

MEMORANDUM

October 15, 2015

TO: Transportation, Infrastructure, Energy & Environment Committee

FROM: *KL* Keith Levchenko, Senior Legislative Analyst

SUBJECT: FY17 Washington Suburban Sanitary Commission (WSSC) Spending Control Limits

FY17 Base Case Scenarios				
	1	2	3	Council Staff Recommendation:
	Includes 2nd Year Phase-in of Infrastructure Fee	Without 2nd Year Phase-in of Infrastructure Fee	#1 plus Additional and Reinstated Programs	
Spending Control Limits				
Rate Increase	4.4%	7.8%	5.0%	3.5%
New Debt	476,810,000	476,810,000	476,810,000	476,810,000
Debt Service	250,762,000	250,762,000	250,762,000	250,762,000
Total W/S Oper. Expenses	728,289,000	728,289,000	737,800,000	729,168,000
Average Residential Customer Monthly Impact				
	7.1%	6.8%	7.6%	6.4%
Total \$ Increase	\$4.36	\$4.19	\$4.70	\$3.89
- Rates	\$2.36	\$4.19	\$2.70	\$1.89
- 2nd Year Phase-in of Infrastructure Fee	\$2.00		\$2.00	\$2.00

The following officials and staff are expected to attend this meeting:

- WSSC Commission Vice Chair Adrienne Mandel
- Jerry Johnson, WSSC General Manager/CEO
- Yvette Downs, WSSC Chief Financial Officer
- Leticia Carolina-Powell, Budget Group Leader
- Matthew Schaeffer, Office of Management & Budget

Attachments

- Details for each base case scenario (©1-12, ©15-17, ©28) and Council Recommended Scenario (©30-31)
- FY17 Additional and Reinstated Programs identified by WSSC (©13, ©18-27)
- Water and Sewer Utility Bill Analysis Comparison Charts (©14, ©33)
- Enterprise Technology Initiatives Summary Chart (©29)
- Fund Balance Analysis (©32)
- WSSC Approved Volumetric Rates (FY15 and FY16) (©34)

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Background

WSSC's spending control limits process was established in April 1994 via resolution by both Councils, with the goal of both Councils agreeing upon certain budgetary limits by November 1 of each year. Some summary information regarding the process is noted below:

- Based on a multi-year planning model, a strategy to stabilize annual rate increases over time, and holding customer fee-supported debt service below 40 percent of the operating budget.
- 4 limits
 - Maximum Average Rate Increase
 - Debt Service
 - New Debt
 - Total Water and Sewer Operating Expenses
- Limits provide direction to WSSC as to what to request, but do not create a ceiling (or a floor) as to what the Councils may jointly approve later.¹
- Process has generally worked well over the past 15 years, although Councils did not agree on limits in FY02, FY06, and FY09 through FY12. However, even in years when there was not agreement, the process provided a rate increase range for WSSC to build its budget.
- Debate focuses on the average rate increase for the coming year and the rate implications for the out years. The other limits are then adjusted to take into account the impacts of the rate decision.

Schedule

- Bi-County Working Group Meetings: September 9 and September 23, 2015
- Montgomery County Council Public Hearing: September 29, 2015
- T&E Committee Discussion: October 19, 2015
- Prince George's County Council TH&E Committee Review: October 21, 2015
- Montgomery County Council Action: October 27, 2015

NOTE: The County Executive is expected to transmit his recommendation on WSSC's spending control limits in time for consideration by the T&E Committee at its October 19 worksession.

¹ State law defines the annual WSSC Proposed Budget as the "default" budget, should the Montgomery and Prince George's County Councils not agree on changes. Therefore, the limits are an important first step to define proposed budget parameters that are acceptable to both Councils.

The goal of the spending control limits process is for the Montgomery and Prince George's County Councils to come to agreement by November 1 of each year, so that WSSC can build the approved limits into its Operating Budget Public Hearing Draft, which is released by January 15 each year. WSSC must transmit an Operating Budget to both counties by March 1 of each year.

Spending Control Limits History

The following chart presents the rate increase limits agreed upon by both Councils (unless otherwise noted) since FY96 and the actual rate increase later approved for each fiscal year.

Spending Control Limits & Actual Rates

Fiscal Year	Rate Increase	
	Approved* Limit	Actual
FY96	3.0%	3.0%
FY97	3.0%	3.0%
FY98	3.0%	2.9%
FY99	2.0%	0.0%
FY00	1.5%	0.0%
FY01	0.0%	0.0%
FY02*	2.0%	0.0%
FY03	0.0%	0.0%
FY04	0.0%	0.0%
FY05	3.0%	3.0%
FY06*	2.5%	2.5%
FY07	3.0%	3.0%
FY08	5.3%	6.5%
FY09*	9.7%	8.0%
FY10*	9.5%	9.0%
FY11*	9.9%	8.5%
FY12*	9.9%	8.5%
FY13	8.5%	7.5%
FY14*	8.0%	7.25%
FY15	6.0%	5.5%
FY16**	2.1%	1.0%

*No agreement was reached in FYs 02,06,09,10,11,12, and 14. Limits shown for those years reflect Montgomery County Council recommendations.

**FY16 limit and actual rate approved assumed increases in the account maintenance fee and phase-in of a new infrastructure investment fee.

- **FY99 through FY04:** Although rate increases were assumed in the approved spending control limits for FY99 and FY00, the WSSC budget was approved in those years without rate increases. In fact, there were six straight years without rate increases (FY99-FY04). During this time, WSSC was implementing its Competitive Action Plan (CAP) effort, which resulted in a reduction in approximately 1/3 of its workforce.
- **FY05 through FY07:** Modest rate increases in the range of 2.5% and 3.0% were approved.

- **FY08 through FY15:** The Councils debated, and ultimately approved, substantial rate increases. These increases were the result of a combination of factors, including:
 - Flat revenues: WSSC’s water production has been largely flat in recent years, even as the number of customer accounts has increased.
 - Expenditure Pressures: Increases in excess of inflationary levels in areas such as debt service (to cover many capital needs, including WSSC’s need to ramp up its water and sewer main reconstruction efforts and its large diameter water main inspections, repairs, and monitoring program), as well as in many operating cost areas, including: chemicals; heat, light, and power; regional sewage disposal; and benefits and compensation.
- **FY16:** The Councils supported a recalibration of the Account Maintenance Fee and creation of a new infrastructure investment fee (to be phased in over two years), which resulted in increased revenue equivalent to about a 5 percent rate increase. Therefore, a lower rate increase ceiling was approved (2.1 percent). Ultimately, the two Councils approved the FY16 WSSC budget with a rate increase of 1.0 percent.

However, with flat water and sewer consumption (88 percent of WSSC’s revenue comes from its water/sewer consumption charges) combined with ongoing infrastructure needs, as well as increased costs for many operating categories, WSSC continues to face significant fiscal challenges going forward.

Public Hearing

At the Spending Control Limits public hearing on September 29, the Council heard from several speakers who expressed concern with WSSC’s rate increases in recent years. They expressed support for the benchmarking study noted earlier and the need to review WSSC’s rate structure. Two speakers noted that WSSC’s existing rate structure “penalizes” large households, since the rate paid for every gallon used goes up as average daily consumption increases. Councilmembers asked Council Staff to review both the rate increase and rate structure concerns as part of the T&E Committee review of WSSC’s FY17 spending control limits. Both issues are discussed later in this memorandum.

