

FY'19 PROPOSED BUDGET, FY'19 – '24 CAPITAL IMPROVEMENTS PROGRAM & RATE STRUCTURE ALTERNATIVES

**Briefing to The Prince George's County Council's
Transportation, Housing & Environment (THE)
Committee**

Todd M. Turner, Committee Chair

March 22, 2018

Current Topics

Infrastructure Repairs and Renewals

- Collington (Bowie) Elevated Water Storage Facility
 - New 4 MG storage
 - Two side-by-side 2MG composite tanks
 - in service Summer 2018
- St. Barnabas Elevated Tank Replacement
 - Current 1 MG elevated tank to be replaced
 - 2.5 MG elevated tank in service Summer 2018



Record cold = Record breaks and leaks

- January set new record: 819
- November - January: 1,653

Rate Study

- In November, 2017, Commission management transmitted three rate structure recommendations to Prince George's and Montgomery County elected officials for consideration and feedback.
- The Commission will select a rate structure in June 2018 for implementation in July 2019.

Calendar Year 2017 Accomplishments

- Major milestone reached on Broad Creek Conveyance System South
- Brighton Dam Rehabilitation
- Improved street restoration and paving process and performance
- Rate study and cost of service analysis were completed
- Lowest reported SSOs since Consent Decree inception
- New collections program resulted in payment of \$1.6 million in delinquent charges
- Resolved discolored water issue
- Recognized excellence in plant performance by NACWA
- 99 years without a water quality violation

Rates & Upcoming Major Capital Projects

- ▶ WSSC's budget & rates are driven by capital costs/debt service
- ▶ WSSC has several critical capital projects in or will be in the CIP in the next ten years that will have a significant, ongoing rate impact
 - Potomac Consent Decree ~\$165-\$500 MM
 - Potomac Submerged Channel Intake ~\$83 MM
 - Advanced Metering Infrastructure (AMI) ~\$94 - \$200M
 - Piscataway Bio-Energy Project ~\$249 MM
 - Potomac WFP 69kV Feeder Options ~\$38-\$217 MM
 - Regional Water Supply Redundancy ~\$400 MM
- ▶ As the project details mature, WSSC and the Counties will need to collaboratively weigh options, timing, costs, rate impacts, and risks.

Cost Control & Efficiencies

- ▶ Supply Chain Management Transformation
 - Over \$70 million in cost avoidance savings and reductions since FY13 inception
 - Fleet
 - Chemicals
 - Ductile Pipe
 - IT Maintenance
 - PCCP

- ▶ Upgraded fueling system, reducing projected fuel costs by 32%

- ▶ Reduced overtime costs by over 11% or nearly \$1 MM in FY17

- ▶ Group Insurance Plan Design & other changes
 - \$1.5 MM annual Prescription cost savings
 - Reduced Stop Loss insurance premium by ~\$400,000 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

FY 2019 Proposed Budget Overview

Letitia Carolina-Powell
Budget Division Manager

FY 2019 Proposed Budget

The FY'19 Proposed Capital and Operating Budget totals \$1.4 Billion

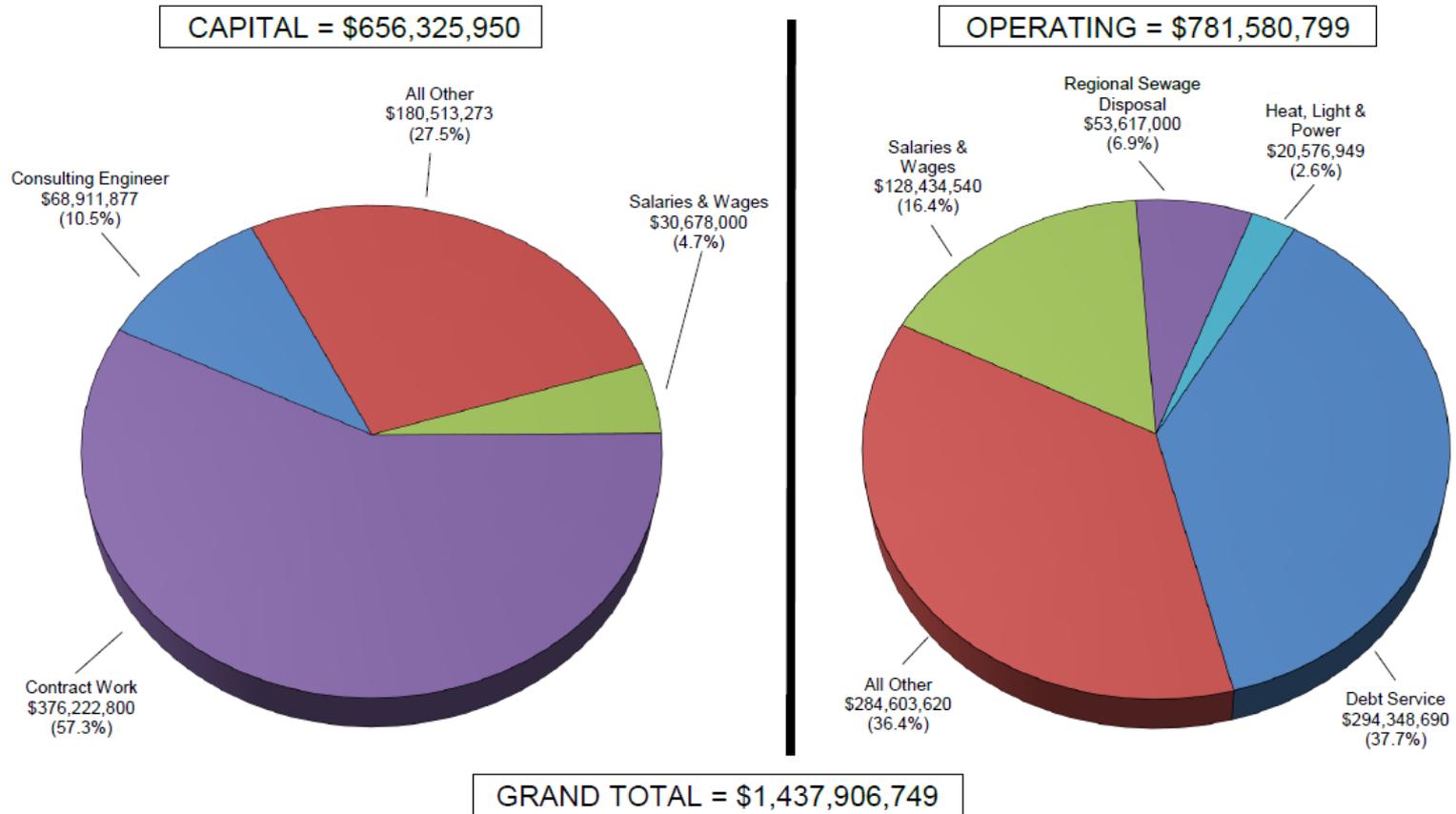
- 4.5% Rate Increase
- No increase in Ready to Serve Charges
- No new positions in FY19
- Major enhancements in Customer Service planned in FY19 through abolishing existing vacancies
- Postponement of planned maintenance service improvements
- Total Budget Increase of only 0.8%

