requirement	Board Policy	Management Target
Days of Cash on Hand	—	\$125.5 million or 120 Days	250 Days
Combined Coverage Ratio	—	—	1.6X
Senior Coverage	1.2X	1.4X	—
Subordinate Coverage	1.0X	1.0X	—
Debt Service as a % of Revenue	—	—	33% of Revenue or Less
Rate Stabilization Fund	—	—	10% of Revenue



Projected Average Residential Customer Bill

Projected average monthly residential customer bill ranges from \$104 in FY 2020 to \$180 in FY 2029



* Assumes average residential consumption of 5.42 Ccf, or 4,054 gallons, per month. Ccf = hundred cubic feet, or 748 gallons



10-Year CIP

- 💧 The proposed FY 2020 disbursement includes the underspending from FY 2019 to remain congruent with previously approved rate increases
- 💧 Ramp-up to modified Baseline CIP beginning in FY 2021

Service Area (\$000's)	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	10-Yr Total	Last Year's CIP	(Increase) /Decrease
Non-Process Facilities	\$ 42,066	\$ 31,849	\$ 20,665	\$ 6,831	\$ 11,058	\$ 10,396	\$ 3,901	\$ 3,553	\$ 3,560	\$ 3,600	\$ 137,479	\$ 138,067	\$ 588
Wastewater Treatment	77,536	102,976	113,378	107,232	107,312	70,680	97,878	101,839	132,256	138,165	1,049,252	978,738	(70,514)
Clean Rivers	162,197	147,565	179,833	129,272	67,536	59,909	148,771	103,265	88,890	115,049	1,202,288	1,262,589	60,301
Combined Sewer	9,239	9,493	12,816	16,553	16,731	8,568	6,699	7,572	8,972	12,435	109,078	79,178	(29,900)
Stormwater	6,869	9,631	7,535	4,170	5,392	4,660	4,201	4,306	6,869	5,057	58,690	68,608	9,918
Sanitary Sewer	44,933	63,926	115,541	88,110	91,562	138,341	159,814	176,789	175,873	174,032	1,228,922	957,135	(271,787)
Water	62,163	88,677	108,878	109,000	92,905	101,765	116,319	146,791	154,916	154,697	1,136,112	945,015	(191,097)
CAPITAL PROJECTS	405,004	454,118	558,645	461,168	392,496	394,318	537,584	544,115	571,337	603,035	4,921,821	4,429,330	(492,491)
Capital Equipment	31,703	37,207	33,790	32,315	33,000	33,000	33,000	33,000	33,000	33,000	333,015	340,324	7,309
Washington Aqueduct	15,515	16,266	18,572	37,841	12,699	33,875	9,508	12,863	24,068	13,971	195,178	187,127	(8,051)
ADDITIONAL CAPITAL PROGRAMS	47,218	53,473	52,362	70,156	45,698	66,875	42,509	45,863	57,068	46,971	528,193	527,450	(743)
TOTAL CIP	\$ 452,223	\$ 507,590	\$ 611,008	\$ 531,322	\$ 438,194	\$ 461,193	\$ 580,093	\$ 589,978	\$ 628,404	\$ 650,006	\$ 5,450,013	\$ 4,956,780	\$ (493,233)
Last Years CIP	420,342	467,016	561,724	530,006	422,607	450,358	585,454	535,666	544,490	439,117	4,956,780		
(Increase)/Decrease	(31,880)	(40,574)	(49,284)	(1,317)	(15,587)	(10,835)	5,361	(54,312)	(83,914)	(210,890)	(493,232)		



Value of Robust Credit Ratings

- Current credit ratings unlock significant value given size and scope of new money capital plan and potential refinancings
- 20-year average life for \$2 billion of capital borrowing

Rating	Yield Differential vs. AAA Rating	Individual Bond Sale (\$200 million)			Aggregate Capital Program (\$2 billion)		
		Annual Cost Differential (\$200 million)	Total Cost Differential (Through Maturity)	PV at 3.50%	Annual Cost (\$2 billion)	Total Cost Differential (Through Maturity)	PV at 3.50% (\$200MM Issued Annually)
AAA	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AA+	0.10%	200,000	4,000,000	2,708,463	2,000,000	40,000,000	22,700,481
AA	0.20%	400,000	8,000,000	5,416,927	4,000,000	80,000,000	45,400,961
AA-	0.25%	500,000	10,000,000	6,771,158	5,000,000	100,000,000	56,751,201
A+	0.35%	700,000	14,000,000	9,479,622	7,000,000	140,000,000	79,451,682
A	0.45%	900,000	18,000,000	12,188,085	9,000,000	180,000,000	102,152,162
A-	0.60%	1,200,000	24,000,000	16,250,780	12,000,000	240,000,000	136,202,883

Note: for demonstrative purposes only. Assumes 20-year average credit spreads as of January 2020. Each \$100 million issue assumed structured as a 20-year bullet maturity at par.



