

**PUBLIC HEARING ON
Proposed Retail Sanitary Sewer Service Rates and CRIAC
for Fiscal Year 2020**

Wednesday, June 12, 2019

6:30 p.m.

AGENDA

1. Call to Order Tommy Wells, Chairman
2. Opening Statement..... Tommy Wells, Chairman
David Gadis, CEO/GM
3. DC Water Management Presentation Matthew Brown, CFO/EVP Finance & Procurement
Proposed FY 2020 Retail Sanitary Service Rates & CRIAC
4. Presentation by Independent Consultant Amawalk Consulting
Proposed FY 2020 Retail Sanitary Sewer Service Rates & CRIAC
5. Public Witnesses
 - Pre-registered Speakers
 - Other comments (time permitting)
6. Closing Statement..... Tommy Wells, Chairman
7. Adjournment Tommy Wells, Chairman



**STATEMENT OF TOMMY WELLS
CHAIRMAN OF THE BOARD OF DIRECTORS
DISTRICT OF COLUMBIA WATER AND SEWER
AUTHORITY**

**JUNE 12, 2019 6:30 P.M.
1385 CANAL STREET SE
WASHINGTON DC 20003**

Good evening. My name is Tommy Wells and I am the Chairman of the Board of Directors of the District of Columbia Water and Sewer Authority, or DC Water. I also serve as director of the District's Department of Energy and the Environment, but I speak tonight as board chairman.

This hearing was convened to provide the public with a convenient way to comment on DC Water's proposed FY 2020 retail customer rates, charges and fees and then to make a recommendation to the full Board on any changes.

We went through a similar process one year ago, but we are considering changes to the rates to make them fairer and this requires a public hearing process and new vote.

Next month the board will vote on this proposal amending rates for Fiscal Year 2020, starting October 1, 2019. Once complete the full schedule will be posted on the DC Water website and shared broadly with the community.

Joining me this evening are Board members XXXX.

Board secretary will you please call the roll to establish the required quorum for tonight's hearing.

(Ms. Manley calls roll)

For the record, DC Water was established by the Council of the District of Columbia in 1996 as an independent authority with a separate legal existence apart from the District Government. DC Water operates the world's largest advanced wastewater treatment plant at Blue Plains and provides water and sewer services to all residents, visitors, institutions and businesses in the District of Columbia. Our drinking water comes from the Potomac River.

All of the proposed changes to our rates were published in the D.C. Register, were announced via social media and traditional media and shared broadly with community groups and other stakeholders. Further, I know that DC Water convened special meetings to share these changes with the business community – hosting two meetings at the authority's office space near Yards Park in order to provide industry with an opportunity to learn about the implications of new rates.

In addition, throughout May and June D.C. Water visited all 8 wards across the city for a series of town hall style meetings with a broad spectrum of District residents. I commend

our CEO for bringing his staff to every ward in the city to provide an easy and convenient opportunity to provide feedback to the authority. Those meetings often include participation by local ANC members or D.C. Council members and they help remind our staff of the impact these changes have on the public.

We know from meeting with the public that increasing water and sewer bills are a source of frustration to many customers, even when they understand that the revenue raised by the increases go to cleaning local waterways and improving reliability. Part of what we are doing is working harder to show customers how these investments will pay off with more reliable service and a better environmental result.

The authority has worked hard to help restore the health of the Anacostia River by reducing combined sewer overflows as part of the Clean Rivers project. The legacy of that work will be felt for generations to come.

Most everyone at this hearing knows that D.C. Water is a non-profit, unlike for-profit utilities in the electric or gas fields. We raise only the amount of money we need to carry out our mission – not a penny more. We are proposing in this new budget to continue and in fact even expand our customer assistance programs and we're proud of the various ways we help customers afford water service.

Before we begin and hear from the public and DC Water's management, I will review the ground rules for this hearing:

- Individuals presenting testimony have up to five (5) minutes to speak.
- Representatives of an organization or group have a total of ten (10) minutes to address this committee.
- Those testifying should clearly state their name, name of organization (if any) and their address.
- Witnesses representing an organization should give a brief description of the organization, its services and its location.

Please keep in mind that we are here to listen to comments only on new rates. If there are individual questions or concerns about a particular service or billing matter, management and staff are here to talk with you after the public hearing.

The Board gives equal consideration and weight to written comments that will be reviewed as we receive them. Written comments can be submitted to the Office of the Board Secretary, DC Water, 5000 Overlook Avenue, SW, Washington, DC 20032. You may also e-mail comments to Imanley@dcwater.com.

The Board will accept and consider comments until July 11, 2019.

A final decision on the proposed rate increases will be made by only the members of the Board who represent the District of Columbia at the Board's regularly scheduled meeting.

DC Water CEO David Gadis will provide his testimony on the proposed rate adjustments and then we will hear a presentation from our independent financial consultant regarding the FY 2020 rates. Afterward, we will hear public comments on the proposal. Individuals who pre-registered will speak first and time permitting we will hear from others here tonight who wish to testify.

CLOSING:

This board is sensitive to rate increases. All board members have different backgrounds and we understand what the tangible impacts are to DC Water customers when their rates go up. However, as stewards of this authority it's our job to make the best decisions we can and we believe that the proposed set of rates for next fiscal year make good sense for the delivery of services to the residents and visitors of the District of Columbia.

Thank you and we will now hear from witnesses.



**STATEMENT BY DAVID L. GADIS
CHIEF EXECUTIVE OFFICER AND GENERAL
MANAGER
DISTRICT OF COLUMBIA WATER AND SEWER
AUTHORITY**

**WEDNESDAY, JUNE 12, 2019 AT 6:30 P.M.
1385 CANAL STREET SE
WASHINGTON DC 20003**

Good evening board members and members of the community here tonight. My name is David L. Gadis, and I have the privilege of serving as the Chief Executive Officer of DC Water.

I've been in this job for a little more than one year and I feel very confident in the people and the systems at DC Water. The men and women who provide service to our customers day in and day out are dedicated and caring professionals who aspire to the very best. If a water repair needs to be made in the middle of the night when the temperature drops below freezing and there is ice on the street, you can count on our hard-working crews to make the repair overnight so that you will have a warm shower and coffee in the morning.

Tonight we are here because we have proposed rates that reflect our need to continue investing in infrastructure and provide the very best service to the 700,000 residents of the District of Columbia and countless millions who visit each year or commute in each day. Even though we already have a set of proposed rates for the next fiscal year, we are here tonight because our board believes that adjusting them at this point is in the best interests of both the authority and our customers.

Under the proposal, the average household increase will be about 5.7%, though we are proposing a change in the way that we pay for the Clean Rivers program. We are pursuing

this change because we believe it will bring more equity to funding for the Clean Rivers program – both by allowing customers to manage their bills by using less water and also responding to complaints that some customers using little or no water had high CRIAC charges.

We know how important the Clean Rivers program is. Since March 2018 when the tunnel opened, it has captured 5.68 billion gallons of combined stormwater and sewage and prevented it from entering the Anacostia River. Our capture rate on overflows is about 90 percent and we have collected 1,761 tons of solid trash from that stream since the tunnel opened.

We've talked about the Clean Rivers project, my vision for DC Water, and this rate proposal in all eight wards of the city.

During these recent public meetings, we had dozens of customers show up to testify about DC Water and our proposed rates. Our customers can always share their opinion at any time with DC Water through the authority's customer service line at 202-354-3600, via our social media feeds on Facebook, Twitter, and Instagram or through email. But meeting individuals in smaller format neighborhood meetings is an important part of our outreach and I was proud to lead that effort this year.

Rate increases are not easy on anyone. I have spent countless hours meeting with DC Water customers from all backgrounds since becoming general manager and I understand what it means to pay more for water bills. That extra few dollars each month adds up and I empathize with our customers about the impact. In the end though, our job is to provide the very best reliable and safe water and wastewater service to our customers and we cannot do that without increasing rates to pay our costs.

I appreciate the work of this board on this topic and their involvement in the authority. I could not do my job as well without the guidance of this board so thank you to each one of you.

Thank you for your time and I look forward to hearing from our witnesses.



**Proposed FY 2020 Rates
Public Hearing**

District of Columbia Water and Sewer Authority



Blue Plains Advanced Wastewater Treatment Plant



Overview of Rates Proposal

- Overall average household charges increase 5.7%, the same as previously forecasted for FY2020
 - The DC Water Board previously approved rates for FY2020
- Proposed change in the way that Clean Rivers costs are recovered
 - Determination that, on average, 37% of flows to Clean Rivers tunnels are from sanitary sewage, and it is therefore appropriate to move costs from the Clean Rivers Impervious Area Charge (based on impervious area) to the sewer volumetric rate
 - \$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
 - Phase-in CRIAC shift of 18% in FY 2020, 28% in FY 2021 and 37% in FY 2022 and beyond to Sewer Volumetric Rate
- Change from previously approved rates:
 - Decrease the Clean Rivers Impervious Area Charge (CRIAC) from projected \$25.58 in FY 2020 to \$20.94 per ERU, per month
 - Increase the Water & Sewer rate by 1.5% in FY 2020
 - Average household charge changes from \$14.48 to \$14.49
- Increase from 4% to 20% CRIAC discount from Stormwater Best Management Practices



Ratemaking at DC Water

- The DC Water Board has the sole ratemaking authority
- Rates are proposed based on Cost of Service studies, which are conducted every three years to ensure that rates appropriately reflect costs
- Rate proposals are recommended to the full Board by the DC Retail Water and Sewer Rates Committee, which are adopted only by Board members from the District of Columbia
- The Board adopts rates after review of the complete record including comments received during the public comment period and public hearing to ensure that they are reasonable, explained, and supportable
 - Cost of Service Studies allocate all DC Water costs to the appropriate service, such as water and sewer
 - The Cost of Service Study projections are then used for the year of the Cost of Service Study and the next two years
- Before the Board takes final action on any rate adjustment, DC Water publishes the proposed rates in the DC Register providing at least 45 days for the public to comment on the proposal, and then hold a public hearing
 - Practice is to also conduct “town hall” meetings



Ratemaking at DC Water

- DC Water performs a full COS Study every three years to synchronize rates and charges with the cost of providing service
 - The last COS Study was completed in March, 2018 by Raftelis consultants
 - Reallocated cost from water to sewer since Water System Replacement Fee helped to offset cost recovery by the Water Volumetric Rate
 - Reduced the CRIAC based on actual cost outlays
 - Prior 2015 COS Study laid groundwork for rate structure changes
 - Water System Replacement Fee – Established to fund Distribution System Replacement
 - Class-based Water Volumetric Rates – Established Residential, Multi-Family, and Non-Residential water rates based on class peaking characteristics
 - Periodically, DC Water also reviews all Miscellaneous Fees to ensure full cost recovery
 - Raftelis also worked with DC Water this year to help ensure that the proposed 18% shift was calculated appropriately



Ratemaking at DC Water

- Municipal utilities rely on industry practice to make their own determination about how to best recover costs through their user charges
 - *Financing and Charges for Wastewater Systems*, a Manual of Practice published by the Water Environment Federation (2018), suggests that impervious area-based charges may be used in conjunction with volumetric rates to equitably recover costs of wet weather flows (p.189)
- In addition, DC Water's Board has adopted its own Rate Setting Policy, Resolution #11-10, January 6, 2011:
 - Rates that, together with other revenue sources, cover current costs and meet or exceed all bond and other financial requirements as well as goals set by the Board
 - Rates that yield a reliable and predictable stream of revenues, taking into account trends in costs and in units of service
 - Rates based on annually updated forecasts of operating and capital budgets
 - Rates that are legally defensible, based on objective criteria, and transparently designed
 - Rates structures that customers can understand and DC Water can implement efficiently and efficaciously
 - Rates increases, if required, that are implemented transparently and predictably



CRIAC Background/History

- DC Water is mandated by a \$2.7 billion consent decree entered in the Federal District Court under the Clean Water Act to implement a mammoth program to resolve water pollution challenges. These challenges stem from a combined sewer system designed and built by the federal government over a century ago
- Prior to May 2009, DC Water recovered the Combined Sewer Overflow – Long Term Control Plan (CSO-LTCP) costs via the volumetric retail sewer charge
- Based on research, analysis and case studies, DC Water proposed to recoup the CSO-LTCP cost through a fixed Impervious Area Charge rather than the volumetric method
- Beginning May 2009, DC Water implemented the Clean Rivers Impervious Area Charge (IAC) to recoup the costs of the federally mandated \$2.7 billion Combined Sewer Overflow – Long Term Control Program (CSO-LTCP)



progress



clean rivers project

Investment is paying off.

