



# Washington Suburban Sanitary Commission

## AGENCY DESCRIPTION

The Washington Suburban Sanitary Commission (WSSC) is a bi-county agency directed by a board of six commissioners, three each from Prince George's County and Montgomery County. The commissioners are appointed by the respective jurisdiction's Executive and confirmed by its County Council.

The WSSC is responsible for providing water and sanitary sewer service within the Washington Suburban Sanitary District, which includes most of Montgomery and Prince George's counties and which, in Montgomery County, excludes the Town of Poolesville and portions of the City of Rockville.

## PROGRAM DESCRIPTION AND OBJECTIVES

The principal objective of the Capital Improvements Program (CIP) is the programming of planning, design, land acquisition, and construction activities on a yearly basis for major water and sewerage facilities. These facilities may be necessary for system improvements and/or service to existing customers, to comply with Federal and/or State environmental mandates, and to support new development in accordance with the counties' approved plans and policies for orderly growth and development.

The CIP submission includes all major projects, defined as extensions, projects, or programs involving water and sewer facilities. Major projects include: sewer lines 15 inches in diameter or larger; sewage pumping stations, storage facilities, and force mains; sewage treatment facilities; water mains 16 inches in diameter or larger; water pumping stations; water storage facilities for raw and potable water; water treatment facilities; and other major facilities.

The section following this narrative ordinarily shows only the WSSC project description forms (PDFs) for which the Executive recommends changes to the Commission's request. Those PDFs would be preceded by project briefs which provide a description of the change and the Executive's rationale. The complete set of PDFs submitted by the Commission can be found on the WSSC web site at: <http://www.wsscwater.com>.

In addition, a report noting the Commission's request by project follows the same report outlining the County Executive's recommendation by project. For this year's proposed CIP budget, these additional documents will not follow this narrative given that the Executive is not recommending changes to the budget proposed by WSSC.

## PROGRAM CONTACTS

Contact Mark Brackett of WSSC's Budget Division at 301.206.8179 or Matt Schaeffer of the Office of Management and Budget at 240.777.2766 for more information regarding this agency's capital budget.

## CAPITAL PROGRAM REVIEW

This narrative applies only to the Montgomery County and bi-county water and sewerage projects. Projects that serve only Prince George's County are not included.

### Agency Request

The total of \$1,615.5 million in six-year expenditures proposed by the WSSC for FY19-24 is \$96.6 million (6.4 percent) above the FY18-23 approved total of \$1,518.9 million. The decrease in six-year costs is the net result of cost changes in both the water and sewer projects with the largest cost changes seen in the Commission's consent decree projects.

The FY19-24 CIP request includes 35 ongoing projects, two closeout projects, and seven pending closeout projects. There are no new

proposed projects.

The following table compares the proportion of funding for Montgomery, Prince George's, and bi-county projects in the Commission's proposed CIP:

<b>MONTGOMERY COUNTY/PRINCE GEORGE'S COUNTY/BI-COUNTY SPLIT</b>						
<b>(FY19-24 Proposed CIP)</b>						
	<b>FY19</b>		<b>6-Year</b>		<b>Total Cost</b>	
	<b>\$ (000)</b>	<b>% of Total</b>	<b>\$ (000)</b>	<b>% of Total</b>	<b>\$ (000)</b>	<b>% of Total</b>
Montgomery County Water Projects	13,869	3.3%	16,204	0.8%	52,122	1.5%
Montgomery County Sewer Projects	12,537	3.0%	25,814	1.3%	41,380	1.2%
Prince George's County Water Projects	49,408	11.6%	214,639	10.7%	366,956	10.4%
Prince George's County Sewer Projects	60,397	14.2%	180,556	9.0%	426,845	12.1%
Bi-County Water Projects	95,051	22.4%	677,084	33.7%	1,080,113	30.6%
Bi-County Sewer Projects	193,109	45.5%	896,378	44.6%	1,561,320	44.2%
<b>TOTAL</b>	<b>424,371</b>	<b>100.0%</b>	<b>2,010,675</b>	<b>100.0%</b>	<b>3,528,736</b>	<b>100.0%</b>
All Montgomery County Projects	26,406	6.2%	42,018	2.1%	93,502	2.6%
All Prince George's County Projects	109,805	25.9%	395,195	19.7%	793,801	22.5%
All Bi-County Projects	288,160	67.9%	1,573,462	78.3%	2,641,433	74.9%

## Executive Recommendation

The County Executive recommends adoption of the FY19-24 CIP as proposed by WSSC.