FY2019 Proposed Budget

- Complying with the Sanitary Sewer Overflow and the Potomac Plant Consent Decrees;
- Funding the replacement of 45 miles of water mains and 41 miles of sewer mains and lateral lines;
- Funding of \$46.5 million is included for large diameter pipe rehabilitation. This includes \$25.0 million for Pre-stressed Concrete Cylinder Pipe inspection, repair, and acoustic fiber optic monitoring of the pipes' condition; \$18.7 million for large diameter repairs and cathodic protection; \$2.8 million for large valve inspections, replacement, and repairs;
- Funding the Customer Assistance Program (~7,930 customers) with a revenue offset of \$888,000;
- Paying WSSC's share of the cost of operating the District of Columbia Water and Sewer Authority's Blue Plains Wastewater Treatment Plant;
- Issuing \$486.8 million in new water & sewer debt and paying debt service of \$294.3 million – of which \$277.1 million is in the Water and Sewer Operating Funds

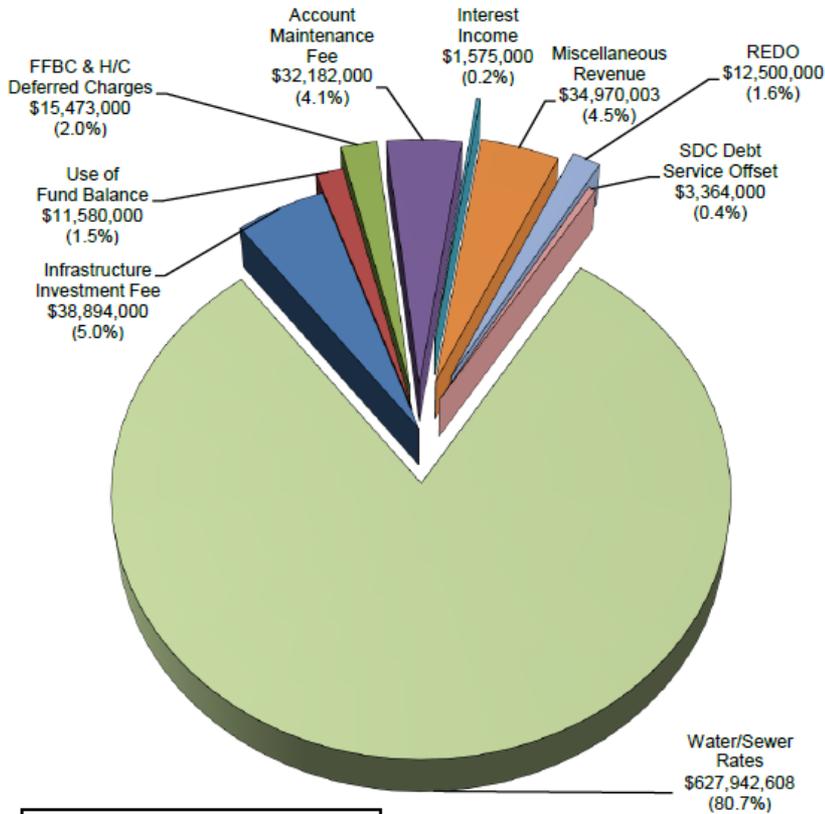
FY 2019 Proposed Budget Overview

BY MAJOR EXPENSE CATEGORY



FY 2019 Proposed Budget Overview

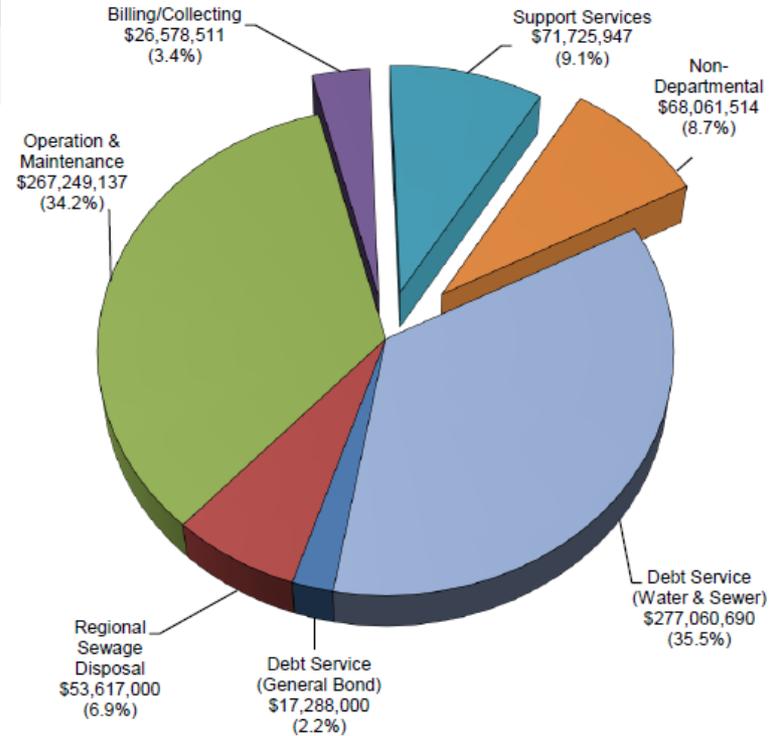
FUNDING SOURCES



REDO = Reconstruction Debt Service Offset
 SDC = System Development Charge
 H/C = House Connection
 FFBC = Front Foot Benefit Charge

