

<b>Subject:</b> Washington Suburban Sanitary Commission Proposed FY20 Operating Budget		
<b>Analyst:</b> Keith Levchenko, Senior Legislative Analyst	<b>Committee:</b> T&E	
<b>Keywords:</b> #WSSCOperatingBudget, Water and Sewer		

**EXPECTED ATTENDEES**

- Howie Denis, WSSC Commissioner
- Carla Reid, General Manager/CEO, WSSC
- Joe Beach, Deputy General Manager for Administration, WSSC
- Monica Johnson, Deputy General Manager for Strategic Partnerships, WSSC
- Jay Price, Deputy General Manager for Operations, WSSC
- Patti Colihan, Chief Financial Officer, WSSC
- Letitia Carolina-Powell, Budget Division Manager, WSSC
- Julie Pohutsky, Budget Section Manager, WSSC
- Trevor Lobaugh, Fiscal and Policy Analyst, Office of Management and Budget

<b>Washington Suburban Sanitary Commission</b>		
FY20 Proposed Operating Budget	\$817.4 million	1,776 FTE
Increase/Decrease from FY19	\$35.8 million (4.6%)*	0.0 (0%)

\* If debt service is excluded from the above numbers, the FY20 WSSC Budget increase is 2.1%.

\* If debt service and the Regional Sewage Disposal Payment to DC Water are both excluded, the FY20 WSSC Budget increase is 1.1%.

**COMMITTEE RECOMMENDATIONS**

- 1) Concur with WSSC to maintain System Development Charge rates for FY20 at current approved levels, but to increase the maximum chargeable rate (the rate the charge could be increased in the future) by a CPI adjustment (1.5 percent) as allowed for under State law.
- 2) Approve the FY20 WSSC Operating Budget as proposed by WSSC and as recommended by the County Executive.

**MAJOR DISCUSSION POINTS**

- Budget Highlights (see pages 2-3)
- Schedule/Prince George’s County Council Actions to Date (see page 4)
- Rate Increase History/Comparisons (see pages 6-8)
- New Rate Structure Status and Impact (see pages 8-9)
- Long-Range Financial Plan (see pages 9-10)
- System Development Charge (SDC) Fees (see pages 11-12)
- Customer Assistance Program (see pages 12-13)
- FY20 Spending Control Limits (see pages 13-14)
- Revenues (see pages 14-15)
- FY20 WSSC Proposed Budget Expenditures (see pages 15-17)
- Employee Compensation (see pages 17-18)
- Closing the Gap (see pages 18-19)

**This report contains:**

- Staff Report to the Council (pages 1-20)
- WSSC FY20 Proposed Budget Briefing Slides (©1-28)
- County Executive's FY20 Recommended Budget Section for WSSC (©29-32)
- Excerpts from the Proposed FY20 WSSC Budget (©33-81)
- Slide: National Trends – Rate Increases Since 2002 (©82)
- Taxpayer League 4/8/19 Public Hearing Testimony (©83)
- WSSC Response to Question from Montgomery County Taxpayers League 2/20/2019 (©84-101)
- WSSC Information Technology Strategic Plan Development and Implementation Status (©102-104)
- Service Improvements Not in the Proposed Budget (©105-106)
- Inspector General Response to Prince George's County Council TIEE Committee FY20 Budget Questions (©107-113)

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Worksession

MEMORANDUM

May 2, 2019

TO: County Council

FROM: *KL* Keith Levchenko, Senior Legislative Analyst

SUBJECT: **FY20 Washington Suburban Sanitary Commission (WSSC) Operating Budget<sup>1</sup>**

PURPOSE: To review and take initial votes on the FY20 WSSC Operating Budget in advance of the May 9 Bi-County Meeting

**Budget Highlights**

- Total Proposed Operating Budget is \$817.4 million, an increase of \$35.8 million (or 4.6 percent) from the Approved FY19 Operating Budget of \$781.6 million
- Proposed rate increase = 5.0 percent
- New rate structure taking effect in FY20
- No change in total number of authorized positions (1,776)
- Major Changes:
  - +\$1.0 million in customer assistance
  - +\$500,000 in Inspector General budget (assumed to be offset by at least \$500,000 in savings/reimbursements/additional revenue)
- See additional highlights on pages 2-3 of this memorandum and briefing slides on ©1-28.

**Summary of Transportation & Environment (T&E) Committee Recommendations**

- System Development Charge
  - Concur with WSSC to maintain System Development Charge (SDC) rates for FY20 at current approved levels.
  - Concur with WSSC to increase the maximum chargeable rate (the rate the charge could be increased in the future) by a CPI adjustment (1.5 percent) as allowed for under State law.  
*NOTE: Final action on the charge will occur via action on a resolution in mid-May.*
- FY20 WSSC Operating Budget
  - Approve the FY20 WSSC Operating Budget as proposed by WSSC and as recommended by the County Executive.

<sup>1</sup> #WSSCOperatingBudget, Water and Sewer.

### Attachments to this Memorandum

WSSC FY20 Proposed Budget Briefing Slides (©1-28)  
County Executive's FY20 Recommended Budget Section for WSSC (©29-32)  
Excerpts from the Proposed FY20 WSSC Budget<sup>2</sup> (©33-81)  
Slide: National Trends – Rate Increases Since 2002 (©82)  
Taxpayer League 4/8/19 Public Hearing Testimony (©83)  
WSSC Response to Question from Montgomery County Taxpayers League 2/20/2019 (©84-101)  
WSSC Information Technology Strategic Plan Development and Implementation Status (©102-104)  
Service Improvements Not in the Proposed Budget (©105-106)  
Inspector General Response to Prince George's County Council TIEE Committee FY20 Budget Questions (©107-113)

### The following officials and staff are expected to attend this worksession

- Howie Denis, WSSC Commissioner
- Carla Reid, General Manager/CEO, WSSC
- Joe Beach, Deputy General Manager for Administration, WSSC
- Monica Johnson, Deputy General Manager for Strategic Partnerships, WSSC
- Jay Price, Deputy General Manager for Operations, WSSC
- Patti Colihan, Chief Financial Officer, WSSC
- Letitia Carolina-Powell, Budget Division Manager, WSSC
- Julie Pohutsky, Budget Section Manager, WSSC
- Trevor Lobaugh, Fiscal and Policy Analyst, Office of Management and Budget

### **Budget Highlights**

WSSC staff provided the T&E Committee with a summary of the FY20 Proposed Budget (see presentation slides on ©1-28). Below are some major highlights of WSSC's Proposed FY20 Budget:

- The combined total of the Capital and Operating Budgets is \$1.46 billion, an increase of \$18 million (or 1.3 percent) from the Approved FY19 amount of \$1.44 billion.
- The total proposed Operating Budget is \$817.4 million, an increase of \$35.8 million (or 4.6 percent) from the Approved FY19 Operating Budget of \$781.6 million. *(NOTE: Excluding debt service, the increase is 2.1 percent.)*
- Assumes continued implementation of a customer assistance program (reducing FY20 revenue by an estimated \$888,000), which waives the Account Maintenance Fee and Infrastructure Investment Fee for approximately 11,529 eligible customers. WSSC is also setting aside another \$1.0 million for assistance in other areas focusing on: water conservation, plumbing repair assistance, flexible billing and payment options, arrearage forgiveness, financial counseling, and social service referrals.

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<sup>2</sup> WSSC's Proposed FY20 Operating Budget is available for download at: <https://www.wsscwater.com/fin>.

- Assumes implementation of a new rate structure effective July 1, 2019 (FY20). See pages 10-11 for details.
- Assumes the equivalent of a 5.0 percent average rate increase under the current rate structure. (During the spending control limits process last fall, both the Montgomery and Prince George's County Councils recommended a rate increase ceiling of 5.0 percent.)
- No changes in the Account Maintenance Fee or Infrastructure Investment Fee are assumed for FY20.
- A pool of \$5.16 million (\$4.25 million rate impact) for salary enhancements is included in the Proposed Budget, with the final amount and allocation of these dollars to be considered in the context of both Councils' actions regarding their employee union bargaining agreements. The \$5.16 million is equivalent to a 2.0 percent COLA and merit increases of up to 4 percent for eligible employees, subject to ratification by WSSC's employee union (with \$304,000 reserved for IT bonuses and \$939,000 reserved for flexible worker pay).
- Water production is projected at 164 million gallons per day (mgd), which is the same amount assumed in FY18 and FY19 and the same as assumed for FY20 during the spending control limits process last fall.
- Includes \$59 million (an increase of \$5.3 million from FY19) for regional sewage disposal costs for WSSC sewage treated at the Blue Plains Wastewater Treatment Facility. *Note: Several years ago, WSSC estimated that the cost per thousand gallons of treatment of WSSC sewage at Blue Plains is \$1.37, compared to \$2.05 at WSSC facilities. About 64 percent of all WSSC sewage and 84 percent of Montgomery County's sewage (generated within the WSSC service area) is treated at the Blue Plains Wastewater Treatment Plant.*
- An additional \$500,000 is proposed for the Inspector General Office for separate office space and two new positions, with the Inspector General's expectation that the office will generate offsetting savings/reimbursements/additional revenue. The WSSC budget assumes these savings. (See additional information from the WSSC Inspector General on ©107-113).
- Assumes to use \$11.34 million from fund balance to fund a portion of WSSC's IT initiatives in FY20 (similar to past years) and continue its strategic energy plan implementation and its climate change vulnerability assessment.
- Includes \$25.6 million (a decrease from the FY19 amount of \$30 million) for large diameter pre-cast concrete cylinder pipe (PCCP) water main inspection, repairs, and acoustic fiber optic (AFO) installation, as well as acoustic fiber optic monitoring of all previously-installed AFO. Also includes \$17.9 million (a decrease from the FY19 amount of \$18.7 million) for large diameter main repairs and cathodic protection and \$2.9 million (the same as in FY19) for large valve inspections, replacement, and repairs.
- Funds 25 miles of water main reconstruction and associated house connection renewals (consistent with the Proposed FY20-25 CIP).

## Schedule

On March 1, WSSC transmitted its proposed FY20 Operating Budget to the Montgomery and Prince George's County Executives and County Councils. On March 15, the County Executive transmitted his recommendations to the Council. Public hearings for the County and Agency Operating Budgets (including WSSC) were held on April 8, 9, and 10. The Bi-County meeting to resolve any CIP and Operating Budget differences with Prince George's County is scheduled for May 9 at WSSC.

The Prince George's County Council's Transportation, Infrastructure, Energy & Environment Committee discussed the WSSC Budget on April 11 and recommended approval with one change (a \$500,000 reduction in WSSC's Proposed budget for the Office of the Inspector General). The Prince George's Council will meet on the WSSC Budget on May 8.

**At the April 29 worksession, the T&E Committee discussed the additional funding included in the Proposed WSSC Budget for the Inspector General and expressed its support.** WSSC staff will be available to discuss this issue at the Council worksession.

### General Information about WSSC

WSSC provides public water and sewer services to 1.8 million residents in a sanitary district covering nearly 1,000 square miles in Montgomery and Prince George's Counties. WSSC has 3 reservoirs and 2 water treatment plants (providing about 164 mgd of drinking water) and maintains 7 wastewater treatment plants (including the Blue Plains Plant in Washington DC). WSSC has 5,772 miles of water mains and 5,582 miles of sewer mains. WSSC has about 459,000 customer accounts (see ©61 for more statistical information) and is one of the ten largest water and wastewater utilities in the country.

WSSC's governing board consists of six commissioners—three from Montgomery County and three from Prince George's County, serving staggered 4-year terms. The positions of Chair and Vice Chair alternate annually between the counties. The current commissioners are:

#### Montgomery County

T. Eloise Foster, Chair  
Fausto R. Bayonet  
Howard A. Denis

#### Prince George's County

Chris Lawson, Vice Chair  
Omar M. Boulware  
Thomasina V. Rogers

The current General Manager, Carla Reid, was appointed by the Commissioners in early 2016.

An organizational chart is attached on ©38. The Chair's budget transmittal letter and other excerpts from the Proposed FY20 Budget are attached on ©33-81.

About two-thirds of all WSSC sewage and four-fifths of Montgomery County's sewage (generated within the WSSC service area) is treated at the Blue Plains Wastewater Treatment Plant in the District of Columbia. This plant is managed by DC Water.<sup>3</sup> WSSC makes operating and capital payments each year to DC Water, consistent with the Blue Plains Intermunicipal Agreement (IMA) of 2012. Blue Plains-

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<sup>3</sup> The Montgomery and Prince George's County Governments each have two representatives (with two alternates) on the eleven-member DC Water Board of Directors. Fairfax County has one representative. The other six members represent the District of Columbia. The Montgomery, Prince George's, and Fairfax County board members only vote on "joint use" issues (i.e., issues affecting the suburban jurisdictions). These board members do not vote on issues affecting only the District of Columbia.

related costs are a major element of the sewer program and reflect a majority of overall CIP expenditures. The projected FY20 operating payment is \$59 million (7.2 percent of WSSC's Proposed Operating Budget).

**County Executive Recommendations for the FY20 WSSC Budget**  
(See Operating Budget Excerpt on ©29-32)

In his March 15 transmittal, the Executive recommended approval of WSSC's FY20 Budget expenditures as proposed.

**Performance Measures**

WSSC has included a number of performance measures in its FY20 Proposed Budget. Most of these measures speak to water quality, quality of service, timeliness of service, and customer satisfaction.

As noted in WSSC's budget document, "WSSC has never exceeded a maximum contaminant level (MCL) or failed to meet a treatment technique (TT) requirement established by the US Environmental Protection Agency (EPA) in accordance with the Safe Drinking Water Act." (see ©72A)

Emergency response timeliness and work order completion measures are presented on ©77. Restoration of water service measures are attached on ©78.

Discolored water issues have been the subject of a rising number of complaints over the past several years. WSSC has identified increases in sodium and manganese coming from the Potomac River. Salt (washing into the river from roads and driveways in the winter months) leached manganese from the soil into ground water, which ultimately reached the intake at the Potomac Water Filtration Plant. High levels of manganese caused discoloration, while high sodium levels increased corrosion of water mains, which also contributed to discolored water issues. The charts on ©73-74 shows complaint trends as well as WSSC's routine flushing work and rehabilitation and replacement of water mains.

Another area of concern has been "Customer Calls for Maintenance Assistance" (see ©79). WSSC's "percent of calls answered" goal is 95 percent. WSSC exceeded that goal in FY16 and FY17 (97 percent and 96 percent respectively) but fell below that goal in FY18 (92 percent). In FY17, both Councils approved 10 additional customer service positions to implement WSSC's "Contact Center Optimization" project. Continued improvements to the non-emergency call center are ongoing. Below is further information provided by WSSC:

*The focus of the Customer Service Department is on implementation of the new Customer-to-Meter billing system for July 2019, while also maintaining day-to-day operations. The Department is significantly involved in organizational and business readiness activities associated with the planned implementation of the new billing and mobile workforce management system. Activities include testing the system, documenting business processes and procedures, participating in pilot training, organizational readiness testing, and end user training to ensure the Department is able to adapt to the new environment.*

*In addition, below are some of the other significant initiatives the Department is implementing in response to the Veolia Benchmarking Study:*

- *Currently building internal capacity to handle higher call volumes. The decision to transition from the 3rd party call center was pushed out to June 2020 to provide the*

*Department with additional capacity for handling customers and calls related to the new water/sewer bill and new rate structure.*

- *Outsourced water and sewer bill composition, design, mailing and printing services to a third party. The Department is engaged in finalizing and testing bill configurations in alignment with the billing system go-live.*
- *Created a dedicated Revenue Protection Division and partnered with Utility Services to improve collection of outstanding revenue. Prior to the January/February 2019 federal government furlough, delinquencies had decreased by 24%.*

### Rate Increase History

#### WSSC Rate Increases Since FY99

The following table presents WSSC's rate increase history going back 20 years and compares those increases to WSSC's Budget over that same time period.

**Table 1:  
Rate Increase and Budget Increase Percentages**

Fiscal Year	Approved Rate Increase	WSSC Budget in (000s)
FY99	0.0%	443,575
FY00	0.0%	
FY01	0.0%	
FY02	0.0%	
FY03	0.0%	
FY04	0.0%	
FY05	3.0%	465,253
FY06	2.5%	
FY07	3.0%	
FY08	6.5%	
FY09	8.0%	
FY10	9.0%	
FY11	8.5%	
FY12	8.5%	
FY13	7.5%	
FY14	7.25%	
FY15	5.50%	707,190
<b>Cumulative Increase (FY99-15):</b>	<b>95.2%</b>	<b>59.4%</b>
- equivalent annual increase	4.01%	2.78%
<b>Cumulative Increase (FY05-15):</b>	<b>85.0%</b>	<b>52.0%</b>
- equivalent annual increase	5.75%	3.88%

Table 1 above, highlights several key points about WSSC rate increases since FY99 and since FY05.

- Rates increased 95.2 percent from FY99 through FY15 (prior to the change in the Account Maintenance Fee in FY16 and the phase-in of the Infrastructure Investment Fee in FY16 and FY17).

- The equivalent annual rate increase (to achieve the same 95.2 percent increase over that time period) is 4.01 percent.
- Expenditures increased 59.4 percent during that same period (equivalent to a 2.78 percent increase per year).<sup>4</sup>
- The change in the consumer price index (CPI) from 1999 to 2015 was 49.1 percent.
- A similar analysis from FY05 to FY15 is also shown in the table. This comparison does not include the earlier five straight years of no rate increase, so the equivalent annual rate increase is higher. Expenditure increase percentages are also higher during this same period, but still well below the rate increases.

### Rate Increase Comparisons

Five years ago, Council Staff asked WSSC for comparative rate increases for other utilities. The slide on ©82 shows rate increases from 2002 to FY14 for a number of utilities. The utilities are clustered into categories of 70 to 89 percent, 90 to 129 percent, and 130 to 233 percent. WSSC's rate increase from 2002 to FY14 is 85 percent. The regional CPI during that time was 34.4 percent. The chart shows that many water and sewer utilities have increased rates well above the CPI in the last decade. WSSC's rate increase trend over that time is not the lowest, but is on the edge of the lower third and middle third of the utilities presented.

The Proposed Operating Budget includes two updated charts from the WSSC Briefing slides (see ©25-26) showing residential bill comparisons for large water utilities across the country and a bill comparison for these same large water utilities as a percentage of median income. WSSC is in the lower half for residential bill comparisons and near the bottom for the bill comparison as a percentage of median income.

### WSSC and Fairfax County

WSSC provided a more detailed look at area water and sewer rates in response to the Montgomery County Taxpayers League concern that WSSC has water rates double that of Fairfax Water. This concern was raised again by the Taxpayers League at the Council's Operating Budget public hearing (see testimony attached on ©83). WSSC's response is attached beginning on ©84. An excerpt summarizing WSSC's response to this point is provided below:

- *A comparison of water rates to Fairfax is problematic because the Fairfax water rates have only one tier and include a seasonal charge. The current WSSC rate structure has sixteen tiers and no seasonal rates. Therefore, a comparison of bill impact rather than just rates is more relevant.*
- *As the attached bill comparison chart indicates, for average residential use of 55 gallons per day per person for the average size household, the WSSC bill is actually the lowest in the region compared to Baltimore, DC Water, Arlington, and Fairfax.*
- *I have also attached a chart prepared by DC Water and is included in its Comprehensive Annual Financial Report to compare the average residential bill with other regional*

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<sup>4</sup> The rate of increase in water and sewer expenditures over time has been substantially lower than the rate of increase in water and sewer rates. This is because WSSC's primary source of funding is from volumetric water and sewer fees. Water production has been flat over the past 20 years, despite increases in the population served, due to declining per capita water usage. Water conservation has a negative impact on WSSC's rate revenue. This impact has been exacerbated by WSSC's current billing structure, which bills all water used at the average daily consumption tier reached during a billing period. Therefore, rate increases have been needed to offset revenue shortfalls in addition to covering increased expenditures.

*utilities. In this analysis, WSSC's average bill is well below the regional average including Baltimore and DC Water though slightly above Fairfax Water.*

- *Fairfax Water, being established in 1957, has relatively new infrastructure compared to WSSC which was established 100 years ago in 1918.*
- *By comparison, portions of WSSC's buried water mains are over 80 years old and nearly 40% of our water & sewer main (11,000 miles) are over 50 years old. The WSSC water main network is over 40% larger than Fairfax's (5,794 miles vs. 3,995 miles) which imposes significant, additional maintenance and infrastructure obligations on WSSC.*
- *Fairfax Water is not responsible for wastewater treatment as WSSC is. While sewer rates are set separately, having this responsibility drives a large portion of WSSC's overhead costs including human resources, benefits, legal and procurement obligations.*

## **New Rate Structure Status and Impact**

### Background

At the request of both Councils during the FY17 budget review process, WSSC initiated a comprehensive rate study during the summer of 2016. Staff from both counties participated in a Bi-County Rate Study Workgroup with WSSC, with assistance from consultant Black and Veatch. The group studied rate structures used by other water/sewer utilities and reviewed a cost of service analysis done by the consultant. A stakeholder group made up of various ratepayer classes was also assembled and met several times to discuss rate structure alternatives and provide comments.

In August and September 2017, WSSC consultants briefed the WSSC Commissioners on rate structure alternatives, including several inclining block rate options (all assumed to bill "through the tiers", unlike the old rate structure) as well as a single volumetric rate. Additional public hearings for WSSC customers were held in the fall of 2017 in both counties.

WSSC transmitted rate structure recommendations to both Councils in December 2017. The T&E Committee received a briefing from WSSC and their consultants on February 1, 2018. Last summer, WSSC formally approved a new rate structure to take effect July 1, 2019 (FY20).

### Impact of the New Rate Structure

The following table compares the new rate structure (with WSSC's proposed FY20 rates) with the current rate structure with FY19 rates plus a 5 percent increase.



**Table #2**  
**Effect of New Rate Structure on Different Customers**

	Avg. Daily Consumption gallons per day (gpd)	New Rate Structure	Customer Cost		
			55 gpd	137 gpd	500 gpd
1	0-80	\$11.89	\$19.89	\$29.29	\$29.29
	81-165	\$13.30	-	\$22.65	\$34.39
	166-275	\$16.09	-	-	\$53.83
	>275	\$20.26	-	-	\$138.04
2	<b>Total Monthly Volumetric Charge - New Rate Structure</b>		<b>19.89</b>	<b>51.95</b>	<b>255.55</b>
3	<b>Effective Billing Rate Per 1000 gallons</b>		<b>11.89</b>	<b>12.47</b>	<b>16.80</b>
4	<b>FY19 Rates Plus 5%</b>		<b>10.01</b>	<b>11.39</b>	<b>18.96</b>
5	<b>FY19 Rates Plus 5% Volumetric Charge</b>		<b>16.74</b>	<b>47.47</b>	<b>288.40</b>
6	<b>Difference (Row 5 minus Row 2)</b>		<b>3.15</b>	<b>4.47</b>	<b>(32.84)</b>
7	<b>Percent Change</b>		<b>15.8%</b>	<b>8.6%</b>	<b>-12.9%</b>

Under the current rate structure, customers are billed at the tier where their average daily water consumption falls. For instance, a customer who uses an average of 137 gallons per day (the middle example above) would pay an FY20 water/sewer rate of \$11.39 (which equals \$10.85 (the FY19 rate) times 1.05) per 1000 gallons of usage. The total volumetric charge would be \$47.47 in FY20 under the current rate structure (see line 5 above).

Under the new rate structure, all customers will be billed “through the tiers” for their water usage. This has the effect of reducing the effective rates paid by high volume customers and increasing the effective rates paid by low volume customers. In FY20 under WSSC’s proposed rates, the same 137 gallons per day customer noted earlier will pay one rate for the first 80 gallons of usage (\$11.89) and a second, higher rate (\$13.30) for the remaining 57 gallons of usage, and their “effective” rate will be \$12.47—higher than under the current rate structure plus 5 percent (\$11.39). The “effective” rate for this customer is \$12.47 (see line 3 above) with a volumetric charge of \$51.95 (or \$4.47 more than under the current rate structure). This impact is more pronounced for even lower-volume ratepayers (like the 55 gallons per day example below). Meanwhile, the high-volume customer (500 gallons per day) sees a significant drop in their volumetric charge.

However, it should be noted that the customer “rate shock” that would occur from changing rate structures was one of the factors reviewed during the new structure review. Other structures, especially a flat rate for all usage, would have had a much greater impact on current customers.

### **Long-Range Financial Plan**

As it did last year, WSSC has included a one-page financial forecast summary (see ©58) in its Proposed Operating Budget. A similar chart is included in the Executive’s Recommended Operating Budget (see ©32). This forecast includes similar assumptions to those used in the spending control limits process each fall. Like Montgomery County’s fiscal plan, this forecast presents a scenario that assumes a balanced budget across the six-year period.

The Long-Range Financial Forecast assumes a 5.0 percent rate increase in FY20 (as proposed) and 6.0 percent rate increases in FY21 through FY23 and then 5.5 percent and 5.0 percent in FY24 and FY25 respectively. The Financial Plan assumes an “Adjustments” line in FY21 and FY22 (-\$10 million in each year) that brings expenditures into balance with funds available. This line is essentially the gap that must be closed to achieve a balanced budget if all of the other assumptions in the Fiscal Plan occur. These

adjustments, while significant, are far less than the adjustments presented in last year's Fiscal Plan that totaled over \$240 million. The large reduction in the adjustments is primarily the result of WSSC's recent efforts to constrain CIP spending (with the resulting debt service savings in FYs20-24 being an estimated \$98.7 million) along with freezing PAYGO at FY19 approved levels (\$31,016 million), rather than increasing it as overall debt service increases (with savings in FYs20-24 of \$117.8 million).

The Taxpayers League expressed concern about the Fiscal Plan last year and again this year (see testimony on ©60), especially regarding the assumed rate increases needed to cover WSSC's budget gaps over the six-year period. However, Council Staff would caution that, by their nature, fiscal projections tend to present gaps. For many years, WSSC's spending control limits multi-year forecasts had shown high rate increases (often double digits) in the outyears of the projections. However, WSSC has not had a double-digit rate increase since the spending control limits process began in FY96. In fact, as shown earlier, WSSC's cumulative rate increases over time have averaged out to about a 4 to 6 percent annual rate increase, depending on the timeframe chosen.

WSSC does have some substantial fiscal challenges, including ongoing capital responsibilities that are keeping debt service as a high percentage of the WSSC budget (36 to 40 percent). At the same time, water usage by WSSC's customers is flat or declining. However, WSSC has also been identifying productivity improvements in its operations over time (some of which are noted in the Commission Chair's letter in the Proposed Budget (see ©4)), such as WSSC's Supply Chain Management Transformation project, group insurance and Workers Compensation savings, and overtime reductions. WSSC also commissioned a benchmarking study several years ago, described in more detail below.

### **Benchmarking Study**

In July 2016, the T&E Committee received a briefing from the consultants who performed WSSC's Utility Benchmarking and Organizational Efficiency Review. This study had been supported by both Councils as part of the FY16 budget.

WSSC had not had a comprehensive benchmarking study since the late 1990s. That previous effort (which included benchmarking and then substantial multi-year follow up by WSSC work teams) ultimately led to a reduction in WSSC staffing from 2,120 in FY96 to 1,458 in FY06 (a reduction of 662 positions, or over 30 percent of the workforce).

From FY06 through FY17, WSSC steadily increased its workforce up to 1,776 positions. However, the FY18 and FY19 budgets kept position totals unchanged and the FY20 Recommended Budget also assumes no increase in positions.

Much of WSSC's ramp-up in staffing and rates has been a result of its increased infrastructure recapitalization work in recent years to address aging water/sewer pipe infrastructure. WSSC has also faced increased environmental regulation costs over time (such as its Sanitary Sewer Overflow (SSO) Consent Decree).

Given the increases in staffing, costs, and rates over the past decade, both counties agreed that a benchmarking study would be helpful to provide a more current assessment of WSSC compared to other similar utilities on a number of measures, and where WSSC's major operations may be improved.

Some of the conclusions of the benchmarking study included:

- WSSC's current staffing appears to be at or below the median compared with its peers.

- For current average single-family residential bills across large national and regional water/sewer utilities, WSSC's bills are at or below the average in terms of total and affordability (as a percentage of household income). However, because of WSSC's current inclining block rate structure (with customers charged for all water used at increasing amounts based on average daily consumption), the affordability impact is much greater for higher water users.
- The study also looked at best practices for WSSC operations. Of these, WSSC exceeded the industry median in 6 of 10 attributes. Opportunities for improvement were found in the areas of customer satisfaction, operational optimization, and infrastructure stability.
- In terms of financial performance, the results were mixed. WSSC is the only utility reviewed with an across-the-board AAA bond rating. WSSC also has the lowest percentage of revenue coming from its top 10 customers. However, WSSC is above the median in debt per capita and has an above average "capital intensity" (ratio of net asset value to revenues).
- The best practices review found three areas – customer service, Fleet, and CIP-asset management – that were recommended for initial focus for improvements. Procurement and utility services also showed potential for significant improvement.

In response to the benchmarking study, each affected WSSC department developed action plans to implement recommendations in the study. Council Staff asked WSSC for an update on its work to date. The response is below:

*WSSC Stat has assumed responsibility for monitoring the progress on implementing the Action Plans for the Benchmarking Report. We are reassessing some of the action plans that may be duplicative of other efforts or may no longer be needed. The expectation is that most tasks will be complete by the end of FY19. Action plans contingent on completion of Release 2 of Project Cornerstone for the Oracle Work Asset Management (WAM) System are expected to be completed as of November 4, 2019 with the implementation of WAM.*

WSSC Staff will be available at the T&E Committee meeting to provide further information on this work.

### **System Development Charge (SDC) Fees and Exemptions**

WSSC's Proposed CIP and draft Operating Budget assume no change in the SDC rate. However, WSSC supports increasing the maximum rate the charge could be increased in future years by a CPI adjustment (1.5 percent) for FY20, as permitted under State law. The proposed charge and the maximum allowable charge are presented in Table 2.

**Table 3:  
Proposed SDC Charges**

Item	FY20 Charge	Max. Allowable Charge
Apartment		
- Water	\$896	\$1,330
- Sewer	\$1,140	\$1,694
1-2 toilets/residential		
- Water	\$1,344	\$1,998
- Sewer	\$1,710	\$2,538
3-4 toilets/residential		
- Water	\$2,240	\$3,328
- Sewer	\$2,850	\$4,234
5 toilets/residential		
- Water	\$3,135	\$4,658
- Sewer	\$3,991	\$5,929
6+ toilets/residential*		
- Water	\$88	\$132
- Sewer	\$115	\$173
Non-residential*		
- Water	\$88	\$132
- Sewer	\$115	\$173

\*costs shown are per fixture unit

The SDC fund itself is discussed in more detail in the Council Staff Report for the Proposed FY20-25 WSSC CIP from March 12 (Agenda Item #4), available at the Council website at: [https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2019/20190312/20190312\\_4.pdf](https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2019/20190312/20190312_4.pdf).

**Council Staff is supportive of WSSC's approach with the caveat that the issue of SDC rates is an annual decision. The T&E Committee concurs.** *NOTE: Both the maximum rate and the adopted rate will be noted in the annual Council resolution to be approved in mid-May.*

#### **Account Maintenance Fee and Infrastructure Investment Fee**

For FY16, the Councils approved a recalibrated account maintenance fee (AMF) and a new Infrastructure Investment Fee (IIF) (phased in over two years). The Approved FY17 WSSC Budget reflected the full phase-in. No changes were made to either fee for FY18 or FY19. WSSC is not recommending changes to either fee for FY20. Fee schedules for both are based on meter size. Most residential customers pay an AMF of \$16 per quarter and an IIF of \$12 per quarter. Ratepayers eligible for the customer assistance program have these fixed charges waived. The customer impact information, discussed later, takes into account both volumetric charges and these fixed fees.

*NOTE: While WSSC's rate structure review focused on volumetric charges, the cost of service study, which was done as part of this rate structure review, can inform future decisions regarding possible changes in the AMF and IIF.*

#### Customer Assistance Program

A customer assistance program was begun during FY16 after the State General Assembly passed the necessary enabling legislation during the 2015 legislative session. Under this program, WSSC

provides a substantial ongoing benefit to eligible residential customer accounts across the WSSC service area (based on current Maryland Office of Home Energy Program eligibility in the two counties). The benefit includes waivers of the full Account Maintenance Fee (typically \$16 per quarter), the Infrastructure Investment Fee (\$12 per quarter), and the Bay Restoration Fee (\$15 per quarter). The monthly benefit (not counting the Bay Restoration Fee waiver) for most eligible residential customers in FY17 is \$9.33 per month (\$112 per year).

The FY19 budget assumes 7,929 customers receive the \$112 benefit, with a budget impact (i.e., lower revenue) of \$888,000 per year. WSSC is seeing growth in program participation, with 11,529 customers enrolled as of April 2019.

WSSC has been seeking to expand the program to include tenants in multi-unit homes. In many of these situations, the tenant is an “indirect” WSSC customer, receiving WSSC water and discharging into WSSC’s sewer system but paying for water/sewer through monthly rent payments or through apartment/condo association fees.

During the 2019 legislative session, State legislation was passed (HB325 “WSSC – Indirect Customer Assistance Program”) which gives WSSC the enabling authority to provide assistance to “indirect” customers. WSSC will now need to develop a process and eligibility criteria to provide this assistance. WSSC has indicated it hopes to implement this new benefit in FY21 or FY22.

### **Other Fees**

A list of WSSC fees (and proposed revenue changes) is attached on ©52-57. Most of these fees have to do with construction activity and not with general customer activities.

WSSC staff meet regularly with representatives from the Maryland Building Industry Association (MBIA) to go over issues of concern as well as the cost basis for proposed fee increases and WSSC’s annual process and methodology. The Council has not received any correspondence or public hearing testimony from MBIA or others on the FY20 fee increases to date.

### **Spending Control Limits**

#### Background

In April 1994, the Council adopted Resolution No. 12-1558, which established a spending affordability process for the WSSC budget. Under this process, which stems from the January 1994 report of the Bi-County Working Group on WSSC Spending Controls, each Council appoints a Spending Affordability Committee (SAC). For Montgomery County, the SAC is the Transportation and Environment (T&E) Committee.

There are four spending control limits: Maximum Average Rate Increase, Debt Service, New Debt, and Total Water and Sewer Operating Expenses. **The spending control limits provide a ceiling regarding what the Councils direct WSSC to propose in its budget. The limits do not cap what the Councils can ultimately approve each year.**

## FY20 Spending Control Limits

Last fall, the T&E Committee and the Council reviewed WSSC's major revenue and expenditure assumptions as part of the FY20 spending control limits process. WSSC developed a "base case" scenario (a "same services" scenario with some enhancements) that included a 6.0 percent rate increase.

Both the Montgomery County and Prince George's County Councils supported a 5.0 percent rate increase ceiling.

Table 3, below, shows how WSSC's Proposed FY20 Budget compares to the approved limits and to the County Executive's FY20 budget recommendations. The FY20 Proposed WSSC Budget is within each of the limits for New Debt, Water and Sewer Debt Service, and the Maximum Average Rate Increase. Total Water/Sewer Operating Expenses are slightly higher than the ceiling (+\$3.6 million). According to WSSC budget staff, approximately \$30 million in reductions were made from its departmental requests. The additional \$3.6 million in expenditures is proposed to be offset by a \$2.5 million bond premium, \$300,000 in additional revenue assumed from the City of Rockville, and budget savings assumed from an additional \$500,000 added to the Inspector General's (IG's) budget (based on the IG's analysis that the additional expenditures will be more than offset by reduced costs and/or increased revenue through its work). The County Executive's assumptions reflect his support of the WSSC budget as proposed.

**Table 4:  
FY20 Spending Control Limits Approved by Each Council  
versus the FY20 Proposed WSSC Budget and CE Recommendation**

Spending Control Limit Categories	Recommended Limits		WSSC	CE
	MC	PG	Proposed	Rec
New Debt (in \$000s)	385.5	385.5	384.9	384.9
Water and Sewer Debt Service (in \$000s)	306.4	306.4	306.3	306.3
Water/Sewer Operating Expenses (in \$000s)	799.0	799.0	802.6	802.6
Maximum Avg. Rate Increase	5.0%	5.0%	5.0%	5.0%

## Revenues

**Table 5:  
WSSC Water and Sewer Operating Funds Revenue and Expenditure Trends: FY19 to FY20**

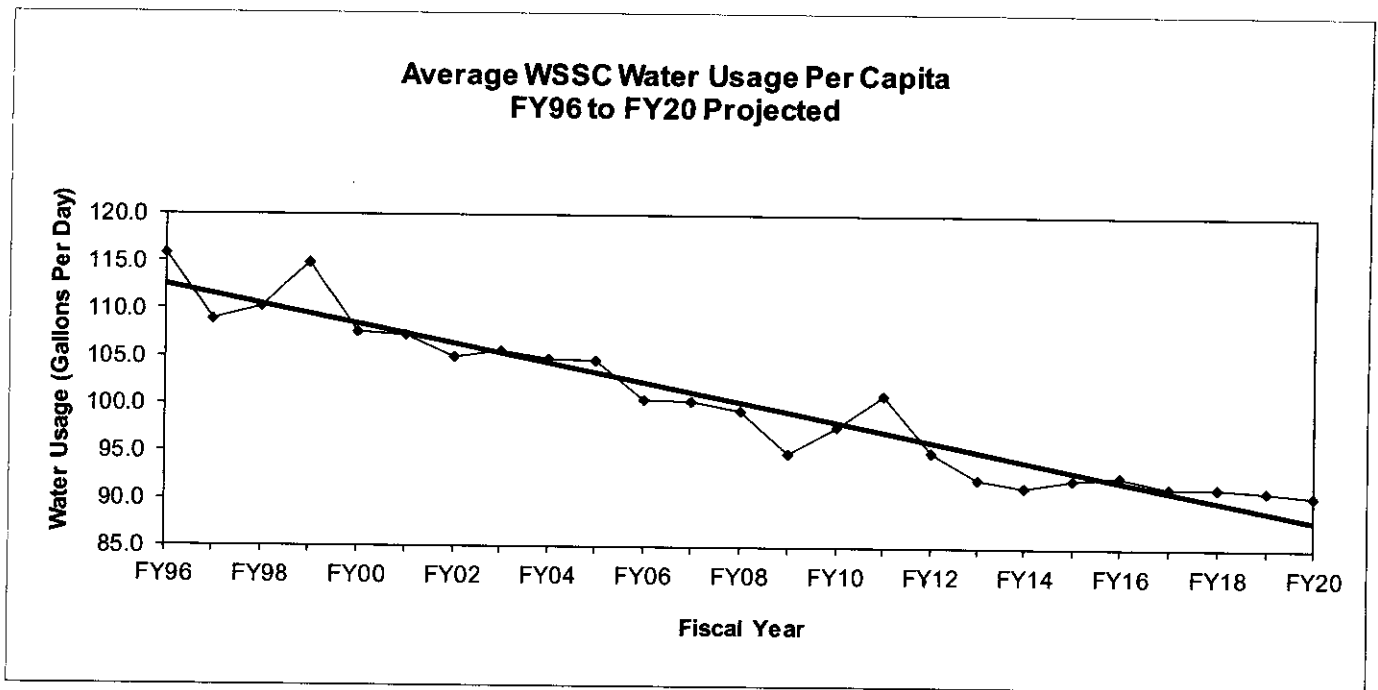
Combined Revenue	Approved FY19	Proposed FY20	change	% change	Impact on Rate (%)
Water and Sewer Rate Revenue	627,942,000	627,523,000	(419,000)	-0.1%	0.07
Account Maintenance Fee	32,182,000	32,296,000	114,000	0.4%	(0.02)
Infrastructure Renewal Fee	38,894,000	39,331,000	437,000	1.1%	(0.07)
Rockville Sewer Use	2,700,000	3,000,000	300,000	11.1%	(0.05)
Plumbing and Inspection Fees	12,231,000	12,900,000	669,000	5.5%	(0.11)
Interest Income	1,500,000	5,500,000	4,000,000	266.7%	(0.64)
Miscellaneous	19,800,000	19,800,000	-	0.0%	-
<b>Total Revenues</b>	<b>735,249,000</b>	<b>740,350,000</b>	<b>5,101,000</b>	<b>0.7%</b>	<b>(0.81)</b>
Use of Fund Balance	11,580,000	11,341,000	(239,000)	-2.1%	0.04
Adjustments for REDO and SDC Debt Service Offset	15,864,000	19,553,000	3,689,000	23.3%	(0.59)
<b>Funds Available</b>	<b>762,693,000</b>	<b>771,244,000</b>	<b>8,551,000</b>	<b>1.1%</b>	<b>(1.36)</b>

Revenue trends were discussed in detail during last fall's spending control limits process. The above chart compares WSSC's FY20 revenue assumptions (assuming no water/sewer rate increase) with FY19 approved revenues. The chart shows that water/sewer volumetric rate revenue (WSSC's dominant

source of revenue) is expected to be about the same in FY20 as in FY19. Overall, revenues are flat (0.7 percent increase).

