

THE PRINCE GEORGE'S COUNTY GOVERNMENT

(301) 952-3700

County Council

MEMORANDUM

OCT 14 2014

October 16th, 2014

TO: Derrick L. Davis, Chair
Transportation, Housing and Environment Committee (THE)

FROM: Hawi Sanu, Director *HS*
Transportation, Housing and Environment Committee (THE)

Howard Stone *HS*
Office of Audits and Investigations

THRU Robert Williams, Council Administrator *RJW*
Prince Georges County Council

SUBJECT: WSSC FY 2016 Spending Control Limits

Montgomery and Prince George's County Councils created a Bi-County Working Group on WSSC Spending Controls to focus on the financial concerns of increasing water and sewer rates, debt, and debt service levels.

Background

In May of 1993, the Montgomery and Prince George's County Councils created a Bi-County Working Group on WSSC Spending Controls to focus on the financial concerns of increasing water and sewer rates, debt, and debt service levels. This group's January 1994 report recommended "the creation of a Spending Affordability Process that requires the Counties to set annual ceilings on WSSC's rates and debt, and then place corresponding limits on the size of the capital and operating budgets of the Commission."

County Administration Building — Upper Marlboro, Maryland 20772

A Bi-County team was put together and a process was created to control capital, operational, and new debt service costs for the purpose of moderating or avoiding water and sewer bill increases. WSSC's FY 1996 Budget was the first budget to be formulated with the limits set by the Spending Affordability Process. The Spending Affordability Process focused the financial performance discussions on the need to balance affordability considerations against providing resources necessary to serve existing customers, meet environmental mandates, and provide the facilities needed to accommodate growth.

The major objectives of this process are to establish the framework for (1) controlling costs, (2) achieving low or moderate water/sewer bill increases, and (3) slowing the rate at which WSSC incurs debt. (Below 40% of the Operating Budget) The impact of this process has been integral in keeping customer bill increases at a stable and reasonable level.

The Spending Affordability process provides a framework within which the Council can review and decide on spending control limits. The limits do not cap what the Councils can approve within the regular budget process that concludes in May of each year. For FY 2016, the Commission recommended moving to a new fee structure, which will revise the Account Maintenance Fees (AMF) to recover a five year average cost for account maintenance services; and a new Infrastructure Fee which will exclusively cover water and sewer pipes reconstruction and rehabilitation. All corresponding funds will be held in a restricted account to be used exclusively for rehabilitation. Each of these proposed fees will generate additional revenues for the said purposes and will lower the water and sewer rate increase. In the past, some of the AMF was a part of the general rate increase; funds were also allocated within the rate increase for rehabilitation of water and sewer pipes.

Bi- County Infrastructure Funding Work Group

Due to the constant rate increases by the Washington Suburban Sanitary Commission, (WSSC), there was a need to create a dedicated revenue source, that will not be exclusively dependent on water and sewer rates. The growing need for the infrastructure rehabilitation and reconstruction, warrants the Commission to be financially structured to accommodate these financial challenges. The Work Group, in collaboration with a renowned consultant, recommended several steps that will enable the Commission to meet its financial goals.

They were as follows:

- Increase the terms on new debt from 20 to 30 years and maintain a debt service coverage target of 1.25X
- Excess cash flow will be used as PAYGO capital funding to reduce borrowing.
- Creation of a dedicated infrastructure rehabilitation charge (fixed or volumetric).
- Creation of a more robust customer affordability program, to be enabled at the State level; MEAP guidelines will be utilized because it is an existing affordability program.

The increment of debt terms from 20 to 30 years was instituted in FY 2015 and produced an immediate benefit of approximately 2% reduction of rates. The Work Group with the assistance of the consultants', also reviewed WSSC's rate structure in an effort to address the Commission's long term fiscal issues. The aim was to have the Commission become less reliant on rate increases, and move to a more definite source of revenue.

It was determined that WSSC's fee structure needed an over haul and the results are as follows:

- Restructure the existing Account Maintenance Fees (AMF) to recover all costs relating to the maintenance of accounts.

- Create a new fixed Infrastructure Renewal Fee to cover the costs of water and sewer pipes rehabilitation and reconstruction programs. Funds will be held in a restricted account for said purposes only.
- Affirm WSSC's pursuit of State Legislation to create a robust Customer Affordability Program.

In complying with these vetted recommendations, the Commission presented scenarios that will be very beneficial towards financial viability.

Schedule and Scenarios

The FY 2016 Spending Affordability Group met on September 10th and 24th 2013. This year's spending affordability process presented three base scenarios.

1. A status Quo scenario, which is how WSSC has been presenting its financials.
2. The addition of the new Account Maintenance Fee Structure (AMF).
3. The addition of the Account Maintenance Fee (AMF) and the Infrastructure Renewal Fee.

WSSC FY 2016 SPENDING CONTROL LIMITS SCENARIOS

SCENARIOS	RATE INCREASE	OPERATING BUDGET	DEBT SERVICE EXPENSE	NEW DEBT
Base Case (Status Quo) (Attachment 1)	10.20%	\$708,205,000	\$234,778,000	\$447,009,000
Base Case with AMF Changes (Attachment 2)	8.60%	\$708,205,000	\$234,778,000	\$447,009,000
Base Case with AMF and Infrastructure Fees (Attachment 3)	1.90% *	\$708,205,000	\$234,778,000	\$447,009,000

NOTE: All scenarios include the use of \$9.8 Million of fund balance

***This scenario only represents the water and sewer rate increase and not the AMF & Infrastructure fees**

Several additional scenarios were discussed, including ones with Additional and Reinstated programs (A/R) and some unspecified reductions.

WSSC FY 2016 SPENDING CONTROL LIMITS SCENARIOS - ADDITIONAL

SCENARIOS		W/S RATE INCREASE AVERAGE \$ IMPACT	ACCOUNT MAINTENACE FEES AVERAGE \$ IMPACT	INFRASTRUCTURE RENEWAL FEES AVERAGE \$ IMPACT	TOTAL AVERGAE IMPACT
Base Case with AMF and Infrastructure Fees	1	0.53	1.67	3.83	\$6.03
Base Case with AMF and Infrastructure Fees with A/R	2	\$0.05	\$1.67	3.83	\$5.55
Base Case with AMF and 50% Infrastructure Fees with A/R (Phase-In)	3	\$1.12	\$1.67	\$1.92	\$4.71
NOTE: Scenarios #2 & 3 assumes \$21.5 million use of Fund Balance; #3 also assumes \$7.6 Million in unspecified reductions					

Scenario 1: A same services scenario as last fiscal year with the new structure of the Account Maintenance Fee and the Infrastructure Renewal Fees, it does not assume any use of fund balance or unspecified reductions. This increases an average consumers' monthly bill by \$6.03. **(Attachment 4)**

Scenario 2: A same services scenario as scenario 1 **with additional and reinstated programs; (Attachment 8)**, and \$21.5 million use of **Fund Balance; (Attachment 7)**. This increases an average consumers' monthly bill by \$5.55 **(Attachment 5)**

Scenario 3 : is exactly as Scenario 2; however, the infrastructure fee will be phased in at 50% for FY2016, and a \$7.6 million of unspecified reductions is assumed. This scenario adds \$4.71 a month to the average consumer's bill. **(Attachment 6)**

Note: WSSC billed account maintenance fees at \$11.00 per quarter or \$3.66 per month, under the previous billing structure. Based on scenario 3, the net increase to an average consumer's bill will be (\$4.71 less \$3.66 = \$1.05).

Historical Data on Spending Control Limits

Historically, the Spending Affordability Process has worked and the limits have been used as a basis to formulate the Commission’s budget. Over the years, lower rate increases were achieved by use of fund balance; staff continues to urge caution in using a one-time revenue source such as fund balance to reduce rates as this only reassigns expenses to later years and does not eliminate it. Fund balance can be used for one time expenditures.

While the Spending Affordability Process was put in place to review four limits: Rates, Operating Budget, Debt Service Expense and New Debt; the most reviewed has been the rate increase and the other three limits are then adjusted accordingly.

HISTORICAL DATA OF WSSC’S RATE INCREASES

<i>Fiscal Year =></i>	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Adopted Rate Increase	2.50%	3.00%	6.50%	8.00%	9.00%	8.50%	8.50%	7.50%	7.25%	5.50%
Montgomery County SAG	2.50%	3.00%	5.30%	9.70%	9.50%	9.90%	9.90%	8.50%	8.00%	6.00%
Prince George's County SAG	2.50%	3.00%	5.30%	8.00%	6.00%	8.00%	8.00%	8.50%	7.50%	6.00%

Council Staff Recommendations

- *Council Staff recommends Scenario 3 which adds no more than \$4.71 to an average consumer’s bill. This scenario also recommends \$21.5 Million in unspecified reductions. This scenario represents a 2.1% in rate increase plus \$1.67 in Account Maintenance Fees and \$1.92 in Infrastructure Renewal Fees.*

WSSC FY 2016 SPENDING CONTROL LIMITS - RECOMMENDED SCENARIO

SCENARIO	W/S RATE INCREASE AVERAGE \$ IMPACT	ACCOUNT MAINTENACE FEES AVERAGE \$ IMPACT	INFRASTRUCTURE RENEWAL FEES AVERAGE \$ IMPACT	TOTAL AVERGAE IMPACT
Base Case with AMF and 50% Infrastructure Fees with A/R (Phase-In)	3 \$1.12	\$1.67	\$1.92	\$4.71
NOTE: Scenarios #2 & 3 assumes \$21.5 million use of Fund Balance; #3 also assumes \$7.6 Million in unspecified reductions				
Rate Increase	2.1%			
Operating Budget	\$701,845,000			
Debt Service Expense	\$235,483,000			
New Debt	\$442,533,000			
Debt Service Ratio (Debt Service / Budget)	33.6%			

- *The Commission must continue to implement strategies and plans that will have long term benefits to the Commission and Consumers.*

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo)
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$679,276	\$638,265	\$688,452	\$744,712	\$792,721	\$841,494
3 All Other Sources	91,834	69,940	65,628	64,376	63,395	60,959	59,902
4 Total Revenue	678,089	749,216	703,893	752,828	808,107	853,680	901,396
5 Expenses							
6 Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,685	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(58,989)	(50,188)	(56,260)	(48,009)	(48,774)	(41,344)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	10.2%	7.9%	8.2%	6.4%	6.2%	4.9%
Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
New Debt	260,345	447,009	416,532	431,893	333,561	280,326	219,764

NOTE:
 Impact of Rate Increase on Average Residential Monthly Bill

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	\$4.08	\$8.02	\$6.82	\$7.65	\$6.63	\$6.63	\$5.62

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo)
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Approved	Proposed	Estimate	Estimate	Estimate	Estimate	Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$638,265	\$688,452	\$744,712	\$792,721	\$841,494
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	23,338	23,461	23,584	23,707	23,831	23,954
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
7 Products & Technology							
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	630,188	689,786	740,228	796,807	845,080	894,196
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
12 Less Rate Stabilization	1,167	728	207	-	-	-	-
13 SDC Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
14 Reconstruction Debt Service Offset	41,360	19,028	14,107	12,600	11,300	8,500	7,200
15 Adjustments to Total Revenue	678,089	649,216	703,893	752,828	808,107	853,680	901,396
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,860	143,515
19 Salaries and Wages - Additional & Reinstated Programs	-	-	-	-	-	-	-
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other - Additional & Reinstated Programs	-	-	-	-	-	-	-
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
28 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
29 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,848	55,447
30 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,188	379,237
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
32 NET EXPENSES	678,089	708,205	754,080	809,088	856,116	902,353	942,740
33 Revenue - Expenditure Gap before rate increase	-	(58,989)	(50,188)	(56,260)	(48,009)	(48,774)	(41,344)
34 Rate Increase	5.5%	10.2%	7.9%	8.2%	6.4%	6.2%	4.9%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Recalibrated AMF - 2
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$588,255	\$579,276	\$629,229	\$679,361	\$735,564	\$783,517	\$832,235
3 All Other Sources	91,834	78,976	74,720	73,524	72,599	70,118	68,218
4 Total Revenue	678,089	658,252	703,949	752,885	808,163	853,635	901,452
5 Expenses							
6 Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,685	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(49,953)	(50,131)	(56,204)	(47,952)	(48,718)	(41,288)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
18 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
17 Rate Increase	5.5%	8.5%	8.0%	8.3%	6.5%	6.2%	5.0%
18 Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
19 Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
20 New Debt	280,345	447,009	416,532	431,893	333,561	280,326	219,764

NOTE:
 21 Impact of Rate Increase on Average Residential Monthly Bill
 22 Impact of Recalibrated AMF on Average Residential Monthly Bill

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Total	\$4.67	\$4.63	\$5.19	\$4.43	\$4.50	\$3.87
	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
	\$6.28	\$5.30	\$6.86	\$6.10	\$6.17	\$5.48

ASSUMPTIONS
WSSC's Multi-Year Financial Forecast
 FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 1

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Proposed	Estimate	Estimate	Estimate	Estimate	Estimate
WATER PRODUCTION						
Yearly Growth Increment (MGD)	166.0	166.0	166.0	166.0	166.0	166.0
Estimated Annual Average Water Production (MGD)	166.0	166.0	166.0	166.0	166.0	166.0
OPERATING FUNDS						
Salaries & Wages Rate of Increase	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Heat, Light & Power Annual Expenses (Includes savings from Energy Performance Program)	13,311	14,010	14,582	15,175	15,799	16,454
Water (\$ thousands)	10,891	11,463	11,931	12,416	12,927	13,462
Sewer (\$ thousands)	-	-	-	-	-	-
Blue Plains (Regional Sewage Disposal) Rate of Increase	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%
All Other - % Annual Increase	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%
GASB 045 Expense	10,000	10,000	10,000	10,000	10,000	10,000
Water REDO (\$ thousands)	4,250	3,500	2,750	2,000	1,250	500
Sewer REDO (\$ thousands)	4,250	3,500	2,750	2,000	1,250	500
Work Years / FTE \$s	-	-	-	-	-	-
Operating Program	-	-	-	-	-	-
Capital Programs	-	-	-	-	-	-
BOND FUNDS						
Short-term Construction Note Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Long-Term Bond Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Life for Non-SRF Water and Sewer Debt (years)	30	30	30	30	30	30
Life for SRF Water and Sewer Debt (years)	20	20	20	20	20	20
CAPITAL EXPENDITURES RELATED PARAMETERS						
Construction Inflation	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Construction Completion Factor	80%	80%	80%	80%	80%	80%
Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
Blue Plains Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
ENR Construction Completion Factor	80%	80%	80%	80%	80%	80%
Reconstruction Completion Factor	100%	100%	100%	100%	100%	100%