Rating Agency Viewpoint

Summary of Rating Agency Views		
Moody's Investors Service	Standard & Poor's	Fitch Ratings
Aa1 (Sr.) / Aa2 (Sub.) / P-1 (Short-term) Stable Outlook	AAA (Sr.) / AA (Sub.) / A-1+ (Short-term) Stable Outlook	AA+ (Sr.) / AA (Sub.) / FI+ (Short-term) Stable Outlook
Strengths		
<ul style="list-style-type: none"> — Large service area bolstered by considerable wealth and institutional presence — Excellent rate management record — Liquidity is solid, and indenture requirements and board policies will protect the authority's cash position in the future — Strong financial metrics because the utility has consistently raised rates to ensure good debt service coverage — No unfunded pension or OPEB liability 	<ul style="list-style-type: none"> — Robust service area that includes highly rated entities in D.C., Maryland, and Virginia — Strong financial management, including conservative financial forecasts and a detailed CIP — Governing board's demonstrated willingness to adjust rates — View that the management team remains committed to balancing environmental stewardship and a socially responsible agenda with ongoing financial commitments — Liquidity and reserves that include high levels of unrestricted cash and investments 	<ul style="list-style-type: none"> — Essential service provider to a large and economically diverse territory with an affluent customer base — Affordable user charges and demonstrated ability / willingness to raise rates, which is done independently of outside oversight — Rate structure aligned towards greater fixed cost recovery — Strong financial margins and healthy liquidity — Projections include rate increases sufficient for stable debt service coverage metrics
Challenges		
<ul style="list-style-type: none"> — Heavy capital needs, in part from regulatory mandates — Need for further rate increases to support substantial capital plan with falling consumption 	<ul style="list-style-type: none"> — Downward pressure could come from a precipitous collapse in financial performance, a change in the way the federal government pays the Authority, or prolonged interruption in operations 	<ul style="list-style-type: none"> — Elevated debt and large CIP — Rating stability will depend on the authority's ability and willingness to continue to adjust and structure rates to maintain financial results in line with historical results and to accommodate rising debt



Select Peer Group

Selected Peer	Type	Moody's Rating (Senior)	S&P Rating (Senior)	Total Operating Revenues (\$000s)	Total Annual Debt Service (\$000s)	Debt Ratio	Long Term Debt (\$000s)	Total Debt Service Coverage	DS as a % of Total Operating Revenues	Days Cash on Hand	Average Bill as % of Median Effective Buying Income
Atlanta, GA	Water & Sewer	Aa2	AA-	488,089	206,344	44.7%	3,158,564	2.6x	42.3%	1,356	4.1%
Charlotte, NC	Water & Sewer	Aaa	AAA	424,327	148,053	36.6%	1,471,334	1.9x	34.9%	960	1.8%
Dallas, TX	Water & Sewer	Aa2	AAA	668,624	202,597	46.3%	2,719,857	1.9x	30.3%	269	1.6% ¹
DC Water	Water & Sewer	Aa1	AAA	684,502	178,400	44.8%	3,273,034	2.2x	26.1%	280	1.6%
Louisville MSD, KY	Sewer	Aa3	AA	294,368	135,021	58.3%	1,959,198	1.6x	45.9%	283	1.3% ¹
Metro St. Louis Sewer District, MO	Sewer	Aa1	AAA	401,109	84,025	41.0%	1,510,664	2.9x	21.0%	516	1.2% ¹
NE Ohio Regional Sewer District	Sewer	Aa1	AA+	326,059	101,881	50.5%	1,619,111	2.1x	31.3%	798	2.8%
NYC Water	Water & Sewer	Aa1	AAA	3,819,799	694,100	92.0%	30,045,906	3.6x	18.2%	305	2.1%
San Antonio, TX	Water & Sewer	Aa1	AA+	691,046	152,442	44.2%	2,843,030	2.5x	22.1%	539	1.9%

Source: Moody's Financial Ratio Analysis database, as of January 31, 2020. Various S&P Reports for Bills as a % of Monthly EBI. All data as of FY2018 for San Antonio, DC Water, Dallas and NE Ohio. All other data as of FY2019
 1: Calculated based on S&P methodology. Not available from S&P



Recommendation

- **Recommend to the full Board the adoption of the proposed FY 2021 and FY 2022 rates, charges and fees and begin the public hearing process**
 - 9.9% increase in FY 2019
 - 7.8% increase in FY 2020
- **Recommend to the full Board the adoption of the proposed Customer Metering Fees for FY 2021 & FY 2022**
- **Recommend to the full Board the adoption of the proposed FY 2020 – FY 2029 Financial Plan**
 - 10-year CIP disbursement budget
 - Projected water and sewer rate increases
- **Recommend to the full Board the adoption of the proposed increase to the Clean Rivers IAC discount for CAP customers from 50% to 75%**
- **Recommend to the full Board the adoption of the proposed amended regulations to make DC Water's Customer Assistance Program II (CAP2) permanent**



Next Steps



Committee Workplan Timelines

DC Retail Water & Sewer Rates Committee Reviews, Recommendations, and Actions	Dates
Update Committee on Proposed FY 2021 & FY 2022 Rates	January 28, 2020
Committee Recommendation on Proposed FY 2021 & FY 2022 Rates	February 25, 2020
Board approval of Notice of Proposed Rulemaking (NOPR) for Proposed FY 2021 & FY 2022 Rates	March 5, 2020
Public Hearing	June 10, 2020
Committee Recommendation on Final FY 2021 & FY 2022 Rates	June 23, 2020
Board approval of Notice of Final Rulemaking (NOFR) for Proposed FY 2021 & FY 2022 Rates	July 2, 2020
Rates go-live	October 1, 2020 (FY 2021) October 1, 2021 (FY 2022)



Budget Adoption Calendar

- 💧 Board Member Questions & Follow Up
 - Submit budget-related questions to Board Secretary
 - Board Secretary will distribute questions to appropriate staff
- 💧 Wholesale Customer Briefing – **January 10**
- 💧 Committee Reviews, Recommendations & Actions – **January & February**



	Environmental Quality & Operations	DC Retail Water & Sewer Rates	Finance & Budget
FY 2020 - FY 2029 Capital Budget (Disbursements & Lifetime)	Action Required		Action Required
FY 2021 Operating Budget			Action Required
Intent to Reimburse Capital Expenditures with Proceeds of a Borrowing			Action Required
FY 2020 – FY 2029 Financial Plan		Action Required	Action Required
FY 2021 & 2022 Rates, Charges & Fees		Action Required	

- 💧 Board Adoption – **March 5**



**Proposed Amendment of Board Resolution #97-91 to Increase the
General Manager's Authority for Abatement of Charges
Presentation to Retail Rates Committee, February 25, 2020**

District of Columbia Water and Sewer Authority



Blue Plains Advanced Wastewater Treatment Plant



Purpose

Seek Committees recommendation to the Board on the:

- 💧 Proposed Amendment of Board Resolution #97-91 to Increase the General Manager's Authority for Abatement of Charges



CEO's Ability to Abate Charges

- Resolution 97-91 gives the CEO/GM the authority to abate charges up to \$25,000
- DC Water works with customers to help bring them into good standing by negotiating payment terms:
 - For Residential customers, we refer them to CAP, SPLASH, and other social service agencies to help ensure that customers can pay their bills going forward
 - For Multi-Family and Non-Residential customers, we also offer interest free payment terms for up to twelve months, and we are able to place the account on hold from collection activities to allow time for payment.
- DC Water requests an increase to this authority to \$50,000 to help customers who are behind on their bills



Recommendation

- 💧 Recommend to the full Board the Proposed Amendment of Board Resolution #97-91 to Increase the General Manager's Authority for Abatement of Charges

ACTION ITEM 1

FY 2021 & FY 2022 Rates, Charges & Fees, Increasing CAP CRIAC Discount and Amend Regulations to make CAP2 Permanent (Effective October 1, 2020 and October 1, 2021)

1. Management recommends the following revisions to the Retail Rates, Charges and Fees for FY 2021 & FY 2022, CAP Customer Clean Rivers Impervious Area Charge (CRIAC) Discount and Amend Regulations to make CAP2 Permanent:

Water Service Rates

- The proposed increased retail rates for metered water services are as follows:

Metered Water Services

	FY 2020		FY 2021		FY 2022		FY 2021 vs. FY 2020 Incr. / (Decr.)		FY 2022 vs. FY 2021 Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers - (0 – 4)	\$3.06	\$4.09	\$3.49	\$4.67	\$3.63	\$4.85	\$0.43	\$0.58	\$0.14	\$0.18
Residential customers – (> 4)	\$4.10	\$5.48	\$4.50	\$6.02	\$4.74	\$6.34	\$0.40	\$0.54	\$0.24	\$0.32
Multi-Family customers	\$3.54	\$4.73	\$3.96	\$5.29	\$4.15	\$5.55	\$0.42	\$0.56	\$0.19	\$0.26
Non-Residential customers	\$4.25	\$5.68	\$4.65	\$6.22	\$4.91	\$6.56	\$0.40	\$0.54	\$0.26	\$0.34

Sanitary Sewer Service Rates

- The proposed increased retail rates for metered sanitary sewer services are as follows:

Metered Sewer Services

	FY 2020		FY 2021		FY 2022		FY 2021 vs. FY 2020 Incr. / (Decr.)		FY 2022 vs. FY 2021 Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers	\$8.89	\$11.89	\$9.77	\$13.06	\$10.64	\$14.22	\$0.88	\$1.17	\$0.87	\$1.16
Multi-Family customers	\$8.89	\$11.89	\$9.77	\$13.06	\$10.64	\$14.22	\$0.88	\$1.17	\$0.87	\$1.16
Non-Residential customers	\$8.89	\$11.89	\$9.77	\$13.06	\$10.64	\$14.22	\$0.88	\$1.17	\$0.87	\$1.16

- Decreasing the annual CRIAC from \$251.28 to \$234.24 per Equivalent Residential Unit (ERU) in FY 2021.
- Decreasing the annual CRIAC from \$234.24 to \$220.80 per ERU in FY 2022.

- The proposed CRIAC charge per ERU will be billed monthly as follows:

Clean Rivers Impervious Area Charge (CRIAC)

	FY 2020	FY 2021	FY 2022	FY 2021 vs. FY 2020 Incr. / (Decr.)	FY 2022 vs. FY 2021 Incr. / (Decr.)
	ERU	ERU	ERU	ERU	ERU
Residential customers	\$20.94	\$19.52	\$18.40	(\$1.42)	(\$1.12)
Multi-Family customers	\$20.94	\$19.52	\$18.40	(\$1.42)	(\$1.12)
Non-Residential customers	\$20.94	\$19.52	\$18.40	(\$1.42)	(\$1.12)

**District of Columbia Pass Through Charge
Right-of-Way Occupancy / PILOT Fee**

- There is no increase in the **Right-of-Way Occupancy Fee** in FY 2021 and FY 2022:
- The **Right-of-Way Occupancy Fee** for FY 2021 and FY 2022 shall be as follows:

ROW

	FY 2020		FY 2021		FY 2022		FY 2021 vs. FY 2020 Incr. / (Decr.)		FY 2022 vs. FY 2021 Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers	\$0.19	\$0.25	\$0.19	\$0.25	\$0.19	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00
Multi-Family customers	\$0.19	\$0.25	\$0.19	\$0.25	\$0.19	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00
Non-Residential customers	\$0.19	\$0.25	\$0.19	\$0.25	\$0.19	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00

- The proposed increased **Payment-in-Lieu of Taxes Fee** for FY 2021 and FY 2022 are as follows:

PILOT

	FY 2020		FY 2021		FY 2022		FY 2021 vs. FY 2020 Incr. / (Decr.)		FY 2022 vs. FY 2021 Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers	\$0.51	\$0.68	\$0.54	\$0.72	\$0.56	\$0.75	\$0.03	\$0.04	\$0.02	\$0.03
Multi-Family customers	\$0.51	\$0.68	\$0.54	\$0.72	\$0.56	\$0.75	\$0.03	\$0.04	\$0.02	\$0.03
Non-Residential customers	\$0.51	\$0.68	\$0.54	\$0.72	\$0.56	\$0.75	\$0.03	\$0.04	\$0.02	\$0.03

- The proposed increased **Customer Metering Fees**, effective October 1, 2020 for FY 2021 and October 1, 2021 for FY 2022 are as follows:

Customer Metering Fees

Meter Size	FY 2020	FY 2021	FY 2022
5/8"	\$ 3.86	\$ 4.96	\$ 7.75
3/4"	\$ 4.06	\$ 5.22	\$ 8.16
1"	\$ 4.56	\$ 5.86	\$ 9.16
1x1.25"	\$ 4.83	\$ 6.21	\$ 9.70
1.5"	\$ 6.88	\$ 8.85	\$ 13.82
2"	\$ 7.54	\$ 9.69	\$ 15.14
2x1/2"	\$ 8.00	\$ 10.28	\$ 16.07
2x5/8"	\$ 8.00	\$ 10.28	\$ 16.07
3"	\$ 76.98	\$ 98.92	\$ 154.56
3x5/8"	\$ 77.94	\$ 100.16	\$ 156.49
3x3/4"	\$ 77.94	\$ 100.16	\$ 156.49
4"	\$ 137.37	\$ 176.52	\$ 275.81
4x3/4"	\$ 138.15	\$ 177.52	\$ 277.38
4x1"	\$ 138.15	\$ 177.52	\$ 277.38
4x2"	\$ 138.15	\$ 177.52	\$ 277.38
4x2x5/8"	\$ 181.04	\$ 232.64	\$ 363.49
6"	\$ 268.14	\$ 344.56	\$ 538.37
6x1"	\$ 272.70	\$ 350.42	\$ 547.52
6x1x1/2"	\$ 272.70	\$ 350.42	\$ 547.52
6x1/2"	\$ 323.09	\$ 415.17	\$ 648.70
6x3x3/4"	\$ 323.09	\$ 415.17	\$ 648.70
6x3"	\$ 323.09	\$ 415.17	\$ 648.70
8"	\$ 323.29	\$ 415.42	\$ 649.10
8x2"	\$ 323.29	\$ 415.42	\$ 649.10
8x4x1"	\$ 358.26	\$ 460.36	\$ 719.31
10"	\$ 317.91	\$ 408.51	\$ 638.30
10x2"	\$ 403.62	\$ 518.65	\$ 810.38
10x6x1"	\$ 403.62	\$ 518.65	\$ 810.38
10x6"	\$ 403.62	\$ 518.65	\$ 810.38
12"	\$ 329.66	\$ 423.61	\$ 661.89
12x6"	\$ 329.66	\$ 423.61	\$ 661.89
16"	\$ 349.45	\$ 449.04	\$ 701.62

Clean Rivers IAC Discount for CAP Customers

- The proposed increased CAP customer CRIAC discount shall be revised from 50% to 75%, effective October 1, 2020.

Customer Assistance Program II (CAP2)

- Proposal to amend regulations to make DC Water's Customer Assistance Program II (CAP2) permanent

ACTION ITEM 2

Proposed Ten Year Financial Plan FY 2020 – FY 2029

1. Attached is a summary of the 10-year Financial Plan, which is based on the following key assumptions for FY 2021 and FY 2022:

FY 2021

- Operating receipts totaling \$733.7 million, an increase of \$39.8 million over FY 2020 funded through;
 - Retail Revenue – increase of \$35.1 million
 - Wholesale Revenue – decrease of \$0.5 million
 - Other Revenue – increase of \$5.2 million
- Operating disbursements of \$618.3 million in FY 2021; and
- A ten-year capital improvement plan (FY 2020 – FY 2029) of \$5.45 billion on a cash disbursement basis.

FY 2022

- Operating receipts totaling \$766.3 million, an increase of \$32.6 million over FY 2021 funded through;
 - Retail Revenue – increase of \$23.0 million
 - Wholesale Revenue – increase of \$2.5 million
 - Other Revenue – increase of \$7.1 million
- Operating disbursements of \$654.6 million in FY 2022; and
- A ten-year capital improvement plan (FY 2020 – FY 2029) of \$5.45 billion on a cash disbursement basis.

The FY 2020 – FY 2029 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 2020 – 2029 Financial Plan
(In 000's)

OPERATING	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Retail*	\$ 571,666	\$ 607,107	\$ 630,495	\$ 669,848	\$ 723,657	\$ 752,224	\$ 791,988	\$ 833,503	\$ 879,616	\$ 928,122
Wholesale*	82,539	81,986	84,445	86,978	89,588	92,275	95,044	97,895	100,832	103,857
Other	44,774	42,145	40,858	44,081	46,959	51,637	54,692	54,970	56,935	57,752
RSF	-	2,500	10,500	-	-	-	-	-	-	-
Operating Receipts ⁽¹⁾	\$ 698,979	\$ 733,738	\$ 766,298	\$ 800,907	\$ 860,204	\$ 896,136	\$ 941,724	\$ 986,368	\$ 1,037,383	\$ 1,089,731
Operating Expenses	(347,881)	(365,658)	(376,303)	(387,553)	(399,149)	(411,101)	(423,421)	(436,120)	(449,209)	(462,701)
Debt Service	(205,137)	(222,268)	(240,497)	(257,460)	(271,238)	(286,756)	(299,489)	(315,321)	(332,807)	(348,316)
Cash Financed Capital Improvement	\$ (28,556)	\$ (30,355)	\$ (37,830)	\$ (46,889)	\$ (50,656)	\$ (60,178)	\$ (71,279)	\$ (75,015)	\$ (79,165)	\$ (83,531)
Net Revenues After Debt Service	\$ 117,405	\$ 115,456	\$ 111,668	\$ 109,005	\$ 139,161	\$ 138,101	\$ 147,535	\$ 159,912	\$ 176,202	\$ 195,183
Operating Reserve-Beg Balance	186,764	180,000	185,000	194,000	201,000	205,000	215,000	220,000	230,000	240,000
Other Misc (Disbursements)/Receipts										
Wholesale/Federal True Up	(5,372)	(3,184)	(5,490)	-	-	-	-	-	-	-
Project Billing Refunds	(4,000)	(4,000)	-	-	-	-	-	-	-	-
Transfers To RSF	(13,000)	-	-	-	-	-	-	-	-	-
Pay-Go Financing	(101,797)	(103,272)	(97,178)	(102,005)	(135,161)	(128,101)	(142,535)	(149,912)	(166,202)	(185,183)
Operating Reserve - Ending Balance	\$ 180,000	\$ 185,000	\$ 194,000	\$ 201,000	\$ 205,000	\$ 215,000	\$ 220,000	\$ 230,000	\$ 240,000	\$ 250,000
Rate Stabilization Fund Balance RSF ⁽²⁾	\$ (74,450)	\$ (71,950)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)
Senior Debt Service Coverage	459%	502%	533%	513%	616%	647%	632%	618%	660%	769%
Combined Debt Service Coverage	171%	172%	169%	170%	179%	177%	181%	182%	184%	187%
Actual/Projected Water/Sewer Rate Increases	11.5%	9.9%	7.8%	8.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
*Operating Receipts \$ Increase/Decrease										
Retail	7,460	35,441	23,388	39,353	53,809	28,567	39,764	41,514	46,113	48,507
Wholesale	423	(554)	2,460	2,533	2,609	2,688	2,768	2,851	2,937	3,025
*Operating Receipts % Increase/Decrease										
Retail	1.3%	6.2%	3.9%	6.2%	8.0%	3.9%	5.3%	5.2%	5.5%	5.5%
Wholesale	0.5%	-0.7%	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 2021 planned transfers of \$0.0 million to Rate Stabilization Fund and \$2.5 million utilization will bring the total fund balance to \$71.95 million