- \$2.7 billion effort to reduce combined sewer overflows to Anacostia and Potomac rivers and Rock Creek
- Anacostia River Tunnel System opened in March 2018.
- In first year it captured 5 billion gallons of combined sewage and stormwater that otherwise would have overflowed into the Anacostia.
- Also captured more than 1,100 tons of trash, solids and other debris
- Capture rate is 90% - better than expected and 10% more than requirement
- Project is helping create jobs and boost economic development along the water – including the Wharf and Navy Yard neighborhood



- We've heard concerns about equity from some of our customers

criac overview of rates and revenue

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



Multi-Family Building
 1 ERU of Impervious Area
 30 CCF's of Water Usage

Total Monthly Bill
 Before Shift: \$413.88
 After Shift: \$431.74



Single Family Home
 1 ERU of Impervious Area
 2 CCF's of Water Usage

Total Monthly Bill
 Before Shift: \$62.21
 After Shift: \$59.07



Current Proposal

- On March 26, 2019, the Retail Rates Committee heard a presentation on various methodologies that could equitably account for the stormwater and wastewater managed by the Clean Rivers Project by shifting a portion of Clean Rivers costs to a sanitary volumetric rate
 - Evaluated methodology based on pollutant concentration – results were determined to be too variable
 - Evaluated methodology calculated based on the percent of wastewater in Clean Rivers tunnels was determined to be justifiable
- As a result, the current proposal shifts 37% of Clean Rivers costs to the sewer volumetric rate by FY 2022
 - Gradual shift selected to help prevent rate shock to customers who will pay higher volumetric rates



Current Proposal

- The proposed shift is driven by a change in cost recovery methodology
 - Old Methodology – 100% of Clean Rivers costs were recovered through the Clean Rivers Impervious Area Charge (“CRIAC”)
 - New Methodology – Clean Rivers costs result from a combination of storm flow AND sanitary sewer flow into combined sewers; therefore, it is reasonable to recover those Clean Rivers costs through a combination of the CRIAC and the sewer charge
- DC Water Engineering analyzed historical flow and strength data to accurately determine storm and sanitary contributions to the Clean Rivers tunnels
- The sanitary sewer contribution is proposed to be recovered through the sewer volumetric rate while the storm contribution is recovered through the impervious area charge
- Raftelis built a financial model to calculate the impact of proposed cost recovery shifts on the CRIAC and Sewer Volumetric Rate
 - The shift reduces the CRIAC revenue requirement and the charge calculation
 - The volumetric rate must increase to fill that gap in order for the shift to be revenue neutral



Current Proposal

Outreach Activities:

- February 7, 2019 - Initial budget presented to the Board
- February 28 - Retail Water and Sewer Rates Committee discusses proposed rates, including “shift” of costs from CRIAC to volumetric and increase in CRIAC Incentive Discount Program
- March 26, 2019 - DC Retail Water and Sewer Rates Committee discusses proposed “shift” methodology in detail, and recommends revised rates and an increase in the CRIAC Incentive Discount Program to the full Board
- April 4, 2019 - Board approved proposed revised Fiscal Year 2020 Retail Sewer Service Rates and Clean Rivers Impervious Area Charge for publication in DC Register
- April 26, 2019 - Publish Notice of Proposed Rulemaking in DC Register for proposed sewer rate and CRIAC adjustments
- May 17, 2019 - Published Notice of Public Hearing to be held on June 12, 2019
- May 23-June 10, 2019 - Conducted eight Public Information Sessions, one in each ward, plus two meetings with the business community
- June 12, 2019 - Public Hearing
- June 17, 2019 – Record closes for public comments on proposed sewer rate and CRIAC adjustments



Current Proposal

- For FY2020, current proposal increases water and sewer rates by 11.5 % rather than 5% approved a year ago
 - Sewer rate is \$8.89 per Ccf rather than previously approved \$8.14 per Ccf
- The CRIAC changes from \$25.58 approved a year ago to \$20.94



Current Proposal

- Many wastewater utilities with combined sewers allocate consent decree costs between sewer volumetric rates and impervious area charges
 - Philadelphia Water Department (PWD) – Consent decree of over \$3 billion includes green infrastructure, collection system upgrades, and treatment plant upgrades with cost recovery allocated between sewer volumetric rates and an impervious area charge. PWD uses revenues from both its impervious area charges and its sewer charges to pay the cost of its Long Term Control Plan
 - Northeast Ohio Regional Sewer District (Cleveland) – Consent decree covering 25 years and over \$3 billion for green and grey infrastructure (including tunnels) with cost recovery allocated between sewer volumetric rates and an impervious area charge
 - Richmond (VA) Department of Public Utilities – A 3-phase consent decree costing about \$700 million for green and grey infrastructure (including diversion structures) with cost recovery allocated between sewer volumetric rates and an impervious area charge



Current Proposal

- **Impact of a Shift to Volumetric Sewer Rate:**
 - 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 is phased in to help reduce rate shock



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
 - Using data from the District Department of Energy and Environment (DOEE), DC Water estimates that for FY2020 the increase could be between \$70,000 and \$950,000
 - By FY2028, depending on the number of customers who access the program, the increased could be between \$2.7 million and \$4.0 million
 - Future rate proposals will reflect our actual experience



Current Proposal

- After extensive deliberation with the Board, commitment to addressing infrastructure challenges, continued focus on balancing needs with customer affordability, management's recommendation for the proposed 10-year CIP disbursements (FY 2019 – FY 2028) is \$4.96 billion:
 - funds the DC Clean Rivers project to meet Consent Decree requirements - \$1.34 billion
 - funds the Wastewater area for major rehabilitation for the liquids and biosolids processing projects and meet the NPDES permit - \$978.7 million
 - funds the Water Service area for the full replacement of small diameter water mains to achieve 1% per year - \$945.0 million
 - fully funds the Sewer Service area for pump stations requirements and ramp up to the annual 1% rehabilitation (17.5 mi/year) for the small lines - \$957.0 million
 - funds the Non Process Facilities, like HVAC, roofs, and fleet/sewer services relocation - \$138.0 million
 - fully funds the Stormwater pump stations - \$68.6 million
 - funds the critical infrastructure needs at the Washington Aqueduct that produces water for our customers - \$187.0 million
 - funds the capital equipment items to meet purchases/replacement of mechanical equipment, operational facilities, vehicle equipment, office renovations, and IT software/hardware - \$340.0 million
- The CIP for FY 2021 to FY 2028 increases the total 10-year CIP from \$4.0 billion to \$5.0 billion

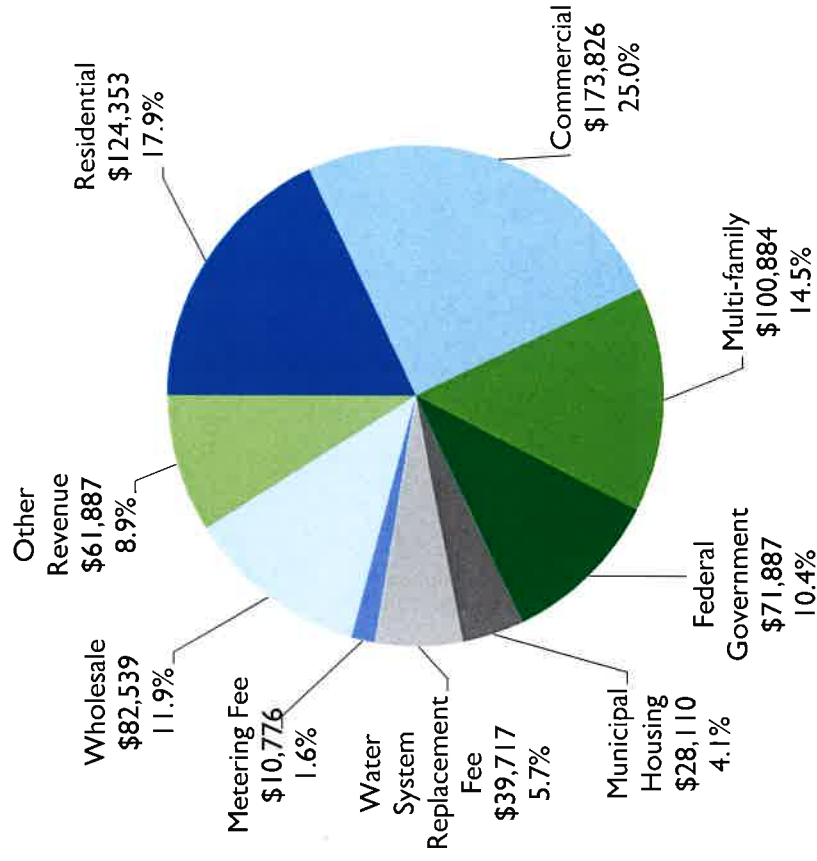
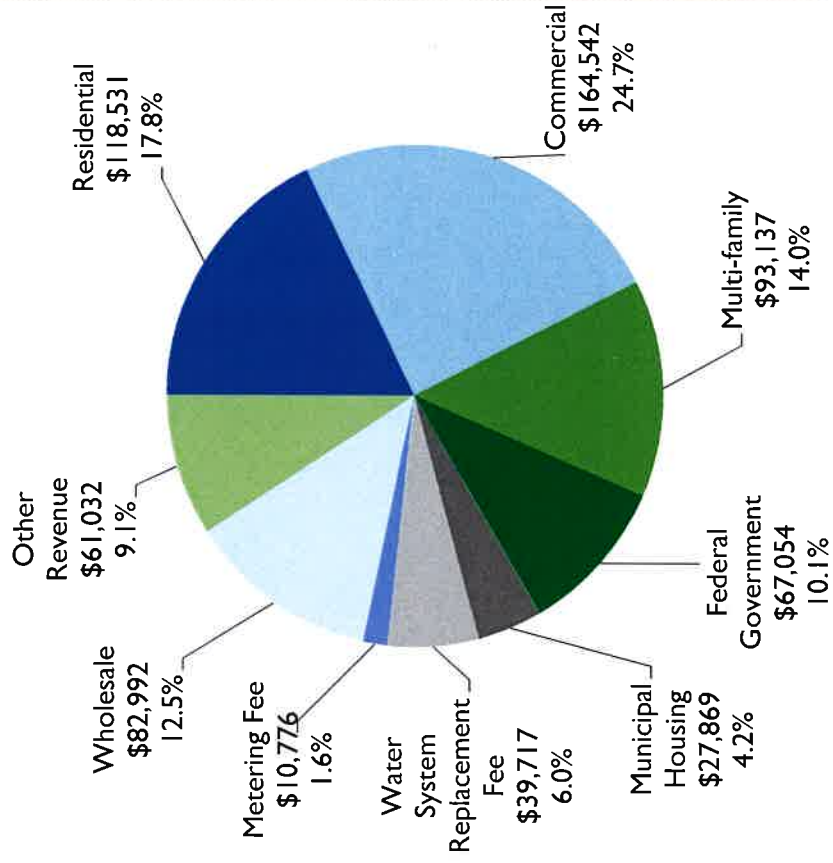