### HIGHLIGHTS

- Continue development of capital projects aimed to address long-term issues in water and sewer management including the Piscataway Bio Energy Project (to address biosolids management) and Advanced Metering Infrastructure (AMI) (to improve billing efficiency, leak detection, system-wide monitoring, and allow for monthly billing).
- Continue a high level of water and sewer line infrastructure reconstruction replacing and rehabilitating 45 miles of water mains and 20 miles of sewer main in FY19.
- The Commission will continue to address the consent order with the Maryland Department of the Environment (MDE) related to the rehabilitation of sewer mains and manholes located in Environmentally Sensitive Areas (ESAs). As of FY19, all construction contracts related to the consent order have been awarded.
- The Commission will also continue to support operations at DC Water's facility in Blue Plains. Support to Blue Plains projects represents 21% of the bi-county and Montgomery County WSSC six-year capital program.

### SPENDING CONTROL LIMITS

In order to reduce the magnitude of water and sewer rate increases, the Montgomery and Prince George's County councils adopted a spending affordability process in April 1994. The process requires the counties to set annual ceilings on WSSC's water and sewer rates and debt (both bonded indebtedness and debt service), and then to adopt corresponding limits on the size of the capital and operating budgets.

While the spending limits technically apply only to the first year of the six-year program, the purpose of the limits includes controlling debt, debt service, and rate increases over the longer term. The FY19 spending control limits adopted by the Montgomery County Council are shown below with their outyear projections. The first year of the Commission's proposed CIP is consistent with the approved FY19 spending control limits shown below, as is the County Executive's recommended CIP for WSSC.

<b>FY19 WSSC SPENDING CONTROL LIMITS ADOPTED BY THE MONTGOMERY COUNTY COUNCIL (AND OUTYEAR PROJECTIONS)</b>						
	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
New Debt Requirement (\$000)	\$546,879	\$536,394	\$519,803	\$423,105	\$366,167	\$325,611
Total W/S Operating Budget (\$000)	\$763,661	\$831,799	\$884,782	\$927,239	\$966,553	\$1,004,938
Debt Service (\$000)	\$281,174	\$319,840	\$352,501	\$375,919	\$396,713	\$416,814
Average Rate Increase	5.0%	11.5%	7.7%	5.8%	5.0%	5.2%

Source: Montgomery County Council Resolution 18-955 and WSSC Budget Division.

## WSSC'S LEVEL OF BONDED INDEBTEDNESS

### Debt Service

The County Executive and County Council monitor the WSSC's bonded indebtedness and debt service level. Total outstanding water and sewer bond debt has risen 64.6 percent since FY13, and total water and sewer debt service is up 10.1 percent over the same period, as shown in the following table.

<b>WSSC BONDED INDEBTEDNESS AND DEBT SERVICE</b>						
(\$ in Millions)	<b>ACTUAL FY13</b>	<b>ACTUAL FY14</b>	<b>ACTUAL FY15</b>	<b>ACTUAL FY16</b>	<b>ACTUAL FY17</b>	<b>ESTIMATED FY18</b>
End of Fiscal Year - Total Outstanding Bond Debt (includes Storm Water Drainage Bonds)	\$1,878.3	\$1,952.5	\$2,171.4	\$2,470.4	\$2,813.4	\$3,179.1
Outstanding Water and Sewer Bond Debt	\$1,595.5	\$1,696.7	\$1,947.5	\$2,284.1	\$2,625.6	\$3,015.8
Total Debt Service - All Operating Funds	\$227.6	\$249.1	\$248.0	\$228.5	\$250.7	\$271.2
Debt Service as a % of Total Operating Exp.	39.1%	40.6%	38.0%	35.7%	36.7%	36.6%
Debt Service in Water/Sewer Operating Exp.	\$184.2	\$210.8	\$222.0	\$210.4	\$236.7	\$257.1
Water/Sewer Debt Service as a % of Total Water/Sewer Operating Expenditures	34.2%	36.7%	35.5%	33.9%	35.4%	35.4%

Source: WSSC Budget Division

The debt service ratio is projected to be 36.8 percent in FY19. WSSC anticipates exceeding previous limits the Commission had set of a 40 percent debt service ratio by FY22 as a result of continuing growth in bond funded capital projects.