District of Columbia Water & Sewer Authority
Average Residential Customer Monthly Bill
FY 2020 - FY 2029

	Units	Current FY 2020	Proposed FY 2021	Proposed FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 66.25	\$ 73.30	\$ 78.92	\$ 85.61	\$ 92.07	\$ 98.98	\$ 106.40	\$ 114.41	\$ 123.04	\$ 132.26
DC Water Clean Rivers IAC ⁽²⁾	ERU	20.94	19.52	18.40	19.58	24.07	23.07	23.82	24.56	25.64	26.78
DC Water Customer Metering Fee	5/8"	3.86	4.96	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
DC Water Water System Replacement Fee ⁽⁴⁾	5/8"	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 97.35	\$ 104.08	\$ 111.37	\$ 119.24	\$ 130.19	\$ 136.10	\$ 144.27	\$ 153.02	\$ 162.73	\$ 173.09
Increase / Decrease		\$ 5.01	\$ 6.73	\$ 7.29	\$ 7.87	\$ 10.95	\$ 5.91	\$ 8.17	\$ 8.75	\$ 9.71	\$ 10.36
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 2.76	\$ 2.93	\$ 3.04	\$ 3.09	\$ 3.14	\$ 3.20	\$ 3.25	\$ 3.31	\$ 3.36	\$ 3.41
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	1.03	1.03	1.03	1.03	1.08	1.08	1.08	1.08	1.08	1.14
District of Columbia Stormwater Fee ⁽³⁾	ERU	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.46	\$ 6.63	\$ 6.74	\$ 6.79	\$ 6.89	\$ 6.95	\$ 7.00	\$ 7.06	\$ 7.11	\$ 7.22
Total Amount Appearing on DC Water Bill		\$ 103.81	\$ 110.71	\$ 118.11	\$ 126.03	\$ 137.08	\$ 143.05	\$ 151.27	\$ 160.08	\$ 169.84	\$ 180.31
Increase / Decrease Over Prior Year		\$ 5.11	\$ 6.90	\$ 7.40	\$ 7.92	\$ 11.05	\$ 5.97	\$ 8.22	\$ 8.81	\$ 9.76	\$ 10.47
Percent Increase in Total Bill		5.2%	6.6%	6.7%	6.7%	8.8%	4.4%	5.7%	5.8%	6.1%	6.2%

(1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 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 - FY 2022

	Units	FY 2020	Proposed FY 2021	Proposed FY 2022
DC Water Retail Rates Water (Residential Lifeline 0 - 4 Ccf)	Ccf	\$ 3.06	\$ 3.49	\$ 3.63
DC Water Retail Rates Water (Residential > 4 Ccf)	Ccf	\$ 4.10	\$ 4.50	\$ 4.74
DC Water Retail Rates Water (Multi-Family)	Ccf	\$ 3.54	\$ 3.96	\$ 4.15
DC Water Retail Rates Water (Non-Residential)	Ccf	\$ 4.25	\$ 4.65	\$ 4.91
DC Water Retail Rates Sewer	Ccf	\$ 8.89	\$ 9.77	\$ 10.64
DC Water Clean Rivers IAC	ERU	\$ 20.94	\$ 19.52	\$ 18.40
DC Water Customer Metering Fee	5/8"	\$ 3.86	\$ 4.96	\$ 7.75
DC Water Water System Replacement Fee	5/8"	\$ 6.30	\$ 6.30	\$ 6.30
District of Columbia PILOT Fee	Ccf	\$ 0.51	\$ 0.54	\$ 0.56
District of Columbia Right-of-Way Fee	Ccf	\$ 0.19	\$ 0.19	\$ 0.19
District of Columbia Stormwater Fee	ERU	\$ 2.67	\$ 2.67	\$ 2.67

ACTION ITEM 3

1. Recommendation to Amend Board Resolution #97-91 to Increase the General Manager's Authority for Abatement of Charges

Proposed amendment of Board Resolution #97-91 to increase the General Manager's Authority for Abatement of Charges:

The proposed increased General Manager's authority for abatement of charges shall be revised from \$25,000 to \$50,000.