FY 2019 vs. FY 2020 Operating Revenues

Revised FY 2019
\$665,650

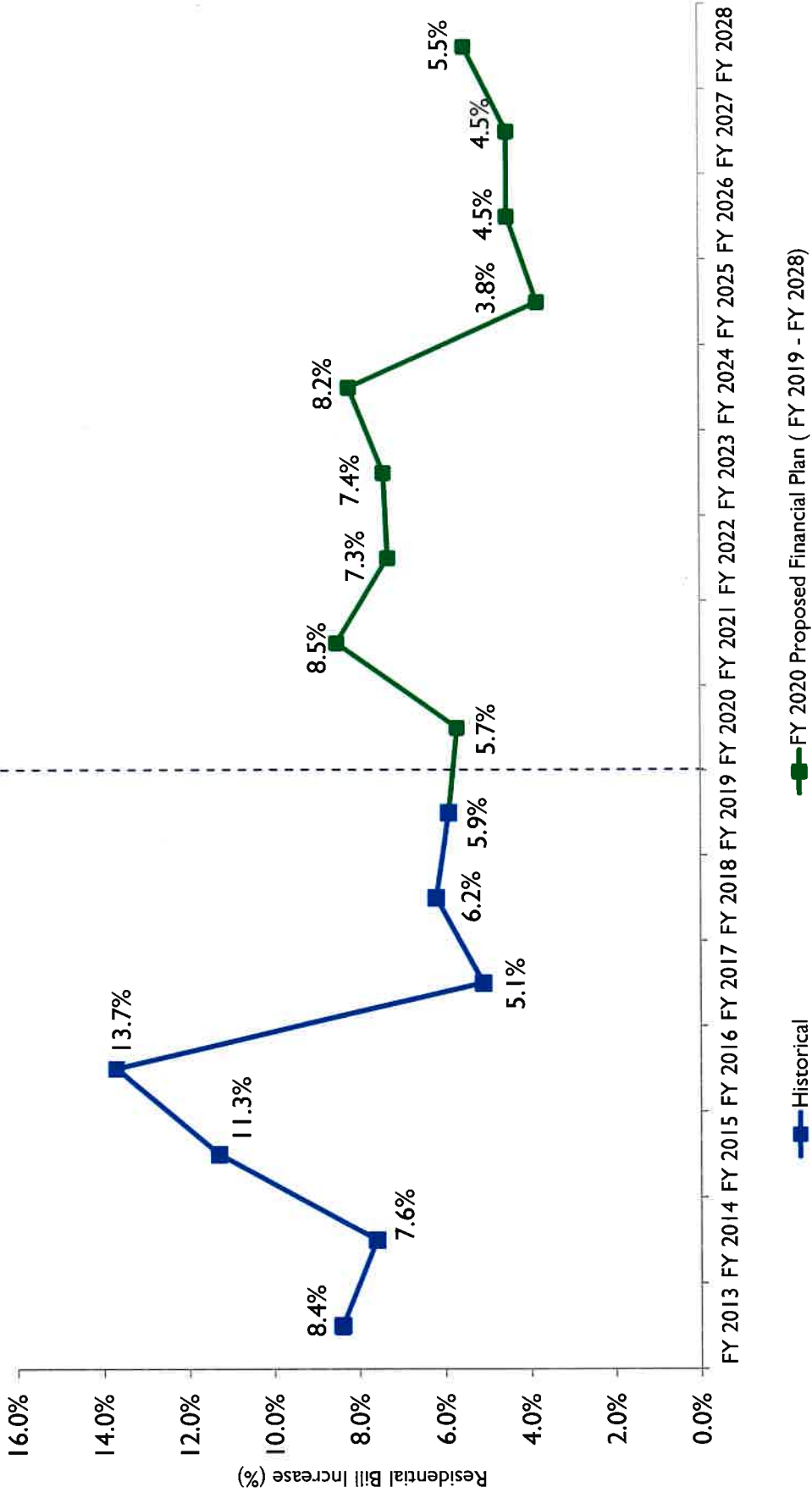
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Proposed FY 2020
\$693,979



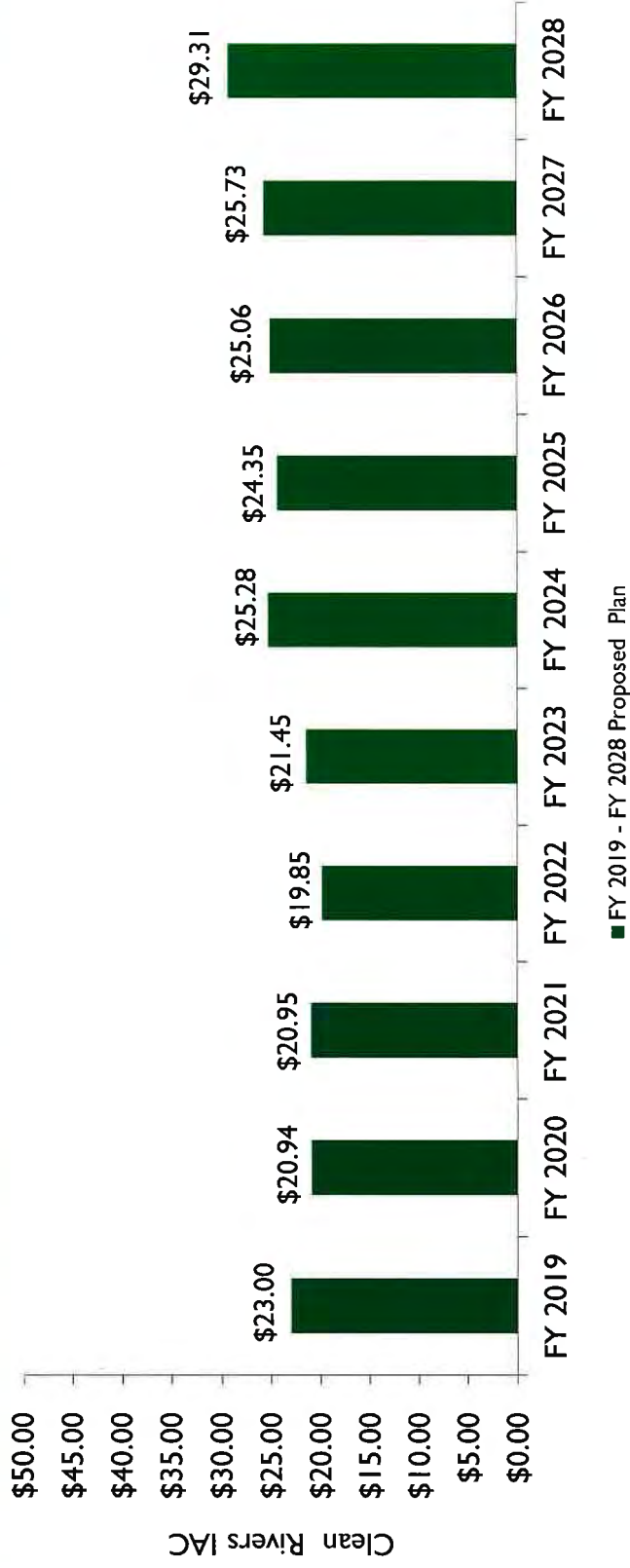


Historic and Projected Combined Household Increases for Residential Customers





Projected Clean Rivers Impervious Area Charge

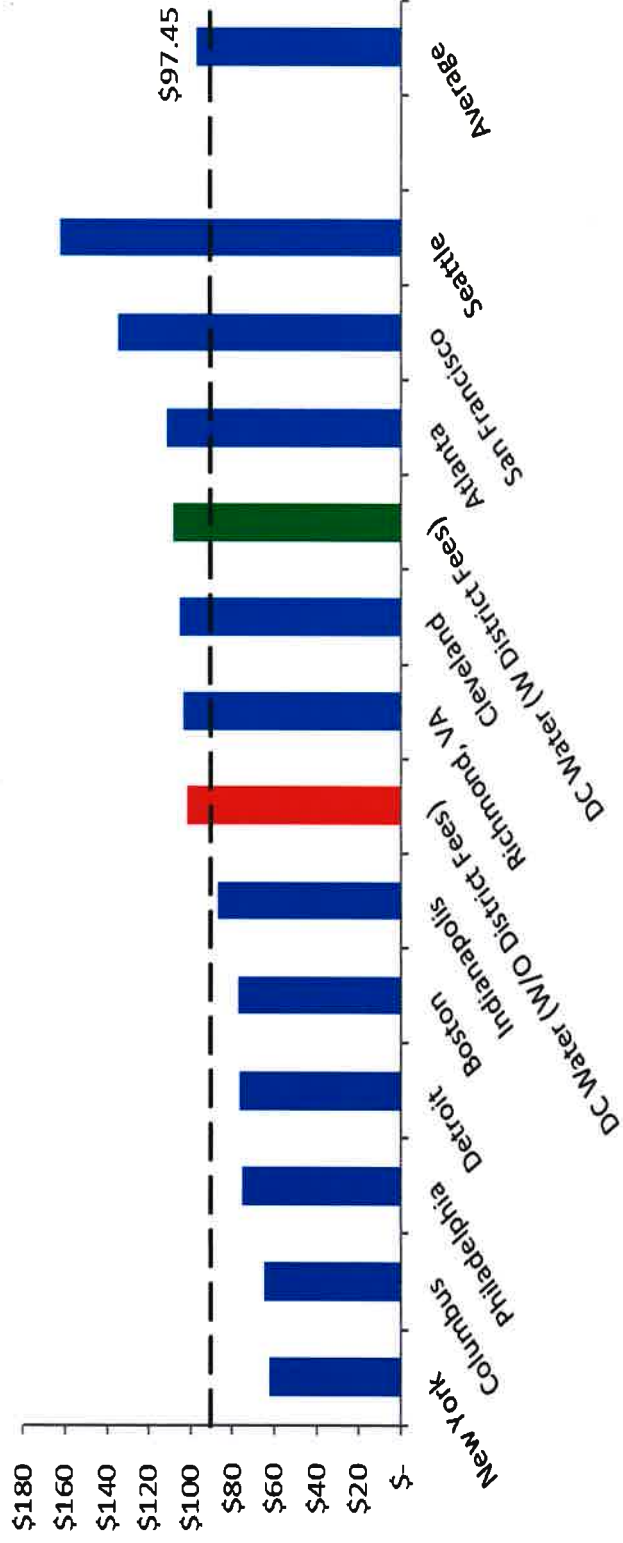


- Charges are driven by debt service and Pay-Go costs necessary to support the \$2.7 billion Clean Rivers Project
- The annual Clean Rivers Project costs for the average residential customer (700 – 2,000 sq. ft. of impervious area) is projected to increase from \$251.28 in FY 2020 to \$351.72 in FY 2028



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)