WSSC is proposing to use a similar amount of excess fund balance for some one-time FY20 expenditures as it used in FY19 and to increase its use of REDO and SDC Debt Service Offset. Therefore, overall, funds available are up by \$8.6 million (for an equivalent rate impact of -1.36 percent).

This trend of flat to declining revenues is not new and is the result of overall water consumption in the WSSC service area being essentially unchanged from 25 years ago, despite 25.1 percent growth in the WSSC customer base over that same time. Per capita water usage is down 21.8 percent since FY96. While water conservation is a good thing from an environmental standpoint, it means WSSC's dominant revenue source has been stagnant, putting more pressure on rates. WSSC's unique rate structure during this same time period (where customers are billed at the highest tier into which their water usage falls) exacerbates this revenue decline as per capita usage goes down.



**FY20 WSSC Proposed Budget Expenditures**

Summary Charts

The following chart presents summary budget data for WSSC for the FY19 Approved and FY20 Proposed Budgets.

**Table 6:  
WSSC Expenditures by Fund (in \$000s)**

	Approved	Proposed	Change	
	FY19	FY20	\$	%
<b>Capital</b>				
Water Supply	306,479	212,555	(93,924)	-30.6%
Sewage Disposal	328,890	357,109	28,219	8.6%
General Construction	20,957	68,862	47,905	228.6%
<b>Total Capital</b>	<b>656,326</b>	<b>638,526</b>	<b>(17,800)</b>	<b>-2.7%</b>
<b>Operating</b>				
Water Operating	340,083	352,472	12,389	3.6%
Sewer Operating	422,610	450,148	27,538	6.5%
<b>Subtotal W&amp;S Operating</b>	<b>762,693</b>	<b>802,620</b>	<b>39,927</b>	<b>5.2%</b>
Interest and Sinking	18,888	14,773	(4,115)	-21.8%
<b>Total Operating</b>	<b>781,581</b>	<b>817,393</b>	<b>35,812</b>	<b>4.6%</b>
<b>Grand Total</b>	<b>1,437,907</b>	<b>1,455,919</b>	<b>18,012</b>	<b>1.3%</b>

The combined total of the FY20 Capital and Operating Budgets is \$1.46 billion, an increase of \$18 million (or 1.3 percent) from the Approved FY19 amount of \$1.44 billion.

The total proposed FY20 Operating Budget is \$817.4 million, an increase of \$35.8 million (or 4.6 percent) from the Approved FY19 Operating Budget of \$781.6 million.

The following chart summarizes the Approved and Proposed operating expenditures by major category.

**Table 7:  
Total Operating Expenditures by Category**

Expense Categories	Approved	Proposed	Change	
	FY19	FY20	\$	%
Salaries and Wages	128,434	130,134	1,700	1.3%
Heat, Light, and Power	20,577	19,444	(1,133)	-5.5%
Regional Sewage Disposal	53,617	59,000	5,383	10.0%
All Other	284,604	288,932	4,328	1.5%
Debt Service	294,349	319,883	25,534	8.7%
<b>Total</b>	<b>781,581</b>	<b>817,393</b>	<b>35,812</b>	<b>4.6%</b>

While the overall increase is 4.6 percent, debt service is the biggest single expenditure item in FY20 (about 39.1 percent of total operating expenditures). Removing debt service from the above totals results in a 2.1 percent increase.

Regional sewage disposal costs are paid by WSSC to DC Water to cover WSSC's portion of costs for the Blue Plains Wastewater Treatment Plant's operations. The costs are based on actual flows. For FY20, the amount is proposed at \$59 million, an increase of 10 percent from FY19. As discussed during the spending control limits discussion last fall, this increase is due to revised cost allocations from DC Water related to shared costs for the Potomac Interceptor, as well as actual costs for FY18 being about



\$5.0 million over budget. Removing this item and debt service from the above totals, results in a 1.1 percent increase in the remaining operating expenses under WSSC's direct control.

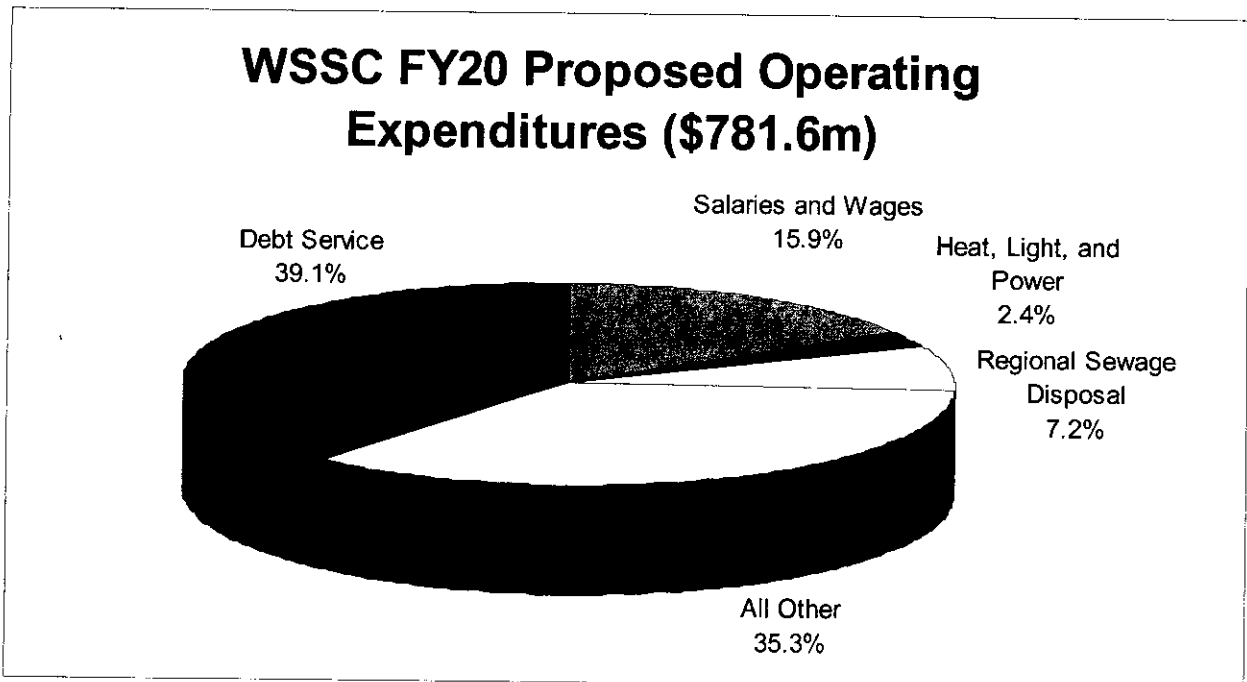
The heat, light, and power category is down significantly for FY20 (-5.5 percent). This trend continues notable declines seen the past several years as a result of both reductions in the weighted average unit price of electricity and also reductions in energy usage. Over the past 10 years, WSSC has pursued a number of electricity retrofit initiatives, funded mostly through a large performance contract with Constellation Energy, that have helped offset operational changes increasing WSSC's energy requirements (such as installation of ultraviolet disinfection processes). Reduced infiltration and inflow into WSSC's sewer lines (thanks to sewer line rehabilitation efforts) has resulted in reduced flows to wastewater treatment plants and thereby reduced energy requirements as well.

WSSC also has made a major long-term investment in wind power through wholesale purchases from a wind farm in Pennsylvania. This contract expired at the end of FY17, at which time WSSC purchased renewable energy credits pending a new wind power contract. The new contract will take effect in FY20, last 10 years, and cover approximately 30 percent of WSSC's power needs at fixed kWh rates.

The "All Other" category includes all operating costs not otherwise broken out above, including: services by others (\$98.5 million), employee benefits (\$59.5 million), PAYGO (\$31 million), outside engineering (\$17.8 million), contract work (\$15.2 million), materials (\$13.5 million), contract restoration (operating cost portion of paving costs; \$14.4 million), chemicals (\$10.6 million), insurance premiums (\$2.1 million), and a number of other items.

### Compensation

Salary and wages remain a comparatively small, although still significant, part of the WSSC Operating Budget (as shown in the following pie chart).



Even adding employee benefits<sup>5</sup> (which are included in the “All Other” category), personnel costs for FY20 make up less than 25 percent of operating budget expenditures. This ratio contrasts sharply with ratios in County Government, where personnel costs are 52.7 percent of County Government expenditures in the FY20 Recommended Budget. MCPS’s personnel costs have historically represented about 90 percent of its budget.

WSSC’s total “Salaries and Wages” costs are proposed to increase by \$1.7 million (1.3 percent). A total of \$5.2 million is for salary enhancements. Putting aside WSSC’s allocation for IT bonuses (\$304,334)<sup>6</sup> and flexible worker pay (\$939,052), the balance would provide a 2 percent COLA and merit increases of 3.5 to 4 percent for eligible employees, subject to ratification by WSSC’s employee union.

WSSC’s personnel costs (and increases) are a small part of WSSC’s budget. The ratepayer impact of all salary changes from FY19 to FY20 (not just enhancements) is \$1.8 million, which equates to about a 0.3 percent rate increase. *Note: since WSSC’s budget is funded by ratepayers rather than by tax dollars, WSSC’s compensation increases do not directly compete for the same tax-supported funding that covers other County agency employees. However, both the County Executive and the Council have expressed support for the concept of the equitable treatment of employees across agencies, especially in the context of annual pay increases.*

For FY20, the County Executive’s agreement with MCGEO includes a general wage adjustment of 2.4 percent (effective November 24, 2019) and service increments for eligible employees (not at top of grade) of 3.5 percent. Employees not eligible for a service increment are eligible for a \$1,200 lump sum payment. Employees who were scheduled to receive a service increment in FY11 that was cancelled due to fiscal constraints at the time, are eligible for a deferred service increment on January 1, 2020. Non-represented employees are eligible for a 2.0 percent general wage adjustment (effective July 1, 2019) and 3.5 percent service increments.

**Council Staff supports the concept of treating employees consistently across all agencies, whenever possible, in the context of compensation adjustments. WSSC’s salary enhancements as proposed would provide approximately a 2.0 percent COLA and 3.5 to 4 percent service increments. Apart from the “deferred service increment” noted above, the WSSC compensation package is close overall to County Government office employee salary enhancements assumed under the County Executive’s recommendation.**

**Based on the above, Council Staff supports WSSC’s salary enhancements as proposed. The T&E Committee concurs.**

### **Closing the Gap**

For FY20, to bring its volumetric rate increase in at 5.0 percent, WSSC did not assume any program expansions or new programs and no new positions are requested.

Each 1.0 percent of rate increase provides an estimated \$6.3 million in revenue. WSSC’s Proposed Budget assumes a 5.0 percent rate increase with no changes assumed for its Account

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<sup>5</sup> Benefit costs (such as Social Security, Group Insurance, and Retirement) are loaded in the “All Other” expense category and total about \$59.5 million for FY20.

<sup>6</sup> In addition to WSSC’s regular employees, WSSC has contract employees working in their IT office who are not eligible for COLA or merit increases. WSSC’s FY20 Proposed Budget assumes bonus awards for these employees, which is consistent with past practice.

Maintenance Fee or Infrastructure Investment Fee. The following chart presents all of the elements (plus and minus) that go into the rate increase request for FY20.

**Table 8:**  
**WSSC Water and Sewer Operating Funds Revenue and Expenditure Trends: FY19 to FY20**

Combined Revenue	Approved FY19	Proposed FY20	change	% change	Impact on Rate (%)
Water and Sewer Rate Revenue	627,942,000	627,523,000	(419,000)	-0.1%	0.07
Account Maintenance Fee	32,182,000	32,296,000	114,000	0.4%	(0.02)
Infrastructure Renewal Fee	38,894,000	39,331,000	437,000	1.1%	(0.07)
Rockville Sewer Use	2,700,000	3,000,000	300,000	11.1%	(0.05)
Plumbing and Inspection Fees	12,231,000	12,900,000	669,000	5.5%	(0.11)
Interest Income	1,500,000	5,500,000	4,000,000	266.7%	(0.64)
Miscellaneous	19,800,000	19,800,000	-	0.0%	-
<b>Total Revenues</b>	<b>735,249,000</b>	<b>740,350,000</b>	<b>5,101,000</b>	<b>0.7%</b>	<b>(0.81)</b>
Use of Fund Balance	11,580,000	11,341,000	(239,000)	-2.1%	0.04
Adjustments for REDO and SDC Debt Service Offset	15,864,000	19,553,000	3,689,000	<b>23.3%</b>	<b>(0.59)</b>
<b>Funds Available</b>	<b>762,693,000</b>	<b>771,244,000</b>	<b>8,551,000</b>	<b>1.1%</b>	<b>(1.36)</b>
<b>Expenditures</b>					
Salaries & Wages	127,901,000	129,676,000	1,775,000	1.4%	0.28
Heat, Light & Power	20,577,000	19,436,000	(1,141,000)	-5.5%	0.18
Regional Sewage Disposal	53,617,000	59,000,000	5,383,000	10.0%	(0.86)
All Other	252,521,000	257,185,000	4,664,000	1.8%	(0.74)
Debt Service	277,061,000	306,307,000	29,246,000	10.6%	(4.66)
PAYGO	31,016,000	31,016,000	-	0.0%	-
<b>Total Expenditures</b>	<b>762,693,000</b>	<b>802,620,000</b>	<b>39,927,000</b>	<b>5.2%</b>	<b>(6.36)</b>
<b>Gap</b>	-	<b>31,376,000</b>			<b>(5.00)</b>
<b>Rate Increase Requirement</b>		<b>5.0%</b>			

When excluding debt service from the calculations above, the WSSC Budget is increasing only 2.1 percent. Further excluding the DC Water regional sewage disposal charge, the remaining budget increase is only 1.1 percent. Council Staff believes this very low increase is reflective of WSSC's efforts in recent years to control costs and, in some cases, to defer some service improvements.

As in past years, WSSC has identified service improvements it supports but that could not fit within the Proposed Budget:

1. Large Water Valves Condition Assessment (accelerate from a 4 to a 3-year cycle) – \$197,000
2. System-Wide Flushing – \$826,000 (currently done “as needed”)
3. Fire Flow (Hydrant) Testing (expand from 200 per year to 4,300 per year) – \$250,000
4. Implement System-Wide Flushing (currently done “as needed”) – \$668,000
5. Leak Detection (expansion) – \$232,000

*NOTE: see additional information on ©21, ©40-41 and ©105-106.*

As recommended last year, Council Staff suggests that these issues (as well as WSSC's CIP pressures, which were previously discussed by the T&E Committee) be revisited as part of next fall's spending control limits process.

### **Summary of T&E Committee Recommendations**

- Concur with WSSC to maintain System Development Charge rates for FY20 at current approved levels, but to increase the maximum chargeable rate (the rate the charge could be increased in the future) by a CPI adjustment (1.5 percent) as allowed for under State law.
- Approve the FY20 WSSC Operating Budget as proposed by WSSC and as recommended by the County Executive.

#### **Attachments**

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# FY 2020 PROPOSED BUDGET

Briefing to The Montgomery County Council's  
Transportation & Environment (T&E) Committee

Tom Hucker, Committee Chair

April 29, 2019



# WSSC Strategic Plan

## MISSION

We are entrusted by our community to provide safe and reliable water, life's most precious resource, and return clean water to our environment, all in an ethical, sustainable, and financially responsible manner.

## VISION

To be THE world-class water utility, where excellent products and services are always on tap.

## STRATEGIC PRIORITIES



## CORE VALUES

Accountability

Transparency

Excellence

Environmental Stewardship

Cost Effectiveness

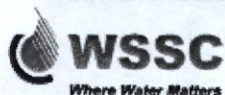
## GUIDING PRINCIPLES

Simplify

Focus

Connect

JOURNEY TO WORLD CLASS





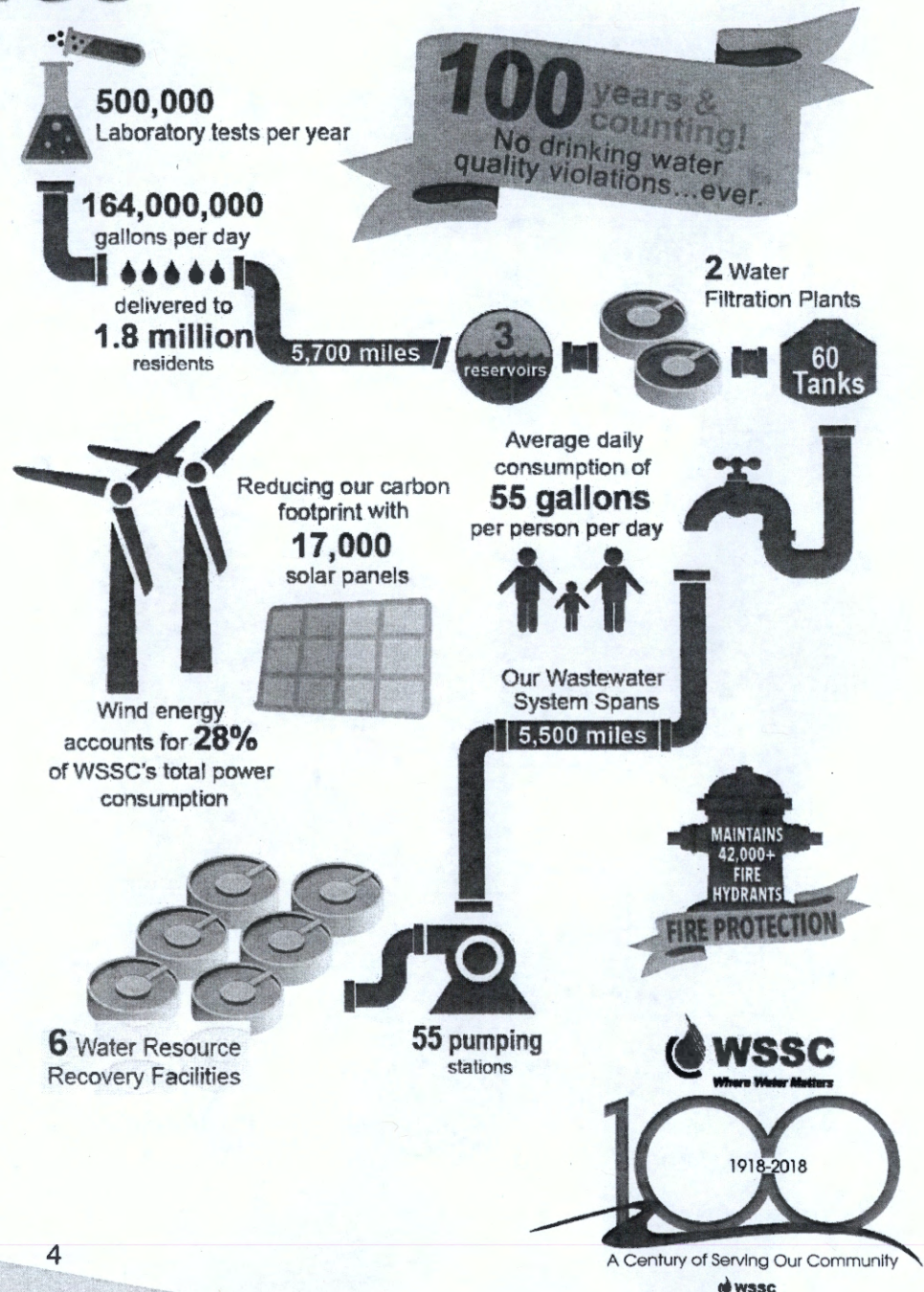
# WSSC At A Glance

- Created by the Maryland General Assembly in 1918
- Governed by six Commissioners
- Provides Water & Sewer service for Montgomery and Prince George's counties
- Serves over 1.8 million people through over 450,000 accounts
- Maintains AAA Bond Rating since 2001 - all three bond rating agencies
- Budget is recommended by County Executives and approved by County Councils
- Rates established annually to recover costs – WSSC does not make a profit and does **not** receive any tax dollars
- Recognized leader in water and wastewater industry



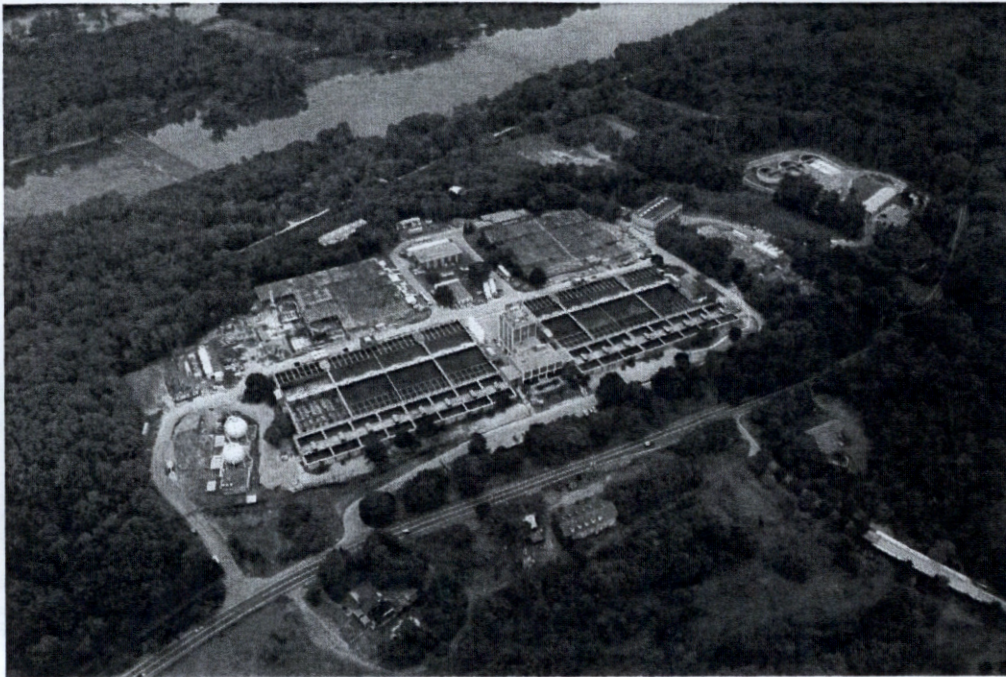
# WSSC At A Glance

- 2 Water Filtration Plants
- 6 Water Resource Recovery Facilities (WRRF)
- 3 Water Storage Dam/Reservoirs
- 60 Water Storage Tanks
- 55 Wastewater Pumping Stations (WWPS)
- 42,000+ Fire Hydrants
- 17,000 Solar Panels
- 0 Water Quality Violations





# WSSC Facilities – Montgomery County



← Potomac WFP  
250 MGD  
Potomac, MD

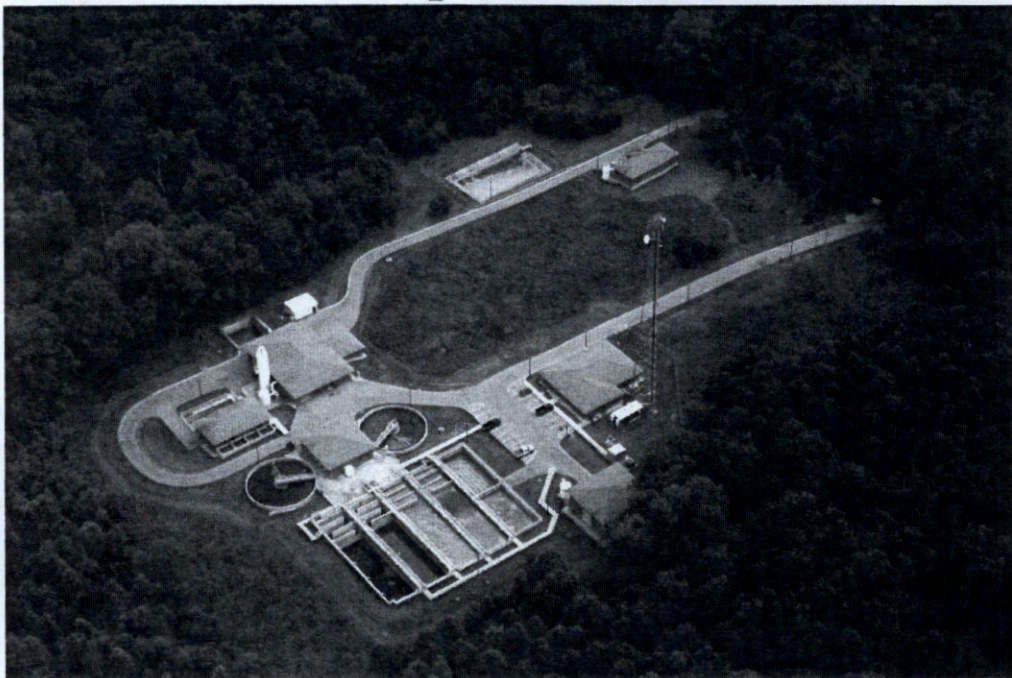


Brighton Dam  
6.3 billion gallons  
Brookville, MD →

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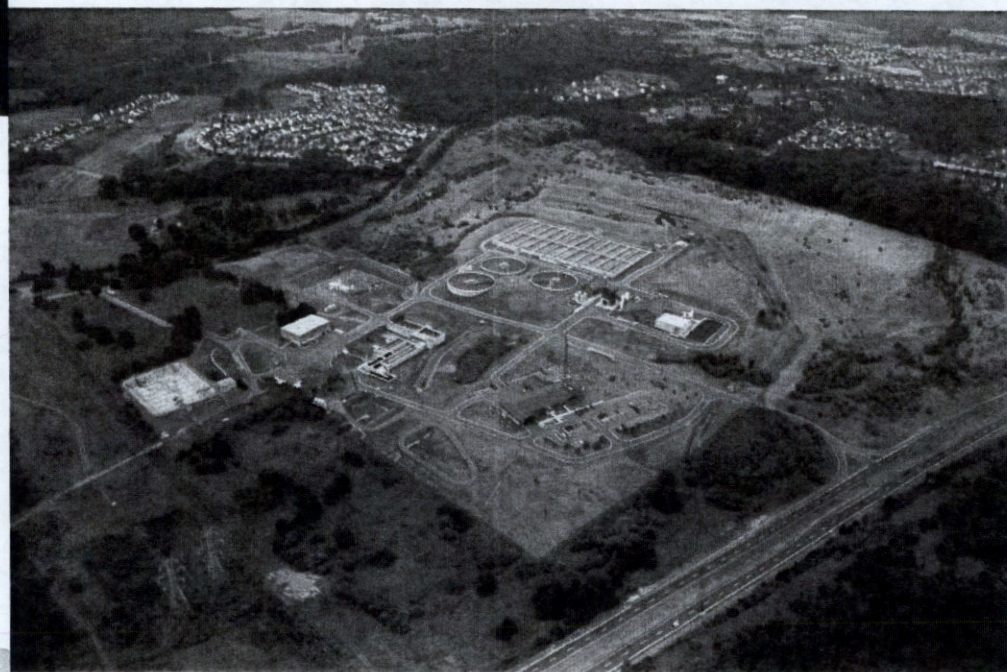


# WSSC Facilities – Montgomery County (cont.)



← **Damascus WRRF**  
1.5 MGD  
Damascus, MD

**Seneca WRRF**  
26 MGD  
Germantown, MD





# Creating a Culture of Innovation

- ▶ Establishment of Innovation and Research Council
- ▶ Commissioner Engagement
  - Innovation and Research Committee
- ▶ Dedicated Staff Positions
- ▶ Leveraged Relationships
  - Universities
  - Water Environment Federation(WEF), Water Research Foundation(WRF)
  - Employee Workshops

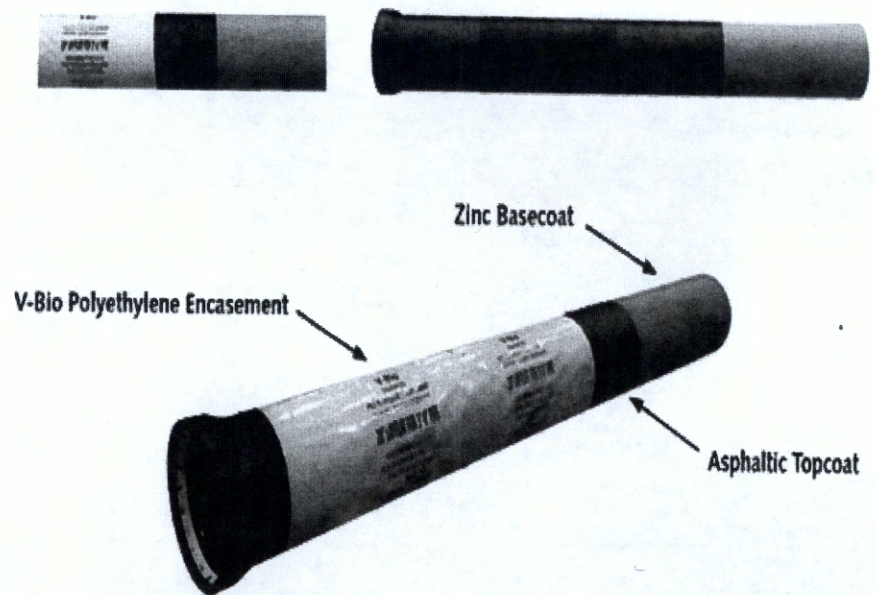
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# Creating a Culture of Innovation – Current Status

- ▶ Successful Implementation of Zinc Coated Ductile Iron Pipe Program
- ▶ On-Going Pilot Projects
  - Leak Detection
  - Carbon Diversion
  - Enhanced Biological Phosphorus Removal
  - Peracetic Acid
- ▶ Created Mid-Atlantic Innovation and Research Forum with Water Research Foundation
- ▶ Piscataway Bio-Energy Project

Zinc Coated Ductile Iron Pipe  
for Corrosion Control





# Calendar Year 2018 Accomplishments

- New rate structure adopted
- Record contributions in WSSC Water Fund
- Continued improved street restoration and paving process and performance
- Recognized excellence in plant performance
- Completed Patuxent Water Filtration Plant expansion
- Longest Acoustic Fiber Optic pipe protection in the USA
- 100+ years without a water quality violation!

(b)



# Changing Business Environment

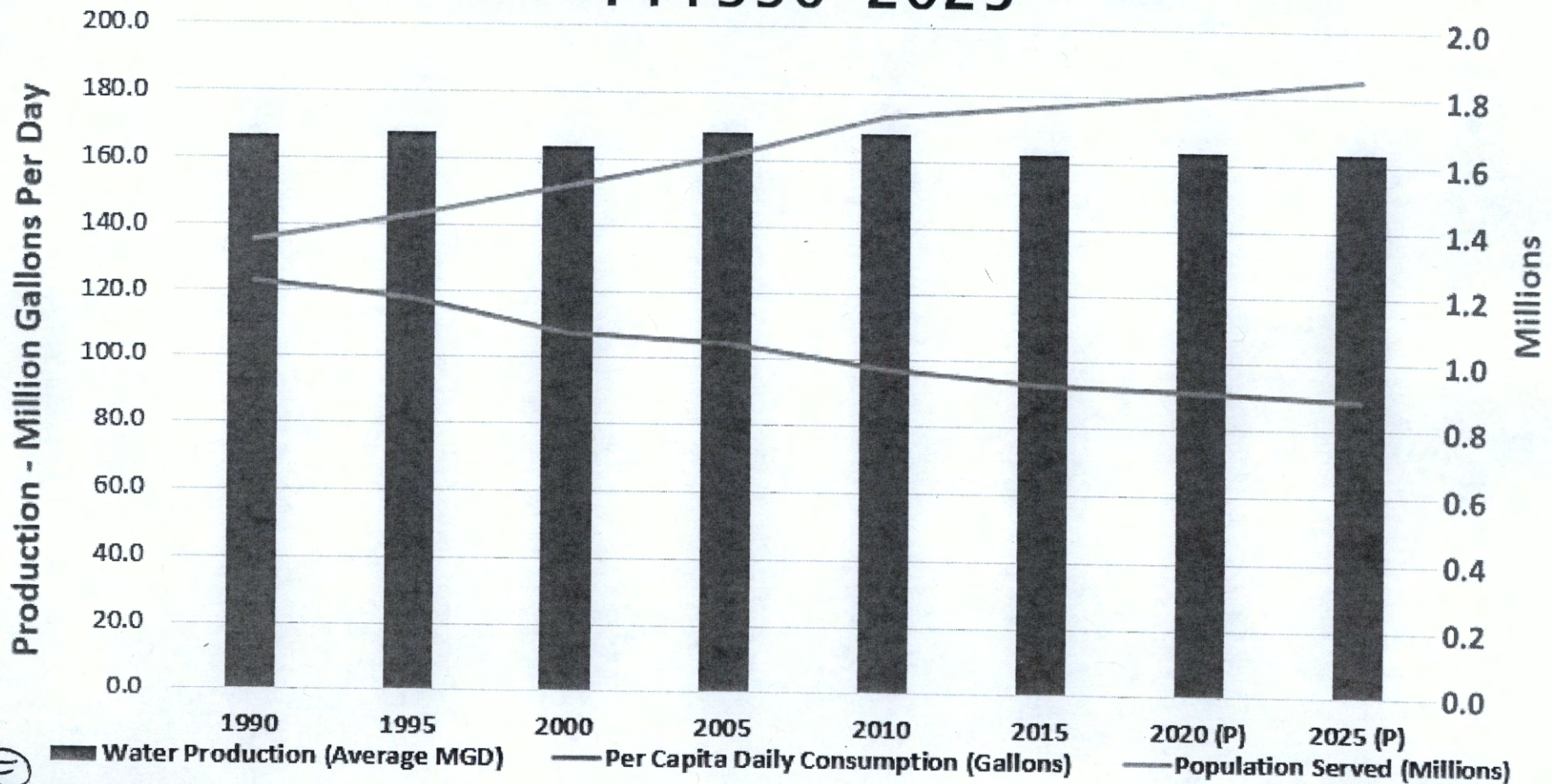
- WSSC, similar to other utilities nationwide, faces continued fiscal and operational challenges:
  - Significant capital investments in WSSC's aging infrastructure
  - Operating and capital costs continue to rise.
  - Declining water use means less revenue
    - The population has increased *23.5%* since 1997, yet total water demand is trending down

6



# Changing Business Environment

## WSSC Drinking Water Production vs Customer Accounts FY1990-2025



(P) = Projection



# Rates & Upcoming Major Capital Projects

- ▶ WSSC's budget & rates are driven by capital costs/debt service
- ▶ WSSC has several critical capital projects that will have ongoing rate impacts over the next six years
  - Water Reconstruction Program – \$1.1 billion
  - Sewer Reconstruction Program – \$730.7 million
  - Piscataway Bio-Energy Project – \$220.8 million
  - Potomac Consent Decree – \$118.1 million

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# Cost Control & Efficiencies

- ▶ Supply Chain Management Transformation
  - Over \$80 million in cost savings since FY'13
    - Fleet, Chemicals, Ductile Pipe, IT Maintenance, PCCP
  
- ▶ Adjusted SAG process to emphasize long-term impacts of CIP/Debt costs on water & sewer rates
  - Reductions to bond funded projects of over \$160 million in FY'20–FY'25 CIP including:
    - Water Main Reconstruction reduced by \$24 million for FY'20
    - Water Storage Rehabilitation Program reduced by \$30 million, FY'20–FY'25
    - Potomac Submerged Channel Intake deferred \$81 million beyond FY'25
  - Debt service savings:
    - Bond refunding savings of \$3.0 million
    - Through debt reductions: \$49.9 million (FY'20–FY'25)

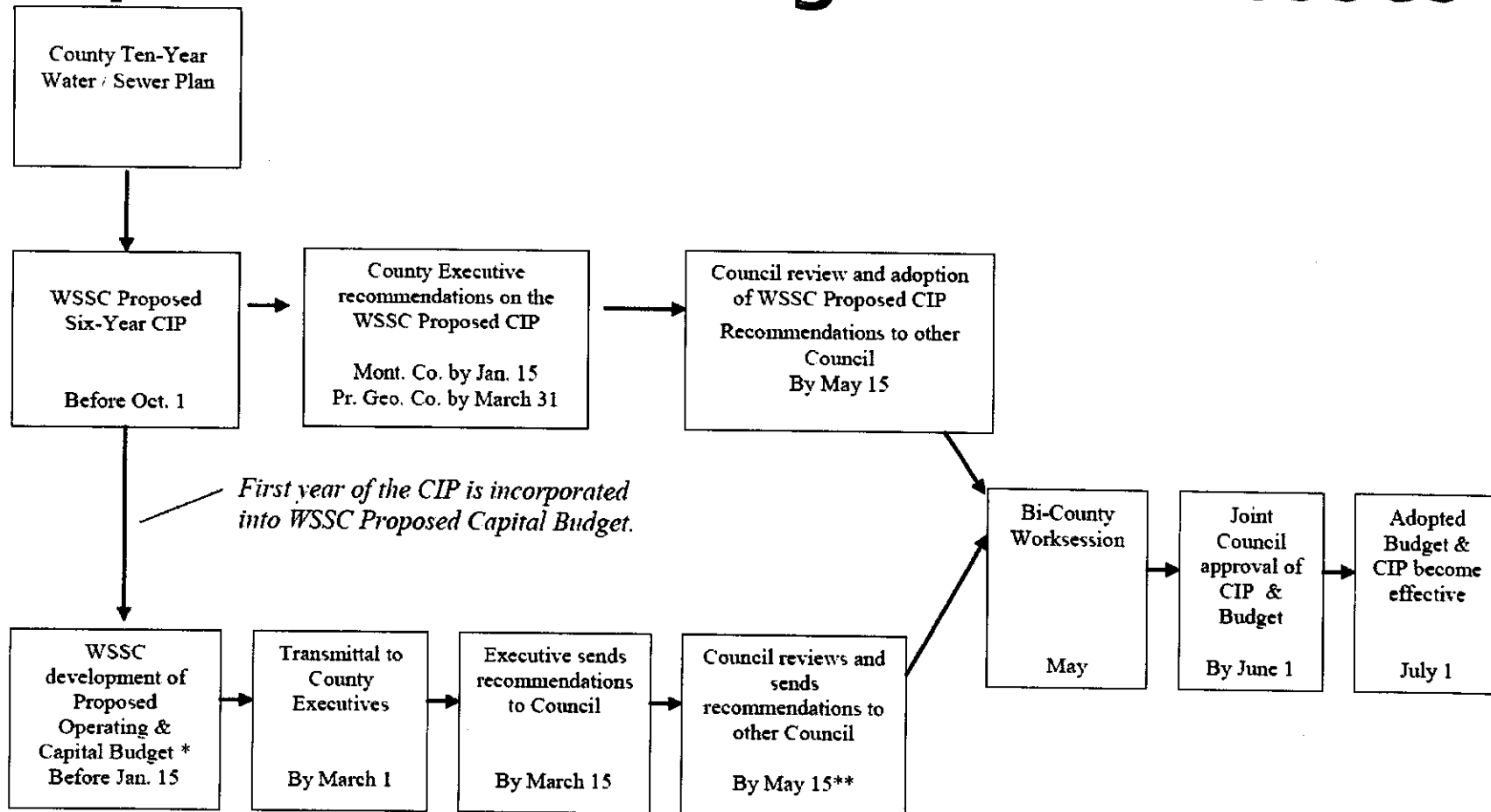
13

# Cost Control & Efficiencies

- ▶ Reducing Personnel Costs
  - 30 frozen positions in FY'18, FY'19 and FY'20
  - No increase in positions since FY'17
  - Overtime costs reduced \$2.0 million since FY'17
  
- ▶ Group Insurance Plan Design & other changes
  - \$1.5 MM annual prescription cost savings
  - Reduced stop loss insurance premium by ~\$400 K annually
  - Medical cost savings of \$1,230 per enrollee in 2017
  - No increase in medical plan premiums in 2017
  - Increased employee contribution to 24% for POS plan
  
- ▶ Energy Conservation Savings
  - \$17.5 million since FY'04
  
- ▶ Workers Compensation
  - 65% reduction in lost work days
  - 54% reduction in costs

(41)

# WSSC Budget & Capital Improvements Program Processes



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\* Includes first year of Proposed CIP plus Information Only Projects and General Construction Projects.