Attachment D



Advanced Metering Infrastructure (AMI) Project Update

Presentation to Retail Rates Committee, February 25, 2020

District of Columbia Water and Sewer Authority



Blue Plains Advanced Wastewater Treatment Plant



Purpose

• Provide an update to the Committee on the status of the AMI project:

- Initial Project
- Project Update
- Accomplishments
- Challenges
- Outreach Efforts
- Budget Update
- Inventory Management
- Path Forward



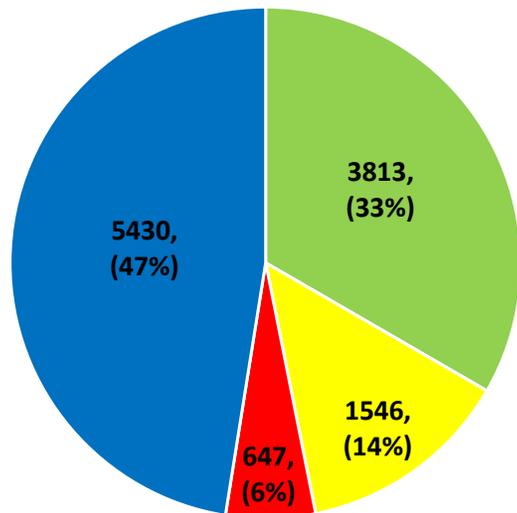
Initial Project

- 💧 Phase I installed 84,534 small meters, mostly residential households
- 💧 At the end of that project, there were still roughly 11k meters that were first generation or second generation and not functioning transmission devices
- 💧 While Phase I moved us from a transmission rate of 70% to 92%, there were 5,128 escalations returned to DC Water, many of which were long standing estimated bills
- 💧 In late June 2019, DC Water engaged West Monroe to accomplish this work
 - Establish a performance-based partnership based on outcomes
 - Develop and document standard procedures to address difficult scenarios in the future
 - Utilize historical experience for AMI closeout to improve success
- 💧 Project Objectives
 - Replace 11k aged and high-risk meters and Meter transmitting units
 - Increase small meter transmission rate to best in class at 98% for small meters



Project Update

The phase focuses on replacement of 11,436 aged and high-risk meters and meter transmitting units



■ Completions
■ Issue/escalation
■ Internal Need Appointment
■ Not started

- Progress to date includes replacement of 33% of meters
- Customers with inside meters who are not responding to appointment requests has slowed progress (14%)
- Challenging locations and issues exist for 6% of the total accounts and are forecasted to be between 10-20% of the population for this phase
- Initial start up challenges occurred that slowed progress, leaving 47% unworked; Partners have addressed issues and we are on the right track to complete with a slight overall project delay



Accomplishments

- Overall AMI transmission rates have increased from 92% to 92.9%
- Consecutive estimates are decreasing

	SEPT 2019		JAN 2020	
Estimates	7,125	5.5%	6,613	5.1%
Consecutive Estimates	5,776	4.5%	5,204	4.0%
Consecutive Estimates >= 12mo	3,107		2,706	

- Incentive contract between UMS and DC Water is working and keeping all parties aligned to the same goals and objectives
- Detailed standard operating procedures (SOPs) were developed with cross-organization input
- Data integrity and confidence are increasing as part of this project
- Initially UMS (the installer) installed MTUs inconsistently/upside down, and re-visited and corrected every location – prioritizing this work and doing it right rather than proceeding with new installations
- DC Water crew installations increased for inside installations almost twofold since a robust customer communication campaign started
- Command Center is dispatching work to help DC Water crews work efficiently



Installation Challenges

- Initial workmanship issues with UMS (upside down MTUs, water off, breaks), though these have been corrected
- Customers eligible for disconnection is higher than expected (i.e., customer-owned plumbing or infrastructure issues, no appointments/missed appointments)
- Indoor installations are contingent on customers making and keeping an appointments
- Infrastructure/plumbing issues (tree roots, blocked meter access, inoperable valves, imminent failure conditions, etc.)
- Data quality - different groups remove or replace water meters, sometimes including re-sizing service lines
 - Handoffs on meter installs needs improvement



Tree Root Challenges



(L/R): Overgrown roots, cannot open lid



(L): Roots engulf pit and lid, no access

(R): Tree roots overtook pit ring, causing a safety hazard for our customers and preventing DC Water from installing a meter or lid





Infrastructure /Plumbing Challenges



(L): Leaking/ rusty valves



(R): Meter welded onto piping, so cannot be removed



(L): Collapsed meter pit



(R): Rusted and fragile flanges, both valves leaking upon arrival



Data & Process Challenges

- (1): Razed lot
- (2): Theft/ illegal plumbing
- (3) Upgraded service with bypass installed, old 5/8" meter left in pit



(Below) Customer refusal to make repair

Sent: Saturday, January 25, 2020 3:11 PM

To: Ami <ami@dcwater.com>

Subject: meter replacement

EXTERNAL EMAIL, PLEASE USE CAUTION BEFORE CLICKING A LINK OR OPENING AN ATTACHMENT

As DC Water learned in May 2018 during their last previous attempt to replace meters at my houses at [redacted] and [redacted] Dana Pl. NW, there are no curb cutoff valves. You cannot shut off the water to these residences unless DC Water shuts off service to the entire surrounding neighborhood. We have been down this road before.