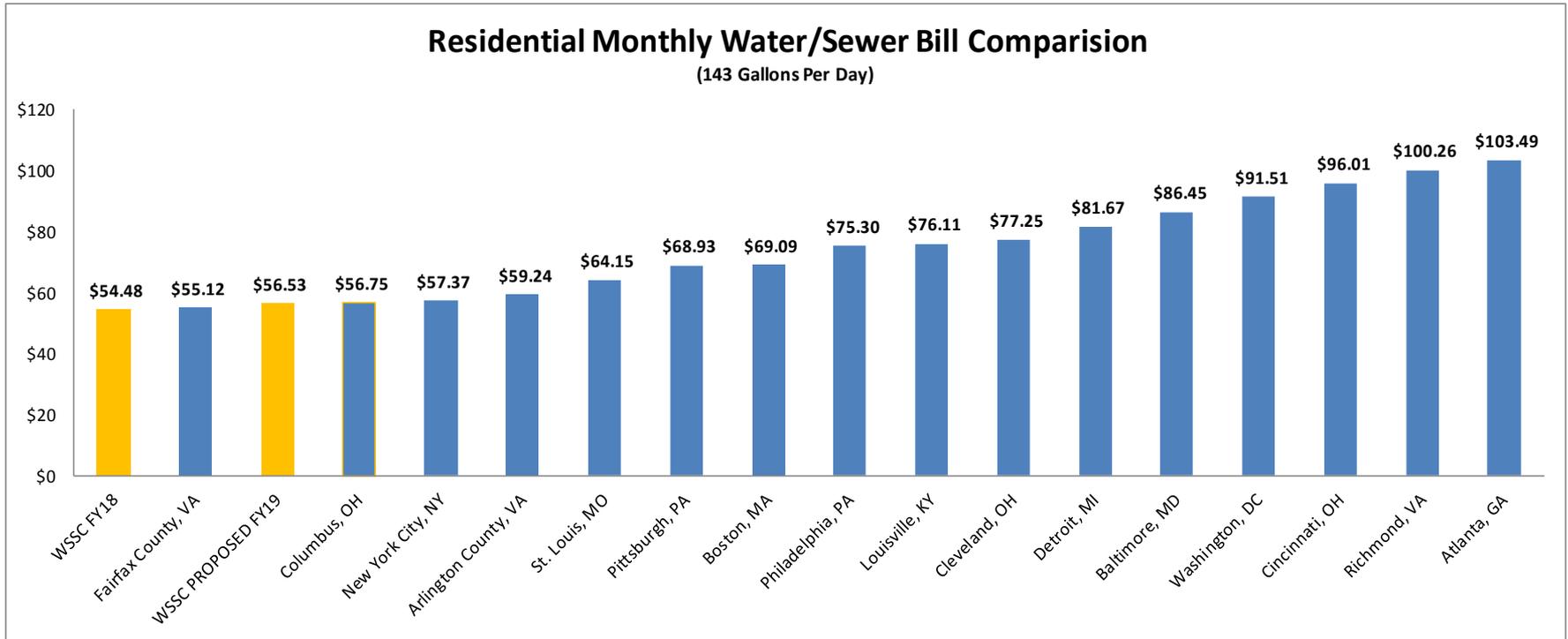
TOTAL SOURCES = \$778,480,611

FUNDING USES

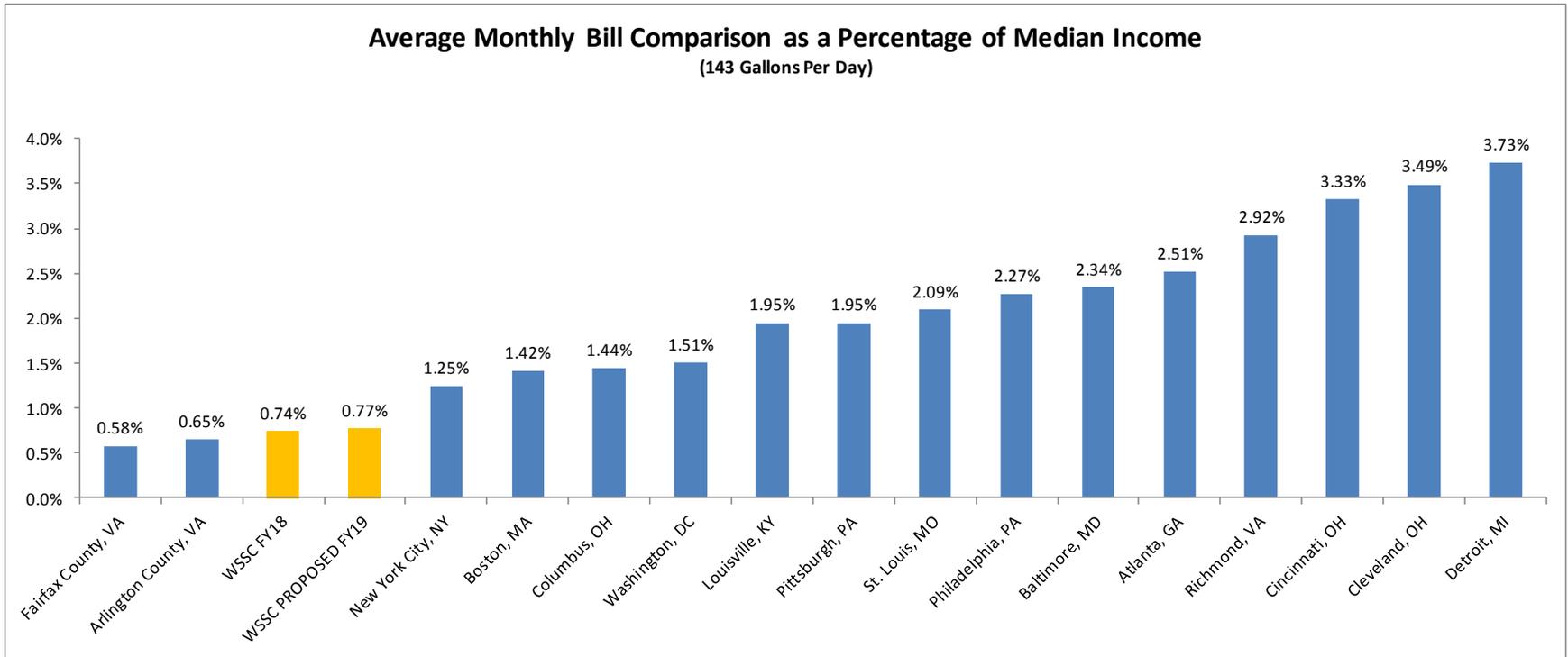


TOTAL USES = \$781,580,799

FY 2019 Proposed Budget Overview



FY 2019 Proposed Budget Overview



FY 2019 Proposed Budget Overview

- ▶ In Mid-February, the Commissioners approved a proposed budget for transmittal to the two Counties. The proposed rate increase falls between the Counties' Spending Affordability recommendations.

<u>Category</u>	<u>Prince George's County</u>	<u>Montgomery County</u>	<u>WSSC Proposed Budget</u>
Water & Sewer Operating Expenditures	\$ 757,645,000	\$ 763,653,000	\$ 762,692,611
Water & Sewer Debt Service	\$ 277,564,000	\$ 281,174,000	\$ 277,060,690
New Debt	\$ 435,879,000	\$ 546,879,000	\$ 486,847,776
Water & Sewer Rate Increase	4.0%	5.0%	4.5%

- ▶ Average residential bill increase:
 - ▶ \$2.04 per month
 - ▶ \$6.12 per quarter

FY 2019 Proposed Capital Budget & Capital Improvements Program Overview

Mark Brackett
Budget Unit Coordinator

FY 2019 Proposed Budget Overview

PROPOSED FY's 2019–2024 CAPITAL IMPROVEMENTS PROGRAM

- ▶ Total program \$3.6 billion
 - Total program includes 70 projects
 - One new project
 - Eleven projects closing out
- ▶ Six-year program period expenditures \$2.0 billion
- ▶ FY'19 budget year estimated at \$401 million



