

**Approved FY 2021 Budgets**  
**Section II: OVERVIEW**

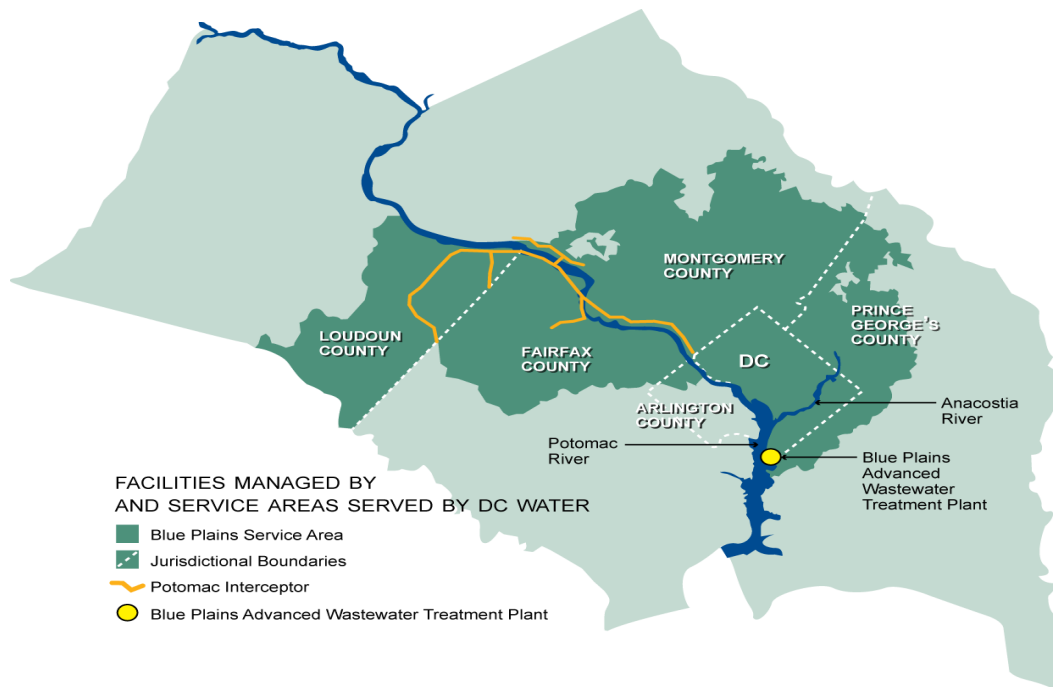


Blue Plains Advanced Wastewater Treatment Plant

**History:** The District of Columbia Water and Sewer Authority (DCWASA), was created by District law in 1996, with the approval of the United States Congress, as an independent authority of the District Government with a separate legal existence. In 2010, the Authority rebranded and became DC Water. DC Water is the sole water and sewer utility in the District of Columbia.

**Age of Pipes:** The median age of District water main pipes is over 77 years old, with approximately 9 percent of pipes installed in the 1900’s and 2 percent dating back to the 1860s before the Civil War.

**Service Area:** Providing approximately 700,000 residents and 21.3 million annual visitors in the District of Columbia with retail water and wastewater (sewer) service, DC Water has a total service area of approximately 725 square miles. In addition, DC Water treats wastewater for approximately 1.6 million people in neighboring jurisdictions, including Montgomery and Prince George’s Counties in Maryland and Fairfax and Loudoun Counties in Virginia.



**Drinking Water Quality:** With a strong emphasis on water quality, DC Water maintains an annual flushing program, regulatory and voluntary water quality testing and ongoing system upgrades. DC Water, in partnership with the U.S. Army Corps of Engineer’s Washington Aqueduct, ensures a high-quality treatment process for delivering outstanding drinking water throughout the year. DC Water purchases water produced by the Aqueduct and distributes to its customers in the District of Columbia.

**Pumped and Treated Water Storage:** During Fiscal Year 2019, DC Water pumped an average of 96.4 million gallons of water per day. In addition, DC Water stores 61 million gallons of treated water at its eight facilities. The Washington Aqueduct stores an additional 49 million gallons .

**Water Distribution System:** DC Water delivers water through roughly 1,350 miles of interconnected pipes, four pumping stations, five reservoirs, four water tanks, 43,860 valves, and 9,510 fire hydrants.

**Sewer System:** DC Water operates 2,000 miles of combined, separate, and stormwater sewers; 50,000 manholes and 25,000 catch basins; nine off-site wastewater pumping stations, one combined sewer swirl facility and 16 stormwater pumping stations.

**Blue Plains Advanced Wastewater Treatment Plant (BPAWWTP):** Blue Plains, located at the southernmost tip of the District, is the largest advanced wastewater treatment facility in the world, covering 150 acres along the Potomac River. Recycled water from the Blue Plains Plant, is used in the treatment of wastewater and is not sold for retail use.

**Wastewater Treatment Capacity:** Blue Plains treats an annual average of 320 million gallons per day (MGD) and has a design capacity of 384 MGD, with a peak design capacity to treat more than one billion gallons per day.

**Customer Service:** DC Water communicates valuable customer-related information through bill inserts, monthly newsletters, its website, and social media to include Facebook, YouTube, Flickr, Twitter and Instagram. Using an interactive voice recognition system, DC Water makes information readily available in more than 150 languages.

A 24-hour Emergency Command Center, operates as the centralized communication facility for receiving and responding to a variety of emergency calls from customers and the public.

DC Water’s new Customer Information System (CIS) provides an integrated environment that enrolls new customers, generates billings, manages credit and collections, and tracks water consumption. CIS also tracks and manages meters, handles customer inquiries, complaints, and service orders as well as provides call center support.

**Community Service:** Donating its time and resources, DC Water strives to be present at events that align with its mission and allows the Authority to engage with the residents about pertinent projects and services. Employees actively support a variety of charitable projects and community services. DC Water also invests in the community; conducting science laboratory exercises in District high schools and engaging the public through tours of the Blue Plains Plant.



## Facts at a Glance

**Community Outreach:** Maintaining an active presence in the community through sharing time and resources is a core value at DC Water. Employees participate in meetings and community events throughout the District; invite the public to the BPAWWTP and new headquarters building; and provide hands-on-lessons, field trips and environmental education events to more than 2,000 students in our service area during the school year. DC Water seeks to educate and support its customers as stewards of the environment.

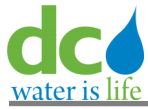
**Employees:** Approximately 1,100 people are employed by DC Water and work at various facilities across the District of Columbia to provide vital services to our customers.

**Governance:** DC Water’s Board of Directors establishes policies and guides the strategic planning process. The Board is composed of 22 members, (11 principals and 11 alternates) representing the District, Montgomery and Prince George’s Counties in Maryland and Fairfax County in Virginia. The District members set rates, charges and policies for District services. The entire Board votes and establishes policies for joint-use services. The Chief Executive Officer and General Manager reports to the Board and manages operations and performance of the enterprise. The members of the Board of Directors also serve on various Sub Committees: DC Retail Water & Sewer Rate; Environmental Quality and Operations; Finance and Budget; Governance; Human Resources and Labor Relations; Strategic Planning and Audit.

**Financial Performance:** In August 2019, Fitch Ratings upgraded DC Water’s credit rating to AA+ for senior lien revenue bonds and the Authority maintained AAA credit rating by S&P and an Aa1 by Moody’s. DC Water also maintained a GB1 rating for green bonds, Moody’s highest possible green bond assessment. DC Water also received its 22<sup>nd</sup> consecutive unqualified audit opinion of its financial statements and 19<sup>th</sup> consecutive Distinguished Budget Presentation Award from the Government Finance Officers Association (GFOA) .

### DC Water Financial Information (\$ Millions)

Bond Rating: AAA/Aa1/AA+	FY 2020	FY 2021
Revenue (Cash Receipts)	\$ 699.0	\$ 733.7
Operating Expenditure Budget	\$ 591.8	\$ 618.3
Capital Disbursement Budget	\$ 452.2	\$ 507.6



# Budget Summary

The chart below highlights DC Water’s operating expenditures, capital disbursements, revenues, rates and fees.

