



FY 2021 Approved Budget

Adopted by the Board of Directors on March 5, 2020

District of Columbia Water and Sewer Authority



DC Water Headquarters from the Anacostia River

I. Executive Summary.....	3
II. Capital Improvement Program	13
III. Operating Expenditure Budgets.....	18
IV. Operating Revenue Budgets.....	23
V. Ten Year Financial Plan.....	32
VI. DC Water’s Promise	38

Executive Summary

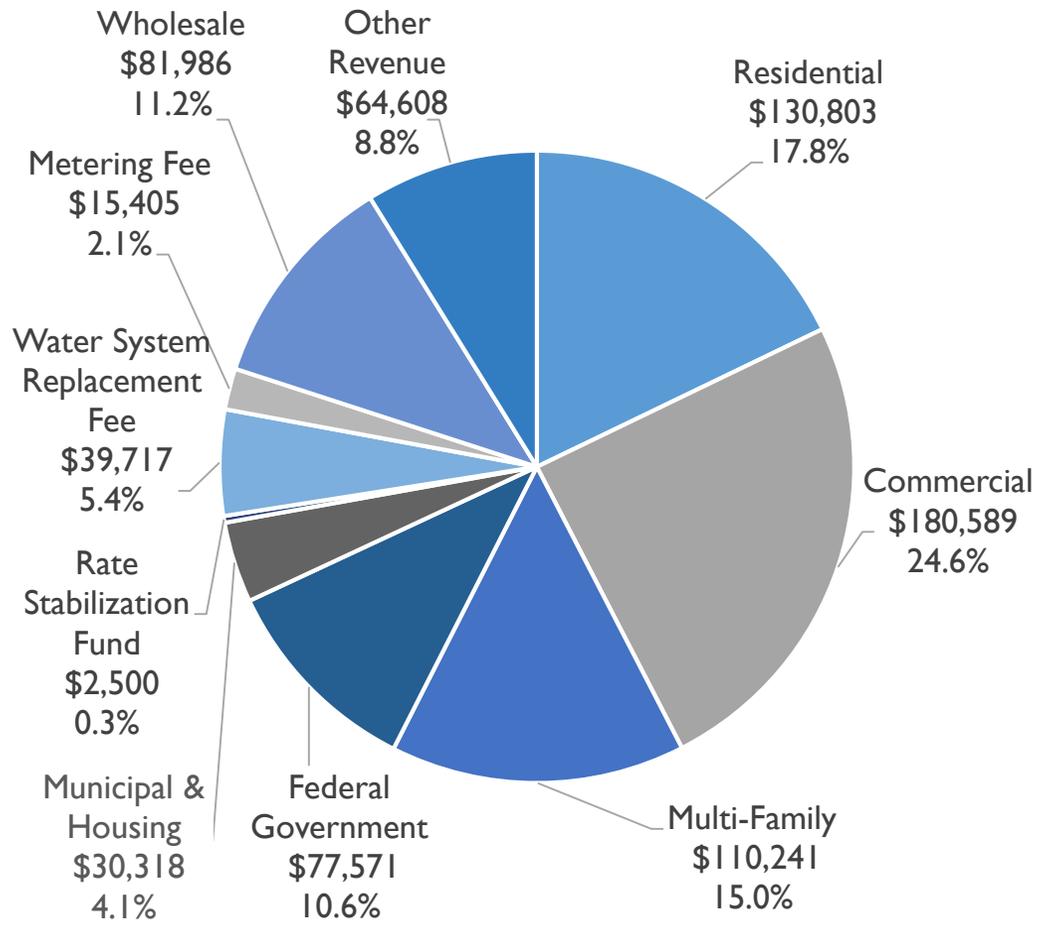
- Fully funds the **Clean Rivers Program**
- Doubles DC Water's current investment in water and sewer infrastructure by FY 2022 to reach a one percent replacement cycle, and **triples the investment by FY 2027 to reach a 1.5 percent replacement cycle**
- Adds five positions for the **DC Water Consumer Protection Amendment Act of 2018**
- Increases funds for **fleet purchases by \$4 million** to ensure crews have the equipment they need
- Continues the shift of a portion of Clean Rivers costs from the Impervious Area Charge to the sewer volumetric rate, **bringing more equity to Clean Rivers funding**
- Invests \$0.5 million in the **Apprenticeship Program to support fifteen entry level positions**
- Makes the **CAP2 program permanent** and expands **CAP benefits to 75% of the CRIAC**
- Advances **LeadFreeDC**
- Takes advantage of **low interest rates and current year savings to deliver rate increases that are smaller** than previously forecasted
- Applies **\$13 million in Rate Stabilization Funds** over FY 2021 and FY 2022 to benefit customers