Outreach Effort- Indoor Meters

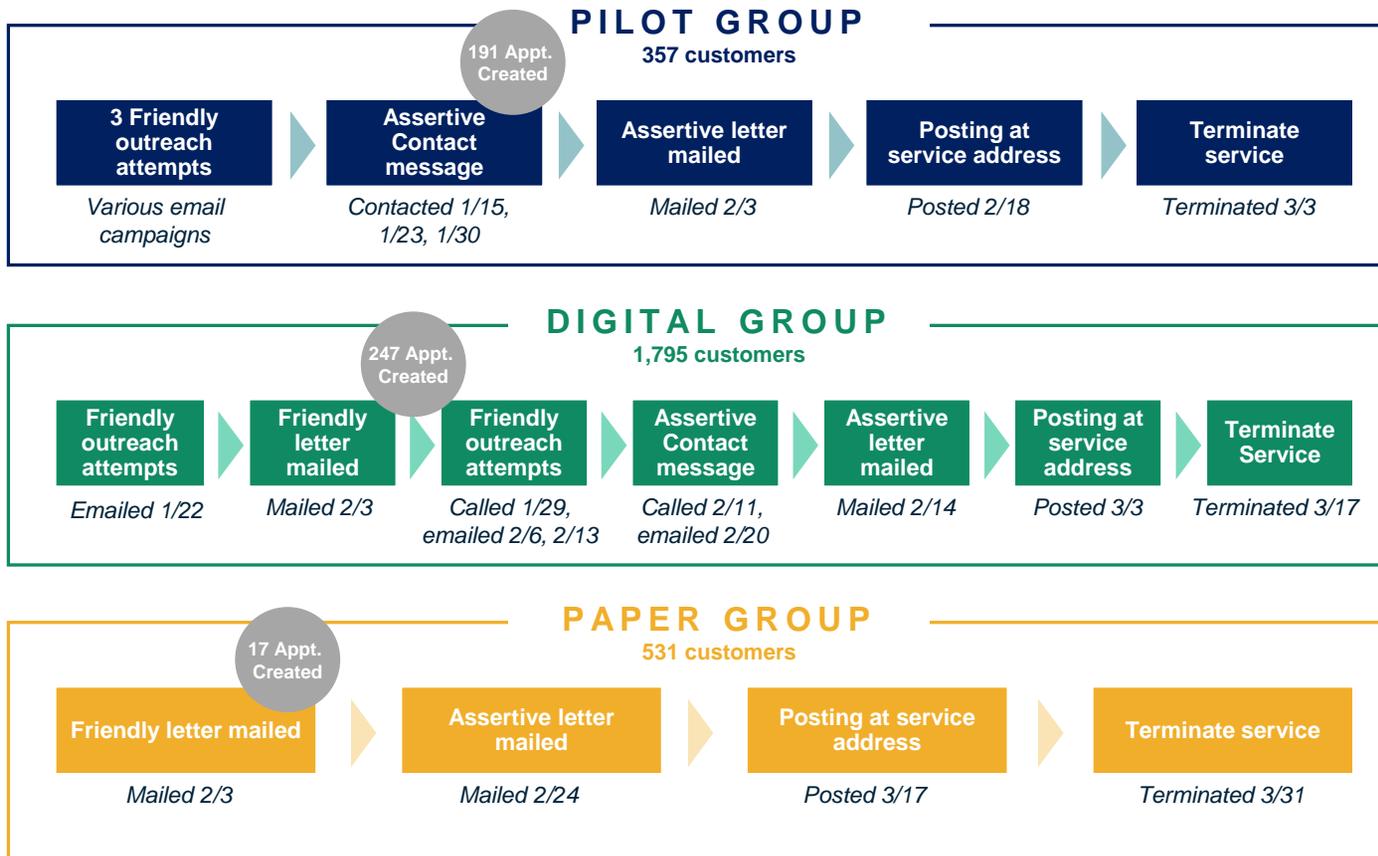
Customers with an indoor meter receive the following outreach, depending on what contact information we have available and/or if the customer schedules a meter replacement appointment

- 💧 Bill message – *all customers*
- 💧 Letter – *all customers*
- 💧 Email (including a link to self-schedule an appointment and an appointment reminder email)
- 💧 Robo-call
- 💧 Doorhanger (successful or unsuccessful) – *all customers*
- 💧 Assertive letter / bill message / email / robo call
- 💧 Final door posting – *only customers who do not make an appointment*
- 💧 Service disconnection – *only customers who do not make an appointment*

Some customers with indoor meters were already contacted multiple times, so our communications are getting more assertive (after 4th contact)



Outreach Efforts- Indoor Meters



Note: Bill message will appear on customer bill either friendly or assertive depending on where in the process.





Budget Updates

- 💧 DC Water evaluated information from the first three months of the project and proposes scope changes informed by lessons learned
- 💧 Ordering needed meters and MTUs for the full project scope would result in an unanticipated cost of up to \$845k
 - Historically consumed assets were not updated in Maximo, inhibiting our understanding of the required need
 - Once inventory was centralized to DC Water sites and a physical inventory was performed, it was determined that there was a gap between Maximo available assets and physical hardware - requiring the additional purchases
- 💧 Contract assumed base rate at 70% and time & material at 30%. To date, the quantity of time and material jobs is projected to be consistent with the forecast; however costs are higher than expected
 - During our initial budget request, UMS was not yet on-site and had not had the opportunity to visit locations and provide T&M quotes
 - We knew infrastructure was going to be challenging – but as illustrated in the photos, the conditions in the field are worse than anticipated and more costly to repair, at times requiring a full service line replacement
- 💧 Performance payout of missed incentive targets are offsets to the cost



Budget Updates

Achievement of initial expected outcomes, 11k installations and 98% small meter transmission rate would exceed the initial project budget of \$3.2 million (\$2.9 million approved + \$.3 million in ongoing), so we propose to adjust target and transfer funds from the ongoing meter replacement program to cover the \$64k overage

Scope Achieved	100%	83%	73%
Total Scope – 11,436	11,436	9,506	8,356
Original	\$3191.1k		
Forecasted cost	\$10601.4k	\$4199.7k	\$3254.7k
Hardware Purchase	\$845.1k	\$538.9k	\$357.0k
Internal Crew Costs	\$2977.5k	\$907.3k	\$786.3k
WMP + UMS performance adjustment	\$741.0k	\$572.3k	\$418.0k
Installation + T&M Cost	\$5852.8k	\$2004.0k	\$1520.7k
Emergency Plumbing, Mobilization, Ancillary	\$185.0k	\$177.3k	\$172.7k
Variance from plan	-\$7410.3k	-\$1008.6k	-\$63.6k



Inventory Management Improvement

Actions Taken to Date

- Centralized all assets to the DC Water locations, previously located at SGS, Sensus, Mueller, Bryant Street, and Blue Plains
- Conducted baseline physical inventory and meter specific mapping of material transitioned to the Blue Plains UMS team
- Established weekly inventory management meetings with Materials Management