Description	Unit of Measure	FY 2020 Revised	FY 2021 Proposed	FY 2022 Proposed	FY 2021 vs FY 2020 Increase /(Decrease)	FY 2022 vs FY 2021 Increase /(Decrease)
Total Operating Expenditure	\$ in thousands	\$614,523	\$642,663	\$654,630	\$28,140	\$11,967
Capital Disbursements	\$ in thousands	\$452,223	\$507,590	\$611,008	\$55,367	\$103,418
Ten-Year CIP (Cash Disbursement)	\$ in billions	\$4.96	\$5.45	N/A	\$0.49	N/A
Total Operating Revenue	\$ in thousands	\$698,979	\$733,738	\$766,298	\$34,759	\$32,560
Wholesale Operating Revenues	\$ in thousands	\$82,539	\$81,986	\$84,445	(\$553)	\$2,459
Residential 0-4 Ccf ( Lifeline) <sup>2</sup>	Ccf	\$3.06	\$3.49	\$3.63	\$0.43	\$0.14
Residential - > 4 Ccf <sup>2</sup>	Ccf	\$4.10	\$4.50	\$4.74	\$0.40	\$0.24
Multi-family / DC Housing <sup>2</sup>	Ccf	\$3.54	\$3.96	\$4.15	\$0.42	\$0.19
Non-Residential	Ccf	\$4.25	\$4.65	\$4.91	\$0.40	\$0.26
DC Water Retail Rates – Sewer	Ccf	\$8.89	\$9.77	\$10.64	\$0.88	\$0.87
DC Water Clean Rivers IAC	ERU	\$20.94	\$19.52	\$18.40	(\$1.42)	(\$1.12)
DC Water Customer Metering Fee	5/8"	\$3.86	\$4.96	\$7.75	\$1.10	\$2.79
Water System Replacement Fee <sup>1</sup>	5/8"	\$6.30	\$6.30	\$6.30	\$0.00	\$0.00
PILOT Fee	Ccf	\$0.51	\$0.54	\$0.56	\$0.03	\$0.02
Right of Way Fee	Ccf	\$0.19	\$0.19	\$0.19	\$0.00	\$0.00
Stormwater Fee	ERU	\$2.67	\$2.67	\$2.67	\$0.00	\$0.00

Ccf - hundred cubic feet or 748 gallons  
 (1) DC WATER WSRF of \$6.30 effective October 1, 2015.  
 (2) Proposed Class-Based rates

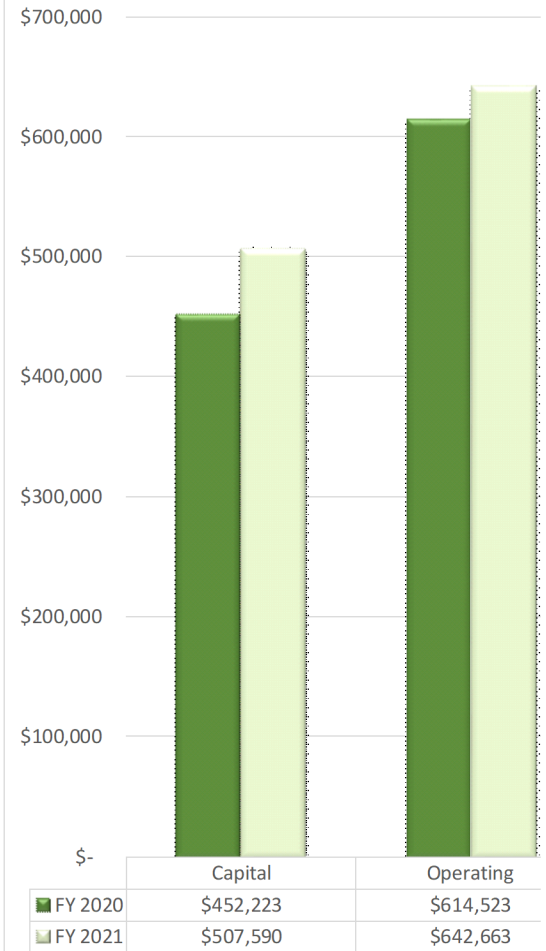


# Comparative Capital & Operating Expenditures

\$ in thousands

## Capital and Operating Budgets Ensure Service Needs and Strategic Objectives are Met

	APPROVED FY 2020	APPROVED FY 2021
<b>CAPITAL (Cash Disbursements Basis)*</b>		
Wastewater Treatment	\$ 77,536	\$ 102,976
Sanitary Sewer	44,933	63,926
Combined Sewer Overflow	171,436	157,058
Stormwater	6,869	9,631
Water	62,163	88,677
Washington Aqueduct	15,515	16,266
Capital Equipment	31,703	37,207
Non Process Facilities	42,066	31,849
<b>Total Capital</b>	<b>\$ 452,223</b>	<b>\$ 507,590</b>
<b>OPERATING</b>		
Personnel Services	\$ 170,680	\$ 177,863
Contractual Services	81,886	88,532
Water Purchases	34,929	36,250
Chemicals and Supplies	33,158	36,081
Utilities	26,953	27,911
Small Equipment	989	1,030
<b>Total O&amp;M</b>	<b>348,594</b>	<b>367,668</b>
Debt Service	215,340	222,268
Cash Financed Capital Improvements	28,556	30,355
Payment in Lieu of Taxes	16,934	17,272
Right of Way Fees	5,100	5,100
<b>Subtotal Operating</b>	<b>614,524</b>	<b>642,663</b>
Personnel Services charged to Capital Projects	(22,748)	(24,382)
<b>Net Operating</b>	<b>\$ 591,776</b>	<b>\$ 618,281</b>



\*Reflect revisions to FY 2020 capital disbursement budget during the FY 2021 cycle.



# Comparative Capital & Operating Revenues

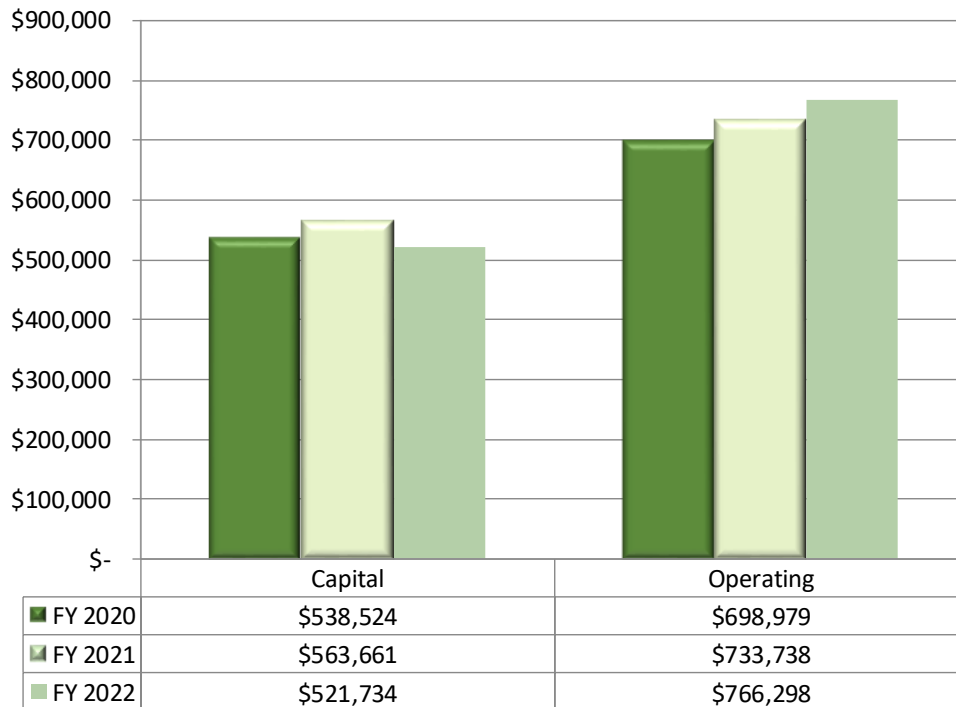
\$ in thousands

## Capital and Operating Budgets Ensure Revenue Sufficiency to Maintain Service Levels

	REVISED FY 2020	PROPOSED FY 2021	PROPOSED FY 2022
<b>CAPITAL</b>			
Wholesale Capital Payments	\$ 71,640	\$ 95,205	\$ 99,550
EPA Grants & CSO Appropriations	32,700	28,464	16,655
Interest Income on Bond Proceeds	3,831	6,365	5,382
Pay-Go-Financing	124,578	125,927	127,307
Revenue Bonds/Commercial Paper/EMCP*	300,000	300,000	265,140
System Availability Fee	5,775	7,700	7,700
<b>Total Capital Revenue</b>	<b>\$ 538,524</b>	<b>\$ 563,661</b>	<b>\$ 521,734</b>

