



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

DC Retail Water and Sewer Rates Committee

125 O Street SE, Washington, DC 20003

*Tuesday, March 26, 2019
9:30 a.m.*

1. **Call to Order** **Rev. Kendrick Curry, Vice Chairperson**
2. **Proposed FY 2020 Rates, Charges and Fees (Attachment A)** **Matthew Brown**
3. **Percent Wastewater in Combined Sewer Overflow (CSO) (Attachment B)** **Carlton Ray**
4. **Action Items (Attachment C)** **Matthew Brown**
 - **Proposal of FY 2020 Retail Rates, Charges and Fees (Action Item 1)**
 - **Proposal of Ten Year Financial Plan FY 2019 – FY 2028 (Action Item 2)**
5. **DC Retail Water and Sewer Rates Committee Workplan** **Matthew Brown**
 - **FY 2019 Proposed DC Retail Rates Committee Workplan (Attachment D)**
6. **Agenda for April 23, 2019 Committee Meeting (Attachment E)**... **Rev. Kendrick Curry, Vice Chair**
7. **Other Business** **Matthew Brown**
8. **Executive Session***
9. **Adjournment**

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



Proposed FY 2020 Rates, Charges and Fees
Presentation to Retail Rates Committee, March 26, 2019

District of Columbia Water and Sewer Authority



Blue Plains Advanced Wastewater Treatment Plant



Overview of Rates and Revenue

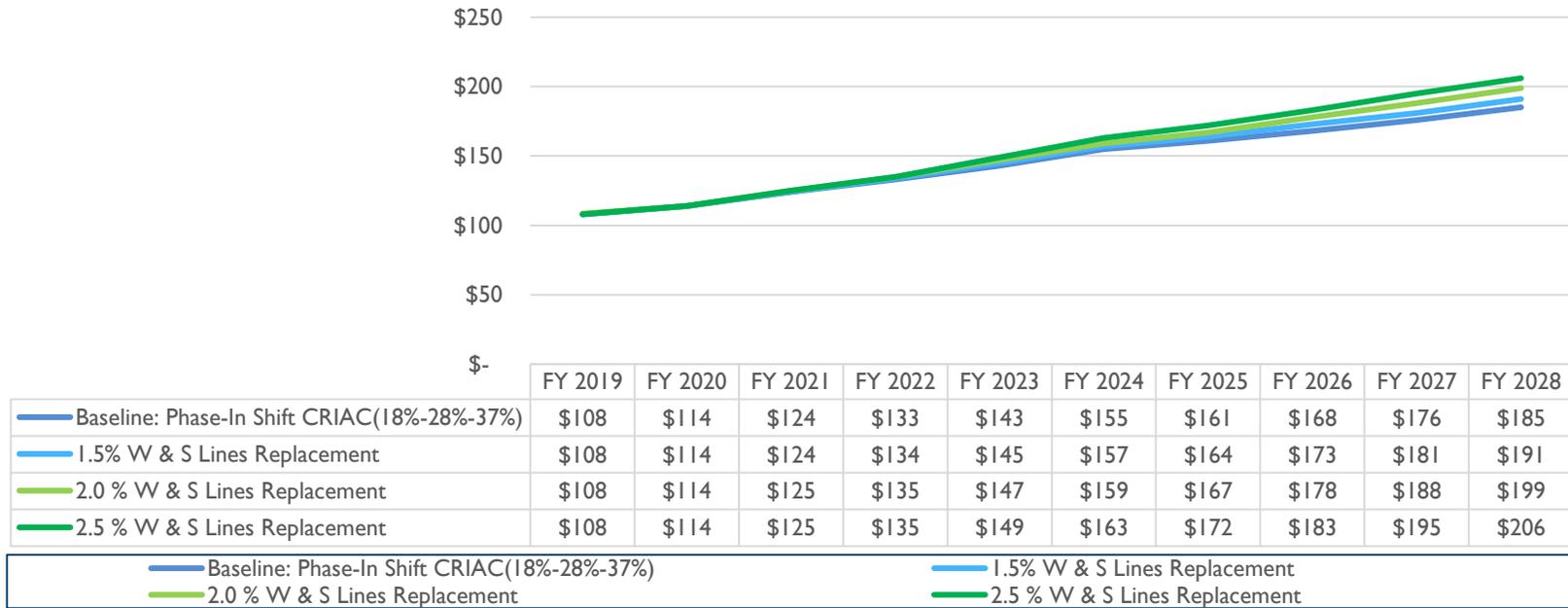
- Overall household charges increase 5.7%, the same as previously forecasted for FY2020
- Proposed change in the way that Clean Rivers costs are recovered
 - \$122.0 million in FY2020 for Clean Rivers; after 18% CRIAC shift, \$99.1 million for Clean Rivers and \$22.9 million for sewer volumetric
 - Proposal 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



Overview of Rates and Revenues

- **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



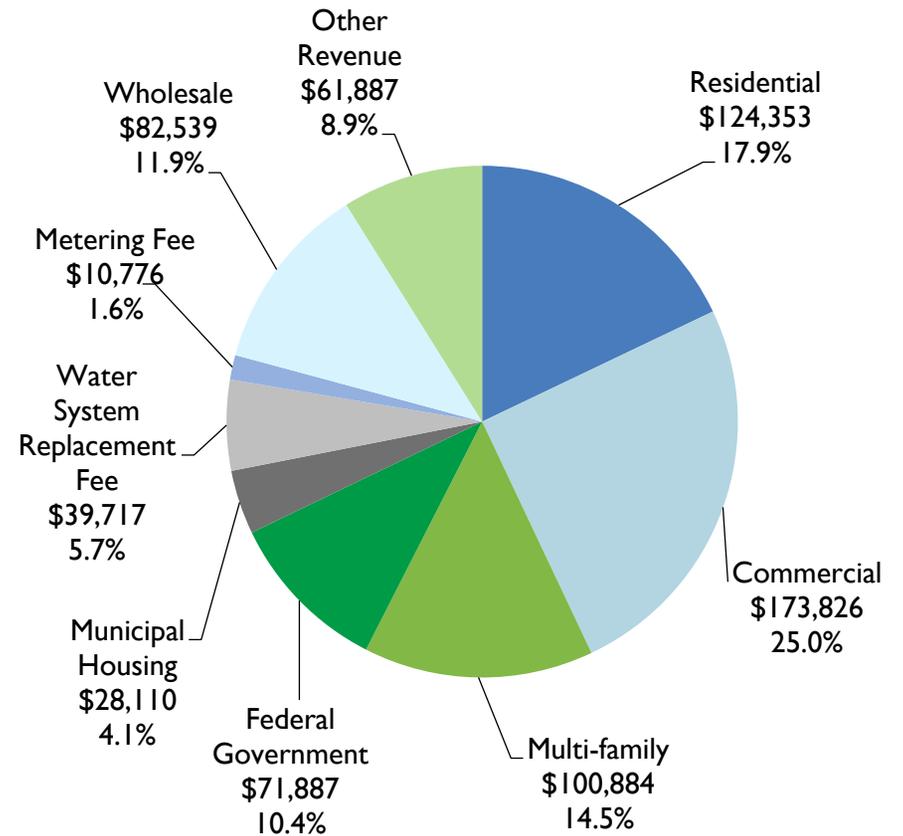
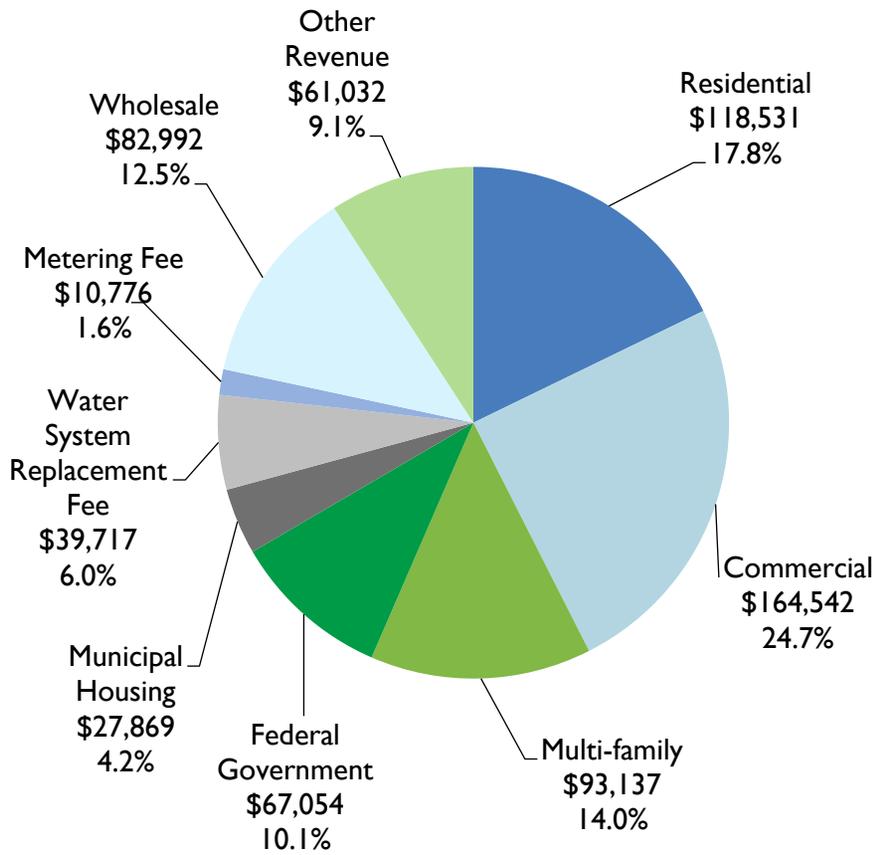