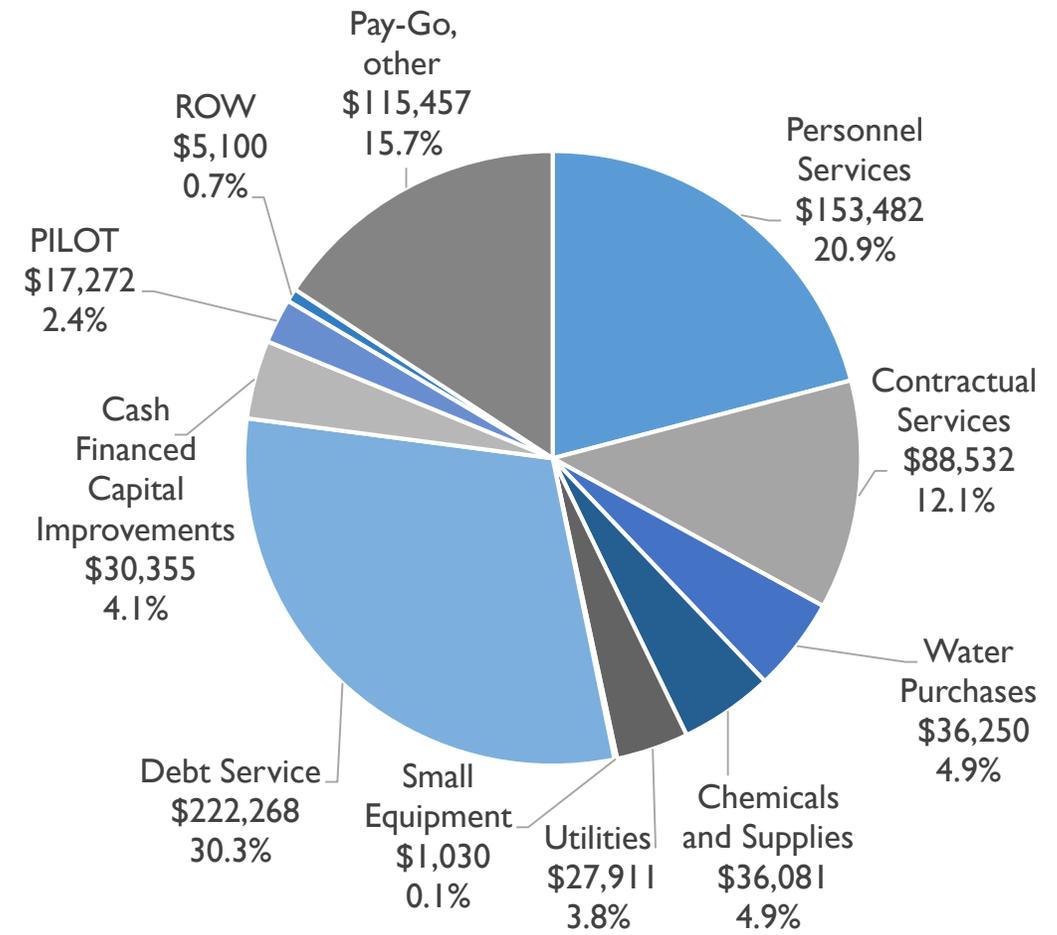
FY 2021: Sources and Uses of Funds

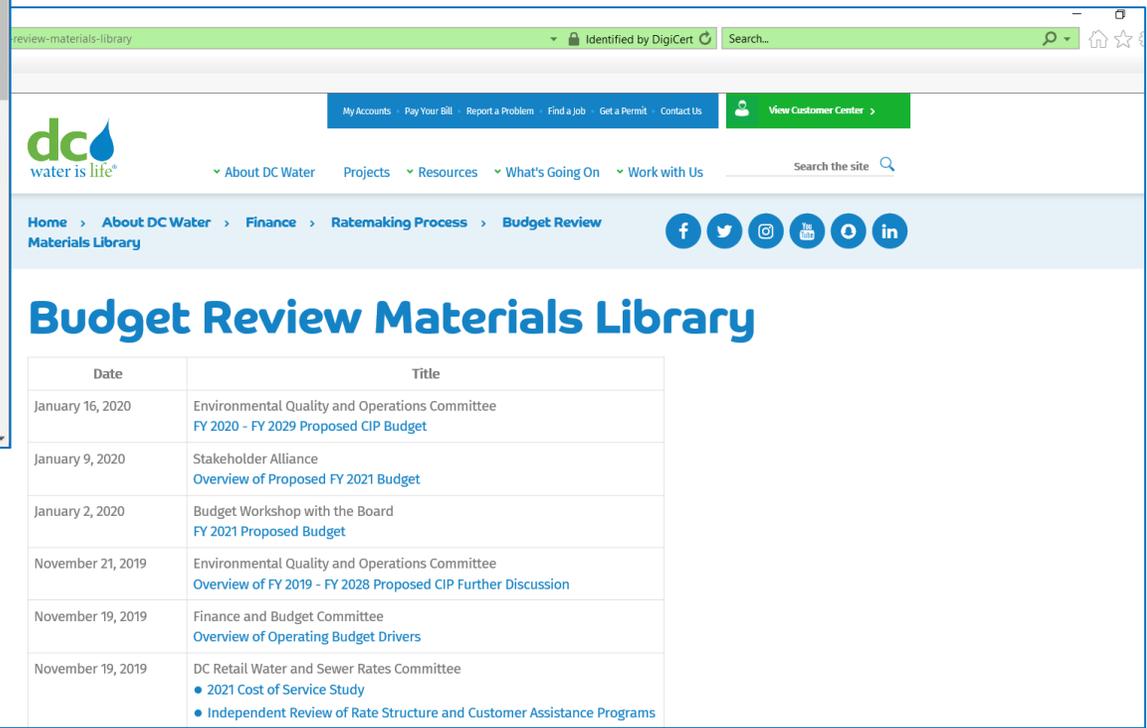
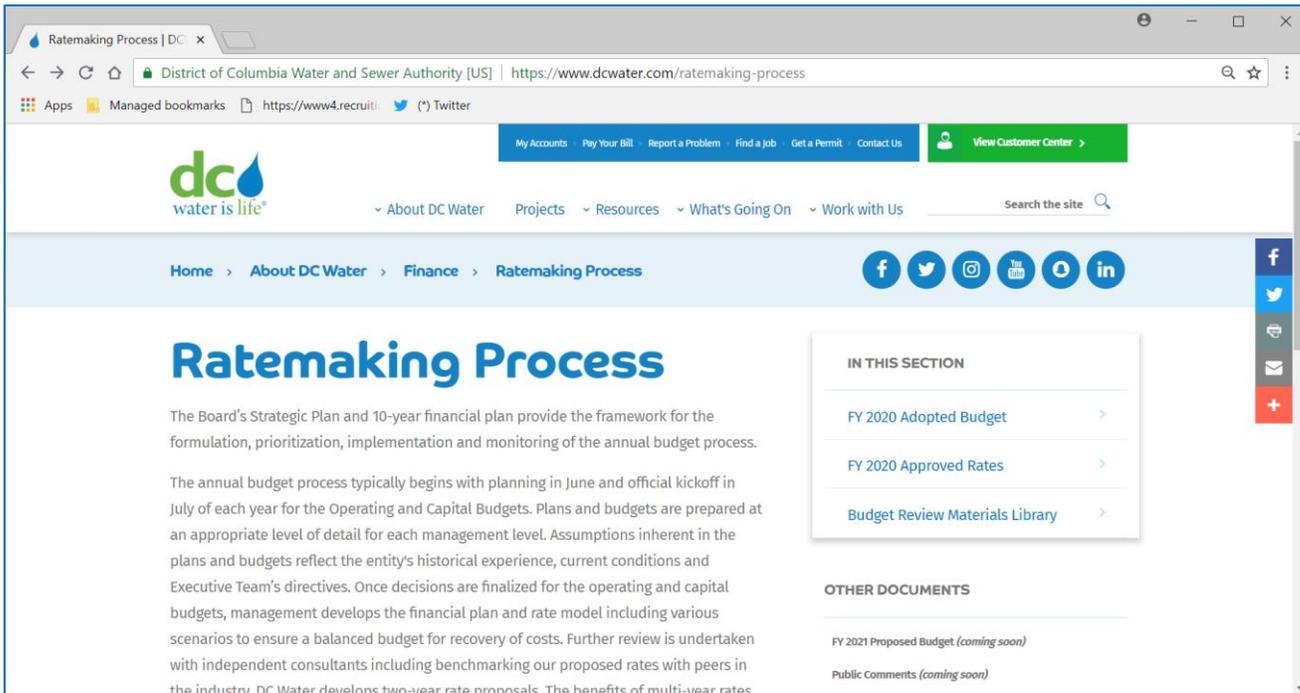
\$ in thousands