General Issues

Economic Indicators

Each year, the Council considers the Bi-County economic context in order to place the concept of affordability in clearer perspective.

While the Great Recession officially ended in June 2009 and the national unemployment rate has declined steadily since then to 5.1 percent, a broader measure including part-time and discouraged workers stands at about double that level. While stock indexes have improved steadily since the recession, 2015 has been a down year to date, reflecting slower growth here and abroad. Housing and other key indicators are uneven.

The regional economy still shows the impact of federal sequestration and budget restraint on jobs and procurement, with defense cuts taking a toll on Northern Virginia in particular. The County’s recovery continues to progress. The County’s August unemployment rate was 3.8 percent, compared to a 5.1 percent national and State rate. Average monthly resident employment for the first eight months

of 2015 was up nearly 6,900 or 1.3 percent from the same period last year. The average monthly unemployment rate for this period was 4.0 percent in 2015 compared to 4.5 percent last year. On the other hand, the County rate was just 2.5 percent in November 2007 and, until January 2009, had not reached even 4 percent at any time in at least 20 years. Housing sales and prices have shown limited improvement. Regarding pressures on the disposable income of County residents, energy costs remain a key factor. Gasoline prices have recently declined but remain high, as do costs for heating and electricity.

As noted last year, the sluggish economic improvement is important to keep in mind when considering the impact of WSSC rate increases on ratepayers and the cumulative impact of these increases when combined with possible increases in other County taxes and fees.

Benchmarking Study

At the Bi County meeting last May where the two Councils approved the FY16 WSSC budget, both Councils also agreed to have WSSC hire a consultant to perform a benchmarking study of WSSC's operations and costs to other best-in-kind utilities. WSSC expects to complete its selection process for a consultant this month. The study is expected to take about six months. Both Montgomery and Prince George's County staffs will serve on a Project Review Group that will work with WSSC staff and the consultant as the benchmarking study progresses.

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

Since FY06, WSSC has steadily increased its workforce. The Approved FY16 budget includes 1,747 positions. WSSC's rates have also increased substantially. Over the past 10 years, rates have increased 90 percent (with an average of 7.8 percent per year). Expenditures have increased about 45 percent over that same time (about 4.7 percent per year).²

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

Both Montgomery and Prince George's County Council staffs believe this benchmarking study of WSSC's major costs and operations can help both Councils and WSSC concur on WSSC's budgetary and operations path going forward. Depending on the results of this study, WSSC and both Councils can consider more targeted follow-up review of particular operations.

² The rate of increase in water and sewer rates over the past 10 years is approximately double that of the rate of increase in expenditures. This is because WSSC's primary source of funding (volumetric water and sewer fees) has been flat, despite increases in the population served due to declining per capita water usage. This trend has resulted in rate increases being needed to offset revenue shortfalls, in addition to funding increased expenditures.

Rate Increase and Expenditure History

For the FY15 budget review (Spring 2014), Council Staff reviewed rate increase and expenditure trends over the past 20 years. This information was updated through FY15 for the budget process earlier this year and is provided below.

Spending Control Limits & Actual Rates

Fiscal Year	Approved* Limit	Actual	Fiscal Year	Approved* Limit	Actual
FY96	3.0%	3.0%	FY06*	2.5%	2.5%
FY97	3.0%	3.0%	FY07	3.0%	3.0%
FY98	3.0%	2.9%	FY08	5.3%	6.5%
FY99	2.0%	0.0%	FY09*	9.7%	8.0%
FY00	1.5%	0.0%	FY10*	9.5%	9.0%
FY01	0.0%	0.0%	FY11*	9.9%	8.5%
FY02*	2.0%	0.0%	FY12*	9.9%	8.5%
FY03	0.0%	0.0%	FY13	8.5%	7.5%
FY04	0.0%	0.0%	FY14*	8.0%	7.25%
FY05	3.0%	3.0%	FY15	6.0%	5.5%

*No agreement was reached in FYs 02,06,09,10,11,12, and 14. Limits shown for those years reflect Montgomery County Council recommendations.

Rate increases have been particularly high since FY08, ranging from 6.5 percent to as high as 9.0 percent. Complaints often focus on how these rates are significantly higher than inflation and higher than other water and sewer utilities in the region over the same period of time.

The compounded consumer price index (CPI) for the region since November 1996 to November 2014 was 54.9 percent, while rates have increased at a compounded amount of 113.1 percent from FY96 through FY15.

Interestingly, if WSSC were to have had the same overall compounded increase over the last 20 years, but with the same rate increase every year, the rate increase would have been about 3.85 percent per year. However, rate increases from FY96 through FY07 were well below this level (including six straight years without a rate increase).

Two years ago, Council Staff asked WSSC for comparative rate increases for other utilities. The slide on ©33 shows rate increases since 2002 for a number of utilities. The utilities are clustered into categories of 70 to 89 percent, 90 to 129 percent and 130 to 233 percent. WSSC’s rate increase from FY02 to FY14 is 85 percent. The regional CPI during that time was 34.4 percent. The chart shows that many water and sewer utilities have increased rates well above the CPI in the last decade. WSSC’s rate increase over that time is not the lowest, but is in the lower third of the utilities presented.

WSSC staff recently did another comparative bill analysis (see ©14) looking at average rate increases (from 2003 to 2015) and average FY15 water and sewer bills. WSSC’s average rate increases (considering both without and with factoring in the fixed fee increases) were below the average across 13 other water and sewer utilities. With regard to average residential bills, WSSC’s total is also below the average across the same 13 utilities.

Another reason for WSSC's recent large rate increases is WSSC's flat water production experience since FY96, resulting in the vast bulk of WSSC's revenue (water/sewer rate revenue) not increasing, and even declining, in some years.

WSSC's operating expenditures from FY00 to FY16 have increased 60.4 percent (, a bit higher than the CPI over the same period (about 45.5 percent) but not nearly as much as rates have increased. **This is further evidence that much of the rate pressure above CPI stems from revenue trends, not expenditure trends. As discussed earlier, the soon to begin benchmarking study is intended to provide a snapshot as to how WSSC's expenditures in its major functions compare to similar best-in-kind utilities.**

Rate Structure

WSSC's current rate structure has been in place since 1978, initially with more than 100 tiers but later reduced to 16 tiers in 1992. WSSC's approved rates for FY16 are attached on ©34. Each tier boundary is based on average daily consumption. As a ratepayer's average daily consumption increases into a higher tier, the ratepayer pays a higher rate for every gallon of water used.

According to a 2014 consultant report commissioned by WSSC, while this inclining block structure is "fairly common" among utilities in the United States, charging all gallons used at the highest tier reached is unusual as is the number of tiers (16) in WSSC's rate structure. Most (and perhaps all) other utilities with inclining block structures do not charge for all water usage at the same high rate and have fewer tiers (typically three to six tiers). The intent of an inclining block structure is to provide an incentive for water conservation. WSSC's rate structure goes even further with this conservation incentive because of this charge at the highest tier for all water used.