FY 2019 vs. FY 2020 Operating Revenues

Revised FY 2019
\$665,650

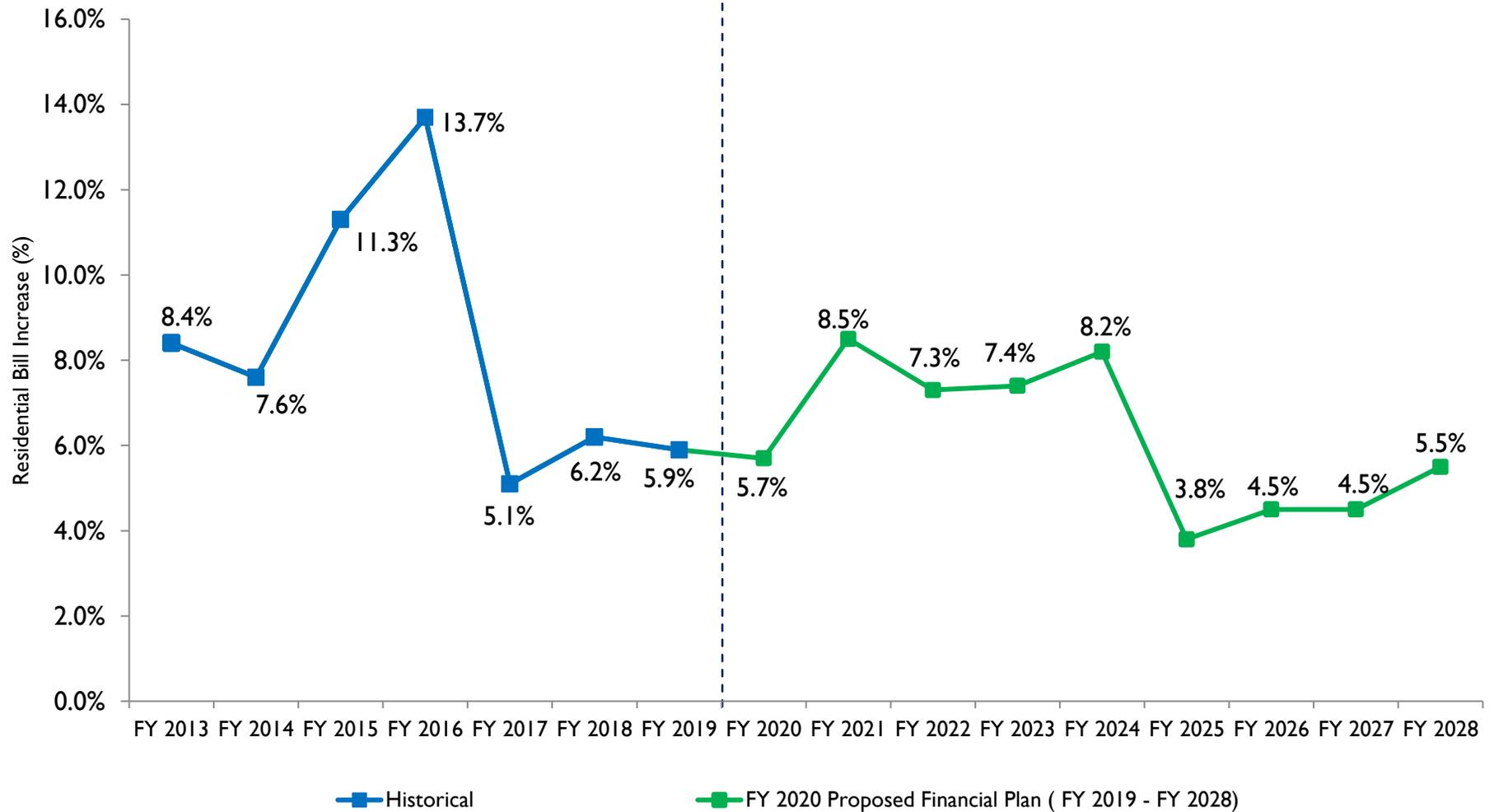
(\$000's)