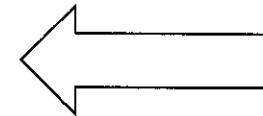
\*\*Incorporates changes to funding in budget year for CIP projects.

# FY 2020 Proposed Budget Overview

- › In February, the Commissioners approved a proposed budget for transmittal to the two Counties. The proposed rate increase meets the Counties' Spending Affordability recommendations from November 2018.

<u>Category</u>	<u>Prince George's County</u>	<u>Montgomery County</u>	<u>WSSC Proposed Budget</u>
Water & Sewer Operating Expenditures	\$ 798,953,000	\$ 798,953,000	\$ 802,619,402
Water & Sewer Debt Service	\$ 306,350,000	\$ 306,350,000	\$ 306,306,700
New Debt	\$ 385,527,000	\$ 385,527,000	\$ 384,910,000
Water & Sewer Rate Revenue Increase	5.0%	5.0%	5.0%

- › **County Executive & Council review (March & April)**
- › **Bi-County Meeting (May 9)**
- › **Commission adopts operating and capital budgets on or before June 30th (June)**



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# FY 2020 Proposed Budget Overview

## LONG-RANGE FINANCIAL PLAN FOR WATER AND SEWER OPERATING FUNDS AT APPROVED SPENDING AFFORDABILITY LIMITS

(\$ In Thousands)	FY 2019 Approved	FY 2020 Proposed	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected
Water and Sewer Combined Rate Increase (Ave)	4.5%	5.0%	6.0%	6.0%	6.0%	5.5%	5.0%
<b>OPERATING REVENUES</b>	<b>\$735,249</b>	<b>\$771,726</b>	<b>\$811,634</b>	<b>\$854,302</b>	<b>\$899,500</b>	<b>\$943,453</b>	<b>\$985,653</b>
<b>OTHER CREDITS AND TRANSFERS</b>	<b>27,444</b>	<b>30,894</b>	<b>22,484</b>	<b>19,383</b>	<b>16,982</b>	<b>9,984</b>	<b>4,984</b>
<b>Total Funds Available</b>	<b>\$762,693</b>	<b>\$802,620</b>	<b>\$834,118</b>	<b>\$873,685</b>	<b>\$916,482</b>	<b>\$953,437</b>	<b>\$990,637</b>
<b>OPERATING EXPENSES</b>	<b>454,616</b>	<b>465,297</b>	<b>485,424</b>	<b>498,843</b>	<b>512,693</b>	<b>526,992</b>	<b>541,755</b>
<b>DEBT SERVICE</b>	<b>277,061</b>	<b>306,307</b>	<b>324,047</b>	<b>341,953</b>	<b>357,427</b>	<b>377,262</b>	<b>393,204</b>
<b>OTHER TRANSFERS AND ADJUSTMENTS</b>							
Unspecified Adjustments	-	-	(10,000)	(10,000)	-	-	-
PAYGO	31,016	31,016	31,016	31,016	31,016	31,016	31,016
<b>Total Expenses</b>	<b>\$762,693</b>	<b>\$802,620</b>	<b>\$830,487</b>	<b>\$861,812</b>	<b>\$901,136</b>	<b>\$935,270</b>	<b>\$965,975</b>
<b>BEGINNING FUND BALANCE - JULY 1</b>	<b>\$185,297</b>	<b>\$173,717</b>	<b>\$162,376</b>	<b>\$158,006</b>	<b>\$162,879</b>	<b>\$172,225</b>	<b>\$185,393</b>
Net Increase (Decrease) in Fund Balance	-	-	3,631	11,873	15,346	18,167	24,662
Use of Fund Balance/Other Adjustments	(11,580)	(11,341)	(8,000)	(7,000)	(6,000)	(5,000)	-
<b>ENDING FUND BALANCE - JUNE 30</b>	<b>\$173,717</b>	<b>\$162,376</b>	<b>\$158,006</b>	<b>\$162,879</b>	<b>\$172,225</b>	<b>\$185,393</b>	<b>\$210,055</b>
Debt Service Coverage (1.10 is target)	1.01	1.00	1.01	1.04	1.08	1.10	1.13
Debt Service as a Percentage of Total Expenditures (Below 40% is target)	36.3%	38.2%	39.0%	39.7%	39.7%	40.3%	40.7%
Operating Reserve Required 10% Level (\$)	\$73,525	\$77,173	\$81,163	\$85,430	\$89,950	\$94,345	\$98,565
Days Operating Reserve-on-Hand (60 - 90 days is target)	84.4	74.4	69.9	69.4	70.2	72.8	79.8
<b>Total Workyears (All Funds)</b>	<b>1,776.0</b>	<b>1,776.0</b>	<b>1,776.0</b>	<b>1,776.0</b>	<b>1,776.0</b>	<b>1,776.0</b>	<b>1,776.0</b>

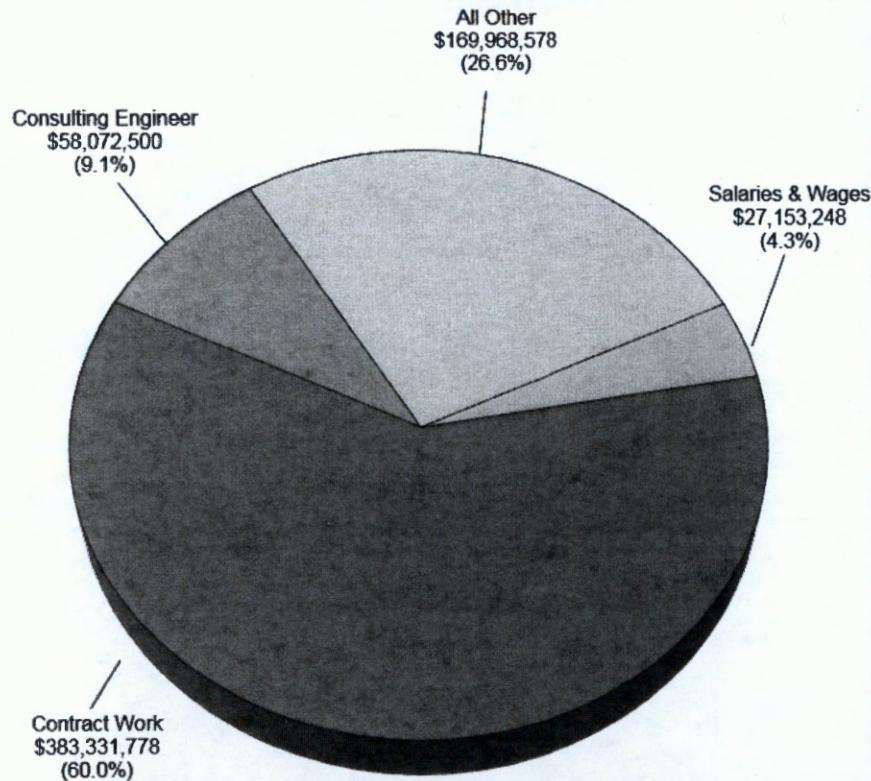
(17)



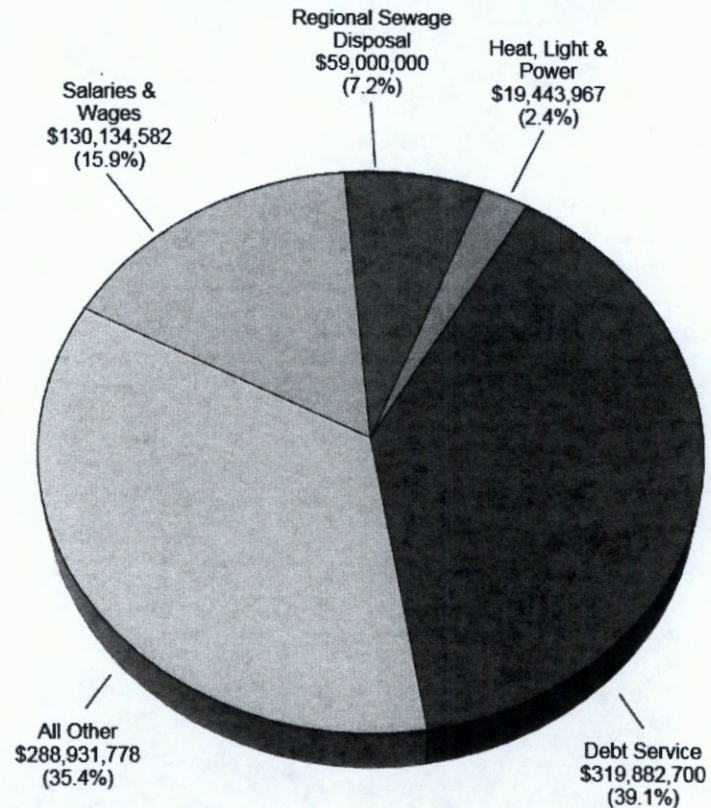
# FY 2020 Proposed Budget Overview

## Major Expense Category

**CAPITAL = \$638,526,104**



**OPERATING = \$817,393,026**



**GRAND TOTAL = \$1,455,919,130**



\*All Other (Capital) – Includes Blue Plains Construction, Professional Services, Materials, Street Repairs and Water Meters

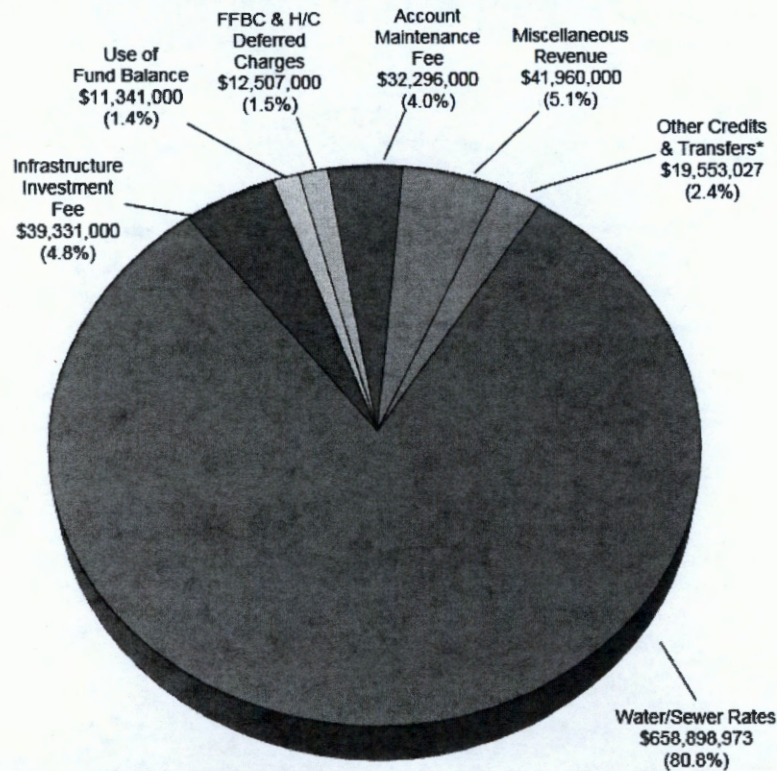
†All Other (Operating) Includes Contract/Professional Services, Street Repairs, Materials, Chemicals and PAYGO



# FY 2020 Proposed Budget Overview

## Operating Budget

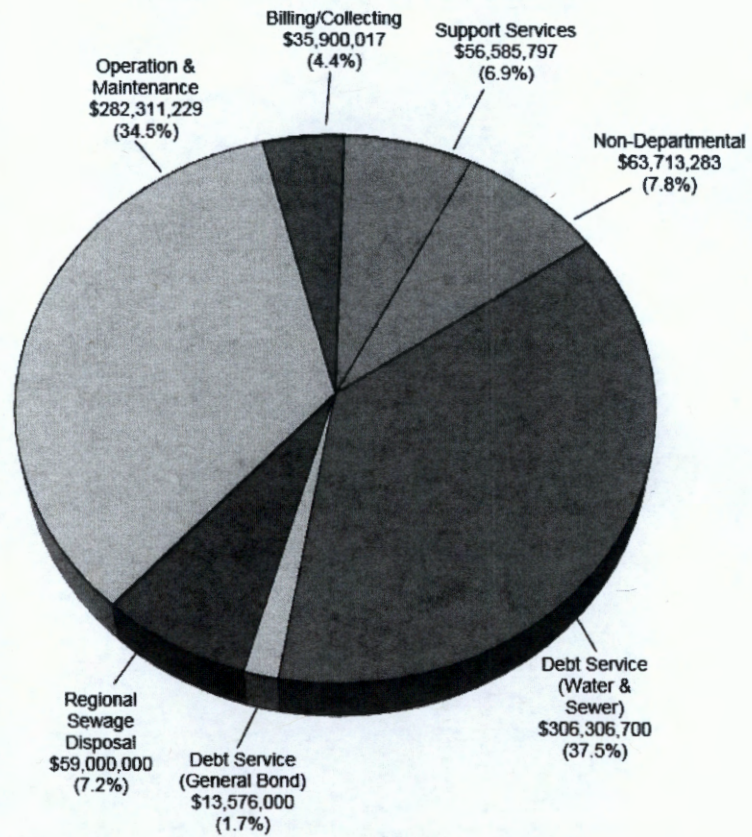
**FUNDING SOURCES**



\*Other includes Reconstruction Debt Service Offset (REDO) and SDC Debt Service Offset

**TOTAL SOURCES = \$815,887,000**

**FUNDING USES**



**TOTAL USES = \$817,393,026**

# FY 2020 Proposed Budget Overview

## Closing the \$30 Million Gap (\$ in millions)

- \$11.7 Operations & Maintenance
- \$6.0 IT Project Deferrals
- \$3.8 Facilities Maintenance & Renovations
- \$3.6 Other Post Employment Benefits
- \$4.9 Miscellaneous

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# Deferred Improvements in FY 2018, FY 2019 & FY 2020

Deferred Improvement	Risks
System-Wide Flushing	Continued discolored water complaints, reduced hydraulic efficiencies, reduction in flow
Leak Detection Program Expansion	Less timely detection of leaks, additional costs to repair damages associated with leaks, increased risks to customers
Large Valve Inspection Acceleration	Valve inoperability, possibility of major outages, hinders ability to provide system redundancy during planned and emergency work

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# FY 2020 Proposed Budget Overview

## Debt Service and Rate Impact

(\$ In Thousands)	FY 2019 Approved	FY 2020 Proposed	Dollar Change	W&S Rev Impact
<b>OPERATING REVENUES</b>				
Adopted Water and Sewer Charges	\$ 627,942	\$ 627,523	\$ (419)	-0.1%
<b>OPERATING EXPENSES</b>				
Salaries and Wages	\$ 127,902	\$ 129,675	\$ 1,773	0.3%
Heat, Light, and Power	20,577	19,436	(1,141)	-0.2%
Regional Sewage Disposal	53,617	59,000	5,383	0.9%
All Other	252,521	287,186	34,665	5.5%
<i>Reductions Taken</i>	-	<b>(30,000)</b>	<b>(30,000)</b>	-4.8%
<b>DEBT SERVICE</b>	277,061	306,307	29,246	<b>4.7%</b>
<b>PAYGO (Contribution to bond fund)</b>	31,016	31,016	0	0.0%
	<b>\$ 762,693</b>	<b>\$ 802,620</b>	<b>39,927</b>	<b>6.4%</b>
<b>REVENUES</b>				
Other Sources and Fees	(107,306)	(112,827)	(5,521)	-0.9%
<b>OTHER TRANSFERS AND CREDITS</b>				
	(27,444)	(30,894)	(3,450)	-0.5%
<b>FUND BALANCE</b>				
Net Decrease to Fund Balance	-	0	0	0.0%
<b>Total - Base Case Revenue Need</b>	<b>\$ 627,943</b>	<b>\$ 658,899</b>	<b>\$ (31,376)</b>	<b>-5.0%</b>

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# FY 2020 Proposed Budget Overview

## Capital and Operating Budget totals \$1.5 Billion

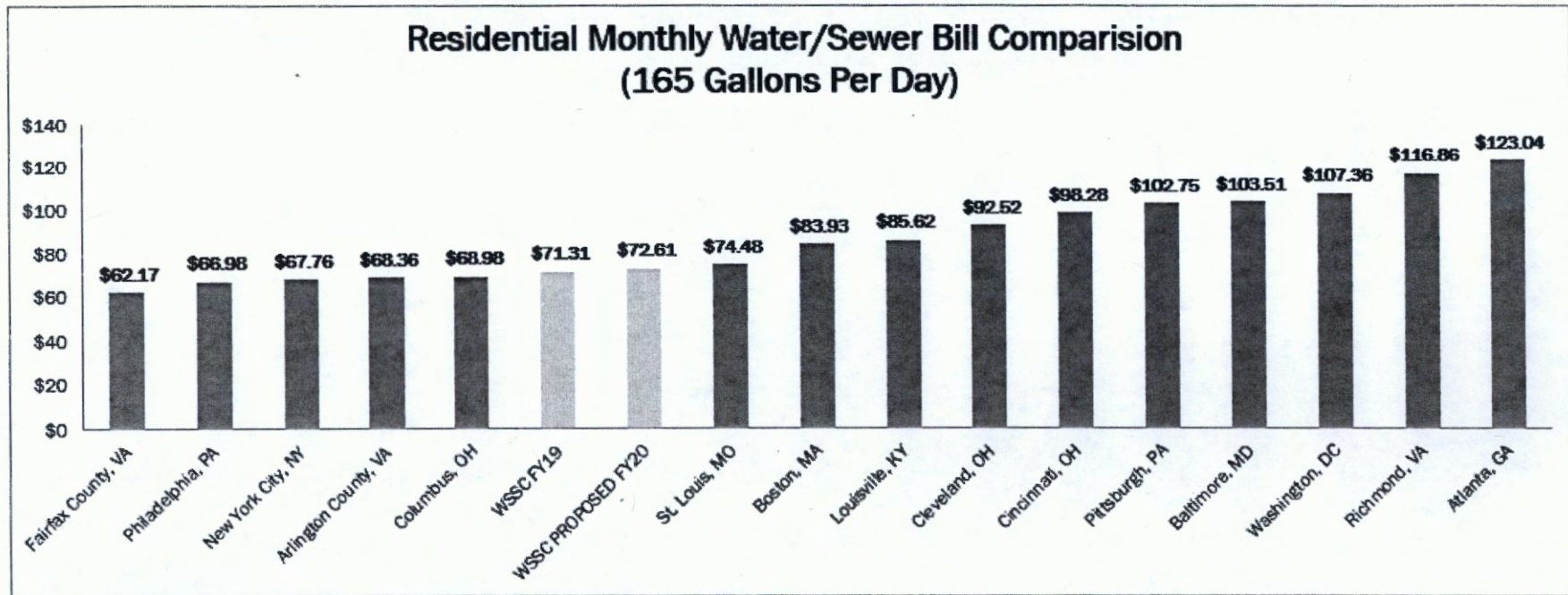
- 5.0% Rate/Revenue Increase
- Funding the Customer Assistance Program (CAP) with a revenue offset of \$888,000 and an additional \$1 million in budget to enhance CAP.
- No increase in Ready to Serve Charges
- No new positions in FY 2020
- Deferred planned maintenance service improvements
- Operating Budget increase is 1.1% over the FY 2019 Approved Budget when excluding non-discretionary increases in debt service and regional sewage disposal costs.

# FY 2020 Proposed Budget Overview

## Key Provisions

- Funding the replacement of 25 miles of water mains and 26 miles of sewer mains and lateral lines;
- Complying with the Sanitary Sewer Overflow and the Potomac Plant Consent Decrees;
- Funding of \$46.4 million for large diameter pipe rehabilitation;
- Issuing \$384.9 million in new water & sewer debt;
- Paying debt service of \$319.8 million – of which \$306.3 million is in the Water and Sewer Operating Funds; and
- <sup>(24)</sup> Paying WSSC's \$59 million share of the operation of the Blue Plains Wastewater Treatment Plant.

# FY 2020 Proposed Budget Overview



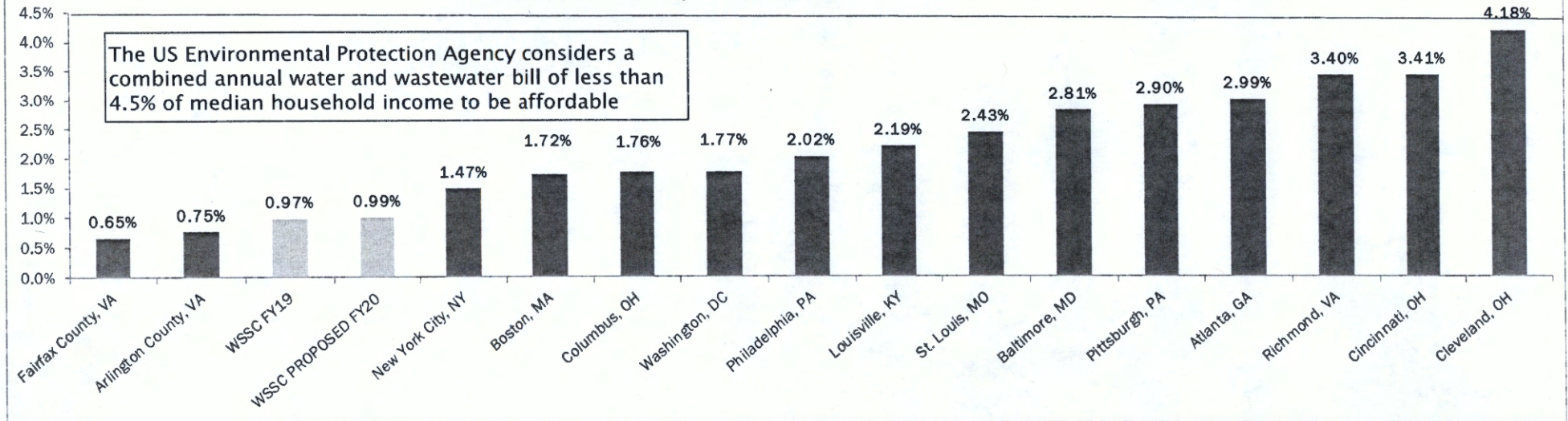
Rates used in this comparison were in effect November 2018.

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# FY 2020 Proposed Budget Overview

Average Monthly Bill Comparison as a Percentage of Median Income  
(165 Gallons Per Day)

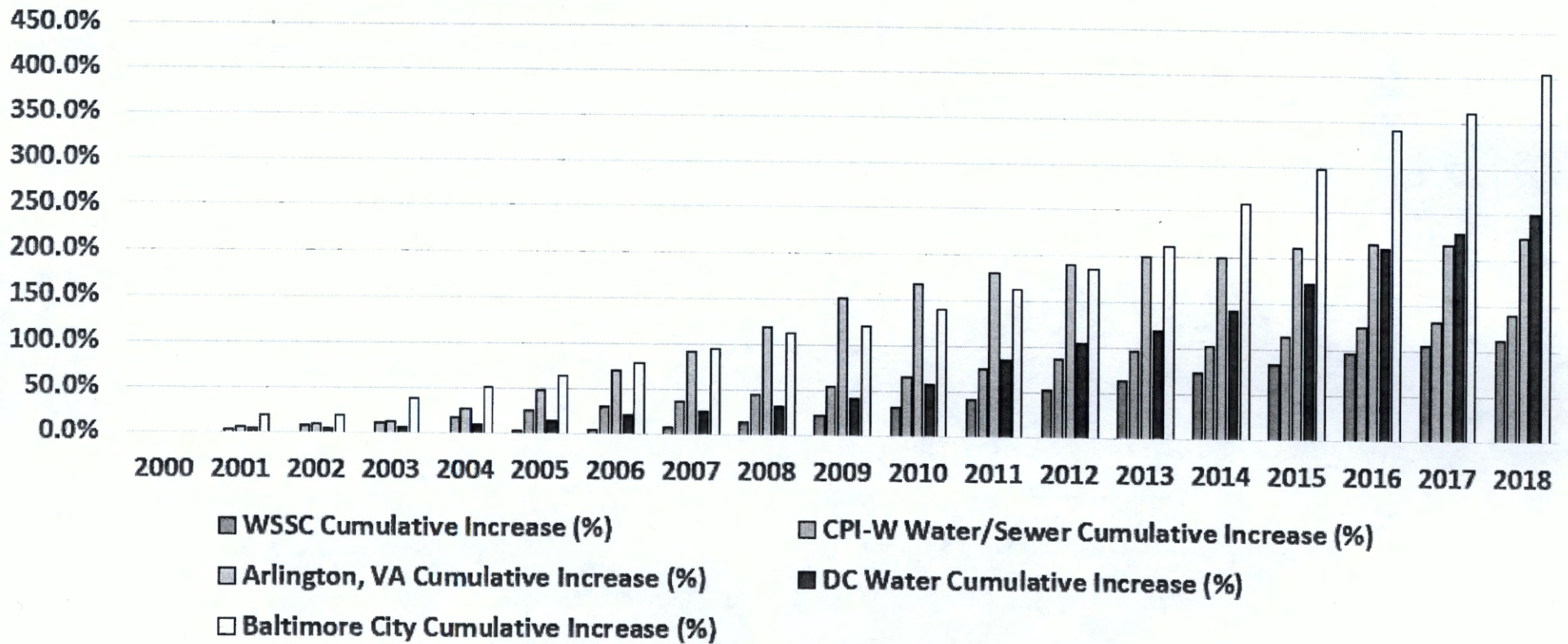


Median household income (in 2016 dollars) 2012-2016. Figures gathered from [www.census.gov](http://www.census.gov), 2012-2016 American Community Survey 5-year estimates.



# FY 2020 Proposed Budget Overview

## Cumulative Rate Increase Comparison



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# FY 2020 Proposed Budget Overview

THANK YOU

Questions?

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# Washington Suburban Sanitary Commission

## **MISSION STATEMENT**

The Washington Suburban Sanitary Commission (WSSC) is a bi-county governmental agency established in 1918 by an Act of the Maryland General Assembly. It is charged with the responsibility of providing water and sanitary sewer service within the Washington Suburban Sanitary District, which includes most of Montgomery and Prince George's Counties. In Montgomery County, only the Town of Poolesville and portions of the City of Rockville are outside of the District.

## **WSSC'S PROPOSED BUDGET**

WSSC's proposed budget is not detailed in this document. The Commission's full budget can be obtained from WSSC's Budget Group at the WSSC Headquarters Building, 14501 Sweitzer Lane, Laurel, Maryland 20707 (phone: 301.206.8110) or from their website at <http://www.wsscwater.com>.

Prior to January 15 of each year, the Commission prepares preliminary proposed capital and operating budgets for the next fiscal year. On or before February 15, the Commission conducts public hearings in both counties. WSSC then prepares and submits the proposed capital and operating budgets to the County Executives of Montgomery and Prince George's Counties by March 1.

By March 15 of each year, the County Executives of Montgomery and Prince George's Counties are required by law to transmit the proposed budgets, recommendations on the proposed budgets, and the record of the public hearings held by WSSC to their respective County Councils.

Each County Council may hold public hearings on WSSC's proposed operating and capital budgets, but no earlier than 21 days after receipt from the County Executive. Each County Council may add to, delete from, increase, or decrease any item in either budget. Additionally, each Council is required by law to transmit by May 15 any proposed changes to the other County Council for review and concurrence. The failure of both Councils to concur on changes constitutes approval of the item as originally proposed by WSSC. Should the Councils fail to approve the budgets on or before June 1 of any given year, WSSC's proposed budgets are adopted.

## **Accomplishments and Initiatives**

- Operating and maintaining a system of three reservoirs impounding 14 billion gallons of water, two water filtration plants, six water resource recovery facilities, 5,700 miles of water mains, and 5,550 miles of sewer mains, 24 hours a day, 7 days a week.
- Treating or delivering 164 Million Gallons per Day (MGD) of water to over 466,000 customer accounts in a manner that meets or exceeds the Safe Drinking Water Act standards.
- Replacing 25 miles of water main and 26 miles of sewer main and lateral lines.
- Providing maintenance services at a level consistent with the objective of responding to the customer within two hours and restoring service within 24 hours.

- Answering 100 percent of all customer billing calls received.

### Spending Control Limits

The spending control limits process requires that the two counties set annual ceilings on WSSC's water and sewer rate increase and on debt (bonded indebtedness as well as debt service) and then adopt corresponding limits on the size of the capital and operating budgets. The two councils must not approve capital and operating budgets in excess of the approved spending control limits unless a majority of each council votes to approve them. If the two councils cannot agree on expenditures above the spending control limits, they must approve budgets within these limits.

The following table shows the FY20 spending control limits adopted by the Montgomery and Prince George's County Councils, compared to the spending control results projected under WSSC's Proposed FY20 Budget and under the County Executive's Recommended Budget for WSSC. The Commission's Proposed Budget complies with all of the spending control limits approved by the two County Councils except for the Total Water and Sewer Operating Expenses which are slightly higher than the approved ceiling.

FY20 Spending Control Limits Comparison				
SPENDING CONTROL LIMITS	Approved Spending Control Limits		Projected Levels Under	
	Montgomery County	Prince George's County	WSSC's Proposed Budget	County Executive Recommended Budget
Maximum Average Water/Sewer Rate Increase	5.0%	5.0%	5.0%	5.0%
New Debt (\$millions)	\$385.5	\$385.5	\$384.9	\$384.9
Water and Sewer Debt Service (\$millions)	\$306.4	\$306.4	\$306.3	\$306.3
Total Water and Sewer Operating Expenses (\$millions)	\$799.0	\$799.0	\$802.6	\$802.6

### County Executive Recommendations

#### Operating Budget

The County Executive recommends that WSSC's proposed FY20 budget be approved with a water and sewer rate increase of 5.0 percent in FY20 consistent with the Commission's resource needs outlined in their proposed budget.

#### Capital Budget

The County Executive recommended the WSSC FY20-25 Capital Improvements Program (CIP) budget be approved as submitted by the Commission.

FY20 fiscal projections for all funds and budgets are shown below.

Expenditures by Category - FY20 WSSC Proposed and Executive Recommended						
(S000s)						
Expenditure Categories	WSSC Total	WSSC Total	CE Capital	CE Operating	CE Total	% Change (CE Rec. vs. WSSC Proposed)
	Approved FY19	Proposed FY20	Recommended FY20	Recommended FY20	Recommended FY20	
Salaries and Wages	159,112	157,288	27,154	130,134	157,288	0.0%
Heat, Light, & Power	20,577	19,444	--	19,444	19,444	0.0%
Regional Sewage Disposal	53,617	59,000	--	59,000	59,000	0.0%
Contract Work	376,223	383,332	383,332	--	383,332	0.0%
Consulting Engineers	68,912	58,073	58,073	--	58,073	0.0%
All Other	434,101	427,883	169,967	257,916	427,883	0.0%
PAYGO	31,016	31,016	--	31,016	31,016	0.0%
Reserve Contribution	--	--	--	--	--	--
Debt Service	294,349	319,883	0	319,883	319,883	0.0%
<b>Total Budget</b>	<b>1,437,907</b>	<b>1,455,919</b>	<b>638,526</b>	<b>817,393</b>	<b>1,455,919</b>	<b>0.0%</b>

Note: Total expenditures include the water and sewer operating funds, the general bond debt service fund, and the three capital funds

**PROGRAM CONTACTS**

Contact Letitia Carolina-Powell of the Washington Suburban Sanitary Commission at 301.206.8379 or Trevor Lobaugh of the Office of Management and Budget at 240.777.2763 for more information regarding this agency's operating budget.

**WSSC PROPOSED BUDGET - SIX-YEAR FORECAST FOR WATER AND SEWER OPERATING FUNDS**

<b>FISCAL PROJECTIONS</b>	<b>FY19 ESTIMATED</b>	<b>FY20 PROPOSED</b>	<b>FY20 CE REC</b>	<b>FY21 PROJECTION</b>	<b>FY22 PROJECTION</b>	<b>FY23 PROJECTION</b>	<b>FY24 PROJECTION</b>	<b>FY25 PROJECTION</b>
<b>SPENDING AFFORDABILITY RESULTS</b>								
New Water and Sewer Debt (\$millions)	\$486.8	\$384.9	\$384.9	\$439.2	\$432.1	\$368.7	\$350.0	\$350.0
Total Water and Sewer Operating Expenses (\$millions)	\$277.1	\$306.3	\$306.3	\$324.0	\$342.0	\$357.4	\$377.3	\$393.2
Debt Service (\$millions)	\$762.7	\$802.6	\$802.6	\$830.5	\$861.8	\$901.1	\$935.3	\$966.0
Average Water and Sewer Rate Increase	4.5%	5.0%	5.0%	6.0%	6.0%	6.0%	5.5%	5.0%
<b>BEGINNING FUND BALANCE (\$000)</b>	<b>185,297</b>	<b>173,717</b>	<b>173,717</b>	<b>162,376</b>	<b>158,006</b>	<b>162,879</b>	<b>172,225</b>	<b>185,393</b>
<b>REVENUES (\$000)</b>								
Water and Sewer Rate Revenue	627,942	658,899	658,899	698,900	740,834	785,284	828,475	869,699
Interest Income	1,500	5,500	5,500	4,821	4,844	4,846	3,941	3,939
Account Maintenance Fee	32,182	32,296	32,296	32,331	32,376	32,441	32,505	32,570
Infrastructure Investment Fee	38,894	39,331	39,331	39,409	39,484	39,560	40,544	40,623
Miscellaneous	34,731	35,700	35,700	36,173	36,764	37,369	37,988	38,622
<b>Total Revenues</b>	<b>735,249</b>	<b>771,726</b>	<b>771,726</b>	<b>811,634</b>	<b>854,362</b>	<b>899,500</b>	<b>943,453</b>	<b>985,653</b>
SDC Debt Service Offset	3,384	4,858	4,858	4,984	4,983	4,982	4,984	4,984
Reconstruction Debt Service Offset (REDO)	12,500	11,600	11,600	9,500	7,400	6,000		
Use of Fund Balance	11,580	11,341	11,341	8,000	7,000	6,000	5,000	
Premium Transfer	0	2,900	2,900					
Miscellaneous Offset		395	395					
<b>TOTAL FUNDS AVAILABLE</b>	<b>762,893</b>	<b>802,620</b>	<b>802,620</b>	<b>834,118</b>	<b>873,685</b>	<b>916,482</b>	<b>953,437</b>	<b>990,637</b>
<b>EXPENDITURES (\$000)</b>								
Salaries and Wages	127,901	129,875	129,875	139,872	145,957	152,525	159,389	166,581
Heat, Light, and Power	20,577	19,436	19,436	21,830	22,485	23,160	23,854	24,570
Regional Sewage Disposal	53,617	59,000	59,000	61,200	62,424	63,672	64,946	66,245
Debt Service	277,061	306,307	306,307	324,047	341,953	357,427	377,262	393,204
PAYGO	31,016	31,016	31,016	31,016	31,016	31,016	31,016	31,016
All Other	252,521	257,188	257,188	262,722	267,977	273,336	278,803	284,379
Reserve Contribution				3,631	11,873	15,346	18,167	24,662
Unspecified Expenditure Reductions				(10,000)	(10,000)			
<b>TOTAL USE OF RESOURCES</b>	<b>762,893</b>	<b>802,620</b>	<b>802,620</b>	<b>834,118</b>	<b>873,685</b>	<b>916,482</b>	<b>953,437</b>	<b>990,637</b>
<b>REVENUE/EXPENDITURE SURPLUS/(GAP)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>YEAR END FUND BALANCE w/o additional reserve contribution</b>	<b>173,717</b>	<b>162,376</b>	<b>162,376</b>	<b>154,376</b>	<b>151,006</b>	<b>156,879</b>	<b>167,225</b>	<b>185,393</b>
<b>Additional Reserve Contribution</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,631</b>	<b>11,873</b>	<b>15,346</b>	<b>18,167</b>	<b>24,662</b>
<b>TOTAL YEAR END FUND BALANCE</b>	<b>173,717</b>	<b>162,376</b>	<b>162,376</b>	<b>158,007</b>	<b>162,879</b>	<b>172,225</b>	<b>185,393</b>	<b>210,055</b>
Debt Service as a Percentage of Water and Sewer Operating Budget	36.3%	38.2%	38.2%	38.8%	39.1%	39.0%	39.6%	38.7%
Total End of Fiscal Year Operating Reserve	73,525	73,525	73,525	77,156	89,029	104,375	122,542	147,204
Total Operating Reserve as a Percentage of Water and Sewer Rate Revenue	11.7%	11.2%	11.2%	11.0%	12.0%	13.3%	14.8%	16.9%
Total Workyears (all funds)	1,649	1,776	1,776					

**Assumptions:**

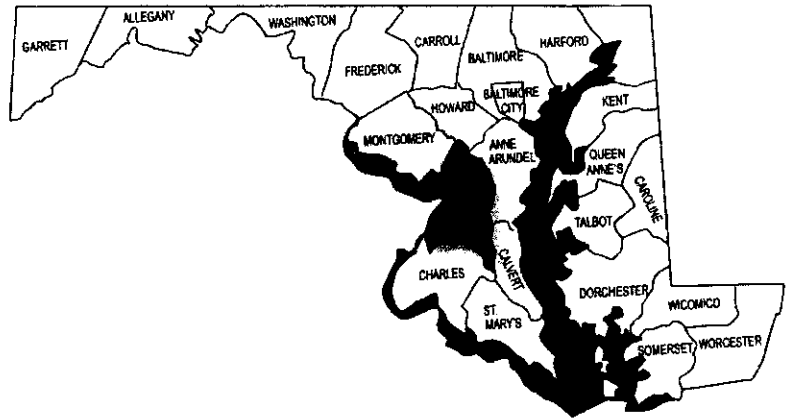
- The County Executive's operating budget recommendation is for FY20 only and incorporates the Executive's revenue and expenditure assumptions for that budget.
- The FY21-25 projections reflect WSSC's multi-year forecast and assumptions, which are not adjusted to conform to the County Executive's Recommended budget for WSSC. The projected expenditures, revenues, and fund balances for these years may be based on changes to rates, fees, usage, inflation, future labor agreements, and other factors not assumed in the County Executive's Recommended FY20 water and sewer operating budget for WSSC.
- The FY19 estimated spending affordability results are the values for the four spending affordability parameters implied by the FY19 budget jointly approved by Montgomery and Prince George's counties. The FY20 Proposed spending affordability results are the values of the spending affordability parameters associated with WSSC's proposed FY20 budget. The FY20 recommended spending affordability results are the spending affordability parameters associated with the County Executive's recommended WSSC budget for FY20. The FY21-25 spending affordability figures correspond to the values of the various spending affordability parameters based on the revenue and expenditure forecasts shown for the given year and are provided by WSSC.
- The total FY19 assumed workyears shown correspond to the actual workyears as of December, 2018.
- Estimates of revenue in FY21-25 assume the rate increases projected by WSSC in the Average Water and Sewer Rate Increase line.
- In the projection for FY21-25 additional unspecified expenditure reductions are included to close WSSC's projected revenue shortfall in these years.



# ABOUT THE WASHINGTON SUBURBAN SANITARY COMMISSION

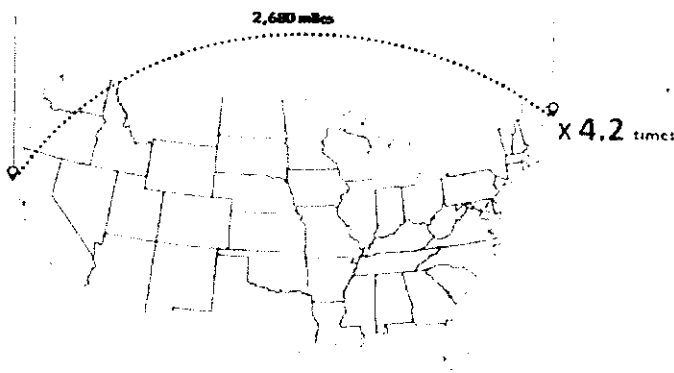
## GENERAL INFORMATION

The Washington Suburban Sanitary Commission (WSSC or the Commission) provides water and sewer services to nearly 1.8 million residents of Maryland's Montgomery and Prince George's Counties, which border Washington, D.C. Established by the Maryland General Assembly in 1918 as a regional (bi-County) organization under Article 29 and later re-codified into Division II of the Public Utilities Article of the Annotated Code of Maryland, the WSSC ranks among the largest water and sewer utilities in the country encompassing a service area of nearly 1,000 square miles.