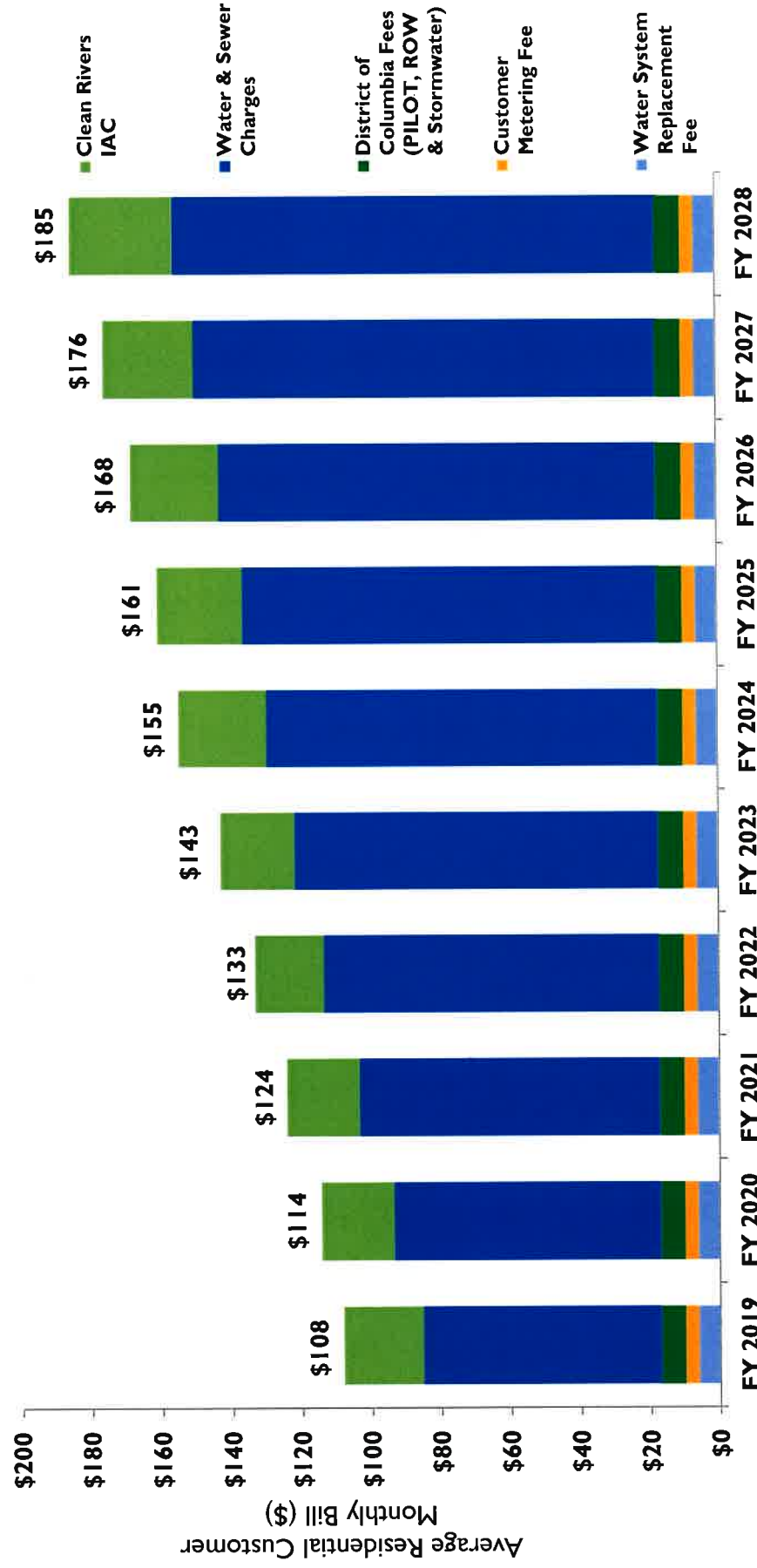


* Assumes average residential consumption of 6.20 Ccf, or 4,638 gallons, per month. Ccf = hundred cubic feet, or 748 gallons. Reflects rates and fees in place as of November 1, 2018



Projected Average Residential Customer Bill

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





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%



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

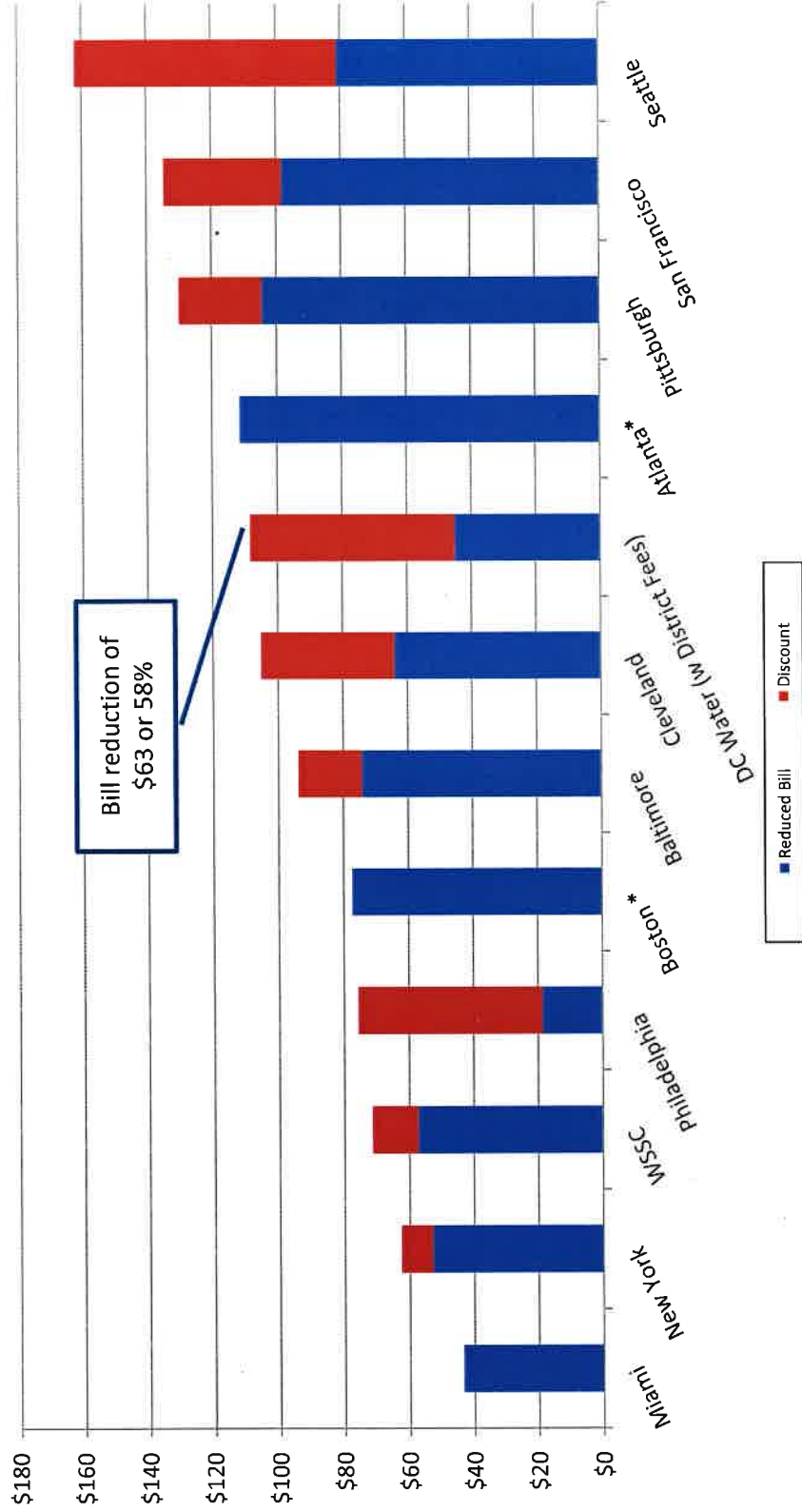
(5) Assumes 50 percent discount for the Clean Rivers IAC effective May 1, 2017

DC Water and District CAP Programs

- Comparison of existing (CAP) and new customer assistance programs (CAP2 and CAP3)

	CAP	CAP2	CAP3	CRIAC Non-Profit
Funding	Existing	New	New	New
	DC Water	DC Water	District	District
Income Eligibility (Households of four persons)	\$59,457	\$93,750	\$117,200	Non-residential customers
Water and Sewer	4 CCFs	3 CCFs	-	-
District Fees	Waived	-	-	-
Water System Replacement Fee	Waived	-	-	-
CRIAC	50% discount	50% discount	75% discount	90% discount
Monthly Discount	\$63.16	\$43.48	\$17.25	Varies based on the no. of ERUs

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.



Independent Review of the Revised Rates for 2020

DC Water Public Hearing

June 12, 2019



Amawalk
Consulting Group LLC



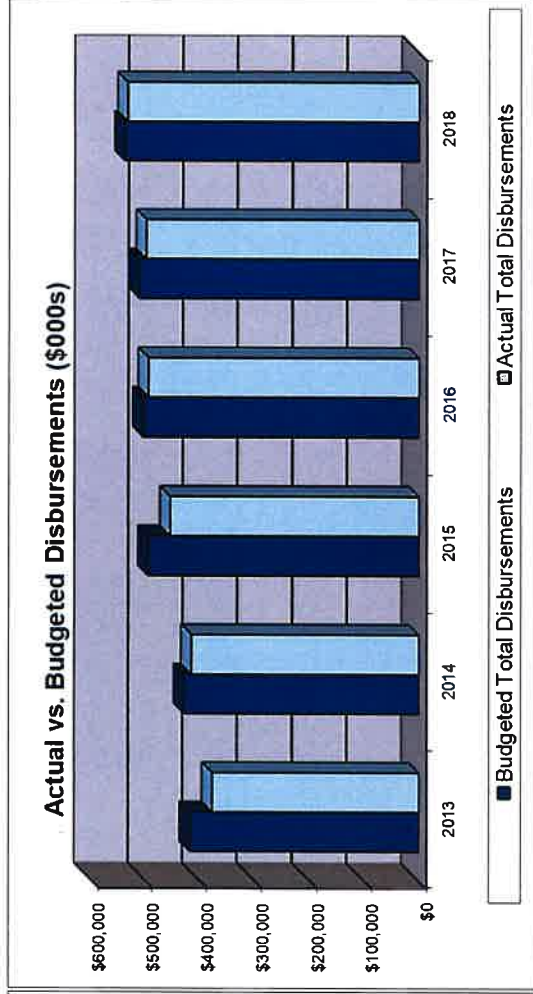
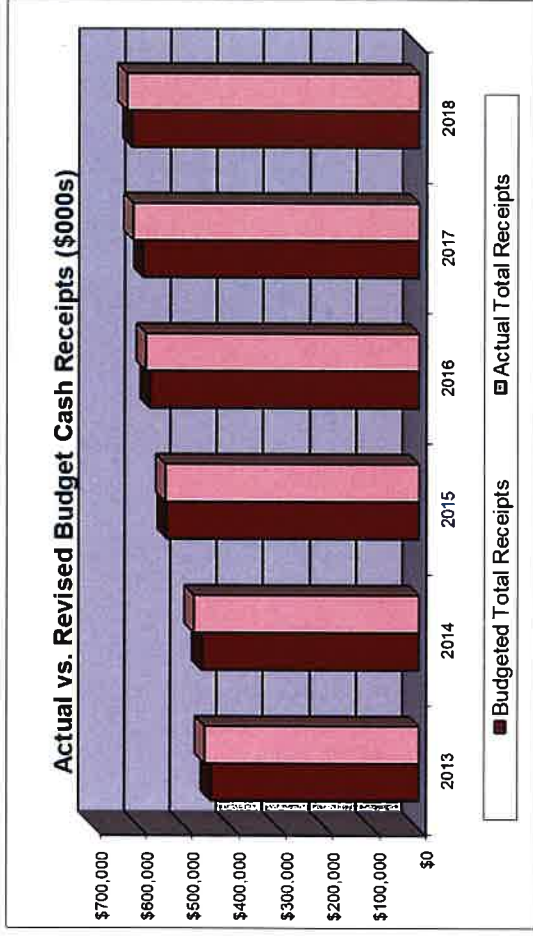
Outline

- Financial Performance
- Operating Performance
- Why Rates Were Increased in 2020
- Proposed 2020 Rate Revisions
- Industry Comparisons
- Affordability of User Charges
- Conclusions
- Appendix – Supporting Information



Financial Performance

- From 2013 – 2018: actual cash receipts were > budget each year (averaging 2.3% more); actual expenditures were < budget (averaging 4.3% less). 2018 differences were narrower: receipts were 1.7% above budget and disbursements 1.1% lower.
- YTD 2019 results are in line with budget. No material changes for 2020.
- 2018 combined coverage = 1.86; projected 2019 & 2020 is 1.62 & 1.68



While not a guarantee of future results, this track record offers a degree of comfort that expenditure and revenue estimates, including those for 2020, are prudently developed.

Operating & Capital Performance

- In compliance with the Consent Orders & all permits.
- The digester facilities & waste-to-energy facilities are yielding multiple benefits – lower expenses, fewer biosolids and a high quality product.
- The ongoing implementation of the new CIS and meter replacement is improving reporting capability and billing accuracy.
- CIP projects are on time and close to budget; change orders and claims continue to be a small % of costs.
- The most recent Independent Engineering Report gave high grades to the facilities and people of DC Water; identified needs are being addressed.
- 10-year CIP, including the addition of \$0.95 billion in the last year, incorporates funds for the replacement of pipes and related assets.
- CIP spending in upcoming years is significant, but lower on average than the recent peak years: in 2014-18, average annual capital spending was \$573 million; the 2019-28 average is \$480 million.

DC Water continues to meet or exceed the Board's operating goals. Strong operating and capital performance helps manage the cost of providing service and mitigates risks.