Proposed FY 2020
\$693,979



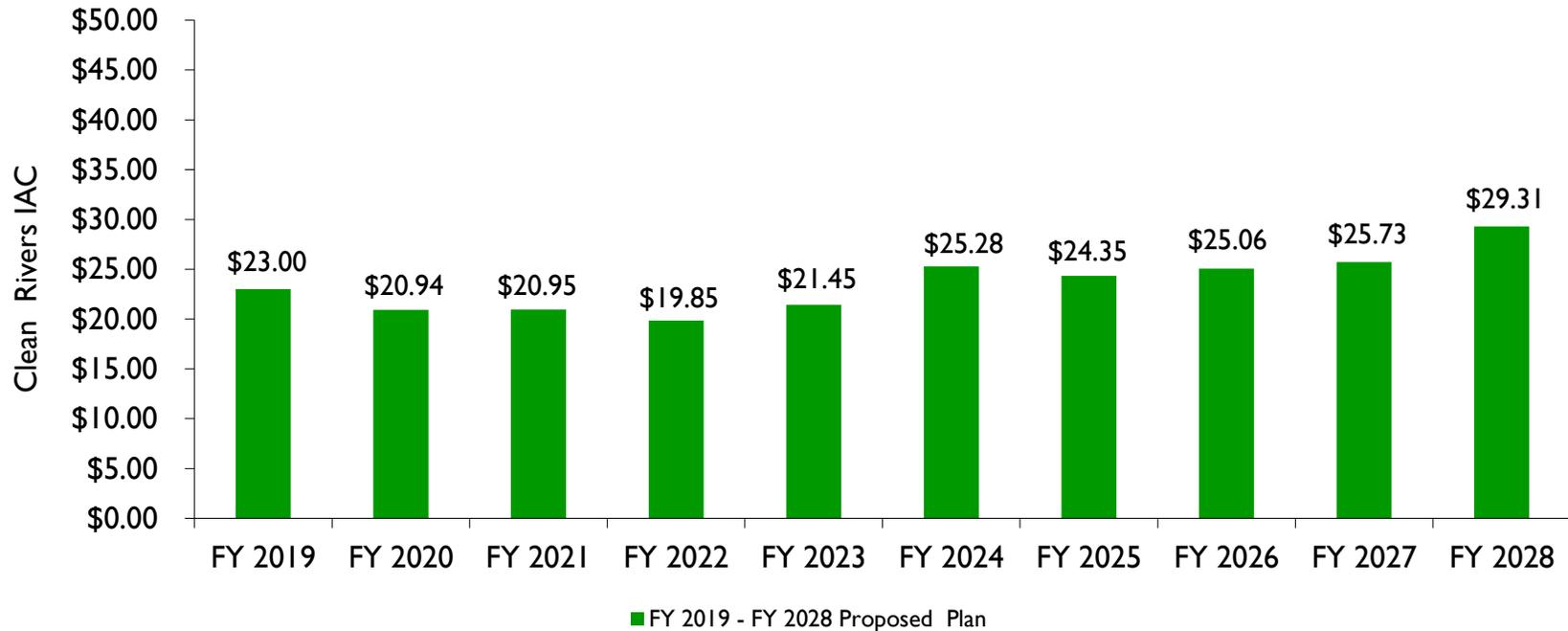


Historic and Projected Combined Household Increases for Residential Customers





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 House of Worship (High Con)	Sample House of Worship (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

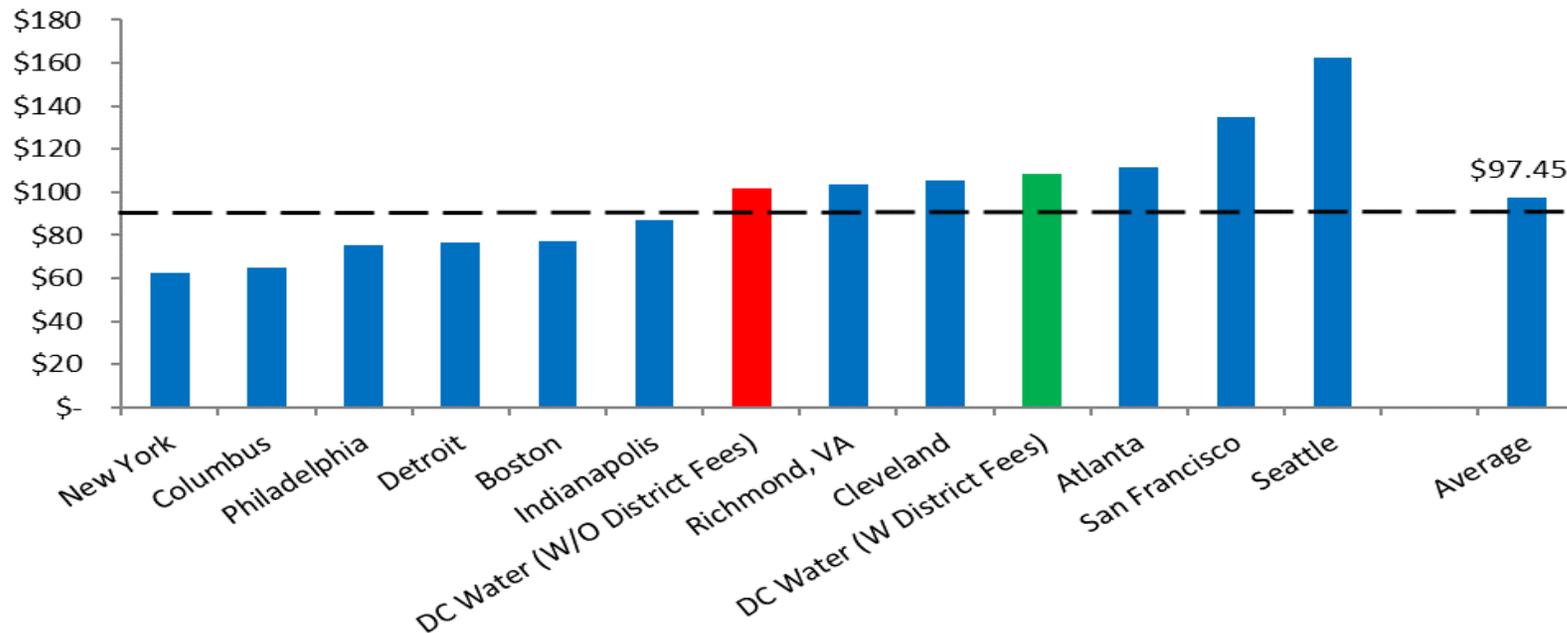
Alternative 2: 37% of CRIAC Shift to Sewer Volumetric, No Phase-in

Monthly	Average Household	Average Multi-Family	Sample Commercial	Sample Cemetery	Sample House of Worship (High Con)	Sample House of Worship (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 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 ⁽¹⁾	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
Subtotal DC Water Rates & Charges		\$ 101.43	\$ 107.48
Increase / Decrease		\$ 5.96	\$ 6.05
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 3.10	\$ 3.16
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	1.12	1.18
District of Columbia Stormwater Fee ⁽⁴⁾	ERU	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.89	\$ 7.01
Total Amount		\$ 108.32	\$ 114.49
Increase / Decrease Over Prior Year		\$ 6.02	\$ 6.17
Percent Increase in Total Bill		5.9%	5.7%
Less: CAP Discount (4 Ccf per month) ^{(1), (2)}		(45.36)	(50.60)
Water System Replacement Fee (WSRF) ⁽³⁾		(6.30)	(6.30)
Clean Rivers IAC ⁽⁵⁾		(11.50)	(10.47)
Total Amount Appearing on DC Water Bill		\$ 45.16	\$ 47.12
Increase / Decrease Over Prior Year		\$ 1.99	\$ 1.96
CAP Customer Discount as a Percent of Total Bill		-58.3%	-58.8%