FY 2019 Proposed Budget Overview

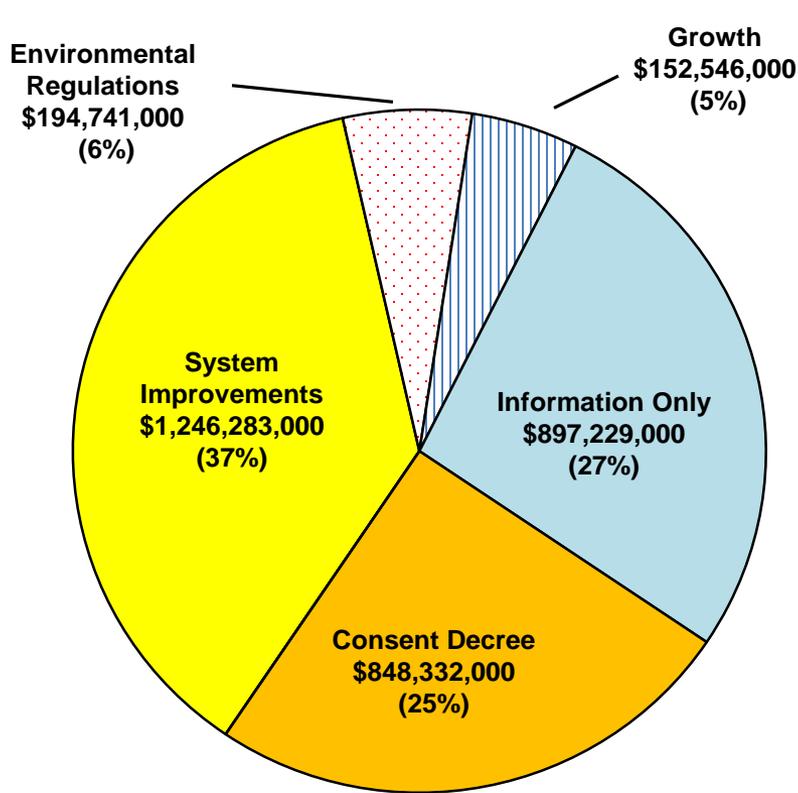
INFORMATION ONLY PROJECTS

- ▶ Total program \$1.6 billion
 - Nine total projects
 - Projects are not required by State Law to be included in CIP but are presented to provide additional information to our customers
- ▶ Six-year program period estimated at \$1.3 billion
- ▶ FY'19 budget estimated at \$226 million