Why Rates Were Increased in 2020

- **Increases in capital spending:**
 - Debt service in 2020 as a percent of Operating Revenue will be about 31.2%
 - Cash-financed construction in 2020 increases by \$7.2M to \$109.6M; the use of cash for construction reduces the need to issue more debt (which has to be paid back) and helps support the strong credit rating of DC Water.
- **Increases in operating expenses:**
 - Total O&M expenses, excluding PILOT/ROW, increase by \$9.1 million for 2020 to about 55.1% of total disbursements. DC Water eliminated 63 positions, saving \$7.0 million annually.
- **Long-term water use is declining:**
 - Long-term water demand is declining in the District as well as in the Mid-Atlantic & Northeast, the actual decline in 2018 was 0.9%. While usage is higher so far in 2019, the projected decline in 2019, 2020 & future years is 1.0% per year.
- **DC Water receives no subsidies:**
 - Unlike cities such as Atlanta (sales tax) or Milwaukee (property tax), DC Water revenues pay all bills.

These are the same reasons that are driving rates up in other cities. Slide 4

Proposed 2020 Rate Revisions

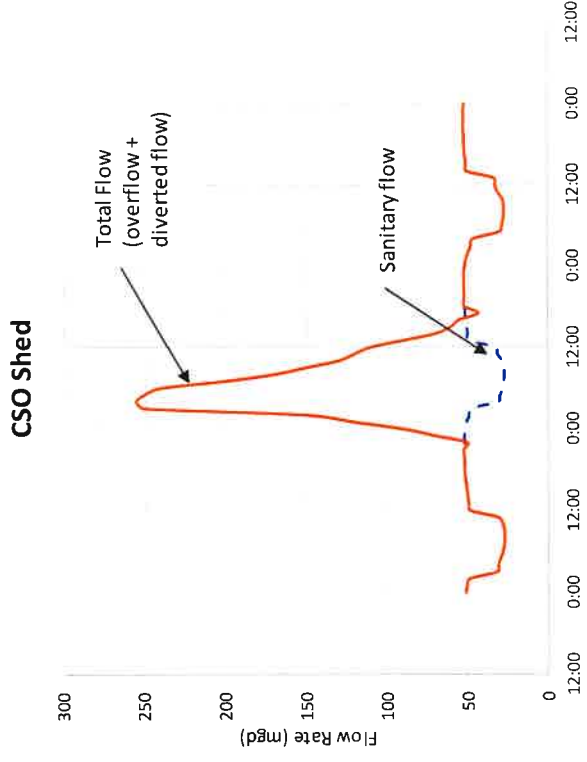
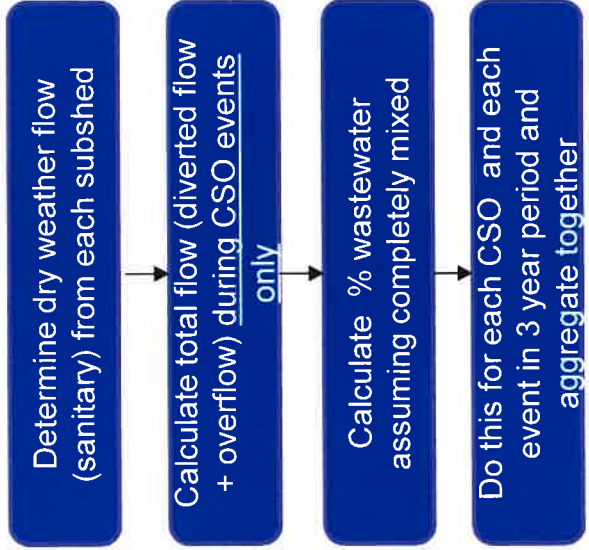
	Units	Approved 2019	Previously Approved 2020	Proposed Revised 2020	Change 2020 vs 2019 \$	Change 2020 vs 2019 %	Change 2020 from Previously Approved \$	Change 2020 from Previously Approved %
DC Water Rates								
Water								
Residential 0-4 Ccf (Lifeline)	Ccf	\$2.91	\$3.06	\$3.06	\$0.15	0.0%	\$0.00	0.0%
Residential > 4 Ccf	Ccf	3.90	4.10	\$4.10	0.20	0.0	0.00	0.0
Multi-Family	Ccf	3.37	3.54	\$3.54	0.17	0.0	0.00	0.0
Non-Residential	Ccf	4.05	4.25	\$4.25	0.20	0.0	0.00	0.0
Sewer (Excluding CRIAC)	Ccf	7.75	8.14	8.89	1.14	14.7	0.75	9.2
Clean Rivers IAC	ERU	23.00	25.58	20.94	-2.06	-9.0	-4.64	-18.1
Customer Metering Fee	5/8"	3.86	3.86	3.86	0.00	0.0	0.00	0.0
Water System Replacement Fee	5/8"	6.30	6.30	6.30	0.00	0.0	0.00	0.0
District Rates								
PILOT Fee	Ccf	0.50	0.51	0.51	0.01	2.0	0.00	0.0
Right of Way Fee	Ccf	0.18	0.19	0.19	0.01	5.6	0.00	0.0
Stormwater Fee	ERU	2.67	2.67	2.67	0.00	0.0	0.00	0.0

Management Recommendations:

- Make two changes to existing approved rates: increase the sewer rate and decrease the CRIAC rate so that the revenues from each rate better reflect the cost of the service provided. The proposed change is intended to be revenue neutral for DC Water.
- Phase-in the shift in revenue needs from CRIAC to sewer over three years:
 - 18% shift of revenue needs in 2020, 28% in 2021 and 37% in 2022.
 - The phase-in helps mitigate impacts on customers & customer classes.

Average monthly residential charges for 2020 (6.2Ccf) as revised would be \$114.49, compared to \$114.48 under the previously approved rates. Slide 5

Proposed 2020 Rate Revisions: Technical Basis - LTCP Model Stormwater & Wastewater



Parameter	Percent Wastewater
Cumulative (Flow-Weighted)	37.3%

Source: Presentation on Percent Wastewater in CSO to DC Water Retail Rates Committee on March 26, 2019.

Conclusion: The technical analysis estimated that the % of wastewater in combined sewer overflows is 37.3%. Thus, it is reasonable to assign that portion of LTCP costs to sewer rates; a phasing of the shift is proposed.

Proposed 2020 Rate Revisions: Financial Basis - Revenue Neutrality

Projected Sewer & CRIAC Billing Under the Prior Approved Rates		
	2019	2020
Rates		
Sewer Rate (\$ per Ccf)	7.75	8.14
CRIAC (\$/ERU)	23.00	25.58
Billings (\$ millions)		
Sewer	258.2	268.5
CRIAC	113.2	125.9
Total	371.4	394.3

Projected Sewer & CRIAC Billing Under the Proposed Revisions to Rates		
	2020	
Rates		
Sewer Rate - All Classes (\$ per Ccf)	8.89	
CRIAC (\$/ERU)	20.94	
Billings (\$ millions)		
Sewer	293.2	
CRIAC	103.0	
Total	396.2	

Note: The above calculations assume a 1% per year consumption decline in 2019 and 2020 and 410,000 ERUs for CRIAC billings. No changes in the rate of bill collection are assumed.

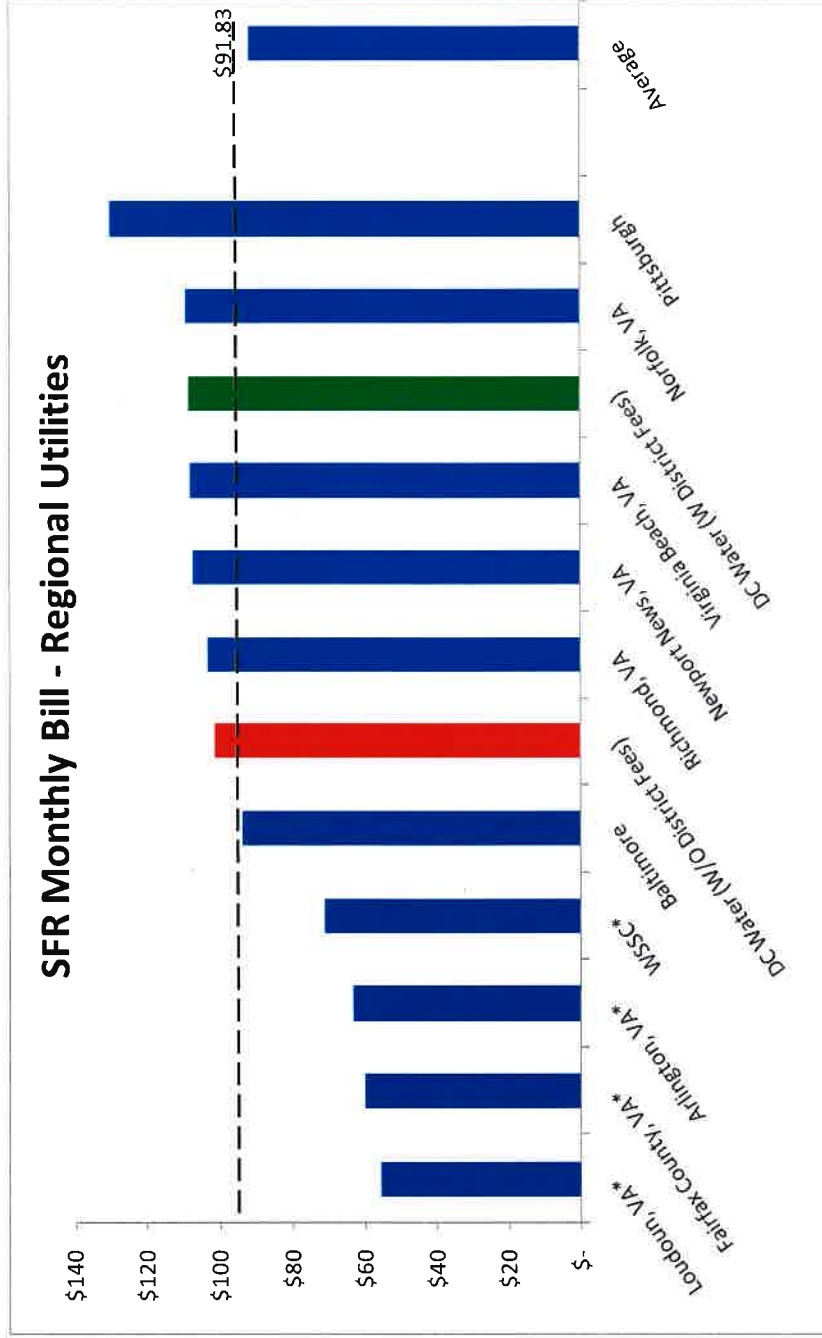
Conclusion: Compared to the adopted rates, the revised sewer rates and CRIAC are expected to be revenue neutral for the Authority.

Proposed 2020 Rate Revisions: Billing Impacts

	Ave SFR	Ave SFR in CAP	Ave Multi-Family	Sample Commercial	Sample Cemetery	Sample House of Worship - Low Usage	Sample House of Worship - High Usage
Monthly Bill - Approved 2020 Rates (\$)	114	48	1,373	62,315	3,314	1,887	15,812
Monthly Bill - Proposed	114	47	1,413	65,431	2,783	1,619	15,873
\$ Change	0	-1	40	3,116	-531	-268	60
% Change	0%	-1%	3%	5%	-16%	-14%	0%
Assumptions:							
Consumption (Ccf/month)	6.2	6.2	92.6	4,478	4.0	9.42	876
Meter Size	5/8"	5/8"	1.5"	8 x 2"	5/8"	2"	1" & 4"
ERU	1	1	6.3	52.2	115.1	59.2	128.6

Conclusion: Average single family residential customers should experience fairly minimal billing changes. Individual customers may see changes in their monthly bills; e.g., customers with high ERUs/low usage may see a reduction in their bills while customers having high usage/low ERUs may see an increase in their bills.