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

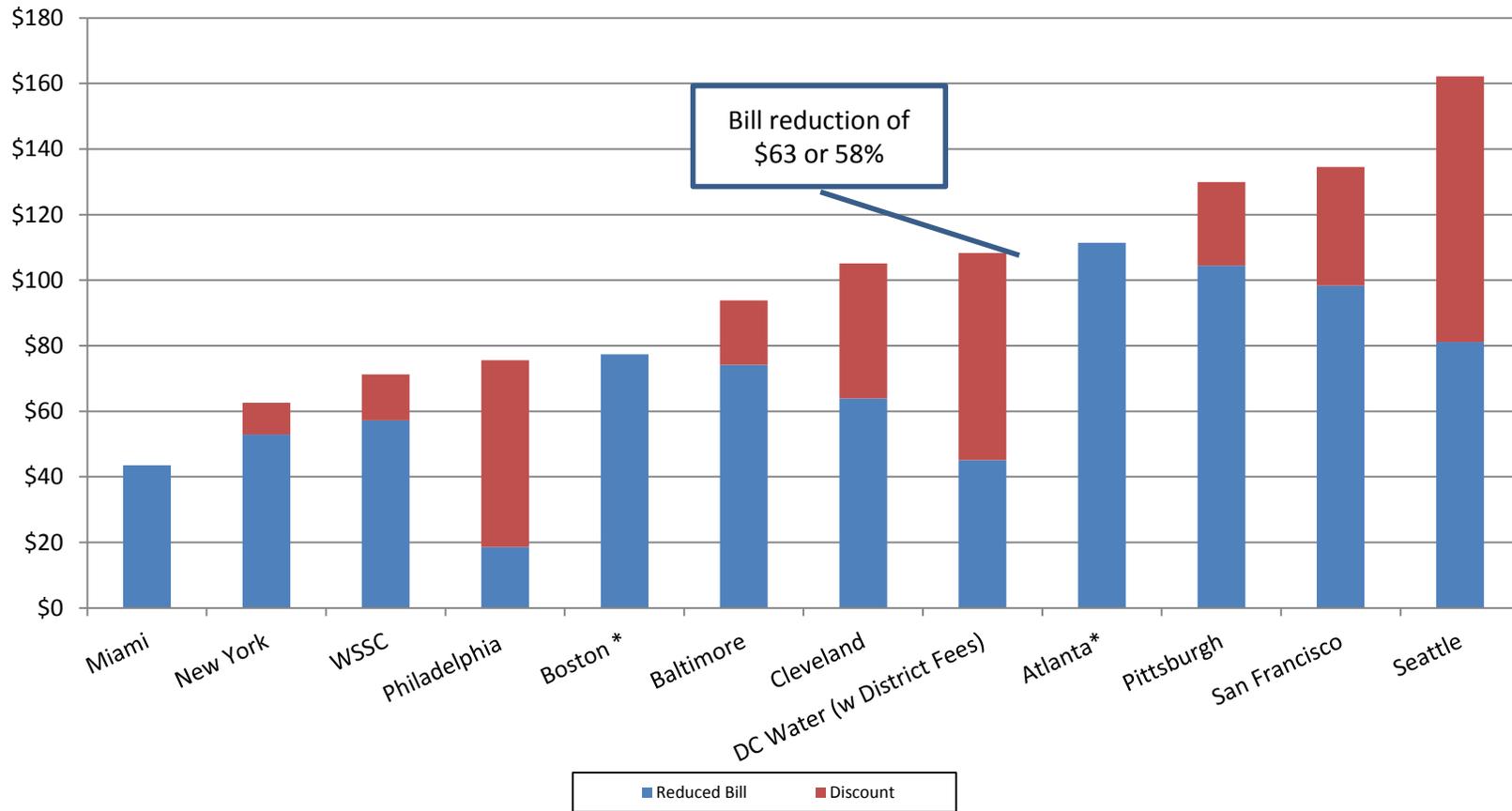
(2) Expansion of CAP program in FY 2009 to first 4 Ccf of Water and Sewer and to first 4 Ccf of PILOT and ROW in FY 2011

(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

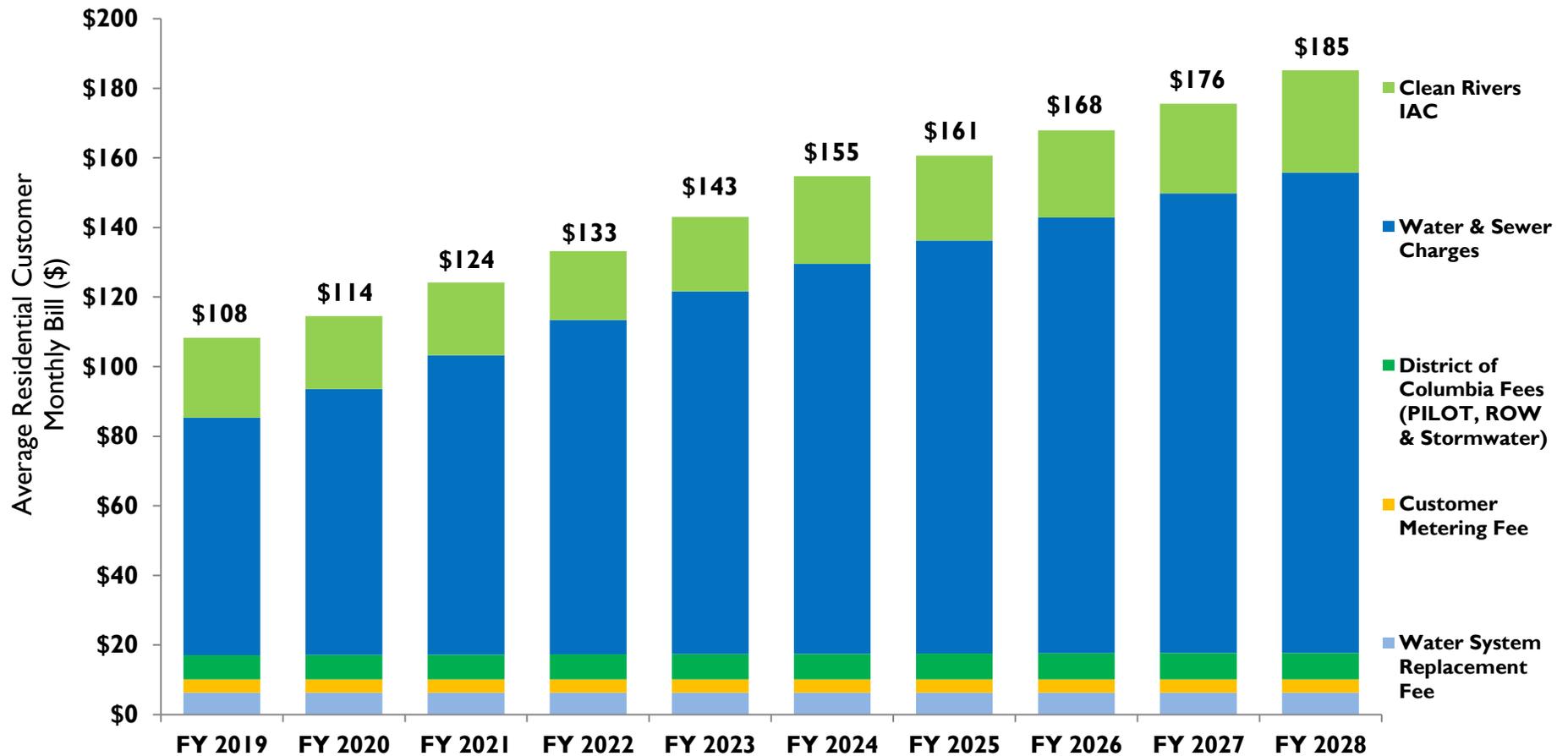


* Boston provides a 30% discount on water bills for senior citizens or fully disabled customers with no income eligibility requirement. Atlanta provides a 30% discount on bills for seniors citizens who meet income eligibility requirement.



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

(\$000's)	Revised	Proposed	FY 2020 vs FY 2019	
	FY 2019	FY 2020	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%



Customer Impacts Water & Sewer Lines Replacement (18%-28%-37%)

Residential – Avg. 6.2 Ccf / IERU Baseline \$5.0B Phase-In 18%-28%-37%	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%

Multi-family – Avg. 92.6 Ccf / 6.3 ERU Baseline \$5.0B Phase-In 18%-28%-37%	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	\$1,837	\$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%

Commercial – Avg. 114 Ccf / 13.1 ERU Baseline \$5.0B Phase-In 18%-28%-37%	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%