Customer Service and Materials Management meter and MTU inventory management initiatives in progress:

- Reconciliation – align mismatched meter and MTU data across the systems: Maximo (asset management), VertexOne SAP (billing) and Aclara Star (automated meter reading)
- Implement serialized asset tracking with the new ERP system, planned for Fall implementation
- Transition ordering and receiving activities to Materials Management for all meter and MTU asset purchases, including coordination with other organizations
- Establish reorder points – determine appropriate stock levels by size/manufacturer and set up automated reordering points
- Partner with other key efforts to improve handoffs (e.g. Lead Replacement, Permits, and Water Operations projects)



Next Steps



Path Forward

To maximize outcomes for our customers and DC Water, project objectives will be modified to allow reduce installs and extend the timeline for completions as follows:

- Substantial completion anticipated May 29
- Time and materials clean-up: Anticipated June 30

	Original Plan	Proposed Plan
Meter/MTU replaced	11,000	8,300 - 9,500
Small Meter transmission rate	98%	94%

Limit UMS time and materials work to those with greatest outcomes, reducing total installations by about 2,700 to 1,500 locations

- For example, we will avoid tearing down trees and addressing customer infrastructure locations that will require service line replacement or substantial investment. This will be done on a case by case basis with a consideration of revenue impact. In addition, we will look at how the work could be combined with other program initiatives in the future versus handling now (e.g. DCHA site scheduled for demolition or lead service line potentially being upgraded).

Longer term, we will explore:

- Options for DC Water to make customer repairs and apply costs to customer bills (some customers have requested this)
- Flat-rate billing under specific conditions (e.g., tree roots)
- Holding customers accountable, where reasonable and possible, to make necessary repairs via disconnects, main shuts, and potentially new rates/fees
- Coordination of these locations with other DC Water groups, such as existing main shuts, lead service projects, and permitting

Attachment E

FY 2020 Proposed RRC Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department
1. Propose and Establish Retail Rates for FY 2021 & FY 2022			
a. Present FY 21 & FY 22 Budget to Board	January 2, 2020	√	EVP F&P
b. Present FY 21 & FY 22 Proposed Rates, Charges & Fees to RRC	January 28, 2020	√	Rates and Revenue
c. RRC recommendation on Proposed FY 21 & FY 22 Rates, etc.	February 25, 2020		Rates and Revenue
d. Board approves Notice of Proposed Rulemaking (NOPR) for Proposed FY 21 & FY 22 Rates, etc.	March 5, 2020		Legal Affairs
e. Publish NOPR in D.C. Register for Proposed Rates, etc.	March 20, 2020		
f. Outreach and Public Comment Period	March 20 – June 13, 2020		Marketing & Comm.
g. Public Hearing	June 10, 2020		Board of Directors
h. Public Hearing Record Closes	June 13, 2020		Board Secretary
i. Present final FY 21 & FY 22 Rates, etc. to RRC for recommendation to Board	June 23, 2020		Rates and Revenue
j. Board approves Notice of Final Rulemaking (NOFR) for FY 21 & FY 22 Rates, Charges & Fees	July 2, 2020		
k. Publish NOFR in D.C. Register for Amended Rates, etc.	July 17, 2020		Legal Affairs
l. Amended Rates, etc. Go-Live	October 1, 2020 (FY 2021) October 1, 2021 (FY 2022)		Rates and Revenue
2. 2021 Cost of Service Study (COS) for Water, Sewer and CRIAC			
a. Present COS to RRC	November 19, 2019	√	Rates and Revenue
b. Present final COS to Board	March 5, 2020		
3. Independent Review of Rate Structure and Customer Assistance Programs (CAP)			
a. Presentation to RRC on Independent Review of Rate Structure and Customer Assistance Programs (CAP)	November 19, 2019	√	Rates and Revenue
b. Present final Independent Review of Rate Structure and Customer Assistance Programs (CAP) to Board	March 5, 2020		

Attachment E

FY 2020 Proposed RRC Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department
4. Amend Regulations for Engineering Review and Miscellaneous Fees			
a. Present COS Update and Recommendation on Proposed Amendment to Miscellaneous Fees & Charges to RRC	October 22, 2019	√	Rates & Revenue
b. Board Approval of Notice of Proposed Rulemaking (NOPR) to Amend Regulations for Engineering Review and Miscellaneous Fees	November 7, 2019	√	
c. Publish NOPR in D.C. Register	November 22, 2019	√	Legal Affairs
d. Public Comment Period	November 23 – December 23, 2019	√	Board Secretary
e. RRC Final Recommendation to Approve Amendment of Regulations for Engineering Review and Miscellaneous Fees	January 28, 2020	√	Rates & Revenue
f. Board Approval of Notice of Final Rulemaking (NOFR)	February 6, 2020	√	
g. Publish NOFR in D.C. Register	February 21, 2020		Legal Affairs
h. Amend Regulations for Engineering Review and Miscellaneous Go-Live	March 2, 2020		Rates and Revenue
5. CAP2 Outreach Plan Update			
a. CAP2 Outreach Plan Update	Monthly, as needed		Office of Marketing and Communications (OMAC)
6. Delinquent Accounts			
a. Soldiers Home Negotiations	Monthly, as needed		Legal Affairs
7. Rate Stabilization Fund			
a. Rate Stabilization Fund	Monthly, as needed		Rates & Revenue

* Dates subject to change



Attachment F

**D.C. WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS
SPECIAL RETAIL WATER & SEWER RATES
COMMITTEE MEETING**

**Tuesday, March 24, 2020; 9:30 a.m.
AGENDA**

Call to Order	Committee Chairman
Monthly Updates	Chief Financial Officer
Committee Workplan	Chief Financial Officer
Agenda for April 28, 2020 Committee Meeting	Committee Chairman
Other Business	Chief Financial Officer
Adjournment	

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