To fulfill its primary mission of providing safe and reliable water and returning clean water to the environment, WSSC operates and maintains an extensive array of highly automated facilities. The

How long is 11,354 miles of water and sewer pipeline



Commission's two water filtration plants, drawing raw water from the Potomac and Patuxent rivers, are projected to produce an average of 164 million gallons of water per day in FY 2019 and deliver that water to homes and businesses in Montgomery and Prince George's Counties, serving over 450,000 customer accounts through a system of over 5,772 miles of water mains. To ensure a reliable water supply for all seasons and conditions, WSSC operates three reservoirs with a total capacity exceeding 14 billion gallons.

Sewage treatment is provided by six water resource recovery facilities (WRRFs) operated by the WSSC, and the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains) operated by the District of Columbia Water and Sewer Authority (DC Water). In FY 2019, it is projected that an average of 201.4 million gallons of wastewater per day from Montgomery and Prince George's Counties will move to these facilities through approximately 5,582 miles of sewer lines maintained by WSSC. The six WRRFs owned by WSSC have a combined capacity of 95 million gallons per day (MGD). Blue Plains is a regional facility that serves the District of Columbia and several northern Virginia jurisdictions, as well as the WSSC. Under the Inter-Municipal Agreement that governs WSSC's arrangement with Blue Plains, the WSSC is allocated 169 MGD of Blue Plains' 370 MGD capacity. The WSSC, in turn, pays a proportionate share of Blue Plains' operating and capital expenses. All but one of these facilities (the Hyattstown plant) go beyond conventional wastewater treatment to provide "tertiary treatment" - advanced treatment processes which ensure that the quality of the treated wastewater is better than the quality of the natural water to which it is returned. Other WSSC responsibilities include promulgation and enforcement of plumbing and gas fitting regulations in suburban Maryland and participation in numerous environmental initiatives.

## FY 2020 STRATEGIC PRIORITIES AND KEY PROVISIONS

---

### Enhance Customer Experience and Community Engagement

- Provide maintenance services at a level consistent with the objective of responding to the customer within 2 hours and restoring service within 24 hours
  - Implement a new Customer to Meter (C2M) billing system
  - Fund the Customer Assistance Program with a revenue offset of \$888,000
  - Provide additional \$1.0 million in funding to enhance the Customer Assistance Program
  - Proactively communicate WSSC's mission and vision to customers and stakeholders
- 

### Improve Infrastructure

- Implement the first year of the FY 2020-2025 Capital Improvements Program
  - Fund the replacement of 25 miles of water mains and 26 miles of sewer mains & laterals
  - Pay WSSC's share of the cost of operating the District of Columbia Water and Sewer Authority's (DC Water) Blue Plains Advanced Wastewater Treatment Plant
  - Optimize biosolids management at Water Resource Recovery Facilities (WRRF)
  - Continue focus on water and wastewater pipeline rehabilitation
  - Inspect and monitor large diameter water mains and large valves
  - Construct new septage discharge facilities
- 

### Achieve Business Process Excellence and Maintain Financial Stability

- Issue \$384.9 million in new water, sewer, and general construction debt
  - Pay debt service of \$319.9 million of which \$306.3 million is in the water and sewer operating funds
  - Continue the implementation of IT Strategic Plan
  - Implement a new four-tier water and sewer rate structure
  - Maintain the highest credit rating "AAA" on bonds and notes
  - Maintain operating reserve at 10% of water and sewer operating revenue
  - Continue to focus on Strategic Sourcing to lower costs
  - Improve business process through the Innovation and Research Program
- 

### Protect Our People Infrastructure, Systems, and Resources

- Treat and deliver 164.0 MGD of water to over 460,000 customer accounts in a manner that meets or exceeds the Safe Drinking Water Act standards
  - Treat 201.4 MGD of wastewater and responsibly managing up to 1,000 tons of bio-solids per day in a manner that meets or exceeds federal and state permit requirements
  - Comply with the Sanitary Sewer Overflow and Potomac Plant Consent Orders
  - Update and improve the Continuity of Operations Program to ensure continued performance of essential functions during all hazards, both natural and man-made
  - Continue to upgrade automated and physical security equipment
- 

### Inspire Employee Engagement

- Fund employee salary enhancements in a manner coordinated with the Counties
- Continue Employee Rewards and Recognition Program
- Offer employee Health and Well-being Program
- Provide employee learning and growth programs

## GOVERNANCE

A six-member commission governs the WSSC - three members from each County. The Commissioners are appointed to four-year terms by their respective County Executives and confirmed by their County Councils. The Commission's powers and responsibilities are set forth in Division II of the Public Utilities Article of the Annotated Code of Maryland and in any subsequent legislative amendments. The Maryland General Assembly conferred these powers upon the WSSC to enable it to fulfill its principal functions:

- To provide for the construction, operation, and maintenance of water supply and sanitary sewerage systems in Montgomery and Prince George's Counties;
- To provide for the construction of water and sewer house connection lines from the Commission's mains to abutting property lines;
- To approve the locations of, and issue permits for, utilities installed in public ways; and
- To establish water consumption rates, sewer usage rates, connection charges, front foot benefit charges, and permit fees and, if required, to cause appropriate ad valorem taxes to be levied.

The Commission also:

- Reviews preliminary subdivision plats as to suitability of water and sewer design, and reviews street grades for those streets in which there are Commission facilities;
- Formulates regulations, issues permits for, and inspects all plumbing and gas fitting installations; and
- Conducts examinations for master and journeyman plumbers and gasfitters, and issues licenses to those qualified to perform plumbing and gas fitting work.

## MISSION

We are entrusted by our community to provide safe and reliable water, life's most precious resource, and return clean water to our environment, all in an ethical, sustainable, and financially responsible manner.

## VISION

To be THE world-class water utility, where excellent products and services are always on tap.

## VALUES

Our guides for daily behavior and decision making at every level include:

- **Accountability:** We are responsible employees who are accountable and take our actions seriously.
- **Transparency:** We conduct ourselves with integrity and transparency.
- **Excellence:** We achieve the highest level of quality, safety and productivity, demonstrating excellence and innovation in providing world-class service to everyone.
- **Environmental Stewardship:** We continuously enhance and protect natural resources and the environment for the health of future generations.
- **Cost Effectiveness:** We balance cost and benefit in our daily actions to achieve optimal value for our customers.

## GOVERNANCE (CONTINUED)

### STRATEGIC PRIORITIES

Our methods for achieving our Mission and Vision:

- **Enhance Customer Experience and Community Engagement:** Deliver an excellent customer experience and enhance community engagement through proactive communication, strategic partnerships, and providing exceptional products and services.
- **Improve Infrastructure:** Plan, invest in and renew our infrastructure to provide future generations with a sustainable system, through innovative, cost-effective technology and world class asset management.
- **Achieve Business Process Excellence and Maintain Financial Stability:** Achieve financial stability through an improved rate structure and improved business processes that drive performance and obtain cost-effective business outcomes.
- **Protect our People, Infrastructure, Systems and Resources:** Protect our community, employees and business through safe practices, mission-oriented security, proactive planning, emergency preparedness, and effective risk management and resilience strategies.
- **Inspire Employee Engagement:** Inspire and motivate employees by making WSSC a great place to work, thrive and serve.

### GUIDING PRINCIPLES

- Simplify
- Focus
- Connect



GOVERNANCE (CONTINUED)

COMMISSIONERS



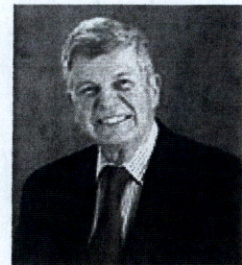
MONTGOMERY COUNTY



**T. Eloise Foster**  
*Chair*



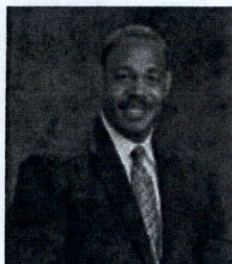
**Fausto R. Bayonet**  
*Commissioner*



**Howard A. Denis**  
*Commissioner*



PRINCE GEORGE'S COUNTY



**Chris Lawson**  
*Vice Chair*



**Omar M. Boulware**  
*Commissioner*

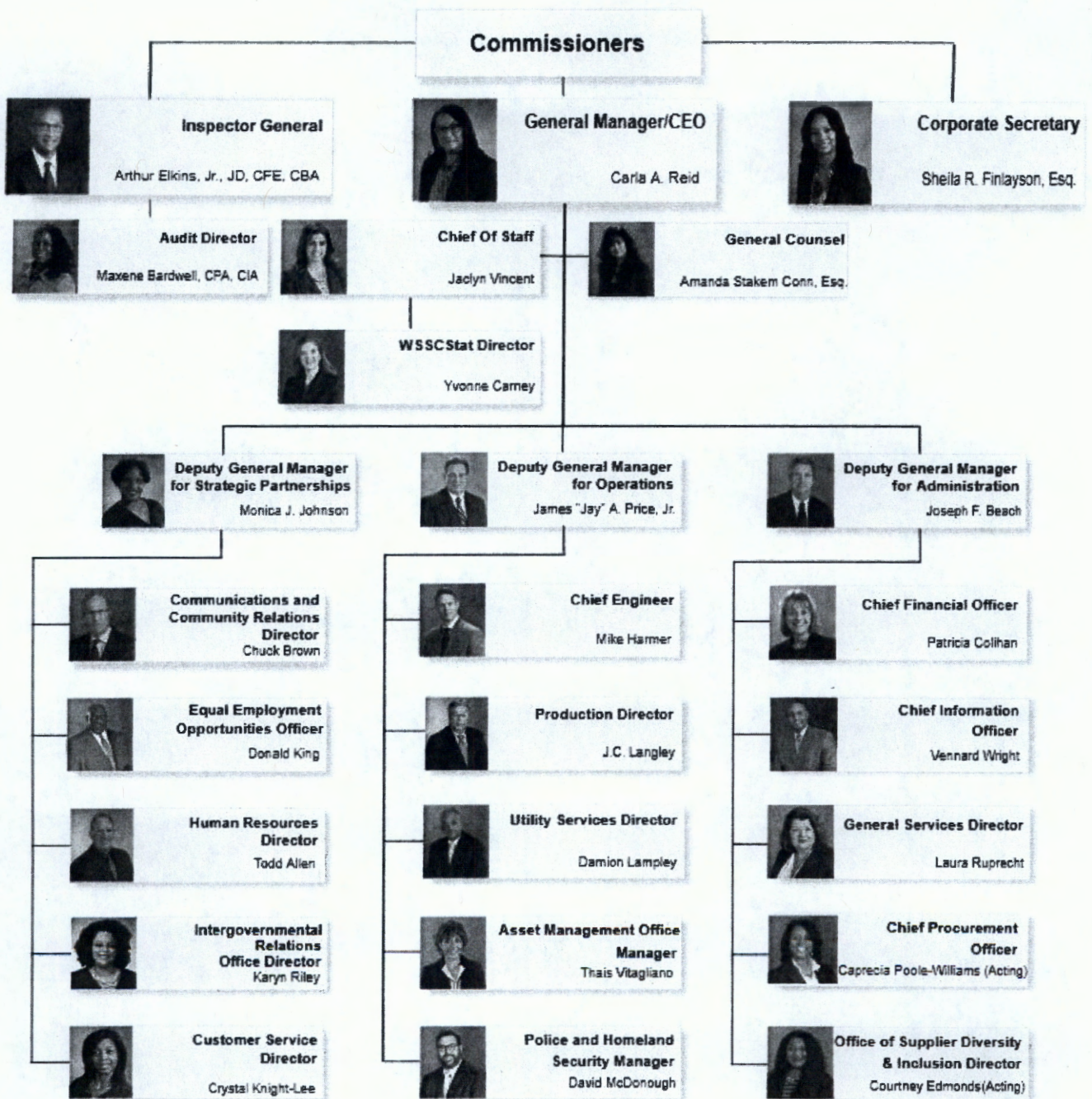


**Thomasina V. Rogers**  
*Commissioner*

Commissioners are appointed to four-year terms by the County Executive of either Montgomery or Prince George's County. Commissioners are subject to confirmation by the County Council of the county from which they are appointed. Each county appoints three Commissioners. For more information regarding the term of office and duties of the WSSC Commissioners, see Division II of the Public Utilities Article of the Annotated Code of Maryland.



# OUR LEADERSHIP AND ORGANIZATION





14501 Sweitzer Lane, Laurel, MD 20707-5901  
(301) 206-8000 1(800) 828-6439 TTY: (301) 206-8345 [www.wsscwater.com](http://www.wsscwater.com)

March 1, 2019

The Honorable Angela D. Alsobrooks, Prince George's County Executive  
The Honorable Marc Elrich, Montgomery County Executive  
The Honorable Todd M. Turner, Chair, Prince George's County Council  
The Honorable Nancy Navarro, President, Montgomery County Council

Dear Ms. Alsobrooks, Mr. Elrich, Mr. Turner, and Ms. Navarro:

We are hereby transmitting WSSC's Proposed Fiscal Year 2020 (FY 2020) Capital and Operating Budget document. This document is released and distributed on this date for review by interested customers, citizens, and elected officials.

This proposed budget reflects our continued mission to our customers to provide safe and reliable water, life's most precious resource, and return clean water to the environment, all in an ethical, sustainable, and financially responsible manner. The programs, goals, and objectives included in this budget seek to achieve the Commission's mission through the following strategic priorities:

- Enhance Customer Experience and Community Engagement
- Improve Infrastructure
- Achieve Business Process Excellence and Maintain Financial Stability
- Protect our People, Infrastructure, Systems and Resources
- Inspire Employee Engagement

#### FY 2020 PROPOSED CAPITAL AND OPERATING BUDGETS

The proposed budget for FY 2020 for all operating and capital funds totals \$1.456 billion or \$18.0 million (1.3%) more than the Approved FY 2019 Budget. The proposed operating budget of \$817.4 million represents an increase of \$35.8 million (4.6%) over the FY 2019 Approved Operating Budget of \$781.6 million. This increase is primarily driven by a \$25.5 million increase in debt service to support infrastructure renewal in the FY 2020 capital budget, a \$5.4 million increase in regional sewage disposal expenses as DC Water's operation and maintenance cost share methodology within the Blue Plains Inter-Municipal Agreement has been revised, and a \$2.8 million increase in paving costs. When controlling for the non-discretionary increases in debt service and regional sewage disposal costs, the FY 2020 Operating Budget is only 1.1% over the FY 2019 Approved Budget. The proposed capital budget of \$638.5 million represents a decrease of \$17.8 million (-2.7%) from the FY 2019 Approved Capital Budget of \$656.3 million.

The proposed budget calls for a combined 5.0% average increase in water and sewer consumption revenue. This proposed increase meets the Spending Affordability Guidelines (SAG) as both Prince George's and Montgomery counties recommended 5.0%. Even with this change, WSSC rates continue to be favorable when compared to many similar sized water and sewer utilities. The average WSSC customer's residential bill is 1% (page 2-3) of the median household income. The impact of the revenue increase, combined with the implementation of the new 4-tier rate structure, will add approximately \$1.29 per month to the bill of a customer using 165 gallons per day, the average per person consumption of 55 gallons per day for a 3-person household. A low-usage customer with consumption of 100 gallons per day will experience an increase of approximately \$3.98 per month, while a customer using 500 gallons per day will see a decrease of approximately \$19.11 per month.

It is important to point out that WSSC's budget is capital intensive and driven by changes in the construction market, commodity prices and tariffs. It is not driven by the more commonplace consumer price index (CPI). Other investments drive our budget, including: compliance with the Sanitary Sewer Overflow (SSO) and the Potomac Plant Consent Decree; environmental regulation directives; maintaining the security of our water infrastructure and for our employees working in the field; and Information Technology improvements to streamline our business processes. Many of these costs are legally mandated and not easily deferred or reduced.

#### CUSTOMER AFFORDABILITY

Like many utilities across the country, WSSC continues to face the challenge of balancing increasing costs for infrastructure and operations with affordability considerations for our customers. While the average costs to ensure access to clean, safe drinking water and efficient wastewater treatment remains a bargain when compared to other household utilities and expenses, there are still many residents who struggle to meet their monthly expenses. In response to this need, the Customer Assistance Program (CAP) was created in FY 2016 to help economically disadvantaged customers by providing financial assistance with water and sewer bills. In FY 2018, CAP helped more than 10,000 customers save more than \$900,000 in fixed fees. We are working with nationally recognized customer affordability experts on an enhanced affordability plan to launch with the FY 2020 implementation of the new rate structure. This proposed budget includes an additional \$1.0 million for these enhancements.

In addition, in accordance with House Bill 408 enacted in last year's legislative session, the proposed budget includes \$100,000 to implement the new Connection Pipe Emergency Replacement Loan Program, which will provide affordable financing of up to \$5,000 per eligible customer.

#### SPENDING AFFORDABILITY GUIDELINE LIMITATIONS

In order to reconcile our Departments' initial FY 2020 budget requests with the Counties' Spending Affordability Guidelines, a funding gap of \$30.0 million dollars was closed. Actions to close this gap included limiting growth for certain budget programs and very difficult decisions to reduce existing programs including the continued deferred implementation of several initiatives to improve system performance and reliability. For the third consecutive year, this proposed budget includes no new positions. However, this will prevent the Commission from implementing some important improvements that would support and advance our strategic priorities including:

- Implementing a system-wide flushing program of our water distribution pipe network in order to reduce discolored water complaints and improve water quality;
- Testing all 43,000 fire hydrants in our service area on a ten-year cycle; a best practice



- recommended by the American Water Works Association;
- Expanding our leak detection program to provide proactive repairs and reduce water loss; and
- Accelerating large water valve inspections from a four-year to a three-year cycle.

In addition, nearly \$17.0 million in FY 2018 reductions were not reinstated and a \$2.5 million reduction was made to a request for critical maintenance to facilities. We will work diligently to maintain service at current expected levels despite these reductions, though it may be necessary to further reduce certain preventative and non-essential services during FY 2020 in order to remain within approved budget limitations. During the 2018 session, the Maryland General Assembly enacted legislation requiring WSSC to establish an Office of the Inspector General. The FY 2020 budget includes \$500,000 to secure permanent office space and accommodate staffing requirements for the Inspector General's Office. It is expected that these additional costs will be offset by savings, reimbursements, and other resources generated by this new office.

### COST SAVING MEASURES

This budget reflects the Commission's continuing commitment to maintaining affordability through the active pursuit and implementation of cost savings measures. In addition to the reductions in the operating and capital budgets noted above, the Commission has several ongoing strategies to identify more cost effective ways of providing clean water to our customers including the following:

- Our efforts in the Supply Chain Management Transformation project, which has been supported by the Commission and both Counties since FY 2013, have produced significant cost reductions in excess of \$40.0 million in the operating and capital budgets since the inception of this program and cost avoidance savings of over \$44.0 million during the same period. If not for these intensive efforts in contract negotiation and cost management, additional rate increases or service reductions would have been necessary. During FY 2018, our efforts resulted in \$7.3 million in cost reductions and \$1.4 million in cost avoidances over the terms of the contracts awarded;
- By continually monitoring and revising our Group Insurance plan design we have identified \$4.3 million in savings since FY 2017;
- There has been no net increase in the number of WSSC positions since FY 2017 and we have currently frozen 32 positions from being filled at all to produce ongoing personnel cost savings;
- Changes to our Workers Compensation have resulted in the following:
  - 50% reduction in lost workday cases
  - 65% reduction in lost work days
  - 54% reduction in costs;
- Our Innovation program has identified promising methods for identifying and remediating water system leakages as well as new approaches to wastewater treatment that may significantly reduce processing costs while improving our environmental stewardship efforts; and
- Changes made in monitoring and supervision of overtime costs have reduced these expenses by \$2.0 million since FY 2017.

### WATER AND SEWER INFRASTRUCTURE RELIABILITY

New technologies and tools are emerging to help WSSC better assess the condition of our existing water/sewer mains so we can improve our ability to target pipes in need of replacement. Because we are better able to identify pipes in poor condition, WSSC is decreasing the Water Reconstruction Program (rehabilitation of smaller water mains <16 inches in diameter) over the next few years to 45 miles in FY

2019 and to 25 miles in FY 2020. This strategic decrease will allow us to develop a more efficient and effective pipe reconstruction program, and provide us time to pilot new rehabilitation techniques and minimize disruption for our customers and control costs. To that end, starting with the FY 2020 Capital Improvements Program (CIP), we are including \$3.0 million in funding for enhanced condition assessment initiatives and new leak detection system technologies.

**INFORMATION TECHNOLOGY STRATEGIC PLAN**

In addition to our ongoing investments in the Commission’s physical infrastructure, the FY 2020 budget invests in the Commission’s organizational infrastructure. Strategic contributions of \$11 million from Fund Balance will be used to fund the Information Technology (IT) Strategic Plan to modernize the Commission’s IT infrastructure, streamline our business processes and help fund the implementation of the Project Cornerstone. This project replaces our oldest computer systems, including our billing system, Customer Connect/Field Service System, and our asset tracking, service requests, work orders, inspections and patch ticket systems. These new systems will provide real time data in the field and help improve our decision making on replacing, rehabilitating and refurbishing our assets. Release I of Project Cornerstone delivers the Customer-to Meter (C2M) billing system in May of 2019 and will be followed by Release II in FY 2020 consisting of the Work Asset Management and Mobile Work Order Management systems. These innovative technologies will lay the foundation for the Advanced Metering Infrastructure project.

**SPENDING AFFORDABILITY**

The Commission, in cooperation with the Montgomery County and Prince George’s County governments, continues to participate in the spending affordability process. The spending affordability process focuses debate, analysis, and evaluation on balancing affordability considerations against the provision of resources necessary to serve existing customers (including infrastructure replacement/rehabilitation), meet environmental mandates, maintain affordable rates, and maintain operating and capital budgets and debt service at prudent and sustainable levels. In November 2018, the Montgomery County Council and Prince George’s County Council approved resolutions establishing four limits on the WSSC’s FY 2020 budget. As indicated in the following table, the proposed FY 2020 budget is in compliance with the spending affordability limits for New Water and Sewer Debt and Water/Sewer Rate Revenue Increase.

WSSC FY 2020 PROPOSED BUDGET VS. SPENDING AFFORDABILITY LIMITS  
(\$ in Millions)

	<b>FY 2020 Proposed Budget</b>	<b>Prince George’s County Limit</b>	<b>Montgomery County Limit</b>
New Water and Sewer Debt	\$384.9	\$385.5	\$385.5
Total Water and Sewer Debt Service	\$306.3	\$306.4	\$306.4
Total Water/Sewer Operating Expenses	\$802.6	\$799.0	\$799.0
Water/Sewer Rate Revenue Increase	5.0%	5.0%	5.0%

In addition to reviewing expenses and revenues for water and sewer services, we have analyzed the cost and current fee levels for other WSSC services. Based upon these analyses, and to better align fees with program costs, some new fees and adjustments to current fees are recommended on pages 2-8 through 2-13.

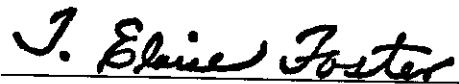
## SYSTEM DEVELOPMENT CHARGE

State law provides that the System Development Charge (SDC), a charge to new applicants for WSSC service which is intended to recover growth costs, may be adjusted annually by the change in the Consumer Price Index for the Washington, DC metropolitan area (CPI-W). Historically, we have adjusted the maximum allowable charge based on the change in the November CPI-W. We plan to do the same this year. Although we are not recommending it at this time, the Commission should begin to have conversations with both counties on the advisability of modifying the SDC in order to ensure that it covers all growth-related costs.

## BUDGET REVIEW PROCESS

The Proposed Budget is subject to the Counties' hearings, procedures, and decisions, as provided under Section 17-202 of the Public Utilities Article, of the Annotated Code of Maryland, before the final budget is adopted for the fiscal year beginning July 1, 2019.

Sincerely,



T. Eloise Foster, Chair  
Washington Suburban Sanitary Commission

cc:  
Members of Prince George's County Council  
Members of Montgomery County Council  
Members of the Maryland General Assembly

## COMPARATIVE EXPENDITURES BY FUND

	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed	FY 2020 Over / (Under) FY 2019	% Change
<b>Operating Funds</b>						
Water Operating	\$ 300,598,657	\$ 320,087,985	\$ 340,082,785	\$ 352,471,682	\$ 12,388,897	3.64%
Sewer Operating	374,234,124	385,526,736	422,609,826	450,147,720	27,537,895	6.52%
General Bond Debt Service	15,557,107	19,107,983	18,888,188	14,773,624	(4,114,564)	-21.78%
<b>Total Operating</b>	<b>690,389,888</b>	<b>724,722,704</b>	<b>781,580,799</b>	<b>817,393,026</b>	<b>35,812,228</b>	<b>4.58%</b>
<b>Capital Funds</b>						
Water Supply	\$ 263,568,816	\$ 261,602,119	\$ 306,478,722	\$ 287,256,345	\$ (19,222,377)	-6.27%
Sewage Disposal	280,632,043	190,058,178	328,890,176	334,377,286	5,487,110	1.67%
General Construction	12,783,881	23,555,308	20,957,052	16,892,473	(4,064,579)	-19.39%
<b>Total Capital</b>	<b>556,984,740</b>	<b>475,215,605</b>	<b>656,325,950</b>	<b>638,526,104</b>	<b>(17,799,846)</b>	<b>-2.71%</b>
<b>Grand Total</b>	<b>\$ 1,247,374,628</b>	<b>\$ 1,199,938,309</b>	<b>\$ 1,437,906,749</b>	<b>\$ 1,455,919,130</b>	<b>\$ 18,012,382</b>	<b>1.25%</b>

## COMPARATIVE EXPENDITURES BY MAJOR EXPENSE CATEGORY

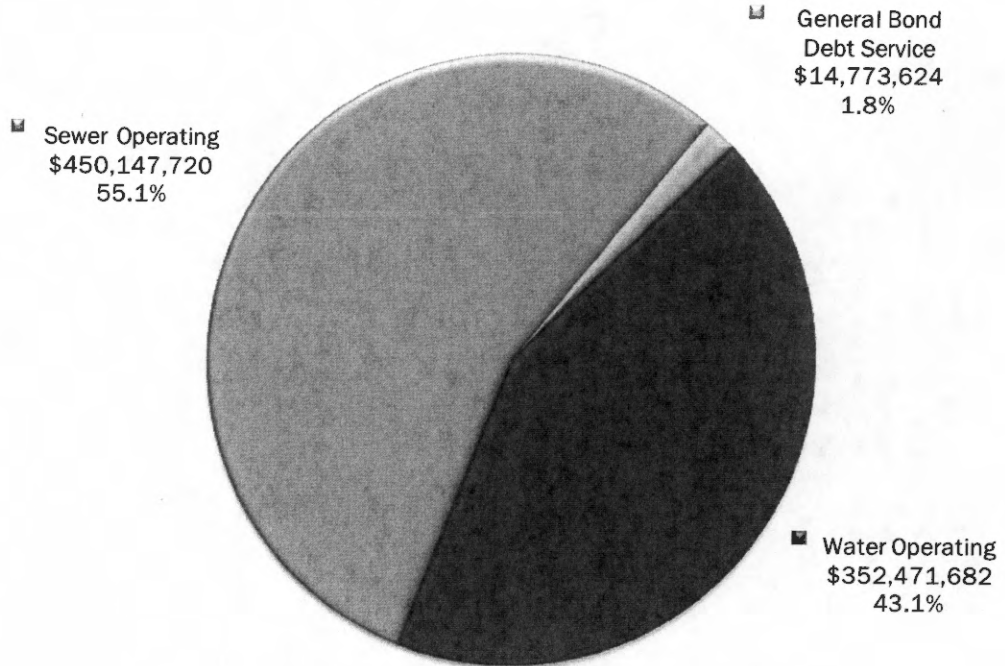
(\$ in Thousands)

Expense Categories	FY 2018 Actual			FY 2019 Approved			FY 2020 Proposed		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
Salaries & Wages	\$27,717	\$117,845	\$145,562	\$30,678	\$128,434	\$159,112	\$27,154	\$130,134	\$157,288
Heat, Light & Power	-	20,044	20,044	-	20,577	20,577	-	19,444	19,444
Regional Sewage	-	58,331	58,331	-	53,617	53,617	-	59,000	59,000
Contract Work	225,086	-	225,086	376,223	-	376,223	383,332	-	383,332
Consulting Engineers	41,718	-	41,718	68,912	-	68,912	58,073	-	58,073
Debt Service	-	275,096	275,096	-	294,349	294,349	-	319,883	319,883
All Other	180,695	253,407	434,102	180,513	284,604	465,117	169,967	288,932	458,899
<b>Total</b>	<b>\$475,216</b>	<b>\$724,723</b>	<b>\$1,199,939</b>	<b>\$656,326</b>	<b>\$781,581</b>	<b>\$1,437,907</b>	<b>\$638,526</b>	<b>\$817,393</b>	<b>\$1,455,919</b>

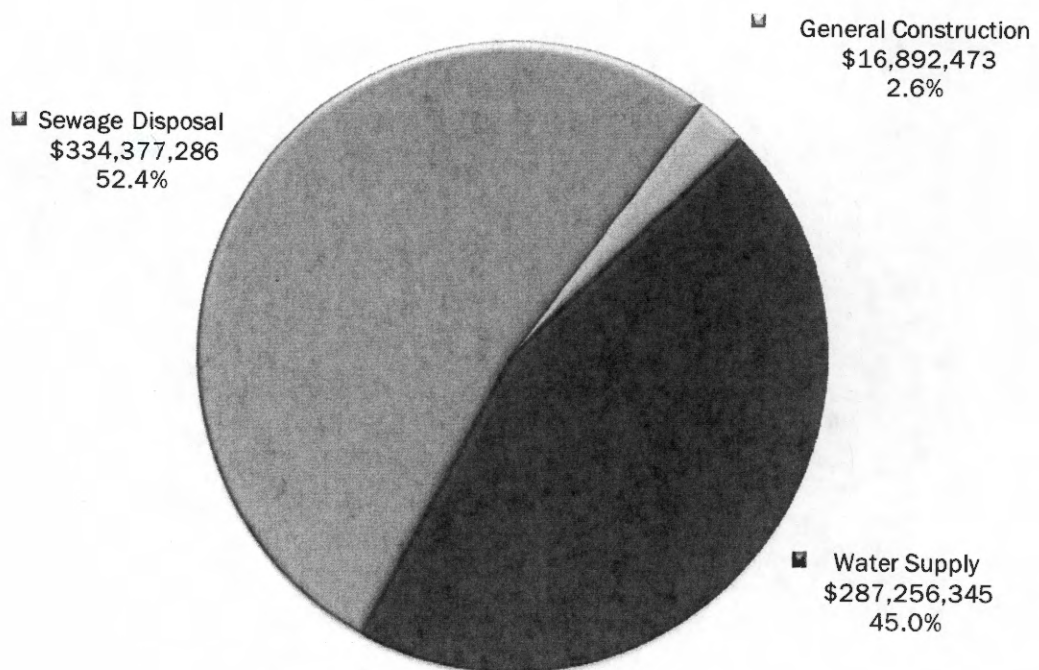


FY 2020 PROPOSED BUDGET BY FUND

**GRAND TOTAL = \$1,455,919,130**



**Operating Funds = \$ 817,393,026**



**Capital Funds = \$ 638,526,104**

COMBINED WATER/SEWER OPERATING FUNDS – FY 2020 PROPOSED RATE IMPACT

5.0% Average Rate Increase Proposed for FY 2020

Funding Sources	FY 2020 Proposed
<b>Revenues at Current Rates</b>	
Consumption Charges	\$ 627,523
Account Maintenance Fee	32,296
Infrastructure Investment Fee	39,331
Miscellaneous Revenues	41,200
<b>Subtotal</b>	<b>740,350</b>
Reconstruction Debt Service Offset	11,600
SDC Debt Service Offset	4,658
Miscellaneous Offset	395
Premium Transfer	2,900
Use of Fund Balance	11,341
<b>Total Funding Sources</b>	<b>771,244</b>
<b>Requirements</b>	
<b>Expenses</b>	
Operating, Maintenance & Support Services Expenses	465,297
Debt Service	306,307
PAYGO	31,016
<b>Total Expenditures</b>	<b>802,620</b>
Shortfall to be Covered by Rate Increase	<u>\$ (31,376)</u>
<b>Proposed Average Water and Sewer Rate Increase</b>	<b>5.0%</b>

The Proposed FY 2020 budget calls for a combined 5.0% average increase in water and sewer consumption revenue. This proposed increase meets the 5.0% Spending Affordability Guidelines (SAG) limit recommended by both Prince George's and Montgomery Counties. Even with this change, WSSC rates continue to be favorable when compared to many other comparable water and sewer utilities and the average residential bill is 1.0% of the median household income as shown on page 2-3. It should be noted that consumption revenue will be generated through the new 4-tier rate structure that will become effective on July 1, 2019.

WATER AND SEWER RATE SCHEDULES

Proposed Rate Structure Effective July 1, 2019

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2020 July 1, 2019		Total Combined
	Proposed		
	Water Rates	Sewer Rates	
	Per 1,000 Gallons		
0 - 80.9999	\$ 5.09	\$ 6.80	\$ 11.89
81 - 165.9999	5.74	7.56	13.30
166 - 275.9999	6.62	9.47	16.09
276 & Greater	7.76	12.50	20.26

Proposed Flat Rate Sewer Charge - \$125.00 per quarter

Additional information on the proposed rate structure can be found at:  
<https://www.wsscwater.com/billchanges>

Current Approved Rate Structure

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2019 July 1, 2018		Total Combined
	Approved		
	Water Rates	Sewer Rates	
	Per 1,000 Gallons		
0-49	\$ 3.61	\$ 4.70	\$ 8.31
50-99	4.04	5.49	9.53
100-149	4.47	6.38	10.85
150-199	4.98	7.37	12.35
200-249	5.83	8.03	13.86
250-299	6.32	8.70	15.02
300-349	6.70	9.27	15.97
350-399	6.97	9.73	16.70
400-449	7.24	9.95	17.19
450-499	7.46	10.25	17.71
500-749	7.59	10.47	18.06
750-999	7.77	10.71	18.48
1,000-3,999	7.91	11.16	19.07
4,000-6,999	8.10	11.41	19.51
7,000-8,999	8.20	11.58	19.78
9,000 & Greater	8.34	11.89	20.23

Current Flat Rate Sewer Charge - \$115.00 per quarter

ANNUAL CUSTOMER BILLS AT VARIOUS CONSUMPTION LEVELS

Meter Size	Average Daily Consumption (Gallons Per Year)	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
3/4" Residential Meter	100 (36,500 gal/yr)	\$ 443.51	\$ 478.10	\$ 490.87	\$ 508.03	\$ 555.76
3/4" Residential Meter	165 (60,225 gal/yr)	756.50	800.37	824.46	855.78	871.31
3/4" Residential Meter	500 (182,500 gal/yr)	3,046.33	3,159.75	3,265.60	3,407.95	3,178.63
2" Meter	1,000 (365,000 gal/yr)	6,730.45	7,286.60	7,512.90	7,808.55	7,612.08
3" Meter	5,000 (1,825,000 gal/yr)	33,408.00	35,527.00	36,676.75	38,209.75	38,947.68
6" Meter	10,000 (3,650,000 gal/yr)	69,466.50	73,967.60	76,340.00	79,515.50	78,994.18

Annual customer bills include the Account Maintenance Fee and Infrastructure Investment Fee shown of the following pages.



ACCOUNT MAINTENANCE FEES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Meter Size</u>	FY 2019 Current <u>Quarterly Charges</u>	FY 2020 Proposed <u>Quarterly Charges</u>
<u>Small Meters</u>		
5/8" to 1"	\$ 16.00	\$ 16.00
<u>Large Meters</u>		
1-1/2"	16.00	16.00
2"	27.00	27.00
3"	66.00	66.00
4"	142.00	142.00
6"	154.00	154.00
8"	200.00	200.00
10"	246.00	246.00
<u>Detector Check</u>		
<u>Meters</u>		
2"	33.00	33.00
4"	177.00	177.00
6"	255.00	255.00
8"	461.00	461.00
10"	633.00	633.00
<u>Fire Service</u>		
<u>Meters</u>		
4"	182.00	182.00
6"	293.00	293.00
8"	452.00	452.00
10"	682.00	682.00
12"	989.00	989.00

This is a quarterly fee which is prorated based on the length of the billing cycle.

INFRASTRUCTURE INVESTMENT FEES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Meter Size</u>	FY 2019 Current <u>Quarterly Charges</u>	FY 2020 Proposed <u>Quarterly Charges</u>
<u>Small Meters</u>		
5/8"	\$ 11.00	\$ 11.00
3/4"	12.00	12.00
1"	14.00	14.00
<u>Large Meters</u>		
1-1/2"	90.00	90.00
2"	185.00	185.00
3"	585.00	585.00
4"	813.00	813.00
6"	1,265.00	1,265.00
8"	2,845.00	2,845.00
10"	4,425.00	4,425.00
<u>Fire Service Meters</u>		
4"	499.00	499.00
6"	616.00	616.00
8"	2,524.00	2,524.00
10"	2,714.00	2,714.00
12"	5,214.00	5,214.00

This is a quarterly fee which is prorated based on the length of the billing cycle.

SYSTEM DEVELOPMENT CHARGE – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

	<u>FY 2019</u> <u>Current</u> <u>Charges</u>	<u>FY 2020</u> <u>Proposed</u> <u>Charges</u>	<u>Current</u> <u>Maximum</u> <u>Allowable</u>	<u>Proposed</u> <u>Maximum</u> <u>Allowable</u>
<b>Apartment</b>				
Water	\$ 896	\$ 896	\$ 1,310	\$ 1,330
Sewer	1,140	1,140	1,669	1,694
<b>1-2 toilets/residential</b>				
Water	1,344	1,344	1,968	1,998
Sewer	1,710	1,710	2,500	2,538
<b>3-4 toilets/residential</b>				
Water	2,240	2,240	3,279	3,328
Sewer	2,850	2,850	4,171	4,234
<b>5 toilets/residential</b>				
Water	3,135	3,135	4,589	4,658
Sewer	3,991	3,991	5,841	5,929
<b>6+ toilets/residential (per fixture unit)</b>				
Water	88	88	130	132
Sewer	115	115	170	173
<b>Non-residential (per fixture unit)</b>				
Water	88	88	130	132
Sewer	115	115	170	173

No increase is proposed for the System Development Charge for FY 2020 in any category. The maximum allowable charge is being adjusted pursuant to Division II, Section 25-403(c) of the Public Utilities Article of the Annotated Code of Maryland, based on the 1.5% change in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for all items in the Washington, D.C. metropolitan area from November 2017 to November 2018.

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

The Commission provides a number of services for which separate fees or charges have been established. Recent review of the costs required to provide these services indicates a need to change the amounts charged for some of the services. The fee and charge changes listed below are proposed to be effective July 1, 2019.