CRIAC Discount

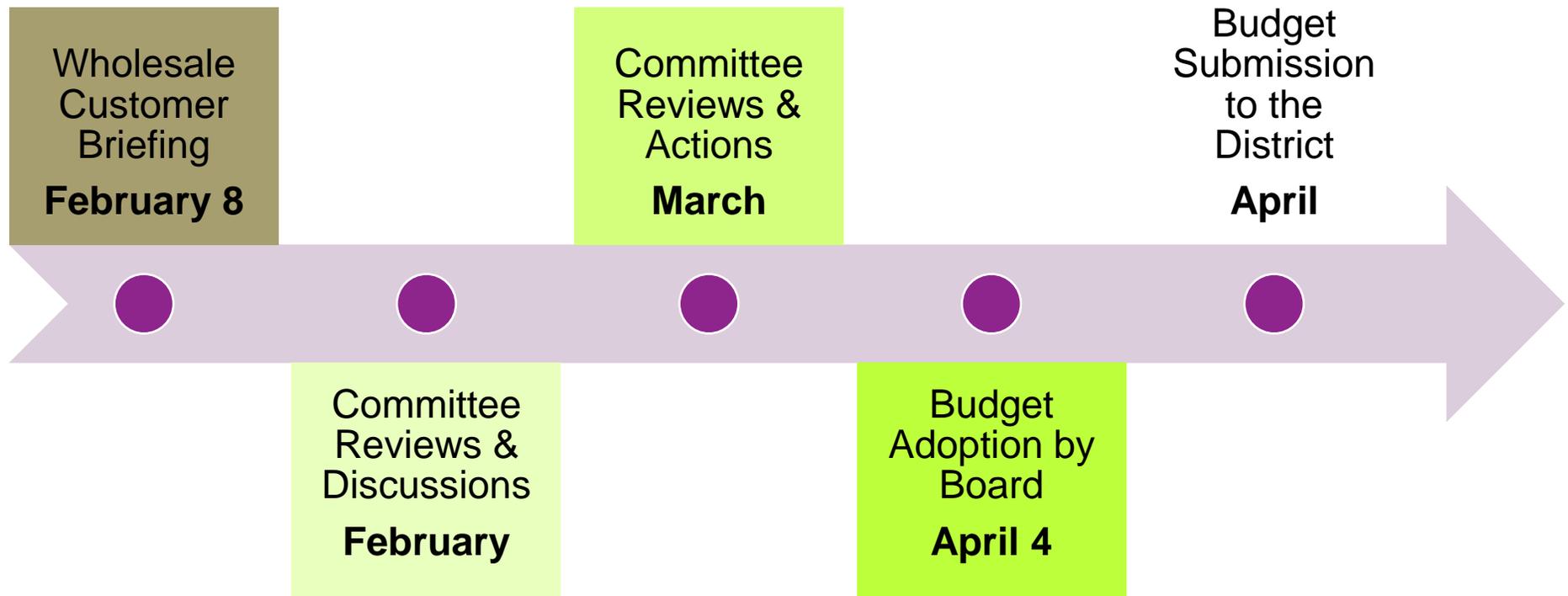
- Resolution #13-80 – DC Water established the Clean Rivers Impervious Surface Area Charge (CRIAC) Incentive Discount Program
 - 4% maximum incentive credit
 - Concern about ensuring that DC Water has sufficient resources to pay mandated Clean Rivers costs

- 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: Budget Review





District of Columbia Water and Sewer Authority
David L. Gadis, CEO and General Manager

Briefing on:

Percent Wastewater in CSO

Briefing for:

DC Retail Water and Sewer Rates Committee

March 26, 2019



Purpose and Agenda

- Purpose: estimate % wastewater in CSO for purpose of recovering portion of costs for Clean Rivers using volumetric rather than IAC

- Methods and Results
 - Methods 1 and 2 – pollutant concentration
 - Methods 3 and 4 – volume
 - Method 5 – tracer

- Conclusion

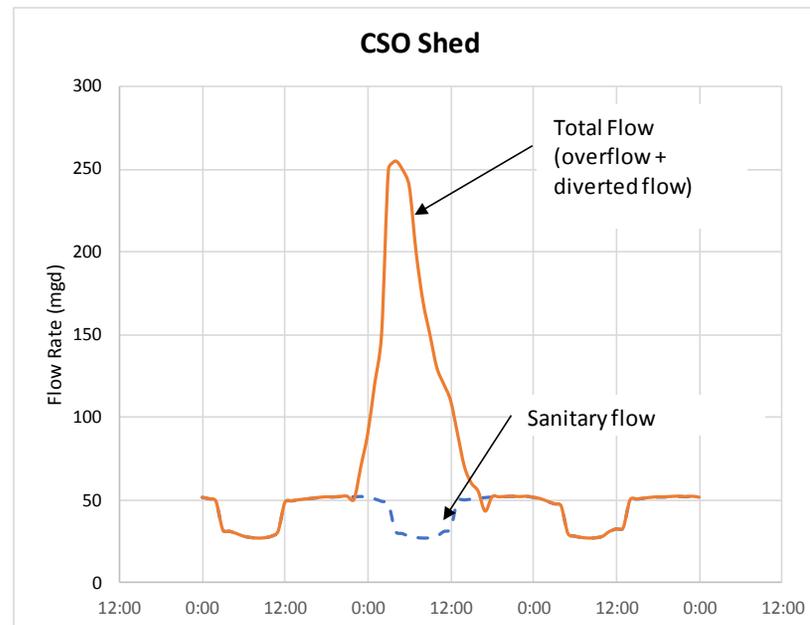


Methods Identified

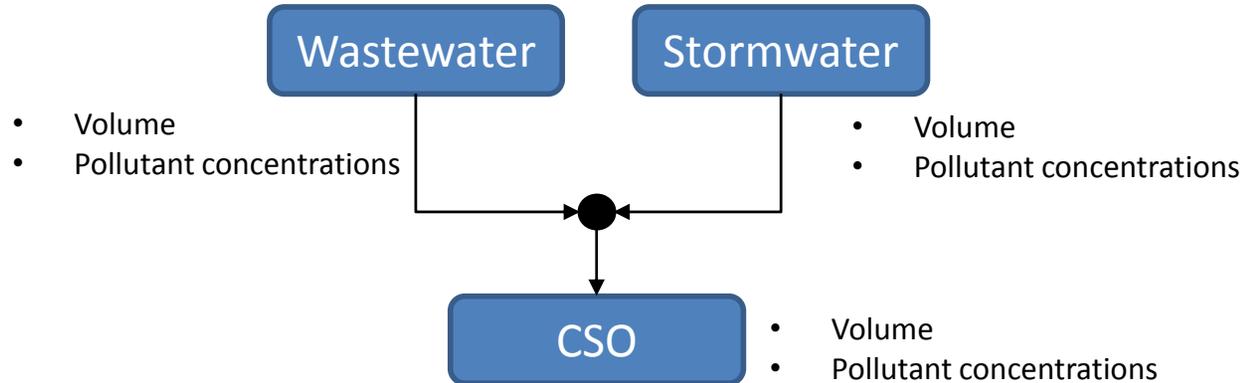
Method	Description
1	Pollutant concentration from Long Term Control Plan (LTCP)
2	Pollutant concentrations from LTCP and partially complete Anacostia Tunnel System
3	Volume, using average year and LTCP
4	Volume, using partially complete Anacostia Tunnel system

The challenge:

- CSO flows are variable
- Sanitary component changes with time
- Stormwater component changes with time
- Different for each event
- Different for each sewershed



Method 1 and 2 Pollutant Concentrations Approach



Selected Pollutants
Total suspended solids (TSS)
Biochemical oxygen demands (BOD)
Total nitrogen (TP)
Total phosphorus (TP)

■ **Concept: mass balance around each pollutant**

Volume: $WW_{vol} + SW_{vol} = CSO_{vol}$

Pollutant Mass: $WW_{conc} \times WW_{vol} + SW_{conc} \times SW_{vol} = CSO_{conc} \times CSO_{vol}$

WW = wastewater

SW = stormwater

CSO = combined sewer overflow

_{vol} = volume

_{conc} = pollutant concentration

By combining and rearranging the above equations, wastewater volume can be defined as a percentage of CSO volume:

$$WW_{vol} / CSO_{vol} = (CSO_{conc} - SW_{conc}) / (WW_{conc} - SW_{conc})$$

Method 1 and 2 Pollutant Concentration Data Available

Item	Data Source	TSS (mg/L)	CBOD (mg/L)	TP (mg/L)	TKN (mg/L)
CSO	LTCP	137.4	40.4	1.0	4.0
CSO	2018 ECF Influent Sampling (outliers retained)	138.3	33.2	1.2	9.1
CSO	2018 ECF Influent Sampling (outliers removed)	109.8	32.2	1.0	7.7
Storm Water	LTCP	93.5	18.9	0.4	2.2
Storm Water	DOEE MS4 Annual Reports	23.8	N/A	0.3	2.3
Wastewater	2000 BP Influent Sampling	139.8	125.7	3.3	24.3
Wastewater	2016 BP Facility Plan (Tbl 3D-1)	209.1	171.4	4.3	37.0
Wastewater	2018 BP Influent Sampling (outliers and wet weather retained)	233.0	158.3	3.9	41.7
Wastewater	2018 BP Influent Sampling (outliers removed)	231.8	165.1	3.9	44.0
Wastewater	2018 BP Influent Sampling (outliers and wet weather removed)	237.1	168.4	4.1	45.0