<b>OPERATING</b>			
Residential	124,353	130,803	137,229
Commercial	173,826	180,589	191,375
Multi-Family	100,884	110,241	116,768
Federal Government	71,887	77,571	67,220
Municipal & Housing	28,110	30,318	31,260
Water System Replacement Fee (WSRF)	39,717	39,717	39,717
Metering Fee	10,776	15,405	24,083
Wholesale	82,539	81,986	84,445
Other Revenue	66,887	67,108	74,201
<b>Total Operating Revenue</b>	<b>\$ 698,979</b>	<b>\$ 733,738</b>	<b>\$ 766,298</b>

\* Extendable Municipal Commercial Paper



- Water and Sewer volumetric rates are listed below:
  - Residential customers: “Consumption of 0 – 4 Ccf” water rate increase of \$0.15 per Ccf to \$3.06 per Ccf, {increase of \$0.20 to \$4.09 per 1,000 gallons}
  - Residential customers: “Consumption greater than 4 Ccf” water rate increase of \$0.20 per Ccf to \$4.10 per Ccf, {increase of \$0.27 to \$5.48 per 1,000 gallons}
  - Multi-family customers: water rate increase of \$0.17 per Ccf to \$3.54 per Ccf, {increase of \$0.22 to \$4.73 per 1,000 gallons}
  - Non-residential customers: water rate increase of \$0.20 per Ccf to \$4.25 per Ccf, {increase of \$0.26 to \$5.68 per 1,000 gallons}
- Sewer rate increase of \$1.14 per Ccf to \$8.89 per Ccf, {increase of \$1.53 to \$11.89 per 1,000 gallons}
- Monthly Clean Rivers Impervious Area Charge decrease of \$2.06 to \$20.94 per ERU to recover the costs of the DC Clean Rivers Project
- Water System Replacement Fee (WSRF) of \$6.30 for 5/8” meter size will remain the same. This fee varies with meter size. The WSRF is to recover the costs of 1% renewal and replacement program for water service lines
- PILOT fee increase of \$0.01 per Ccf to \$0.51 per Ccf {increase of \$0.01 to \$0.68 per 1,000 gallons}
- ROW fee increase of \$0.01 per Ccf to \$0.19 per Ccf {increase of \$0.01 per Ccf to \$0.25 per 1,000 gallons}

Ccf is equivalent to hundred cubic feet or 748 gallons

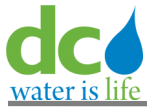


- Water and Sewer volumetric rates are listed below:
  - Residential customers: “Consumption of 0 – 4 Ccf” water rate increase of \$0.43 per Ccf to \$3.49 per Ccf, {increase of \$0.58 to \$4.67 per 1,000 gallons}
  - Residential customers: “Consumption greater than 4 Ccf” water rate increase of \$0.40 per Ccf to \$4.50 per Ccf, {increase of \$0.54 to \$6.02 per 1,000 gallons}
  - Multi-family customers: water rate increase of \$0.42 per Ccf to \$3.96 per Ccf, {increase of \$0.56 to \$5.29 per 1,000 gallons}
  - Non-residential customers: water rate increase of \$0.40 per Ccf to \$4.65 per Ccf, {increase of \$0.54 to \$6.22 per 1,000 gallons}
- Sewer rate increase of \$0.88 per Ccf to \$9.77 per Ccf, {increase of \$1.17 to \$13.06 per 1,000 gallons}
- Monthly Clean Rivers Impervious Area Charge decrease of \$1.42 to \$19.52 per ERU to recover the costs of the DC Clean Rivers Project
- Monthly Customer Metering Fee increase of \$1.10 from \$3.86 to \$4.96 for a 5/8” meter size. The Customer Metering fee varies by size.
- Water System Replacement Fee (WSRF) of \$6.30 for 5/8” meter size will remain the same. This fee varies with meter size. The WSRF is to recover the costs of 1% renewal and replacement program for water service lines
- PILOT fee increase of \$0.03 per Ccf to \$0.54 per Ccf {increase of \$0.04 to \$0.72 per 1,000 gallons}
- No increase in ROW fee, which remains the same at \$0.19 per Ccf {\$0.25 per 1,000 gallons}

Ccf is equivalent to hundred cubic feet or 748 gallons

- Water and Sewer volumetric rates are listed below:
  - Residential customers: “Consumption of 0 – 4 Ccf” water rate increase of \$0.14 per Ccf to \$3.63 per Ccf, {increase of \$0.18 to \$4.85 per 1,000 gallons}
  - Residential customers: “Consumption greater than 4 Ccf” water rate increase of \$0.24 per Ccf to \$4.74 per Ccf, {increase of \$0.32 to \$6.34 per 1,000 gallons}
  - Multi-family customers: water rate increase of \$0.19 per Ccf to \$4.15 per Ccf, {increase of \$0.26 to \$5.55 per 1,000 gallons}
  - Non-residential customers: water rate increase of \$0.26 per Ccf to \$4.91 per Ccf, {increase of \$0.34 to \$6.56 per 1,000 gallons}
- Sewer rate increase of \$0.87 per Ccf to \$10.64 per Ccf, {increase of \$1.16 to \$14.22 per 1,000 gallons}
- Monthly Clean Rivers Impervious Area Charge decrease of \$1.12 to \$18.40 per ERU to recover the costs of the DC Clean Rivers Project
- Monthly Customer Metering Fee increase of \$2.79 from \$4.96 to \$7.75 for a 5/8” meter size. The Customer Metering fee varies by size.
- Water System Replacement Fee (WSRF) of \$6.30 for 5/8” meter size will remain the same. This fee varies with meter size. The WSRF is to recover the costs of 1% renewal and replacement program for water service lines
- PILOT fee increase of \$0.02 per Ccf to \$0.56 per Ccf {increase of \$0.03 to \$0.75 per 1,000 gallons}
- No increase in ROW fee, which remains the same at \$0.19 per Ccf {\$0.25 per 1,000 gallons}