File: FY16_SRF_Forecast_Preliminary with Current Fee Structure (Status Quo) - 1.xss
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Budget Group
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WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge - 3
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$679,276	\$690,395	\$640,397	\$696,473	\$744,297	\$792,886
3 All Other Sources	91,834	117,810	113,683	112,515	111,819	109,467	108,596
4 Total Revenue	678,089	697,086	704,078	753,012	808,292	853,764	901,582
5 Expenses							
6 Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,685	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	66,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future years expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(11,119)	(50,003)	(56,076)	(47,824)	(48,590)	(41,158)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	1.5%	8.5%	8.8%	6.9%	6.5%	5.2%
Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
New Debt	280,345	447,059	416,532	431,893	333,561	280,326	219,764

NOTE:
 21 Impact of Rate Increase on Average Residential Monthly Bill
 22 Impact of Recalibrated AMF on Average Residential Monthly Bill
 23 Impact of Infra-Investment Fee on Avg Residential Monthly Bill

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Total	\$1.02	\$4.63	\$5.20	\$4.44	\$4.47	\$3.81
	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83
	\$8.52	\$10.13	\$10.70	\$9.94	\$9.97	\$9.31

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge - 3

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$590,395	\$640,397	\$696,473	\$744,297	\$792,886
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	38,834	38,963	39,091	39,220	39,349	39,478
5 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
6 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
7 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
8 Products & Technology	-	-	-	-	-	-	-
9 Miscellaneous	-	-	-	-	-	-	-
10 Total Revenue	17,000	17,000	17,303	17,404	17,515	17,638	17,775
11 Adjustments to Revenue	636,729	678,058	689,971	740,412	796,992	845,264	894,382
12 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
13 Less Rate Stabilization	1,167	728	207	-	4,000	2,500	1,000
14 SDC Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
15 Reconstruction Debt Service Offset	41,360	19,028	14,107	12,600	11,300	8,500	7,200
16 Adjustments to Total Revenue	678,089	697,086	704,078	753,012	809,292	853,764	901,582
17 FUNDS AVAILABLE							
18 EXPENDITURES							
19 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
20 Salaries and Wages - Additional & Reinstated Programs	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Heat, Light and Power	55,176	54,895	56,928	59,032	61,216	63,481	65,830
22 Regional Sewage Disposal	243,582	252,925	266,072	277,825	291,217	305,279	320,043
23 All Other	-	-	-	-	-	-	-
24 All Other - Additional & Reinstated Programs	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Additional Operating Reserve Contribution	-	-	-	-	-	-	-
26 Unspecified reductions	-	-	-	-	-	-	-
27 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
28 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
29 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
30 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,916	50,649	55,447
31 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,186	379,237
32 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
33 NET EXPENSES	678,089	708,205	754,080	809,088	856,116	902,353	942,740
34 Revenue - Expenditure Gap before rate increase	-	-	-	-	-	-	-
35 Rate Increase	5.5%	1.9%	8.5%	8.8%	6.9%	6.5%	5.2%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to Ready-to-Serve Charge Fee Structure - 3 - Revised
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1 Revenue							
2 Water & Sewer Rate Revenue	Approved \$586,255	Proposed \$579,276	Estimate \$684,800	Estimate \$628,272	Estimate \$683,292	Estimate \$730,219	Estimate \$776,916
3 All Other Sources	91,834	117,989	113,707	111,961	110,538	109,077	105,680
4 Total Revenue	678,089	697,165	698,507	740,233	793,830	839,296	882,596
5 Expenses							
6 Maintenance & Operating	373,575	383,270	395,638	414,687	434,674	455,664	477,701
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	235,561	255,737	279,562	296,151	312,199	322,350
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	702,690	741,979	795,253	840,757	885,993	925,528
14 Revenue Gap (Revenue - Expenses)	-	(5,525)	(43,472)	(55,021)	(46,926)	(46,698)	(42,932)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.5%	34.5%	35.2%	35.2%	35.2%	34.8%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
17 Rate Increase	5.5%	1.0%	7.4%	8.8%	6.9%	6.4%	5.5%
18 Operating Budget	\$678,089	\$702,690	\$741,979	\$795,253	\$840,757	\$885,993	\$925,528
19 Debt Service Expense	227,042	235,561	255,737	279,562	296,151	312,199	322,350
20 New Debt	260,345	444,053	409,666	416,494	326,663	278,285	218,649

NOTE:

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
21 Impact of Rate Increase on Average Residential Monthly Bill	\$0.53	\$4.00	\$5.11	\$4.36	\$4.32	\$3.95
22 Impact of Recalibrated AMF on Average Residential Monthly Bill	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
23 Impact of Infra. Investment Fee on Avg Residential Monthly Bill	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83
Total	\$6.03	\$9.50	\$10.61	\$9.86	\$9.82	\$9.45

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to Ready-to-Serve Charge Fee Structure - 3 - Revised
 Estimated Revenues and Expenditures (\$'1,000)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Approved	Proposed	Estimate	Estimate	Estimate	Estimate	Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$584,800	\$628,272	\$683,292	\$730,219	\$776,916
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	38,834	38,963	39,091	39,220	39,349	39,478
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,773	2,851	2,829	2,862	2,895	2,927
7 Products & Technology	-	-	-	-	-	-	-
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	678,137	684,400	728,258	783,780	831,171	878,396
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	9,800	7,525	7,725	7,925	8,125	4,200
12 Less Rate Stabilization	1,167	728	207	-	-	-	-
13 SDC Debt Service Offset	10,000	8,500	6,375	4,250	2,125	-	-
14 Reconstruction Debt Service Offset	41,360	19,028	14,107	11,975	10,050	8,125	4,200
15 Adjustments to Total Revenue	678,089	697,165	698,507	740,233	793,830	839,296	882,596
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,064	123,967	130,165	136,673	143,506
19 Salaries and Wages - Additional & Reinstated Programs	-	-	-	-	-	-	-
20 Heat, Light and Power	22,966	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 All Other	243,582	246,626	250,058	262,062	274,666	287,900	301,796
23 All Other - Additional & Reinstated Programs	-	-	2,043	2,145	2,252	2,365	2,483
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	444,465	455,964	477,319	499,690	523,145	547,731
28 Debt Service	227,042	235,561	255,737	279,562	296,151	312,199	322,350
29 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	258,224	286,015	317,934	341,067	362,848	377,797
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	702,689	741,979	795,253	840,757	885,993	926,528
32 NET EXPENSES	678,089	702,689	741,979	795,253	840,757	885,993	926,528
33 Revenue - Expenditure Gap before rate increase	-	(5,524)	(43,472)	(55,021)	(46,926)	(46,698)	(42,932)
34 Rate Increase	5.5%	1.0%	7.4%	8.8%	6.9%	6.4%	5.5%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to Ready-to-Serve Charge Fee Structure - Includes A & R
 Estimated Revenues and Expenditures (\$',000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$579,883	\$629,108	\$684,176	\$731,153	\$777,902
3 All Other Sources	91,834	129,575	113,707	111,961	110,538	109,077	105,680
4 Total Revenue	678,089	708,851	693,590	741,069	794,714	840,230	883,582
5 Expenses							
6 Maintenance & Operating	373,575	388,517	396,584	415,681	435,718	456,760	478,851
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
9 PAYGO	19,996	24,263	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	709,458	742,815	796,137	841,691	866,979	926,568
14 Revenue Gap (Revenue - Expenses)	-	(607)	(49,225)	(55,069)	(46,976)	(46,750)	(42,986)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	34.4%	35.1%	35.2%	35.2%	34.8%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	0.1%	8.5%	8.8%	6.9%	6.4%	5.5%
Operating Budget	\$678,089	\$709,458	\$742,815	\$796,137	\$841,691	\$866,979	\$926,568
Debt Service Expense	227,042	235,483	255,627	279,452	296,041	312,089	322,240
New Debt	260,345	442,533	409,666	416,294	326,663	278,285	218,649

NOTE:

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
21 Impact of Rate Increase on Average Residential Monthly Bill	\$0.05	\$4.55	\$5.11	\$4.36	\$4.33	\$3.96
22 Impact of Recalibrated AMF on Average Residential Monthly Bill	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
23 Impact of Intra- Investment Fee on Avg Residential Monthly Bill	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83
Total	\$5.55	\$10.05	\$10.61	\$9.86	\$9.83	\$9.46

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to Ready-to-Serve Charge Fee Structure - Includes A & R

Estimated Revenues and Expenditures (\$1,000)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Approved	Proposed	Estimate	Estimate	Estimate	Estimate	Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$579,883	\$629,108	\$684,176	\$731,153	\$777,902
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	38,834	38,963	39,091	39,220	39,349	39,478
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,773	2,851	2,829	2,862	2,895	2,927
7 Products & Technology	-	-	-	-	-	-	-
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	678,137	679,483	729,094	784,654	832,105	879,382
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	21,486	7,525	7,725	7,925	8,125	4,200
12 Less Rate Stabilization	1,167	728	207	-	-	-	-
13 SDC Debt Service Offset	10,000	8,500	6,375	4,250	2,125	-	-
14 Reconstruction Debt Service Offset	41,360	30,714	14,107	11,975	10,050	8,125	4,200
15 Adjustments to Total Revenue	678,089	708,851	693,590	741,059	794,714	840,230	883,582
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,064	123,967	130,165	136,673	143,506
19 Salaries and Wages - Additional & Reinstated Programs	-	900	946	994	1,044	1,096	1,150
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,896	56,926	59,032	61,216	63,481	65,830
22 All Other	243,562	246,626	250,058	262,062	274,666	287,900	301,796
23 All Other - Additional & Reinstated Programs	-	4,347	2,043	2,145	2,252	2,365	2,483
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	449,712	456,910	478,313	500,734	524,241	548,881
28 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
29 Debt Reduction (PAYGO)	19,996	24,253	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	259,746	285,905	317,824	340,957	362,738	377,687
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	709,458	742,815	796,137	841,691	886,979	926,568
32 NET EXPENSES	678,089	709,458	742,815	796,137	841,691	886,979	926,568
33 Revenue - Expenditure Gap before rate increase	-	(607)	(49,225)	(55,069)	(46,976)	(46,750)	(42,986)
34 Rate Increase	5.5%	0.1%	8.5%	8.8%	6.9%	6.4%	5.5%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to Ready-to-Serve Charge Fee Structure (2-Year Phase-In) - Includes A & R
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1 Revenue							
2 Water & Sewer Rate Revenue	Approved \$586,255	Proposed \$579,276	Estimate \$591,687	Estimate \$621,115	Estimate \$675,783	Estimate \$722,341	Estimate \$768,649
3 All Other Sources	91,834	110,158	113,707	111,961	110,538	109,077	105,680
4 Total Revenue	678,089	689,434	705,394	733,076	786,321	831,418	874,329
5 Expenses							
6 Maintenance & Operating	373,575	388,517	396,564	415,681	435,718	456,760	478,851
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,890
8 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
9 PAYGO	19,996	24,263	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	(7,613)	(7,993)	(8,393)	(8,812)	(9,263)	(9,715)
12 Unspecified reduction of future year's expenditure base	-	-	(7,993)	(8,393)	(8,812)	(9,263)	(9,715)
13 Total Expenses	678,089	701,845	734,822	787,744	832,879	877,726	916,853
14 Revenue Gap (Revenue - Expenses)	-	(12,411)	(29,428)	(54,669)	(46,557)	(46,309)	(42,524)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.6%	34.8%	35.5%	35.5%	35.6%	35.1%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
17 Rate Increase	5.5%	2.1%	5.0%	8.8%	6.9%	6.4%	5.5%
18 Operating Budget	\$678,089	\$701,845	\$734,822	\$787,744	\$832,879	\$877,726	\$916,853
19 Debt Service Expense	227,042	235,483	255,627	279,452	296,041	312,089	322,240
20 New Debt	260,345	442,533	409,666	416,494	326,663	278,285	218,649

NOTE:

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
21 Impact of Rate Increase on Average Residential Monthly Bill	\$1.12	\$2.73	\$5.05	\$4.30	\$4.27	\$3.90
22 Impact of Recalibrated AMF on Average Residential Monthly Bill	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
23 Impact of Infra. Investment Fee on Avg Residential Monthly Bill	\$1.92	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83
Total	\$4.71	\$8.23	\$10.55	\$9.80	\$9.77	\$9.40

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to Ready-to-Serve Charge Fee Structure (2-Year Phase-In) - Includes A & R
 Estimated Revenues and Expenditures (\$1,000)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Approved	Proposed	Estimate	Estimate	Estimate	Estimate	Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$591,687	\$621,115	\$676,783	\$722,341	\$768,649
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	19,417	38,963	39,091	39,220	39,349	39,478
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,773	2,851	2,829	2,862	2,895	2,927
7 Products & Technology	-	-	-	-	-	-	-
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	658,720	691,287	721,101	776,271	823,293	870,129
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	21,486	7,525	7,725	7,925	8,125	4,200
12 Less Rate Stabilization	1,167	728	207	-	-	-	-
13 SDC Debt Service Offset	10,000	8,500	6,375	4,250	2,125	-	-
14 Reconstruction Debt Service Offset	43,360	30,714	14,107	11,975	10,050	8,125	4,200
15 Adjustments to Total Revenue	678,089	689,434	705,394	733,076	786,321	831,418	874,329
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,064	123,967	130,165	136,673	143,506
19 Salaries and Wages - Additional & Reinstated Programs	-	900	946	994	1,044	1,096	1,150
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 All Other	243,582	246,626	250,058	262,062	274,666	287,900	301,796
23 All Other - Additional & Reinstated Programs	-	4,347	2,043	2,145	2,252	2,365	2,483
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	(7,613)	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	(7,993)	(8,393)	(8,812)	(9,253)	(9,715)
27 Total Operating Expenses	431,051	442,099	448,917	469,920	491,922	514,988	539,166
28 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
29 Debt Reduction (PAYGO)	19,996	24,263	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	259,746	285,905	317,824	340,957	362,738	377,687
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	701,845	734,822	787,744	832,879	877,726	916,853
32 NET EXPENSES	678,089	701,845	734,822	787,744	832,879	877,726	916,853
33 Revenue - Expenditure Gap before rate increase	-	(12,411)	(29,426)	(54,669)	(46,557)	(46,309)	(42,524)
34 Rate Increase	5.5%	2.1%	5.0%	8.8%	6.9%	6.4%	5.5%