There are a number of impacts from WSSC's current rate structure including:

- Ratepayers can see large fluctuations in their water bills if their average daily consumption from one quarter to another moves between tiers.
- These fluctuations can also result in WSSC's water and sewer rate revenue being less predictable from quarter to quarter.
- As per capita water consumption has declined over the last 20 years, the decline in WSSC's revenue collection has been magnified.
- Large households and large commercial ratepayers are effectively subsidizing the rest of the ratepayer base, since the rates they pay for all of their water usage are in higher tiers than the tiers where most small commercial ratepayers and small households reside.

At the public hearing, the Council heard from some ratepayers about this large household

for commercial customers. Although this assumption complicates matters, there may be ways to work within State law to address the large household penalty issue. A changes in State law could also be sought.

It is also important to note that WSSC is in the midst of upgrading its Customer Service Information System (i.e. its billing system) and is also in the early stages of planning for its Advanced Meter Reading (AMR) project.

The customer benefits of the new AMR system include: monthly billings based on actual water usage, more rapid identification of leaks, and the ability of the customer to better monitor water usage. For WSSC, the elimination of the need for manual reading of all customer meters could present significant cost savings. WSSC would also gain the capability to do more and better analysis of actual water usage and potential billing structures.

Council Staff believes WSSC's current rate structure is in need of comprehensive review given the issues raised above. The current rate structure dates back to 1978 and some of the negative impacts of the rate structure noted earlier have been exacerbated as rates have increased. **Council Staff recommends that language be added to the Spending Control Limits resolution to indicate the Council's support for a rate study to be funded out of the FY17 budget.**

FY17 Spending Control Limits Base Case

For the upcoming budget, WSSC staff prepared three versions of a Base Case (see ©1-12) spending control limits scenario, all based on the same general assumptions for revenue and expenditure trends. However, Scenario #1 assumes that the second year phase-in (assumed during the FY16 budget review) for the Infrastructure Investment Fee occurs. Scenario #2 assumes to maintain the Infrastructure Investment Fee at its FY16 approved level. The third scenario assumes the second year phase-in of the fee and also adds some additional and reinstated programs (partially covered by excess fund balance). The chart below summarizes these three scenarios:

WSSC Base Case Scenarios Summary

FY17 Base Case Scenarios				
	1	2	3	Council Staff Recommendation:
	Includes 2nd Year Phase-in of Infrastructure Fee	Without 2nd Year Phase-in of Infrastructure Fee	#1 plus Additional and Reinstated Programs	
Spending Control Limits				
Rate Increase	4.4%	7.8%	5.0%	3.5%
New Debt	476,810,000	476,810,000	476,810,000	476,810,000
Debt Service	250,762,000	250,762,000	250,762,000	250,762,000
Total W/S Oper. Expenses	728,289,000	728,289,000	737,800,000	729,168,000
Average Residential Customer Monthly Impact*				
	7.1%	6.8%	7.6%	6.4%
Total \$ Increase	\$4.36	\$4.19	\$4.70	\$3.89
- Rates	\$2.36	\$4.19	\$2.70	\$1.89
- 2nd Year Phase-in of Infrastructure Fee	\$2.00		\$2.00	\$2.00
Use of Excess Fund Balance	20,138,000	20,138,000	26,050,000	26,050,000

*Impact assumes 160 gallons per day of water usage.

All three base case scenarios assume:

- Full funding of WSSC’s Proposed FY17-22 Capital Improvements Program (CIP).
- Inflationary increases in current programs.
- Adjustments in regional sewage disposal and employee compensation.
- A phase-out of Reconstruction Debt Service Offset³ (\$8.5 million in FY16 down to \$7.0 million in FY17, with further reductions through FY21 until the Fund is exhausted).
- Use of \$20.1 million in excess fund balance in FY17 (\$8.0 million for the IT Strategic Plan, \$6.5 million additional operating reserve contribution, \$3.5 million to offset reduced revenue due to lower water production, and \$250,000 each for continuation of a climate change vulnerability assessment and strategic energy plan implementation). These uses are consistent with prior assumptions supported by both Councils during last year’s spending control limits process. *(Note: Scenario #3 would use an additional \$5.9 million in excess fund balance for some one-time additional and reinstated programs.)*

As shown for Scenario #1, the second year of the Infrastructure Investment Fee phase-in would generate an additional \$19.5 million and thus result in a lower rate requirement (4.4 percent instead of 7.8 percent).

Scenario #3 adds about \$9.5 million in rate-supported expenses for additional and reinstated programs. These initiatives will be discussed in more detail at the Committee worksession on October 19. About \$5.9 million of this total is assumed to be covered with excess fund balance. Therefore, the overall change in the rate increase from Scenario #1 to #3 is relatively small (from 4.4 to 5.0 percent).

The elements of the Base Case revenue gap, before including any additional and reinstated programs or assuming the second year phase-in of the Infrastructure Investment Fee (i.e., Scenario #2), are shown in Table 3 below. The overall funding gap is \$44.7 million.

Components of the Base Case Rate Increase (Without Second Year Phase-In of Infrastructure Fee and no A&R added)					
Components of the FY17 Base Case Gap	Change from FY16 (in \$Millions)	Impact on Rate	Cumulative Rate Increase		
Reduction Funds Available	10.06	1.74%	1.74%		Rate revenue, REDO, and FB down
Additional Operating Reserve Contribution	0.22	0.04%	1.78%		
Regional Sewage Disposal	(3.29)	-0.57%	1.21%		Lower than FY16
Debt Service	15.19	2.64%	3.85%		Based on Proposed CIP
PAYGO (Debt Service Coverage of 1.25x)	5.98	1.04%	4.89%		Based on Proposed CIP
Heat, Light, and Power	3.30	0.57%	5.46%		
Salaries and Wage Increases	5.57	0.97%	6.42%		
All Other	7.65	1.33%	7.75%		
Total Base Case Gap	44.679	7.75%			

Changes in funds available (including revenue estimates, revenue adjustments, and use of fund balance) requires about a 1.74 percent rate increase.

Debt service costs are up (2.6 percent rate impact) as is PAYGO (1.04 percent rate impact). Both of these assumptions are based on WSSC’s soon-to-be-transmitted FY17-22 CIP.

³ REDO is the use of surplus funds from the General Bond Debt Service Fund to offset a portion of the debt service cost of the Water and Sewer Reconstruction programs. The surplus funds are expected to be exhausted in FY21.

Some other WSSC expenditures, which are essentially fixed (at least in the short run), are also presented. Regional sewage disposal expenses (which are based on actual WSSC sewage flows to the Blue Plains Wastewater Treatment Plant) are down slightly (-0.57 percent impact). Heat, light, and power is up (+0.57 percent rate impact). The “All Other” category is also up (1.33 percent rate impact).

To cover changes in funds available, debt service, PAYGO, regional sewer disposal, and heat, light, and power (all essentially fixed costs in the short run) requires about a 5.5 percent rate increase. Assuming salary adjustments moves the rate requirement up to 6.4 percent. Finally, “All Other” inflationary increases bumps the rate increase requirement up to 7.75 percent.

If the second year phase-in of the Infrastructure Fee is implemented, another \$19.5 million in revenue would be generated, which can reduce the rate increase requirement down to 4.4 percent. However, the average residential customer impact would go up \$2.00 per month within the fixed fee portion of a customer bill.