Ccf is equivalent to hundred cubic feet or 748 gallons



# Cash Flow Summary

\$ in thousands

	FY 2019 Actual	FY 2020 Revised	FY 2021 Proposed	FY 2022 Proposed
<b>OPERATING BUDGET</b>				
<b>Operating Revenue</b>				
Residential, Commercial & Multi-Family	\$ 308,558	\$ 332,704	\$ 357,363	\$ 381,425
Federal	42,634	47,940	56,031	50,276
Municipal	7,785	10,052	10,714	11,445
D.C. Housing Authority	9,692	9,235	10,806	11,521
Groundwater	-	5	5	5
Water System Replacement Fee (WSRF)	40,660	39,717	39,717	39,717
Metering Fee	11,613	10,776	15,405	24,083
Payment in Lieu of Taxes / Right of Way Fee	21,076	22,113	22,463	22,844
Clean Rivers IAC Revenue	122,188	99,123	94,604	89,179
<b>Sub-total Retail</b>	<b>564,206</b>	<b>571,666</b>	<b>607,107</b>	<b>630,495</b>
Wholesale	82,116	82,539	81,986	84,445
Interest Earnings	2,775	3,396	3,019	3,296
Transfer from Rate Stabilization Fund	6,000	-	2,500	10,500
Other Operating Rev <sup>(1)</sup>	38,723	40,808	38,717	37,131
<b>Total Operating Revenue<sup>(1)</sup></b>	<b>693,819</b>	<b>698,409</b>	<b>733,328</b>	<b>765,868</b>
<b>Operating Expenditures</b>				
Personnel Services	139,408	147,932	153,482	159,621
Contractual Services	78,951	81,886	88,532	88,641
Chemicals & Supplies	39,213	33,158	36,081	37,524
Utilities & Rent	24,471	26,953	27,911	29,027
Water Purchases	32,008	34,929	36,250	37,700
Small Equipment	478	989	1,030	1,071
<b>Subtotal - Operating Expenditures</b>	<b>314,529</b>	<b>325,847</b>	<b>343,286</b>	<b>353,585</b>
Payment in Lieu of Taxes / Right of Way Fee	21,702	22,034	22,372	22,718
Debt Service	193,035	205,137	222,268	240,497
Cash Financed Capital Improvements/Defeasance	26,999	28,556	30,355	37,830
<b>Total Operating Disbursements</b>	<b>556,265</b>	<b>581,574</b>	<b>618,281</b>	<b>654,630</b>
<b>CAPITAL Disbursements</b> (See Section VI for more details)				
Sources of Capital Funds	189,541	538,524	563,661	521,734
Uses of Capital Funds	399,366	452,221	507,590	611,008
<b>Capital Disbursements Overage / (Shortage)</b>	<b>(209,826)</b>	<b>86,303</b>	<b>56,071</b>	<b>(89,274)</b>
<b>CASH RESERVES</b>				
<b>Beginning O&amp;M Reserve Balance (Net of Rate Stabilization Fund)</b>	<b>166,796</b>	<b>186,764</b>	<b>180,000</b>	<b>185,000</b>
Operating Surplus	137,554	116,835	115,047	111,238
Wholesale Customer Refunds/Payments for Prior Years	(10,940)	(5,599)	(5,417)	(5,490)
Transfer to Rate Stabilization Fund	(6,000)	(13,000)	-	-
Federal Customer Refund/Payments for Prior Years	(5,753)	227	2,233	-
Transfer to CAP Fund	(10,246)	-	-	-
DC Fleet Reimbursement	1,719	-	-	-
Interest Earned from Bond Reserve	618	570	410	430
Pay-As-You-Go Capital Financing	(86,982)	(101,797)	(103,272)	(97,178)
Project Billing Refunds	-	(4,000)	(4,000)	-
<b>Ending O&amp;M Reserve Balance (Net of Rate Stabilization Fund)</b>	<b>186,764</b>	<b>180,000</b>	<b>185,000</b>	<b>194,000</b>
<b>Rate Stabilization Fund</b>	<b>\$ 61,450</b>	<b>\$ 74,450</b>	<b>\$ 71,950</b>	<b>\$ 61,450</b>

<sup>(1)</sup> Does not include interest earned from the debt service reserve fund

In the early history of Washington, DC, water and sewer operated as separate entities. Early incarnations of the agency we now call DC Water included the District of Columbia Water Board (1859—1872) and the District of Columbia Board of Public Works (1872—1932).

Beginning in 1932, the Agency operated as the District of Columbia Department of Sanitary Engineering and constructed the first sewage treatment plant at Blue Plains. The Agency went through another transition to the District of Columbia Department of Environmental Services in 1971, then operated as the Water and Sewer Utility Administration (WASUA) under the Department of Public Works from 1985 to 1996.

The District of Columbia Water and Sewer Authority (DC Water) was created in April 1996 and began operating October 1, 1996 under and pursuant to an act of the Council of the District of Columbia and an act of the United States Congress. Previously, the Water and Sewer Utility Administration, a division of the District’s Department of Public Works, performed DC Water’s operations. In the aftermath of the District’s financial crisis in the 1990s, Congress created an independent utility agency governed by a Board of Directors consisting of eleven principal and eleven alternate members who represent the District of Columbia, Montgomery and Prince George’s Counties in Maryland and Fairfax County in Virginia to govern DC Water. The Mayor of the District of Columbia appoints, and the Council confirms, all District Board members, including the Chairperson. In addition, the Mayor appoints the five principal and five alternate members who represent the surrounding jurisdictions based on submissions from those jurisdictions. All members serve four-year terms. The existence of a quorum and an affirmative vote of a majority of the members present, who are permitted to participate in the matter under consideration, is required to approve any Board action; except, that 7 affirmative votes are required for approval of the Authority’s budget and 8 affirmative votes are required for the selection or relieving of the CEO/General Manager. All Board members participate in decisions directly affecting the general management of joint-use facilities (such as projects at the Blue Plains Advanced Wastewater Treatment Plant), and only the District of Columbia members participate in decisions for those matters that affect only District ratepayers. Rate setting authority resides solely with the Board of Directors, and is a non-joint use matter.

At its inception, DC Water faced a cash shortage and projected multi-million dollar deficit. The newly established utility was also burdened with a barely functional fleet, poorly maintained infrastructure, an antiquated billing system, and many operating weaknesses. Through the leadership of an active Board of Directors and strong management staff, a line of credit was obtained, municipal bonds were issued and new strategic goals, business processes and technologies were developed. DC Water made tremendous strides in its prudent financial management and cutting-edge technology, customer service improvements, extensive capital investment, environmental stewardship, peer-reviewed research and establishment of an award winning fleet. Our credit rating since 1996 has gone from no credit to AAA. Today, DC Water is one of the best utilities not only in North America but in the world.

Over the years, we have developed strong partnerships with the District government, Congress, suburban jurisdictions, federal regulators and environmental advocates. We are continuing to strengthen our existing partnerships while reaching out to establish new relationships. Our success has been acknowledged through many awards as well as positive financial results and audits over the years. Since 1996, the Authority has met its mission of providing clean drinking water to residents of the District of Columbia and wastewater conveyance and treatment services to both residents of the District of Columbia and wholesale customers in Maryland and Virginia.

At DC Water, we focus all of our technology initiatives on improving both the quality of services we provide to our customers and organizational effectiveness. We were one of the first utilities to automate our meter reading program (AMR) which has been heralded as a best practice in the industry. The automated meters use radio frequency and cell phone technology to send daily water usage information from the meter to DC Water. This tool analyzes daily water consumption and provides monthly and yearly averages on an account so a customer can monitor their own water use. In addition, we developed a powerful application in-house called the High Use Notification Application (HUNA). This tool alerts customers of unusually high amounts of water delivered to their meter so they can check for leaks and avoid a high bill. In FY 2018 we issued 36 thousand alerts to over 16 thousand customers.

## **Basis of Accounting**

DC Water is a single enterprise fund and maintains accounting records using the modified accrual basis of accounting in accordance with Generally Accepted Accounting Principles (GAAP). Under this basis of accounting, revenues are recorded when earned, and expenses are recorded when incurred. DC Water's expenditure budget is prepared on a comparable basis to GAAP, with the exception of debt service (including principal and interest) that is budgeted in full when due. Depreciation and interest expense are recorded as expenses for financial statement purposes. (Depreciation is not budgeted.)

## **Annual Budget Process**

As a first step in the budget development process, the Finance Department updates DC Water's ten-year financial plan to reflect any revisions to the capital improvement program and any other major revenue or operating budget issues, and analyzes the potential impact of these items on rates. In addition to these items, the ten-year plan is also developed based on the financial and rate-setting policies adopted by the Board as well as the Board's Strategic Plan.