Fund Balance Analysis

	Total
Water and Sewer Operating Fund Balance at end of FY'13	133,930,000
Water and Sewer Operating Fund Balance from FY'14	19,364,000
Less Working Capital Reserve	(53,300,000)
FY'14 Year-end Unallocated Fund Balance	\$ 99,994,000
FY'15 Use of Fund Balance Billing Factor Reduction Offset	(5,643,000)
FY'15 Use of Fund Balance IT Strategic Plan	(9,000,000)
FY'15 Use of Fund Balance AML/Billing System Replacement	(3,500,000)
FY'15 Use of Fund Balance PAYGO	(5,000,000)
FY'15 Use of Fund Balance Supply Chain Management Transformation	(1,000,000)
FY'15 Operating Reserve Contribution	(2,300,000)
FY'15 Modular Data Center	(2,000,000)
FY'15 Watershed improvements	(1,500,000)
FY'15 Electric Rate Intervention Cases	(250,000)
Unallocated Reserve (end of FY'15)	69,861,000
FY'16 REDO Extinguishment	(1,500,000)
FY'16 Use of Fund Balance IT Strategic Plan	(8,000,000)
FY'16 Use of Fund Balance AML/Billing System Replacement	(2,000,000)
FY'16 Operating Reserve Contribution (to maintain 10% of budgeted revenues)	(6,300,000)
FY'16 Contact Center Optimization	(1,300,000)
FY'16 Implementation of Space Study recommendations for support facilities	(12,500,000)
FY'16 Easements & Land Acquisition for Watershed Protection (A&R) - PAYGO	(1,600,000)
FY'16 Use of Fund Balance Supply Chain Management Transformation (A&R)	(555,000)
FY'16 Vibration Analysis Pilot (A&R)	(150,000)
FY'16 Analysis of Water Production Trends & Projections (A&R)	(125,000)
FY'16 Climate Change Vulnerability Assessment (A&R)	(300,000)
FY'16 Communications & Community Relations Special Projects	(156,000)
FY'16 Strategic Energy Plan Implementation (A&R)	(200,000)
FY'16 Warehouse Distribution & Inventory Optimization Study (A&R)	(500,000)
FY'16 Globally Harmonized System of Classification and Labeling of Chemicals (GHS)(A&R)	(100,000)
Unallocated Reserve (end of FY'16)	34,515,000
FY'17-20 REDO Extinguishment (to fully phase in 100% extinguishment)	(8,500,000)
FY'17-20 Use of Fund Balance AML/Billing System Replacement	(6,000,000)
FY'17-20 Climate Change Vulnerability Assessment (A&R)	(1,000,000)
FY'17-20 Strategic Energy Plan Implementation (A&R)	(1,000,000)
FY'17-20 Operating Reserve Requirement (to maintain 10% of budgeted revenues)	(14,800,000)
Unallocated Reserve	\$ 3,215,000
Working Capital Reserve	
Working Capital Reserve 6/30/14	53,300,000
FY'14 Operating Reserve Contribution	2,300,000
Working Capital Reserve 6/30/15	55,600,000
FY'15 Operating Reserve Contribution	6,300,000
Working Capital Reserve 6/30/16 (10% of budgeted revenue)	\$ 61,900,000
CSIS/AMI PAYGO Reserve (FY'15 - FY'20 Use of Fund Balance)	\$ 11,500,000

T:\Spending_Affordability_2016\FY16 Fund Balance Analysis.xlsx

WSSC
 FY 2016 ADDITIONAL & REINSTATED PROGRAM REQUESTS SUMMARY

Program: LARGE VALVE ASSESSMENT, REPAIRS, & REPLACEMENT PROGRAM

Request: 1 Principal Engineer, 4 Utility Technicians

Cost including vehicles & equipment: \$2,318,320, Water/Sewer Impact: \$2,147,820

Justification:

Many of the valves that were installed in the 1920's thru the 1960's (approx. 775 valves) are past their useful life. Often times, these valves cannot be operated without repairs. In many instances, when repairs are needed, the parts cannot be purchased because the manufacturers are no longer in business. While the WSSC currently uses an outside contractor to service its small diameter valves, the larger diameter valves (16" and larger) now require immediate and aggressive attention. In collaboration with the Asset Management Program, this initiative is for the continuous assessment, inspection and exercising of approximately 430 valves annually starting with FY'15 through FY'22. Program also includes repairs to approximately 85 valves per year through FY'22, right-of-way clearing and temporary roads to access valves for about 50 valves per year.

Program: PCCP PROGRAM

Request: 5 Utility Technicians

Cost including vehicles & equipment: \$709,100 Water/Sewer Impact: \$428,600

Justification:

There is currently only one crew supporting the PCCP inspection program. As the program continues to develop, inspections are less seasonal. The dedicated PCCP crews will be more effective due to their experience in entering confined spaces to support inspection efforts. These Utility Technicians would also be used to support other programs, such Large Valve Rehabilitation.

Program: PCCP MANAGEMENT PROGRAM

Request: 1 Project Manager

Cost including benefits: \$132,300 Water/Sewer Impact: \$132,300

Justification:

The PCCP program has increased the annual inspection rate from 12 miles to 18 miles. The inspections, along with Acoustic Fiber Optic (AFO) monitoring, are identifying critical pipe segments in need of repair or replacement. Due to the intense nature of this work, the current PCCP team is at capacity for providing the necessary on-site field investigations, the associated contract management for the inspections and AFO technologies, coordinating the scheduling of planned and emergency shut-downs, and recommending repair or replacements. The requested Project Manager will be involved in the management of inspection and AFO monitoring task orders, determining repair recommendations, the management of the PCCP inspection schedule, and prioritizing inspection efforts.

Program: OPERATIONS

Systems Control

Request: 1 Operational Hydraulic Planner

Cost including benefits: \$107,734, Water/Sewer Impact: \$83,253

Justification:

The number of water main replacement contracts, PCCP lines that are scheduled each year to be inspected, CIP projects, water storage facilities out of service for rehabilitation and additional water main emergency work have been steadily increasing. The increasing number of long duration shutdowns is having a detrimental impact on the water system. This is also impacting water quality, increasing water velocity in pipes, and potentially causes construction delays when multiple contracts are requesting shutdowns across the same transmission system. It is

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also important to evaluate the impacts of the frequently required increases in pressure to meet system needs and minimize high pressures as much as possible. This position will assist in scheduling, monitoring, coordinating all shutdowns in the water distribution system.

Program: ASSET MANAGEMENT PROGRAM

Request: 1 Asset Management Project Manager

Cost including benefits: \$111,915, Water/Sewer Impact: \$54,192

Justification:

This position was identified as part of the Asset Management Program Long Term Organization Structure approved in November 2008. This is a key position to manage the development and analysis of the capital investment requirements needed to sustain infrastructure, provide economic analysis and input to the Enterprise Asset Management Program business planning process, develop the Enterprise Asset Management Plan, and manage the new CIP/ESP Validation and Prioritization.

Program: CONSTRUCTION COMMUNICATION

Request: 1 Construction Communication Coordinator

Cost including benefits: \$121,500, Water/Sewer Impact: \$97,200

Justification:

The number of construction projects has and continues to increase. Communications to customers, HOAs, neighbors, and other stakeholders around construction projects is not coordinated. There is no uniform procedure on communicating with stakeholders nor is there a procedure on developing a uniform message or a message tailored to the type of construction. Some communications are handled by contractors, others by project managers. Sometimes there are changes or delays and often customers are not informed. The proposed workyear would address these issues.

Program: CATHODIC PROTECTION

Request: 1 Contract Manager

Cost including benefits: \$98,280, Water/Sewer Impact: \$0

Justification:

The Commission will begin an extensive cathodic protection rehabilitation program on our large water transmission mains in FY'16. It is anticipated that 27 miles of transmission main will have existing cathodic protection repaired, upgraded and/or replaced each fiscal year. It is anticipated that this amount of work will translate into the need to manage at least 5 concurrent cathodic protection contracts at any given time during the fiscal year. Accordingly, one contract manager is needed to handle this additional work load. It would be appropriate to use a merit employee rather than a contractual employee for this position since this program does not have an end point.

Program: ELECTRONIC AS-BUILT PREPARATION

Request: 1 Engineering Assistant IV

Cost including benefits: \$76,000, Water/Sewer Impact: \$0

Justification:

Recently, the WSSC has significantly improved the process of as-built preparation for the water rehabilitation contracts. Instead of marking changes in red on a hard copy of the plans and using ties to locate appurtenances, electronic as-builts have been prepared using AutoCAD. All appurtenances are now located using hand held GPS units and added to the AutoCAD as-built file. We would like to expand this effort by preparing electronic as-builts for sewer rehabilitation contracts and System Enhancement Unit jobs. Currently, we are using three consultant inspectors to perform this function and there is a significant backlog of work to prepare as-builts for 43 miles of

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water main rehabilitation. Since this initiative adds significant value to the as-built process, we are requesting one (1) Engineering Assistant IV to permanently establish this program and expand it to include 20 miles of sewer rehabilitation contracts and 12 miles of SEU work. This initiative converts a pilot using consultant inspectors to improve as-built preparation into a lasting part of the organization.

Program: RELOCATIONS

Request: 2 Project Managers

Cost including benefits: \$211,200, Water/Sewer Impact: \$0

Justification:

These positions support the relocations program and will not impact water and sewer rates as it is part of the CIP.

Program: WELLNESS PROGRAM

Request: \$240,000 Water/Sewer Impact: \$192,000

Justification:

The purpose of this program is to show employees that the Commission cares about their wellbeing; to take advantage of some of the Affordable Care Act provisions; to provide educational and hands-on opportunities for members to learn about the choices available to them for healthy living; to reduce absenteeism & increase productivity at work; to increase moral & retention rate. We will partner with internal and external resources, including our carriers and other companies to develop programs and strategies to promote health & wellness; evaluate aggregate health risk assessment data to determine priorities to be addressed, the type and number of educational programs needed; benchmark best practices; assemble data and metrics for an annual report on the effectiveness of the wellness program in improving employee health as well as reducing the Commission's health care cost; provide on-going review and measurement of the program's success; recommend changes to the programs and provide on-going communications regarding the wellness program. All of the Montgomery County agencies have dedicated staffing and financial resources in place for such programs. The Montgomery County Council has made wellness a priority and has high expectations that each agency will go above and beyond to have comprehensive programs in place for their employees.

Program: WATERSHED PROTECTION

Request: \$1,600,000, Water/Sewer Impact: \$0

Justification:

Despite almost 20 years of partnership with local government agencies aimed at protecting the Patuxent reservoirs as drinking water sources, little has been accomplished other than studies. Partner agencies consider the reservoirs' watershed to be a low priority, compared to other waterways in their jurisdictions that need protection and improvement. Funding resources from partners range from extremely limited to non-existent. As the water supplier and owner of the reservoirs, WSSC is looked upon as the beneficiary of improved water quality, and it has been argued by the partners that WSSC should pay for the improvements. A limited source water protection effort by WSSC, completed as a Supplemental Environmental Program in compliance with the SSO Consent Decree, totaled \$3.47 million on land purchases (39.66 acres) and conservation easements (32.81). These acquisitions of larger, isolated parcels have only limited benefits for drinking water source protection compared to measures focused on riparian buffers along streams, which are smaller in area but provide many important water quality benefits.

It is proposed that initiative be funded out of the Fund Balance.

Program: STRATEGIC ENERGY PLAN IMPLEMENTATION

Request: \$200,000, Water/Sewer Impact: \$0 (Total cost is \$1.2 million over 5 years)

Justification:

The WSSC has a \$24 million energy budget. The Strategic Energy Plan needs to be finalized, expanded and updated annually in order for WSSC to optimize costs, consumption and load shifting opportunities. The Strategic Plan will result in the rollout of energy metrics (such as kWh/million gallons) to all Commission users and reduction of energy consumption per unit (kWh/MG, kWh/SF, etc.). Year 1: Develop goals beyond water and wastewater treatment facilities (i.e., remote pumping stations, fleet vehicles, depots and buildings), assistance in developing and prescreening projects with regard to energy impact with the goals of the AMP, assist other WSSC departments in detailed development, evaluation and revisions to policies and procedures as recommended in the SEP. Year 2: Evaluate future resource options, energy efficiency investments against WSSC energy supply requirements and forecasted market conditions to provide a basis for future decisions on block energy purchases, long-term wind and solar contracts, and other alternatives for energy purchases. Prepare RFP for next 10 year electricity supply and wind contract. Year 2-5: assist the Energy Management office in guiding energy projects through the AMP process, providing input to be used by AMP Business Case consultants, assist WSSC in development, implementation, and on-going maintenance of SEP support systems (as recommended by the SEP), including detailed sub-metering plan and software applications to provide appropriate reporting to various WSSC stakeholders, assist WSSC in managing facility energy audit program (based on life cycle audit plan).

It is proposed that initiative be funded out of the Fund Balance.

Program: CLIMATE CHANGE VULNERABILITY ASSESSMENT, ADAPTATION & MITIGATION PLAN

Request: \$300,000, Water/Sewer Impact: \$0 (Total cost is \$1.5 million over 5 years)

Justification:

WSSC infrastructure planning currently does not address changing wet weather conditions, sea level rise, storm surge, and other considerations inherent in Climate Change as evidenced by scientific consensus - the Intergovernmental Panel on Climate Change (IPCC) and The National Climate Assessment. Both AWWA and WEF have recommended and many other water/wastewater utilities have conducted assessments to assess Climate Change vulnerability, strategies for reducing these risks, and mitigation of greenhouse gas (GHG) emissions. While WSSC currently has a GHG Action (reduction plan), that is only a piece of the overall Climate Change resiliency planning that needs to be accomplished for WSSC to be fully prepared for the next 50-80 years to protect our infrastructure and to maintain our status as a first class provider of water and wastewater treatment services to our ratepayers.

It is proposed that initiative be funded out of the Fund Balance.

Program: VIBRATION ANALYSIS PILOT

Request: \$150,000 Water/Sewer Impact: \$0

Justification:

An asset strategies consultant has recommended that several of our large and expensive assets have vibration analysis as part of their condition assessment and tracking of degradation. The resulting data would be monitored, documented and reviewed to identify potential catastrophic failures before they occur. The data would also be used to determine current condition of the asset. This service would be piloted on very large pumps and motors.