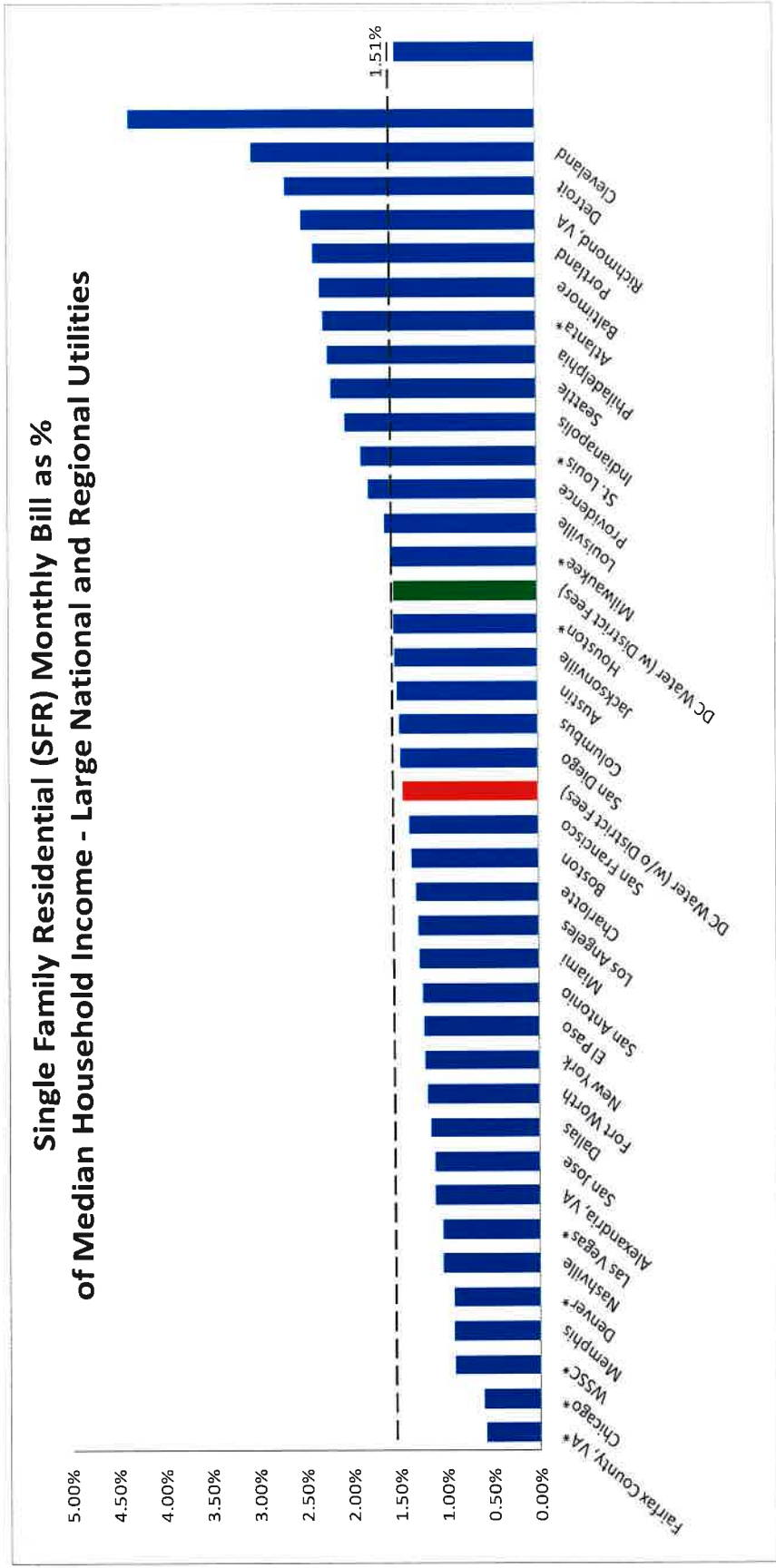
Comparison: DC Water & Regional Utilities



Note: Reflects rates and fees in place as of November 2018. Some cities utilities use property tax revenue or other revenues to pay for part of the cost of water, wastewater, or stormwater services, as indicated by * in the graph above.

DC Water charges are somewhat higher than the average of the regional utilities that we survey; however, unlike some utilities, DC Water receives no property tax revenue or other subsidies to reduce its user charges.

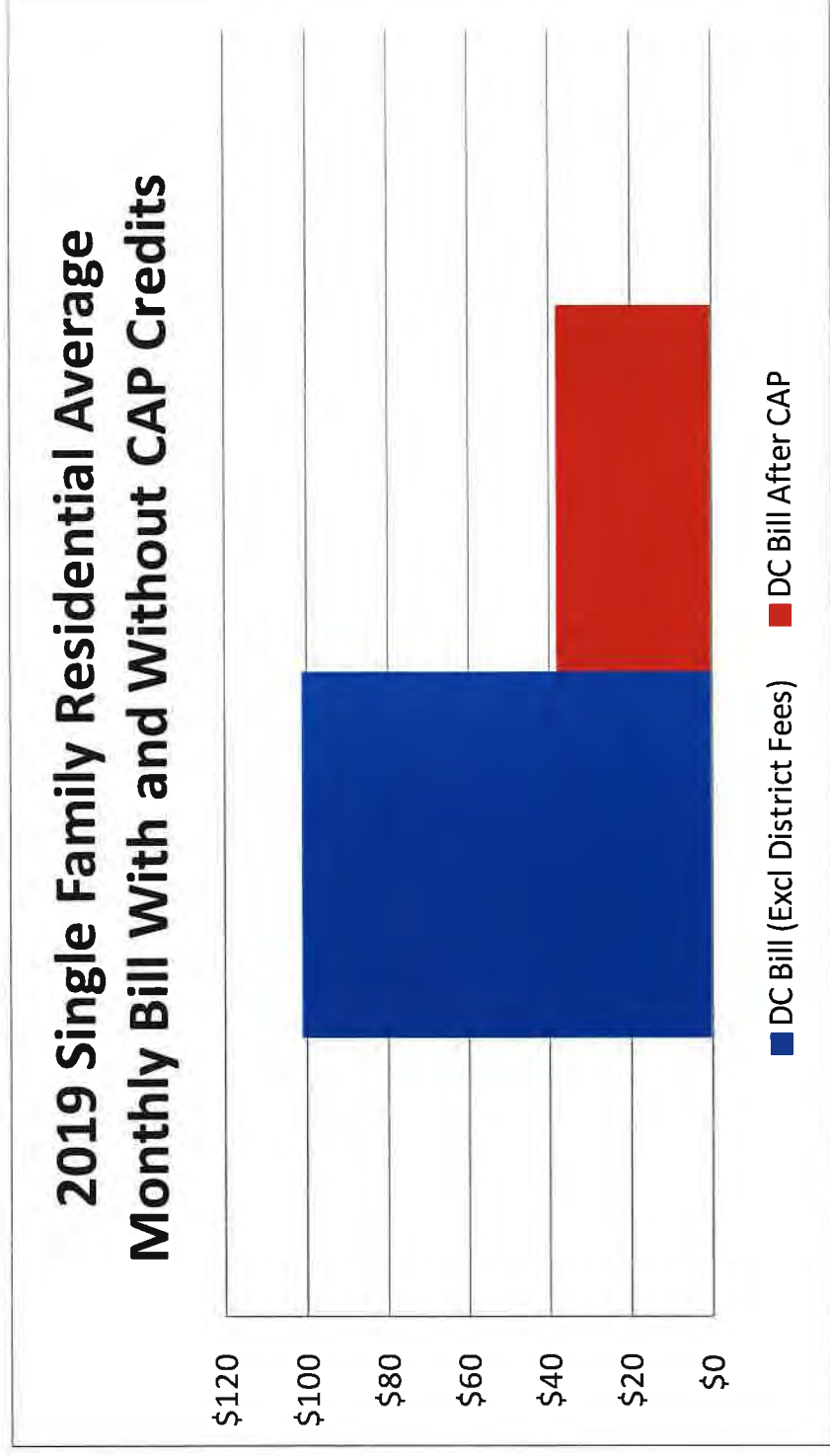
Comparison: Affordability of User Charges



Note: Reflects rates and fees in place as of November 2018. Some cities utilities use property tax revenue or other revenues to pay for part of the cost of water, wastewater, or stormwater services, as indicated by * in the graph above.

Water, sewer, stormwater, and District charges as a % of median household income (MHI) are affordable at 1.58%, and competitive with peers

Affordability of User Charges: DC Water Customer Assistance Program (CAP)



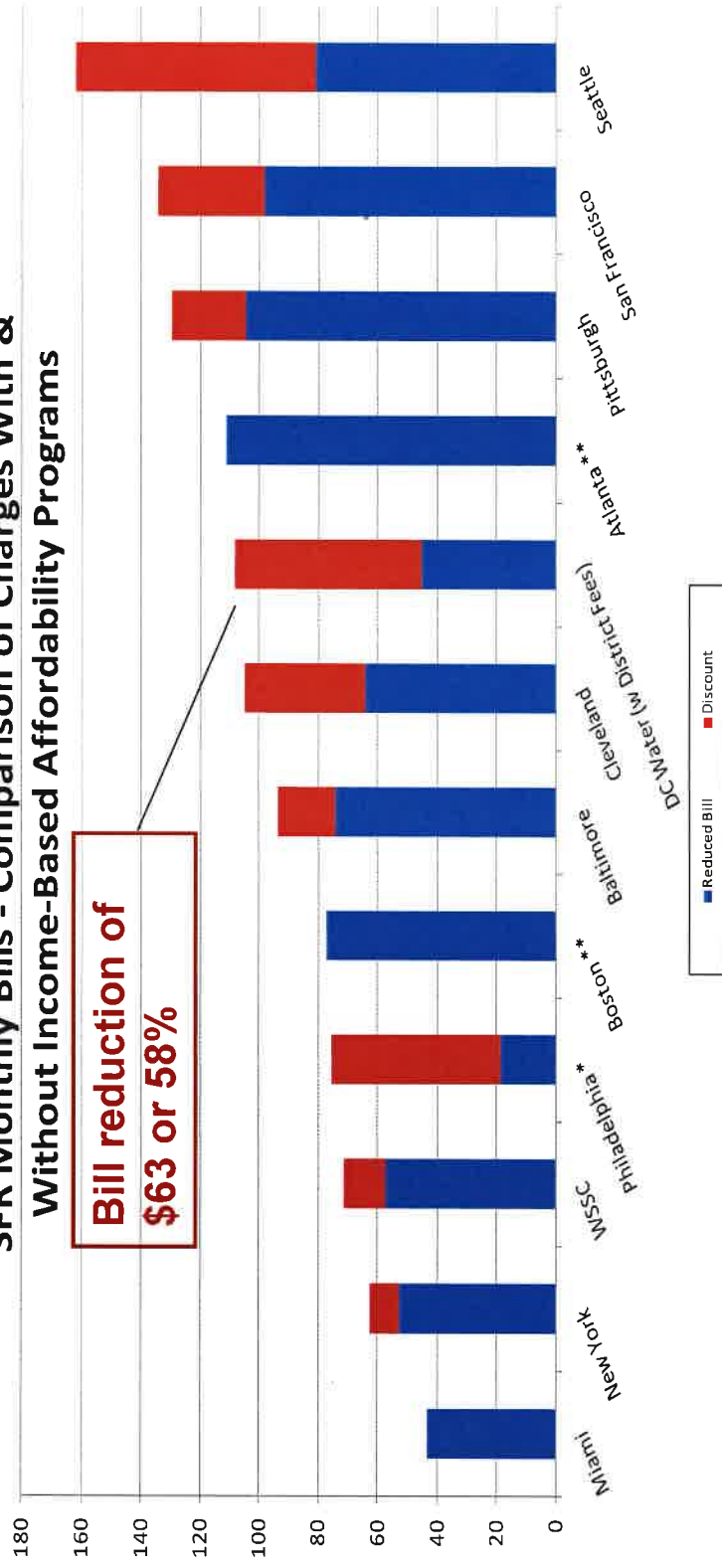
Note: After CAP credits, a family of 4 at the 2019 Federal Poverty level spends a little less than 1.8% of income on DC Water bills.



Affordability of User Rates: DC Water CAP With Peers

SFR Monthly Bills - Comparison of Charges With & Without Income-Based Affordability Programs

Bill reduction of \$63 or 58%



* Amount of discounts Philadelphia provides depend on income. Chart above uses average amount of assistance.
** Boston provides a 30% discount on water bills for senior citizens or fully disabled customers with no income eligibility requirement.

Note: Reflects rates and fees in place as of November 2018.

The affordability assistance provided by DC Water is robust compared to other utilities, providing a meaningful impact on a customer bill.