Method 1 and 2 Pollutant Concentrations Results

Row	Event Mean Concentration Data Source			Results (WW as % of CSO)				
	Combined Sewage	Stormwater	Wastewater	TSS	CBOD	TP	TKN	Average
1	LTCP	LTCP	2000 BP Influent Sampling*	94.8%	20.1%	20.7%	8.1%	35.9%
2	LTCP	DOEE MS4	2000 BP Influent Sampling*	97.9%	N/A	23.3%	7.7%	43.0%
3	LTCP	LTCP	2016 Blue Plains Facility Plan (Tbl 3D-1)	38.0%	14.1%	15.4%	5.2%	18.2%
4	LTCP	DOEE MS4	2016 Blue Plains Facility Plan (Tbl 3D-1)	61.3%	N/A	17.5%	4.9%	27.9%
5	2018 ECF Influent Sampling (outliers removed)	LTCP	2018 BP Influent Sampling (outliers and wet weather removed)	11.4%	8.9%	16.2%	12.9%	12.3%
6	2018 ECF Influent Sampling (outliers removed)	DOEE MS4	2018 BP Influent Sampling (outliers and wet weather removed)	40.3%	N/A	18.4%	12.6%	23.8%
7	2018 ECF Influent Sampling (outliers removed)	LTCP	2016 Blue Plains Facility Plan (Tbl 3D-1)	14.1%	8.7%	15.4%	15.8%	13.5%
8	2018 ECF Influent Sampling (outliers removed)	DOEE MS4	2016 Blue Plains Facility Plan (Tbl 3D-1)	46.4%	N/A	17.5%	15.6%	26.5%

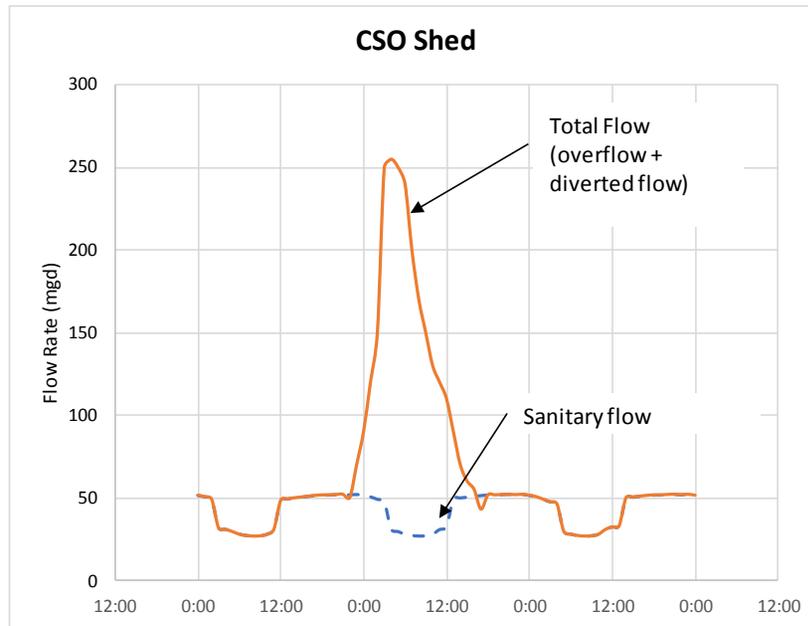
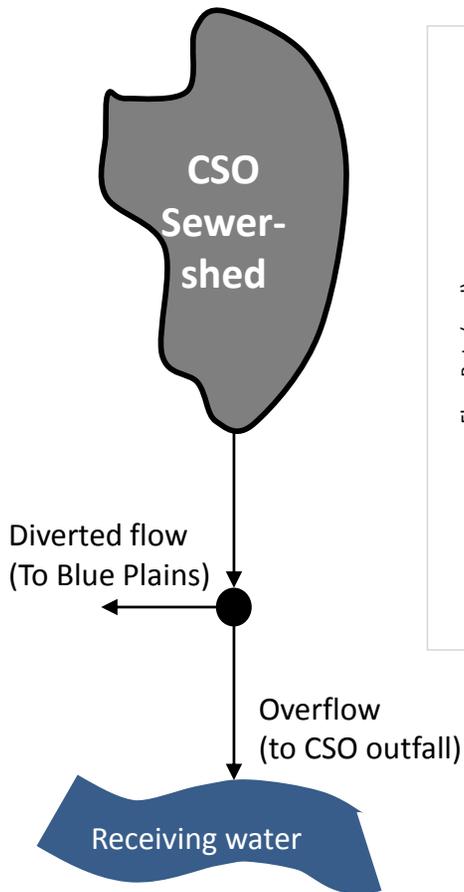
- CSO – LTCP data most comprehensive. 2018 data was wettest year on record, for part of system and based on new operations and sampling
- Separate stormwater – LTCP data is based on event mean concentrations. DOEE data is a geometric mean which is not appropriate for mass-type calculations
- Wastewater – 2016 Facility Plan addresses challenges with influent sampling and variability and is considered to be the most reliable

Method 3 – Volume using LTCP Model Approach

Item	Approach Used
Collection system model	<ul style="list-style-type: none"> • Same collection system model used to developed LTCP (MikeUrban) • Used Scenario C3, representing after inflatable dams and PS rehab. Remaining CSOs in this configuration are handled by Clean Rivers Project
Climate period	<ul style="list-style-type: none"> • Average year- rainfall in years 1988, 1989, 1990 • Same basis as DOEE and EPA’s water quality standard determination for the LTCP
Dry Weather Flow	<ul style="list-style-type: none"> • System at full buildout with DC and suburban flows at 370 mgd dry weather flow (i.e. at IMA allocation) • Same basis as LTCP
TN/WW Plan and Blue Plains capacity	<ul style="list-style-type: none"> • Blue Plains complete treatment at 740 mgd/511 mgd before TN/WW Plan • Tunnel components addressing reduction in flows are already billed at IMA 370 split (volumetric) and are not paid by IAC



Method 3 – Volume using LTCP Model Approach



- Determine dry weather flow (sanitary) from each subshed
- Calculate total flow (diverted flow + overflow) during CSO events only
- Calculate % wastewater assuming completely mixed
- Do this for each CSO and each event in 3 year period and aggregate together

Parameter	Percent Wastewater
Cumulative (Flow-Weighted)	37.3%



Method 5 – Tracer Study using Model

- New approach recently identified
- Modern models allow ability to insert a non- reactive tracer in sanitary flows (e.g. 100 mg/L)
- Model calculates concentration of tracer at downstream locations (e.g. tunnel)
- Use concentration to estimate % wastewater in tunnel
- Has not been utilized before
- Requires extensive testing and time
- Estimated completion late spring 2019

Conclusion

- Phase in shift

- Volumetric methods typically more common than pollutant-based methods

- Benefits
 - Gradual transition
 - Allows time to consider results of 5th approach (tracer) and make adjustments if needed

DC Retail Water and Sewer Rates Committee

Action Items

1. Proposal of FY 2020 Retail Rates, Charges and Fees
(Action item 1)
2. Proposal of Ten Year Financial Plan FY 2019 – FY 2028
(Action Item 2)