It is proposed that initiative be funded out of the Fund Balance.

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Program: SAFETY

Implementation of Globally Harmonized System of Classification and Labeling (GHS)

Request: \$100,000 Water/Sewer Impact: \$0

Justification:

The primary benefit of the GHS is to increase the quality and consistency of information provided to workers, employers and chemical users by adopting a standardized approach to hazard classification, labels and safety data. The GHS provides a single set of harmonized criteria for classifying chemicals according to their health and physical hazards and specifies hazard communication elements for labeling and safety data sheets. Under the GHS, labels would include signal words, pictograms, and hazard and precautionary statements and safety data sheets would have standardized format. This system was agreed on at an international level by governments, industry, and labor, and adopted by the UN in 2002 with a goal of 2008 for implementation.

It is proposed that initiative be funded out of the Fund Balance.

Program: ANALYSIS OF WATER PRODUCTION TRENDS & PROJECTIONS

Request: \$125,000 Water/Sewer Impact: \$0

Justification:

Historically, the Commission's water production figures have been flat. In response to these trends, the Commission lowered its water production projection for the FY'15 budget and held future water production figures constant. However, recent trends are showing declining water production figures (several recent months have experienced the lowest production numbers in 20 years). The primary criterion to evaluate revenues is sufficiency, i.e. how much money is generated. Water and sewer rate revenues account for almost 90% of the Commission's operating revenues. Flat water production places tremendous stress on the sufficiency of these revenues. As water production declines, water and sewer rates have to be increased just to generate the same amount of money as the previous year in order to maintain the status quo, let alone fund any additional needs or initiatives. When Commission staff is queried as to why water production is flat or declining, only anecdotal evidence is provided. Some of the most valuable information provided during the recent utility rate study was that the average residential customer uses 159 gallons per day and that this figure has been declining for each of the past three fiscal years. The proposed initiative would build upon this data analysis by going back further in the customer data in the CSIS system to ascertain a more precise understanding of historic water production trends and project these trends into the future.

It is proposed that initiative be funded out of the Fund Balance.

Program: WAREHOUSE DISTRIBUTION & INVENTORY OPTIMIZATION STUDY

Request: \$500,000 Water/Sewer Impact: \$0

Justification:

WSSC has increased capital project improvement efforts resulting in increased volume of inventory transactions (receipts and issues). Operations are further impacted by the physical deterioration and inadequacies of physical storage features at the Central Commission warehouse (Anacostia) - the facility has been in operational existence since the 1960's without substantial renovations. As an example, industry packaging standards (pallet configuration) have changed to a state that is not compatible with warehouse racking systems. Warehouse capacities (including lighting, racking, environmental features, and configuration) are not optimizing the use of operational, administrative, and human resources. Limitations and restrictions also create significant safety and workplace environment concerns. A consultant would be tasked with developing a plan for optimizing warehouse distribution and inventory management at Anacostia and the depots.

It is proposed that initiative be funded out of the Fund Balance.

Program: COMMUNICATIONS & COMMUNITY RELATIONS SPECIAL PROJECTS

Request: \$156,000, Water/Sewer Impact: \$0

Justification:

In an effort to sustain relationships with our stakeholders and provide educational opportunities for the community, Communications is proposing several special projects. The first is the development of a "Can the Grease" program for middle school students in MCPS, similar to the one that exists in PGCPs. This will allow WSSC, in partnership with MCPS, to develop a lesson plan so that every student can learn the importance of the "Can the Grease" program. This funding will also include upgrading WSSC's Kids Page which will help us teach and instruct our community's future leaders on important topics relating to water and wastewater in an engaging way that supports Maryland's core curriculum standards. In addition, the requested funds will support the creation of an educational video on water treatment. The animated film will be geared towards upper primary students (3rd - 6th grade) in both counties. Lastly, the funds will assist with WSSC Historical Archiving. Converting photographs, negatives, and documents to a digital format will facilitate the ease of accessibility of information through the use of a network-based program.

It is proposed that initiative be funded out of the Fund Balance.

Program: SUPPLY CHAIN MANAGEMENT TRANSFORMATION (final year)

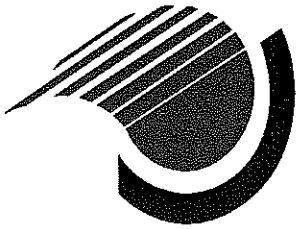
Request: \$555,000 Water/Sewer Impact: \$0

Justification:

Supply Chain Transformation, as it is implemented, will allow WSSC to reduce the costs of doing business. Our transformation efforts will result in WSSC realizing value through cooperatively working with suppliers. This cooperative relationship with suppliers will include supplier identification, management and development. Enhanced supplier relationships will lead to improved demand management by WSSC. The success will be measured by the amount of savings generated by implementing transformation initiatives across six key dimensions: Best Practices, Innovation and Technology, Supply Chain Roles, Stretch Objectives from a Total Cost of Ownership perspective, and an Optimized Organization supported by Good Leadership. It will also result in a training program that focuses on those primarily accountable for managing contracts. It will support strategies around entrepreneurship and innovation by providing highly skilled procurement and supply chain management professionals and a commitment to continuous learning.

The success of this process will support our strategic priority by creating a culture and a center led sourcing process that will ultimately drive cost out of the business. It will allow WSSC to review the direct and indirect spend of all dollars over a selected period of time to determine best in class strategies to reduce multiple solicitations, and begin building supplier relationships for contractors to consider WSSC as the customer of choice. Realignment of responsibilities will help utilize cross functional teams to gather and evaluate data to select the most appropriate acquisition strategy, identify a negotiations approach and ultimately select the "right" supplier. The impact will not just be in Procurement but for all business units. The impact will be sustainable over multiple years, reflected in time reductions from cradle to grave purchasing, resource savings and lower costs of goods, supplies and services.

It is proposed that initiative be funded out of the Fund Balance.



**Washington Suburban
Sanitary Commission**

FY 2016
SPENDING AFFORDABILITY GROUP
MEETING #1

September 10, 2014

ASSUMPTIONS

WSSC's Multi-Year Financial Forecast

FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo)

	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
<u>WATER PRODUCTION</u>						
Yearly Growth Increment (MGD)	166.0	166.0	166.0	166.0	166.0	166.0
Estimated Annual Average Water Production (MGD)						
<u>OPERATING FUNDS</u>						
Salaries & Wages Rate of Increase	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Heat, Light & Power Annual Expenses (includes savings from Energy Performance Program)	13,311	14,010	14,582	15,175	15,799	16,454
Water (\$ thousands)	10,891	11,463	11,931	12,416	12,927	13,462
Sewer (\$ thousands)						
Blue Plains (Regional Sewage Disposal) Rate of Increase	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%
All Other - % Annual Increase	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%
GASB 045 Expense	10,000	10,000	10,000	10,000	10,000	10,000
Water REDO (\$ thousands)	4,250	3,500	2,750	2,000	1,250	500
Sewer REDO (\$ thousands)	4,250	3,500	2,750	2,000	1,250	500
Work Years / FTE \$s	-	-	-	-	-	-
Operating Program	-	-	-	-	-	-
Capital Programs	-	-	-	-	-	-
<u>BOND FUNDS</u>						
Short-term Construction Note Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Long-Term Bond Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Life for Non-SRF Water and Sewer Debt (years)	30	30	30	30	30	30
Life for SRF Water and Sewer Debt (years)	20	20	20	20	20	20
<u>CAPITAL EXPENDITURES RELATED PARAMETERS</u>						
Construction Inflation	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Construction Completion Factor	80%	80%	80%	80%	80%	80%
Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
Blue Plains Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
ENR Construction Completion Factor	80%	80%	80%	80%	80%	80%
Reconstruction Completion Factor	100%	100%	100%	100%	100%	100%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$638,265	\$688,452	\$744,712	\$792,721	\$841,494
3 All Other Sources	91,834	69,940	65,628	64,376	63,395	60,859	59,902
4 Total Revenue	678,089	649,216	703,893	752,828	808,107	853,580	901,396
5 Expenses							
6 Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,685	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(58,989)	(50,188)	(56,260)	(48,009)	(48,774)	(41,344)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
17 Rate Increase	5.5%	10.2%	7.9%	8.2%	6.4%	6.2%	4.9%
18 Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
19 Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
20 New Debt	260,345	447,009	416,532	431,893	333,561	280,326	219,764

NOTE:

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
21 Impact of Rate Increase on Average Residential Monthly Bill	\$4.08	\$8.02	\$6.82	\$7.65	\$6.53	\$6.63	\$5.62

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$638,265	\$688,452	\$744,712	\$792,721	\$841,494
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	23,338	23,461	23,584	23,707	23,831	23,954
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
7 Products & Technology	-	-	-	-	-	-	-
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	630,188	689,786	740,228	796,807	845,080	894,196
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
12 Less Rate Stabilization							
13 SDC Debt Service Offset	1,167	728	207	-	-	-	-
14 Reconstruction Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
15 Adjustments to Total Revenue	41,360	19,028	14,107	12,600	11,300	8,500	7,200
16 FUNDS AVAILABLE	678,089	649,216	703,893	752,828	808,107	853,580	901,396
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
19 Salaries and Wages - Additional & Reinstated Programs							
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,928	59,032	61,216	63,481	65,830
22 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other - Additional & Reinstated Programs							
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
28 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
29 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,188	379,237
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
32 NET EXPENSES	678,089	708,205	754,080	809,088	856,116	902,353	942,740
33 Revenue - Expenditure Gap before rate increase	-	(58,989)	(50,188)	(56,260)	(48,009)	(48,774)	(41,344)
34 Rate Increase	5.5%	10.2%	7.9%	8.2%	6.4%	6.2%	4.9%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Capital and Bond Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo)

Estimated Revenues and Expenditures (\$1,000)

	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
	<u>Approved</u>	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Capital Expenditures							
1 Water & Sewer CIP Projects	\$ 472,036	\$ 542,880	\$ 471,270	\$ 438,303	\$ 266,073	\$ 183,029	\$ 141,450
2 Information Only Projects (@ < 100% completion)	27,933	25,961	35,239	39,501	38,599	34,012	10,787
3 Additional High Probability Future CIP Projects	-	-	-	-	-	-	-
4 SAG Adjustments (unspecified capital spending reductions)	-	-	-	-	-	-	-
5 Subtotal - Capital Expenditures less unspecified SAG capital spending reductions	499,969	568,841	506,509	477,804	304,672	217,041	152,237
6 Subtotal - Capital Expenditures w/ scaling, completion, & inflation index factors	\$ 399,976	\$ 455,073	\$ 417,364	\$ 405,523	\$ 266,340	\$ 195,426	\$ 141,188
Information Only Projects (@ 100% completion)							
7 Water Reconstruction	104,509	101,658	103,843	105,808	105,808	105,808	105,808
8 Sewer Reconstruction	16,419	34,784	36,124	41,071	58,449	54,707	41,340
9 EPP & Water Storage Facility Rehab	5,000	5,550	7,860	8,860	6,100	5,000	5,000
10 Total Capital Funding Required	<u>525,904</u>	<u>597,065</u>	<u>565,191</u>	<u>561,262</u>	<u>436,697</u>	<u>360,941</u>	<u>293,336</u>
Funding							
11 Debt Issues (includes SRF Water and Sewer Debt)	260,345	447,009	416,532	431,893	333,561	280,326	219,764
12 5% Debt Buydown of Short-term Construction Notes	9,880	22,270	21,712	22,731	17,556	14,754	11,567
13 System Development Charges (w/ scaling, completion & inflation index factors)	55,915	64,263	56,246	37,826	21,043	9,930	5,127
14 PAYGO	19,996	22,663	30,277	38,372	44,914	50,648	55,446
15 Grants - Federal & State (includes ENR Grants)	22,179	21,498	26,082	22,857	17,665	771	268
16 Developers and Government Contrib. (w/ scaling, completion & inflation index factors)	24,204	19,362	14,340	7,581	1,955	4,510	1,164
17 Previous Year's Funds Available after Construction	133,384	1	2	1	2	2	0
18 Total Funds Available	<u>525,904</u>	<u>597,065</u>	<u>565,191</u>	<u>561,262</u>	<u>436,697</u>	<u>360,941</u>	<u>293,336</u>
19 Funds Available after Construction	-	-	-	-	-	-	-

ASSUMPTIONS

WSSC's Multi-Year Financial Forecast

FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge

	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
<u>WATER PRODUCTION</u>						
Yearly Growth Increment (MGD)	166.0	166.0	166.0	166.0	166.0	166.0
Estimated Annual Average Water Production (MGD)						
<u>OPERATING FUNDS</u>						
Salaries & Wages Rate of Increase	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Heat, Light & Power Annual Expenses (includes savings from Energy Performance Program)	13,311	14,010	14,582	15,175	15,799	16,454
Water (\$ thousands)	10,891	11,463	11,931	12,416	12,927	13,462
Sewer (\$ thousands)	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%
Blue Plains (Regional Sewage Disposal) Rate of Increase	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%
All Other - % Annual Increase	10,000	10,000	10,000	10,000	10,000	10,000
GASB 045 Expense	4,250	3,500	2,750	2,000	1,250	500
Water REDO (\$ thousands)	4,250	3,500	2,750	2,000	1,250	500
Sewer REDO (\$ thousands)	-	-	-	-	-	-
Work Years / FTE \$s	-	-	-	-	-	-
Operating Program	-	-	-	-	-	-
Capital Programs	-	-	-	-	-	-
<u>BOND FUNDS</u>						
Short-term Construction Note Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Long-Term Bond Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Life for Non-SRF Water and Sewer Debt (years)	30	30	30	30	30	30
Life for SRF Water and Sewer Debt (years)	20	20	20	20	20	20
<u>CAPITAL EXPENDITURES RELATED PARAMETERS</u>						
Construction Inflation	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Construction Completion Factor	80%	80%	80%	80%	80%	80%
Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
Blue Plains Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
ENR Construction Completion Factor	80%	80%	80%	80%	80%	80%
Reconstruction Completion Factor	100%	100%	100%	100%	100%	100%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge

Estimated Revenues and Expenditures (\$1,000)