Affordability of User Charges - Current &

New Initiatives

- **Customer Assistance Program (CAP)** – Existing program that uses LIHEAP (Low Income Home Energy Assistance Program) criteria to provide DC Water-funded discounts to residential customers with incomes up to 60% of the State Median Income (SMI)
- **Customer Assistance Program II (CAP2)** – DC Water’s proposed expanded program for residential customers who do not qualify for CAP with household income up to 80% Area Median Income (AMI)
- **Customer Assistance Program III (CAP3)** – New District-funded program to provide benefits to DC Water customers with household income greater than 80% and up to 100% AMI who do not qualify for CAP or CAP2
- **CRIAC Nonprofit Relief Program** – New District-funded program to provide CRIAC credits to nonprofit organizations as determined by the District Department of the Environment (DOEE)
- **CRIAC Credits** – DC Water proposal to increase availability to 20% of rate 13



Conclusions

- DC Water's proposed revision to 2020 rates have been reasonably developed, reflect the anticipated revenue requirements of the System, adhere to Board policy and are comparable to other utilities.
- If water usage declines at a faster rate than assumed rate, interest rates are higher than expected or unforeseen major expenses are encountered, the actual financial results could differ from current projections. The potential for some underspending in 2019, the availability of the RSF and allowances for cash-financed construction provide flexibility and risk mitigation in such circumstances.
- Affordability is a growing concern in the water and wastewater industry as the cost of providing service continues to increase. DC Water's CAP programs (original, II & III) and SPLASH and its use of a lifeline rate are: 1) in line with industry practices and 2) progressive in providing assistance to low income billpayers. The expansion of CRIAC credits provides a modest incentive for ratepayers to reduce stormwater discharges.



Appendix – Supporting Information

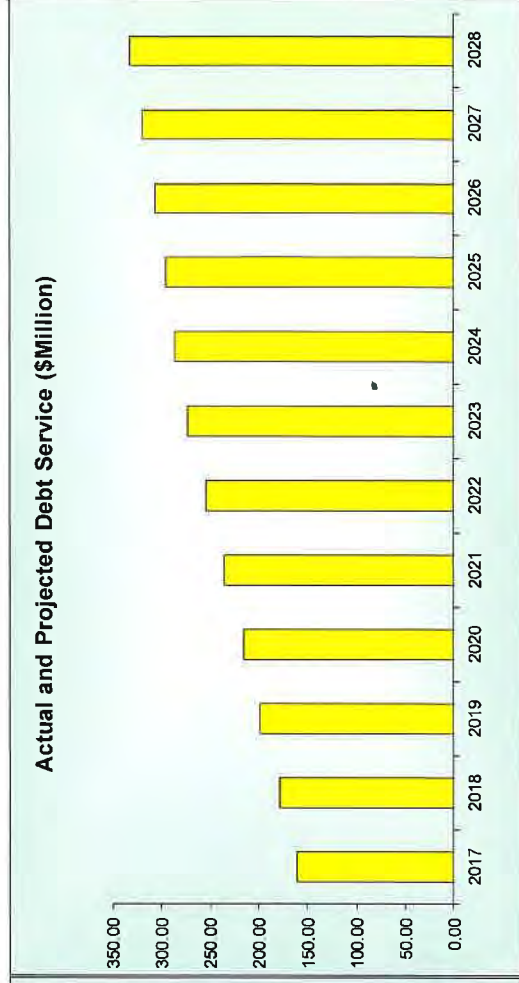
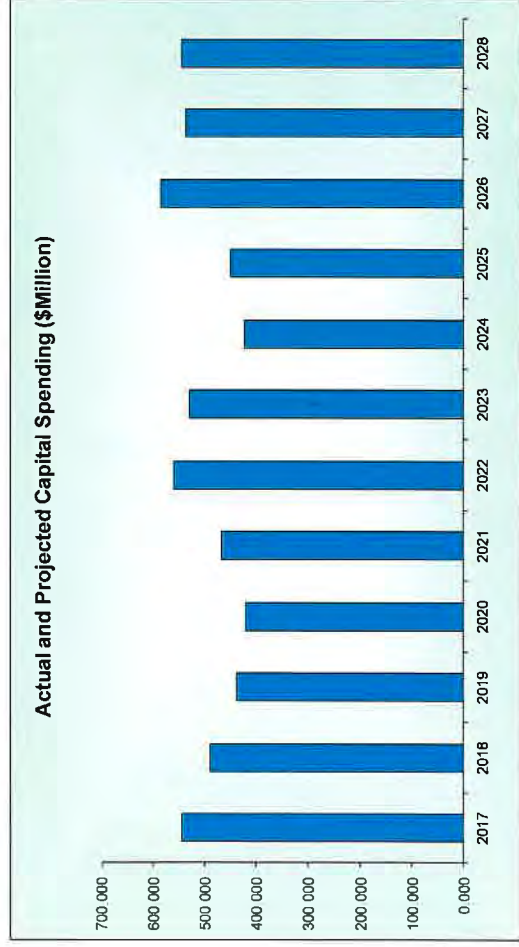


Water & Wastewater Industry Challenges

- **Increases in capital spending:**
 - Growing regulatory mandates require significant investments; in addition, state-of-good-repair investments are also needed to ensure that the underlying assets (e.g., pipes) provide reliable service.
- **Increases in operating expenses:**
 - Salaries and wages, fringe benefits and pensions.
 - Growing regulatory requirements for stormwater management.
 - Certain costs that previously would be capitalized are now counted as expenses.
- **Long-term water use is declining:**
 - Most revenues are derived from water usage-based charges but long-term water demand is declining in the east coast cities such as New York, Philadelphia, the District & Boston.
- **Affordability of rates and charges:**
 - Charges as a % of median household income (MHI) is a common measure of affordability but a portion of customers may be well below MHI.

Why Rates Were Increased in 2020 – Capital Investment/Debt Service

- DC Water is investing in its water and sewer infrastructure to ensure that high quality services are provided on a reliable basis. As result of the year-long review and commitment by the Board to continue to address infrastructural challenges, DC Water is increasing capital investments by \$0.95 billion starting in 2021 and beyond.
- 26% of planned capital improvements are legally mandated.
- Debt service payments increase by \$16.6 million from 2019 to 2020; such payments are an increasing % of total disbursements: 35.2% in 2019 and 36.4% in 2020.



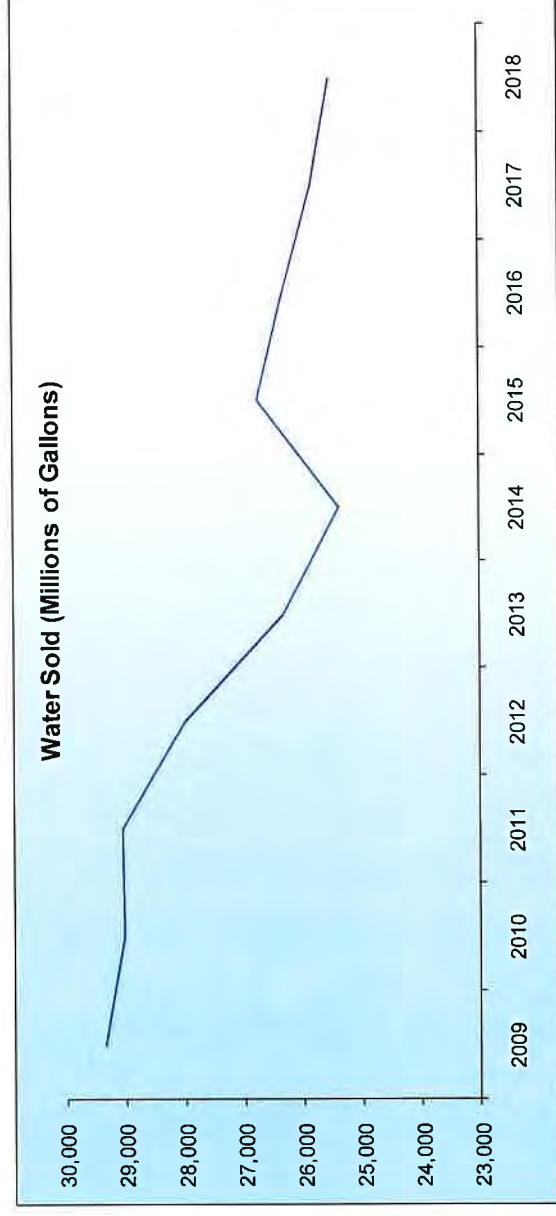
Why Rates Were Increased in 2020 – O&M Expenses

- Total O&M expenses, excluding PILOT/ROW, are expected to increase by \$9.1 million in 2020.
- DC Water budgeted \$27.0 million in 2019 for cash-financed construction/bond defeasance; this increases to \$28.6 million in 2020. The purpose is to avoid debt, enhance coverage and provide cash flow flexibility.

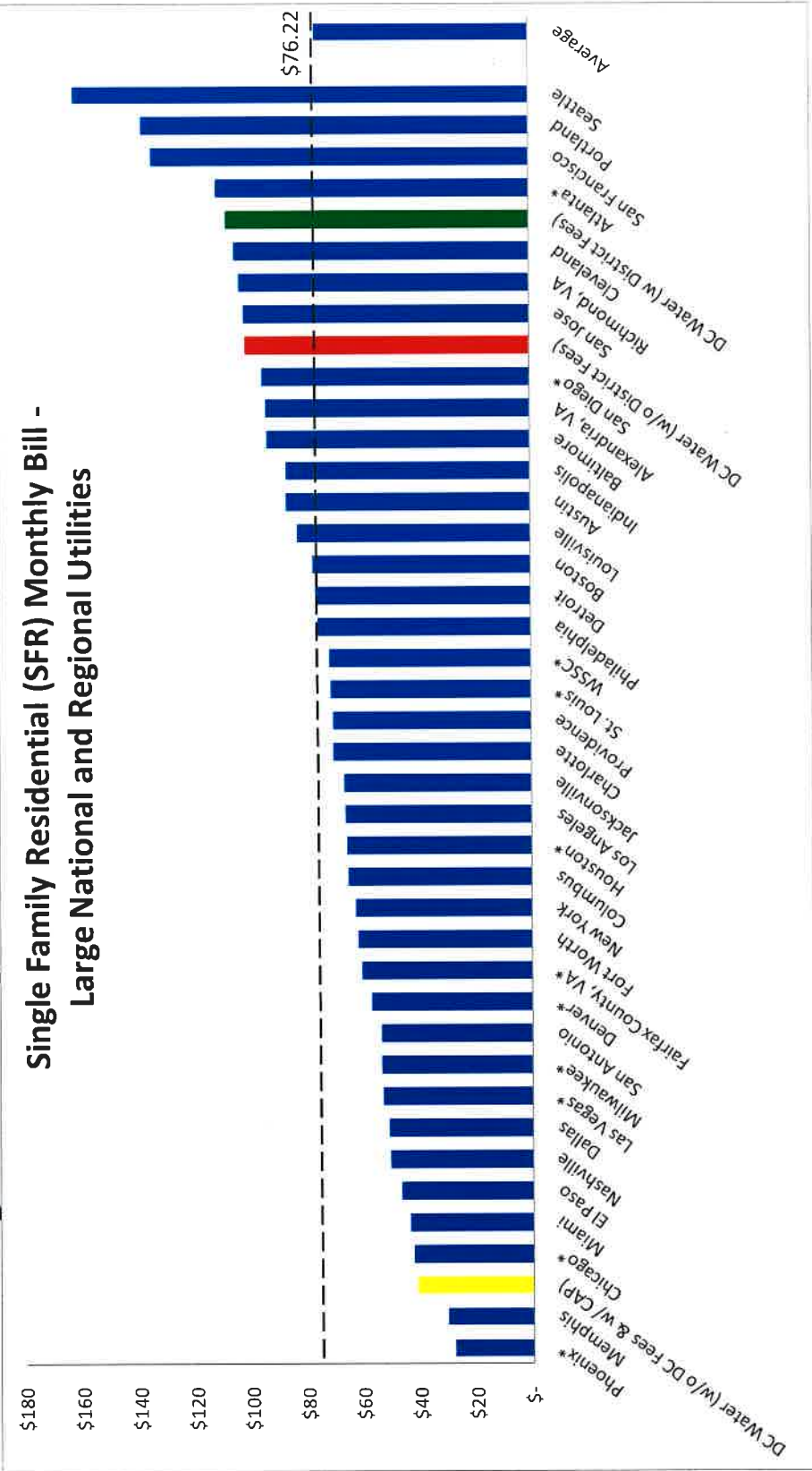
O&M Expenditure (\$ M)	2019 Projected	2020 Prior Approved Budget	2020 Proposed Revised Budget	2020 Prior Budget vs 2019	2020 Proposed Budget vs 2019
Personnel Services	144.4	148.7	147.9	3.0%	2.5%
Contractual Services	81.7	84.1	81.9	3.0%	0.3%
Water Purchases	30.5	31.4	34.9	3.0%	14.4%
Chemicals & Supplies	32.1	33.0	33.2	3.0%	3.4%
Utilities & Rent	26.9	27.7	27.0	3.0%	0.1%
Small Equipment	1.2	1.3	1.0	3.0%	-20.2%
Total	316.8	326.3	325.8	3.0%	2.9%
PILOT/ROW Fees	21.7	22.0	22.0	1.5%	1.5%
Debt Service	198.8	214.1	215.3	7.7%	8.3%
Defeasance D.S./Cash Financed Capital Construction	27.0	28.6	28.6	5.8%	5.8%
Total Operating Disbursements	564.3	591.0	591.8	4.7%	4.9%

Why Rates Were Increased in 2020 – Conservation/Declining Demand

- About 58% of total cash receipts in 2020 are expected from consumption-related retail charges.
- Long-term retail water demand is slowly declining.
- Year-to-date 2019 water sales are 2.5% higher than in 2018.
- It is assumed that water usage will decline at the rate of 1.0% per year in 2019 and each year thereafter. New York, Boston & Philadelphia assume annual declines in sales.