WSSC also has substantial excess reserves (beyond its fiscal policy reserve levels), which the T&E Committee can discuss at its October 19 meeting. In past years, excess fund balance has been used to address high priority non-recurring items. These items, along with other “additional and reinstated” programs identified by the General Manager, will be discussed at the October 19 meeting.

The monthly impact of each of these base case scenarios on an average residential customer (assuming 160 gallons per day of water usage) ranges from an increase of \$4.19 to \$4.70 per month (from an FY16 average monthly bill of \$61.35 per month).

Building the Base Case Scenario

The first step the Working Group took in reviewing spending control limits and the Base Case scenario was to review the major revenue and expenditure assumptions for WSSC. Many of these assumptions are the same as or similar to assumptions in past years. These assumptions involve various inflators assumed in categories such as salaries and wages, construction inflation, estimated Blue Plains operating costs, and others.

Use of Fund Balance

Each year, WSSC carries over fund balance from the prior year. The FY15 carryover into FY16 is estimated at \$142.8 million. Of this amount, \$55.6 million is needed to maintain WSSC’s working capital reserve at FY16 levels.

The chart on ©32 shows how WSSC is assuming to allocate the balance of these dollars (\$87.2 million) in FY16 (per the Approved Budget) and in FY17 and beyond (as assumed in the FY17 Base Case Scenarios).

This excess fund balance is the result of several factors, including: lower salary and wage expenses (due to slower than expected hiring), lower expenses for chemicals related to the strategic sourcing efforts and the reduced water production and lower bio-solids hauling volume and costs resulting from the startup of the new anaerobic digester project at Blue Plains.

Revenues

Total revenue (setting aside the second-year phase-in of the Infrastructure Investment Fee and assuming no use of fund balance or other adjustments) is expected to be down from FY16 by approximately \$6.6 million, as shown in Table 4 below. This revenue drop requires the equivalent of approximately a 1.14 percent rate increase.⁴

WSSC Total Revenue (FY16 Approved and FY17 Projected)

Revenue	FY16	FY17	change	% change
Water and Sewer Rate Revenue	583,375,000	576,346,000	(7,029,000)	-1.2%
Account Maintenance Fee	32,374,000	32,553,000	179,000	0.6%
Infrastructure Fee (w/o year 2 increase)	19,418,000	19,481,000	63,000	0.3%
Interest Income	1,000,000	700,000	(300,000)	-30.0%
Other Fees	10,693,000	9,932,000	(761,000)	-7.1%
Miscellaneous	16,000,000	17,253,000	1,253,000	7.8%
Total Revenue	662,860,000	656,265,000	(6,595,000)	-1.0%
			equivalent rate impact:	1.14%

WSSC’s most important revenue-related assumption is its estimated water production in millions of gallons per day (mgd). WSSC produces approximately 160 to 170 mgd (approximately 60 billion gallons per year). This production (minus unbilled water), multiplied by a billing factor, determines water and sewer rate revenue. Water and sewer rate-related revenue currently accounts for about 88 percent of all WSSC revenue. On average, every 1 mgd produced provides approximately \$3.5 million in annual revenue.

The decline in rate revenue is the result of continued flat water consumption levels and reductions in recent years of the effective “billing factor”.⁵

WSSC continues to reduce its average water production assumptions. For FY17, WSSC is assuming 164 mgd. Prior budget assumptions were: FY14 - 170 mgd, FY15 – 168 mgd, FY16 – 166 mgd. FY17 through FY22 are also assumed at 164 mgd (also reflecting declines of 2 mgd from last year’s forecast). Since the first spending control limits were approved (21 years ago), the population served has increased 22.9 percent. However, WSSC’s water production estimates are flat (and perhaps even declining).

For FY11, average daily water production averaged a record high of 175 mgd. This level was most likely an anomaly resulting from a one-time sale of water sold to the City of Rockville as a result of a major water main break and extremely dry weather conditions that led to increased water usage in the WSSC service area. FY12 water production dropped back down to 165.7 mgd. FY13 dropped again to 161.2 mgd and FY14 came in at its lowest total in decades, at 160 mgd.

Water production is extremely sensitive to various factors, such as weather conditions and customer choices. WSSC’s graduated rate structure (in which the more water one uses, the more one pays for all water used) provides a major conservation incentive, and WSSC’s flat water production—even as

⁴ For FY17, each one percent increase in rates raises approximately \$5.8 million in revenue.

⁵ Complicating any projection of water production revenue is WSSC’s graduated rate structure and the fact that, in any given year, the average mix of customers at different rate levels may change, meaning the “billing factor” or average rate charged per gallon produced can fluctuate from year to year.

the number of customers has increased—may be reflective of successful long-term water conservation efforts in the region.

Also, new in FY16 is WSSC’s Customer Assistance Program. This program will result in reduced revenue of an estimated \$1.7 million in FY16 and \$2.2 million in FY17.

Overall, WSSC’s revenue trends continue to be flat. With regard to rate revenues, the WSSC customer base is increasing slightly, but the billing factor is falling slightly. Future rate revenue growth is also likely to be modest or even continue to decline, given expected flat water demand trends over the next six years. As a result, inflationary pressures alone result in additional rate increase pressure for FY17 and the foreseeable future.

Expenditures

Expenditure assumptions include both debt-related assumptions (interest rates, construction inflation, completion factors) to meet WSSC’s recently Proposed FY17-22 CIP and ongoing operating cost assumptions (salary and wage increases, energy, Blue Plains operating charges, “All Other,” etc.). These assumptions are noted on ©3, are similar to assumptions presented during last year’s review (see ©28), and are either consistent with historical levels of increase in these areas or are based on locked-in rates (such as energy costs).

- **PAYGO:** In past years, PAYGO had been allocated with excess fund balance and with some rate revenue in order to try to bring down the debt service to budget ratio. However, fiscal pressures and relatively low interest rates had made PAYGO a less appealing option in recent years. No PAYGO was assumed in the FY13 spending control limits forecast several years ago. However, two year ago, the Bi-County Working Group recommended both extending the term of new debt (from 20 to 30 years) and investing some of the resulting debt savings in PAYGO in order to achieve long-term savings in debt service over time. As a result, PAYGO was ramped up in the FY14 Approved Budget and continued in the FY15 and FY16 budgets. A similar approach is assumed for FY17.
- **Salaries and Wages:** The salaries and wages rate of increase assumed in the Base Case for FY17 (5 percent) is the same percentage assumed in past spending control limits. This increase would accommodate cost of living adjustments (COLAs) as well as merit increases, although the details of any increase are assumed to be worked out during the Council review process rather than assumed in WSSC’s budget transmittal. This way, the two Councils can take into account approved compensation levels for its own employees when considering WSSC employee compensation.

WSSC compensation has been the subject of much debate in past years. However, both Councils ultimately came to agreement on WSSC employee compensation the last three fiscal years after difficult processes in FY12 and FY13.

The Council included specific language in its FY14 through FY16 resolutions. The FY16 language says:

5. *Montgomery County Council action on FY16 spending control limits does not presume approval of any specific level of WSSC workforce compensation or benefits adjustments for*

FY16. Compensation and benefits decisions for the FY16 budget will be made during the budget review process next spring, in the context of the Council's review of compensation and benefit adjustments across all County agencies.