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
<b>1 Inspection Fees - Water/Sewer Connection Hookup, Well/Septic Hookup</b>		
<u>Plumbing and Gasfitting Inspections</u>		
New Single Family Detached Dwellings	\$ 835	\$ 919
New Attached Dwellings (townhouse/multiplex excluding apartments)	835	919
<u>All Other Residential:</u>		
Water/Well Hookup	109	120
Meter Yoke Inspection (meter only installation)	109	120
Water Hookup Converting from Well (includes 2 inspections)	218	240
Sewer/Septic Hookup	109	120
First Plumbing Fixture	109	120
Each Additional Fixture	40	46
SDC Credit Fixture Inspection (per fixture)	40	44
Minimum Permit Fee	200	220
Permit Reprocessing Fee	60	66
Long Form Permit Refund Fee (1B write-up form)	200	220
Long Form Permit Re-Issue Fee	200	220
<u>All Non-Residential:</u>		
<u>Plan Review (without Permit Application)</u>		
25 Fixtures or Less	454	499
26-200 Fixtures	1,541	1,772
Over 200 Fixtures	3,070	3,531
<u>2<sup>nd</sup> or 3<sup>rd</sup> Review (with or without Permit Application)</u>		
25 Fixtures or Less	160	173
26-200 Fixtures	345	397
Over 200 Fixtures	736	846
Water/Well Hookup	195	214
Meter Yoke Inspection (meter only installation)	195	214
Sewer/Septic Hookup	195	214
FOG Interceptor	195	214
First Plumbing Fixture	195	214
Each Additional Fixture	51	55
SDC Credit Fixture Inspection (per fixture)	40	44
Minimum Permit Fee	278	306
Permit Reprocessing Fee	60	65
Long Form Permit Refund Fee		
Long Form Permit Refund Fee	291	320
Long Form Permit Re-Issue Fee	291	320



MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
<b>2 Site Utility (On-Site) Review Fee</b>		
Base Fee	\$ 3,301	\$ 3,522
Additional Fee per 100 feet	302	332
Minor (Waived) Site Utility (On-Site) Fee	1,005	1,106
<b>3 License Fees for the Regulated Trades</b>		
<u>Reciprocal Master Plumber, Gasfitter:</u>		
Initial Registration per type (2 years)	102	112
Registration Renewal all types (2 years)	88	96
Late Registration Renewal	52	57
<u>Examined Master Plumber, Gasfitter:</u>		
Initial Registration per type (4 years)	108	118
Registration Renewal all types (4 years)	108	118
Late Registration Renewal	52	57
Cross-connection Technician Registration	26	29
Sewer and Drain Registration and Renewal (2 years)	40	46
Sewer and Drain Late Renewal Fee	20	22
<u>Journeyman License Registration:</u>		
Initial Registration (2 years)	31	34
Registration Renewal (2 years)	31	34
Late Registration Renewal	21	23
License Replacement Fee	16	17
Apprentice License Registration Renewal	11	12
<b>4 Short Form Permit Fee (up to 3 fixtures) – Non-Refundable</b>	94	103
<b>5 Fee for the Sale of WSSC Plumbing and Fuel Gas Code (Plumbing Code) and Cross Connection Control Manual</b>		
Sale of Plumbing Regulation (per book)	38	42

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
<b>6 Septic Hauler Discharge Permit Fee</b>		
<u>Category   Residential &amp; Septic Waste &amp; Grease</u>		
50 - 799 gallons (per vehicle)	\$ 4,610	\$ 5,071
800 - 2,999 gallons (per vehicle)	13,149	14,464
3,000 - gallons and up (per vehicle)	31,188	34,307
Transfer and/or Replacement Permit Sticker	107	118
Zero Discharge Permit Fee	107	118
Temporary Discharge Permit Fee	98 + Sewer Rate/1,000 gallons	118 + Sewer Rate/1,000 gallons
Sewer Rate – Domestic Low Strength Wastewater	11.14/1,000 gallons of truck capacity	Delete
Sewer Rate – Domestic High Strength Wastewater	56.00/1,000 gallons of truck capacity	Delete
Sewer Rate - Hauled Waste	-	43.00/1,000 gallons of truck capacity
<b>7 Long Form Permit Transfer Fee (With Inspection)</b>	160	176
<b>8 Meter Replacement Fee (Damaged or Stolen Meter)</b>		
6" Fire Service Meter	9,820	9,874
8" Fire Service Meter	11,495	12,315
<b>9 Temporary Fire Hydrant Connection Fee</b>		
<u>Service Charge</u>		
2 Weeks or Less (3/4" meter)	56	62
Water Consumption Charge - 3/4" Meter	Current approved rate for 1,000 gal ADC; \$30 min.	Proposed rate for 1,000 gal ADC; \$33 min.
Water Consumption Charge - 3" Meter	Current approved rate for 1,000 gal ADC; \$195 min.	Proposed rate for 1,000 gal ADC; \$214 min.
<b>10 Water Turn-Off, Turn-On Fee</b>		
Small Meter Turn-On	89	97

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	Current Charge	FY 2020 Proposed Charge
<b>11 Feasibility Review Fee (WSSC Built)</b>		
Feasibility Submission Fee (Non-refundable)	\$ 1,618	\$ 1,780
Feasibility Review & Report Fee Deposit	10,784	11,862
<i>(can be deferred as deficit when extension is completed)</i>		
<b>12 Industrial Discharge Control Program Fees By Category</b>		
<u>Industrial users subject to Categorical Pretreatment Standards</u>		
Less than 5,000 gpd (double visit)	4,623	5,085
Greater than 5,000 gpd (double visit)	7,084	7,792
Non-discharging Categorical Industries (zero discharge)	1,245	1,370
<u>Significant Industrial User</u>		
Less than 25,000 gpd (single visit - priority pollutant sampling)	4,623	5,085
Greater than 25,000 gpd (double visit - priority pollutant sampling)	7,084	7,792
<b>13 Fees for Sale of Contract Specifications, Contract Specification Books, Drawings, Design Manuals, Standard Details, and General Conditions</b>		
Utility Contracts	17	11-20
Construction Standard Details	55	60
Construction General Conditions & Standard Specifications	46	53
SEP Construction General Conditions & Standard Specifications	46	53
<b>14 Watershed Use Permit Fees</b>		
<u>Watershed Use Permit Fees</u>		
Watershed Use Permit (January 1 - December 31)	70	72
Open Season Boat Mooring (March 15 - November 30)	80	82
Winter Boat Mooring (December 1 - March 14)	55	57
Boat/Craft Removal Fee	100	103
Monthly Storage Fee for Removed Boats	80	82
Rental for the Azalea Garden	75/4 hours	77/4 hours
Rental for the Bio-Brick Pavilion	75/4 hours	77/4 hours
Boarding Stable Entrance Permit	250	258
Adjacent Landowner Entrance Permit	80	82
<u>Picnic Permit</u>		
Groups 11-15	18	19
<b>15 Call Back Fees (large meters, plumbers)</b>	228	262

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
<b>16 Utility Erosion and Sediment Control Permit Fee</b>		
Minor Projects (less than 125 linear ft OR less than 42 in. deep and 20 in. width)	\$0.20/linear ft	\$0.23/linear ft
Major Projects	0.30/linear ft	0.34/linear ft
<b>17 Erosion and Sediment Control Training Certification Session Fee</b>	79/session, per participant	Delete
<b>18 Fee for Sale of Erosion and Sediment Control Field Guide</b>	10	Delete
<b>19 Shut Down/Charge Water Main Fee</b>	1,144	1,177
<b>20 Right-of Way Release Review Fee (per document)</b>	1,144	1,236
<b>21 Fee for Review and Inspection of Site Work Potentially Impacting WSSC Pipelines</b>		
Complex Review / Non-DR Type Design Review	2,179	2,615
<b>22 Discharge Authorization Permit Fees</b>		
Significant Industrial User – Initial Permit (4 years)	5,496	6,046
Significant Industrial User – Renewal (4 years)	2,694	2,963
Initial zero-discharge CIU Permit (4 years)	2,087	2,296
Reissued zero-discharge CIU Permit (4 years)	1,392	1,531
Temporary Discharge Permit (Non – SIU)	5,496	6,046
<b>23 Property Inspection Fee</b>	107	115
<b>24 Hydraulic Planning Analysis and System Planning Forecast</b>		
Modeling and Re-Modeling Fee - Up to 3 parts	1,600	1,840
Modeling and Re-Modeling Fee - per part Over 3	696	765
<b>25 Environmental Site Review Fee</b>		
with Database Search Conducted by WSSC	379	Delete
with Database Search Submitted by Applicant	288	331
<b>26 Partial Release for Service Fee</b>	1,331	1,398
<b>27 Facilities Design Guideline Fee</b>	35	40
<b>28 Feasibility Review Fee for On-Site Takeover Projects</b>	974	1,120



MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
<b>29 Fee for the Preparation of Hold Harmless Agreement</b>	\$ 1,068	\$ 1,228
<b>30 Warehouse Restocking Fee</b>	33	39
<b>31 Residential Outside Meter Housing Upgrade/Pipe Alteration</b>	6,540	6,786
<b>32 Pre-Screen All Plan Types Fee</b>	338	365
<b>33 Cross Connection Fees</b>		
Test Report Fee	35	38
Base Fee for High Hazard Commercial Water Customer - per month	13	16
Base Fee for All Other Commercial Water Customer- per month	7	8
<b>34 Name/Transfer of Ownership Change Fee</b>	228	250
<b>35 Protest Filing Fee</b>	700	770
<b>36 Plumbing/Fuel Gas Plans Review Pre-Screen Fee</b>	255	Delete
<b>37 Varlance Review Fee (NEW)</b>	-	1,238

# LONG-RANGE FINANCIAL PLAN FOR WATER AND SEWER OPERATING FUNDS

(\$ In Thousands)	FY 2019 Approved	FY 2020 Proposed	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected
<b>OPERATING REVENUES</b>							
Water and Sewer User Charges	\$ 627,942	\$ 658,899	\$ 698,900	\$ 740,834	\$ 785,284	\$ 828,475	\$ 869,899
Other Sources/Fees:							
Account Maintenance Fees	32,182	32,296	32,331	32,376	32,441	32,505	32,570
Rockville Sewer Use	2,700	3,000	3,000	3,000	3,000	3,000	3,000
Plumbing and Inspection Fees	12,231	12,900	12,975	13,364	13,765	14,178	14,604
Infrastructure Investment Fee	38,894	39,331	39,409	39,484	39,560	40,544	40,623
Miscellaneous	19,800	19,800	20,198	20,400	20,604	20,810	21,018
Interest Income	1,500	5,500	4,821	4,844	4,846	3,941	3,939
<b>Total Revenues</b>	<b>\$ 735,249</b>	<b>\$ 771,726</b>	<b>\$ 811,634</b>	<b>\$ 854,302</b>	<b>\$ 899,500</b>	<b>\$ 943,453</b>	<b>\$ 985,653</b>
<b>OTHER CREDITS AND TRANSFERS</b>							
Use of Fund Balance	11,580	11,341	8,000	7,000	6,000	5,000	-
Premium Transfer	-	2,900	-	-	-	-	-
SDC Debt Service Offset	3,364	4,658	4,984	4,983	4,982	4,984	4,984
Reconstruction Debt Service Offset (REDO)	12,500	11,600	9,500	7,400	6,000	-	-
Miscellaneous Offset	-	395	-	-	-	-	-
<b>Total Funds Available</b>	<b>\$ 762,693</b>	<b>\$ 802,620</b>	<b>\$ 834,118</b>	<b>\$ 873,685</b>	<b>\$ 916,482</b>	<b>\$ 953,437</b>	<b>\$ 990,637</b>
<b>OPERATING EXPENSES</b>	<b>454,616</b>	<b>465,297</b>	<b>485,424</b>	<b>498,843</b>	<b>512,693</b>	<b>526,992</b>	<b>541,755</b>
<b>DEBT SERVICE</b>							
Bonds and Notes Principle and Interest	277,061	306,307	324,047	341,953	357,427	377,262	393,204
<b>OTHER TRANSFERS AND ADJUSTMENTS</b>							
Unspecified Adjustments	-	-	(10,000)	(10,000)	-	-	-
PAYGO	31,016	31,016	31,016	31,016	31,016	31,016	31,016
<b>Total Expenses</b>	<b>\$ 762,693</b>	<b>\$ 802,620</b>	<b>\$ 830,487</b>	<b>\$ 861,812</b>	<b>\$ 901,136</b>	<b>\$ 935,270</b>	<b>\$ 965,975</b>
<b>Net Revenue (Loss)</b>	<b>-</b>	<b>-</b>	<b>3,631</b>	<b>11,873</b>	<b>15,346</b>	<b>18,167</b>	<b>24,662</b>
<b>BEGINNING FUND BALANCE - JULY 1</b>	<b>\$ 185,297</b>	<b>\$ 173,717</b>	<b>\$ 162,376</b>	<b>\$ 158,006</b>	<b>\$ 162,879</b>	<b>\$ 172,225</b>	<b>\$ 185,393</b>
Net Increase (Decrease) in Fund Balance	-	-	3,631	11,873	15,346	18,167	24,662
Use of Fund Balance/Other Adjustments	(11,580)	(11,341)	(8,000)	(7,000)	(6,000)	(5,000)	-
<b>ENDING FUND BALANCE - JUNE 30</b>	<b>\$ 173,717</b>	<b>\$ 162,376</b>	<b>\$ 158,006</b>	<b>\$ 162,879</b>	<b>\$ 172,225</b>	<b>\$ 185,393</b>	<b>\$ 210,055</b>
Debt Service Coverage (1.10 is target)	1.01	1.00	1.01	1.04	1.08	1.10	1.13
Debt Service as a Percentage of Total Expenditures (Below 40% is target)	36.3%	38.2%	39.0%	39.7%	39.7%	40.3%	40.7%
Operating Reserve Required 10% Level (\$)	\$73,525	\$77,173	\$81,163	\$85,430	\$89,950	\$94,345	\$98,565
Days Operating Reserve-on-Hand (60 - 90 days is target)	84.4	74.4	69.9	69.4	70.2	72.8	79.8
Total Workyears (All Funds)	1,776.0	1,776.0	1,776.0	1,776.0	1,776.0	1,776.0	1,776.0

**Assumptions:**

1. The FY 2021-2025 projections reflect WSSC's multi-year forecast and assumptions. The projected expenditures, revenues, and fund balances for these years may be based on changes to rates, fees, usage, inflation, future labor agreements, and other factors not assumed in the FY 2020 Proposed Budget. Data excludes General Construction Debt Service and General Construction Bonds.
2. Debt service for bonds and notes includes Maryland Water Quality Bonds and interfund debt service transfers. General Construction debt service is excluded.
3. Adjustment for Rate Increase assumes rate increases in effect for 12 months.
4. Debt Service Coverage is Operating Revenues less Operating Expenses (excluding Debt Service) divided by the debt service on bonds and notes.
5. Operating Reserve represents 10% of Operating Revenue.

# SPENDING AFFORDABILITY AND LONG-RANGE FINANCIAL PLAN

## INTRODUCTION

In May 1993, the Montgomery and Prince George's County Councils created the Bi-County Working Group on WSSC Spending Controls (Working Group) to review WSSC finances and recommend spending control limits. The Working Group's January 1994 report recommended "the creation of a spending affordability process that requires the Counties to set annual ceilings on the WSSC's rates and debt (debt in this context means both bonded indebtedness and debt service), and then place corresponding limits on the size of the capital and operating budgets of the Commission."

Each year, the spending affordability process focuses debate, analysis, and evaluation on balancing affordability considerations against the provision of resources necessary to serve existing customers (including infrastructure replacement/rehabilitation), meet environmental mandates, maintain affordable rates, and maintain operating and capital budgets and debt service at prudent and sustainable levels.

The Commission has submitted an annual budget, which generally conforms to the Spending Affordability Guidelines (SAG) established by both county governments every year since 1994.

A long-range financial plan complements the spending affordability process by utilizing approved SAG limits to forecast outer year implications and strategize potential problems and opportunities which may impact WSSC's work program. The plan is WSSC's road map and reflects financial strategic intent, as well as imposing discipline by highlighting cumulative effects of decisions. Addressing issues earlier, not only protects WSSC's long-term financial condition, but ensures that necessary actions and/or changes are properly communicated to our customers, County Councils, and other stakeholders.

## MAJOR ASSUMPTIONS AND WORKLOAD INDICES

Below is a summary of budget outcomes related to results from FY 2020 Spending Affordability.

- Fiscal Policy Guidelines - Fund Balance - It was assumed for the purpose of preparing the Proposed Budget FY 2020 that, at the end of FY 2019, accumulated net revenues for the water and sewer operating funds would total \$173.7 million. For FY 2020, approximately \$77.2 million will be held in accumulated net revenues in adherence to the Commission's reserve policy (see Fiscal Guidelines page 5-1). Fund balance of \$11.0 million will also be used to finance the IT Strategic Plan which includes AMI and Work and Asset Management (WAM) system. An additional \$0.3 million will be used to fund the strategic energy plan and climate vulnerability assessment. This leaves an unallocated reserve of approximately \$85.2 million.
- Revenues - The estimated FY 2020 revenues from water consumption and sewer use charges are \$281.0 million and \$377.9 million, respectively. Water production is assumed to be 164.0 MGD and water purchases are projected to remain the same.

## MAJOR ASSUMPTIONS AND WORKLOAD INDICES (CONTINUED)

- Capital Improvement Program (CIP) and Capital Budget - The Capital Budget includes expenditure estimates for all projects for which work is reasonably expected to be accomplished. This provides management with maximum flexibility to proceed on the many and diverse projects approved each year in the budget. The FY 2020 Capital Budget is \$638.5 million.
- Debt Service - The debt service estimates for FY 2020 assume that \$155.2 million in Water bonds and \$229.7 million in Sewer bonds will be issued in FY 2020, in addition to repayment of existing debt. The WSSC water and sewer issues will be 30-year bonds with an estimated 3.75% net interest rate.
- Reconstruction Debt Service Offset (REDO) - For FY 2020, \$11.6 million will be transferred from the General Bond Debt Service Fund to the Water and Sewer Operating Funds. The transfer is made to help defray the debt service on funds borrowed to finance water and sewer systems reconstruction activities.
- Workforce and Compensation - Funding for employee salary enhancements in a manner coordinated with the Counties is included in the budget.



MAJOR ASSUMPTIONS AND WORKLOAD INDICES (CONTINUED)

The following table presents assumptions, workload indices, and demand projections used during Spending Affordability to develop the FY 2020 Proposed Budget.

WORKLOAD DATA	ACTUAL							PROJECTED				
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water and Sewer Combined Rate Increase (%)	7.25	5.5	1.0	3.0	3.5	4.5	5.0	6.0	6.0	6.0	5.5	5.0
Population to be served (000s)	1,757	1,765	1,774	1,759	1,777	1,801	1,810	1,819	1,828	1,837	1,846	1,856
Customer Accounts (000s)	444	445	448	452	456	459	461	463	465	466	468	470
Residential (%)	94.4	94.4	94.4	94.4	94.5	94.4	94.4	94.4	94.4	94.4	94.4	94.4
Commercial and Industrial (%)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Government (%)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
<b>Water Program:</b>												
Water supplied (Average MGD)	160.6	162.9	164.2	163.1	163.9	164.0	164.0	164.0	164.0	164.0	164.0	164.0
Water lines added by the WSSC (miles)	0.5	***9.0	7.0	**12.1	4.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Water lines added - contributed (miles)*	26.3	22.4	27.1	25.2	22.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Water Mains Maintained (miles)	5,521	5,552	5,586	5,647	5,768	5,772	5,777	5,804	5,831	5,858	5,885	5,892
Water House Connections Maintained	449,333	453,004	457,393	460,891	465,393	468,391	471,191	474,091	477,091	480,591	484,091	487,291
<b>Sewer Program:</b>												
Sewage treated (Average MGD)	195.6	190.8	184.8	179.0	172.8	201.4	201.4	211.4	215.6	219.9	224.3	228.8
Sewer lines added by the WSSC (miles)	0	0	0.2	0.4	0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sewer lines added - contributed (miles)*	25.7	21.4	27.3	24.7	19.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Sewer Mains Maintained (miles)	5,402	5,424	5,421	5,549	5,578	5,582	5,587	5,613	5,639	5,665	5,691	5,717
Sewer House Connections Maintained	425,445	428,279	431,589	434,586	437,789	440,786	443,386	445,986	448,786	451,886	454,986	457,686
<b>House connections added</b>												
Water	2,880	3,671	4,389	3,498	4,502	2,998	2,800	2,900	3,000	3,500	3,500	3,200
Sewer	2,335	2,834	3,310	2,997	3,203	2,997	2,600	2,600	2,800	3,100	3,100	2,700
New Water and Sewer Bond and Notes Debt Issues (\$ In Millions)	200	340	535	455	459	487	385	439	432	368	350	350
Average Annual Interest Rate for New Bond Issuance (%)	4.09	4.05	3.26	4.27	3.97	5.0	3.75	3.75	3.75	3.75	3.75	3.75

\* Contributed lines are built by developers and maintained by the WSSC (includes Joint Base Anacostia-Bolling).

\*\* Includes Potomac Bi-County Supply Tunnel (5.5 miles).

\*\*\* Includes Potomac Vista (8.1 miles).

## FUND STRUCTURE

The Proposed Budget FY 2020 consists of six separate funds, three in the operating budget (the Water Operating, Sewer Operating, and General Bond Debt Service Funds) and three in the capital budget (the Water Supply Bond, Sewage Disposal Bond, and General Construction Bond Funds). The Water Operating and Sewer Operating Funds are the primary funds for operating purposes. The Water Operating Fund pays for water treatment and distribution, and the Sewer Operating Fund pays for sewage collection and treatment. The General Bond Debt Service Fund receives front foot benefit payments to underwrite the debt service on smaller lateral water and sewer lines. Although each fund is essentially a separate entity authorized to expend funds for prescribed purposes and derive revenues from specific rates, charges, and/or taxes, as prescribed by state law, the capital and operating funds are interrelated as explained below.

The respective purpose and revenue source of each fund are described in the table below. Although each fund is essentially a separate entity authorized to expend funds for prescribed purposes and derive revenues from specific rates and charges as prescribed by state law, WSSC audited annual financial statements consider only a single operating budget without further fund delineation. Audited financial statements can be found at <https://www.wsscwater.com/financereports>.

Capital Fund	Major Purpose	Major Revenue Source
Water Supply Bond	Construct major water supply treatment and transmission facilities; Reconstruct water distribution system.	Water Supply Bonds and System Development Charge
Sewage Disposal Bond	Construct major sewage treatment and transmission facilities; Reconstruct sewerage collection system.	Sewage Disposal Bonds, System Development Charge, and Grants
General Construction Bond	Construct minor water and sewer lines and support facilities.	General Construction Bonds and House Connection Charges

Operating Fund	Major Purpose	Major Revenue Source
Water Operating	Operate and maintain water facilities and pay debt service on Water Supply Bonds.	Customer Water Bill
Sewer Operating	Operate and maintain sewerage facilities and pay debt service on Sewage Disposal Bonds.	Customer Sewer Bill
General Bond Debt Service	Pay debt service on General Construction Bonds.	Front Foot Benefit Charges

## WATER

The Commission issues Water Supply Bonds (Capital Fund) and collects System Development Charges to finance the planning, design, and construction of major water treatment and transmission facilities and the reconstruction of the water distribution system. The facilities include dams, reservoirs, water filtration plants, water pumping stations, water storage facilities, and water supply lines. Water operating revenues - customer payments for water bills - in the Water Operating Fund are used to pay for operating and maintaining these water facilities, and also to pay the debt service (principal and interest that must be repaid) on Water Supply Bonds.

## SEWER

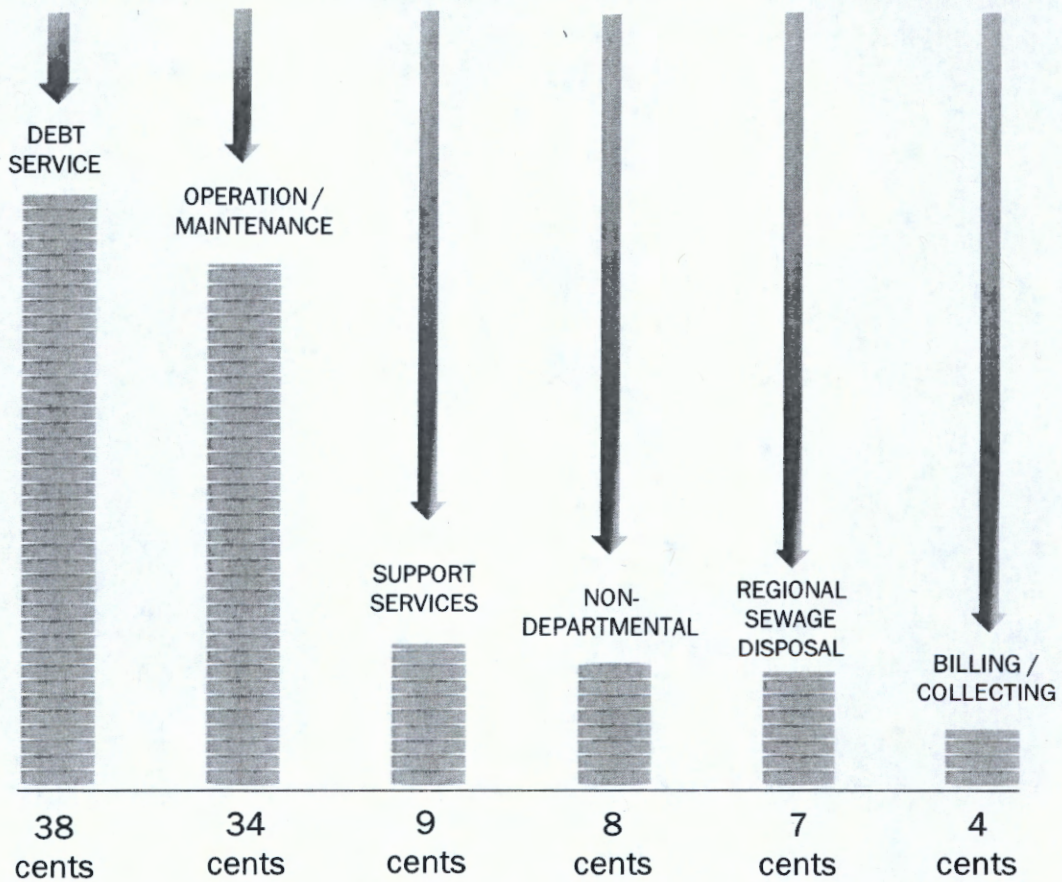
The Commission issues Sewage Disposal Bonds (Capital Fund) collects System Development Charges, and receives grants to finance the planning, design, and construction of major sewage disposal and treatment facilities and the reconstruction of the sewerage collection system. The facilities include sewage pumping stations and force mains, sewer lines, sewage treatment facilities (including reimbursement to the District of Columbia Water (DC Water) and Sewer Authority for construction at Blue Plains), and improvements or modifications to these facilities. Sewer operating revenues - customer payments for sewer bills - in the Sewer Operating Fund are used to pay for operating and maintaining these facilities, and also to pay the debt service on Sewage Disposal Bonds. Sewer use charges are generally based upon metered water use.

## GENERAL CONSTRUCTION

The Commission issues General Construction Bonds (Capital Fund) to pay for the construction of minor water and sewer lines (water distribution lines 15 inches in diameter and smaller, and sewer lines 14 inches in diameter and smaller) and support facilities. General Bond Debt Service Fund revenues - customer payments for front foot benefit charges - are used to pay the debt service on construction of minor water and sewer lines. House connection construction costs are underwritten by a direct charge to the applicant.

PROPOSED BUDGET FY 2020

HOW EACH DOLLAR OF A WATER & SEWER BILL IS SPENT

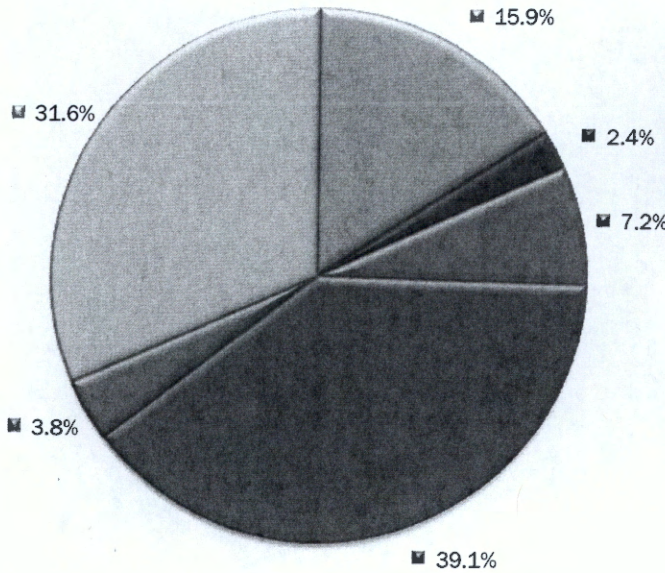




PROPOSED BUDGET FY 2020 - BY MAJOR EXPENSE CATEGORY

**GRAND TOTAL = \$1,455,919**  
(\$ in Thousands)

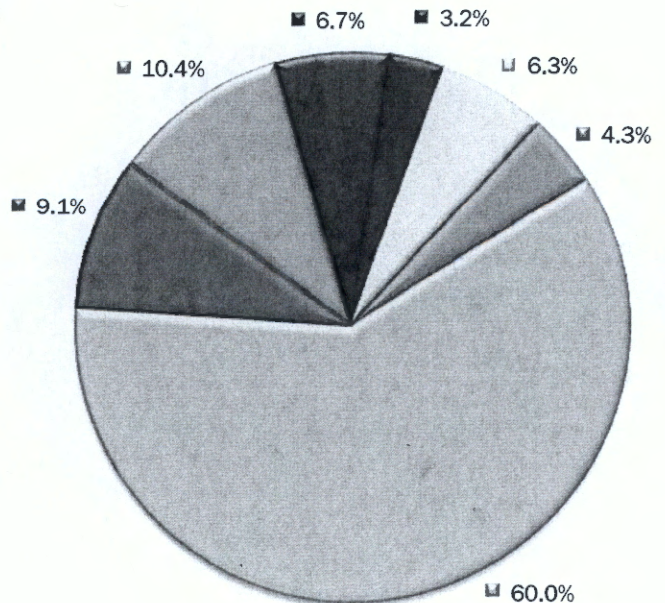
OPERATING



(\$ in Thousands)		FY 2020 Proposed
Salaries & Wages		\$ 130,134
Heat, Light & Power		19,444
Regional Sewage Disposal		59,000
Debt Service		319,883
PAYGO		31,016
All Other *		257,916
<b>Total</b>		<b>\$ 817,393</b>

\*All other includes Non-Departmental Accounts, Services and Contracts, Materials and Chemicals, Gas and other Petroleum Products, Communications, and Claims & Damages.

CAPITAL



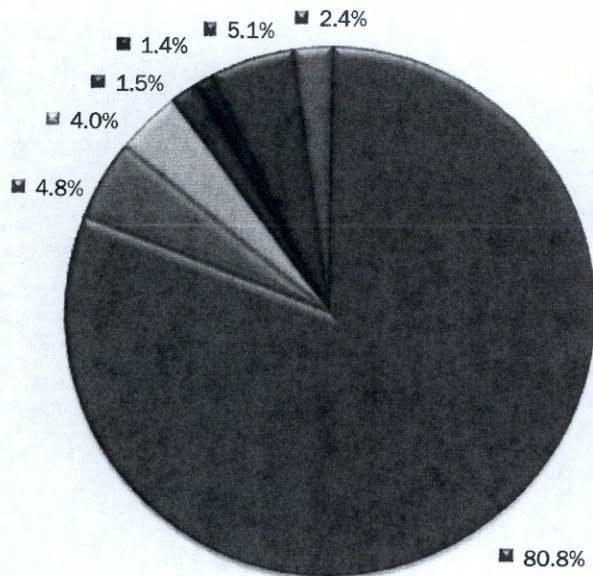
(\$ in Thousands)		FY 2020 Proposed
Salaries & Wages		\$ 27,154
Contract Work		383,332
Consulting Engineers		58,073
Contribution to Construction		66,280
Contract Restoration		42,600
Materials		20,636
Other*		40,451
<b>Total</b>		<b>\$ 638,526</b>

\*Other includes Land, Professional Services, Non-Departmental Accounts, and Water Meters.



PROPOSED BUDGET FY 2020 - BY SOURCES

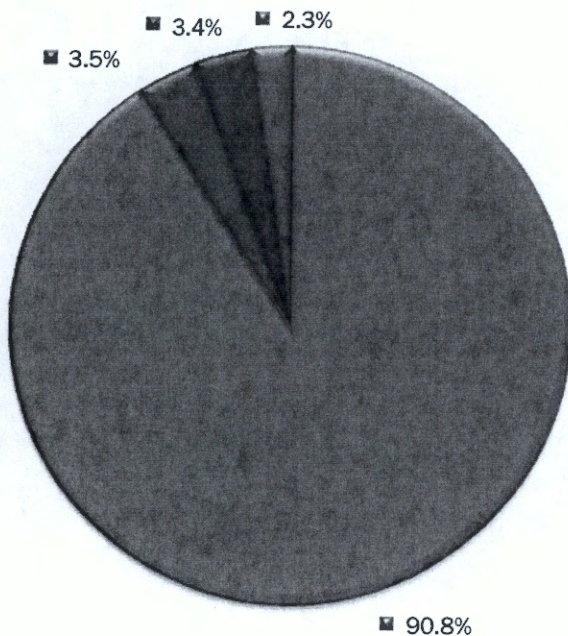
OPERATING



(\$ in Thousands)		FY 2020 Proposed
Water & Sewer Charges		\$ 658,899
Infrastructure Investment Fee		39,331
Account Maintenance Fee		32,296
Front Foot Benefit & House Connection Charge		12,507
Fund Balance Use		11,341
Miscellaneous (Licenses, Permits, Interest)		41,960
Other Credits & Transfers *		19,553
		<b>Total \$ 815,887</b>

\*Other includes: Reconstruction Debt Service Offset (REDO) and SDC Debt Service Offset.

CAPITAL



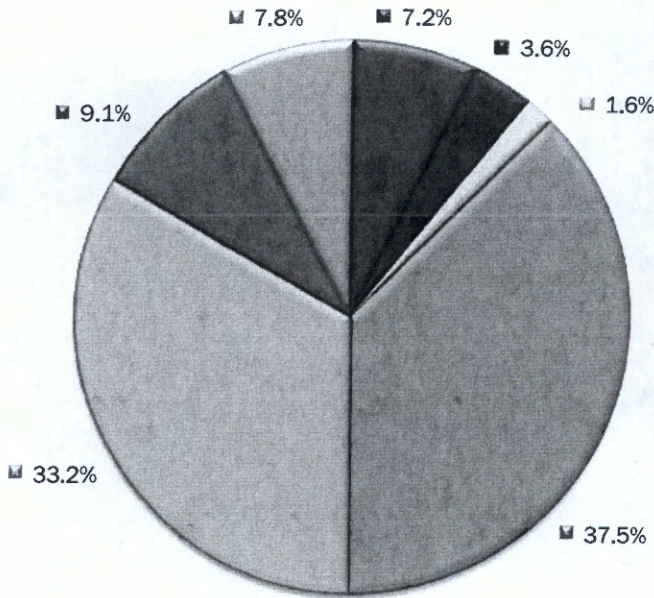
(\$ in Thousands)		FY 2020 Proposed
Bonds and Cash		\$ 579,823
Federal and State Grants*		22,291
System Development Charge		21,716
Other - Developer/Local Gov't		14,696
		<b>Total \$ 638,526</b>

\*Includes funding under Maryland's Bay Restoration Fund Enhanced Nutrient Removal



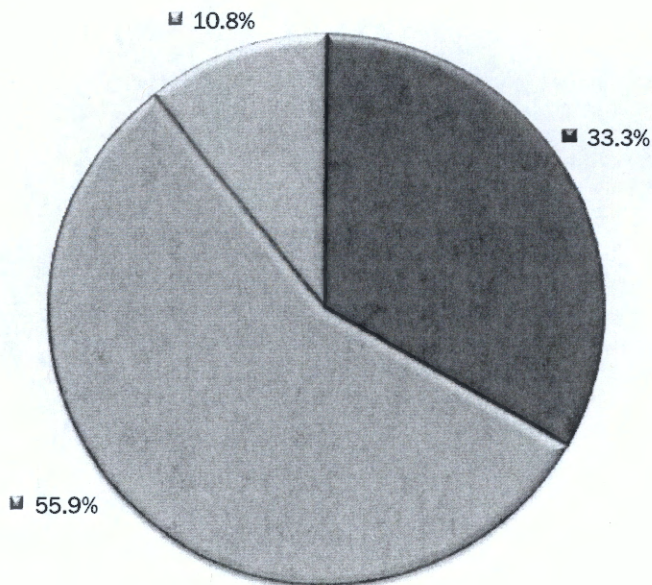
PROPOSED BUDGET FY 2020 – FUND USES

OPERATING



(\$ in Thousands)		FY 2020 Proposed
Debt Service (Water & Sewer)	\$	306,307
Operation & Maintenance		271,071
Support Services		74,570
Non-Departmental		63,713
Regional Sewage Disposal		59,000
Billing/Collecting		29,156
Debt Service (General Bond)		13,576
<b>Total</b>	<b>\$</b>	<b>817,393</b>

CAPITAL



(\$ In Thousands)		FY 2020 Proposed
Water Infrastructure Projects	\$	212,555
Sewer Infrastructure Projects		357,109
Other Capital Projects *		68,862
<b>Total</b>	<b>\$</b>	<b>638,526</b>

\*Includes New House Connections, Paving, Relocations, Allocated & Other Costs

## SHORT-TERM FISCAL AND SERVICE GUIDELINES (CONTINUED)

The budget planning for FY 2020 continues to be shaped by the challenges of balancing increasing costs for infrastructure and operations with affordability considerations for our customers. While the average costs to ensure access to clean, safe drinking water and efficient wastewater remains low when compared to other household utilities and expenses, there are still residents who struggle to meet their monthly expenses. WSSC offers financial assistance with water and sewer bills under two programs: the Customer Assistance Program (CAP) and WSSC Water Fund.

WSSC's Water Fund provides one-time or emergency assistance to customers in financial need and is funded entirely by contributions from customers, employees, and other sources. The Water Fund is administered by a third party.

Additional factors and events that shaped the budget environment include:

- Continued efforts on regulatory compliance with Consent Decrees including meeting permit levels for sewer discharge at water resource recovery facilities;
- Flat or declining water consumption revenues;
- Support for the Information Technology Strategic Plan;
- Addressing aging infrastructure; and
- Uncertainty regarding potential changes in environmental regulations.

As part of the FY 2020 Spending Affordability Guideline process, WSSC staff originally recommended a water and sewer rate increase of 6.0%. Montgomery and Prince George's Counties supported a 5.0% rate increase. In order to reconcile FY 2020 operating budget submissions, departments would not receive funding for new positions, initiatives, nor enhancements to existing programs. In addition, certain department budgets were recommended for targeted reductions. The Commission emphasized that WSSC would work to maintain service at current levels, though it may be necessary to pull back on certain preventative and non-essential services during FY 2020 in order to remain within approved budget limitations.

To cope with these fiscal challenges while ensuring that WSSC's priorities are met, the Commission reaffirmed its efforts to control and reduce costs, as well as identify opportunities for cost savings. Initiatives instituted include:

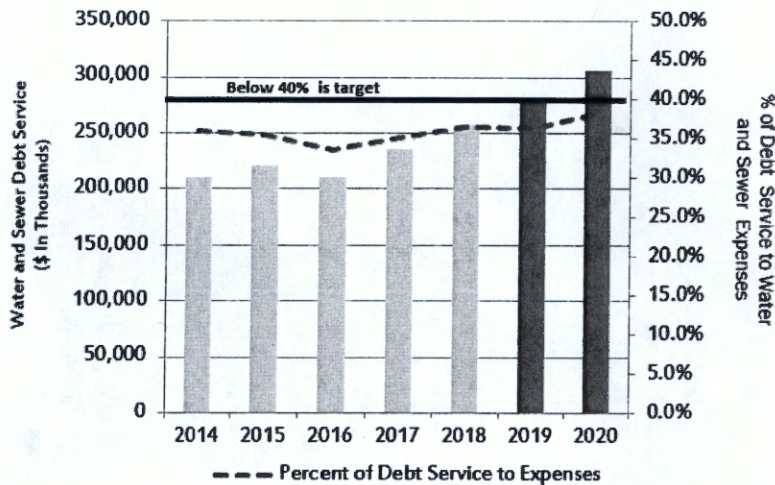
- Careful management of labor costs including overtime and group insurance plan redesign;
- Use of the Supply Chain Management Transformation process to identify savings in operating and capital procurements; and
- Reduction in energy usage and costs through the Energy Performance Program (EPP).

The cumulative effects of the many efficiencies and reductions WSSC implemented helped manage slowing revenue growth and tightening budgets.