## **Approval Process**

Typically in May or June, the CEO & General Manager and CFO kick off the budget season. In July, departments submit their initial budget requests for management review. DC Water's strategic and operational priorities are included in each department's work plan and performance agreements, as appropriate. During the month of August and in early September, departments complete budget reviews with budget staff, and in September and October, reviews are held with the Executive Team and with the CEO & General Manager in tandem.

Typically, in December of each year, management presents the operating budget, ten-year capital improvement program and ten-year financial plan to the Board’s Environmental Quality and Operations Services, DC Water Retail Water and Sewer Rates and Finance and Budget Committees for their review. The budget is proposed for the following fiscal year (e.g. beginning October 1, 2020). The Committees review the budget documents in December through February and submit budget recommendations to the full Board in March. Typically, decisions are finalized and Board action on the budget is taken between March and April.

Upon budget adoption, the Budget Office publishes and distributes the approved budget book and ensures that DC Water’s budget is included in the District of Columbia’s budget submission, which is transmitted to the U.S. Congress for approval. Once approved by Congress, the budget is effective October 1 of each year.

### **Budgetary Control**

After the U.S. Congress approves the budget, the operating and capital budgets are loaded into the DC Water’s financial management system, which prevents overspending without appropriate approvals. The Finance Department prepares monthly management reports for each operating unit, management staff, the Board of Directors and its various committees. The reports are consistently reviewed each month to ensure that DC Water complies with its authorized budget levels.

### **Amendment Process**

The CEO & General Manager has control over the budget as approved by the U.S. Congress, at the appropriation level, i.e., DC Water’s overall approved operating budget and capital authority at the Authority-wide level in the capital budget. The CEO & General Manager has the authority to approve budget reprogramming between departments. Any additional budget spending above the budget appropriation level requires approval from the U.S. Congress.





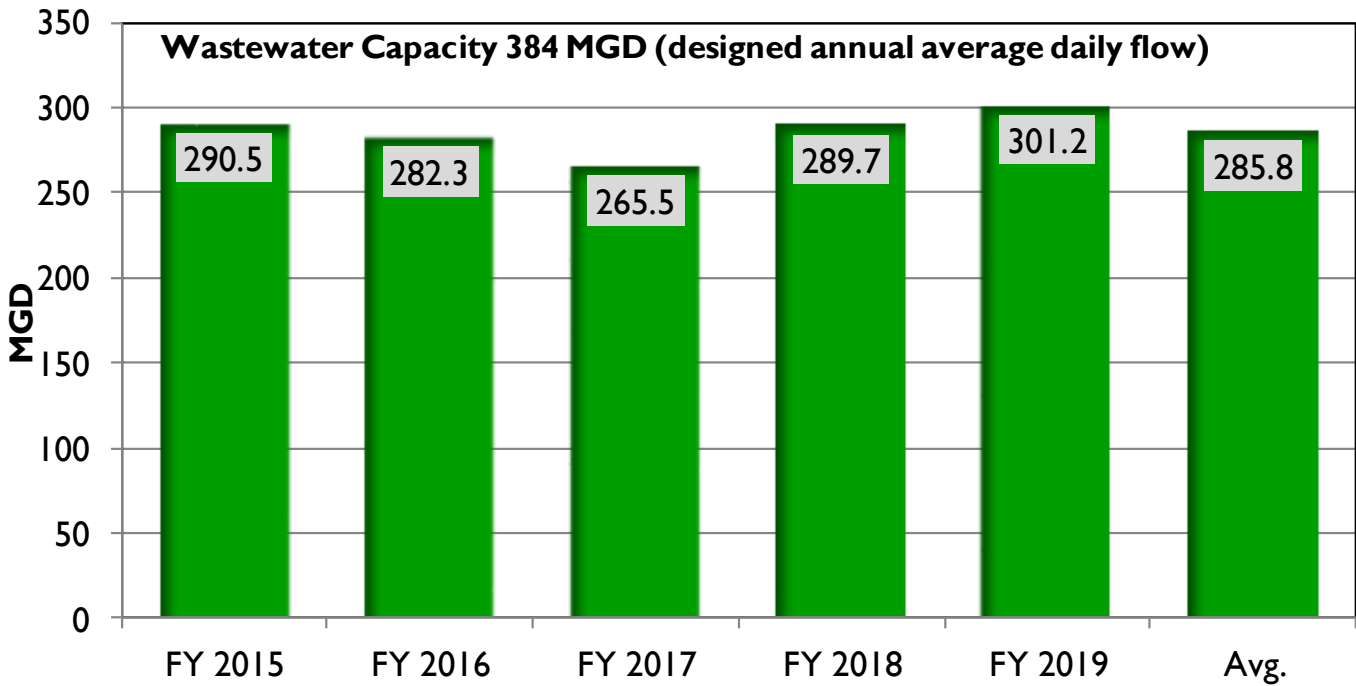
# FY 2021 Budget Calendar

Month	Activity
<b>July 31</b>	Chief Executive Officer (CEO) & General Manager's (GM) Budget Kickoff Meeting
<b>August 2</b>	Distribution of budget templates and guidelines
<b>August</b>	Guidance/Training for Departments
<b>September 13</b>	Departmental FY 2021 budget submission to Budget Office
<b>September 25</b>	Chief Financial Officer Briefing on Departmental Budget Requests
<b>October 15 –31</b>	Departmental FY 2021 Operating and Capital Equipment Budget Reviews with the Chief Executive Officer, Chief Financial Officer and the Budget Office
<b>October 17</b>	Environmental Quality & Operations Committee Review of Capital Improvement Program
<b>November 5</b>	Executive Team Briefing (Operating and Ten-year Capital Improvement Program)
<b>November 19</b>	Finance & Budget Committee Review of Operating Budget Drivers  DC Retail Water & Sewer Rates Committee Review of Independent Review of Rate
<b>November 21</b>	Environmental Quality & Operations Committee Review of Capital Improvement Program
<b>December</b>	Finalize Ten-Year Financial Plan (Operating, Capital Improvement Program, Revenues, Rates & Fees)  Transmittal of CEO's & GM's Final Budget Proposal to Executive Vice Presidents & Department Heads
<b>January 2</b>	Budget Workshop - Board Briefing of the CEO & GM's Proposed FY 2021 Budgets
<b>January 9</b>	Stakeholder Alliance Discussion
<b>January 10</b>	Wholesale Customer Briefing
<b>January</b>	Board Committees Conducted in-depth Review of Budget Proposal
<b>February</b>	Board Committees Forward Recommendations to Full Board for deliberation/action Budget Book Preparation & Production
<b>March 5</b>	Board Adoption  Submission to the District of Columbia for onward transmission to U.S. Congress

## Wastewater System Capacity Ensures Service Area Meets Needs Through 2040

- Blue Plains is the world’s largest advanced wastewater treatment plant
  - Treats an average of approximately 300 million gallons per day (MGD) annually
  - Designed for average daily flow of 384 MGD and peak wet weather capacity of 1,076 MGD
- System comprises 1,800 miles of sanitary, stormwater and combined sewers; 125,000 building sewer lateral; 22 flow-metering stations; 9 off-site wastewater pumping stations; and 16 stormwater pumping stations