6. *With regard to employee compensation changes in FY16, the Council will not support any base salary or lump sum increases that exceed the amounts provided to County general government employees.*

This language reflects the Council's position of the past several years supporting equity across employee groups with regard to annual compensation adjustments, and it also provided some guidance to WSSC management moving forward with the FY15 budget process.

Council Staff believes both Councils should include similar language in their FY17 spending control limits resolutions.

NOTE: Benefit costs are included in the "All Other" expense category. During the annual operating budget review, the MFP Committee reviews all of the County agency compensation and benefit assumptions, with the intent of treating each agency equitably.

- **Heat, Light, and Power:** Energy costs are expected to increase about 14.1 percent in FY17. This double digit percentage increase is a departure from recent years of modest increases and even slight declines. These costs are based on actual energy contracts and expected energy usage. WSSC is experiencing an increase in wastewater pumped and treated which is resulting in higher than inflation increases in overall energy costs.
- **Regional Sewage Disposal:** The Blue Plains regional sewage disposal costs are expected to continue to decrease (by 3.3 million (6.0 percent) in FY17). The FY17 projected reduction is a result of the Blue Plains anaerobic digesters being fully functional by FY17. DC Water has budgeted additional savings that are reflected in WSSC's projections.
- **"All Other" Costs:** With the exception of the cost increases noted above, "All Other" costs are assumed to go up 4.0 percent in FY17 and through FY2022. This level is actually below last year's FY17 and beyond assumptions of 5.0 percent per year although the same as assumed at this time last year for FY16. Within this category are health care costs, as well as employee benefits and regulatory compliance costs (including SSO compliance). For comparison purposes, the CPI-U for the DC area has fluctuated up and down over the past year and was 0.2 percent (from July 2014 to July 2015), after 1.7 percent increase from July 2013 to July 2014.
- **Additional and Reinstated Programs:** Finally, WSSC did an initial review of its needs for additional and reinstated programs, and identified a list of items for consideration. These items are included in Scenario #3 (as noted earlier) and are assumed to be funded through a combination of use of fund balance and increased rates. A summary of these items is attached on ©13, with detail of each item beginning on ©18-27. The total FY17 operating expense impact of these efforts (after use of fund balance) is estimated at \$3.6 million, with a rate impact of about 0.62 percent in FY17.

Some of the items noted reflect a continued ramping up of efforts begun in prior years (such as the supply chain management transformation effort and IT strategic plan. Others are one-time items.

Council Staff believes all of these items should be further reviewed in the context of the FY17 budget next spring.

Overall, the expenditure assumptions noted above (including increases to the Operating Reserve) result in a rate increase requirement of about 7.7 percent. With revenues assumed to include the second year phase-in of the Infrastructure Investment Fee, the overall rate requirement drops to 5.0 percent.

Alternative Scenarios

As in past years, the Bi-County Working Group developed a number of scenarios based on varying rate increases in FY17.

For reference, each 1.0 percent added to the rate provides approximately \$5.8 million in revenue to the budget. Alternatively, each 1 percent reduction in the rate removes that amount in revenues for that year and future years. Each 1.0 percent rate increase results in about a 54 cent monthly impact to the average residential customer.

Closing the Gap

As noted earlier, any rate increase below base case levels will result in a projected gap that must be addressed either through increased revenues or decreased expenditures. Some of the options for closing the gap are summarized in the following list:

- Revenues
 - Increase Reconstruction Debt Service Offset (REDO). *This has been done in past years, but since a sizeable amount is already assumed to be used each year, increases have tended to be marginal in size. In addition, by design this fund is gradually being drawn down to zero over the next decade and gradual reductions in this revenue assumption are needed to create a “soft landing” when the Fund is extinguished.*
 - Allocate excess fund balance to reduce the rate requirement. *The base cases already assume to allocate much of the projected excess fund balance over the next several years. Some of these dollars could be accelerated into FY17 to reduce the rate requirement. Council Staff believes this action, if required, should be considered at the end of the budget process, rather than assumed up front in the spending control limits process. One downside of this approach is that it would create a larger gap to fill in FY18 if the FY17 dollars are used to fund ongoing expenditures.*
- Expenditures
 - Assume unspecified reductions to be determined later in the budget process. *The numbers before the Councils now are based to a large degree on broad inflationary assumptions. WSSC has not comprehensively reviewed its budget yet.*
 - Reduce additional and reinstated programs.
 - Reduce compensation assumptions.
 - Assume lower “All Other” costs rate of increase.

In past years, WSSC estimated that approximately 70 percent of its budget involves costs that would be extremely difficult, if not impossible, to cut in the short term. Three items alone – debt service/PAYGO; regional sewage disposal; and heat, light, and power – make up nearly 50 percent of the FY16 Base Case expenditure assumptions.

Council Staff Recommendations

Given WSSC’s budget profile discussed earlier (i.e., its high level of fixed and/or mandated costs, its flat revenue projections, plus the need to make up for reduced funds available this year), rate increases above inflation are likely to continue to be needed. For FY17, the level of rate increase can be offset by moving forward with the second phase of the Infrastructure Investment Fee (consistent with the Council’s actions last year).

This budget squeeze can be further offset somewhat in FY17 by the fact that WSSC continues to have significant unallocated reserves which are especially useful for funding one-time items. These excess reserves may also indicate that some of WSSC’s fiscal model inflators may be slightly high.

Council Staff recommends the following scenario (see ©30-31 for details):

- **Assume Scenario #3 but with a lower rate increase (3.5 percent instead of 5.0 percent). This scenario assumes the second year phase-in of the Infrastructure Investment Fee and also includes some additional and reinstated programs partially funded with excess fund balance.**
- **Assume unspecified reductions of \$8,632,000 to offset the smaller rate increase.**

While the volumetric rate increase would be 3.5 percent, the total customer impact (factoring in the increased Infrastructure Investment Fee) would be equivalent to a 6.4 percent rate increase. Council Staff believes this is a reasonable increase ceiling to assume at this time, given that under this scenario about half of the customer impact is needed to offset revenue changes and that WSSC will need to meet its base budget and potential new budget items within the balance of that impact.

WSSC would need to do some reprioritization within its Base Case expenditure and/or revenue assumptions to address the unspecified reductions noted above (\$8.6 million). The Montgomery and Prince George’s Councils can consider more specific budget actions as part of the budget review next spring and are free to agree upon lower or higher expenditures at that time.

With regard to the additional and reinstated programs that could be funded out of the unallocated reserve in Council Staff’s recommendation, Council Staff will work collaboratively with Executive staff and Prince George’s County staff to analyze these items so that more specific funding recommendations can be made to the Council next spring. For purposes of the spending control limits (specifically the Operating Expense limit), Council Staff supports giving WSSC the flexibility to utilize the excess fund balance within its FY17 budget transmittal.

Council Staff Recommendations

Council Staff recommends the Council consider adopting the same limits:

New Debt:	\$476.810 million
Debt Service:	\$250.762 million

Total W/S Operating Expenses: \$729.168 million
Maximum Average Rate Increase: 3.5 percent*

**Assumes the second year phase in of the Infrastructure Investment Fee.*

As noted earlier, Council Staff recommends including compensation language in the spending control limits resolution as follows:

Montgomery County Council action on FY17 spending control limits does not presume approval of any specific level of WSSC workforce compensation or benefits adjustments for FY17. Compensation and benefits decisions for the FY17 budget will be made during the budget review process next spring, in the context of the Council's review of compensation and benefit adjustments across all County agencies.