Sources - \$733.7 Million



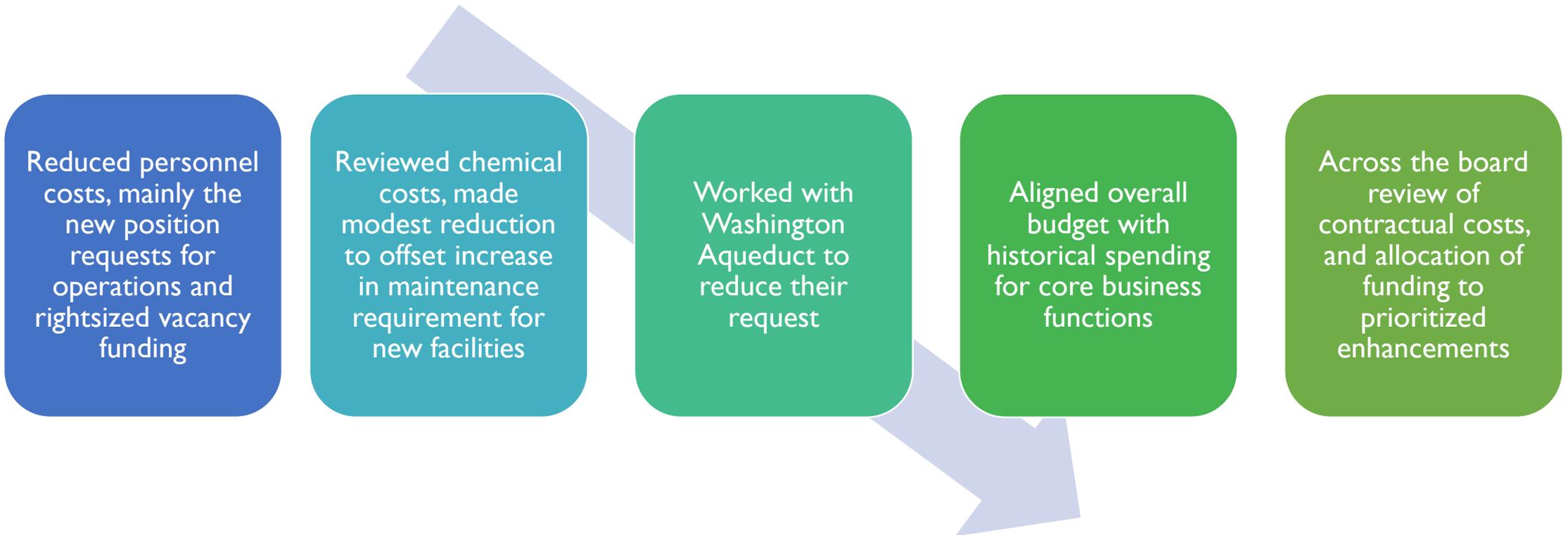
Uses - \$733.7 Million





Complete Budget Briefing available online at <https://www.dewater.com/budget-review-materials-library>

- To close the budget gap, approximately \$13 million was reduced from enhancement requests with tough choices made to ensure that we continue to deliver the best service to our customers



FY 2021 Operating Budget of \$642.7 million, an increase of \$28.1 million

- Operations and Maintenance – \$367.7 million, an increase of \$19.1 million for personnel and non personnel
- Debt Service budget of \$222.3 million or an increase of \$6.9 million and Cash Financed Capital Improvements budget of \$30.4 million or an increase of \$1.8 million
- PILOT & ROW payments to the District of \$22.4 million or an increase of \$0.3 million

10-year Capital Disbursements of \$5.45 billion, an increase of \$0.49 billion

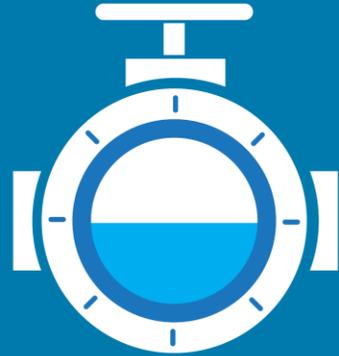
- Capital Projects – Funded at \$4.92 billion with increased funding starting FY 2027 to ramp up to 1.5 percent per year replacements for the small water mains and sewer lines
- Capital Equipment – Funded at \$333 million for planned equipment spending including the procurement of backhoes, jet-vacs, catch basin trucks and other aged vehicles to meet operational needs
- Washington Aqueduct (WAD) – Total of \$195.2 million, an increase of \$8.1 million for DC Water's share of WAD's capital program

FY 2020-2029 Capital Investments of \$5.45 billion

\$1.3 billion For the DC Clean Rivers Project and CSOs



\$2.4 billion



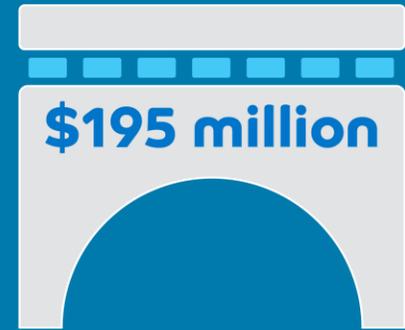
Rehabilitation of water mains and sewer pipes



\$333 million

Capital Equipment including backhoes, jet-vacs and other specialized vehicles for crews to respond to emergencies

Improvements at Washington Aqueduct



\$195 million

\$59 million



Improve the condition and drainage of the stormwater pump stations



\$1.03 billion

Major upgrades and rehabilitation at our Wastewater Treatment Plant

\$137 million



Construct new Fleet and Sewer Facilities, renovate Historic Main Pump Station, restore Seawall

FY 2021 Operating Budget of \$642.7 million



\$177.4 million

Pays the salaries, benefits and overtime costs for 1231 employees to achieve service levels

\$84.5 million



Other core operations like maintenance and repairs, software technology, legal, compliance, insurance, credit card fees, security and facilities



\$500,000

15 entry-level positions for the new apprenticeship program

\$101.3 million



For chemicals, supplies, water purchases, energy, telecoms and small equipment



\$4 million

Pay for Success for Green Infrastructure (GI) project, GI certification program and establishment of non-ratepayer expenditure fund

\$252.6 million



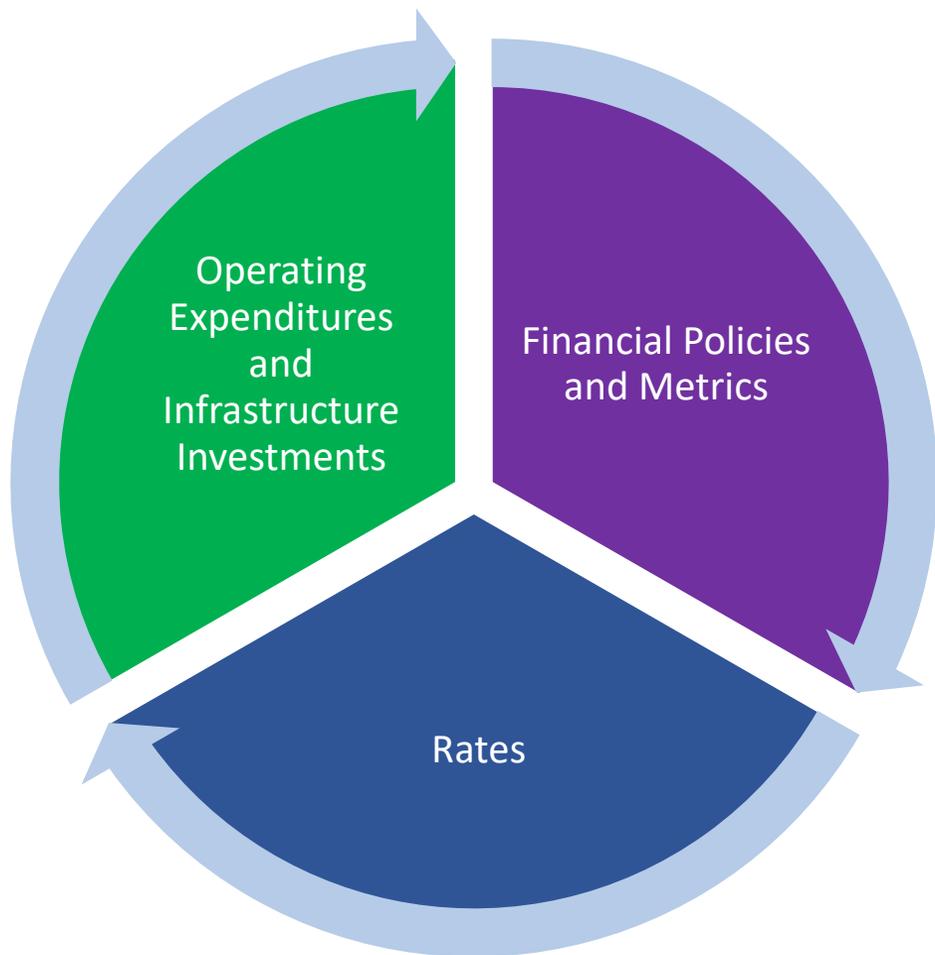
Other non-operational needs including debt service, Paygo