These short-term fiscal guidelines and actions have been critical in shaping WSSC's Proposed Budget FY 2020. Together with the long-term guidelines elsewhere in this section, the short-term guidelines described here have allowed WSSC to construct a balanced, fiscally responsible budget consistent with current economic and fiscal realities while achieving the Commission's priorities.



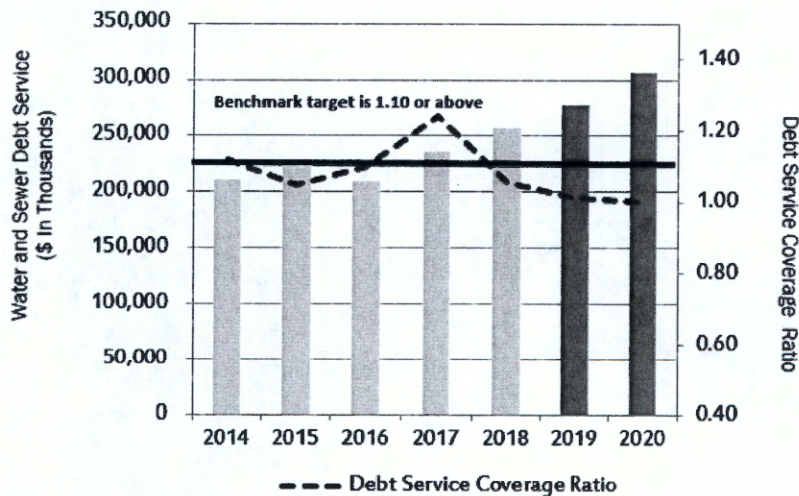
**WATER AND SEWER DEBT SERVICE AND PERCENT OF DEBT SERVICE TO WATER AND SEWER EXPENSES**



Water and sewer debt service as a percent of water and sewer expenses are increasing as a result of costs associated with the on-going large diameter and small diameter reconstruction programs and as a result of mandated costs related to the Sanitary Sewer Overflow (SSO) and Potomac Consent Decrees.

Percent of Debt Service = Water and Sewer Debt Service / Water and Sewer Expenditures  
Debt Service excludes General Bond Debt Service fund.

**WATER AND SEWER DEBT SERVICE AND DEBT SERVICE COVERAGE RATIO**



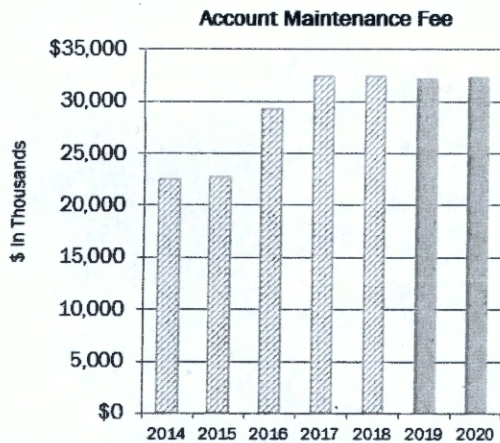
The debt service coverage ratio is decreasing due to flat or declining water consumption and increasing debt service costs. The ratio peaked in FY 2017, the first year the full infrastructure investment fees was collected. Debt service continues to increase to meet the needs of the large and small diameter reconstruction programs and as a result of mandated costs associated with the SSO and Potomac Consent Decrees.

Net Operating Revenues = Operating Revenue minus Operating Expenses (excluding Debt Service and PAYGO)  
Debt Service Coverage Ratio: Operating Revenues less Operating Expenses (excluding Debt Service) divided by the Debt Service.



REVENUES – RATE PAYER, READY-TO-SERVE, AND MISCELLANEOUS FEES AND CHARGES (CONTINUED)

**Account Maintenance Fee**



The Account Maintenance Fee (AMF) is charged to all customers, based on meter size, to defray costs of providing and reading a meter and rendering a water and/or sewer bill. The Proposed Budget FY 2020 assumes a 0.4% increase over the Approved Budget FY 2019, and \$32.3 million in available resources in FY 2020.

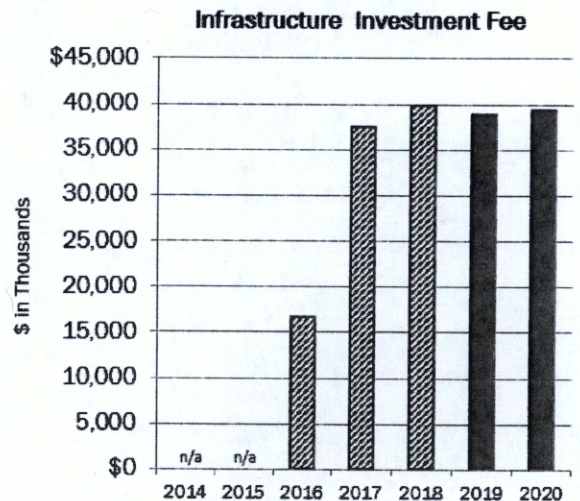
The AMF currently in place was developed in a 2014 study which resulted in a revised fee in FY 2016 based on meter size.

**Infrastructure Investment Fee**

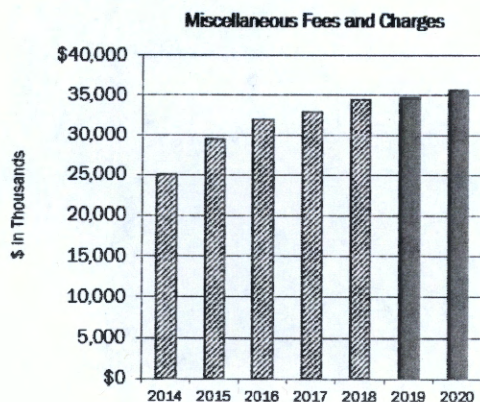
The Infrastructure Investment Fee (IIF) is a fixed fee that funds a portion of the debt service associated with the Commission’s water and sewer main reconstruction programs for the approved CIP.

The IIF was implemented in FY 2016 with the fee phased-in over two fiscal years. The Commission has held the fee at the FY 2017 level through FY 2020. The fee is based on meter size.

The Proposed Budget FY 2020 assumes a 1.1% increase over the Approved Budget FY 2019 due to population growth, resulting in \$39.3 million in available resources in FY 2020.



**Miscellaneous Fees and Charges**



Miscellaneous revenue derived from: plumbing and inspection fees; Rockville sewer use; late payment of bills; repair of Commission property (e.g., sewer mains) damaged by individuals; relocation of WSSC sewer lines and/or facilities for the benefit of other parties (e.g., state or county departments of transportation); and sewage haulers’ fees which are charged for discharging septic tank clean-out wastes into the WSSC’s sewerage system.

The Proposed Budget FY 2020 assumes Miscellaneous Fees and Charges will increase 2.8% from Approved Budget FY 2019, resulting in \$36.0 million in available resources in FY 2020.

REVENUES – RATE PAYER, READY-TO-SERVE, AND MISCELLANEOUS FEES AND CHARGES (CONTINUED)

**Interest Income**

Interest income includes pooled and non-pooled investment, plus interest income from other funds. WSSC operates an investment pool, directed by an investment manager, using an approved, prudent WSSC adopted investment policy. The Commission earned an average of 0.51% in interest income on its short-term portfolio for FY 2017 with estimated increases to 1.17% in FY 2018 and 1.94% to 2.94% from FY 2019 to FY 2021. This assumption is based on rate increases in the targeted federal funds rate by the FOMC each year between FY 2018 and FY 2021.

REVENUES AND TRANSFERS IMPACT ON DEBT SERVICE

**Front Foot Benefit and House Connection Assessments**

Front Foot Benefit (FFB) revenues are derived from charges assessed owners of property abutting water and/or sewer mains who derive a benefit from the construction of these water mains and sewers. This revenue pays a portion of General Construction Bonds.

**Current Front Foot Benefit Assessment Rates**

(\$ Per Foot)

	<u>Water</u>	<u>Sewer</u>
<b><u>Subdivision</u></b>		
First 150 Feet	\$4.00	\$6.00
Next 150 Feet	3.00	4.50
Over 300 Feet	2.00	3.00
<b><u>Business</u></b>		
All Footage	\$5.32	\$7.98

The rates established each year apply mainly to the assessable properties that benefit from that year's construction. The rates cannot be increased, and remain in effect during the life of the bonds issued to pay for the construction.

House Connections revenues are derived from deferred or amortized house connection payments to cover the cost of building lines from Commission lateral lines to the property line. These connection charges may be paid over a multi-year period, and revenues shown are those being collected from this method of payment until fully amortized.

The Proposed Budget FY 2020 assumes that Front Foot Benefit and House Connections revenue will decrease 19.2% from Approved Budget FY 2019.

## REVENUES AND TRANSFERS IMPACT ON DEBT SERVICE (CONTINUED)

### **Use of Fund Balance**

Using a portion of the fund balance is an essential tool for addressing an operating budget that may be impacted by short term revenue volatility, need for debt service relief, and/or extraordinary expense. The decision to use fund balance is at the discretion of WSSC management and may be done in conjunction with other actions to reduce costs or increase revenues. The minimum level of fund balance retained is governed under fiscal policy.

The Proposed Budget FY 2020 assumes that the Use of Fund Balance Transfer will decrease 2.1% from the Approved Budget FY 2019 of \$11.6 million to \$11.3 million.

### **Debt Service Offsets**

Reconstruction Debt Service Offset (REDO) is supported through surplus funds from the refinancing of General Construction Bond debt. The offset is used to pay a portion of the debt service for the Systems Reconstruction Program.

The Proposed Budget FY 2020 assumes REDO will decrease from the Approved Budget FY 2019 of \$12.5 million balance to \$11.6 million.

The System Development Charge (SDC) Debt Service Offset is related to prior fiscal years when capital "growth" expenditures exceeded the available SDC account balance. When there is such an occurrence, WSSC issues new SDC supported debt to cover this temporary gap rather than increasing the SDC. The portion of debt is then repaid (offset) through future SDC collections, as allowed by state law.

The Proposed Budget FY 2020 assumes that the SDC offset will increase 38.5% from Approved Budget FY 2019.

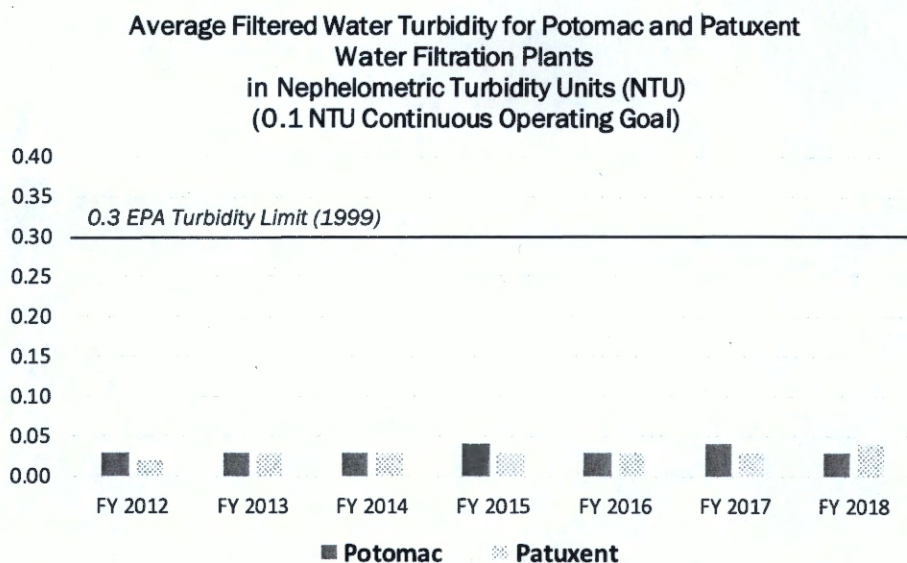


## PERFORMANCE OF KEY SERVICES

### Water Filtration and Treatment - Turbidity

One of the WSSC's primary goals is to provide a safe and reliable supply of drinking water that meets or exceeds the requirements of the Safe Drinking Water Act and other federal and state regulations. The WSSC has *never* exceeded a maximum contaminant level (MCL) or failed to meet a treatment technique (TT) requirement established by the U.S. Environmental Protection Agency (EPA) in accordance with the Safe Drinking Water Act.

In addition to traditional approaches to ensuring drinking water quality, the WSSC continues to place particular emphasis on addressing low-level contaminants such as disinfection byproducts, and maintaining low levels of turbidity (suspended sediment) to ensure public health protection. The Commission continues to work closely with local and national professional and research organizations, as well as with state and county agencies and the EPA, to ensure that our treatment methods are cost-efficient and consistent with current research findings.



The WSSC's continued participation in the Partnership for Safe Water Program is indicative of our commitment. A primary goal of this program is to maintain filtered water turbidity well below EPA established limits to effectively guard against *Cryptosporidium*. Although the WSSC was already meeting the then newly-established maximum average monthly turbidity requirement of 0.5 NTU, a substantial effort was made in FY 1992 to further improve water quality to prevent emerging problems associated with *Cryptosporidium*. The graph above shows the average turbidity for the Potomac and Patuxent Water Filtration Plants for FY 2012 through FY 2018. The EPA reduced the turbidity limit to 0.3 NTU in 1999, still well above the levels being achieved by the WSSC. A maximum water turbidity of 0.1 NTU level has been and will continue to be a key objective for the WSSC's Production Department.

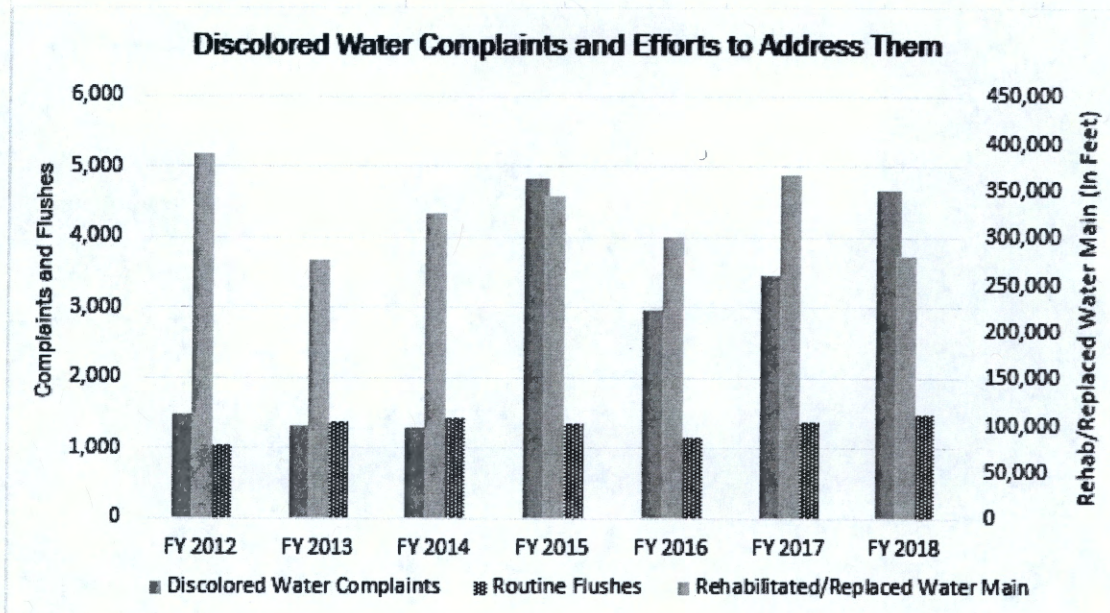
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PERFORMANCE OF KEY SERVICES (CONTINUED)

Discolored Water

Unlined cast iron pipe eventually leads to discolored water in the distribution system as the water chemically reacts with the pipe to form iron oxides (rust) and accumulates deposits of iron and manganese that can become dislodged. This is a serious inconvenience for the affected customers, limiting and disrupting their normal water use. To combat this problem, an aggressive program was begun in FY 1996 to periodically flush water mains in the affected areas to keep the water clear. At the same time, the Commission augmented its ongoing program to resolve such problems by mechanically cleaning and relining the old mains with a new cement mortar lining.

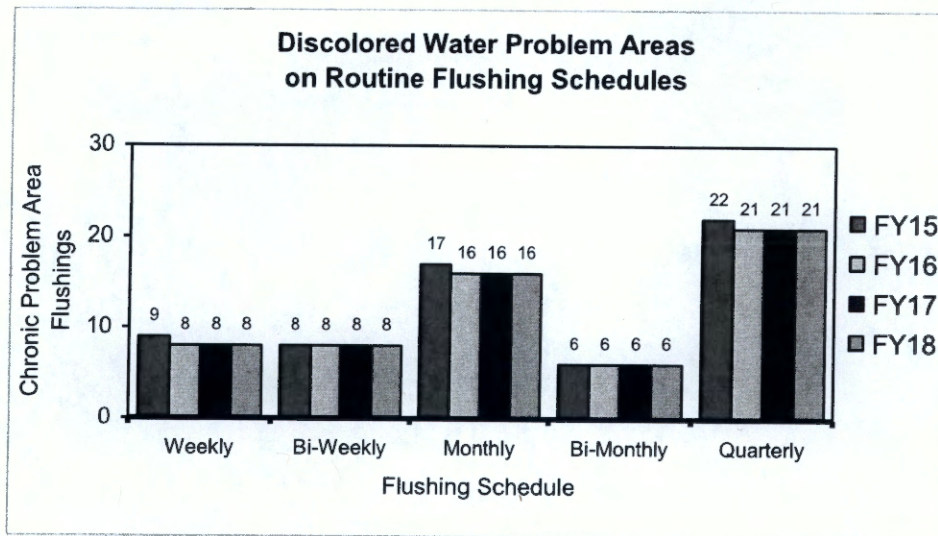


Beginning in FY 2001, the emphasis was shifted from cleaning and lining water mains to the more permanent solution of water main replacement, which is more involved and more time consuming than cleaning and lining. During FY 2004, even though rehabilitation and replacement efforts more than doubled, discolored water complaints increased as a result of the volume of water main breaks associated with winter weather and service changes resulting from the Patuxent Water Filtration Plant Upgrade. In recent years, the number of discolored water complaints has again increased substantially. An investigation of this issue has revealed significant increases in sodium and manganese coming from the Potomac River. The sodium concentration, up to 7 times higher than usual, was in the river due to the use of salt on roads and driveways in the winter months. The salt leached manganese from the soil and the increased manganese in the ground water reached the river and the intake at the Potomac Plant. The presence of high levels of manganese caused discoloration. The presence of sodium aggravated the corrosion of WSSC's aging water mains and contributed to increased discolored water complaints. The Commission is now treating water for manganese reduction, which should reduce discolored water complaints in the future.

The focus on rehabilitation and replacement efforts has been increased in recent years. In order to maintain the high level of water quality our customers expect, it is important to continue acceleration of water main replacement. This will continue to reduce the amount of flushing that is required. WSSC replaced 48.3 miles of distribution mains, and 5.0 miles of transmission mains during FY 2018.



PERFORMANCE OF KEY SERVICES (CONTINUED)



The graph to the left shows the number of chronic problem areas requiring regular flushing on a weekly, bi-weekly, monthly, bi-monthly, and quarterly basis since FY 2015. The number of areas with chronic discolored water problems has remained relatively constant over the years, with little variation in bi-weekly, monthly, bi-monthly, and quarterly flushings. Areas with weekly flushings have been reduced in number over the past few years.

Sewer Line Blockages

The goal of the Line Blockage Analysis (LBA) program is to prevent a customer who experiences a sewer backup due to a problem in the WSSC's main sewer line from suffering a second backup. When a customer has a sewer backup, a maintenance crew responds to clear the stoppage and assist in cleaning the basement. Response is generally within 2 hours, 24 hours a day, 7 days a week. The customer is contacted the following business day to see if additional assistance is needed and is advised that an LBA investigation has been initiated. The sewer main is immediately recleaned to preclude another backup during the investigation process, and a television camera is pulled through the line within 30 days to determine structural condition. All pertinent data is then reviewed and analyzed to determine what action is necessary to prevent a recurrence of the backup. After a decision is made, the customer is notified by letter of any planned action, and the appropriate preventive maintenance or rehabilitation action is scheduled and subsequently implemented.

The overall program objective is to prevent a second backup in 95% of the cases processed. For FY 2018, the Commission was successful in preventing a second backup in 99% of these cases. The Proactive Maintenance Program (PMP), along with technological advances such as the jet cam, has enabled the Commission to pursue its objective more diligently.

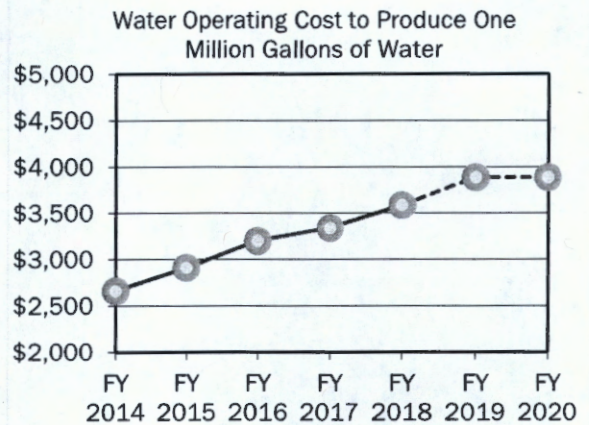
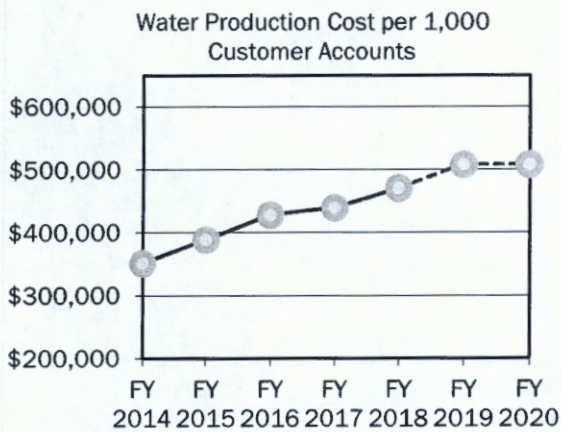
Sewer House Connection Renewal

The sewer house connection renewal program replaces sewer house connections when structural problems have caused customer backups. Damaged or deteriorated sewer house connections are replaced as necessary to ensure that customers do not suffer repeated sewer backups into their homes. The program objective is to prevent a second backup after the WSSC has confirmed there is a problem with the service. During FY 2018, the Commission replaced 640 connections, versus 1,198 connections in FY 2017.

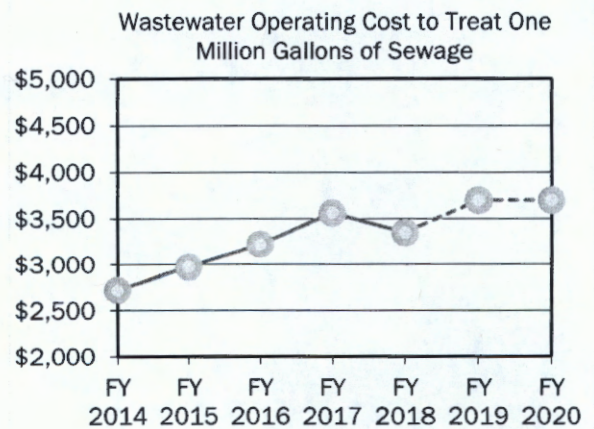
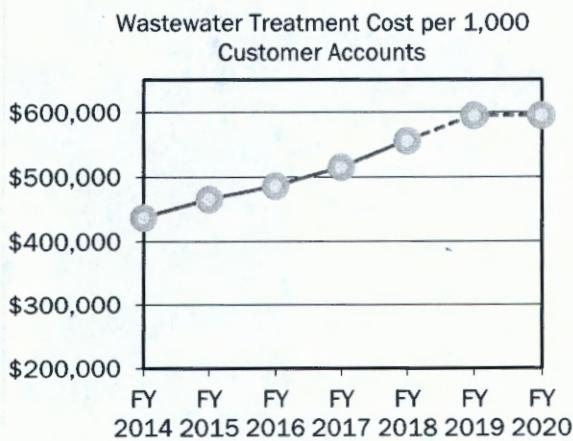


PERFORMANCE OF KEY SERVICES (CONTINUED)

Water & Wastewater Operations



The Commission's top priority is to continuously provide a safe and reliable supply of drinking water that meets all strict federal Safe Drinking Water Act standards. At the same time the Commission works closely with local and national professional and research organizations, as well as with state and county agencies and the EPA, to ensure that our treatment methods are cost-efficient. The graphs above show the annual Water Production Cost per 1,000 Customer Accounts and the annual Water Operating Cost to Produce One Million Gallons of Water for the FYs 2014 to 2018 as well as the projected costs for FYs 2019 and 2020.



The graphs above show the annual Wastewater Treatment Cost per 1,000 Customer Accounts and the annual Wastewater Operating Cost to Treat One Million Gallons of Sewage for the FYs 2014 to 2018 as well as the projected costs for FYs 2019 and 2020.



COMPARATIVE EXPENDITURES BY ORGANIZATIONAL UNIT – ALL OPERATING AND CAPITAL FUNDS

	FY 2019 Approved		FY 2020 Proposed	
	Workyears	Budget	Workyears	Budget
Commissioners Office/Corporate Secretary's Office*	2	\$ 390,768	2	\$ 381,879
Office of the Inspector General	10	1,348,142	10	1,572,084
General Manager's Office	9	1,598,034	9	1,640,475
WSSC STAT Office	4	684,350	4	668,784
General Counsel's Office	25	10,392,624	28	10,498,597
<b>Strategic Partnerships Branch</b>				
Customer Service Department	102	11,883,866	87	11,661,762
Intergovernmental Relations Office	4	723,476	4	753,746
Communications & Community Relations Office	19	3,111,669	19	3,071,397
Human Resources Office	36	6,054,817	36	7,921,259
Equal Employment Opportunities Office	1	228,994	1	226,400
<b>Operations Branch</b>				
Asset Management Office	8	3,468,777	8	3,010,023
Engineering & Construction Department	378	578,731,541	378	589,038,593
Police & Homeland Security Office	41	5,557,088	41	6,136,099
Production Department	332	160,340,070	332	161,028,691
Utility Services Department	499	126,454,367	512	138,619,476
<b>Administration Branch</b>				
Finance Department	64	7,691,928	64	7,720,450
Information Technology Department	104	70,230,482	104	56,107,369
General Services Department	94	15,617,308	93	18,509,401
Procurement Department	35	3,677,370	35	3,552,532
Office of Supplier Diversity & Inclusion	9	1,414,076	9	1,461,900
<b>Other</b>				
Non-Departmental - Finance		53,825,526		51,056,376
Retirement Trust Charge Back		-		(756,355)
Non-Departmental - Human Resources		34,524,900		31,139,492
Debt Service		294,348,690		319,882,700
PAYGO		31,015,512		31,016,000
Depreciation Expense **		14,592,374		-
<b>SUMMARY-TOTAL</b>	<b>1,776</b>	<b>\$ 1,437,906,749</b>	<b>1,776</b>	<b>\$ 1,455,919,130</b>

\*Commissioners (6) and Inspector General (1) not included in totals for workyears. However, funds shown in table do provide for associated workyear expenses.

\*\*Beginning in FY 2020, movable assets are budgeted as a direct expense at the organization level in lieu of depreciation.

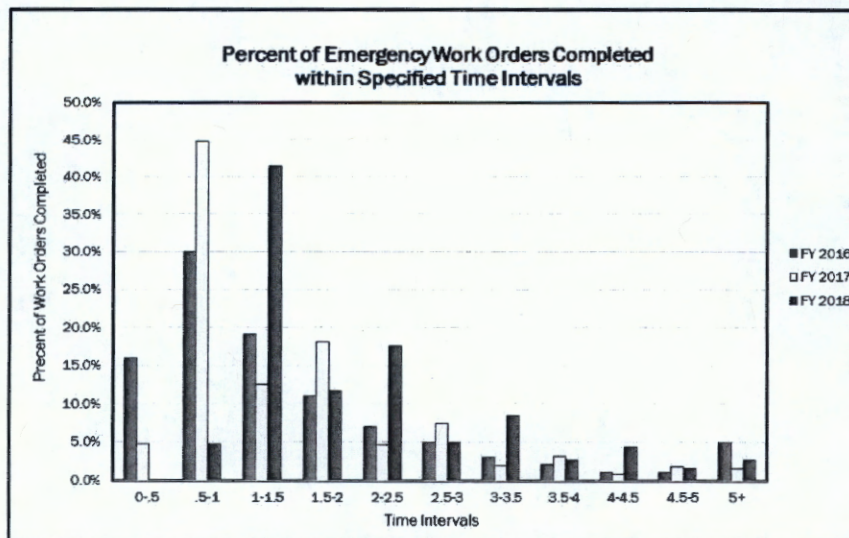
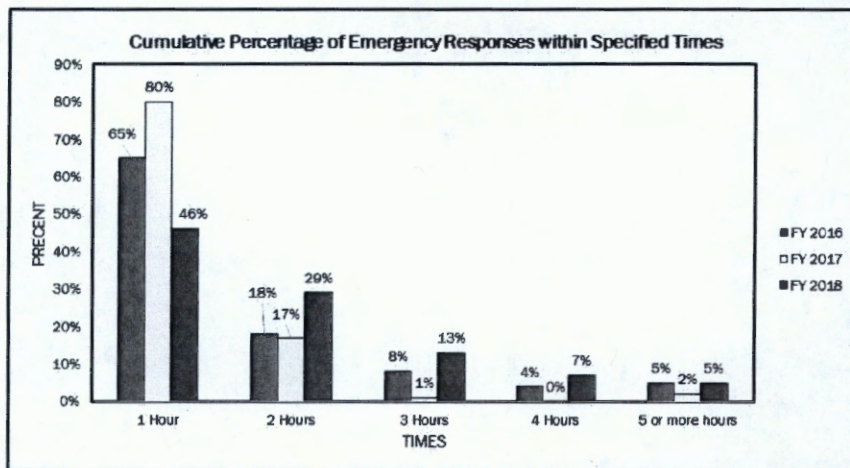
UTILITY SERVICES DEPARTMENT (CONTINUED)

**Highlights**

The Utility Services Department underwent a realignment of responsibilities to better meet customer needs and expectations. The WSSC Emergency Call Center was transferred to the Utility Services Department from the Customer Service Department to improve response to emergencies.

**Accomplishments**

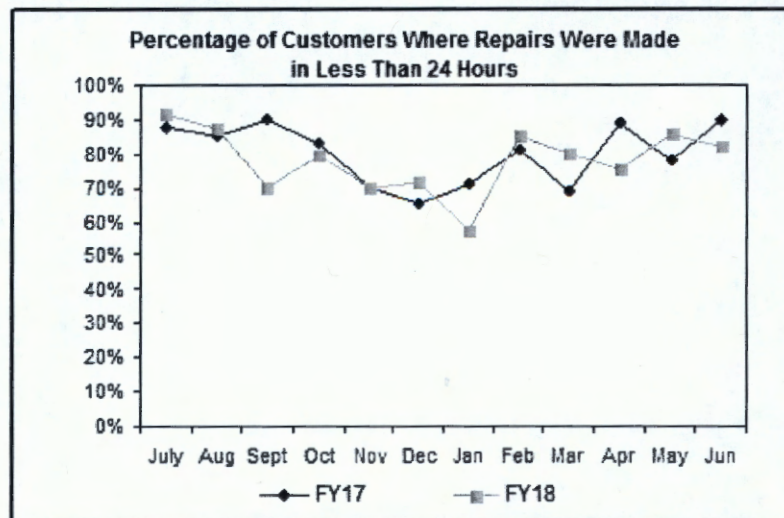
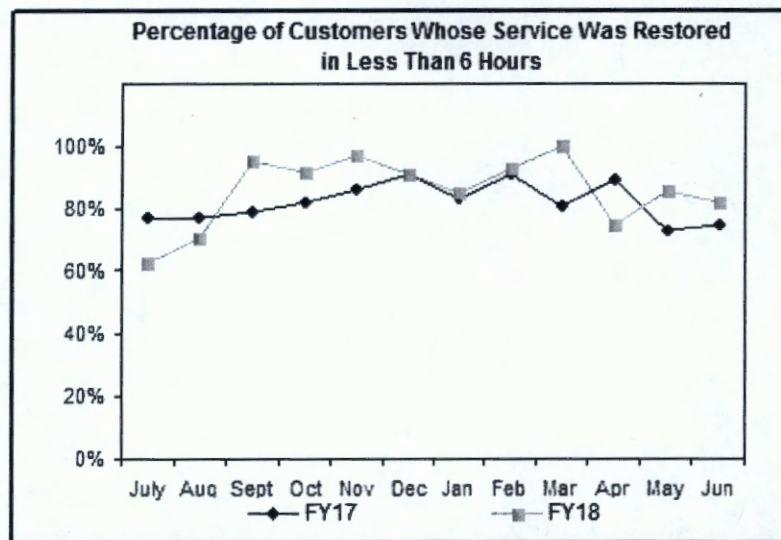
**Emergency Response:** During FY 2018, 41,702 emergency work orders were initiated in response to customer or system emergencies, a 30.7% increase from FY 2017. WSSC's objective is to provide a first response to these emergencies in less than 2 hours, a reasonable and necessary response time based upon feedback from customers. As illustrated in the top graph, WSSC responded to approximately 46.2% of emergency calls in less than 1 hour and to 75.4% in less than 2 hours with an average response time of 1.4 hours. The bottom graph shows the distribution of emergency work order completion times in FY 2018. Most emergency work orders required less than 2 hours to complete. The percentage of calls responded to within the 2-hour goal declined primarily due to the increased number of emergency work orders in FY 2018 over FY 2017.





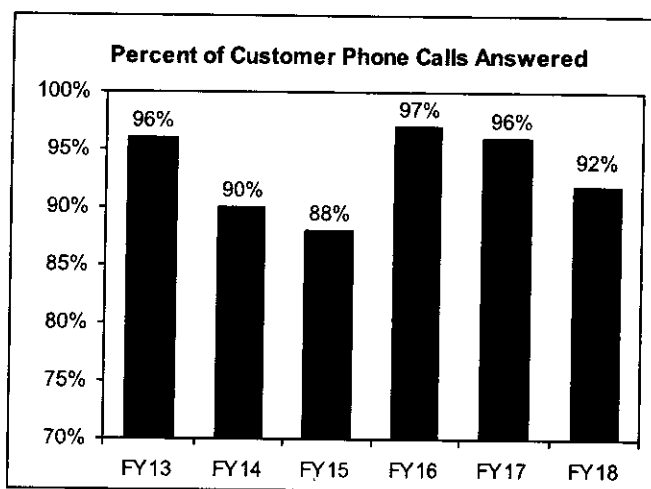
UTILITY SERVICES DEPARTMENT (CONTINUED)

**Restoration of Water Service:** The WSSC's objective is to restore normal service to our customers within 24 hours from the time the Commission is notified of an emergency, and to limit the actual time a customer is without water service to less than 6 hours. During FY 2018, 6,380 customers, or approximately 3% of the WSSC's customers, experienced a temporary suspension in water service while a water main was shut down following a water main break or other emergency. The top graph below indicates the percentage of affected customers whose water service was restored in less than 6 hours after a water main was shut down and returned to service. For FY 2018, the average time customers were without water service was 3.7 hours, with 86% having water service restored within the targeted 6-hour goal. The second graph below indicates the percentage of affected customers where repairs were completed in less than 24 hours to restore normal or permanent water service. The average time from notification of a problem to restoration of normal service was 15.4 hours for FY 2018, with 77.8% of customers having normal water service restored in less than the 24-hour goal.



UTILITY SERVICES DEPARTMENT (CONTINUED)

Customer Calls for Maintenance Assistance: During FY 2018, the Commission answered 91.8% of customer calls for maintenance assistance, as shown in the graph below. The unusually cold weather during this past winter resulted in a record number of calls into the Emergency Service Center, impacting the percentage of calls answered. Our goal continues to be a 95% response rate. We continue to work through several measures in furtherance of this goal. Cross-training agents from the Non-Emergency Call Center allows for greater flexibility in staffing and an improved knowledge base. A Geographic Information System (GIS) application enables customers to report emergencies using their smart phones. The system complements the Maintenance Management Information System (MMIS) by placing needed information about leaks and other emergencies at the dispatchers' fingertips, thereby allowing representatives to provide consistent and knowledgeable responses. Detailed help in determining the proper response to customers' problems and questions is included along with other frequently required reference materials, such as phone numbers and standard operating procedures.





## CUSTOMER CHARACTERISTICS

### TOP 20 CUSTOMERS – WATER AND SEWER USAGE CHARGES

Name of Customer	Total Collected	Annual Consumption
	(In \$'s) Amount	(In Kilo Gallons) Amount
National Institute of Health	\$ 12,170,803	1,305,772
University of Maryland	8,999,882	950,420
Prince George's County Public Schools	3,316,309	357,601
Andrews Air Force Base	3,059,122	317,237
Southern Management - Properties	2,918,920	467,473
General Services Administration (GSA)	2,645,611	277,493
Gaylord Hotels	2,334,116	247,338
Leisure World of Maryland	2,258,679	445,913
Riderwood Retirement	2,112,828	268,515
US Navy (Jones Bridge Road Account)	2,020,498	212,298
Southern Management Corp - Properties	1,898,096	315,632
Franklin Park Apartments	1,691,987	305,045
MGM National Harbor	1,599,257	165,360
National Institute of Standards and Technology (NIST)	1,574,040	192,897
US Navy (Rockville Pike Account)	1,570,173	162,208
Bdmg Quest Pg Owner, LLC - Apartments	1,353,485	213,412
Trinity Health Hospitals	1,323,096	136,885
Fort Detrick - Forest Glen Annex	1,126,326	116,356
MedImmune LLC	1,121,345	117,466
Prince George's County Correctional Center	1,014,494	105,592
<b>Total (20 largest Customers)</b>	<b>\$ 56,109,067</b>	<b>6,680,913</b>

Collected represents only water and sewer usage charges at FY 2018 rate.

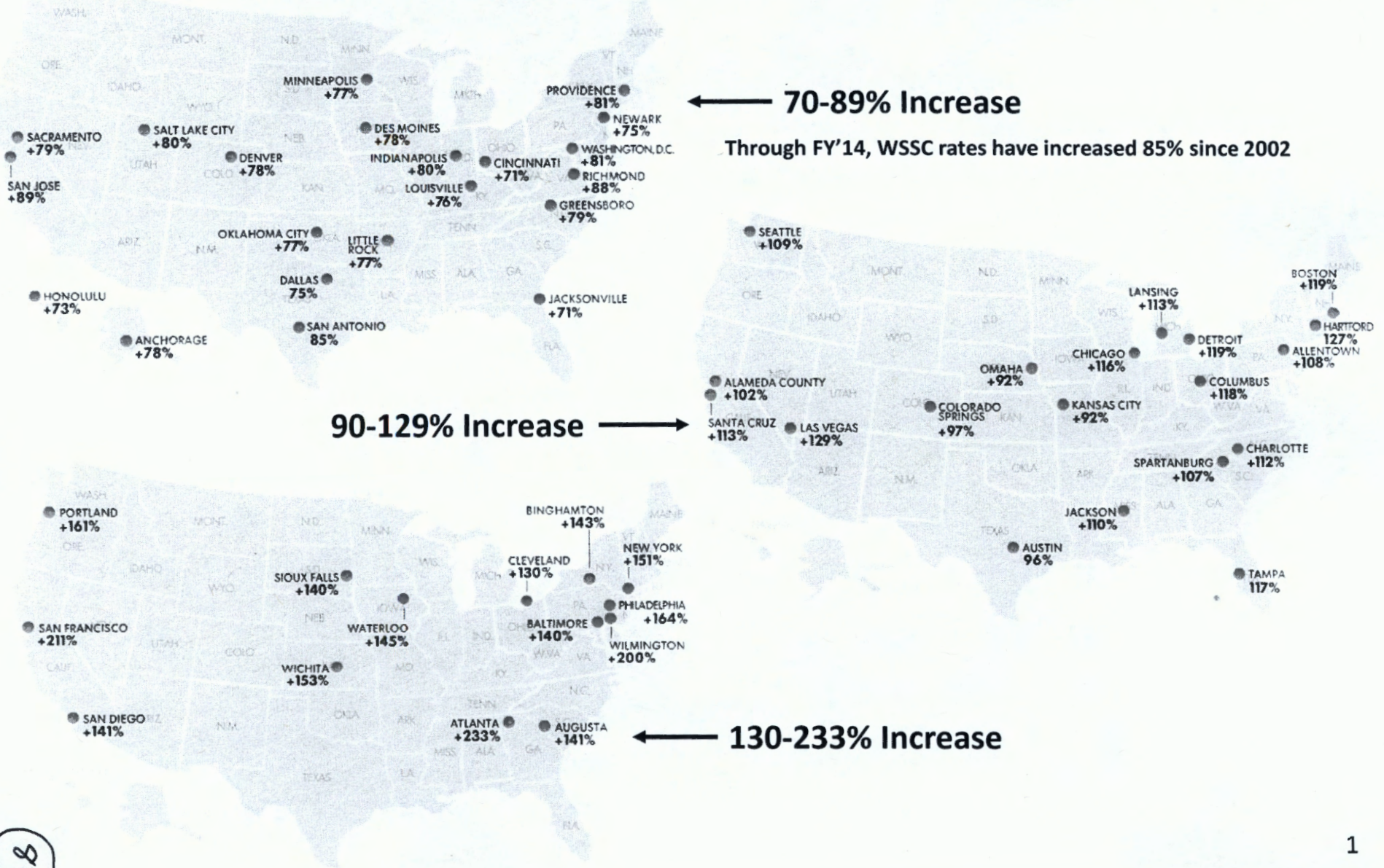
## CUSTOMER CHARACTERISTICS (CONTINUED)

### CUSTOMER ACTIVE ACCOUNTS

WSSC active customer accounts for Montgomery County and Prince George's County as of the end of the fiscal year.