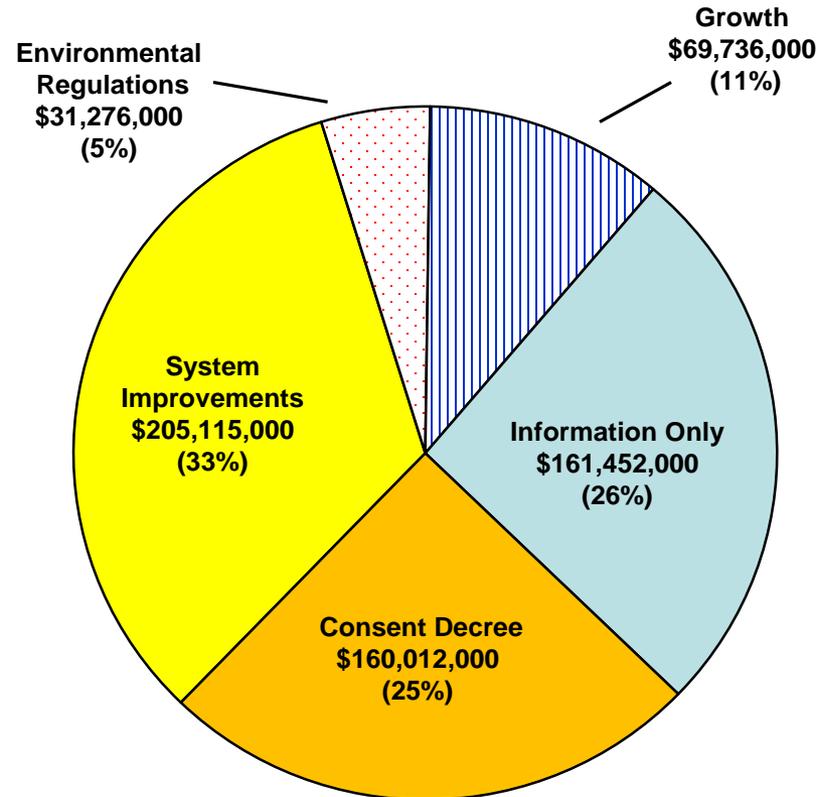


FY 2019 Proposed Budget Overview

COMBINED PROGRAM: MAJOR CATEGORIES



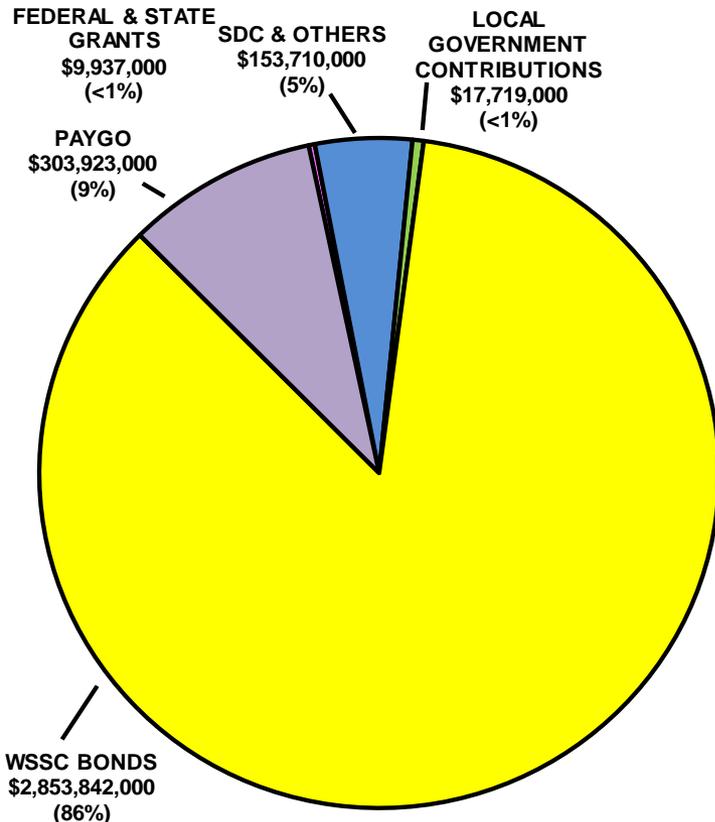
Six-Year Program Total \$3,339,131,000



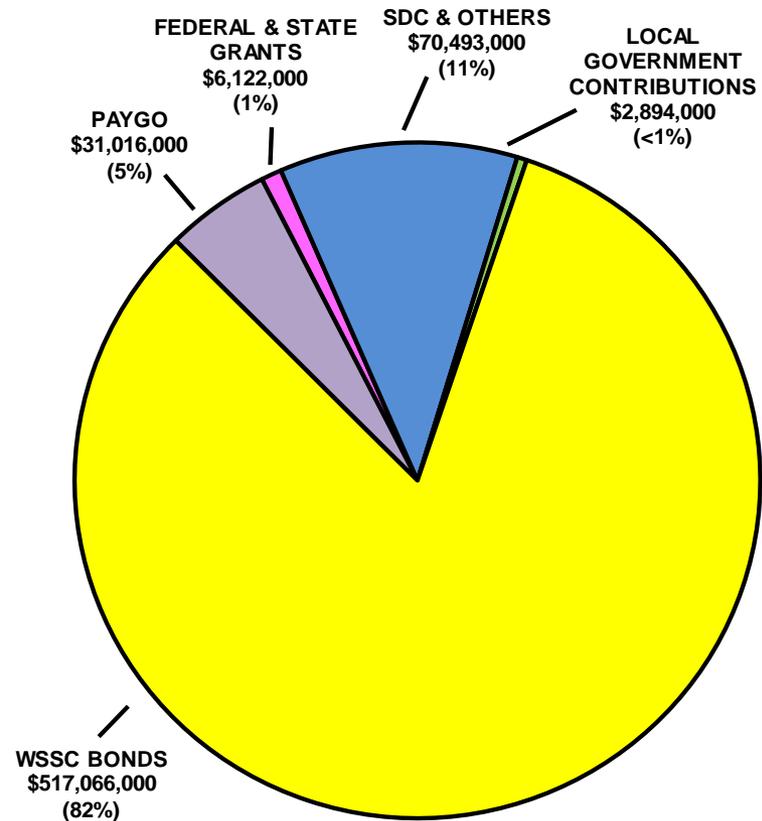
FY'19 Budget \$627,591,000

FY 2019 Proposed Budget Overview

COMBINED PROGRAM: FUNDING SOURCES



Six-Year Program Total \$3,339,131,000



FY'19 Budget \$627,591,000

FY 2019 Proposed Budget Overview

CAPITAL EXPENDITURE IMPACT

(\$ millions)

	FY'13	FY'14	FY'15	FY'16	FY'17	5- years
New Debt Issued	\$ 590.7	\$ 438.7	\$ 394.0	\$ 729.5	\$ 402.1	\$2,555.0
New Debt Avoided:						
PAYGO	-	13.8	20.0	18.8	21.5	74.1
SDC PAYGO	41.5	31.9	49.2	8.6	36.8	168.0
Total Debt Outstanding	1,878.3	1,952.5	2,171.4	2,470.4	2,610.8	