\$22.4 million

PILOT & ROW payments to the District

- Board approved 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 (calculated at 5.42Ccf)
 - Proposed annual water and sewer rate increase of 9.9% for FY 2021 and 7.8% FY 2022
 - Continue Shift of Clean Rivers Impervious Area Charge (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 (VSRF) will remain the same as in FY 2020
 - 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



- 💧 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

Capital Improvement Program



Ten-Year Capital Improvement Program

Approved ten-year CIP comprises of the following budgets -

- Capital Disbursements** – Total of \$5.45 billion begins the implementation of the “Modified Baseline”, adds additional funds to reach 1.5% replacement plans for water and sewer infrastructure starting FY 2027, balancing infrastructure renewal and affordability; and includes funding requirements for capital equipment and the Washington Aqueduct’s capital projects
- Lifetime Project** – Total of \$12.39 billion represents the historical spending prior to, during and beyond the ten-year period for projects active during the ten-year window, including the in-house labor costs

Service Area (\$ in thousands)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	10-Yr Total	Lifetime Budget
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	\$ 221,841
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	3,698,301
COMBINED SEWER OVERFLOW	171,436	157,058	192,649	145,824	84,267	68,476	155,470	110,837	97,863	127,484	1,311,366	3,041,740
STORMWATER	6,869	9,631	7,535	4,170	5,392	4,660	4,201	4,306	6,869	5,057	58,690	122,404
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	2,094,934
WATER	62,163	88,677	108,878	109,000	92,905	101,765	116,319	146,791	154,916	154,697	1,136,112	2,273,813
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	11,453,033
CAPITAL EQUIPMENT	31,703	37,207	33,790	32,315	33,000	33,000	33,000	33,000	33,000	33,000	333,015	333,015
WASHINGTON AQUEDUCT	15,515	16,266	18,572	37,841	12,699	33,875	9,508	12,863	24,068	13,971	195,178	195,178
ADDITIONAL CAPITAL PROGRAMS	47,218	53,473	52,362	70,156	45,699	66,875	42,508	45,863	57,068	46,971	528,193	528,193
LABOR												409,370
TOTAL CAPITAL BUDGETS	\$ 452,223	\$ 507,590	\$ 611,008	\$ 531,323	\$ 438,195	\$ 461,193	\$ 580,092	\$ 589,978	\$ 628,404	\$ 650,006	\$ 5,450,013	\$ 12,390,596

The approved 10-year capital program begins the implementation of the “Modified Baseline”, and includes additional investments to balance infrastructure renewal and affordability

- Fully funds the **Clean Rivers** program to meet all consent decree deadlines
- Funds **non-process facilities** including the new Fleet and Sewer Facilities, renovations to the Historic Main Pump Station, and restoration of the Main & O campus seawall
- At **Blue Plains** funds upgrades to Screens, Grit and Primary Facilities, and Process Control Computer System, Efficiency Improvements, and Long-term Concrete Rehabilitation projects
- Advances major rehabilitation of **sanitary collection sewers**, upgrades to sewer pump stations, rehabilitation of the Potomac Interceptor and increased funding to ramp up to 1.5 percent replacements per year starting FY 2027 and onwards for the **small diameter water mains** and **small sewer lines**
- Increases funds for fleet purchases to reduce the backlog by investing \$12 million over two years to help ensure that crews have the equipment that they need
- Includes carryover from prior year to complete the Enterprise Resource Planning (ERP) and Advanced Meter Infrastructure (AMI) projects



Screens, Grit & Primary Facilities Upgrades



Large Equipment

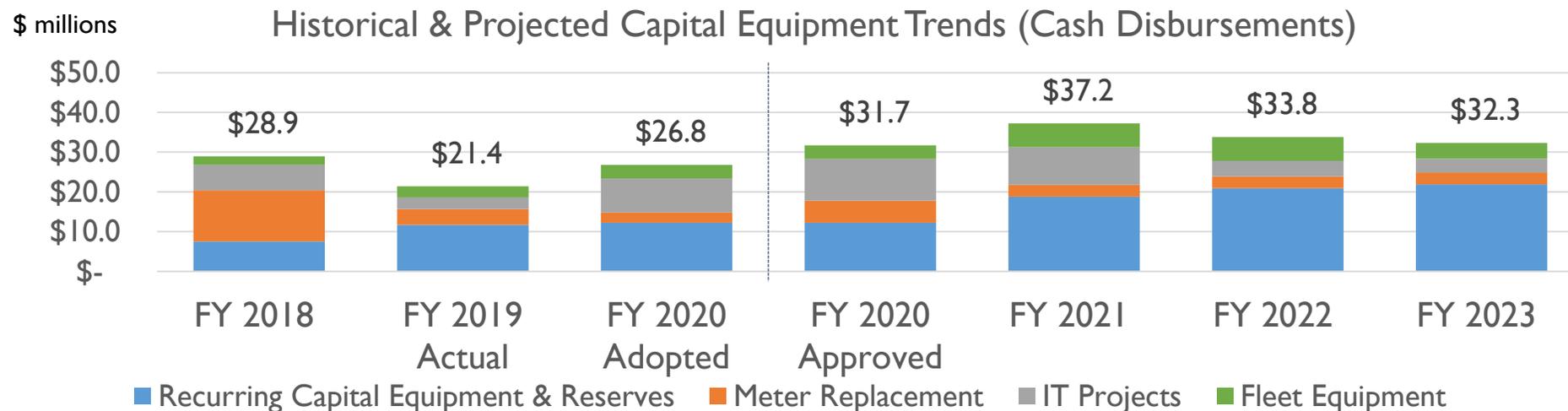
\$000's	Washington Aqueduct	DC Water's Share
FY 2020	\$21,095	\$15,515
FY 2021	\$22,115	\$16,266
FY 2022	\$25,251	\$18,572
FY 2023	\$51,449	\$37,841
FY 2024	\$17,266	\$12,699
FY 2025	\$46,057	\$33,875
FY 2026	\$12,927	\$9,508
FY 2027	\$17,489	\$12,863
FY 2028	\$32,723	\$24,068
FY 2029	\$18,995	\$13,971
Total	\$265,368	\$195,178