		FY 2015 <u>Approved</u>	FY 2016 <u>Proposed</u>	FY 2017 <u>Estimate</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>
1 Revenue								
2	Water & Sewer Rate Revenue	\$586,255	\$579,276	\$595,395	\$640,397	\$696,473	\$744,297	\$792,886
3	All Other Sources	91,834	112,810	113,683	112,615	111,819	109,467	108,696
4	Total Revenue	678,089	692,086	709,078	753,012	808,292	853,764	901,582
5 Expenses								
6	Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,685	493,474
7	Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8	Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9	PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10	Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11	Unspecified reductions	-	-	-	-	-	-	-
12	Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13	Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14	Revenue Gap (Revenue - Expenses)	-	(16,119)	(45,003)	(56,076)	(47,824)	(48,590)	(41,158)
15	Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16	Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
17	Rate Increase	5.5%	2.8%	7.6%	8.8%	6.9%	6.5%	5.2%
18	Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
19	Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
20	New Debt	260,345	447,009	416,532	431,893	333,561	280,326	219,764

NOTE:

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
21 Impact of Rate Increase on Average Residential Monthly Bill	\$4.08	\$2.19	\$6.12	\$7.62	\$6.50	\$6.61	\$5.60

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge

Estimated Revenues and Expenditures (\$1,000)

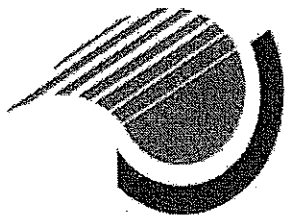
	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$595,395	\$640,397	\$696,473	\$744,297	\$792,886
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	33,834	38,963	39,091	39,220	39,349	39,478
5 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
6 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
7 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
8 Products & Technology	-	-	-	-	-	-	-
9 Miscellaneous	17,000	17,303	17,303	17,404	17,515	17,638	17,775
10 Total Revenue	636,729	673,058	694,971	740,412	796,992	845,264	894,382
11 Adjustments to Revenue							
12 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
13 Less Rate Stabilization	1,167	728	207	-	-	-	-
14 SDC Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
15 Reconstruction Debt Service Offset	41,360	19,028	14,107	12,600	11,300	8,500	7,200
16 Adjustments to Total Revenue	678,089	692,086	709,078	753,012	808,292	853,764	901,582
17 FUNDS AVAILABLE							
18 EXPENDITURES							
19 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
20 Salaries and Wages - Additional & Reinstated Programs	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Heat, Light and Power	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 Regional Sewage Disposal	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other	-	-	-	-	-	-	-
24 All Other - Additional & Reinstated Programs	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Additional Operating Reserve Contribution	-	-	-	-	-	-	-
26 Unspecified reductions	-	-	-	-	-	-	-
27 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
28 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
29 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
30 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,649	55,447
31 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,188	379,237
32 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
33 NET EXPENSES	678,089	708,205	754,080	809,088	856,116	902,353	942,740
34 Revenue - Expenditure Gap before rate increase	-	(16,119)	(45,003)	(56,076)	(47,824)	(48,590)	(41,158)
35 Rate Increase	5.5%	2.8%	7.6%	8.8%	6.9%	6.5%	5.2%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Capital and Bond Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 <u>Approved</u>	FY 2016 <u>Proposed</u>	FY 2017 <u>Estimate</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>
Capital Expenditures							
1 Water & Sewer CIP Projects	\$ 472,036	\$ 542,880	\$ 471,270	\$ 438,303	\$ 266,073	\$ 183,029	\$ 141,450
2 Information Only Projects (@ < 100% completion)	27,933	25,961	35,239	39,501	38,599	34,012	10,787
3 Additional High Probability Future CIP Projects	-	-	-	-	-	-	-
4 SAG Adjustments (unspecified capital spending reductions)	-	-	-	-	-	-	-
5 Subtotal - Capital Expenditures less unspecified SAG capital spending reductions	499,969	568,841	506,509	477,804	304,672	217,041	152,237
6 Subtotal - Capital Expenditures w/ scaling, completion, & inflation index factors	\$ 399,976	\$ 455,073	\$ 417,364	\$ 405,523	\$ 266,340	\$ 195,426	\$ 141,188
Information Only Projects (@ 100% completion)							
7 Water Reconstruction	104,509	101,658	103,843	105,808	105,808	105,808	105,808
8 Sewer Reconstruction	16,419	34,784	36,124	41,071	58,449	54,707	41,340
9 EPP & Water Storage Facility Rehab	5,000	5,550	7,860	8,860	6,100	5,000	5,000
10 Total Capital Funding Required	<u>525,904</u>	<u>597,065</u>	<u>565,191</u>	<u>561,262</u>	<u>436,697</u>	<u>360,941</u>	<u>293,336</u>
Funding							
11 Debt Issues (includes SRF Water and Sewer Debt)	260,345	447,009	416,532	431,893	333,561	280,326	219,764
12 5% Debt Buydown of Short-term Construction Notes	9,880	22,270	21,712	22,731	17,556	14,754	11,567
13 System Development Charges (w/ scaling, completion & inflation index factors)	55,915	64,263	56,246	37,826	21,043	9,930	5,127
14 PAYGO	19,996	22,663	30,277	38,372	44,914	50,648	55,446
15 Grants - Federal & State (includes ENR Grants)	22,179	21,498	26,082	22,657	17,665	771	268
16 Developers and Government Contrib. (w/ scaling, completion & inflation index factors)	24,204	19,362	14,340	7,581	1,955	4,510	1,164
17 Previous Year's Funds Available after Construction	133,384	1	2	1	2	2	0
18 Total Funds Available	<u>525,904</u>	<u>597,065</u>	<u>565,191</u>	<u>561,262</u>	<u>436,697</u>	<u>360,941</u>	<u>293,336</u>
19 Funds Available after Construction	-	-	-	-	-	-	-



**Washington Suburban
Sanitary Commission**

FY 2016
SPENDING AFFORDABILITY GROUP
MEETING #2

September 24, 2014

WSSC Water & Sewer Operating Revenue and Expenses

	Actual FY13	Preliminary Actual FY14
REVENUE		
Water / Sewer Use Charges	500,771	537,326
Account Maintenance Fee	22,772	22,582
Interest Income	722	630
Plumbing/Inspection Fees	7,792	7,882
Rockville Sewer Use	2,709	2,633
Miscellaneous	<u>16,425</u>	<u>14,589</u>
Total Revenue	551,191	585,642
Adjustments to Revenue		
Use of Fund Balance	18,528	27,481
SDC Debt Service Offset	2,192	1,428
Reconstruction Debt Service Offset	<u>11,000</u>	<u>10,500</u>
Adjustments to Total Revenue	31,720	39,409
FUNDS AVAILABLE	582,911	625,051
EXPENDITURES		
Salaries and Wages	92,996	95,482
Heat, Light and Power	22,979	24,443
Regional Sewage Disposal	49,226	44,631
All Other	188,854	199,269
Additional Operating Reserve Contribution	10,200	11,700
Debt Service	184,230	210,841
Debt Reduction (PAYGO)	<u>-</u>	<u>-</u>
Total Financial Expenses	548,485	586,366
Water Production	161.2	160.6
Billing Factor	\$ 8.51	\$ 9.17

Budgeted FY'15 billing factor is \$9.56.

Fund Balance Analysis

	Total
Water and Sewer Operating Fund Balance at end of FY'13	133,930,000
Water and Sewer Operating Fund Balance from FY'14	19,364,000
Less Working Capital Reserve	(53,300,000)
FY'14 Year-end Unallocated Fund Balance	\$ 99,994,000
FY'15 Use of Fund Balance Billing Factor Reduction Offset	(5,643,000)
FY'15 Use of Fund Balance IT Strategic Plan	(9,000,000)
FY'15 Use of Fund Balance AMI/Billing System Replacement	(3,500,000)
FY'15 Use of Fund Balance PAYGO	(5,000,000)
FY'15 Use of Fund Balance Supply Chain Management Transformation	(1,000,000)
FY'15 Operating Reserve Contribution	(2,300,000)
FY'15 Modular Data Center	(2,000,000)
FY'15 Watershed improvements	(1,500,000)
FY'15 Electric Rate Intervention Cases	(250,000)
Unallocated Reserve (end of FY'15)	69,801,000
FY'16 REDO Extinguishment	(1,500,000)
FY'16 Use of Fund Balance IT Strategic Plan	(8,000,000)
FY'16 Use of Fund Balance AMI/Billing System Replacement	(2,000,000)
FY'16 Operating Reserve Contribution (to maintain 10% of budgeted revenues)	(6,300,000)
FY'16 Contact Center Optimization	(1,300,000)
FY'16 Implementation of Space Study recommendations for support facilities	(12,500,000)
FY'16 Easements & Land Acquisition for Watershed Protection (A&R) - PAYGO	(1,600,000)
FY'16 Use of Fund Balance Supply Chain Management Transformation (A&R)	(555,000)
FY'16 Vibration Analysis Pilot (A&R)	(150,000)
FY'16 Analysis of Water Production Trends & Projections (A&R)	(125,000)
FY'16 Climate Change Vulnerability Assessment (A&R)	(300,000)
FY'16 Communications & Community Relations Special Projects	(156,000)
FY'16 Strategic Energy Plan Implementation (A&R)	(200,000)
FY'16 Warehouse Distribution & Inventory Optimization Study (A&R)	(500,000)
FY'16 Globally Harmonized System of Classification and Labeling of Chemicals (GHS)(A&R)	(100,000)
Unallocated Reserve (end of FY'16)	34,515,000
FY'17-'20 REDO Extinguishment (to fully phase in 100% extinguishment)	(8,500,000)
FY'17-'20 Use of Fund Balance AMI/Billing System Replacement	(6,000,000)
FY'17-'20 Climate Change Vulnerability Assessment (A&R)	(1,000,000)
FY'17-'20 Strategic Energy Plan Implementation (A&R)	(1,000,000)
FY'17-'20 Operating Reserve Requirement (to maintain 10% of budgeted revenues)	(14,800,000)
Unallocated Reserve	\$ 3,215,000
Working Capital Reserve	
Working Capital Reserve 6/30/14	53,300,000
FY'14 Operating Reserve Contribution	2,300,000
Working Capital Reserve 6/30/15	55,600,000
FY'15 Operating Reserve Contribution	6,300,000
Working Capital Reserve 6/30/16 (10% of budgeted revenue)	\$ 61,900,000
CSIS/AMI PAYGO Reserve (FY'15 - FY'20 Use of Fund Balance)	\$ 11,500,000

**FY'16 WSSC Multi-Year Financial Forecast
Summary**

Forecast Scenario	30 Year 1.25x Coverage PAYGO	Additional & Reinstated	Additional Operating Reserve	Use of Fund Balance PAYGO	Use of Fund Balance One Time A&R	Use of Fund Balance IT Strategic Plan	Use of Fund Balance AMI	Use of Fund REDO	Total Use of Fund Balance	Unspecified Reductions	Rate
Scenario 1 - Base Case - Status Quo - No Additional & Reinstated (A&R)	22,663	-	6,300	-	-	-	2,000	1,500	9,800	-	10.2%
Scenario 2 - Base Case - Recalibrated Account Maintenance Fee - No A&R	22,663	-	6,300	-	-	-	2,000	1,500	9,800	-	8.6%
Scenario 3 - Base Case - Recalibrated Account Maintenance Fee and Infrastructure Renewal Fee - No A&R	22,663	-	6,300	-	-	-	2,000	1,500	9,800	-	1.9%
Scenario 4 - Status Quo - With A&R	24,263	5,246	6,300	1,600	2,086	8,000	2,000	1,500	21,486	-	9.4%
Scenario 5 - Recalibrated Account Maintenance Fee - With A&R	24,263	5,246	6,300	1,600	2,086	8,000	2,000	1,500	21,486	-	7.8%
Scenario 6 - Recalibrated Account Maintenance Fee and Infrastructure Renewal Fee - With A&R	24,263	5,246	6,300	1,600	2,086	8,000	2,000	1,500	21,486	-	1.1%

FY'16 Operating Ratios

Capital to Operating Ratio

<u>Assumptions</u>	CIP	Reconstruction
Short -Term Interest Rate	3.5%	3.5%
Annual Amortization	3.3%	3.3%
Completion Factor	80%	100%
Desired Debt Service Savings	\$ 1,000,000	\$ 1,000,000
Capital Expenses to achieve above debt svc savings	\$ 18,292,683	\$ 14,634,146

Amount Needed to Impact Rates by X%

Water & Sewer Rate Revenue	\$ 579,276,000
% Desired to Impact Rates	1%
Amount Needed to Impact Rate by above %	\$ 5,792,760

Revenue Received for each MGD of Water Production

Water & Sewer Rate Revenue	\$ 579,276,000
Water Production (in MGD)	166
Revenue Received per MGD of Production	\$ 3,489,614

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Capital and Bond Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 1

Estimated Revenues and Expenditures (\$1,000)

	<u>FY 2016</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
	<u>Approved</u>	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Capital Expenditures							
1 Water & Sewer CIP Projects	\$ 472,036	\$ 542,880	\$ 471,270	\$ 438,303	\$ 266,073	\$ 183,029	\$ 141,450
2 Information Only Projects (@ < 100% completion)	27,933	25,981	35,239	39,501	38,599	34,012	10,787
3 Additional High Probability Future CIP Projects	-	-	-	-	-	-	-
4 SAG Adjustments (unspecified capital spending reductions)	-	-	-	-	-	-	-
5 Subtotal - Capital Expenditures less unspecified SAG capital spending reductions	499,969	568,841	506,509	477,804	304,672	217,041	152,237
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9 EPP & Water Storage Facility Rehab	5,000	5,550	7,860	8,860	6,100	5,000	5,000
10 Total Capital Funding Required	<u>525,904</u>	<u>597,065</u>	<u>565,191</u>	<u>561,262</u>	<u>436,697</u>	<u>360,941</u>	<u>293,336</u>
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19 Funds Available after Construction	-	-	-	-	-	-	-

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
 FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 1

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$638,265	\$688,452	\$744,712	\$792,721	\$841,494
3 All Other Sources	91,834	69,940	65,628	64,376	63,395	60,859	59,902
4 Total Revenue	678,089	649,216	703,893	752,828	808,107	853,580	901,396
5 Expenses							
6 Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,685	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,800	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(58,989)	(50,188)	(56,260)	(48,009)	(48,774)	(41,344)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	10.2%	7.9%	8.2%	6.4%	6.2%	4.9%
Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
New Debt	260,345	447,009	416,532	431,893	333,561	280,326	219,764

NOTE:
 Impact of Rate Increase on Average Residential Monthly Bill

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	\$5.44	\$4.63	\$5.19	\$4.43	\$4.50	\$3.82