With regard to employee compensation changes in FY17, the Council will not support any base salary or lump sum increases that exceed the amounts provided to County general government employees.

Council Staff recommends adding language in the resolution to note the second year phase-in of the Infrastructure Investment Fee. Similar language regarding revenue changes was included in last year's resolution.

The maximum average rate increase limit noted in paragraph #2 above assumes the second-year of a two-year phase-in of WSSC's infrastructure investment fee. Final decisions on this revenue change will be included as part of both Councils' actions on the FY17 budget approval process. This action results in an estimated \$19.5 million in additional revenue for WSSC in FY17. Without this additional revenue, the maximum average rate increase for FY17 would be approximately 6.4 percent.

Council Staff recommends adding language noting that:

The Montgomery County Council recommends that WSSC include funding within its FY17 Proposed Budget for a consultant study of WSSC's rate structure.

Finally, Council Staff also supports keeping the language in the spending control limits resolution, noting the County's support for WSSC's large diameter pre-stressed concrete cylinder pipe (PCCP) inspection, repair, and fiber optic cabling program and its water and sewer main reconstruction programs.

WSSC FY'17 Preliminary Proposed Budget Scenarios

Preliminary Scenarios	Incremental Increase Over FY'16					W&S Rate Increase
	FY16 Approved Operating	Salaries & Benefits	Debt Service	PAYGO	Additional & Reinstated	
#1 - Scenario #1 with Year 2 of IIF Phase-In (Base Case)	693,665	8,348	15,188	5,984		4.4%
#2 - Includes new debt service, no IIF Phase-In	\$ 693,665	\$ 8,348	\$ 15,188	\$ 5,984		7.8%
#3 - Scenario #1 with FY17 Additional & Reinstated	693,665	8,348	15,188	5,984	3,599	5.0%
#4 - FY'15 Status Quo: no recalibrated AMF, no IIF, no A&R	693,665	8,348	15,188	5,984	3,599	7.5%

Includes lowered water production assumptions for FY 2017 from 166 MGD to 164 MGD.

All scenarios project flat water production of 164 MGD through FY 2022. However, a recent analysis of WSSC customer data done by Municipal & Financial Services Group indicates water consumption has been falling, on average, approximately 0.9% per year since FY 2000. This is consistent with national trends.

Rate Increase Components (FY'17 Preliminary Proposed Budget Base Case)

	FY 2016 Approved	FY 2017 Estimate	Dollar Change	Rate Impact	Description
<u>Revenue</u>					
Water & Sewer Revenue	583,375,000	576,346,000	(7,029,000)	1.2%	Decrease in water production
Account Maintenance Fee	32,374,000	32,553,000	179,000	0.0%	
Infrastructure Fee	19,418,000	38,963,000	19,545,000	-3.4%	
Miscellaneous Revenue	27,693,000	27,885,000	192,000	0.0%	Based on historical miscellaneous revenue
Use of Fund Balance	-	3,514,000	3,514,000	-0.6%	Lessen impact of decreased water production
Use of Fund Balance	91,000	-	(91,000)	0.0%	Blue Plains Debt Service Bi-County Council adjustment
Use of Fund Balance	1,500,000	-	(1,500,000)	0.3%	REDO Extinguishment
Use of Fund Balance	6,300,000	6,524,000	224,000	0.0%	For operating reserve contribution
Use of Fund Balance	2,086,000	500,000	(1,586,000)	0.3%	Multi-year Additional & Reinstated
Use of Fund Balance	8,000,000	8,000,000	-	0.0%	IT Strategic Plan
Use of Fund Balance	2,000,000	-	(2,000,000)	0.3%	AMI
Use of Fund Balance - Watershed	1,600,000	1,600,000	-	0.0%	Easements & Land Acquisition
Reconstruction Debt Service Offset	8,500,000	7,000,000	(1,500,000)	0.3%	
SDC Debt Service Offset	728,000	207,000	(521,000)	0.1%	
Revenue Subtotal	693,665,000	703,092,000	9,427,000	-1.6%	
<u>Debt Service</u>					
Debt Service	235,574,000	250,762,000	15,188,000	2.6%	
<u>Expenses</u>					
All Other	242,557,000	250,210,000	7,653,000	1.3%	
Salaries & Wages	111,309,000	116,875,000	5,566,000	1.0%	
Additional & Reinstated Programs	-	-	-	0.0%	
Regional Sewage Disposal	54,895,000	51,601,000	(3,294,000)	-0.6%	
Operating Reserve Contribution	6,300,000	6,524,000	224,000	0.0%	
Additional PAYGO	1,406,000	-	(1,406,000)	-0.2%	Jt. Council Reduction in COLA to PAYGO
Fund Balance PAYGO	1,600,000	1,600,000	-	0.0%	Easements & Land Acquisition
30 Year 1.25x Coverage PAYGO	16,671,000	24,061,000	7,390,000	1.3%	
Heat, Light & Power	23,353,000	26,656,000	3,303,000	0.6%	Based on projection from WSSC Energy Manager.
Unspecified Reductions	-	-	-	0.0%	
Expenses Subtotal	458,091,000	477,527,000	19,436,000	3.4%	
			Total	4.4%	
Total Gross Expenses	693,665,000	728,289,000			

ASSUMPTIONS
WSSC's Multi-Year Financial Forecast
 FY 2017 thru 2022 Forecast : Preliminary Budget

	<u>FY 2017</u> <u>Proposed</u>	<u>FY 2018</u> <u>Estimate</u>	<u>FY 2019</u> <u>Estimate</u>	<u>FY 2020</u> <u>Estimate</u>	<u>FY 2021</u> <u>Estimate</u>	<u>FY 2022</u> <u>Estimate</u>
<u>WATER PRODUCTION</u>						
Yearly Growth Increment (MGD)	-	-	-	-	-	-
Estimated Annual Average Water Production (MGD)	164.0	164.0	164.0	164.0	164.0	164.0
<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)	14,661	15,252	16,871	16,529	17,199	17,905
Sewer (\$ thousands)	11,995	12,479	12,985	13,524	14,072	14,650
Blue Plains (Regional Sewage Disposal) Rate of Increase	-6.0%	3.7%	3.7%	3.7%	3.7%	3.7%
All Other - % Annual Increase	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Water REDO (\$ thousands)	3,500	2,750	2,000	1,250	500	-
Sewer REDO (\$ thousands)	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	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Life for Non-SRF Water and Sewer Debt (years)	29	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 2017 thru 2022 Forecast : Preliminary Budget - Infrastructure Fee Phase-In (Base Case)

Estimated Revenues and Expenditures (\$1,000)