- ▶ **Washington Aqueduct (WAD)** – Total ten-year budget of \$265.4 million
 - Presented a risk-based asset management CIP using decision-making tools to prioritize and grade projects to achieve established service levels
 - Major projects include the Old Conduit Rehabilitation, North Clearwell Replacement, and Dalecarlia Back-up Power Generation
 - Budget proposal excludes the Federally Owned Water Mains, Travilah Quarry Acquisition & Outfitting and Advanced Treatment Facilities

- ▶ **DC Water's Share** – Total of \$195.2 million represents 73.6% of WAD's capital programs

💧 Ten-year disbursements of \$333 million for capital equipment includes

- The approved FY 2020 budget includes the carryover of \$5 million from prior year for the Enterprise Resource Planning (ERP) and Advanced Meter Infrastructure (AMI) projects
- Recurring Capital Equipment – This covers the purchase/replacement of pumps, motors, HVACs, roof, laptops, computers, servers, fire hydrants and includes the Authority-wide reserves for future facilities and other equipment needs
- Meter Replacement – Funding requirement for equipment, labor and installation of small and large meters including completion of the AMI project
- Information Technology (IT) Projects – Funds new and upgrades to various Authority-wide technology systems such as the ERP, Maximo, Vertex One, GIS, Facilities Mobility, and Third Party Portal Enhancements
- Fleet Equipment – increases funds for procurement of backhoes, jet-vacs, catch basin trucks and other aged vehicles to meet operational needs



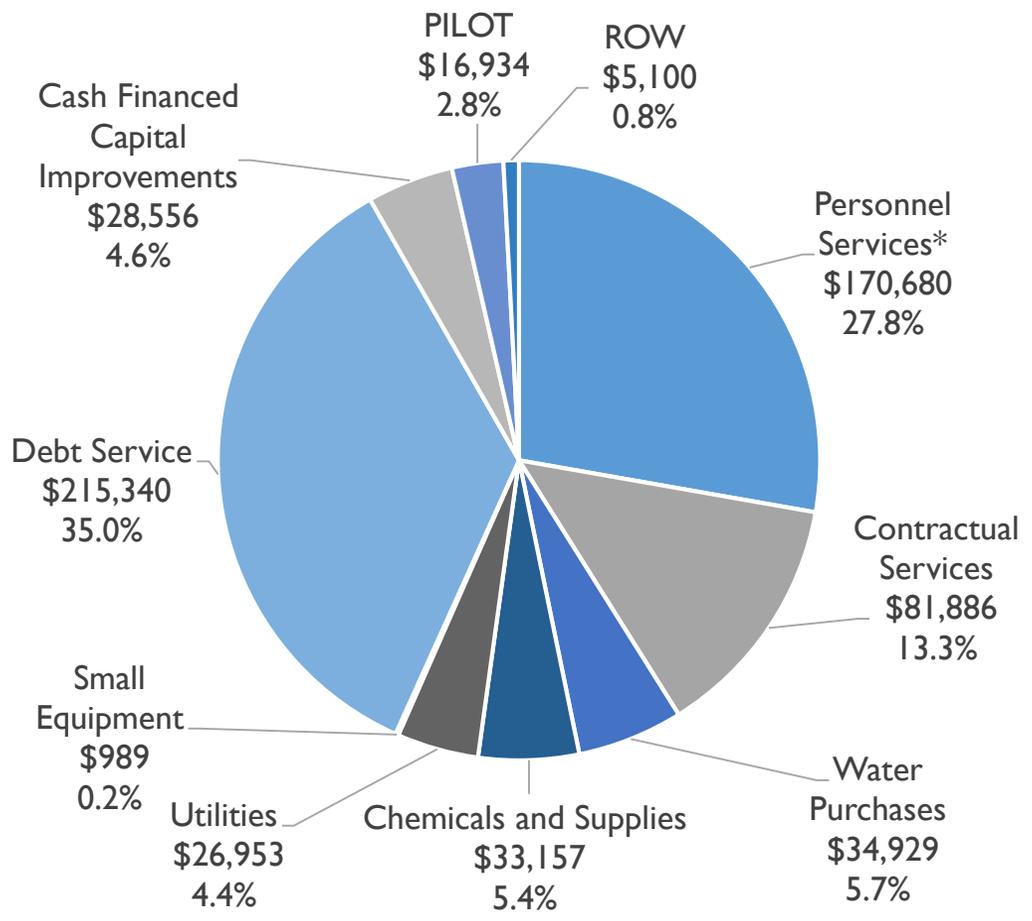
Operating Expenditures



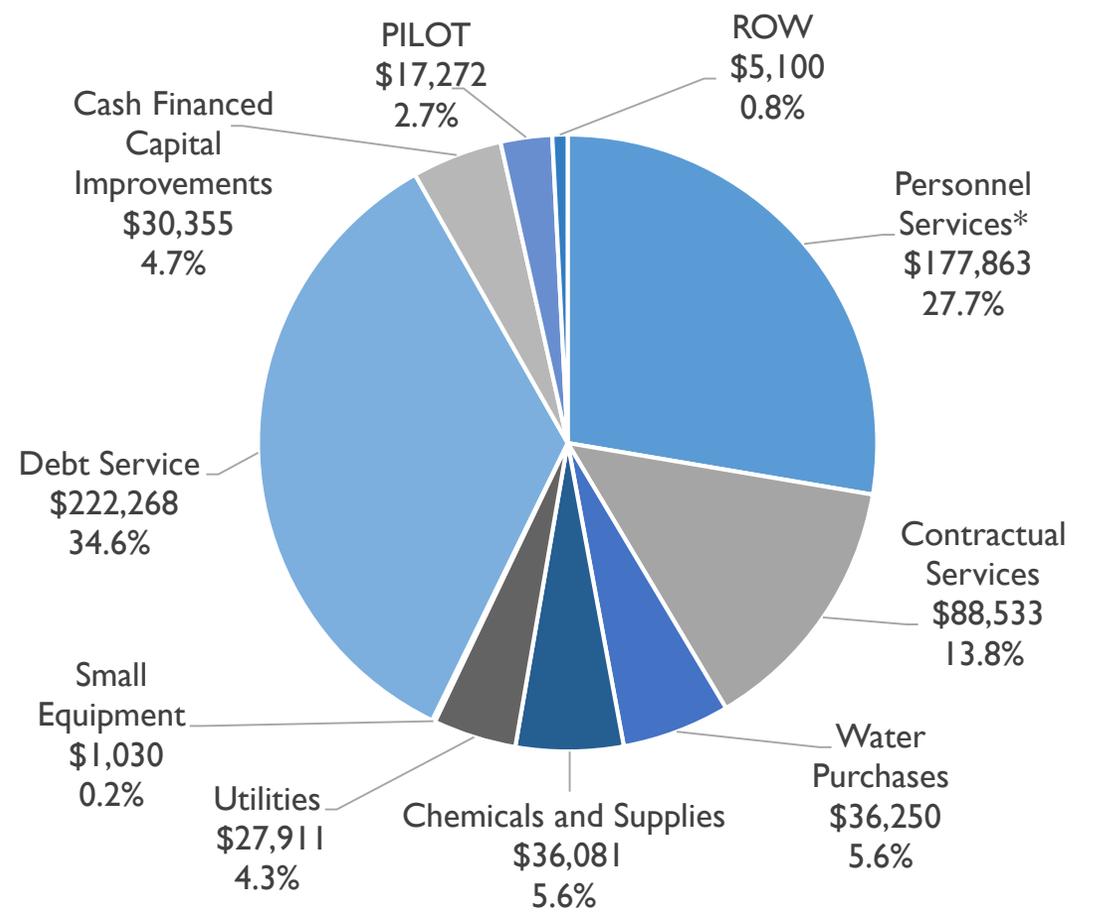
FY 2020 vs. FY 2021 Expenditure Budgets

\$ in thousands

Approved FY 2020 \$614,523



Approved FY 2021 \$642,663



* Personnel Services includes capital labor charges



FY 2021 Approved Operating Budget

- Total operating expenditure is projected to increase by \$28.1 million or 4.6 percent
- Total O&M expenditure is projected to increase by \$19.1 million or 5.5 percent