### Historical Wastewater Treatment vs. Capacity FY 2015 –FY 2019

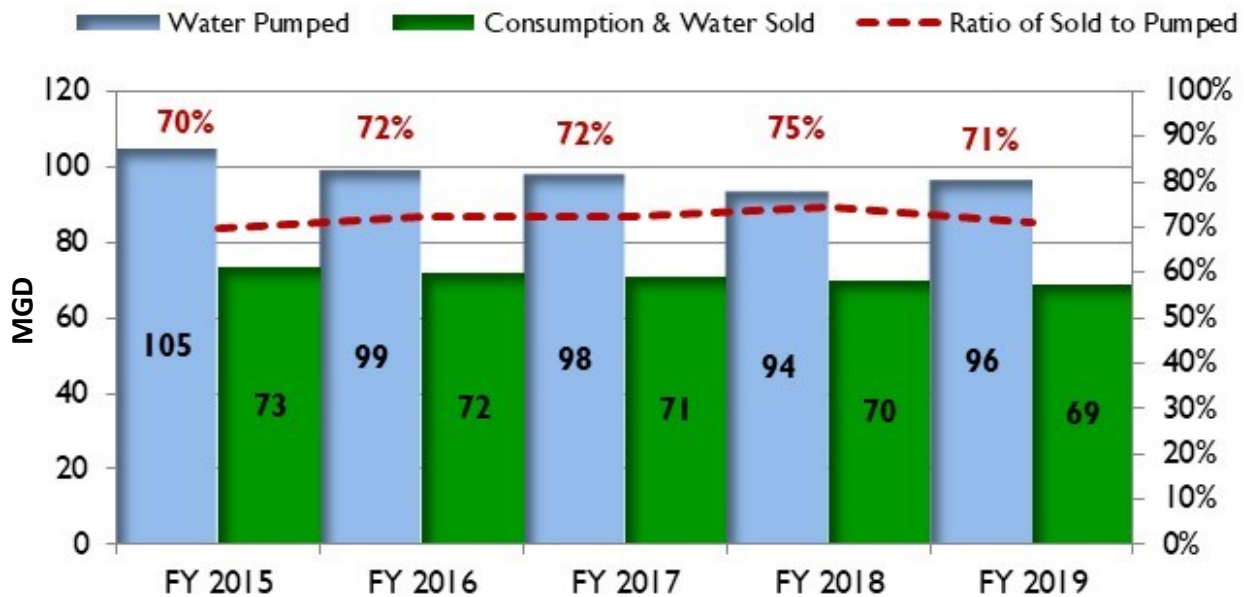




## Water System Capacity Meets Service Area Needs

- Water is purchased from the Washington Aqueduct, owned and operated by the U.S. Army Corps of Engineers
- Four pumping stations provide adequate capacity to meet peak demand
  - Bryant Street, New Fort Reno, 16th and Alaska, Anacostia
- One Washington Aqueduct pumping station with capacity sufficient to take over for Bryant Street pumping station
- System comprises 1,350 miles of interconnected pipes

**Volume of Water Pumped versus Sold FY 2015 – FY 2019**



**Infrastructure Leakage Index (ILI):**  
 FY 2015 – 9.94  
 FY 2016 – 7.84  
 FY 2017 – 9.00  
 FY 2018 – 9.84  
 FY 2019 – 12.53

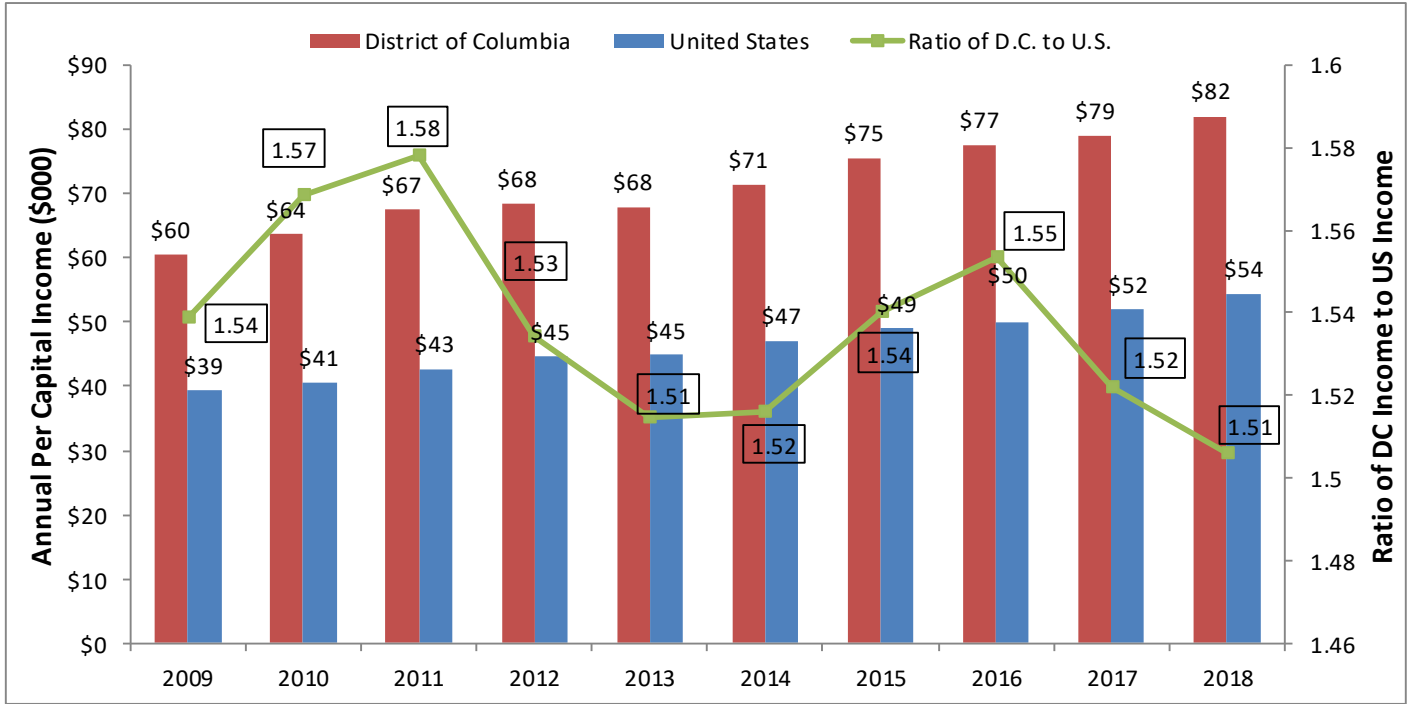
Strong financial planning requires careful monitoring and analysis of various trends and factors that may influence the market place. In this case, the market place for DC Water is the District of Columbia and its surrounding region. DC Water monitors consumption and wastewater flow trends within the customer base, weather patterns, regional income changes, population trends, federal activity in the region, housing starts, office vacancy rates and employment trends. A review of experiences from similar national systems is a useful benchmark assessment. While there are no crystal balls in the area of forecasting water demand, monitoring such data can provide insight into customer behavior and anticipated service demands.

## **Regional Economy**

DC Water's service area has historically been resilient, even during fluctuations in nationwide economic conditions. Employment at the U.S. government and all of the professional and service industry firms that support the federal government have been a steadying force through various economic cycles.