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 1

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$566,255	\$579,276	\$638,265	\$688,452	\$744,712	\$792,721	\$841,494
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	23,338	23,461	23,584	23,707	23,831	23,954
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
7 Products & Technology							
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	630,188	689,786	740,228	786,807	845,080	894,196
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
12 Less Rate Stabilization	1,167	728	207				
13 SDC Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
14 Reconstruction Debt Service Offset	41,360	19,028	14,107	12,600	11,300	8,500	7,200
15 Adjustments to Total Revenue	678,089	649,216	703,893	752,828	808,107	853,580	901,396
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
19 Salaries and Wages - Additional & Reinstated Programs							
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other - Additional & Reinstated Programs							
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,500	3,800	4,000	4,200
25 Unspecified reductions							
26 Unspecified reduction of future year's expenditure base							
27 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
28 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
29 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,188	379,237
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
32 NET EXPENSES							
33 Revenue - Expenditure Gap before rate increase	5.5%	(58,989)	(50,188)	(56,260)	(48,009)	(48,774)	(41,344)
34 Rate Increase		10.2%	7.9%	8.2%	6.4%	6.2%	4.9%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget with Recalibrated AMF - 2

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$629,229	\$679,361	\$735,564	\$783,517	\$832,235
3 All Other Sources	91,834	78,976	74,720	73,524	72,599	70,118	69,218
4 Total Revenue	678,089	658,252	703,949	752,885	808,163	853,635	901,452
5 Expenses							
6 Maintenance & Operating	373,575	369,569	408,610	428,308	448,978	470,685	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(49,953)	(50,131)	(56,204)	(47,952)	(48,718)	(41,288)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	8.6%	8.0%	8.3%	6.5%	6.2%	5.0%
Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
New Debt	260,345	447,009	416,532	431,893	333,561	280,326	219,764

NOTE:

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Impact of Rate Increase on Average Residential Monthly Bill	\$4.61	\$4.63	\$5.19	\$4.43	\$4.50	\$3.81
Impact of Recalibrated AMF on Average Residential Monthly Bill	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
Total	\$6.28	\$6.30	\$6.86	\$6.10	\$6.17	\$5.48

ASSUMPTIONS

WSSC's Multi-Year Financial Forecast
 FY 2016 thru 2021 Forecast: Preliminary Budget with Current Fee Structure (Status Quo) - 1

	FY 2016 <u>Proposed</u>	FY 2017 <u>Estimate</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>
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WATER PRODUCTION

Yearly Growth Increment (MGD)						
Estimated Annual Average Water Production (MGD)	166.0	166.0	166.0	166.0	166.0	166.0

OPERATING FUNDS

Salaries & Wages Rate of Increase	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Heat, Light & Power Annual Expenses (Includes savings from Energy Performance Program)						
Water (\$ thousands)	13,311	14,010	14,582	15,175	15,799	16,454
Sewer (\$ thousands)	10,891	11,463	11,931	12,416	12,927	13,482

Blue Plains (Regional Sewage Disposal) Rate of Increase

All Other - % Annual Increase	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%
	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%

GASB 045 Expense

Water REDO (\$ thousands)	10,000	10,000	10,000	10,000	10,000	10,000
Sewer REDO (\$ thousands)	4,250	3,500	2,750	2,000	1,250	500
	4,250	3,500	2,750	2,000	1,250	500

Work Years / FTE \$s

Operating Program	-	-	-	-	-	-
Capital Programs	-	-	-	-	-	-

BOND FUNDS

Short-term Construction Note Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Long-Term Bond Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Life for Non-SRF Water and Sewer Debt (years)	30	30	30	30	30	30
Life for SRF Water and Sewer Debt (years)	20	20	20	20	20	20

CAPITAL EXPENDITURES RELATED PARAMETERS

Construction Inflation	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Construction Completion Factor	80%	80%	80%	80%	80%	80%
Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
Blue Plains Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
ENR Construction Completion Factor	80%	80%	80%	80%	80%	80%
Reconstruction Completion Factor	100%	100%	100%	100%	100%	100%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Recalibrated AMF - 2

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$628,229	\$679,361	\$735,564	\$783,517	\$832,235
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
7 Products & Technology							
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	639,224	689,842	740,285	796,863	845,135	894,252
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
12 Less Rate Stabilization	1,167	728	207	-	-	-	-
13 SDC Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
14 Reconstruction Debt Service Offset	41,360	19,028	14,107	12,600	11,300	8,500	7,200
15 Adjustments to Total Revenue	678,089	658,252	703,949	752,885	809,163	853,635	901,452
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,660	143,515
19 Salaries and Wages - Additional & Reinstated Programs							
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other - Additional & Reinstated Programs							
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
28 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
29 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,188	379,237
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
32 NET EXPENSES	678,089	708,205	754,080	809,088	856,116	902,353	942,740
33 Revenue - Expenditure Gap before rate increase		(49,953)	(50,131)	(56,204)	(47,952)	(48,718)	(41,288)
34 Rate Increase	5.5%	8.6%	8.0%	8.3%	6.5%	6.2%	5.0%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge - 3

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$590,395	\$640,397	\$696,473	\$744,297	\$792,886
3 All Other Sources	91,834	117,810	113,683	112,615	111,819	109,467	108,696
4 Total Revenue	678,089	697,086	704,078	753,012	808,292	853,764	901,582
5 Expenses							
6 Maintenance & Operating	373,575	389,569	408,610	428,308	448,978	470,585	493,474
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
9 PAYGO	19,996	22,663	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,600	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	708,205	754,080	809,088	856,116	902,353	942,740
14 Revenue Gap (Revenue - Expenses)	-	(11,119)	(50,003)	(56,076)	(47,824)	(48,590)	(41,158)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	33.2%	33.8%	34.6%	34.7%	34.7%	34.3%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	1.9%	8.5%	8.8%	6.9%	6.5%	5.2%
Operating Budget	\$678,089	\$708,205	\$754,080	\$809,088	\$856,116	\$902,353	\$942,740
Debt Service Expense	227,042	234,778	254,867	279,775	297,207	313,539	323,789
New Debt	260,345	447,009	416,532	431,993	333,561	280,326	219,764

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Total	\$1.02	\$4.63	\$5.20	\$4.44	\$4.47	\$3.81
	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83
	\$6.52	\$10.13	\$10.70	\$9.94	\$9.97	\$9.31

NOTE:
 Impact of Rate Increase on Average Residential Monthly Bill
 Impact of Recalibrated AMF on Average Residential Monthly Bill
 Impact of Infra. Investment Fee on Avg Residential Monthly Bill

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge - 3

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$590,395	\$640,397	\$696,473	\$744,297	\$792,886
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	38,834	38,963	39,091	39,220	39,349	39,478
5 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
6 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
7 Rockville Sewer Use	2,694	2,694	2,827	2,858	2,893	2,910	2,943
8 Products & Technology							
9 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
10 Total Revenue	636,729	678,058	689,971	740,412	796,992	845,264	894,382
11 Adjustments to Revenue							
12 Use of Fund Balance	30,193	9,800	6,900	7,100	7,300	6,000	6,200
13 Less Rate Stabilization	1,167	728	207	-	-	-	-
14 SDC Debt Service Offset	10,000	8,500	7,000	5,500	4,000	2,500	1,000
15 Reconstruction Debt Service Offset	41,360	19,028	14,107	12,600	11,300	8,500	7,200
16 Adjustments to Total Revenue	678,089	697,086	704,078	753,012	808,292	853,764	901,582
17 FUNDS AVAILABLE							
18 EXPENDITURES							
19 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
20 Salaries and Wages - Additional & Reinstated Programs	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Heat, Light and Power	55,176	54,895	56,926	59,032	61,216	63,481	65,830
22 Regional Sewage Disposal	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other							
24 All Other - Additional & Reinstated Programs	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Additional Operating Reserve Contribution							
26 Unspecified reductions	-	-	-	-	-	-	-
27 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
28 Total Operating Expenses	431,051	450,764	468,936	490,940	513,994	538,166	563,504
29 Debt Service	227,042	234,778	254,867	279,775	297,207	313,539	323,789
30 Debt Reduction (PAYGO)	19,996	22,663	30,277	38,372	44,915	50,649	55,447
31 Total Financial Expenses	247,038	257,440	285,145	318,148	342,122	364,188	379,237
32 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	708,205	754,080	809,088	856,116	902,353	942,740
33 NET EXPENSES							
34 Revenue - Expenditure Gap before rate increase	-	(11,119)	(50,003)	(56,076)	(47,824)	(48,590)	(41,158)
35 Rate Increase	5.5%	1.9%	8.5%	8.8%	6.9%	6.5%	5.2%

ASSUMPTIONS

WSSC's Multi-Year Financial Forecast
 Preliminary Budget with Current Fee Structure (Status Quo) - 4 (Includes A & R)

	FY 2016 <u>Proposed</u>	FY 2017 <u>Estimate</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>
<u>WATER PRODUCTION</u>						
Yearly Growth Increment (MGD)	166.0	166.0	166.0	166.0	166.0	166.0
Estimated Annual Average Water Production (MGD)						
<u>OPERATING FUNDS</u>						
Salaries & Wages Rate of Increase	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Heat, Light & Power Annual Expenses (Includes savings from Energy Performance Program)						
Water (\$ thousands)	13,311	14,010	14,582	15,175	15,799	16,454
Sewer (\$ thousands)	10,891	11,463	11,931	12,416	12,927	13,462
Blue Plains (Regional Sewage Disposal) Rate of Increase	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%
All Other - % Annual Increase	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%
GASB 045 Expense	10,000	10,000	10,000	10,000	10,000	10,000
Water REDO (\$ thousands)	4,250	3,188	2,125	1,063	-	-
Sewer REDO (\$ thousands)	4,250	3,188	2,125	1,063	-	-
Work Years / FTE, \$\$	-	-	-	-	-	-
Operating Program	-	-	-	-	-	-
Capital Programs	-	-	-	-	-	-
<u>BOND FUNDS</u>						
Short-term Construction Note Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Long-Term Bond Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Life for Non-SRF Water and Sewer Debt (Years)	30	30	30	30	30	30
Life for SRF Water and Sewer Debt (Years)	20	20	20	20	20	20
<u>CAPITAL EXPENDITURES RELATED PARAMETERS</u>						
Construction Inflation	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Construction Completion Factor	80%	80%	80%	80%	80%	80%
Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
Blue Plains Sewer Construction Completion Factor	80%	80%	80%	80%	80%	80%
ENR Construction Completion Factor	80%	80%	80%	80%	80%	80%
Reconstruction Completion Factor	100%	100%	100%	100%	100%	100%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 4 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$633,738	\$692,177	\$748,179	\$796,127	\$843,889
3 All Other Sources	91,834	81,705	65,652	63,722	62,114	60,459	56,886
4 Total Revenue	678,089	660,981	699,390	755,899	810,293	856,586	900,775
5 Expenses							
6 Maintenance & Operating	373,575	394,501	411,598	431,444	452,269	474,139	497,098
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
9 PAYGO	19,996	24,263	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	715,443	757,829	811,901	858,241	904,358	944,815
14 Revenue Gap (Revenue - Expenses)	-	(54,462)	(58,439)	(56,002)	(47,949)	(47,761)	(44,040)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	32.9%	33.7%	34.4%	34.5%	34.5%	34.1%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	9.4%	9.2%	8.1%	6.4%	6.0%	5.2%
Operating Budget	\$678,089	\$715,443	\$757,829	\$811,901	\$858,241	\$904,358	\$944,815
Debt Service Expense	227,042	235,483	255,627	279,452	296,041	312,089	322,240
New Debt	260,345	442,533	409,666	416,494	326,663	278,285	218,649

NOTE:
 Impact of Rate Increase on Average Residential Monthly Bill

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	\$5.02	\$5.40	\$5.17	\$4.43	\$4.41	\$4.07

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 4 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$566,255	\$579,276	\$633,738	\$692,177	\$748,179	\$796,127	\$843,889
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	23,338	23,461	23,584	23,707	23,831	23,954
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,694	2,773	2,851	2,829	2,862	2,895	2,927
7 Products & Technology	17,000	17,000	17,303	17,404	17,515	17,638	17,775
8 Miscellaneous	636,729	630,267	685,283	743,924	800,243	848,471	896,575
9 Total Revenue	30,193	21,486	7,525	7,725	7,925	8,125	4,200
10 Adjustments to Revenue							
11 Use of Fund Balance	1,167	728	207	-	-	-	-
12 Less Rate Stabilization	10,000	8,500	6,375	4,250	2,125	-	-
13 SDC Debt Service Offset	41,360	30,714	14,107	11,975	10,050	8,125	4,200
14 Reconstruction Debt Service Offset							
15 Adjustments to Total Revenue	678,089	660,981	699,390	755,899	810,293	856,596	900,775
16 FUNDS AVAILABLE							
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,064	123,967	130,165	136,673	143,506
19 Salaries and Wages - Additional & Reinstated Programs	-	900	946	994	1,044	1,096	1,150
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	58,032	61,216	63,481	65,830
22 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other - Additional & Reinstated Programs	-	4,032	2,043	2,145	2,252	2,365	2,483
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	455,696	471,924	494,076	517,285	541,620	567,128
28 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
29 Debt Reduction (PAYGO)	19,996	24,263	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	259,746	285,905	317,824	340,957	362,738	377,687
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	715,443	757,829	811,901	858,241	904,358	944,815
32 NET EXPENSES	678,089	715,443	757,829	811,901	858,241	904,358	944,815
33 Revenue - Expenditure Gap before rate increase	-	(54,461)	(58,439)	(56,002)	(47,949)	(47,761)	(44,040)
34 Rate Increase	5.5%	9.4%	9.2%	8.1%	6.4%	6.0%	5.2%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Capital and Bond Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Current Fee Structure (Status Quo) - 4 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
Capital Expenditures							
1 Water & Sewer CIP Projects	\$ 472,036	\$ 540,188	\$ 462,645	\$ 418,968	\$ 257,669	\$ 180,642	\$ 140,185
2 Information Only Projects (@ < 100% completion)	27,933	25,961	35,239	39,501	38,599	34,012	10,787
3 Additional High Probability Future CIP Projects	-	-	-	-	-	-	-
4 SAG Adjustments (unspecified capital spending reductions)	-	-	-	-	-	-	-
5 Subtotal - Capital Expenditures less unspecified SAG capital spending reductions	499,969	566,149	497,884	458,469	296,268	214,654	150,972
6 Subtotal - Capital Expenditures w/ scaling, completion, & inflation index factors	\$ 399,976	\$ 452,920	\$ 410,257	\$ 389,113	\$ 258,993	\$ 193,277	\$ 140,015
Information Only Projects (@ 100% completion)							
7 Water Reconstruction	104,509	101,658	103,843	105,808	105,808	105,808	105,808
8 Sewer Reconstruction	16,419	34,784	38,124	41,071	58,449	54,707	41,340
9 EPP & Water Storage Facility Rehab	5,000	5,550	7,860	8,860	6,100	5,000	5,000
10 Total Capital Funding Required	525,904	594,912	558,084	544,852	429,350	358,792	292,163
Funding							
11 Debt Issues (includes SRF Water and Sewer Debt)	260,345	442,533	409,666	416,494	326,663	278,285	218,649
12 5% Debt Buydown of Short-term Construction Notes	9,880	22,993	21,471	21,720	17,108	14,647	11,508
13 System Development Charges (w/ scaling, completion & inflation index factors)	55,915	64,263	56,246	37,826	21,043	9,930	5,127
14 PAYGO	19,996	24,263	30,277	38,372	44,914	50,648	55,446
15 Grants - Federal & State (includes ENR Grants)	22,179	21,498	26,082	22,857	17,665	771	268
16 Developers and Government Contrib. (w/ scaling, completion & inflation index factors)	24,204	19,362	14,340	7,581	1,955	4,510	1,164
17 Previous Year's Funds Available after Construction	133,384	1	1	2	2	1	1
18 Total Funds Available	525,904	594,912	558,084	544,852	429,350	358,792	292,163
19 Funds Available after Construction							