(\$000's)	FY 2019 Approved	FY 2019 Actual	FY 2019 Variance	FY 2020 Approved	FY 2021 Approved	(Increase)/ Decrease	
Regular Pay	\$ 118,909	\$ 115,735	\$ 3,174	\$ 123,293	\$ 128,287	\$ (4,994)	-4.1%
Benefits	36,137	34,073	2,064	39,303	41,422	(2,119)	-5.4%
Overtime	7,575	8,171	(596)	8,084	8,154	(70)	-0.9%
Total Personnel Services	\$ 162,620	\$ 157,979	\$ 4,641	\$ 170,680	\$ 177,863	\$ (7,183)	-4.2%
Chemicals & Supplies	32,082	34,979	(2,897)	33,157	36,081	(2,924)	-8.8%
Utilities	26,915	25,778	1,137	26,953	27,911	(957)	-3.6%
Contractual Services	81,679	76,206	5,473	81,886	88,532	(6,647)	-8.1%
Water Purchases	30,520	32,430	(1,910)	34,929	36,250	(1,321)	-3.8%
Small Equipment	1,240	731	509	989	1,030	(41)	-4.1%
Total Non-Personnel Services	172,435	170,125	2,310	177,914	189,804	(11,891)	-6.7%
Total Operations & Maintenance	\$ 335,055	\$ 328,104	\$ 6,951	\$ 348,594	\$ 367,667	\$ (19,073)	-5.5%
Debt Service	199,025	193,035	5,990	215,340	222,268	(6,928)	-3.2%
PILOT & ROW	21,702	21,702	0	22,034	22,372	(339)	-1.5%
Cash Financed Capital Improvements	26,999	26,999	-	28,556	30,355	(1,800)	-6.3%
Total Non-O&M	247,726	241,736	5,990	265,929	274,996	(9,066)	-3.4%
Total Operating Expenditure	\$ 582,781	\$ 569,839	\$ 12,942	\$ 614,523	\$ 642,663	\$ (28,140)	-4.6%
Capital Labor Charges	(18,259)	(17,588)	(671)	(22,748)	(24,382)	1,634	-7.2%
Net Operating Expenditure	\$ 564,522	\$ 552,251	\$ 12,271	\$ 591,775	\$ 618,281	\$ (26,506)	-4.5%

- **Personnel Services** – \$7.2 million increase mainly for salaries, employee health benefits and overtime costs. This includes five new positions to support the DC Water Consumer Protection Amendment Act of 2018
- **Chemicals & Supplies** – \$2.9 million increase in fixed cost for major chemicals (methanol, sodium bisulfite and ferric chloride) used in the wastewater treatment process and for the maintenance requirements of the Tunnel Dewatering Pump Station (TDPS)
- **Utilities** – \$1 million increase includes the impacts of the Clean Energy DC Omnibus Act for increased renewable portfolio standards, and telecommunication costs for data network circuits, skype connectivity, backup internet and other technology solutions
- **Water Purchase** – \$1.3 million increase funds DC Water’s responsibility of approximately 75 percent of Washington Aqueduct’s operating budget
- **Contracts** – \$6.6 million increase is mainly for the Pay for Success based on the performance of the Green Infrastructure (GI) project, mandatory software maintenance, equipment maintenance and repairs, fire suppression and detection system, security guards for new facilities, credit card fees, insurance and other professional services
- **Small Equipment** – Budget is relatively flat and is mainly for the purchase of small items such as office equipment, cameras, small appliances and tools and rental of postage machines

- 💧 **Debt Service** – Increase of \$6.9 million due to existing debt and anticipated FY 2020 new money issuance
 - Refunded Series 2013A bonds for \$300 million in FY 2020; total Present Value (PV) savings of \$50.8 million and annual cash flow savings of \$2.4 to \$2.7 million through FY 2048 compared to the previous financial plan
- 💧 **Payment-in-Lieu of Taxes (PILOT)** – Increase of \$0.3 million consistent with MOUs for payments to the District
- 💧 **Right-of-Way (ROW)** – Remains at the FY 2020 level for payments to the District
- 💧 **Cash Financed Capital Improvements** – Increase of \$1.8 million mainly for PAYGO funding
- 💧 **Capital Labor Charges** – Increase of \$1.6 million funds personnel costs incurred on capital projects