	FY 2016 <u>Approved</u>	FY 2017 <u>Proposed</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>	FY 2022 <u>Estimate</u>
1 Revenue							
2 Water & Sewer Rate Revenue	\$583,375	\$576,346	\$601,544	\$662,988	\$713,088	\$761,245	\$805,450
3 All Other Sources	<u>110,290</u>	<u>126,745</u>	<u>110,557</u>	<u>110,811</u>	<u>110,120</u>	<u>108,699</u>	<u>108,637</u>
4 Total Revenue	693,665	703,091	712,101	773,799	823,208	869,944	914,087
5 Expenses							
6 Maintenance & Operating	377,219	393,741	410,268	427,522	445,554	464,345	483,972
7 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
8 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,669
9 PAYGO	19,677	25,661	31,995	39,489	46,249	52,029	56,829
10 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
11 Adjustments to Expenses (SDC Debt Service Offset, REDO)	-	-	-	-	-	-	-
11 Unspecified reductions	-	-	-	-	-	-	-
## Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	693,665	728,289	773,545	823,899	871,365	914,149	950,636
14 Revenue Gap (Revenue - Expenses)	-	(25,198)	(61,444)	(50,100)	(48,157)	(44,205)	(36,549)
15 Water Production (MGD)	166.0	164.0	164.0	164.0	164.0	164.0	164.0
16 Debt Service Ratio (debt service / budget)	34.0%	34.4%	35.4%	36.0%	36.4%	36.5%	36.2%

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
17 Rate Increase	1.0%	4.4%	10.2%	7.6%	6.8%	5.8%	4.5%
18 Operating Budget	\$693,665	\$728,289	\$773,545	\$823,899	\$871,365	\$914,149	\$950,636
19 Debt Service Expense	235,574	250,762	273,606	296,463	317,287	333,817	343,669
20 New Debt	422,681	476,810	462,345	396,326	365,349	303,170	238,095

NOTE:

- 21 Impact of Rate Increase on Residential Monthly Bill with 160 GPD usage
- 22 Impact of Phased-In Infrastructure Investment Fee
- Total
- 23 Impact of Rate Increase on Residential Monthly Bill with 100 GPD usage
- 24 Impact of Phased-In Infrastructure Investment Fee
- Total

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	\$2.36	\$5.76	\$4.70	\$4.51	\$4.14	\$3.43
	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$4.36	\$5.76	\$4.70	\$4.51	\$4.14	\$3.43
	7.1%	8.7%	6.5%	5.9%	5.1%	4.0%
	\$1.30	\$3.16	\$2.58	\$2.48	\$2.27	\$1.88
	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$3.30	\$3.16	\$2.58	\$2.48	\$2.27	\$1.88
	9.0%	7.9%	6.0%	5.4%	4.7%	3.7%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - Infrastructure Fee Phase-In (Base Case)
 Estimated Revenues and Expenditures (\$1,000)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	<u>Approved</u>	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
1 REVENUE							
2 Water / Sewer Use Charges	\$583,375	\$576,348	\$601,544	\$662,988	\$713,088	\$761,245	\$805,450
3 Account Maintenance Fee (Ready to Serve Charge)	32,374	32,553	32,732	32,911	33,090	33,270	33,449
4 Infrastructure Renewal Fee (Ready to Serve Charge)	19,418	38,963	39,091	39,220	39,349	39,478	39,607
5 Interest Income	1,000	700	700	700	700	700	700
6 Plumbing/Inspection Fees	7,920	7,300	7,500	7,700	7,900	8,100	8,300
7 Rockville Sewer Use	2,773	2,632	2,664	2,680	2,711	2,741	2,771
8 Miscellaneous	16,000	17,252	17,704	18,166	18,638	19,124	19,524
9 Total Revenue	<u>662,860</u>	<u>675,746</u>	<u>701,935</u>	<u>764,364</u>	<u>815,476</u>	<u>864,658</u>	<u>909,801</u>
10 Adjustments to Revenue							
11 Use of Fund Balance	21,577	20,138	4,666	5,435	5,232	4,286	4,286
12 Less Rate Stabilization	-	-	-	-	-	-	-
13 SDC Debt Service Offset	728	207	-	-	-	-	-
14 Reconstruction Debt Service Offset	8,500	7,000	5,500	4,000	2,500	1,000	-
15 Adjustments to Total Revenue	<u>30,805</u>	<u>27,345</u>	<u>10,166</u>	<u>9,435</u>	<u>7,732</u>	<u>5,286</u>	<u>4,286</u>
16 FUNDS AVAILABLE	<u>693,665</u>	<u>703,091</u>	<u>712,101</u>	<u>773,799</u>	<u>823,208</u>	<u>869,944</u>	<u>914,087</u>
17 EXPENDITURES							
18 Salaries and Wages	111,309	116,875	122,719	128,855	135,298	142,063	149,166
19 Salaries and Wages - Additional & Reinstated Programs	-	-	-	-	-	-	-
20 Heat, Light and Power	23,353	26,656	27,731	28,856	30,053	31,271	32,655
21 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
22 All Other	242,557	250,210	259,818	289,811	280,203	291,011	302,251
23 All Other - Additional & Reinstated Programs	-	-	-	-	-	-	-
24 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	<u>438,414</u>	<u>451,866</u>	<u>467,944</u>	<u>487,947</u>	<u>507,829</u>	<u>528,303</u>	<u>550,138</u>
28 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,669
29 Debt Reduction (PAYGO)	19,677	25,061	31,995	39,489	46,249	52,029	56,829
30 Total Financial Expenses	<u>255,251</u>	<u>276,423</u>	<u>305,601</u>	<u>335,952</u>	<u>363,536</u>	<u>385,846</u>	<u>400,498</u>
31 TOTAL GROSS EXPENSES (Operating & Financial)	<u>693,665</u>	<u>728,289</u>	<u>773,545</u>	<u>823,899</u>	<u>871,365</u>	<u>914,149</u>	<u>950,636</u>
32 NET EXPENSES	<u>693,665</u>	<u>728,289</u>	<u>773,545</u>	<u>823,899</u>	<u>871,365</u>	<u>914,149</u>	<u>950,636</u>
33 Revenue - Expenditure Gap before rate increase	-	(25,198)	(61,444)	(50,100)	(48,157)	(44,205)	(36,549)
34 Rate Increase	1.0%	4.4%	10.2%	7.6%	6.8%	5.8%	4.5%

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

FY 2017 thru 2022 Forecast : Preliminary Budget - No Infrastructure Investment Fee Phase-In

Estimated Revenues and Expenditures (\$1,000)

	FY 2016 <u>Approved</u>	FY 2017 <u>Proposed</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>	FY 2022 <u>Estimate</u>
1 Revenue							
2 Water & Sewer Rate Revenue	\$583,375	\$576,346	\$621,025	\$683,533	\$733,698	\$781,919	\$825,189
3 All Other Sources	110,290	107,264	90,012	90,201	89,447	88,959	88,834
4 Total Revenue	693,665	683,610	711,037	773,734	823,145	870,878	914,023
5 Expenses							
6 Maintenance & Operating	377,219	393,741	410,268	427,522	445,554	464,345	483,972
7 Regional Sewage Disposal	54,896	51,601	53,510	55,490	57,543	59,672	61,880
8 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,759
9 PAYGO	19,677	25,661	31,995	39,489	46,249	52,029	56,829
10 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	693,665	728,289	773,545	823,899	871,365	914,149	950,726
14 Revenue Gap (Revenue - Expenses)	-	(44,679)	(62,508)	(50,165)	(48,220)	(43,271)	(36,703)
15 Water Production (MGD)	166.0	164.0	164.0	164.0	164.0	164.0	164.0
16 Debt Service Ratio (debt service / budget)	34.0%	34.4%	35.4%	36.0%	36.4%	36.5%	36.2%