ACTION ITEM 1

FY 2020 Rates, Charges and Fees (Effective October 1, 2019)

1. Management recommends the following Retail Rates, Charges and Fees for FY 2020:

Water Service Rates

- A change in the rate for metered water services:

Metered Water Services

	FY 2019		FY 2020		FY 2020 vs. FY 2019 Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers - (0 – 4)	\$2.91	\$3.89	\$3.06	\$4.09	\$0.15	\$0.20
Residential customers – (> 4)	\$3.90	\$5.21	\$4.10	\$5.48	\$0.20	\$0.27
Multi-Family customers	\$3.37	\$4.51	\$3.54	\$4.73	\$0.17	\$0.22
Non-Residential customers	\$4.05	\$5.42	\$4.25	\$5.68	\$0.20	\$0.26

Sewer Service Rates

- An increase in the rate for metered sewer services:

Metered Sewer Services

	FY 2019		FY 2020		FY 2020 vs. FY 2019 Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers	\$7.75	\$10.36	\$8.89	\$11.89	\$1.14	\$1.53
Multi-Family customers	\$7.75	\$10.36	\$8.89	\$11.89	\$1.14	\$1.53
Non-Residential customers	\$7.75	\$10.36	\$8.89	\$11.89	\$1.14	\$1.53

- A decrease in the annual Clean Rivers Impervious Area Charge (CRIAC) from \$276.00 to \$251.28 per Equivalent Residential Unit (ERU) in FY 2020.

The charge per ERU will be billed monthly at:

Clean Rivers Impervious Area Charge (CRIAC)

	FY 2019	FY 2020	FY 2020 vs. FY 2019
	ERU	ERU	Incr. / (Decr.)
	ERU	ERU	ERU
Residential customers	\$23.00	\$20.94	(\$2.06)
Multi-Family customers	\$23.00	\$20.94	(\$2.06)
Non-Residential customers	\$23.00	\$20.94	(\$2.06)

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

- An increase in the **Right-of-Way Occupancy Fee** for FY 2020:
ROW

	FY 2019		FY 2020		FY 2020 vs. FY 2019	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers	\$0.18	\$0.24	\$0.19	\$0.25	\$0.01	\$0.01
Multi-Family customers	\$0.18	\$0.24	\$0.19	\$0.25	\$0.01	\$0.01
Non-Residential customers	\$0.18	\$0.24	\$0.19	\$0.25	\$0.01	\$0.01

- An increase in the **Payment-in-Lieu of Taxes Fee** for FY 2020:

PILOT

	FY 2019		FY 2020		FY 2020 vs. FY 2019	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Incr. / (Decr.)	
	Ccf	1,000 Gal.	Ccf	1,000 Gal.	Ccf	1,000 Gal.
Residential customers	\$0.50	\$0.67	\$0.51	\$0.68	\$0.01	\$0.01
Multi-Family customers	\$0.50	\$0.67	\$0.51	\$0.68	\$0.01	\$0.01
Non-Residential customers	\$0.50	\$0.67	\$0.51	\$0.68	\$0.01	\$0.01

**District of Columbia Clean Rivers
Impervious Area Charge Incentive Program**

- Proposal to amend the Clean Rivers IAC Incentive Program Discount from 4% to 20%. Cost of the credits will be applied to the rate of the associated customer category. Effective date October 1, 2019.

ACTION ITEM 2

Proposed Ten Year Financial Plan FY 2019 – FY 2028

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)

<i>OPERATING</i>	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
<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	-	-	-	-	-	-	-	-	-
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 ⁽¹⁾	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 ⁽²⁾	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 ⁽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		\$ 101.43	\$ 107.48	\$ 117.11	\$ 126.09	\$ 135.84	\$ 147.46	\$ 153.24	\$ 160.47	\$ 168.03	\$ 177.55
Increase / Decrease		\$ 5.96	\$ 6.05	\$ 9.63	\$ 8.98	\$ 9.75	\$ 11.62	\$ 5.78	\$ 7.23	\$ 7.56	\$ 9.52
Percent Increase in DC Water Portion of Bill		6.2%	6.0%	9.0%	7.7%	7.7%	8.6%	3.9%	4.7%	4.7%	5.7%
District of Columbia PILOT Fee ⁽¹⁾	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 ⁽¹⁾	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 ⁽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		\$ 6.89	\$ 7.01	\$ 7.07	\$ 7.14	\$ 7.20	\$ 7.32	\$ 7.38	\$ 7.44	\$ 7.51	\$ 7.57
Total Amount Appearing on DC Water Bill		\$ 108.32	\$ 114.49	\$ 124.18	\$ 133.23	\$ 143.04	\$ 154.78	\$ 160.62	\$ 167.91	\$ 175.54	\$ 185.12
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
Percent Increase in Total Bill		5.9%	5.7%	8.5%	7.3%	7.4%	8.2%	3.8%	4.5%	4.5%	5.5%

(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

	Units		FY 2019	Proposed	FY 2020
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

Attachment D

FY 2019 Proposed RRC Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department
1. Propose and Establish Retail Rates for FY 2020			
a. FY 2020 Budget presentation to Board	February 7, 2019	√	Chief Financial Officer
b. FY 2020 Proposed Rates, Charges & Fees presented to RRC	February 28, 2019	√	Rates and Revenue
c. RRC recommendation on proposed FY 2020 rates	March 26, 2019		Rates and Revenue
d. Board approves proposed FY 2020 rates	April 4, 2019		
e. Publish Proposed Rates and Fees in <i>D.C. Register</i>	April 19, 2019		Legal Affairs
f. Public Comment	April 19 – May 20, 2019		Marketing & Comm.
g. Public Hearing	May TBD, 2019		
h. Public Hearing Record Closes	May 20, 2019		Board Secretary
i. RRC final recommendation to approve FY 2020 rates	June 25, 2019		Rates and Revenue
j. Board approves FY 2020 rates	July 11, 2019		
k. Publish Final Rates and Fees in <i>D.C. Register</i>	July 26, 2019		Legal Affairs
l. Rates Go-Live	October 1, 2019 (FY 2020)		Rates and Revenue
2. Conduct a Review of the Impact of the CRIAC on Various Customer Segments (on-going) <i>including low-income customers who do not qualify for CAP, non-profit organizations and small businesses owners</i>			
a. CRIAC overview to RRC	November 15, 2016	√	Rates and Revenue
b. Discuss the CRIAC restructuring of various segments including low-income customers who do not qualify for CAP, non-profit, charitable and religious organizations and small businesses.	February 21, 2017	√	
c. Comparison of how other utilities with impervious area charges segment non-residential customers and provide discounts/credits/ exemptions	November 14, 2017	√	
d. Stakeholder Alliance “Clean Rivers Reformulation Strategies” meeting	September 20, 2018	√	
	October 11, 2018	√	
	December 13, 2018	√	
	January 10, 2019	√	