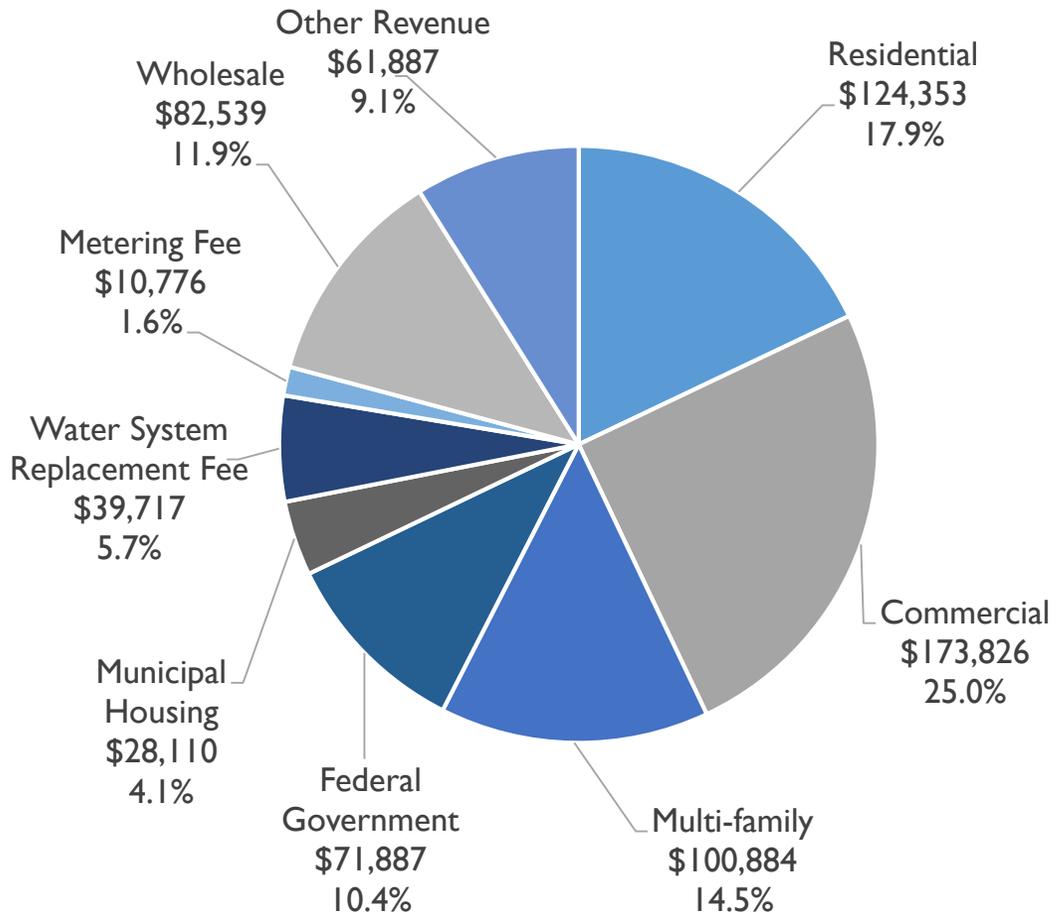
Operating Revenue



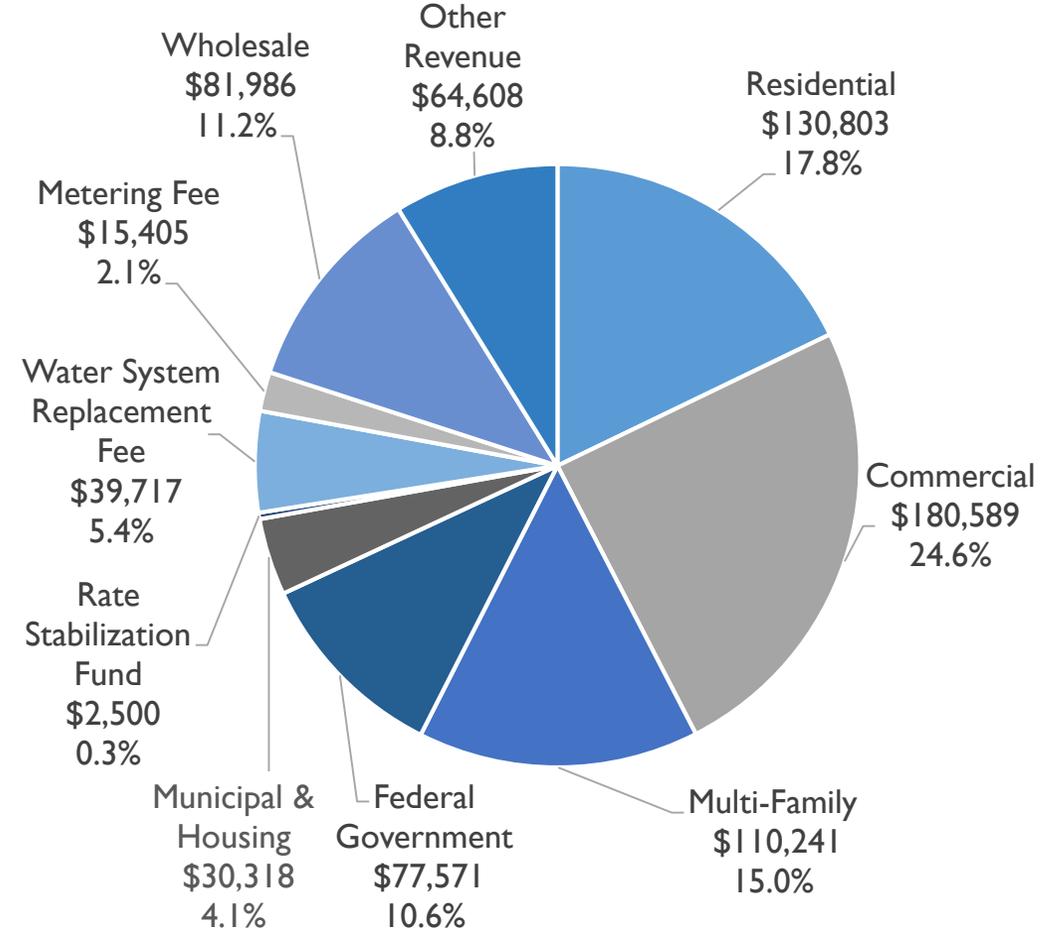
FY 2020 vs. FY 2021 Operating Revenues

\$ in thousands

Approved FY 2020 \$693,979



Proposed FY 2021 \$733,738





Revenue Comparison by Customer Class

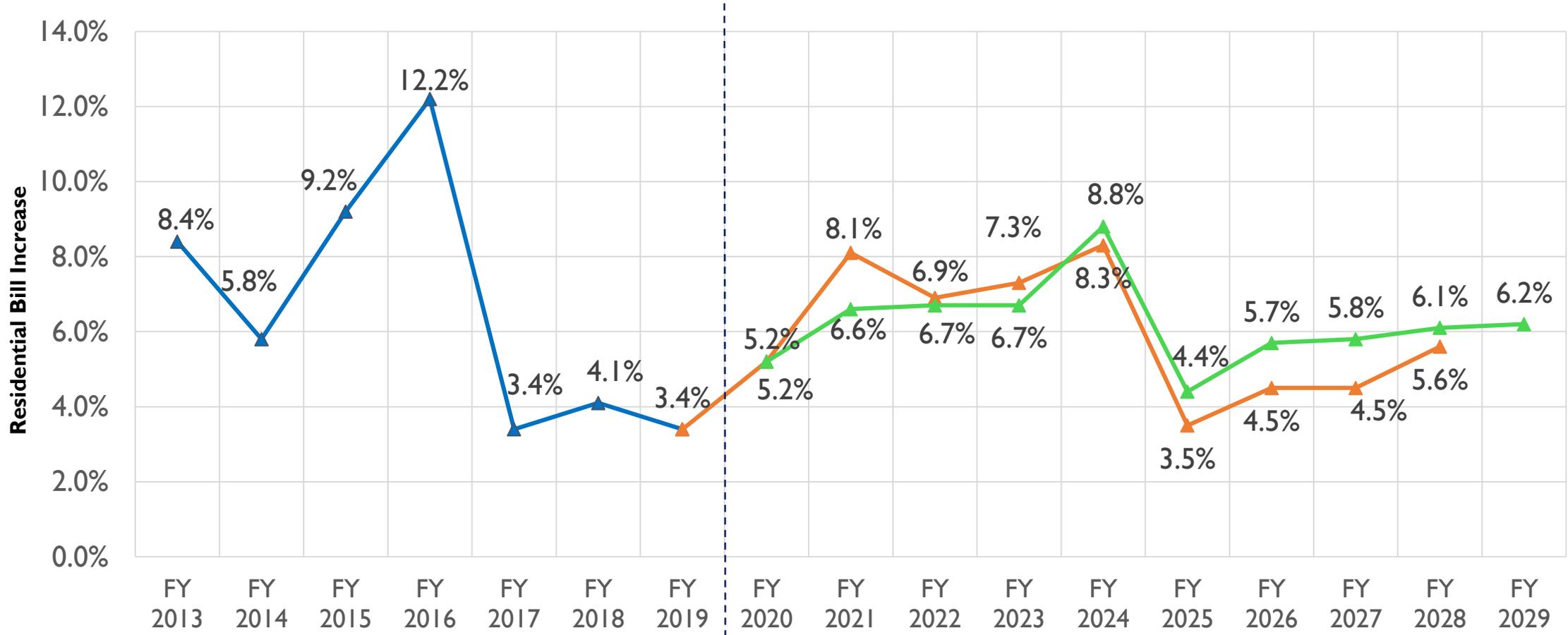
- Total revenue is projected to increase by \$39.7 million or 5.7% for FY 2021 and \$32.6 million or 4.4% for FY 2022 mainly due to rate increases
- Retail revenue is projected to increase by \$35.1 million or 6.4% for FY 2021 and \$23.0 million or 3.9% for FY 2022 due to rate increases for both years
- 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	Proposed	Proposed	FY 2021 vs		FY 2022 vs	
	FY 2020	FY 2021	FY 2022	FY 2020		FY 2021	
				Incr/(Decr)		Incr/(Decr)	
				\$	%	\$	%
Retail Revenue	\$549,553	\$584,644	\$607,652	\$35,091	6.4%	\$23,008	3.9%
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%