Industry Comparisons: Rates/Charges



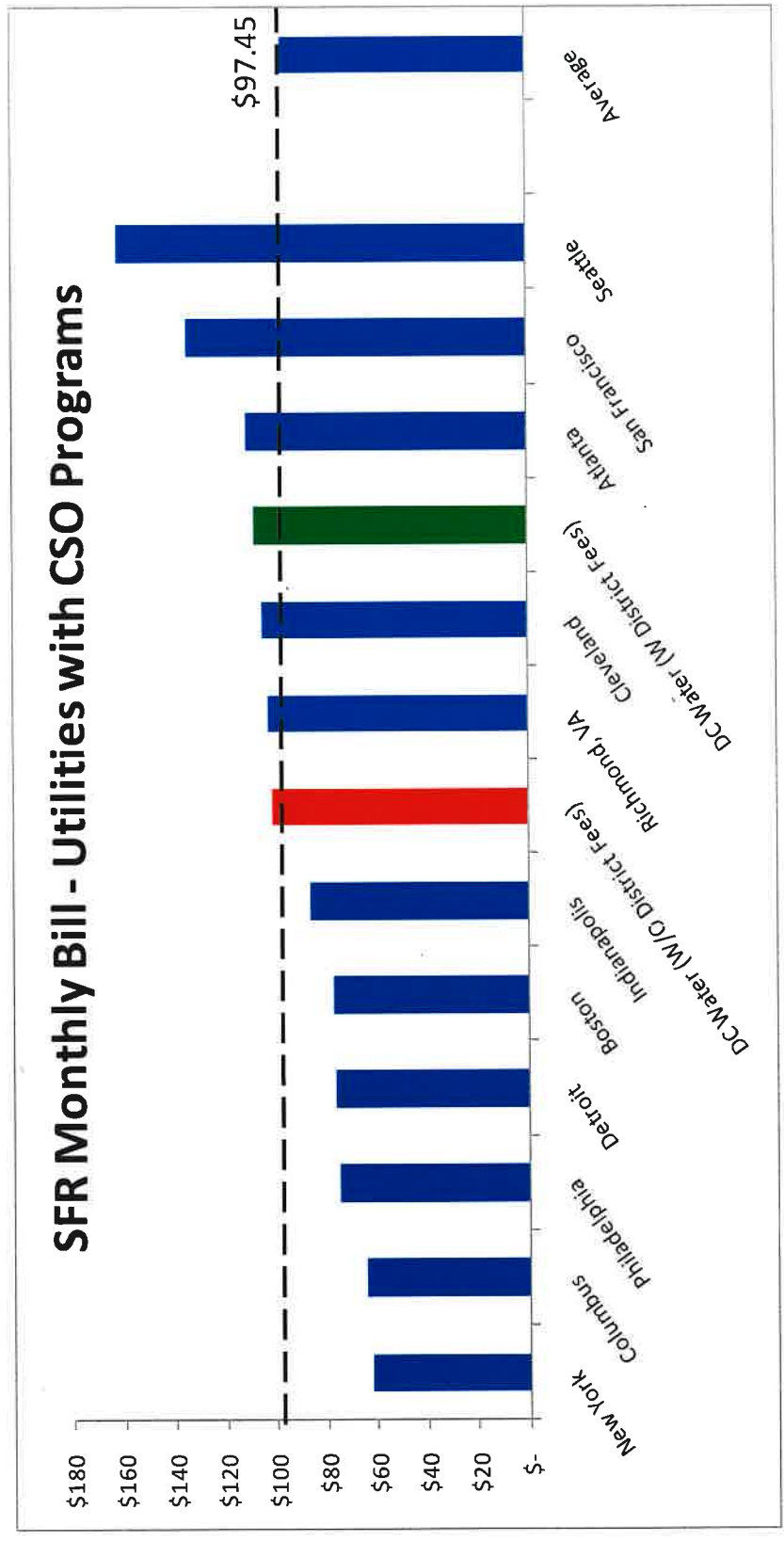
Note: Reflects rates and fees in place as of November 2018. Some cities use property tax revenue or other revenues to pay for part of the cost of water, wastewater, or stormwater services, as indicated by * in the graph above. In such situations, the user charge will not reflect the full cost of water, wastewater or stormwater services.

DC Water charges, without the benefits of CAP, are higher than the average of the universe of national and regional utilities that we survey each year on behalf of DC Water.

Slide 20



Industry Comparisons – CSO Utilities



Note: Reflects rates and fees in place as of November 2018.

DC Water charges are comparable to the average of the utilities that we survey that have CSO programs.

Affordability of User Charges – Existing & New Initiatives

- DC Water is considering extending/expanding programs beyond CAP:

	CAP	CAP2	CAP3	CRIAC Non-Profit
Funding	Existing DC Water	New DC Water	New District	New District
Income Eligibility (Households of four persons)	\$59,457	\$93,750	\$117,200	Non-residential customers
Water and Sewer	4 CCFs	3 CCFs	-	-
District Fees	Waived	-	-	-
Water System Replacement Fee	Waived	-	-	-
CRIAC	50% discount	50% discount	75% discount	90% discount
Monthly Discount	\$63.16	\$43.48	\$17.25	Varies based on the no. of ERUs

Comparison – DC Water Proposal to Increase CRIAC Credit Program: 4% to 20%

CRIAC/Stormwater Discount Program		
City	State	Max Discount
Portland	OR	35%
DC Water	DC	20%
Austin	TX	50%
Alexandria	VA	50%
Newport News *	VA	15%
Norfolk	VA	60%
Annapolis	MD	50%
Baltimore *	MD	45%
Philadelphia **	PA	80%
Montgomery County *	MD	80%
Prince Georges County	MD	100%

* For residential households; non-residential properties may receive a different % discount

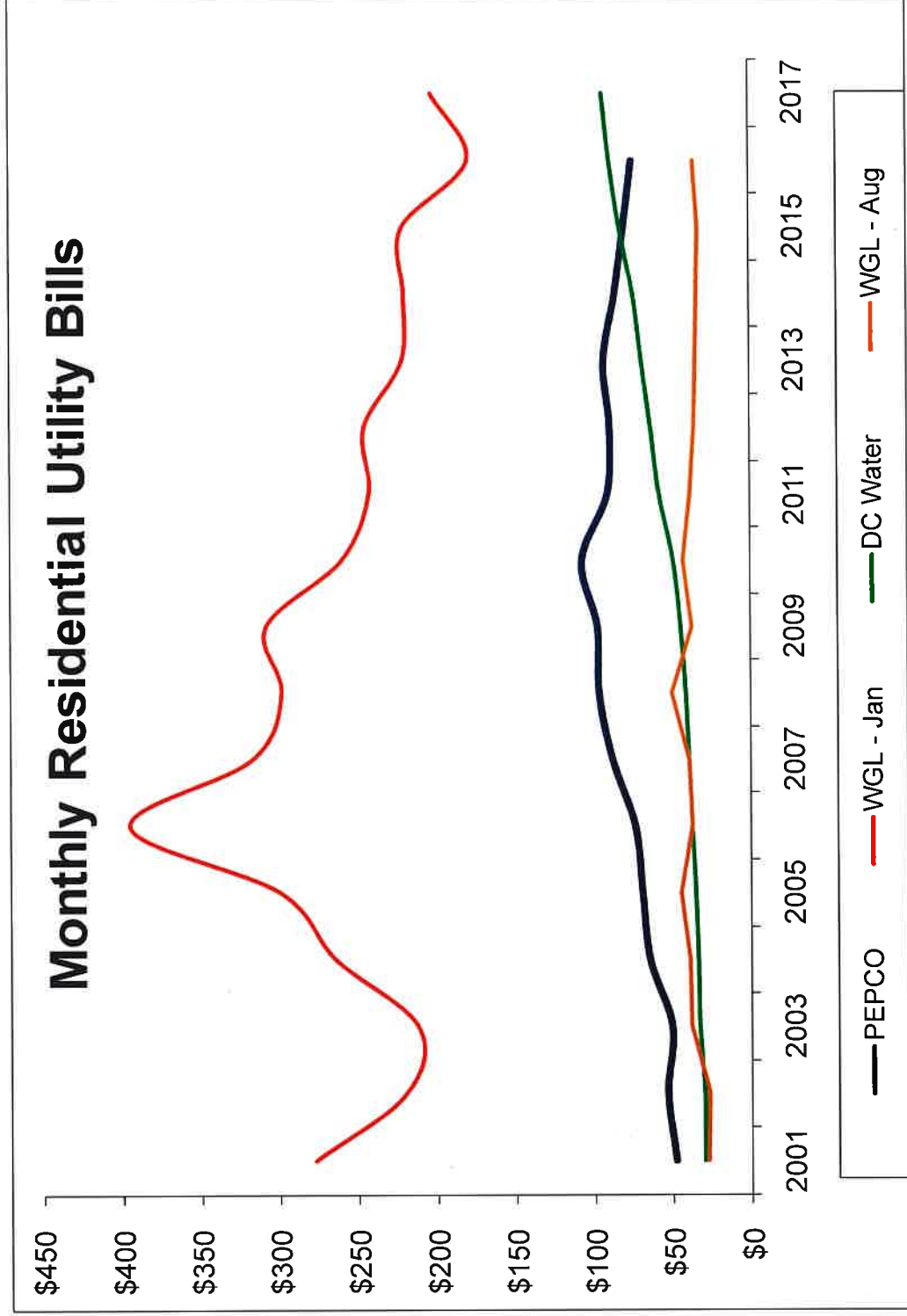
** Only large multi-family and non-residential properties are eligible. 80% maximum credit is assuming no NPDES permit

It is noted that the value of the discount varies with both the credit percentage (the maximums are shown above) as well as the amount of the charge.

Conclusion: DC Water’s proposal is in line and somewhat on the lower end of the range with peers in providing impervious area charge credits to customers that reduce their stormwater discharges.



Comparison – Electricity and Gas Bills



Source: DC Public Service Commission and DC Water

DC WATER PUBLIC HEARING

Sign-in Sheet

2020 Proposed Rate Increase

**DC Water Headquarters -2nd Floor Boardroom
1385 Canal Street SE, Washington, DC 20003**

June 12, 2019

6:30 pm - 8:30 pm

Name	Individual or Organization	Date Rec'd
Kirsten B. Williams, Esq	Organization- Apartment and Office Building Assc. Of Metro Wash.	05/17/19
Qingliu (Mary) Yang	Organization- Covington & Burling, counsel for DC Appleaseed	05/22/19
Grace D. Soderberg	Organization- Office of the People's Counsel	06/10/19