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Customer Accounts both counties	439,805	441,480	443,827	445,385	448,061	451,904	456,078
<i>Percent Change (%)</i>		0.4%	0.5%	0.4%	0.6%	0.9%	0.9%
<b>By Type of Customer</b>							
Residential	415,200	416,781	418,982	420,458	422,965	426,611	430,552
<i>Percent Change (%)</i>		0.4%	0.5%	0.4%	0.6%	0.9%	0.9%
Commercial and Industrial	21,122	21,200	21,333	21,415	21,566	21,721	21,922
<i>Percent Change (%)</i>		0.4%	0.6%	0.4%	0.7%	0.7%	0.9%
Government	3,482	3,499	3,512	3,511	3,530	3,572	3,605
<i>Percent Change (%)</i>		0.5%	0.4%	0.0%	0.5%	1.2%	0.9%
<b>By Type of Property</b>							
Single-Family Residence	326,176	326,978	328,274	328,234	329,593	333,911	336,995
Townhouse	81,156	81,894	82,775	84,290	85,424	84,635	85,417
General Commercial	21,122	21,200	21,333	21,415	21,566	21,721	21,922
Garden Apartment	4,155	4,174	4,176	4,167	4,171	4,246	4,285
Multi-Unit (individually metered)	3,147	3,140	3,135	3,123	3,122	3,191	3,221
High-Rise Apartment	421	432	444	448	455	448	452
Other	<u>3,628</u>	<u>3,663</u>	<u>3,690</u>	<u>3,708</u>	<u>3,730</u>	<u>3,752</u>	<u>3,786</u>
	439,805	441,480	443,827	445,385	448,061	451,904	456,078

# National Trends – Rate Increases Since 2002



82

C#, VY, SF, KL  
11

### FY'20 Operating Budget Testimony- 4/8/19 Gordie Brenne

The FY'20 budget has unique challenges to balance the risks of uncertain revenue projections, while funding new transition strategies, keeping existing effective strategies in place, and scaling back less effective programs and strategies. (We like the cross-walk to new transition strategies in the Executive's budget, but would like to see the costs and results of existing strategies summarized as well).

One basic problem is our revenues are falling under the worn out "smart growth" policies of the past. The number of jobs in the County have grown only 2.7% since 2008, second worst in the region. Transition strategies outlined for economic development of small business are the same tired old approaches that haven't worked in the past to expand our stagnant tax base, or grow the bio-science business network. At the same time the County, MCPS and WSSC budgets continue to bloat-out, with hefty County pay raises, paid for with delayed retiree health care contributions (OPEB), and no productivity improvements to show for it. We've stopped treading water and are sinking fast.

Make the following adjustments to key strategies to save hundreds of millions in wasted spending and improve the lives of our residents:

1. **MCPS**- hold the line on spending above MoE until a plan to narrow the achievement gap is completed and tied to the budget. Why keep throwing money at MCPS when the gap grew last year in math and flatlined in reading? (The state ESSA plan requires the gap to cut in half by 2030, but, MCPS has no plan to do this, and the requested \$51M increase over FY'19 does not include new strategies for individual instruction needed to narrow the achievement gap (an approach supported by the NAACP transition team representatives). The MCPS request has just \$16M for academic strategic accelerators, less than 1% of the budget, but doesn't say how this will narrow the gap (Table 1A). 45% of every dollar continues to be spent on overhead which doesn't lower the gap. None of the \$70M the county pays from it's own budget for nurses, police, and special academic assistance programs are linked to MCPS strategies to narrow the gap.
2. **Pre-K**- instead of spending \$7M more, redirect funds from the costly centralized delivery model and use a more decentralized approach to scale-up increased Pre-K enrollment, shifting service delivery to local control in neighborhoods where eligible kids live, and relying more on non-profits and private service providers. (Currently MCPS spends \$7M to educate 2,395 kids, and Head Start enrolls just 648, for a total of just 3,049 kids enrolled in Pre-K, far below the est. need of 30,000 kids. New approaches are needed along with performance measures of academic rigor to assure the benefit doesn't disappear by 3<sup>rd</sup> grade).
3. **Public Safety**- the Police budget is up 5.4% and Fire is up 2.3%., largely driven by big pay increases. The Police budget reduces the bloated investigation unit by 8 people (297 to 289), but closure rates remain unchanged and are comparable to Fairfax which has 1/3 fewer investigators. The number of patrol officers is dropping, while the "Management Services" Division increases FTEs from 430 to 454 (likely related to 911 services). Instead of upgrading the current 911 service, use Fairfax's successful independent 911 operation as a model for transforming our operation to lower costs and improve response capabilities. (Incredibly, the Fire Dept. still has overtime issues and 20 new career positions are proposed to manage shift transition's with volunteer staff (pg 43-11). Take a fresh look at the cost-effectiveness of increasing career vs. volunteer positions).
4. **WSSC**- it's time to take a stand on behalf of all rate payers and say no to the budget request for an above market 5% rate increase. Why? It gets worse. Management projects rate increases of 6% in the Six Year Financial Forecast (pg 15-4). Our water rates are double Fairfax, our primary economic development competitor, and insolvency and a taxpayer bailout looms. (Insist that new cost controls called for in the 2016 Benchmark report and return on investment criteria for capital spending be implemented. (An independent review of the Council's process for setting operating and capital spending guidance, with a return on investment project ranking would be a good first step to reign-in out of control spending).



**WSSC RESPONSE TO QUESTION FROM MONTGOMERY COUNTY TAXPAYERS LEAGUE – 2/20/2019**

<http://parentscoalitionmc.blogspot.com/2019/02/montgomery-county-taxpayers-league.html>

**6. WSSC-** *A billion dollar operation, WSSC has water rates double that of Fairfax Water and spends on projects that have either no rate of return or one that's lower than the cost of capital. We, as rate payers, subsidize the resulting debt service. Consequently, we have endured a never ending spiral of above market rate increases (132% since 2003). But WSSC continues to argue in its proposed budget (1/15/19) that it cannot calculate ROI or rank projects based on their returns. In a 2/7 hearing about the CIP plan that involved no substantive discussion of major projects, the T&E chair remarked that he would stay in his "swim lane," and would look to the state delegation's Metro committee for oversight. Does the Executive plan to also defer to the state? Would the Executive support shifting rate making away from local politicians to the state's Public Service Commission?*

1. *WSSC has water rates double that of Fairfax Water:*
  - A comparison of water rates to Fairfax is problematic because the Fairfax water rates have only one tier and include a seasonal charge. The current WSSC rate structure has sixteen tiers and no seasonal rates. Therefore, a comparison of bill impact rather than just rates is more relevant.
  - As the attached bill comparison chart indicates, for average residential use of 55 gallons per day per person for the average size household, the WSSC bill is actually the lowest in the region compared to Baltimore, DC Water, Arlington, and Fairfax.
  - I have also attached a chart prepared by DC Water and is included in its Comprehensive Annual Financial Report to compare the average residential bill with other regional utilities. In this analysis, WSSC's average bill is well below the regional average including Baltimore and DC Water though slightly above Fairfax Water.
  - Fairfax Water, being established in 1957, has relatively new infrastructure compared to WSSC which was established 100 years ago in 1918.
  - By comparison, portions of WSSC's buried water mains are over 80 years old and nearly 40% of our water & sewer main (11,000 miles) are over 50 years old. The WSSC water main network is over 40% larger than Fairfax's (5,794 miles vs. 3,995 miles) which imposes significant, additional maintenance and infrastructure obligations on WSSC.
  - Fairfax Water is not responsible for wastewater treatment as WSSC is. While sewer rates are set separately, having this responsibility drives a large portion of WSSC's overhead costs including human resources, benefits, legal and procurement obligations.
  
2. *WSSC ... spends on projects that have either no rate of return or one that's lower than the cost of capital. We, as rate payers, subsidize the resulting debt service.*
  - WSSC is a state created agency, supported primarily by the water and sewer rates, and is not intended to be a profit oriented corporation.
  - Therefore an ROI standard would not be an appropriate criteria for most of our capital projects which are built to provide water and sewer service to our

**WSSC RESPONSE TO QUESTION FROM MONTGOMERY COUNTY TAX PAYERS  
LEAGUE – 2/20/2019**

customers and comply with environmental regulations and requirements in the most cost effective manner possible.

- When appropriate, we do calculate the ROI or payback on certain projects including the Piscataway Bio-Energy project, the Advanced Meter Infrastructure (AMI) Project, and the Energy Performance Project.
- However, we subject all proposed capital projects to a rigorous screening, prioritization, and evaluation process.
- WSSC has an extensive Enterprise-wide Asset Management Planning (AMP) process.
  - Each area of capital investment (e.g. water buried assets, water resource recovery facility (WRRF), and the Lab) has an Asset Management Plan that is updated annually to identify the lowest life-cycle cost option for maintaining and replacing assets while still achieving the expected level of service to our customers.
  - After completing the rigorous AMP review process all requested projects are further evaluated and prioritized based on customer impact, project status, regulatory or judicial mandates, business risk, and lifecycle cost before inclusion in the Six-Year Capital Improvements Plan.

3. *Consequently, we have endured a never ending spiral of above market rate increases (132% since 2003).*

- As indicated in the chart below, Water & Sewer rate increases since FY2003 have actually been 81.25% or an average of 4.78% per year. The chart below also indicates that from FY99 through FY04 there were no increases.
- The attached Wall Street Journal article from March 15, 2018 discusses some of the reasons behind the need for continuing water rate increases including aging infrastructure and environmental compliance requirements. However, the article didn't state another reason which is that water production is either flat or declining despite increasing population due to water efficient fixtures in residential and commercial buildings and conservation oriented rate structures. The table below shows that the average daily water production at WSSC has actually decreased since FY1999 by 5.0% despite population increasing by over 22% in Montgomery County over that same period of time.
- While decreasing water production shows that the County's water conservation efforts have been successful, it also is a significant fiscal challenge. For example, if Montgomery County's Assessable Base had not increased by nearly 138% since FY1999, the County's tax rate would have to be increased by 155% from \$0.999/\$100 AV to \$2.55/\$100 AV to raise the FY18 estimated tax levy of \$1.679 Billion. Unfortunately, water and sewer rate increases are necessary to provide resources for rising costs due to environmental compliance, commodity costs increases, and timely replacement of aging infrastructure.
- To reduce the pressure on rate increases WSSC has recently initiated a Business Development program to identify alternative sources of revenue through

**WSSC RESPONSE TO QUESTION FROM MONTGOMERY COUNTY TAX PAYERS  
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public-private partnership opportunities, marketing environmental laboratory services to state and local governments and private industry, and selling proprietary software.

- Additionally, WSSC has several successful and ongoing cost savings strategies including the following:
  - Strategic Sourcing Teams<sup>1</sup> identified nearly \$32 million in operating cost reductions and cost avoidances through FY'18
  - Group Insurance plan design changes, including implementation of an employer group waiver (EGWP) for retiree prescription costs, identified \$4.3 million in savings FY'17 – FY19
  - Debt refunding during FY18 achieved \$16.7 million in savings and a planned March 2019 debt refunding is estimated to achieve \$2.7 million in savings
  - Overtime has been reduced by \$2 million since FY17 due to changes in shift scheduling, inclement weather staffing, and improved management oversight.
  - The Energy Performance Program since FY04 has implemented \$17.5 million in ongoing savings with additional projects for FY20 planned to produce \$700,000 in additional annual savings
  - Management of Workers Compensation claims has resulted in:
    - 50% reduction in lost workday cases
    - 65% reduction in lost work days
    - 54% reduction in costs
  - There has been no increase in WSSC positions since FY'17
  - WSSC's Innovation program has piloted several new technologies that would improve environmental compliance, identify leaking water pipes more cost effectively, and provide over \$300,000 in chemical treatment costs savings per year.<sup>2</sup>

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<sup>1</sup> The WSSC Procurement Department's Strategic Sourcing program manages the total cost of operation for WSSC by using a fact-based and data-driven process focused on cost savings, process improvements, supplier innovation, and category management. Cross-functional teams led by strategic sourcing specialists work collaboratively to understand WSSC's internal needs via spend analytics, process gap-analysis, and defining stakeholder requirements.

<sup>2</sup> For more information on the WSSC Innovation Program please see the briefing provided to the Council's T&E Committee on February 7, 2019 in this link:

[https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2019/20190207/20190207\\_TE1.pdf](https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2019/20190207/20190207_TE1.pdf)

**WSSC RESPONSE TO QUESTION FROM MONTGOMERY COUNTY TAX PAYERS  
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	<b>Water</b>		<b>W&amp;S</b>
	<b>Production Ave MGD</b>	<b>W&amp;S Rate</b>	<b>Rate Cumulative</b>
FY 1999	172.7	0.00%	0.00%
FY 2000	163.6	0.00%	0.00%
FY 2001	165.2	0.00%	0.00%
FY 2002	163.3	0.00%	0.00%
FY 2003	166.4	0.00%	0.00%
FY 2004	166.9	0.00%	0.00%
FY 2005	168.0	3.00%	3.00%
FY 2006	170.5	2.50%	5.50%
FY 2007	169.8	3.00%	8.50%
FY 2008	168.2	6.50%	15.00%
FY 2009	162.3	8.00%	23.00%
FY 2010	168.7	9.00%	32.00%
FY 2011	175.0	8.50%	40.50%
FY 2012	168.7	8.50%	49.00%
FY 2013	161.2	7.50%	56.50%
FY 2014	160.6	7.25%	63.75%
FY 2015	162.9	5.50%	69.25%
FY 2016	164.2	1.00%	70.25%
FY 2017	163.1	3.00%	73.25%
FY 2018	163.9	3.50%	76.75%
FY 2019	164.0	4.50%	81.25%
<b>Average:</b>	166.2	3.87%	Since 1999
<b>Average:</b>	166.1	4.78%	Since FY2003

*In a 2/7 hearing about the CIP plan that involved no substantive discussion of major projects, the T&E chair remarked that he would stay in his "swim lane," and would look to the state delegation's Metro committee for oversight. Does the Executive plan to also defer to the state?*

- This response was made concerning the Advanced Meter Infrastructure (AMI) project and was specifically related to an opt-out provision proposed by Delegate Carr, which the state delegation would address. This comment makes it seem as if the state approves WSSC projects, which is not accurate. The WSSC Operating and Capital Budgets are approved by Prince George's County and Montgomery County. The Capital Budget and specific projects were discussed extensively by the T&E Committee and included in the staff analytical packet.<sup>3</sup>

*Would the Executive support shifting rate making away from local politicians to the state's Public Service Commission?*

- WSSC recommends against this since this proposal would, in effect, transfer local authority for setting water and sewer rates to a State agency with no required local representation and therefore no direct knowledge of local needs and priorities.

<sup>3</sup> The staff analytical packet can be found at:

[https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2019/20190207/20190207\\_TE2.pdf](https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2019/20190207/20190207_TE2.pdf)



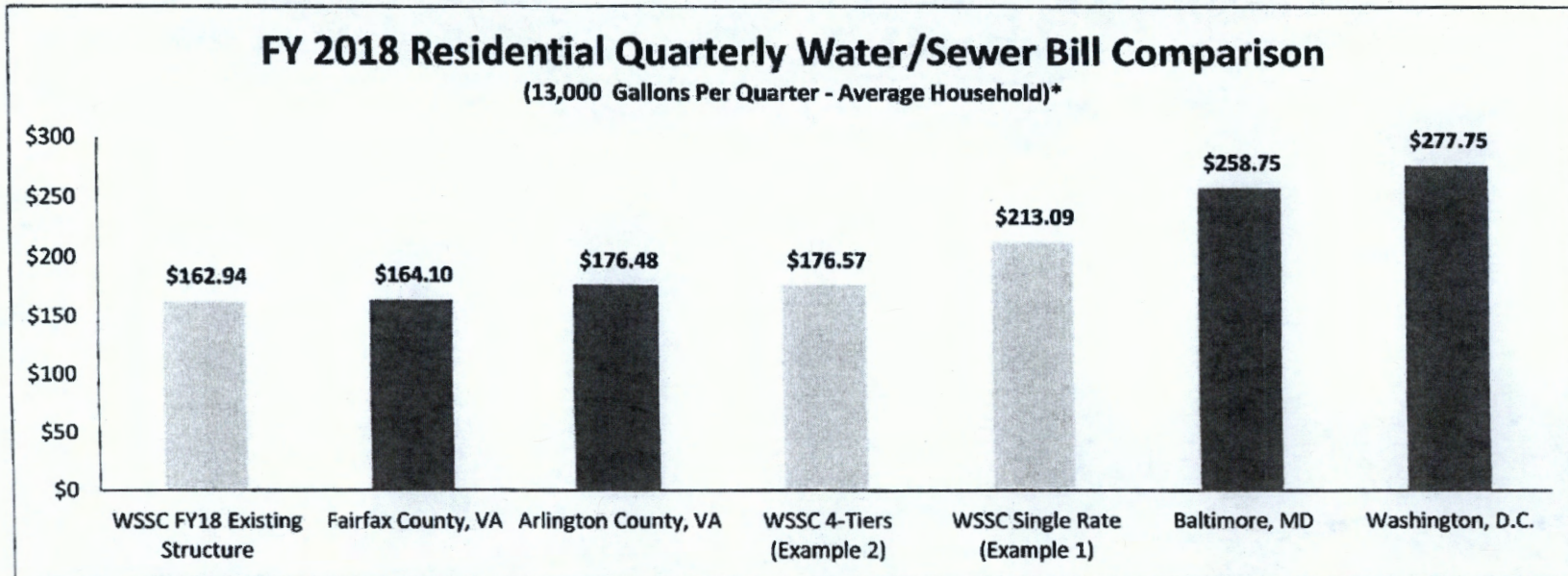
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- According to information on its own website, the PSC has very limited experience in water & sewer rate setting and "...regulates the rates of 22 water and water/sewage systems. The 22 water companies under the Commission's jurisdiction represent a small percentage of the population, with approximately 11,000 residential customers. The majority of water systems in Maryland are municipal systems whose supply, infrastructure, customer care, and rates are not regulated by the Commission."<sup>4</sup>
- WSSC, Montgomery County and Prince George's County are in the best position to determine the budget and rate setting for WSSC and not a State agency.

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<sup>4</sup> <https://www.psc.state.md.us/water/>

# Quarterly Bill Comparisons



\*Approximately 2.6 people

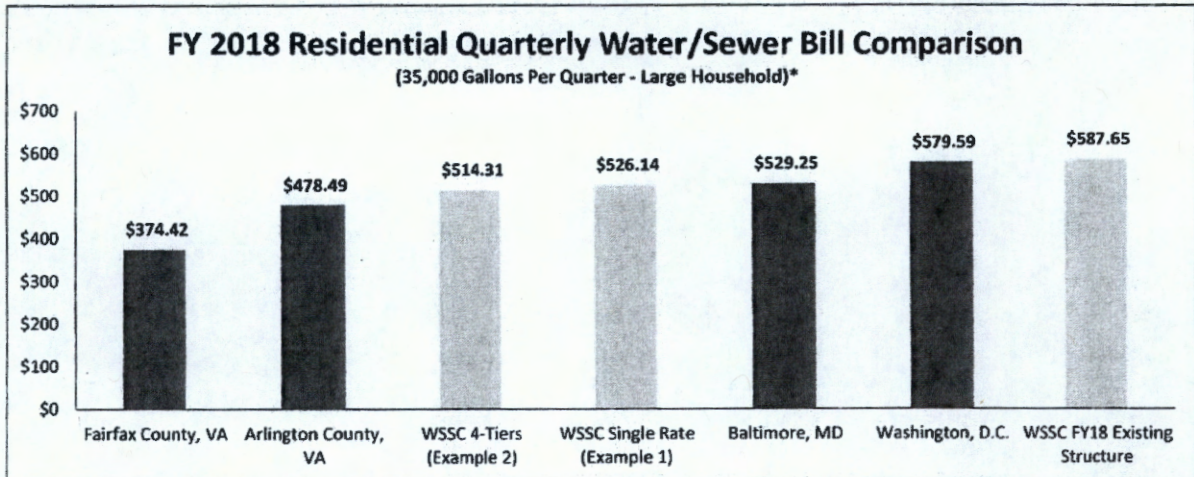
Quarterly fixed charges included in bill estimates above are based on 3/4" meters.

WSSC		WSSC		Baltimore City		DCWater	
4-Tier Volumetric Charge	\$148.57	Uniform Charge	\$185.00	Volumetric Charge	\$159.83	Volumetric Charge	\$167.88
Account Maintenance Fee	18	Account Maintenance Fee	16	Account Fee	8.94	Customer Metering Fee	12.18
Infrastructure Investment Fee	12	Infrastructure Investment Fee	12	Infrastructure	89.98	Water System replacement Fee	22.17
						Clean Rivers Impervious Area Charge	75.54
<b>Total Charges - WSSC</b>	<b>\$176.57</b>	<b>Total Charges - WSSC</b>	<b>\$213.09</b>	<b>Total Charges - Baltimore City</b>	<b>\$258.75</b>	<b>Total Charges - DCWater</b>	<b>\$277.75</b>

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# Quarterly Bill Comparisons



\*Approximately 7.0 people

Quarterly fixed charges included in bill estimates above are based on 3/4" meters.

WSSC		WSSC		Baltimore City		DCWater	
4-Tier Volumetric Charge	\$486.31	Uniform Charge	\$498.14	Volumetric Charge	\$430.33	Volumetric Charge	\$489.70
Account Maintenance Fee	18	Account Maintenance Fee	16	Account Fee	8.94	Customer Metering Fee	12.18
Infrastructure Investment Fee	12	Infrastructure Investment Fee	12	Infrastructure	89.88	Water System replacement Fee	22.17
						Clean Rivers Impervious Area Charge	75.64
<b>Total Charges - WSSC</b>	<b>\$514.31</b>	<b>Total Charges - WSSC</b>	<b>\$526.14</b>	<b>Total Charges - Baltimore City</b>	<b>\$529.25</b>	<b>Total Charges - DCWater</b>	<b>\$579.59</b>

WSSC

**Example 1:**

Existing Rate Structure

Average Daily Consumption in gallons (ADC)	137
ADC * 365 (Gal/Year)	50,005
Gallons per quarter	12,501
Gallons per quarter rounded	13,000
Quarterly Gal * 4 (Annual gallons)	52,000
Annual gallons + 1,000	53
Annual volumetric cost: 52 * 10.38(rate)	\$ 539.76
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill	\$ 651.76
Quarterly Bill (Annual Bill ÷ 4)	\$ 162.94

Uniform Rate

Quarterly Gal * 4 (Annual gallons)	52,000
Annual Tier 1 gallons divided by 1,000	52.000
Annual bill for Tier 1 (52*\$14.23)	\$ 739.96
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill (\$739.96+\$64+\$48)	\$ 851.96
Quarterly Bill (Annual Bill ÷ 4)	\$ 212.99
Presentation (difference due to rounding)	\$ 213.09

Existing Rate Structure

Average Daily Consumption in gallons (ADC)	385
ADC * 365 (Gal/Year)	140,525
Gallons per quarter	35,131
Gallons per quarter rounded	35,000
Quarterly Gal * 4 (Annual gallons)	140,000
Annual gallons + 1,000	141
Annual volumetric cost: 140 * \$15.99(rate)	\$ 2,238.60
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill	\$ 2,350.60
Quarterly Bill (Annual Bill ÷ 4)	\$ 587.65

Uniform Rate

Quarterly Gal * 4 (Annual gallons)	140,000
Annual Tier 1 gallons divided by 1,000	140.000
Annual bill for Tier 1 (140*\$14.23)	\$ 1,992.20
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill (\$1992.20+\$64+\$48)	\$ 2,104.20
Quarterly Bill (Annual Bill ÷ 4)	\$ 526.05
Presentation (difference due to rounding)	\$ 526.14

Existing Rate Structure

Average Daily Consumption in gallons (ADC)	11,638
ADC * 365 (Gal/Year)	4,247,870
Gallons per quarter	1,061,968
Gallons per quarter rounded	1,062,000
Quarterly Gal * 4 (Annual gallons)	4,248,000
Annual gallons + 1,000	4,249
Annual volumetric cost: 52 * 19.36(rate)	\$ 82,241.28
Annual Account Maintenance Fee	\$ 616.00
Annual Infrastructure Investment Fee	\$ 5,060.00
Annual Bill	\$ 87,917.28
Quarterly Bill (Annual Bill ÷ 4)	\$ 21,979.32

4-Tier Increasing Block

Quarterly Gal * 4 (Annual gallons)	4,248,000
Annual gallons billed at 1st tier (99*365)	36,135
Annual Tier 1 gallons divided by 1,000	36.135
Annual bill for Tier 1 (36.135*\$10.62)	\$ 383.75
Annual gallons billed at Tier 2 (90,885-36,135)	54,750
Annual Tier 2 gallons divided by 1,000	54.750
Annual bill for Tier 2 (15.865*\$13.27)	\$ 726.53
Annual gallons billed at Tier 3 (8999*365-249*365)	3,193,750
Annual Tier 3 gallons divided by 1,000	3,193.750
Annual bill for Tier 3 (49.125*\$17)	\$ 54,294.75
Annual gallons billed at Tier 4 (4,248,000-3,284,635)	963,365
Annual Tier 4 gallons divided by 1,000	963.365
Annual bill for Tier 4 (1108.25*\$19.12)	\$ 18,419.54
Annual Account Maintenance Fee	\$ 616.00
Annual Infrastructure Investment Fee	\$ 5,060.00
Annual Bill	\$ 79,499.58
Quarterly Bill (Annual Bill ÷ 4)	\$ 19,874.89



WSSC

**Example 2:**

WSSC Existing Rate Structure

Average Daily Consumption in gallons (ADC)	137
ADC * 365 (Gal/Year)	50,005
Gallons per quarter	12,501
Gallons per quarter rounded	13,000
Quarterly Gal * 4 (Annual gallons)	52,000
Annual gallons ÷ 1,000	52
Annual volumetric cost: 52 * 10.38(rate)	\$ 539.76
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill	\$ 651.76
Quarterly Bill (Annual Bill ÷ 4)	\$ 162.94

4-Tier Increasing Block

Quarterly Gal * 4 (Annual gallons)	52,000
Annual gallons billed at 1st tier (99*365)	36,135
Annual Tier 1 gallons divided by 1,000	36.135
Annual bill for Tier 1 (36.135*\$10.62)	\$ 383.75
Annual gallons billed at Tier 2 (52,000-36,135)	15,865
Annual Tier 2 gallons divided by 1,000	15.865
Annual bill for Tier 2 (15.865*\$13.27)	\$ 210.53
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill (\$383.75+\$210.53+\$64+\$48)	\$ 706.28
Quarterly Bill (Annual Bill ÷ 4)	\$ 176.57

WSSC Existing Rate Structure

Average Daily Consumption in gallons (ADC)	385
ADC * 365 (Gal/Year)	140,525
Gallons per quarter	35,131
Gallons per quarter rounded	35,000
Quarterly Gal * 4 (Annual gallons)	140,000
Annual gallons ÷ 1,000	140
Annual volumetric cost: 140 * \$15.99(rate)	\$ 2,238.60
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill	\$ 2,350.60
Quarterly Bill (Annual Bill ÷ 4)	\$ 587.65

4-Tier Increasing Block

Quarterly Gal * 4 (Annual gallons)	140,000
Annual gallons billed at 1st tier (99*365)	36,135
Annual Tier 1 gallons divided by 1,000	36.135
Annual bill for Tier 1 (36.135*\$10.62)	\$ 383.75
Annual gallons billed at Tier 2 (90,885-36,135)	54,750
Annual Tier 2 gallons divided by 1,000	54.750
Annual bill for Tier 2 (54.750*\$13.27)	\$ 726.53
Annual gallons billed at Tier 3 (140,000-90,885)	49,115
Annual Tier 3 gallons divided by 1,000	49.115
Annual bill for Tier 3 (49.115*\$17)	\$ 834.96
Annual Account Maintenance Fee	\$ 64.00
Annual Infrastructure Investment Fee	\$ 48.00
Annual Bill (\$383.75+\$726.53+\$834.96+\$64+\$48)	\$ 2,057.24
Quarterly Bill (Annual Bill ÷ 4)	\$ 514.31

WSSC Existing Rate Structure

Average Daily Consumption in gallons (ADC)	11,638
ADC * 365 (Gal/Year)	4,247,870
Gallons per quarter	1,061,968
Gallons per quarter rounded	1,062,000
Quarterly Gal * 4 (Annual gallons)	4,248,000
Annual gallons ÷ 1,000	4,248
Annual volumetric cost: 52 * 19.36(rate)	\$ 82,241.28
Annual Account Maintenance Fee	\$ 616.00
Annual Infrastructure Investment Fee	\$ 5,060.00
Annual Bill	\$ 87,917.28
Quarterly Bill (Annual Bill ÷ 4)	\$ 21,979.32

4-Tier Increasing Block

Quarterly Gal * 4 (Annual gallons)	4,248,000
Annual gallons billed at 1st tier (99*365)	36,135
Annual Tier 1 gallons divided by 1,000	36.135
Annual bill for Tier 1 (36.135*\$10.62)	\$ 383.75
Annual gallons billed at Tier 2 (90,885-36,135)	54,750
Annual Tier 2 gallons divided by 1,000	54.750
Annual bill for Tier 2 (54.750*\$13.27)	\$ 726.53
Annual gallons billed at Tier 3 (8995*365-249*365)	3,193,750
Annual Tier 3 gallons divided by 1,000	3,193.750
Annual bill for Tier 3 (49.115*\$17)	\$ 834.96
Annual gallons billed at Tier 4 (4,248,000-3,284,635)	963,365
Annual Tier 4 gallons divided by 1,000	963.365
Annual bill for Tier 4 (1108.25*\$19.12)	\$ 21,187.44
Annual Account Maintenance Fee	\$ 616.00
Annual Infrastructure Investment Fee	\$ 5,060.00
Annual Bill	\$ 29,499.58
Quarterly Bill (Annual Bill ÷ 4)	\$ 7,374.89

1 ccf=748 gallons  
4 ccf = 2992 gallons

**DCWater**

Annual Gallons		52,000
1st Tier 0-4 ccf (2992 gallons *12)		35,904
Annual Tier 1 gallons divided by 1,000		35.904
Annual bill for Tier 1 (35.907*\$12.55)	\$	450.63
Annual gallons billed at Tier 2 (52,000-35,904)		16,096
Annual Tier 2 gallons divided by 1,000		16.096
Annual bill for Tier 2 (16.093*\$13.72)	\$	220.84
Customer Metering Fee (\$4.06*12)	\$	48.72
Water System replacement Fee (\$7.39*12)	\$	88.68
Clean Rivers Impervious Area Charge (\$25.18*12)	\$	302.16
Annual Bill (\$450.63+\$220.80+\$48.72+\$88.68+\$302.16)	\$	1,110.99
Quarterly Bill (Annual Bill ÷ 4)	\$	277.75

Fees based on 3/4" meter



About DC Water Projects Resources What's Go

**FY 2017 & FY 2018 Approved Rates**

Fig. 1 in Ccf and equivalent gallons.  
1 CCF = 748 gallons

Rate Class	Approved FY 2017 (Effective 10/1/2016)		Approved FY 2018 (Effective 10/1/2017)	
	CCF	1,000 Gallons	CCF	1,000 Gallons
<b>Water Rate</b>				
Residential (0-4 Ccf)	\$4.37	\$4.37	\$3.29	\$4.51
Residential (Greater than 4 Ccf)	\$4.06	\$4.43	\$4.26	\$5.79
Multi-Family	\$3.92	\$4.84	\$3.80	\$5.08
Non-Residential	\$4.19	\$4.50	\$4.42	\$5.85
<b>Sewer Rate</b>				
Residential	\$5.71	\$6.63	\$4.99	\$8.62

**DCWater**

Annual Gallons		140,000
1st Tier 0-4 ccf (2992.21 gallons *12)		35,907
Annual Tier 1 gallons divided by 1,000		35.907
Annual bill for Tier 1 (35.907*\$12.55)	\$	450.63
Annual gallons billed at Tier 2 (140000-35,907)		104,093
Annual Tier 2 gallons divided by 1,000		104.093
Annual bill for Tier 2 (104.093*\$13.72)	\$	1,428.16
Customer Metering Fee (\$4.06*12)	\$	48.72
Water System replacement Fee (\$7.39*12)	\$	88.68
Clean Rivers Impervious Area Charge (\$25.18*12)	\$	302.16
Annual Bill (\$450.63+\$1,428.16+\$48.72+\$88.68+\$302.16)	\$	2,318.34
Quarterly Bill (Annual Bill ÷ 4)	\$	579.59

Monthly Fees

Clean Rivers Impervious Area Charge per ERU (Equivalent Residential Unit)

Residential	\$22.24	\$25.18
Multi-Family	\$22.24	\$25.18
Non-Residential	\$22.24	\$25.18

Meter Size	Monthly Fee per Meter	Meter Size	Monthly Fee per Meter
5/8"	\$3.86	6"	\$268.14
3/4"	\$4.06	6x1"	\$272.70

**Residential Water System Replacement Fee**

3/4"	\$4.30
1"	\$7.20
1 1/4"	\$9.67
1 1/2"	\$14.07
2"	\$19.67

Note: Customers enrolled in the Customer Assistance Program (CAP) will not pay the fee.

52,000 gallons + 748 ccf = 69.519

140,000 gallons / 748 ccf = 187.14

Baltimore	
Annual ccf	69.51
Volumetric bill (Water/Sewer ccf rate of \$9.198 *388,960)	\$ 639.35
Account Fee	\$ 35.75
Infrastructure	\$ 359.92
Annual Bill	\$ 1,035.01
Quarterly Bill (Annual Bill ÷ 4)	\$ 258.75

Baltimore	
Annual ccf	187.14
Volumetric bill (Water/Sewer ccf rate of \$9.198 *388,960)	\$ 1,721.32
Account Fee	\$ 35.75
Infrastructure	\$ 359.92
Annual Bill	\$ 2,116.98
Quarterly Bill (Annual Bill ÷ 4)	\$ 529.25

\$ 159.84

<http://publicworks.baltimorecity.gov/Water-Bill-Rates-and-Fees>

**New Water and Sewer Rates for Baltimore City Customers**

Fixed Components - Charges Per Month			
	October 11, 2016	July 1, 2017	July 1, 2018
<b>Account Management Fee</b>	\$ 2.720	\$ 2.979	\$ 3.263
<b>Infrastructure</b>			
<b>5/8" Meter</b>	\$ 15.220	\$ 16.663	\$ 18.244
<b>3/4" Meter</b>	\$ 27.396	\$ 29.993	\$ 32.837
<b>1" Meter</b>	\$ 60.880	\$ 66.652	\$ 72.973
<b>1 1/2" Meter</b>	\$ 106.540	\$ 116.642	\$ 127.704
<b>2" Meter</b>	\$ 243.520	\$ 266.611	\$ 291.896
<b>3" Meter</b>	\$ 426.160	\$ 466.568	\$ 510.816
<b>4" Meter</b>	\$ 974.080	\$ 1,066.441	\$ 1,167.580
<b>6" Meter</b>	\$ 1,750.300	\$ 1,916.263	\$ 2,097.997
<b>8" Meter</b>	\$ 2,739.600	\$ 2,999.367	\$ 3,283.820
<b>10" Meter</b>	\$ 3,881.100	\$ 4,249.104	\$ 4,652.080
Variable Component - Charges Per Month			
<b>Volumetric Rate (water)</b>	\$ 2.260	\$ 2.484	\$ 2.730
<b>Volumetric Rate (sewer)</b>	\$ 6.160	\$ 6.714	\$ 7.318



Fairfax

Quarterly Gal * 4 (Annual gallons)	52,000
Annual Tier 1 gallons divided by 1,000	52.000
Annual bill for Tier 1 (52*\$9.56)	\$ 497.12
Annual Service Charge	\$ 48.80
Sewer Base Charge	\$ 110.48
Annual Bill (\$487.12+\$48.80+\$110.48)	\$ 656.40
Quarterly Bill (Annual Bill ÷ 4)	\$ 164.10

Fairfax

Quarterly Gal * 4 (Annual gallons)	140,000
Annual Tier 1 gallons divided by 1,000	140.000
Annual bill for Tier 1 (140*\$9.56)	\$ 1,338.40
Annual Service Charge	\$ 48.80
Sewer Base Charge	\$ 110.48
Annual Bill (\$1,338.40+\$48.80+\$110.48)	\$ 1,497.68
Quarterly Bill (Annual Bill ÷ 4)	\$ 374.42

<http://www.fairfaxcounty.gov/dpwes/wastewater/sewerrate.htm>

	6.75
	2.81
W/S rate	9.56

**Fairfax Sewer quarterly charge**

**Base Charge**

The sewer base charge is based on account type and meter size. The larger the meter the recover fixed expenses to operate and manage the system, which continues to increase.

METER SIZE	Through 6/30/2017	Service After 7/1/2017
3/4" and smaller, Residential, as well as Fixture Accounts	\$24.66	\$27.62

**Consumption**

Current consumption is billed at a rate of \$6.69 per 1,000 gallons.

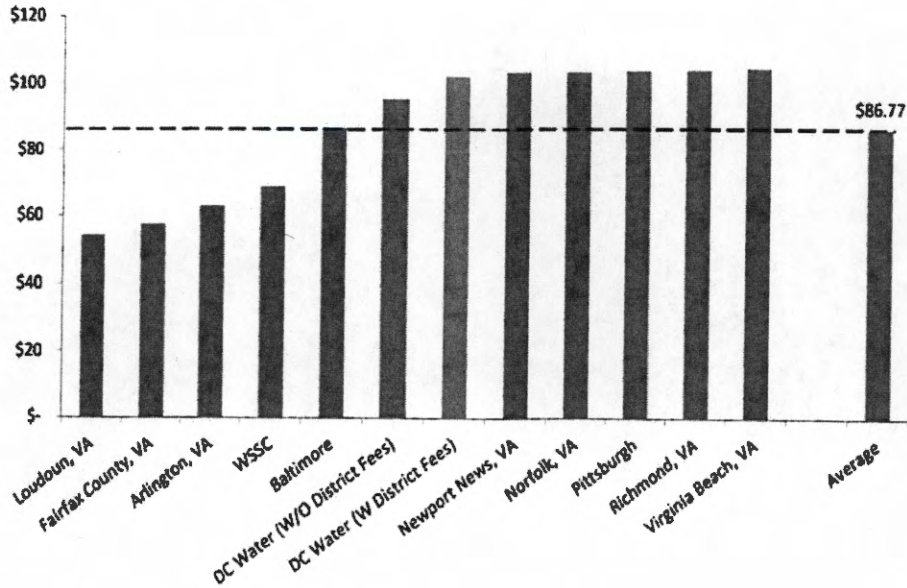
Effective with service rendered on July 1, 2017 or later, the residential customers are billed for use of the sanitary sewer system at a rate of \$6.75 per 1,000 gallons. Sewer usage is based on water consumption during the current billing period or the preceding winter quarter billing period, whichever is lower. This prevents residential customers from being charged sewer rates on water used outdoors during the summer.