- 💧 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)



Historical and Projected Combined Rate Increases for Average Residential Customer



▲ Historical ▲ Last Year's Financial Plan (FY 2019 - FY 2028) ▲ FY 2021 Approved Financial Plan (FY 2020 - FY 2029)

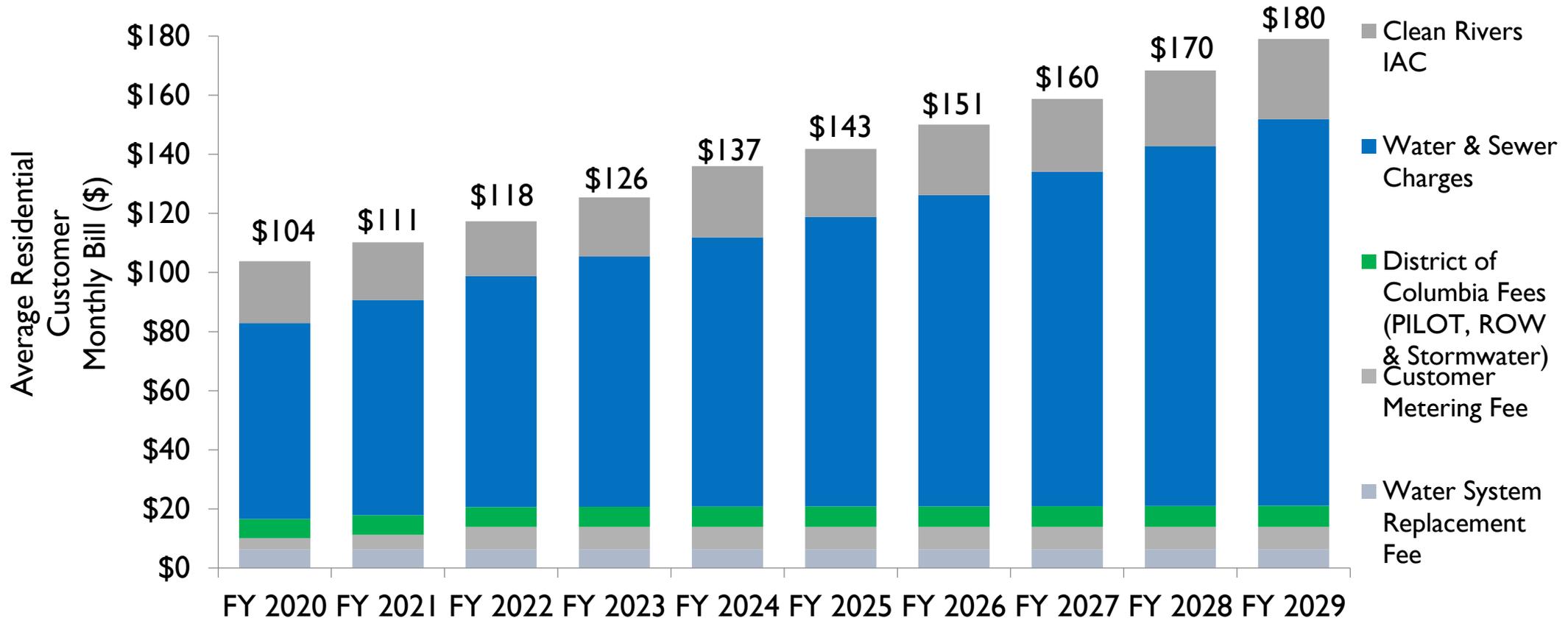
- CAP is being expanded to increase the CRIAC discount from 50% to 75%
 - Reduces bill for customers with average household consumption to 1.7% of Area Median Income (AMI)
 - Change consistent with Independent Rate Review recommendation
- CAP2 to be made permanent
- DC Water requested District Government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

- 💧 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



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



Low Income CAP Customer Monthly Bill

**District of Columbia Water & Sewer Authority
Average CAP Customer Monthly Bill
FY 2017 - FY 2022**

	Units	FY 2017	FY 2018	FY 2019	Current FY 2020	Proposed FY 2021	Proposed FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 49.63	\$ 52.13	\$ 59.18	\$ 66.25	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC	ERU	22.24	25.18	23.00	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	3.86	3.86	3.86	4.96	7.75
DC Water Water System Replacement Fee	5/8"	6.30	6.30	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 82.03	\$ 87.47	\$ 92.34	\$ 97.35	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 4.26	\$ 5.44	\$ 4.87	\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 2.61	\$ 2.66	\$ 2.71	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	0.87	0.97	0.98	1.03	1.03	1.03
District of Columbia Stormwater Fee ⁽⁴⁾	ERU	\$ 2.67	2.67	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.15	\$ 6.30	\$ 6.36	\$ 6.46	\$ 6.63	\$ 6.74
Total Amount		\$ 88.18	\$ 93.77	\$ 98.70	\$ 103.81	\$ 110.71	\$ 118.11
Less: CAP Discount (4 Ccf per month) ^{(1), (2)}		(38.33)	(40.24)	(45.36)	(50.60)	(55.96)	(60.08)
Water System Replacement Fee (WSRF) ⁽³⁾		(6.30)	(6.30)	(6.30)	(6.30)	(6.30)	(6.30)
Clean Rivers IAC ⁽⁵⁾		(11.12)	(12.59)	(11.50)	(10.47)	(14.64)	(13.80)
Total Amount Appearing on DC Water Bill		\$ 32.43	\$ 34.64	\$ 35.54	\$ 36.44	\$ 33.81	\$ 37.93
Increase / Decrease Over Prior Year		\$ (8.50)	\$ 2.21	\$ 0.90	\$ 0.90	\$ (2.63)	\$ 4.12
CAP Customer Discount as a Percent of Total Bill		-63.2%	-63.0%	-64.0%	-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 FY 2021 and FY 2022 for the Clean Rivers IAC

Financial Plan

- 💧 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



Board-Approved 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

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

- Upgrades beyond 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.



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

DC Water is committed to providing superior service, ingenuity and stewardship to our customers

- 💧 We are efficient with our ratepayers money
- 💧 We are devoted to improving water quality
- 💧 We provide opportunity to small and minority businesses
- 💧 We continue to invest in our aging infrastructure for the benefit of our customers and the community
- 💧 We are a great place to work



Saint Elizabeth Water Tower



Boat Skimmers to Clean the Anacostia River



Anacostia River Tunnel