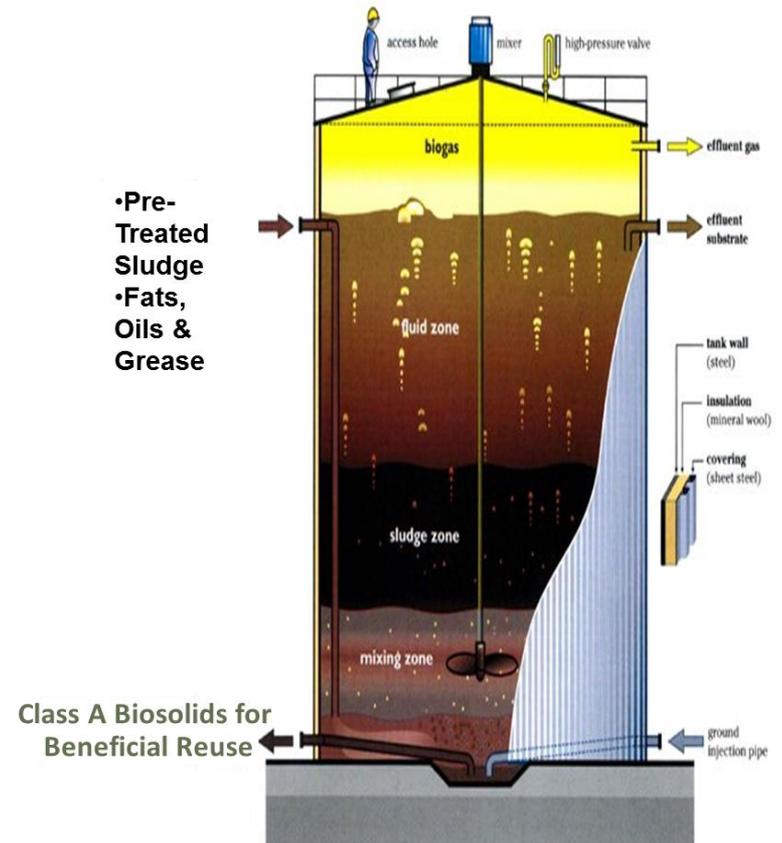
FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS

Piscataway WWTP Bio-Energy Project

(S-103.02; p.4-8)

- ▶ Construct new centralized anaerobic digestion/combined heat & power system
- ▶ Treat biosolids from Piscataway, Parkway, **Western Branch**, Seneca, and Damascus wastewater treatment plants
- ▶ Reduce biosolids volume by 50%
- ▶ Class A biosolids for beneficial re-use
- ▶ Reduce Greenhouse Gas Emissions by 15%
- ▶ Reduce nutrient load to Chesapeake Bay
- ▶ Recover 2-3 megawatts of renewable energy
- ▶ Projected economic benefit of \$3.7M per year
- ▶ Expected construction start fall 2018



FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS (cont.)