Quarterly Billing Service Charge	Is based on meter size, appears on all of our bills for water service. It offsets the costs of meter reading, repair and replacement, service repairs, billing postage, collecting, accounting and customer service operations. The charge for apartments, commercial and municipal accounts also includes a fee to offset the cost of cross connection plumbing inspections.	\$12.20*
Commodity Charge (per 1,000 gallons)	Charge for Established Accounts - The charge per 1,000 gallons of water used in the previous three months. Established accounts may be subject to a peak use charge.	\$2.61
	Charge for New Accounts - The charge per 1,000 gallons of water used in the previous three months. New customers pay a higher rate because they are not charged for their peak use until they establish their winter quarter consumption.	\$2.96
Peak Use Charge (per 1,000 gallons)	Are applied (during billing periods ending in June through November) to water consumption that is 1.3 times the Winter Quarter Consumption or 6,000 gallons above the Winter Quarter Consumption, whichever is greater.	\$3.80



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

EXHIBIT 10  
RESIDENTIAL WATER AND WASTEWATER BILL COMPARISONS  
TO LOCAL AND REGIONAL UTILITIES (1)



(1) This analysis represents single family residential average monthly bill based on rates in effect fall 2017.

Source: DC Water Department of Finance & Budget

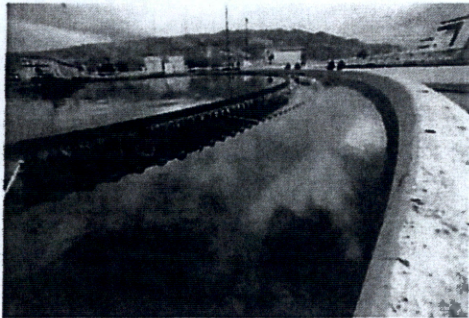
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<https://www.wjv.com/articles/whos-paying-for-outdated-water-and-sewer-systems-you-are-1521106201>

U.S.

## Why Your Water Bill Is Rising Much Faster Than Inflation

Rate increases average 5.5% a year as utilities race to fix corroded pipes and overflowing sewers



A wastewater-treatment plant in Salt Lake City, Utah. Water bills have been climbing around the country as cities repair pipes and systems. PHOTO: RICK EGAN/ASSOCIATED PRESS

By David Harrison

March 15, 2018 5:30 a.m. ET

Water bills are surging nationwide as utilities try to fix corroded pipes and overflowing sewer systems, leaving many households struggling to pay and in some cases risking shutoffs and home foreclosures.

Bills started rising significantly faster than inflation in the mid-2000s as communities stepped up their repairs of aging water and sewer infrastructure. Over the past decade, the increases have averaged 5.5% a year, more than three times the rate of inflation, according to the Labor Department.

The median household bill for water and sewer service rose to \$77 a month in 2016 from about \$44 in 2006, a 75% increase, according to surveys by the American Water Works Association, a group representing water providers. Business and industrial customers saw similar increases during that time.

In Baltimore, water bills have climbed at least 9% a year since 2009 to build underground storage tanks and replace leaky pipes. Baltimore is also one of dozens of municipalities bound by agreements with the Environmental Protection Agency to comply with Clean Water Act rules limiting the amount of sewage discharged into waterways. The city has agreed to a 13-year, \$1.6 billion to \$2 billion sewer upgrade.

C. Rochelle Williams, 37 years old, a single mother of four in Baltimore who makes \$50,000 a year as a medical billing specialist, said she can't cover her full bill, which averages around \$120 a month, about six times what she paid when she moved into her house 16 years ago.

"I usually try to pay, like, \$50 a month," she said.

The country needs to spend \$655 billion over the next 20 years to upgrade water and sewer systems, the EPA estimates. Around 240,000 water mains break a year, contributing to \$2.6 billion in lost drinking water, according to the agency.

For decades, water companies put off making repairs to keep prices low, creating public expectations of cheap water, said Jonathan Cuppett, research manager at the Water Research

Foundation, an industry research group.

"We're moving towards those days being over," he said. "It's a valuable commodity and it requires resources to deliver that to any tap in your house 24 hours a day."

Most Americans get their water from one of the 82,000 municipal water utilities in the country. Some are government agencies, others are independent, public agencies. About 15% of customers get their water from private operators, according to Manuel Teodoro, a political scientist at Texas A&M University.

Sometimes the same agency provides both water and sewer service. Other times, the responsibilities are split.

Most of the typical household water bill reflects the amount of water consumed. The rest covers fixed costs such as meter reading, billing, infrastructure and environmental fees.

Utilities' funding comes almost entirely from their customers, with the U.S. government providing just about 4% of the total. The Trump administration in February proposed increasing federal spending on infrastructure by \$200 billion, but it is unclear how much of that would go to water and sewer upgrades.

In Kansas City, Mo., local officials agreed to complete 121 sewer improvement projects over 25 years, costing \$4.5 billion. Sewer fees are set to rise 15% annually in the coming years.

"To be able to afford those projects, from the department's perspective, we have to have our rates considerably higher for a period of time," said Terry Leeds, director of the city government's water department.

Customers unable to pay rising bills can see their service shut off. While there are no national data on shutoffs, some utilities say their numbers are rising. Kansas City said it shut off 18,333 accounts last year, up from 15,196 in 2014, and officials expect around 19,000 this year.

A survey of 81 large utilities across the U.S. by the environmental group Food & Water Watch found that 5% of customers—roughly 566,000 households—lost water service because of overdue bills in 2016.

Oakland resident Wendel Stevenson, 59, who lets homeless people fill water jugs from a tap in his yard, said he lost service for about a week last year when he couldn't pay a \$256 bill. He showered at his mother's house, he said.

"To go to someone's house to shower, come on, man, that's not a good feeling," he said.

Water bills in Oakland have risen at least 7% in recent years as the service provider, East Bay Municipal Utility District, deals with infrastructure upgrades and the consequences of a severe drought that cut water usage.

Many utilities have assistance programs to help customers keep the water running. An Oakland program has enabled the utility district to reduce the number of shutoffs to 10,952 last year from 13,400 in 2014, according to KBMUD General Manager Alexander Coate.

Some local governments sell liens from unpaid property taxes and water bills to investors, allowing them to collect the debt from homeowners, often with hefty interest rates. If homeowners don't pay, the investors can foreclose on their homes. In most cases, however, investors are more interested in collecting the debt than in foreclosing on the property.

Owen Dutton, a 57-year-old from Baltimore who owed about \$1,500 in unpaid water bills, learned last year that the city was planning to put the house he shares with his wife on the tax sale list. He had to borrow to pay down the amount and keep his home. His water bill has gone up at least 50% in the past few years, he said.

"I was disappointed in the city to even do something like that," said Mr. Dutton, who earns \$42,000 a year as a home inspector. "I'd been living in my house at that present time for 33 years."

In December, in response to a public outcry over the practice, Baltimore Mayor Catherine Pugh said the city would no longer send properties to tax sale for delinquent water bills alone.

Write to David Harrison at [david.harrison@waj.com](mailto:david.harrison@waj.com)





WASHINGTON SUBURBAN SANITARY COMMISSION  
**PROJECT PRIORITIZATION**  
 Version: 2.0

Project Prioritization Tool: Definitions and Criteria Scoring

	Entry	Value	Weighting	Score
<b>LOS/SERVICE OUTCOMES</b>				
<b>A.1 No. of Customers Affected</b>				
Number of Customers that are directly affected by the project from a service perspective (not temporary construction effects).  WMR: Use AM Model. WTS: Use Planning Water Model, W Facilities: Use Planning Group Estimates if related to Process & Downstream, WW Network: Typically <100, B&G: Use WSSC Building Population or Customer Care Zone Population for Depot.	01 - <100 or impact within facility	10%	4%	0.4%
	02 - <1,000	30%	4%	1.2%
	03 - <10,000	50%	4%	2.0%
	04 - <100,000	90%	4%	3.6%
	05 - >=100,000	100%	4%	4.0%
<b>A.2 Will need/project help WSSC achieve LOS target/goal?</b>				
Will the project directly improve or help WSSC achieve target/goal as defined in an existing performance measure? If yes, is it a Key Performance Measure?  See list of WSSC LOS Performance Measures and count number of performance measures that directly apply.	01 - No	0%	11%	0.0%
	02 - 1 performance measure	30%	11%	3.3%
	03 - 2 or more performance measures	50%	11%	5.5%
	04 - 1 key performance measure	75%	11%	8.3%
	05 - 2 or more key performance measures	100%	11%	11.0%
<b>A.3 Service Life Improvement</b>				
Purpose of project is to upgrade or rehabilitate an existing facility or other group of assets in order to extend service life.  Use shortest lived asset extension years. For new assets, use 01 - None.	01 - None	0%	5%	0.0%
	02 - 5 years	30%	5%	1.5%
	03 - 10 years	50%	5%	2.5%
	04 - 25 years	75%	5%	3.8%
	05 - >25 years	100%	5%	5.0%
<b>RISK</b>				
<b>B.1 Business Risk Exposure Zone/Risk Reduction</b>				
What risk zone is the project addressing? Has a risk reduction computation been performed?  Use register score or use prevailing worst BRE Zone the asset is located in (or vicinity for new assets). For facilities without AMP, use high level estimates available. If business case is performed use 05-Business Case to indicate actual risk reduction has been computed.	01 - Unknown or <\$10K	0%	16%	0.0%
	02 - Zone 4/B or \$10K-\$100K	25%	16%	4.0%
	03 - Zone 3 or \$100K-\$1M	50%	16%	8.0%
	04 - Zone 2 or \$1M-\$2M	90%	16%	14.4%
	05 - Zone 1 or >\$2M	100%	16%	16.0%
<b>B.2 Security Improvement</b>				
Consideration of the project's potential to provide additional security of facilities that positively affects system reliability.  Typically applies to B&G Network and some Water Facility Projects with physical or electronic security systems	01 - Yes	100%	3%	3.0%
	02 - No	0%	3%	0.0%
<b>B.3 Safety Improvement</b>				
Consideration of the effects on the safety conditions of the working environment. Is the proposed project going to improve the safety of working conditions?  Use yes if project addresses Employee and Public Safety	01 - Yes	0%	4%	0.0%
	02 - No	0%	4%	0.0%
<b>B.4 Current Status</b>				
Consideration of the current status and phase of the project  Use status at time of scoring. AMP identified projects typically use 01-Not Started unless a business case or planning study has begun	01 - Not started	10%	3%	0.3%
	02 - Planning	20%	3%	0.6%
	03 - Design	40%	3%	1.2%
	04 - Bidding	70%	3%	2.1%
	05 - Construction	100%	3%	3.0%
<b>B.5 Deferrable/Schedule</b>				
Consideration of the available float in the project scheduled and ability to defer the project to a later date. For example, when is the latest date the project is needed? Can the project be delayed and still meet the date?  If asset has already failed and no redundancy or project is regulatory driven, use 03-Urgent need. AMP generated needs will generally be low impact for now.	01 - Low impact from delay in implementation (>25% float available)	15%	4%	0.6%
	02 - Moderate impact from delay in implementation (>10% float available)	50%	4%	2.0%
	03 - Urgent need (high impact results from delay; minimal or no float available)	100%	4%	4.0%





Project Prioritization Tool: Definitions and Criteria Scoring

	Entry	Value	Weighting	Score
<b>COST/ECONOMIC INDICATORS</b>				
<b>C.1 Life Cycle Costs [Enter net present values]</b>				
Have life cycle costs (LCC) been estimated for the proposed need? Provided as net present values for each of the following categories:				
Note: Use 30%-70% split for planning & design costs if combined. For AMP needs, use 10% of replacement value for Planning & Design. This note applies to Planning, Design, and Construction Costs only.				
<b>C.1.1 Capital - planning</b>	01 - \$0 - \$500K	80%	1%	0.8%
	02 - \$500K - \$1M	70%	1%	0.7%
	03 - \$1M - \$2M	50%	1%	0.5%
	04 - \$2M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.1.2 Capital - design</b>	01 - \$0 - \$500K	90%	1%	0.9%
	02 - \$500K - \$1M	70%	1%	0.7%
	03 - \$1M - \$2M	50%	1%	0.5%
	04 - \$2M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.1.3 Capital - construction</b>	01 - \$0 - \$5M	90%	1%	0.9%
	02 - \$5M - \$10M	70%	1%	0.7%
	03 - \$10M - \$50M	50%	1%	0.5%
	04 - \$50M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.1.4 Operations (annual)</b>	01 - \$0 - \$500K	90%	1%	0.9%
	02 - \$500K - \$1M	70%	1%	0.7%
	03 - \$1M - \$2M	50%	1%	0.5%
	04 - \$2M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.1.5 Maintenance (annual)</b>	01 - \$0 - \$500K	90%	1%	0.9%
	02 - \$500K - \$1M	70%	1%	0.7%
	03 - \$1M - \$2M	50%	1%	0.5%
	04 - \$2M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.1.6 Decommissioning</b>	01 - \$0 - \$500K	90%	1%	0.9%
	02 - \$500K - \$1M	70%	1%	0.7%
	03 - \$1M - \$2M	50%	1%	0.5%
	04 - \$2M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.1.7 Rehabilitation</b>	01 - \$0 - \$500K	90%	1%	0.9%
	02 - \$500K - \$1M	70%	1%	0.7%
	03 - \$1M - \$2M	50%	1%	0.5%
	04 - \$2M+	30%	1%	0.3%
	05 - No LCC estimate	0%	1%	0.0%
<b>C.2 Funding Source</b>	01 - Federal / State / Local Gov't Aid (no SOC Credits)	100%	5%	5.0%
	02 - Developer built / Contribution / SOC funds	80%	5%	4.0%
	03 - WSSC bonds	50%	5%	2.5%
	04 - Operational	0%	5%	0.0%
<b>C.3 Staffing Requirements</b>	01 - Significant reduction in work years (> 2)	100%	4%	4.0%
	02 - Neutral	50%	4%	2.0%
	03 - Significant additional work years (> 2)	0%	4%	0.0%
<b>C.4 Financial Efficiency</b>	01 - Yes	100%	3%	3.0%
	02 - No	0%	3%	0.0%
Purpose of project is to upgrade or rehabilitate an existing facility or other group of assets in order to improve financial. Financial efficiency is one of the four major failure modes. A project may either directly address this failure mode or an improvement in financial efficiency may be a side benefit of executing the project.				
*Yes* is applicable to B&G projects that reduce insurance rates, energy efficiency projects that reduce cost for example.				





Project Prioritization Tool: Definitions and Criteria Scoring

	Entry	Value	Weighting	Score
<b>C.5 Cost Effectiveness Ratio / Benefit Cost Ratio</b>	0.0	0%	11%	0.0%
CER and BCR are metrics developed during the business case process. They present a means of assessing the cost of a project vs. its benefit in dollar amounts. Benefits can be in form of risk reduction or other.  Typically if no business case exists Value is 0.0.	0.2	10%	11%	1.1%
	0.4	20%	11%	2.2%
	0.6	30%	11%	3.3%
	0.8	40%	11%	4.4%
	1.0	50%	11%	5.5%
	1.2	60%	11%	6.6%
	1.4	70%	11%	7.7%
	1.6	80%	11%	8.8%
	1.8	90%	11%	9.9%
	2.0	100%	11%	11.0%
<b>STRATEGIC PRIORITIES</b>			<b>20%</b>	
<b>D.1 Which corporate objective does this need address?</b> In this section, enter as Yes or No for 100% and 0% corresponding scoring, respectively, for each of the four strategic priorities of the Commission. The strategic priorities considered are:  Note: Applicable strategic priorities can be obtained from LOS performance measures sheet.				
<b>D.1.1 Infrastructure</b>	01 - Yes	100%	4%	4.0%
	02 - No	0%	4%	0.0%
<b>D.1.2 Financial Stability</b>	01 - Yes	100%	4%	4.0%
	02 - No	0%	4%	0.0%
<b>D.1.3 Customer Service</b>	01 - Yes	100%	4%	4.0%
	02 - No	0%	4%	0.0%
<b>D.1.4 Environmental Stewardship</b>	01 - Yes	100%	4%	4.0%
	02 - No	0%	4%	0.0%
<b>D.2 County Policy</b>	01 - Yes	100%	4%	4.0%
Project's implementation is in accordance with plans or policies of either Montgomery or Prince George's County Councils. Bi-County Projects also Apply.	02 - No	0%	4%	0.0%
<b>TOTAL</b>			<b>100%</b>	



## WSSC Information Technology Strategic Plan Development & Implementation

Status as of March 2019

In 2018, WSSC revised its Information Technology Strategic Plan (ITSP) to create a 2-Year ITSP as an approach to implementing the vision that helps make measurable advances to progress WSSC towards key initiatives and strategic goals over a two-year time frame. The 2-Year ITSP is designed to be responsive to the WSSC critical business and leverages technology-enabled solutions to advance the WSSC pressing business challenges.

The WSSC 2-Year ITSP aligns the Information Technology (IT) Departmental Mission and Vision with the corporate goals and objectives and provides the framework and roadmap for completing the transformation of the IT organization. Starting with technology governance, this plan continues the WSSC technology focus on improving the organization's ability to quickly respond to changing business needs and leveraging advances in technology while always ensuring safe, efficient, cost-effective water delivery and sewage treatment for WSSC customers.

The implementation sequencing recommendations, depicted below, was based on careful consideration of the Commission's priorities, operational risk of status-quo systems, and implementation readiness of business units, organizational capacity, and urgency of needs.

**Key Projects: WSSC IT 2-Year Strategic Initiatives (as of March 15, 2019)**

	FY 2018				FY 2019				FY 2020				FY 2021				Status
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>MULTI-YEAR</b>	Project Cornerstone - Release 1 (C2M and MWM)				-71%												◆
	Project Cornerstone - Release 2 (WAM)				-41%												◆
	Procure-to-Pay				-100%												◆
	Enterprise Content Management				-15%												◆
	Laboratory Information Management System				-10%												◆
	Advanced Meter Infrastructure (AMI)				-5%												◆
<b>SHORT-TERM</b>	ProjectDox - Phase 2				100%												◆
	Questica Budgeting & Reporting																◆
	Neighborhood Mapping																◆
	Fire Hydrant Inspection																◆
	Fire Hydrant Painting																◆
<b>PLATFORM</b>	Disaster Recovery Table Top Test				100%												◆
	Data Center Redesign																◆
	Disaster Recovery Oracle E-Business Suite																◆
	ServiceNow (IT Service Management)																◆
	Electronic Security System																◆
	Identity Management																◆
	Website Redesign																◆

◆ On Track    Watch List    ◆ Behind Schedule    ◆ Completed

--- Planned    █ Actual % Percent of total planned work for multi-year & short-term projects; Percent of annual planned work for platform initiatives.

## **System Implementation Initiatives FY 2018 Through FY 2020:**

Progress was made this fiscal year across several Major Strategic Initiatives. Most notably:

### **1. Project Cornerstone:**

Customer-to-Meter (C2M), which was previously referred to as Customer Care and Billing, and Work and Asset Management/Mobile Workforce Management (WAM|MWM) have been combined under Project Cornerstone. Project Cornerstone currently has two distinct releases; Release 1 for C2M and MWM; Release 2 for WAM. Release 1 is targeting July 2, 2019 for 'Go-Live' and Release 2 is targeting November 4, 2019 for 'Go-Live'. Release 1 will introduce a brand-new billing system for WSSC, coupled with a new workforce management tool to dispatch work to be done by WSSC's field crews. Release 2 will introduce an upgraded Asset Management tool with flattened business processes across all of WSSC's depots, streamlining the way work is completed. In addition, Release 2 will tie back into the systems launched in Release 1 to complete the feedback loop; fully integrating the systems will increase visibility for WSSC staff to provide proactive information to customers.

### **2. Procure-to-Pay:**

In May 2018, as part of its supply chain transformation, WSSC modernized its procurement system moving from MAPS/Rumba to Oracle Procure-to-Pay (P2P). The successful launch of the P2P system has moved the requisition entry, PO creation, and receiving activities from MAPS/Rumba to Oracle E-Business Suite (EBS). P2P provides seamless document management and transparency from procurement to invoice payment, reduced errors in processing requests and improved coordination between Procurement and User Departments.

### **3. Enterprise Content Management:**

This implementation is to develop a Commission-wide Enterprise Content Management (ECM) strategy and related taxonomy and architect the ECM technology solution in a way that best meets the needs of the Commission. This project has been deferred to FY 2021, however requirements gathering is ongoing to ensure a comprehensive approach across all departments during implementation.

### **4. Laboratory Information Management System:**

Laboratory Information Management System (LIMS) – used by the WSSC Chemistry Laboratory to handle and report the laboratory's analytical data and provide the Division with a single, integrated database of analytical results. System updates are in progress with expected completion date of FY 2020 Q2.

### **5. Advanced Meter Infrastructure:**

The Advanced Meter Infrastructure (AMI) Project Team currently projects award of an AMI vendor in November 2019. Following award, we anticipate approximately 48 months of system deployment. AMI will provide many benefits to customers and the Commission. AMI will enable WSSC to switch to monthly billing, which in turn will allow our customers to budget monthly for their water and sewer bills. AMI will also assist WSSC in distribution system leak detection and planning. The AMI Project is a 6-year project with a total project



budget of \$92 million and completion date of FY 2024.

**6. Electronic Security System:**

Currently in its final phase of implementation, the goal of the Electronic Security System (ESS) project is to implement a solid security system that not only will replace aging equipment but also add functionalities requested by the business side, implement security analytics and ensure the Commission will have a security system that is prepared for future advanced protection and surveillance requirements. ESS is expected to be completed in FY 2020 Q2.

**7. ServiceNow (IT Service Management):**

WSSC implemented ServiceNow in FY 2019 Q1 to improve overall customer satisfaction and visibility of IT service to business partners, improve self-service capabilities, reduce the number of calls to the service desk, and increase the speed of delivering new services. ServiceNow is branded as FOCUS by WSSC and is comprised of multiple modules, including Password Reset, Incident Management, Change Management, and a catalog of services accessed through the FOCUS portal.

**IT Strategic Planning Forecast**

	FY 2018	FY 2019	FY 2020	FY 2021	Total	
<b>MULTI-YEAR</b>	Project Cornerstone - Release 1 (C2M and MWM)	\$ 10,219,745	\$ 12,578,295	\$ 4,226,119	\$ -	\$ 27,024,158
	Project Cornerstone - Release 2 (WAM)	\$ 2,919,551	\$ 12,450,000	\$ 6,036,592	\$ -	\$ 21,406,144
	Procure-to-Pay	\$ 1,200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,500,000
	Enterprise Content Management	\$ -	\$ -	\$ -	\$ 1,500,000	\$ 1,500,000
	Laboratory Information Management System	\$ 35,000	\$ 175,000	\$ 35,000	\$ 35,000	\$ 280,000
	Advanced Meter Infrastructure (AMI)	\$ -	\$ 800,000	\$ 1,950,000	\$ 25,633,000	\$ 28,383,000
<b>SHORT-TERM</b>	ProjectDox - Phase 2	\$ 390,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 525,000
	Questica Budgeting & Reporting	\$ 442,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 562,000
	Neighborhood Mapping	\$ 135,497	\$ -	\$ -	\$ -	\$ 135,497
	Fire Hydrant Inspection	\$ 178,000	\$ -	\$ -	\$ -	\$ 178,000
	Fire Hydrant Painting	\$ 240,000	\$ -	\$ -	\$ -	\$ 240,000
<b>PLATFORM</b>	Disaster Recovery Table Top Test	\$ 10,000	\$ -	\$ -	\$ -	\$ 10,000
	Data Center Redesign	\$ 120,000	\$ 300,000	\$ -	\$ -	\$ 420,000
	Disaster Recovery Oracle E-Business Suite	\$ 300,000	\$ 435,000	\$ -	\$ -	\$ 735,000
	ServiceNow (IT Service Management)	\$ 800,000	\$ 600,000	\$ 372,000	\$ 372,000	\$ 2,144,000
	Electronic Security System	\$ -	\$ 600,000	\$ 800,000	\$ 120,000	\$ 1,520,000
	Identity Management	\$ 120,000	\$ 120,000	\$ 30,000	\$ 30,000	\$ 300,000
	Website Redesign	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000
<b>TOTAL</b>	\$ 17,109,793	\$ 28,543,295	\$ 13,634,711	\$ 27,875,000	\$ 87,162,799	

**Note:**

- Funding requirement identified here covers the IT initiatives identified under the 2-Year IT Strategic Plan only.
- FY 2018 represents actual costs.

# Service Improvements not included in the Proposed Budget

## #1 - Large Water Valves Condition Assessment

In order to minimize the risk associated with inoperable large valves and possible water outages, the Large Valves Inspection and Repair Program was initiated in April 2014 to systematically inspect, exercise, repair and replace (when necessary) large diameter valves located throughout the system. When the large valve program was established in 2014, the system inventory was listed at about 1,700 large valves and the condition assessment cycle was established at 4 years (425 valves per year). During the course of the initial condition assessment the number of large valves was refined through data corrections. Currently, there are close to 1,500 large valves in the water transmission and distribution system. After conducting research, it was noted that the City of Baltimore inspects large valves (16-24") on a 3-year cycle (30" and larger) on a 2-year cycle. Further research suggests that Prince William County exercises large valves every 30 months. The City of Detroit spends \$4 million every 2 years for valve exercising. It was also noted that the American Water Works Association (AWWA) standard recommends a program duration that is optimum for a utility to prevent tuberculation and other issues with the water distribution system and does not recommend a specific cycle. Based upon industry standards, other utilities' overview of their programs and identifying optimum valve exercising cycles for WSSC while providing adequate system reliability, we recommend switching the large valves condition assessment and exercising from a 4-year cycle to a 3-year cycle.

Cost of Program = \$197,000 contract work

## #2 - System Wide Flushing

The spike in discolored water complaints in 2015 (90 day) resulted in WSSC to taking action. Historically, WSSC received less than 10 complaints a day. There was a program in place over 15 years ago. Simply stated, clean pipes deliver better quality water at higher hydraulic efficiencies. Flushing is the easiest and cheapest method to implement (over lining/replacement). Our goal is to keep the number of discolored water complaints per 1,000 customers to be 0.2. Our past 5 year average is 2.9.

Cost of Program - \$826,000 - 10 workyears (project mgr. field supervisor and 8 utility technicians; IT equipment and vehicles.

## #3 - Fire Flow Testing

WSSC has 43,000 fire hydrants in our system. AWWA recommends that we test each hydrant on a ten year cycle. Currently, we test approximately 200 hydrants per year. These tests are mainly generated at the request of contractors, engineers, and designers. A smaller number of flow tests are generated at the request of Fire Departments. Testing all hydrants on a ten year cycle will help to ensure they will be effective for firefighting and preventing the contamination of public water supplies by backflow. Performing a fire hydrant flow test provides the actual static (non-flowing) pressure, residual (flowing) pressure, and the flow from the hydrant.

Cost = \$250,000 - contract services.

## **#4 - Leak Detection Program**

The Water Distribution and Water Transmission Program in Asset Management Program identified leak detection program to provide condition assessment of the water system. This program supports WSSC strategic priorities by maintaining our infrastructure, supporting customer services and providing sound financial stewardship by proactively repairing leaks before they become worse and potentially allowing contaminants to enter the system, and the problems that cost additional costs and risks. Currently, we have three leak detection crews performing a minimum amount of leak surveys in the Gaithersburg, Lyttonville and Temple Hills service area. Utility Services Central Zone does not have a leak detection crew. Leak detection will minimize lost revenue inherent from unknown leak sources.

**Current projection is \$232,000 – 2 workyears, IT and vehicles**

Note: The new satellite leak detection method may reduce the hours spent performing acoustic monitoring as it will help crews narrow the search to a specific area when looking for a leak. It is suspected that we will have a significant amount of leaks unidentified in our distribution system.

Thus, we will need to increase staffing levels, vehicles, materials, and equipment/tools to address the increased number of leaks, while addressing breaks too. Perhaps over time, as the leaks get addressed and repaired, we would have less breaks. However, until that normalizes, we anticipate an increase in maintenance activities and support needed. This impact amount is still being projected.



**WSSC INSPECTOR GENERAL RESPONSE TO PRINCE GEORGE'S COUNTY COUNCIL TRANSPORTATION, INFRASTRUCTURE, ENERGY, AND ENVIRONMENT COMMITTEE FY 2020 BUDGET QUESTIONS**

In relevant part, Maryland Public Code 17-601 et seq. (WSSC IG Act) provides:

§ 17-605. Duties.

- In general. – The Office shall:
- (1) assist the Commission by providing independent evaluation and recommendations regarding opportunities to: (i) preserve the Commission's reputation; and (ii) improve the effectiveness, productivity, or efficiency of Commission programs, policies, practices, and operations;
- (2) ensure public accountability by preventing, investigating, and reporting instances of fraud, waste, and abuse of Commission property or funds;
- (3) examine, evaluate, and report on the adequacy and effectiveness of the systems of internal controls and their related accounting, financial, technology, and operational policies;
- (4) report noncompliance with and propose ways to improve employee compliance with applicable law, policy, and ethical standards of conduct;
- (5) conduct audits as required under § 25-405 of this article; and
- (6) conduct other audits related to the operation of the Commission.

§ 17-606. Work plan and goals.

- (a) Development. – (1) The inspector general shall consult with the Commission to develop a written work plan and establish periodic goals and priorities for the Office based on an assessment of relative risks.

§ 17-607. Budget amounts and legal services.

- (a) Budget amounts. – The Commission shall include in the Commission's annual operating budget proposal the amounts recommended for the Office. (§ 17-601(d), Definitions, provides "Office" means the Office of the Inspector General).

The Inspector General's first day on the job was October 15, 2018. The Commissioners asked the Inspector General to provide a detailed plan to transition the Internal Audit Office into a fully functional Office of Inspector General, consistent with the Maryland WSSC IG Act; as well as provide any general needs assessment observations that may have budget implications. On November 28, 2018, the Inspector General provided a "100 Day Plan for WSSC OIG" (see Attachment A for a copy of the 100 Day Plan including updates), which included general observations and needs assessment analysis as well (see Attachment B).

**Relevant OIG budget and Return on Investment (ROI) data follows:**

**Internal Audit and Inspector General Approved FY Annual Budgets:**

- 2014 - \$1,171,900.00
- 2015 - \$1,167,000.00
- 2016 - \$1,231,400.00
- 2017 - \$1,260,200.00
- 2018 - \$1,308,751.00
- 2019 - \$1,348,142.00
- **Total cumulative OIG Approved Budget = \$7,487,393.00**

**O&M Billings OIG Audit Adjustments (Blue Plains):**

- FY 2014 - 0
- FY 2015 - 0
- FY 2016 - \$1,318,206.65
- FY 2017 - \$2,323,704.62
- FY 2018 - 0
- FY 2019 - \$1,962,678.58
- **Total cumulative OIG O&M Billings ROI = \$5,604,589.85**

**System Development Charges (SDC) OIG Audit Adjustments:**

- FY 2014 - \$1,741,360.50
- FY 2015 - \$102,453.97
- FY 2016 - \$40,981.56
- FY 2017 - \$1,042,314.37
- FY 2018 - \$1,746,925.53
- FY 2019 (as of 4/15/2019) - \$356,642.11
- **Total cumulative OIG SDC ROI = \$5,030,678.04**

**Office of Inspector General Net Budget Impact FY 2014 – FY 2019:**

- **FY 2014 – FY 2019 cumulative Approved Budgets = \$7,487,393.00**
- **FY 2014 – FY 2019 cumulative O&M Billings and SDC Audit Adjustments (ROI) = \$10,635,267.89**
- **The net result: OIG cumulative ROIs covered its cumulative budgetary outlays, and, in addition, returned an additional \$3,147,874.89 to WSSC's coffer over the same period.**

**OIG Fiscal Impact and Fiscal Perspective:**

A fiscal note is also called a fiscal impact statement. The purpose is to describe the fiscal impact of a bill on State revenues and expenditures if the bill becomes law. The purpose of the process is to provide to the Legislature the estimated cost of legislation that is going through the legislative process. Regulations for fiscal notes often require, among other things, inclusion of operating costs, anticipated salary and inflationary increases, and additional capital costs over a specified period. (See USLegal.com "Fiscal Note Law and Legal Definition").

It is my understanding that the Fiscal Note analysis that accompanied the Maryland WSSC IG Act provided for funding at a 2018 budget level. It is not clear whether the rate of inflation was included in the Fiscal Note (i.e. the Federal Reserve Bank of Minneapolis provided the following national inflation figures, using the CPI Calculator: 2016 = 1.3% rate of inflation; 2017 rate of inflation = 2.1%; 2018 rate of inflation = 2.2%), or a consideration for the potential return on investment that is a typical feature and benefit of comparable Federal Office of Inspectors General.

WSSC's "Fiscal Year 2020 Preliminary Proposed Budget, dated January 15, 2019" at page 10, states "The FY 2020 budget includes \$500,000 to secure permanent office space and accommodate staffing requirements for the Inspector General's Office. It is expected that these additional costs will be offset by savings, reimbursements, and other resources generated by this new office."

**The following represents the relative fiscal impact of both the approved FY 2019 OIG budget and the proposed FY 2020 OIG budget:**

- WSSC FY 2019 Approved Budget = \$1,437,906,749
- WSSC OIG FY 2019 Approved Budget = \$1,348,142
- WSSC OIG 2019 Approved Budget represents .094% of WSSC's FY 2019 Approved Budget
  
- WSSC FY 2020 Proposed Budget = \$1,455,919,130
- WSSC OIG FY 2020 Proposed Budget = \$1,572,084
- WSSC OIG Proposed 2020 Budget represents .11% of WSSC's FY 2020 Proposed Budget

**Conclusion:**

The above history, analysis, and the attached documentation in support, demonstrate that the fiscal impact to WSSC resulting from the Maryland Legislature's creation of the WSSC OIG, will produce a net positive return on investment to WSSC and its ratepayers for FY 2020 and beyond, as well as meet the legislative intent outlined above under § 17-605(a). In short, the Office of Inspector General represents one of the few shops within WSSC that has a history and a continued potential to pay for itself, in addition to assisting the Commission preserve its reputation and improve the effectiveness, productivity, and efficiency of Commission programs, policies, practices, and Operations.



# Attachment A

## 100 Day Plan for WSSC OIG – Update # 3

A = within 30-50 days  
B = within 50-70 days  
C = within 70-100 days

Purple = Completed  
Orange = In Process  
Black = In Queue

### A

- Meet and greet Commissioners and Commission Office Staff - Discuss Commissioners' vision for OIG
- Meet and greet, as team and individuals, all Internal Audit staff – Share IG vision and path forward
- Meet and greet WSSC General Manager
- Meet and greet relevant Maryland state legislators responsible for IG Act
- Meet and greet Prince George's County Executive and Council Chair
- Meet and greet Montgomery County Executive and Council Chair
- Meet and greet relevant Montgomery and Prince George's County fraud prosecutors
- Meet and greet all Maryland IGs, DC IG, and WMATA IG
- Meet and greet WSSC Ethics Board
- Meet and greet Maryland State Ethics Commission
- Provide findings to Commissioners on results of two alleged whistleblower complaints received by the Commission and referred to OIG for investigation

### B

- Meet and greet with WSSC leadership team – Discuss roles, authorities, functions, etc.
- Review current internal audit policies and procedures and draft updates to reflect expanded OIG mission, role, responsibilities, and authorities
- Review current hotline policy and procedures for continuing and/or upgrade under new OIG authorities
- Review current fraud, waste, and abuse policies and regulations – Draft updated version that incorporates new IG mandates
- Meet with WSSC General Counsel to discuss dedicated IG counsel position –outside OGC
- Meet with WSSC OHS/Police to discuss dedicated investigator to work (proactively and reactively) OIG specific white collar fraud crimes
- Visit all WSSC facilities
- Review, decide, and recommend whether current OIG office space location at HQ should be reconsidered – for confidential meetings purpose
- Update whistleblower protection regulation, policy, and procedures that include OIG's investigative role
- Obtain WSSC vehicle for specific OIG use
- Incorporate GAGAS Standards for OIG audit products
- Decide whether Internal Audit Charter is relevant in light of new IG Act
- Update titles and PDs for OIG staff that reflect broader OIG responsibilities under new IG Act
- Discuss future staff reporting role of ethics officer, as an OIG dotted line report, with WSSC Commissioners, Ethics Board and Ethics Officer
- Develop mission and vision statements for the OIG

- Develop key performance indicators, including return on investment (ROI)

**C**

- Refresh and update OIG Web presence to include accurate, timely, user friendly, relevant, internally and externally consistent, and visually appealing OIG brand and data; create an OIG Logo, establish an OIG List Serv, include links to OIG related sites and work-products, etc.
- Join and actively participate in state and national OIG associations
- Review OIG staff training needs for alignment with expanded OIG responsibilities and work-product expectations
- Propose budgetary needs assessment to include new staffing and office space

Arthur Elkins  
Inspector General



# Attachment B

## OIG 100 Day Plan Update and Talking Points for WSSC Commissioners November 28, 2018

### General observations

OIG is analogous to an insurance policy that pays for itself through activities that recoup misappropriated WSSC resources. This recoupment represents a Return on the OIG Investment that typically covers the entire operations costs of the OIG (i.e.) WSSC OIG SDC Audit. The OIG insurance policy is not passive, but proactive as it not only serves to protect (passive), but also serves to detect, deter, and prevent fraud, waste, abuse, and mismanagement, and take action to eliminate the threat (proactive).

According to the 2018 ACFE "Report to the Nations on Occupational Fraud and Abuse", a general estimate of organizational losses due to fraud each year is 5% of their annual revenues.

The approved WSSC budget for FY 2019 projects total revenue of \$762.6 million, net operational expenses of \$781.6 million, and a net revenue loss of \$3.1 million. Total capital expenses are projected to be \$656.3 million.

WSSC's total FY 2019 budget is \$1.4 billion.

WSSC OIG's FY 2019 budget is \$1.3 million.

WSSC OIG's budget represents .0009% of WSSC's total budget.

### Preliminary needs assessment observations

**OIG Attorney** – The attorney's role is to interpret and apply the MD IG Act authorities to protect the independence of OIG access to WSSC records, staff, and work products; work with OIG auditors to ensure work product legal sufficiency; work with law enforcement investigators; serve as WSSC OIG liaison to states and federal prosecutors; serve as the OIG legislative liaison and public affairs point of contact; and serve as legal liaison with WSSC OGC.

**OIG Investigator** – White collar crime investigations are labor intensive. These type of cases tend to take a greater amount of time to work through to completion than many other criminal cases. WSSC OHS police officers and investigators do not have the time or extensive experience in working these complicated cases as a proactive investigative activity.

Current OIG investigations typically involve matters that are reactive in nature (i.e.) hotline tips. The probability that there is fraudulent activity that has not been discovered is high, in light of the 2018 ACFE Report to the Nations fraud statistics.

A useful strategy to address this risk is through the use of investigative data analytics that proactively assess WSSC data for the purpose of identifying fraud indicators for further investigative review. This is a labor intensive activity, and requires a dedicated full-time investigative resource.

**Position Description (PDs) Updates** – Auditor PDs need to be reevaluated to ensure that the auditor PDs reflect the expanded OIG auditor responsibilities under the new MD IG Act. The duties and responsibilities are broader in scope than was required under the Internal Audit Charter. This may have a financial impact on auditor staff salaries.

**OIG Training Budget** – The new MD IG Act requirement for compliance with Generally Accepted Government Audit Standards (GAGAS) (Yellow Book) triggers enhanced required CPE auditor training. An increased training budget will be required to accommodate GAGAS CPEs, as well as maintenance of associated professional certifications and professional licenses.

**OIG Office Space** – Separate OIG office space that can accommodate all OIG staff in one location, and serve as a confidential meeting facility as well is recommended.

**Goal at the end of 100 days** – Provide budget proposal that reflects the following: **(1)** Best case = Standard fully staffed and organizational sound OIG shop; **(2)** Mid-level case = Increased staffing and training recommendations in # 1, reduced by one-third to one-half; or **(3)** Status quo = Zero budget increase, maintain original pre IG Act Internal Audit organization configuration.

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