Attachment D

FY 2019 Proposed RRC Committee Workplan			
Objective/ <i>Activities</i> /Task	Date of Activity	Completed	Responsible Department
3. Delinquent Accounts			
a. <i>Soldiers Home Negotiations</i>	Monthly, as needed		Legal Affairs
4. Establish CAP2 Program and Rules to Implement District CAP3 and CRIAC Nonprofit Relief Programs to Mitigate Impacts of DC Water Rates, Fees and Charges on Low-Income Residents Currently not Eligible for CAP and District of Columbia Identified Customers			
a. <i>Regulations to Establish CAP2 Program and Rules for Implementing District CAP3 and CRIAC Nonprofit Relief Programs</i>			
1) Presentation to RRC on Rate Policy Options and the RSF	April 24, 2018	√	Rates & Revenue
2) Presentation to Joint RRC & F&B Committees on one-time transfer of \$6 Million from the RSF to FY 2019 Budget	June 26, 2018	√	
3) F&B Committee recommends one-time transfer of \$6 Million from the RSF to FY 2019 Budget	June 26, 2018	√	Rates & Revenue
4) Board approved one-time transfer from RSF in FY 2019	July 5, 2018	√	
5) RRC update and approval of proposed CAP2 Program and rules implementing District CAP3 and CRIAC Nonprofit Relief Programs	September 25, 2018	√	Rates & Revenue
6) Board approval of CAP2 Program and rules implementing District CAP3 Nonprofit Relief Programs	October 4, 2018	√	
7) Publish NOPR for CAP2 Program and rules implementing District CAP3 and Nonprofit Relief Programs	October 19, 2018	√	Legal Affairs
8) Publish NOPH for Public Hearing	October 19, 2018	√	Legal Affairs
9) Public Comment Period	October 19 – November 19, 2018	√	Marketing & Comm.
10) Update the RRC on the CAP expansion communication plan & system implementation	October 23, 2018	√	Rates & Revenue
11) Public Hearing	October 30, 2018	√	Board Secretary

Attachment D

FY 2019 Proposed RRC Committee Workplan			
Objective/ <i>Activities</i> /Task	Date of Activity	Completed	Responsible Department
4. Establish CAP2 Program and Rules to Implement District CAP3 and CRIAC Nonprofit Relief Programs to Mitigate Impacts of DC Water Rates, Fees and Charges on Low-Income Residents Currently not Eligible for CAP and District of Columbia Identified Customers, (Continued)			
12) Special RRC meeting to recommend final CAP2 Program and rules implementing District CAP3 Program and reserve action on CRIAC Nonprofit Relief Program	November 29, 2018	√	Rates & Revenue
13) Board approval of CAP2 Program and rules implementing District CAP3 Program	December 6, 2018	√	
14) Publish final NOFR for CAP2 Program and rules implementing District CAP3 Program	December 21, 2018	√	Legal Affairs
15) Go-Live	January 1, 2019	√	Rates and Revenue and Customer Care
16) RRC meeting to recommend final action on rules implementing District CRIAC Nonprofit Relief Program	December 18, 2018	√	
17) Board approval of rules implementing District CRIAC Nonprofit Relief Program	December 19, 2018	√	
18) Publish final NOFR for rules implementing District CRIAC Nonprofit Relief Program	December 28, 2018	√	Legal Affairs
19) Go-Live	January 1, 2019	√	Rates and Revenue and Customer Care

Attachment D

FY 2019 Proposed RRC Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department
5. 2018 Cost of Service Miscellaneous Fees and Charges			
a. <i>RRC COS Update and Recommendation on Proposed Amendments to Miscellaneous Fees & Charges</i>	October 23, 2018	√	Rates & Revenue
b. <i>Board Approval of Notice of Proposed Rulemaking (NOPR) for Miscellaneous Fees & Charges</i>	November 1, 2018	√	
c. <i>Publish NOPR in DC Register</i>	November 23, 2018	√	Legal Affairs
d. <i>Public Comment period</i>	November 23 – December 24, 2018	√	Board Secretary
e. <i>RRC Final Recommendation to Approve Amendments for Miscellaneous Fees & Charges</i>	January 22, 2019	√	Rates & Revenue
f. <i>Board Approval of Notice of Final Rulemaking (NOFR)</i>	February 7, 2019	√	
g. <i>Publish NOFR in DC Register</i>	February 22, 2019	√	Legal Affairs
h. <i>Miscellaneous Fees & Charges Go-Live</i>	June 3, 2019 (FY 2019)		Rates and Revenue/ Customer Care/Permit Operations/Pretreatment Legal Affairs
i. <i>Present Proposed Legal Regulation to EQ&O Committee for New FOG, CC/BFP, Fire Hydrant Use</i>	March 21, 2019		
j. <i>Board Approval of Notice of Proposed Rulemaking for New FOG, CC/BFP, Fire Hydrant Use</i>	April 4, 2019		
k. <i>Publish NOPR in DC Registers</i>	April 19, 2019		Legal Affairs
l. <i>Public Comment Period</i>	April 19 – May 20, 2019		Board Secretary
m. <i>Present Final Rulemaking to EQ&O Committee for New FOG, CC/BFP, Fire Hydrant Use</i>	June 20, 2019		Legal Affairs
n. <i>Board Approval of Notice of Final Rulemaking for New FOG, CC/BFP, Fire Hydrant Use</i>	July 11, 2019		Legal Affairs
o. <i>Publish NOFR in DC Registers</i>	July 26, 2019		
p. <i>New FOG, CC/BFP, Fire Hydrant Use Fees Go-Live</i>	August 1, 2019		

Attachment D

FY 2019 Proposed RRC Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department
6. Retail Groundwater Sewer Rate Ratemaking			
a. RRC Update and Recommendation on Proposed Retail Groundwater Sewer Rate	October 23, 2018	√	Rates & Revenue
b. Board Approval of Proposed Notice of Proposed Rulemaking for Retail Groundwater Sewer Rate	November 1, 2018	√	
c. Publish Notice of Proposed Rulemaking (NOFR) in DC Register	November 16, 2018	√	Legal Affairs
d. Public Comment period	November 16 – December 17, 2018	√	Marketing & Comm.
e. Public Hearing	May TBD, 2019		Board Secretary
f. RRC Final Recommendation to Approve Amendments for Retail Groundwater Sewer Rate	June 25, 2019		Rates & Revenue
g. Board Approval of Notice of Final Rulemaking (NOFR)	July 11, 2019		
h. Publish NOFR in DC Register	July 26, 2019		Legal Affairs
i. Retail Groundwater Sewer Charge Go-live	October 1, 2019 (FY 2020)		Rates and Revenue/ Customer Care
7. Amend District of Columbia Clean Rivers Impervious Area Charge Incentive Program			
a. FY 2020 Budget presentation to Board	February 7, 2019	√	Rates & Revenue
b. RRC update on Proposed Amendments for CRIAC Incentive Program	February 28, 2019	√	Rates and Revenue
c. RRC recommendation on proposed FY 2020 CRIAC Incentive	March 26, 2019		
d. Board approval of proposed Amendments for CRIAC Incentive program	April 4, 2019		Legal Affairs
e. Publish proposed Amendments to CRIAC Incentive Program in D.C. Register	April 19, 2019		Marketing & Comm. Rates and Revenue
f. Public Comment	April 19 - May 20, 2019		
g. RRC final recommendation for approval of Amendments to CRIAC Incentive program	June 25, 2019		Rates and Revenue
h. Board approval of Amendments for CRIAC Incentive program	July 11, 2019		Legal Affairs
i. Publish Final Amendments CRIAC Incentive program in D.C. Register	July 26, 2019		Rates and Revenue/ Customer Care
j. Amended CRIAC Incentive program Go-Live	October 1, 2019 (FY 2020)		

Attachment D

FY 2019 Proposed RRC Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department
8. 2019 Potomac Interceptor Cost of Service Study			
k. <i>2019 Potomac Interceptor Cost of Service Study (FY 2020 – FY 2022 rates are proposed)</i>	May 28, 2019		Rates & Revenue
9. Path to Achieve Asset Management			
a. <i>Path to Achieve Asset Management Update</i>	October 23, 2018 December 6, 2018	√ √	Rates & Revenue
10. FY2020 Budget Considerations			
a. <i>FY2020 Budget Considerations</i>	December 6, 2018	√	Rates & Revenue
11. Cost of Service Studies			
a. <i>Cost of Service Studies Update</i>	TBD		Rates & Revenue

* Dates subject to change



Attachment E

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

**Tuesday, April 23, 2019; 9:30 a.m.
AGENDA**

Call to Order	Committee Chairman
Monthly Updates	Chief Financial Officer
Committee Workplan	Chief Financial Officer
Agenda for May 28, 2019 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