<b>PROJECTED WSSC DEBT SERVICE RATIO UNDER THE COUNTY'S APPROVED SPENDING CONTROL LIMITS</b>						
	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Debt Service as a % of Total Water and Sewer Operating Expenditures	36.8%	38.5%	39.8%	40.5%	41.0%	41.5%

Source: WSSC Budget Division

### Debt Capacity

State law provides for the option of a tax levy against all assessable property in the Washington Suburban Sanitary District by Montgomery and Prince George's counties to pay for the principal and interest on WSSC bonds. This provision, which would be exercised only if requested by the WSSC, does not constitute a pledge of the full faith and credit of the two counties. The amount of debt that the WSSC issues is therefore a factor in rating agency assessments of the credit worthiness of Montgomery County. In addition, increasing levels of debt service can lead to increases in the combined water and sewer rate.

## "INFORMATION ONLY" PROJECTS

The WSSC is obligated by State law to submit for CIP review and approval only major water and sewerage projects. However, the Commission undertakes other kinds of capital projects which are shown separately in the CIP. These "Information Only" projects may be included for a number of reasons, including: fiscal planning purposes; to improve the reader's understanding of the full scope of a specific set of projects; or in response to a request from one or both of the county governments. "Information Only" projects are subject to review and approval as part of the annual WSSC Operating and Capital Budget, which is acted on by the Council in the spring.

The FY19-24 "Information Only" projects include the Water and Sewer Reconstruction projects, Engineering Support Program, Advanced Metering Infrastructure, and the Water Storage Facility Rehabilitation Program.

The total FY19-24 budget for the "Information Only" projects is \$1,441.1 million, a 0.7 percent increase from the \$1,431.5 million approved for the FY18-23 CIP. This increase is the net result of cost changes throughout the projects.

Total proposed FY19-24 spending on the Water and Sewer Reconstruction "Information Only" projects will increase by \$40.5 million (3.6 percent). The accompanying metrics for miles of water main replacement and sewer main rehabilitation can be seen below in the following table.

<b>SMALL WATER AND SEWER MAIN RECONSTRUCTION INCLUDED IN WSSC'S PROPOSED FY19-24 CIP</b>								
	Approved	Proposed FY19-24						FY19-24
	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Total
Water Main Replacement (mi.)	55	45	45	45	45	45	45	270
Sewer Main Rehabilitation (mi.)	20	20	22	22	22	22	22	130

Source: WSSC Budget Division

## PROGRAM FUNDING

The WSSC CIP is funded through a variety of sources described below.

### WSSC Bonds

The WSSC raises revenue for CIP projects by issuing water and sewer bonds. These bonds are amortized through periodic charges to the users of water and sewer services. Bond funding for the FY19-24 CIP, as recommended by the County Executive, is \$1,560.4 million.

### System Development Charge

The System Development Charge (SDC) is a charge to new development to pay for the part of the CIP which is needed to accommodate growth. The WSSC collects SDC revenue from charges to builders based on the number and type of plumbing fixtures installed in new construction projects. The County Executive recommends that \$6.3 million in SDC funds be used to fund growth projects in FY19-24.

### State Aid

The total State Aid budgeted for the FY19-24 CIP and recommended by the Executive is \$7.5 million. WSSC asserts that all Commission projects receiving State Aid conform to the requirements of local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

### Municipal Financing

The WSSC CIP contains projects in which neighboring jurisdictions such as the District of Columbia and the City of Rockville join the Commission in financing the construction of sewerage facilities serving the metropolitan area. These jurisdictions contribute an agreed-upon share of the project cost. A total of \$17.9 million in project expenditures is recommended to be financed by these jurisdictions during FY19-24.

### Contributions

When the actual costs of water and sewerage facilities required to serve new development are estimated to exceed expected revenues, the difference may be financed by developers in the form of contributions. Contributions toward CIP projects are estimated at \$23.4 million for FY19-24.

## STATUTORY AUTHORITY

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The Montgomery County CIP review process for the WSSC is governed by laws and regulations of the State of Maryland, the Montgomery County Charter, and the Montgomery County Code. Relevant projects authorized for Montgomery County review include only Montgomery and bi-county water and sewer projects.