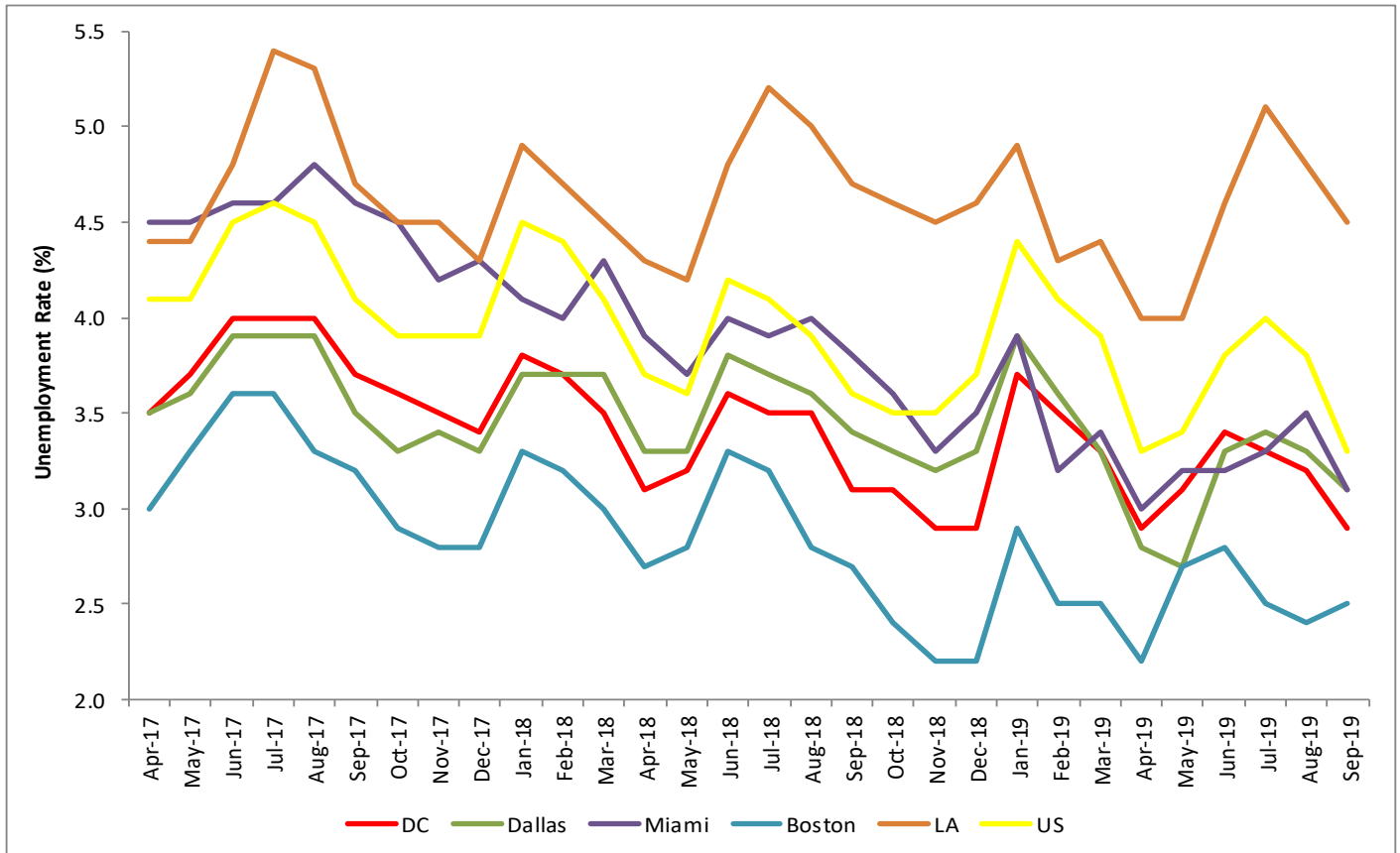
The effects of the recent decline in the federal workforce has been offset to some extent by growth in private sector employment as well as major redevelopment efforts such as Nationals Park and the adjoining area along the Anacostia River. The population of the District grew by over 100,000 people from 2009 to 2017. Per capita incomes within the District and for the region as a whole continue to be higher than the U.S. average. Regional office vacancy rates have increased somewhat in recent years while retail vacancy rates remain low. The strengths of the District are complimented by its highly rated partners: the federal government and wholesale wastewater users. Select demographic charts that follow support the overall positive outlook for the Washington Metropolitan region and its economy.

## DC Per Capita Income is Higher than US Average



Source: Bureau of Labor Statistics

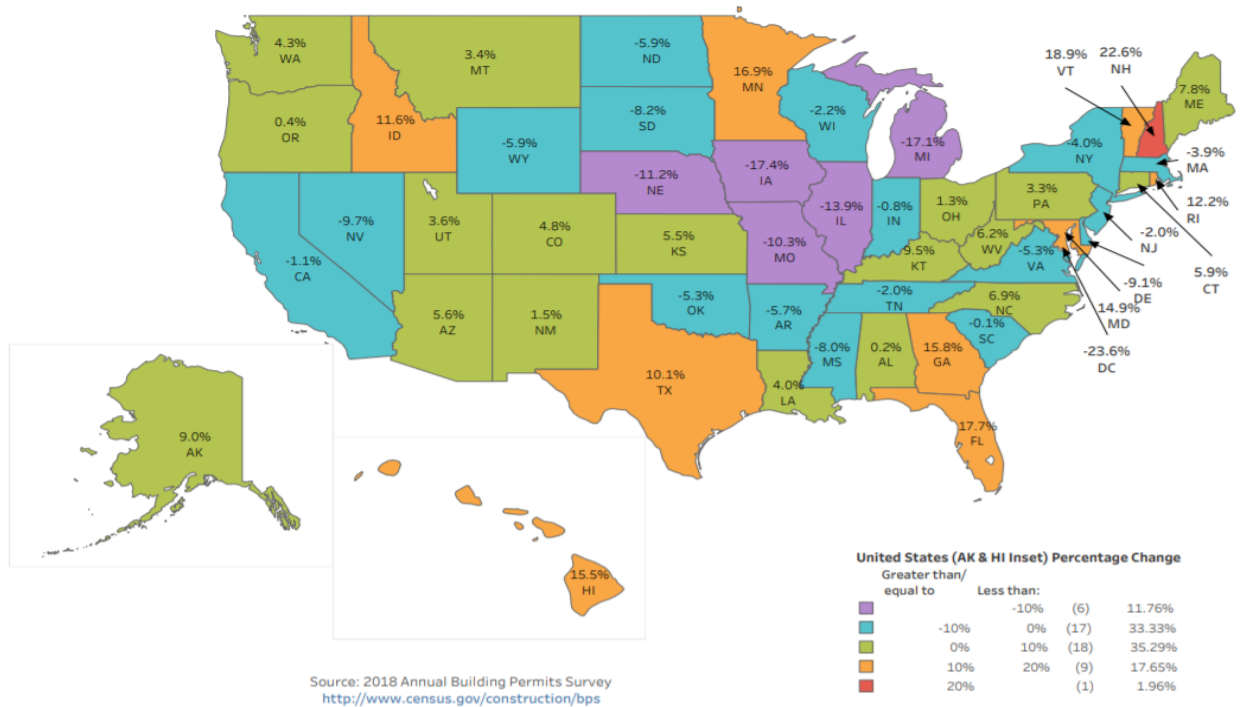
## Unemployment Rate in the DC Region Remains Relatively Low



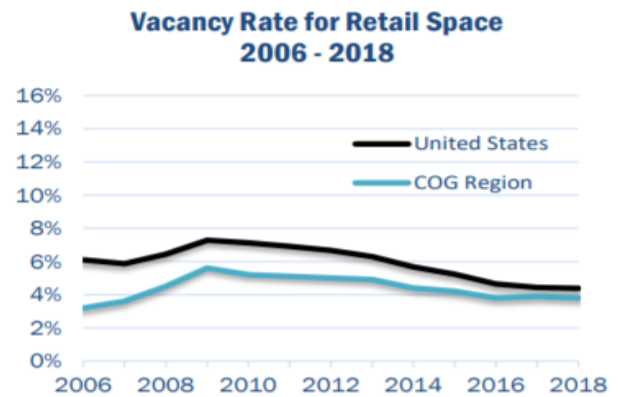
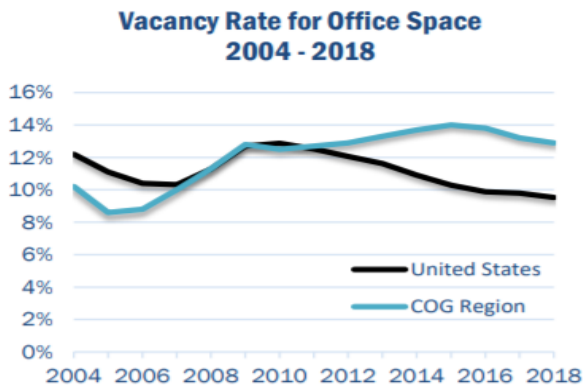
Source: Bureau of Labor Statistics

## 2017 – 2018 Significant Growth in New Housing Permit Issuance in DC

Percent Change from 2017-2018 of New Privately-Owned Housing Units Authorized by State



## DC Metro Vacancy Rates are Above Pre-Recession Levels partly due to New Spaces Added to the Market



DC Water’s performance is driven by federal government growth and associated industries, supporting regional growth and diversification.