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary

FY 2016 thru 2021 Forecast : Preliminary Budget with Recalibrated AMF - 5 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$624,702	\$683,086	\$739,034	\$786,928	\$834,637
3 All Other Sources	91,834	90,741	74,744	72,870	71,318	69,728	66,202
4 Total Revenue	678,089	670,017	699,446	755,956	810,352	856,657	900,838
5 Expenses							
6 Maintenance & Operating	373,575	394,501	411,599	431,447	452,274	474,146	497,107
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
9 PAYGO	19,996	24,263	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	715,443	757,830	811,904	858,246	904,365	944,824
14 Revenue Gap (Revenue - Expenses)	-	(45,426)	(58,384)	(55,948)	(47,894)	(47,708)	(43,986)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	32.9%	33.7%	34.4%	34.5%	34.5%	34.1%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	7.8%	9.3%	8.2%	6.5%	6.1%	5.3%
Operating Budget	\$678,089	\$715,443	\$757,830	\$811,904	\$858,246	\$904,365	\$944,824
Debt Service Expense	227,042	235,483	255,627	279,452	296,041	312,089	322,240
New Debt	260,345	442,533	409,666	416,494	326,663	278,286	218,649

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Total	\$4.17	\$5.36	\$5.17	\$4.43	\$4.43	\$4.08
Impact of Rate Increase on Average Residential Monthly Bill	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
Impact of Recalibrated AMF on Average Residential Monthly Bill	\$5.84	\$7.03	\$6.84	\$6.10	\$6.10	\$5.75

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget with Recalibrated AMF - 5 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$624,702	\$683,086	\$739,034	\$786,928	\$834,637
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
6 Rockville Sewer Use	2,684	2,773	2,851	2,829	2,862	2,895	2,927
7 Products & Technology							
8 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
9 Total Revenue	636,729	639,303	685,339	743,981	800,302	848,532	896,638
10 Adjustments to Revenue							
11 Use of Fund Balance	30,193	21,486	7,525	7,725	7,925	8,125	4,200
12 Less Rate Stabilization							
13 SDC Debt Service Offset	1,167	728	207	-	-	-	-
14 Reconstruction Debt Service Offset	10,000	8,500	6,375	4,250	2,125	-	-
15 Adjustments to Total Revenue	41,360	30,714	14,107	11,975	10,050	8,125	4,200
16 FUNDS AVAILABLE	678,089	670,017	699,446	755,956	810,352	856,657	900,838
17 EXPENDITURES							
18 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
19 Salaries and Wages - Additional & Reinstated Programs		900	946	994	1,044	1,096	1,150
20 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
21 Regional Sewage Disposal	55,176	54,895	56,926	58,032	61,216	63,481	65,830
22 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
23 All Other - Additional & Reinstated Programs		4,032	2,043	2,145	2,252	2,365	2,483
24 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	431,051	455,696	471,925	494,079	517,290	541,627	567,137
28 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
29 Debt Reduction (PAYGO)	19,996	24,263	30,277	38,372	44,915	50,649	55,447
30 Total Financial Expenses	247,038	259,746	285,905	317,824	340,957	362,738	377,687
31 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	715,443	757,830	811,904	858,246	904,365	944,824
32 NET EXPENSES							
33 Revenue - Expenditure Gap before rate increase	-	(45,426)	(58,384)	(55,948)	(47,934)	(47,708)	(43,986)
34 Rate Increase	5.5%	7.8%	9.3%	8.2%	6.5%	6.1%	5.3%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge - 6 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$586,255	\$579,276	\$585,868	\$644,123	\$699,943	\$747,708	\$795,288
3 All Other Sources	91,834	129,575	113,707	111,961	110,538	109,077	105,680
4 Total Revenue	678,089	708,851	699,575	756,084	810,481	856,785	900,968
5 Expenses							
6 Maintenance & Operating	373,575	394,501	411,599	431,447	452,274	474,146	497,107
7 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
8 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
9 PAYGO	19,996	24,263	30,277	38,372	44,915	50,649	55,447
10 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	678,089	715,443	757,830	811,904	858,246	904,365	944,824
14 Revenue Gap (Revenue - Expenses)	-	(6,592)	(58,255)	(55,820)	(47,766)	(47,579)	(43,856)
15 Water Production (MGD)	168.0	166.0	166.0	166.0	166.0	166.0	166.0
16 Debt Service Ratio (debt service / budget)	33.5%	32.9%	33.7%	34.4%	34.5%	34.5%	34.1%

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Rate Increase	5.5%	1.1%	9.9%	8.7%	6.8%	6.4%	5.5%
Operating Budget	\$678,089	\$715,443	\$757,830	\$811,904	\$858,246	\$904,365	\$944,824
Debt Service Expense	227,042	235,483	255,627	279,452	296,041	312,089	322,240
New Debt	260,345	442,533	409,666	416,494	326,668	278,285	218,649

NOTE:

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Impact of Rate Increase on Average Residential Monthly Bill	\$0.59	\$5.35	\$5.17	\$4.39	\$4.42	\$4.04
Impact of Recalibrated AMF on Average Residential Monthly Bill	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67	\$1.67
Impact of Infra. Investment Fee on Avg Residential Monthly Bill	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83	\$3.83
Total	\$6.09	\$10.85	\$10.67	\$9.89	\$9.92	\$9.54

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2016 thru 2021 Forecast : Preliminary Budget With Changes to Ready-to-Serve Charge - 6 (Includes A & R)

Estimated Revenues and Expenditures (\$1,000)

	FY 2015 Approved	FY 2016 Proposed	FY 2017 Estimate	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$586,255	\$579,276	\$585,868	\$644,123	\$699,943	\$747,708	\$795,288
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	32,374	32,553	32,732	32,911	33,090	33,270
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	38,834	38,963	39,091	39,220	39,349	39,478
5 Interest Income	1,000	1,000	1,000	1,000	1,000	1,000	1,000
6 Plumbing/Inspection Fees	6,880	6,880	6,930	6,930	6,980	6,980	7,030
7 Rockville Sewer Use	2,694	2,773	2,851	2,829	2,862	2,895	2,927
8 Products & Technology	-	-	-	-	-	-	-
9 Miscellaneous	17,000	17,000	17,303	17,404	17,515	17,638	17,775
10 Total Revenue	636,729	678,137	685,468	744,109	800,431	848,660	896,768
11 Adjustments to Revenue							
12 Use of Fund Balance	30,193	21,486	7,525	7,725	7,925	8,125	4,200
13 Less Rate Stabilization	-	-	-	-	-	-	-
14 SDC Debt Service Offset	1,167	728	207	-	-	-	-
15 Reconstruction Debt Service Offset	10,000	8,500	6,375	4,250	2,125	-	-
16 Adjustments to Total Revenue	41,360	30,714	14,107	11,975	10,050	8,125	4,200
17 FUNDS AVAILABLE	678,089	708,851	699,575	756,084	810,481	856,785	900,968
18 EXPENDITURES							
19 Salaries and Wages	107,087	112,442	118,065	123,970	130,170	136,680	143,515
20 Salaries and Wages - Additional & Reinstated Programs	-	900	946	994	1,044	1,096	1,150
21 Heat, Light and Power	22,906	24,202	25,473	26,513	27,591	28,726	29,916
22 Regional Sewage Disposal	55,176	54,895	56,926	59,032	61,216	63,481	65,830
23 All Other	243,582	252,925	265,072	277,825	291,217	305,279	320,043
24 All Other - Additional & Reinstated Programs	-	4,032	2,043	2,145	2,252	2,365	2,483
25 Additional Operating Reserve Contribution	2,300	6,300	3,400	3,600	3,800	4,000	4,200
26 Unspecified reductions	-	-	-	-	-	-	-
27 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
28 Total Operating Expenses	431,051	455,696	471,925	494,079	517,290	541,527	567,137
29 Debt Service	227,042	235,483	255,627	279,452	296,041	312,089	322,240
30 Debt Reduction (PAYGO)	19,996	24,263	30,277	38,372	44,915	50,649	55,447
31 Total Financial Expenses	247,038	259,746	285,905	317,824	340,957	362,738	377,687
32 TOTAL GROSS EXPENSES (Operating & Financial)	678,089	715,443	757,830	811,904	858,246	904,365	944,824
33 NET EXPENSES	678,089	715,443	757,830	811,904	858,246	904,365	944,824
34 Revenue - Expenditure Gap before rate increase	-	(6,591)	(58,255)	(55,820)	(47,766)	(47,579)	(43,856)
35 Rate Increase	5.5%	1.4%	9.9%	8.7%	6.8%	6.4%	5.5%

Increased FY'16 Expenditure Assumptions Over and Above Inflation Factor

FY'16 Additional & Reinstated Programs:

New Workyears Impacting Water & Sewer Rates

Large Valve Assessment, Repairs, Replacement

4 Utility Technicians	227,200	227,200
1 Principal Engineer	98,000	98,000

PCCP Program

5 Utility Technicians	284,000	284,000
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PCCP Management Program

1 Project Manager	98,000	98,000
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Operations

1 Operational Hydraulic Planner	79,900	79,900
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Asset Management Program

1 Asset Management Project Manager	82,900	40,142
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Construction Communication

1 Construction Communication Coordinator	90,000	72,000
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14 Subtotal Workyears

New Workyears With No Water & Sewer Rate Impact

Water Main Reconstruction Program (capital)

1 Contract Manager	72,800	-
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Electronic As-Built Preparation

1 Engineering Assistant IV	56,300	-
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Relocations

1 Lead Project Manager	88,500	-
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1 Associate Project Manager	68,000	-
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18 Total Workyears

	Cost	W/S Impact
<i>New Workyears Impact</i>	\$ 1,245,600	\$ 899,200
<i>Benefits</i>	436,000	314,700

Other Additional & Reinstated Programs

Large Valve Assessment, Repairs, Replacement	1,879,300	1,708,800
PCCP Program (Maintenance trucks, pick-up trucks & equipment)	325,700	45,200
Wellness Program	240,000	192,000
Easement & Land Acquisition for Watershed Protection (PAYGO)	1,600,000	- *
Vibration Analysis Pilot	150,000	150,000 *
Analysis of Water Production Trends & Projections	125,000	125,000 *
Climate Change Vulnerability Assessment	300,000	300,000 *
Strategic Energy Plan Implementation	200,000	200,000 *
Warehouse Distribution & Inventory Optimization Study	500,000	500,000 *
Communications & Community Relations Special Projects	156,000	156,000 *
Globally Harmonized System of Classification and Labeling	100,000	100,000 *
Supply Chain Management Transformation (final year)	555,000	555,000 *
	<u>6,131,000</u>	<u>4,032,000</u>
Total Other Additional & Reinstated Programs	\$ 7,812,600	\$ 5,245,900

*Projects funded via use of fund balance. (2,086,000)

Water & Sewer operating impact of additional & reinstated programs. **\$ 3,159,900**

WSSC

FY 2016 ADDITIONAL & REINSTATED PROGRAM REQUESTS SUMMARY

Program: LARGE VALVE ASSESSMENT, REPAIRS, & REPLACEMENT PROGRAM

Request: 1 Principal Engineer, 4 Utility Technicians

Cost including vehicles & equipment: \$2,318,320, Water/Sewer Impact: \$2,147,820

Justification:

Many of the valves that were installed in the 1920's thru the 1960's (approx. 775 valves) are past their useful life. Often times, these valves cannot be operated without repairs. In many instances, when repairs are needed, the parts cannot be purchased because the manufacturers are no longer in business. While the WSSC currently uses an outside contractor to service its small diameter valves, the larger diameter valves (16" and larger) now require immediate and aggressive attention. In collaboration with the Asset Management Program, this initiative is for the continuous assessment, inspection and exercising of approximately 430 valves annually starting with FY'15 through FY'22. Program also includes repairs to approximately 85 valves per year through FY'22, right-of-way clearing and temporary roads to access valves for about 50 valves per year.

Program: PCCP PROGRAM

Request: 5 Utility Technicians

Cost including vehicles & equipment: \$709,100 Water/Sewer Impact: \$428,600

Justification:

There is currently only one crew supporting the PCCP inspection program. As the program continues to develop, inspections are less seasonal. The dedicated PCCP crews will be more effective due to their experience in entering confined spaces to support inspection efforts. These Utility Technicians would also be used to support other programs, such Large Valve Rehabilitation.

Program: PCCP MANAGEMENT PROGRAM

Request: 1 Project Manager

Cost including benefits: \$132,300 Water/Sewer Impact: \$132,300

Justification:

The PCCP program has increased the annual inspection rate from 12 miles to 18 miles. The inspections, along with Acoustic Fiber Optic (AFO) monitoring, are identifying critical pipe segments in need of repair or replacement. Due to the intense nature of this work, the current PCCP team is at capacity for providing the necessary on-site field investigations, the associated contract management for the inspections and AFO technologies, coordinating the scheduling of planned and emergency shut-downs, and recommending repair or replacements. The requested Project Manager will be involved in the management of inspection and AFO monitoring task orders, determining repair recommendations, the management of the PCCP inspection schedule, and prioritizing inspection efforts.