Broad Creek WWPS Augmentation

(S-43.02, page 6-5)

- ▶ Piscataway WWTP headworks and storage upgrade; northern end of force main and southern end of force main projects construction completed
- ▶ Pumping station modifications construction phase started in January 2017 with expected completion in spring 2020
- ▶ Quarterly Project Update Newsletters sent out to citizens and stakeholders



FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS (cont.)

Blue Plains WWTP

The Blue Plains WWTP is owned and operated by DC Water. WSSC's share of the capital costs of the plant is approximately 46%.

- ▶ The Blue Plains WWTP treats approximately 65% of WSSC's wastewater.
- ▶ The largest projects include the Long-Term Control Plan tunnels, and the Enhanced Nutrient Removal projects.
- ▶ At \$360 million, Blue Plains projects represent 18% of the six-year CIP program.
- ▶ The FY'19 budget, at \$65.3 million, represents 16% of the budget year program.



FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS (cont.)

Patuxent Water Filtration Plant

The Patuxent plant in Laurel produced an average of 48 million gallons of water per day (mgd) in FY'17 and serves northern Prince George's County and a portion of eastern Montgomery County

- ▶ Phase II Expansion (W-172.05, page 3-13)
Expansion to 72 MGD and new UV facilities. Currently in construction.
- ▶ Raw Water Pipeline (W-172.07, page 3-14)
New raw water pipeline to plant. Final alignment determined. Delayed resolving easement issues.
- ▶ Rocky Gorge Pump Station Upgrade
(W-172.08, page 3-15)
Upgrades to expand plant to pump up to 110 MGD of raw water up to plant. Currently in construction.



FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS (cont.)

Potomac Water Filtration Plant

The Potomac plant produced an average of 116 million gallons of water per day (mgd) in FY'17 and serves Montgomery County and southern Prince George's County

- ▶ Consent Decree Program (W-73.33, page 3-8)
 - Short-term Operational Changes and Capital Projects (Audit Report) submitted to MDE December 2016, must be completed by April 1, 2020. Cost \$11.5M.
 - Long-term Upgrade Plan (10 years) not approved by MDE over design capacity issue. Pilot project revealed plan was not adequate.
 - MDE considering amending the plan with different technology and discussing design capacity issue.
 - Completion due early 2026. Initial cost estimate of \$165M expected to increase.



FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS (cont.)

Large Diameter Water Pipe & Valve Program

(W-161.01; page 3-10)

- ▶ Over 1,000 miles of water pipe and nearly 1500 large water valves
- ▶ Over 100 miles of PCCP pipe inspected and monitored 24/7; avoided 12 imminent pipe failures
- ▶ Over 4,000 pipe joints repaired; 438 pipe segments repaired/replaced
- ▶ Over 1,300 valves inspected and repaired as needed



FY 2019 Proposed Budget Overview

HIGHLIGHTED PROJECTS (cont.)

Trunk Sewer Reconstruction Program

(S-170.09; page 4-11)

- ▶ Inspection and evaluation of all 24 sewer basins is complete (over 1300 miles inspected)
- ▶ Comprehensive rehabilitation of sewer pipes in Environmentally Sensitive Areas currently underway to reduce infiltration and inflow
- ▶ Replacement of pipe; in-situ relining of pipe; correction of defects; pipeline protection; and, rehabilitation of manholes
- ▶ Over 151 of 156 miles released for construction
- ▶ Consent Decree deadline extended to 2022



FY 2019 Proposed Budget Overview

RECONSTRUCTION PROGRAMS – WATER

	Current		Planned
	<u>FY'18 Adopted</u>	<u>FY'18 Estimated</u>	<u>FY'19 Proposed</u>
Main Line Design - (\$)	\$ 20,313,000	\$ 17,500,000	\$ 17,993,000
Main Line & House Connection Construction - Miles	55 miles	48 miles	45 miles
Main Line & House Connection Construction - (\$)	\$ 78,947,000	\$ 69,751,000	\$ 66,243,000
Cathodic Protection - (\$)	\$ 4,746,000	\$ 1,422,000	\$ 1,036,000
Large Water Service Design - (\$)	\$ 2,636,000	\$ 2,571,000	\$ 2,636,000
Large Water Service Construction - Meters	30 meters	30 meters	30 meters
Large Water Service Construction - (\$)	\$ 5,314,000	\$ 5,229,000	\$ 5,314,000
Emergency Contracts at Depots - (\$)		\$ 6,571,000	\$ 6,703,000
Total Water Reconstruction	\$ 111,956,000	\$ 103,044,000	\$ 99,925,000

FY 2019 Proposed Budget Overview

RECONSTRUCTION PROGRAMS – SEWER

	Current		Planned
	<u>FY'18 Adopted</u>	<u>FY'18 Estimated</u>	<u>FY'19 Proposed</u>
Main and Lateral Line Design - (\$)	\$ 1,429,000	\$ 1,514,000	\$ 1,893,000
Main Line Residential Construction - Miles	20 miles	20 miles	20 miles
Main Line Residential Construction - (\$)	\$ 29,614,000	\$ 29,671,000	\$ 30,223,000
Lateral Line & House Connection Construction - Miles	6 miles	6 miles	6 miles
Lateral Line & House Connection Construction - (\$)	\$ 24,986,000	\$ 24,986,000	\$ 25,483,000
Sewer House Connection Renewal	400 renewals	400 renewals	400 renewals
Sewer House Connection Renewal - (\$)	\$ 4,229,000	\$ 4,000,000	\$ 4,229,000
Emergency Repairs - (\$)	\$ 2,856,000	\$ 2,857,000	\$ 2,856,000
Total Sewer Reconstruction	\$ 63,114,000	\$ 63,028,000	\$ 64,684,000

Rate Structure Alternatives Briefing

Joseph F. Beach
Chief Financial Officer

Why Change?