- Source: Metropolitan Washington Council of Governments (COG)
- Note: COG region includes the District of Columbia, Northern Virginia, and Suburban Maryland

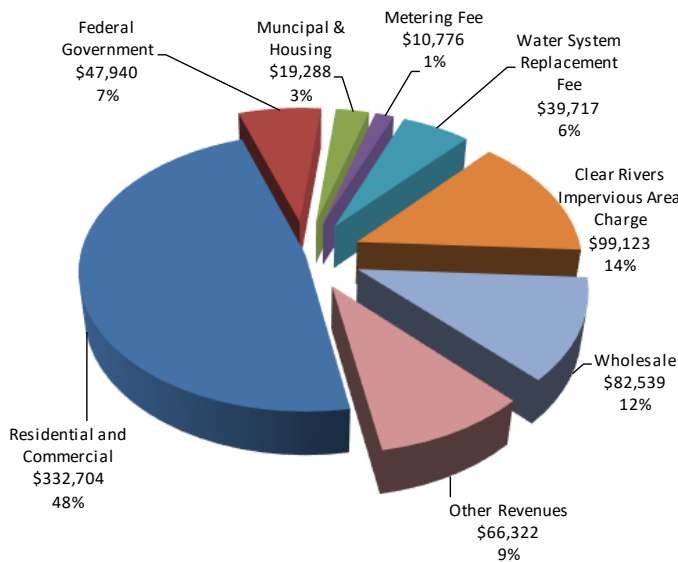
The regional indicators are positive with strong incomes and unemployment below the national level. These factors, coupled with stable consumption and the financial strength of the major AAA rated customers helps to ensure the financial success of DC Water.

### The DC Water service area includes highly-rated customers

- About 21.6% of the projected FY 2020 revenues came from “AAA” rated entities and are received in advance of service:
  - Federal Government
  - Fairfax County
  - Washington Suburban Sanitary Commission
  - Loudoun County Sanitation Authority
  - District of Columbia

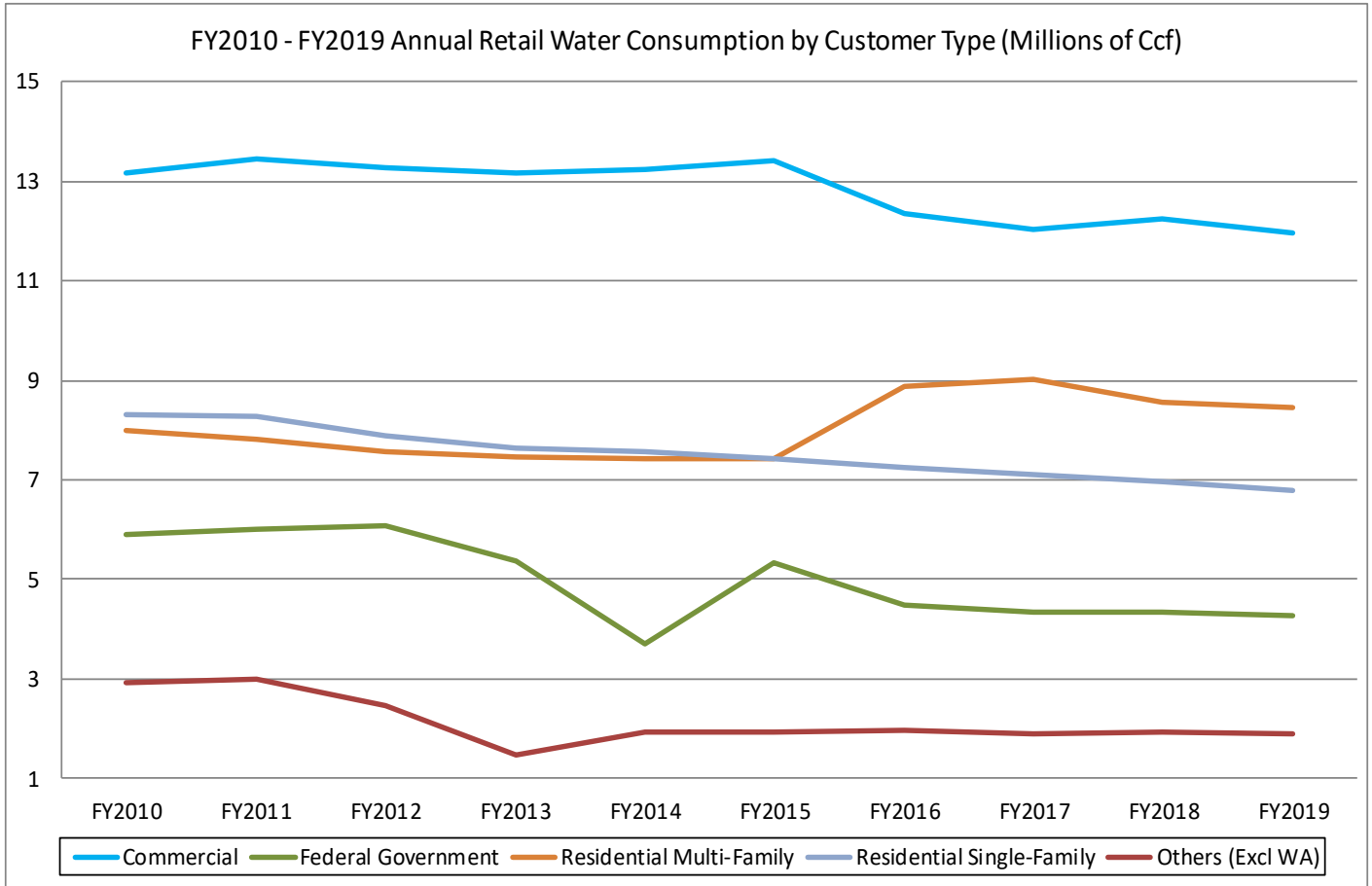
### Media reports reference the service area’s economic strength

- "Washington, DC once again comes in first place in our ranking. The capital's Q2 2018 GDP per capita of \$202,726 and November 2018 average weekly wage of \$1,532 were both by far the highest in the country." Business Insider, Jan 17, 2019
- "Take a closer look at the U.S. cities experiencing the fastest-growing job growth pace ... Job openings grew at a 4.9 percent in Washington, D.C., with more than 190,500 available positions. Those jobs have a median income of \$61,956." Fox Business, September 3, 2019
- "The D.C. region's population keeps growing ... Overall, the D.C. metro area is the sixth-most populous region in the country." WTOP, April 18, 2019
- “[Amazon] will welcome the first 25,000 employees into its suburban D.C. campus next month, which explains why the local housing market is already experiencing a boom.” Observer, May 2019



Customer Demand: A reasonable degree of accuracy in forecasting water demand is important for sound financial planning and rate-setting. The FY 2010 - 2019 actual average decline in usage is 1.5% annually, excluding the Washington Aqueduct. FY 2010 – FY 2019 average annual rate of change in demand for the customer classes: Commercial -1.0%; Federal Government: -3.5%; Single Family: -2.2%; and Other (include Exempt, DC Housing Authority, DC Municipal Government, and DC Water): -4.7%. Multi-Family increased by 0.6% annually.

## DC Water Consumption by Customer Type



Source: DC Water

- FY 2019 consumption decreased 1.8%, mostly due to decreases in consumption for Commercial, Single Family and Multi-Family accounts.
- DC Water has typically assumed an annual reduction in water demand of 1.0% in line with historic averages. The Financial Plan assumes an annual retail water consumption decline of 3% in 2019 and 1% thereafter. We believe that this estimate is prudent, consistent with peers such as New York and Boston and assures revenue sufficiency for the Authority.



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