The Montgomery County Executive reviews relevant WSSC CIP proposals and includes them, along with comments and recommendations, in the Executive's Recommended Capital Improvements Program. After a public hearing and subsequent committee work sessions, the Montgomery County Council approves by resolution WSSC's six year capital program and annual operating and capital budgets, with modifications as desired.

Bi-county projects are projects located completely or partially within Montgomery County or Prince George's County that are designed to provide service in whole or in substantial part to the other county. A proposed bi-county project may be disapproved only with the concurrence of the governing body of the county which is to receive the designated service. However, the county in which the project is to be physically located has the authority to direct modifications in project location and scheduling, provided that such modifications or changes do not prevent the service from being available when needed.

This authority to modify location may only be exercised during the year in which the project is first introduced. Thereafter, the authority to make modifications is limited to those changes that would not result in substantial net additional costs to the WSSC, unless the county directing the modification reimburses the WSSC for any additional net cost increases resulting from the modification.

The WSSC is responsible for constructing approved capital projects on a schedule as close as possible to the schedule set forth in the adopted CIP. The Commission is limited to undertaking only those projects which are scheduled in the first year of the program. However, it is not obligated to implement any project determined to be not financially feasible.

**FY 19-24 Full CIP**  
**Agency 6-Year Request Compared to Executive Recommended**  
**WSSC**

Project Name (Project Number)	Agency Request	Executive Recommended
<b>Sewerage Bi-County</b>		
Blue Plains WWTP: Biosolids Mgmt PT2 (P954812)	34,162	34,162
Blue Plains WWTP: Enhanced Nutrient Removal (P083800)	11,332	11,332
Blue Plains WWTP: Liquid Train PT 2 (P954811)	139,060	139,060
Blue Plains WWTP: Plant Wide Projects (P023805)	74,087	74,087
Blue Plains: Pipelines and Appurtenances (P113804)	77,656	77,656
Land & Rights-of-Way Acquisition - Bi-County (S) (P163800)	170	170
Piscataway WWTP Bio-Energy Project (P063808)	232,933	232,933
Septage Discharge Facility Planning & Implement. (P103802)	25,620	25,620
Trunk Sewer Reconstruction Program (P113805)	301,358	301,358
<b>Sewerage Montgomery County</b>		
Cabin Branch WWPS (P023807)	2,786	2,786
Cabin Branch WWPS Force Main (P023808)	379	379
Cabin John Trunk Sewer Relief (P063807)	15,430	15,430
Clarksburg Triangle Outfall Sewer, Part 2 (P023811)	720	720
Clarksburg Wastewater Pumping Station (P173802)	3,092	3,092
Clarksburg WWPS Force Main (P173803)	877	877
Milestone Center Sewer Main (P173804)	514	514
Shady Grove Station Sewer Augmentation (P063806)	2,016	2,016
<b>Water Bi-County</b>		
Duckett and Brighton Dam Upgrades (P073802)	8,546	8,546
Land & Rights-of-Way Acquisition - Bi-County (P983857)	2,918	2,918
Large Diameter Water Pipe Rehabilitation Program (P113803)	395,347	395,347
Patuxent Raw Water Pipeline (P063804)	16,756	16,756
Patuxent WFP Phase II Expansion (P033807)	1,076	1,076
Potomac WFP Consent Decree Program (P173801)	121,150	121,150
Potomac WFP Corrosion Mitigation (P143802)	65	65
Potomac WFP Main Zone Pipeline (P133800)	35,970	35,970
Potomac WFP Outdoor Substation No. 2 Replacement (P113802)	22	22
Potomac WFP Pre-Filter Chlorination & Air Scour Improvements (P143803)	12,424	12,424
Potomac WFP Submerged Channel Intake (P033812)	78,257	78,257
Rocky Gorge Pump Station Upgrade (P063805)	4,553	4,553
<b>Water Montgomery County</b>		
Brink Zone Reliability Improvements (P143800)	7,700	7,700
Clarksburg Area Stage 3 Water Main, Part 4 (P113800)	1,493	1,493
Clarksburg Area Stage 3 Water Main, Part 5 (P163801)	220	220
Clarksburg Elevated Water Storage Facility (P973819)	1,864	1,864
Olney Standpipe Replacement (P063801)	1,070	1,070

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Project Name (Project Number)	Agency Request	Executive Recommended
Shady Grove Standpipe Replacement (P093801)	3,857	3,857

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