Program: OPERATIONS

Systems Control

Request: 1 Operational Hydraulic Planner

Cost including benefits: \$107,734, Water/Sewer Impact: \$83,253

Justification:

The number of water main replacement contracts, PCCP lines that are scheduled each year to be inspected, CIP projects, water storage facilities out of service for rehabilitation and additional water main emergency work have been steadily increasing. The increasing number of long duration shutdowns is having a detrimental impact on the water system. This is also impacting water quality, increasing water velocity in pipes, and potentially causes construction delays when multiple contracts are requesting shutdowns across the same transmission system. It is

also important to evaluate the impacts of the frequently required increases in pressure to meet system needs and minimize high pressures as much as possible. This position will assist in scheduling, monitoring, coordinating all shutdowns in the water distribution system.

Program: ASSET MANAGEMENT PROGRAM

Request: 1 Asset Management Project Manager

Cost including benefits: \$111,915, Water/Sewer Impact: \$54,192

Justification:

This position was identified as part of the Asset Management Program Long Term Organization Structure approved in November 2008. This is a key position to manage the development and analysis of the capital investment requirements needed to sustain infrastructure, provide economic analysis and input to the Enterprise Asset Management Program business planning process, develop the Enterprise Asset Management Plan, and manage the new CIP/ESP Validation and Prioritization.

Program: CONSTRUCTION COMMUNICATION

Request: 1 Construction Communication Coordinator

Cost including benefits: \$121,500, Water/Sewer Impact: \$97,200

Justification:

The number of construction projects has and continues to increase. Communications to customers, HOAs, neighbors, and other stakeholders around construction projects is not coordinated. There is no uniform procedure on communicating with stakeholders nor is there a procedure on developing a uniform message or a message tailored to the type of construction. Some communications are handled by contractors, others by project managers. Sometimes there are changes or delays and often customers are not informed. The proposed workyear would address these issues.

Program: CATHODIC PROTECTION

Request: 1 Contract Manager

Cost including benefits: \$98,280, Water/Sewer Impact: \$0

Justification:

The Commission will begin an extensive cathodic protection rehabilitation program on our large water transmission mains in FY'16. It is anticipated that 27 miles of transmission main will have existing cathodic protection repaired, upgraded and/or replaced each fiscal year. It is anticipated that this amount of work will translate into the need to manage at least 5 concurrent cathodic protection contracts at any given time during the fiscal year. Accordingly, one contract manager is needed to handle this additional work load. It would be appropriate to use a merit employee rather than a contractual employee for this position since this program does not have an end point.

Program: ELECTRONIC AS-BUILT PREPARATION

Request: 1 Engineering Assistant IV

Cost including benefits: \$76,000, Water/Sewer Impact: \$0

Justification:

Recently, the WSSC has significantly improved the process of as-built preparation for the water rehabilitation contracts. Instead of marking changes in red on a hard copy of the plans and using ties to locate appurtenances, electronic as-builts have been prepared using AutoCad. All appurtenances are now located using hand held GPS units and added to the AutoCAD as-built file. We would like to expand this effort by preparing electronic as-builts for sewer rehabilitation contracts and System Enhancement Unit jobs. Currently, we are using three consultant inspectors to perform this function and there is a significant backlog of work to prepare as-builts for 43 miles of

water main rehabilitation. Since this initiative adds significant value to the as-built process, we are requesting one (1) Engineering Assistant IV to permanently establish this program and expand it to include 20 miles of sewer rehabilitation contracts and 12 miles of SEU work. This initiative converts a pilot using consultant inspectors to improve as-built preparation into a lasting part of the organization.

Program: RELOCATIONS

Request: 2 Project Managers

Cost including benefits: \$211,200, Water/Sewer Impact: \$0

Justification:

These positions support the relocations program and will not impact water and sewer rates as it is part of the CIP.

Program: WELLNESS PROGRAM

Request: \$240,000 Water/Sewer Impact: \$192,000

Justification:

The purpose of this program is to show employees that the Commission cares about their wellbeing; to take advantage of some of the Affordable Care Act provisions; to provide educational and hands-on opportunities for members to learn about the choices available to them for healthy living; to reduce absenteeism & increase productivity at work; to increase moral & retention rate. We will partner with internal and external resources, including our carriers and other companies to develop programs and strategies to promote health & wellness; evaluate aggregate health risk assessment data to determine priorities to be addressed, the type and number of educational programs needed; benchmark best practices; assemble data and metrics for an annual report on the effectiveness of the wellness program in improving employee health as well as reducing the Commission's health care cost; provide on-going review and measurement of the program's success; recommend changes to the programs and provide on-going communications regarding the wellness program. All of the Montgomery County agencies have dedicated staffing and financial resources in place for such programs. The Montgomery County Council has made wellness a priority and has high expectations that each agency will go above and beyond to have comprehensive programs in place for their employees.

Program: WATERSHED PROTECTION

Request: \$1,600,000, Water/Sewer Impact: \$0

Justification:

Despite almost 20 years of partnership with local government agencies aimed at protecting the Patuxent reservoirs as drinking water sources, little has been accomplished other than studies. Partner agencies consider the reservoirs' watershed to be a low priority, compared to other waterways in their jurisdictions that need protection and improvement. Funding resources from partners range from extremely limited to non-existent. As the water supplier and owner of the reservoirs, WSSC is looked upon as the beneficiary of improved water quality, and it has been argued by the partners that WSSC should pay for the improvements. A limited source water protection effort by WSSC, completed as a Supplemental Environmental Program in compliance with the SSO Consent Decree, totaled \$3.47 million on land purchases (39.66 acres) and conservation easements (32.81). These acquisitions of larger, isolated parcels have only limited benefits for drinking water source protection compared to measures focused on riparian buffers along streams, which are smaller in area but provide many important water quality benefits.

It is proposed that initiative be funded out of the Fund Balance.

Program: STRATEGIC ENERGY PLAN IMPLEMENTATION

Request: \$200,000, Water/Sewer Impact: \$0 (Total cost is \$1.2 million over 5 years)

Justification:

The WSSC has a \$24 million energy budget. The Strategic Energy Plan needs to be finalized, expanded and updated annually in order for WSSC to optimize costs, consumption and load shifting opportunities. The Strategic Plan will result in the rollout of energy metrics (such as kWh/million gallons) to all Commission users and reduction of energy consumption per unit (kWh/MG, kWh/SF, etc.). Year 1: Develop goals beyond water and wastewater treatment facilities (i.e., remote pumping stations, fleet vehicles, depots and buildings), assistance in developing and prescreening projects with regard to energy impact with the goals of the AMP, assist other WSSC departments in detailed development, evaluation and revisions to policies and procedures as recommended in the SEP. Year 2: Evaluate future resource options, energy efficiency investments against WSSC energy supply requirements and forecasted market conditions to provide a basis for future decisions on block energy purchases, long-term wind and solar contracts, and other alternatives for energy purchases. Prepare RFP for next 10 year electricity supply and wind contract. Year 2-5: assist the Energy Management office in guiding energy projects through the AMP process, providing input to be used by AMP Business Case consultants, assist WSSC in development, implementation, and on-going maintenance of SEP support systems (as recommended by the SEP), including detailed sub-metering plan and software applications to provide appropriate reporting to various WSSC stakeholders, assist WSSC in managing facility energy audit program (based on life cycle audit plan).

It is proposed that initiative be funded out of the Fund Balance.

Program: CLIMATE CHANGE VUNERABILITY ASSESSMENT, ADAPTATION & MITIGATION PLAN

Request: \$300,000, Water/Sewer Impact: \$0 (Total cost is \$1.3 million over 5 years)

Justification:

WSSC infrastructure planning currently does not address changing wet weather conditions, sea level rise, storm surge, and other considerations inherent in Climate Change as evidenced by scientific consensus - the Intergovernmental Panel on Climate Change (IPCC) and The National Climate Assessment. Both AWWA and WEF have recommended and many other water/wastewater utilities have conducted assessments to assess Climate Change vulnerability, strategies for reducing these risks, and mitigation of greenhouse gas (GHG) emissions. While WSSC currently has a GHG Action (reduction plan), that is only a piece of the overall Climate Change resiliency planning that needs to be accomplished for WSSC to be fully prepared for the next 50-80 years to protect our infrastructure and to maintain our status as a first class provider of water and wastewater treatment services to our ratepayers.

It is proposed that initiative be funded out of the Fund Balance.

Program: VIBRATION ANALYSIS PILOT

Request: \$150,000 Water/Sewer Impact: \$0

Justification:

An asset strategies consultant has recommended that several of our large and expensive assets have vibration analysis as part of their condition assessment and tracking of degradation. The resulting data would be monitored, documented and reviewed to identify potential catastrophic failures before they occur. The data would also be used to determine current condition of the asset. This service would be piloted on very large pumps and motors.

It is proposed that initiative be funded out of the Fund Balance.

Program: SAFETY**Implementation of Globally Harmonized System of Classification and Labeling (GHS)****Request: \$100,000 Water/Sewer Impact: \$0****Justification:**

The primary benefit of the GHS is to increase the quality and consistency of information provided to workers, employers and chemical users by adopting a standardized approach to hazard classification, labels and safety data. The GHS provides a single set of harmonized criteria for classifying chemicals according to their health and physical hazards and specifies hazard communication elements for labeling and safety data sheets. Under the GHS, labels would include signal words, pictograms, and hazard and precautionary statements and safety data sheets would have standardized format. This system was agreed on at an international level by governments, industry, and labor, and adopted by the UN in 2002 with a goal of 2008 for implementation.

It is proposed that initiative be funded out of the Fund Balance.

Program: ANALYSIS OF WATER PRODUCTION TRENDS & PROJECTIONS**Request: \$125,000 Water/Sewer Impact: \$0****Justification:**

Historically, the Commission's water production figures have been flat. In response to these trends, the Commission lowered its water production projection for the FY'15 budget and held future water production figures constant. However, recent trends are showing declining water production figures (several recent months have experienced the lowest production numbers in 20 years). The primary criterion to evaluate revenues is sufficiency, i.e. how much money is generated. Water and sewer rate revenues account for almost 90% of the Commission's operating revenues. Flat water production places tremendous stress on the sufficiency of these revenues. As water production declines, water and sewer rates have to be increased just to generate the same amount of money as the previous year in order to maintain the status quo, let alone fund any additional needs or initiatives. When Commission staff is queried as to why water production is flat or declining, only anecdotal evidence is provided. Some of the most valuable information provided during the recent utility rate study was that the average residential customer uses 159 gallons per day and that this figure has been declining for each of the past three fiscal years. The proposed initiative would build upon this data analysis by going back further in the customer data in the CSIS system to ascertain a more precise understanding of historic water production trends and project these trends into the future.

It is proposed that initiative be funded out of the Fund Balance.

Program: WAREHOUSE DISTRIBUTION & INVENTORY OPTIMIZATION STUDY**Request: \$500,000 Water/Sewer Impact: \$0****Justification:**

WSSC has increased capital project improvement efforts resulting in increased volume of inventory transactions (receipts and issues). Operations are further impacted by the physical deterioration and inadequacies of physical storage features at the Central Commission warehouse (Anacostia) - the facility has been in operational existence since the 1960's without substantial renovations. As an example, industry packaging standards (pallet configuration) have changed to a state that is not compatible with warehouse racking systems. Warehouse capacities (including lighting, racking, environmental features, and configuration) are not optimizing the use of operational, administrative, and human resources. Limitations and restrictions also create significant safety and workplace environment concerns. A consultant would be tasked with developing a plan for optimizing warehouse distribution and inventory management at Anacostia and the depots.

It is proposed that initiative be funded out of the Fund Balance.

Program: COMMUNICATIONS & COMMUNITY RELATIONS SPECIAL PROJECTS

Request: \$156,000, Water/Sewer Impact: \$0

Justification:

In an effort to sustain relationships with our stakeholders and provide educational opportunities for the community, Communications is proposing several special projects. The first is the development of a "Can the Grease" program for middle school students in MCPS, similar to the one that exists in PGCPs. This will allow WSSC, in partnership with MCPS, to develop a lesson plan so that every student can learn the importance of the "Can the Grease" program. This funding will also include upgrading WSSC's Kids Page which will help us teach and instruct our community's future leaders on important topics relating to water and wastewater in an engaging way that supports Maryland's core curriculum standards. In addition, the requested funds will support the creation of an educational video on water treatment. The animated film will be geared towards upper primary students (3rd – 6th grade) in both counties. Lastly, the funds will assist with WSSC Historical Archiving. Converting photographs, negatives, and documents to a digital format will facilitate the ease of accessibility of information through the use of a network-based program.

It is proposed that initiative be funded out of the Fund Balance.

Program: SUPPLY CHAIN MANAGEMENT TRANSFORMATION (final year)

Request: \$555,000 Water/Sewer Impact: \$0

Justification:

Supply Chain Transformation, as it is implemented, will allow WSSC to reduce the costs of doing business. Our transformation efforts will result in WSSC realizing value through cooperatively working with suppliers. This cooperative relationship with suppliers will include supplier identification, management and development. Enhanced supplier relationships will lead to improved demand management by WSSC. The success will be measured by the amount of savings generated by implementing transformation initiatives across six key dimensions: Best Practices, Innovation and Technology, Supply Chain Roles, Stretch Objectives from a Total Cost of Ownership perspective, and an Optimized Organization supported by Good Leadership. It will also result in a training program that focuses on those primarily accountable for managing contracts. It will support strategies around entrepreneurship and innovation by providing highly skilled procurement and supply chain management professionals and a commitment to continuous learning.

The success of this process will support our strategic priority by creating a culture and a center led sourcing process that will ultimately drive cost out of the business. It will allow WSSC to review the direct and indirect spend of all dollars over a selected period of time to determine best in class strategies to reduce multiple solicitations, and begin building supplier relationships for contractors to consider WSSC as the customer of choice. Realignment of responsibilities will help utilize cross functional teams to gather and evaluate data to select the most appropriate acquisition strategy, identify a negotiations approach and ultimately select the "right" supplier. The impact will not just be in Procurement but for all business units. The impact will be sustainable over multiple years, reflected in time reductions from cradle to grave purchasing, resource savings and lower costs of goods, supplies and services.

It is proposed that initiative be funded out of the Fund Balance.