1. WSSC's current rate structure was adopted 25 years ago and good management practice dictates periodic review of rate structure alternatives.
2. The Maryland Public Service Commission (PSC) ordered WSSC to develop a new rate structure. The PSC found the existing rate structure to be preferential to low-usage customers.
3. A new rate structure is intended:
 - To reflect customer and Commission rate setting policy goals and objectives;
 - To provide a more predictable revenue stream to pay for infrastructure improvements; and
 - To better align costs to produce and deliver safe, clean water with rates.

Why Change?

- ❖ Current 16-Tier rate structure charges customers at their highest level of water use back to the 1st drop
- ❖ Common practice is to charge for usage that falls within each tier

WSSC's Current 16-Tier Rate Structure

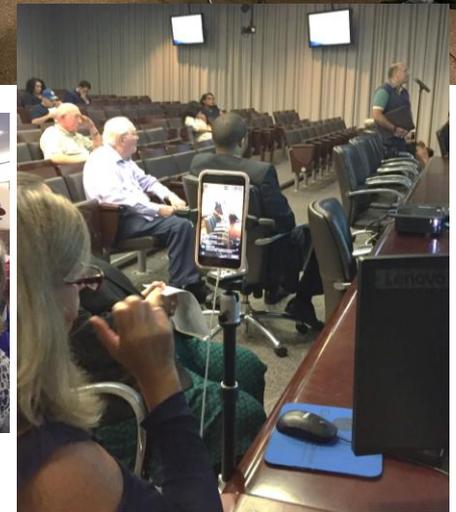
	Combined Water & Sewer Rates Per 1,000 Gallons
Average Daily Consumption (ADC)	Effective
Range (Gallons Per Day)	July 1, 2017
0-49	\$ 7.95
50-99	9.12
100-149	10.38
150-199	11.83
200-249	13.27
250-299	14.38
300-349	15.29
350-399	15.99
400-449	16.46
450-499	16.95
500-749	17.28
750-999	17.68
1,000-3,999	18.26
4,000-6,999	18.67
7,000-8,999	18.94
9,000 & Greater	19.36

Rate Structure Setting Milestones

- ❖ **June – October 2016:** Bi-County Rate Structure Working Group develops viable rate structure alternatives
- ❖ **November 2016 – January 2017:** Stakeholder Representative Group meets to review & provide input on rate structure alternatives
- ❖ **April 2017:** Cost of Service Study completed
- ❖ **May – July 2017:** WSSC hosts 8 public informational meetings on rate structure options and participates in other public meetings to brief customers on rate structure alternatives
- ❖ **June – November 2017:** WSSC hosts 3 public hearings in October and WSSC Commissioners hold 5 special public sessions on rate structure policies & options
- ❖ **February – June 2018:** County Council Review of Rate Structure alternatives; Commission selects a new rate structure in June 2018 for implementation in FY20

Extensive Public Outreach

- ❖ 26 public meetings public meetings attended by nearly 1,500 WSSC customers including:
 - ❖ 15 interactive Public Informational Meetings
 - ❖ 3 Public Hearings
 - ❖ 7 Commission meetings on the rate structure
 - ❖ 1 Joint Council Committee Meeting
- ❖ 3 direct mailings to all customers
- ❖ Meetings attended by nearly 1,500 customers & generated more than 300 comments
- ❖ All WSSC meetings livestreamed and seen by nearly 2,500 viewers
- ❖ Radio ads on key stations
- ❖ English/Spanish outreach
- ❖ Paid social media ads
- ❖ News releases/earned media
- ❖ Elected official notification
- ❖ wsscwater.com/ratestudy



Framework for Developing Rate Structure Alternatives

- ❖ Basis for rate design is 3 person household
- ❖ Typical household size in WSSC service area is 3 people
- ❖ 93% of all bills are for residential customers
- ❖ 75% of residential households are 3 or less people
- ❖ 95% of residential households are 5 or less people

Rate Structure Alternatives

Type of Rate Structure	Options	Gallons Per Day	Rate Per 1,000 Gallons	Options	Gallons Per Day	Rate Per 1,000 Gallons
Uniform (Not Recommended)		n/a	\$14.73			
3 Block Inclining	Option A	0-80	\$10.66	Option B	0-165	\$10.41
		81-165	\$13.43		166-275	\$13.89
		>165	\$17.61		>275	\$19.96
4 Block Inclining	Option A	0-80	\$10.66	Option B (Not Recommended)	0-80	\$10.66
		81-165	\$12.25		81-165	\$13.09
		166-275	\$14.86		166-9,000	\$16.16
		>275	\$18.74		>9,000	\$20.52

FY 2019 Proposed Budget and Rate Structure Alternatives

THANK YOU.

Questions?