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
17 Rate Increase	1.0%	7.8%	10.1%	7.3%	6.6%	5.5%	4.4%
18 Operating Budget	\$693,665	\$728,289	\$773,545	\$823,899	\$871,365	\$914,149	\$950,726
19 Debt Service Expense	235,574	250,762	273,606	296,463	317,287	333,817	343,759
20 New Debt	422,681	476,810	462,345	396,326	365,349	303,170	238,095

NOTE:

21 Impact of Rate Increase on Residential Monthly Bill with 160 GPD usage
 22 Impact of Phased-In Infrastructure investment Fee

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	4.19	5.84	4.72	4.53	4.04	3.46
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$4.19	\$5.84	\$4.72	\$4.53	\$4.04	\$3.46
	6.8%	8.9%	6.6%	6.0%	5.0%	4.1%

23 Impact of Rate Increase on Residential Monthly Bill with 100 GPD usage
 24 Impact of Phased-In Infrastructure Investment Fee

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	2.30	3.21	2.59	2.46	2.22	1.89
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$2.30	\$3.21	\$2.59	\$2.46	\$2.22	\$1.89
	6.2%	8.2%	6.1%	5.5%	4.7%	3.8%

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

FY 2017 thru 2022 Forecast : Preliminary Budget - No Infrastructure Investment Fee Phase-In

Estimated Revenues and Expenditures (\$1,000)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	<u>Approved</u>	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
1 REVENUE							
2 Water / Sewer Use Charges	\$583,375	\$576,346	\$621,025	\$683,533	\$733,698	\$781,919	\$825,189
3 Account Maintenance Fee (Ready to Serve Charge)	32,374	32,553	32,732	32,911	33,090	33,270	33,449
4 Infrastructure Renewal Fee (Ready to Serve Charge)	19,418	19,481	19,546	19,610	19,674	19,739	19,803
5 Interest Income	1,000	700	700	700	700	700	700
6 Plumbing/Inspection Fees	7,920	7,300	7,500	7,700	7,900	8,100	8,300
7 Rockville Sewer Use	2,773	2,632	2,664	2,680	2,711	2,741	2,771
8 Miscellaneous	16,000	17,253	17,704	18,165	18,639	19,124	19,525
9 Total Revenue	<u>662,860</u>	<u>656,265</u>	<u>701,871</u>	<u>765,299</u>	<u>816,412</u>	<u>865,593</u>	<u>909,737</u>
10 Adjustments to Revenue							
11 Use of Fund Balance	21,577	20,138	3,666	4,435	4,232	4,286	4,286
12 Less Rate Stabilization							
13 SDC Debt Service Offset	728	207	-	-	-	-	-
14 Reconstruction Debt Service Offset	8,500	7,000	5,500	4,000	2,500	1,000	-
15 Adjustments to Total Revenue	<u>30,805</u>	<u>27,345</u>	<u>9,166</u>	<u>8,435</u>	<u>6,732</u>	<u>5,286</u>	<u>4,286</u>
16 FUNDS AVAILABLE	<u>693,665</u>	<u>683,610</u>	<u>711,037</u>	<u>773,734</u>	<u>823,144</u>	<u>870,879</u>	<u>914,023</u>
17 EXPENDITURES							
18 Salaries and Wages	111,309	116,875	122,719	128,855	135,298	142,063	149,166
19 Salaries and Wages - Additional & Reinstated Programs	-	-	-	-	-	-	-
20 Heat, Light and Power	23,353	26,658	27,731	28,856	30,053	31,271	32,555
21 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
22 All Other	242,557	250,210	259,818	269,811	280,203	291,011	302,251
23 All Other - Additional & Reinstated Programs	-	-	-	-	-	-	-
24 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	<u>438,414</u>	<u>451,866</u>	<u>467,944</u>	<u>487,947</u>	<u>507,829</u>	<u>528,303</u>	<u>550,138</u>
28 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,759
29 Debt Reduction (PAYGO)	19,677	25,661	31,995	39,489	46,249	52,029	56,829
30 Total Financial Expenses	<u>255,251</u>	<u>276,423</u>	<u>305,601</u>	<u>335,952</u>	<u>363,536</u>	<u>385,846</u>	<u>400,588</u>
31 TOTAL GROSS EXPENSES (Operating & Financial)	<u>693,665</u>	<u>728,289</u>	<u>773,545</u>	<u>823,899</u>	<u>871,365</u>	<u>914,149</u>	<u>950,726</u>
32 NET EXPENSES	<u>693,665</u>	<u>728,289</u>	<u>773,545</u>	<u>823,899</u>	<u>871,365</u>	<u>914,149</u>	<u>950,726</u>
33 Revenue - Expenditure Gap before rate increase	-	(44,679)	(62,508)	(50,165)	(48,221)	(43,270)	(36,703)
34 Rate Increase	1.0%	7.8%	10.1%	7.3%	6.6%	5.5%	4.4%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - Infrastructure Investment Fee Phase-in and Additional & Reinstated Programs
 Estimated Revenues and Expenditures (\$1,000)

	FY 2016 Approved	FY 2017 Proposed	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
1 Revenue							
2 Water & Sewer Rate Revenue	\$583,375	\$576,346	\$605,143	\$666,982	\$717,258	\$765,599	\$809,996
3 All Other Sources	110,290	132,667	110,557	110,811	110,120	108,699	108,637
4 Total Revenue	693,665	709,003	715,700	777,793	827,378	874,298	918,633
5 Expenses							
6 Maintenance & Operating	377,219	403,252	414,262	431,692	449,908	468,891	488,718
7 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
8 Debt Service	235,574	250,762	273,606	296,483	317,287	333,817	343,669
9 PAYGO	19,677	26,661	31,995	39,489	46,249	52,029	56,829
10 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	693,665	737,800	777,539	828,069	875,719	918,695	955,382
14 Revenue Gap (Revenue - Expenses)	-	(28,797)	(61,839)	(50,276)	(48,341)	(44,397)	(36,749)
15 Water Production (MGD)	166.0	164.0	164.0	164.0	164.0	164.0	164.0
16 Debt Service Ratio (debt service / budget)	34.0%	34.0%	35.2%	35.8%	36.2%	36.3%	36.0%

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
17 Rate Increase	1.0%	5.0%	10.2%	7.5%	6.7%	5.8%	4.5%
18 Operating Budget	\$693,665	\$737,800	\$777,539	\$828,069	\$875,719	\$918,695	\$955,382
19 Debt Service Expense	235,574	250,762	273,606	296,483	317,287	333,817	343,669
20 New Debt	422,681	476,810	462,345	396,326	365,349	303,170	238,095

NOTE:

21 Impact of Rate Increase on Residential Monthly Bill with 160 GPD usage
 22 Impact of Phased-In Infrastructure Investment Fee
 Total
 Bill percentage increase

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
21	\$2.70	\$5.80	\$4.71	\$4.53	\$4.16	\$3.44
22	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$4.70	\$5.80	\$4.71	\$4.53	\$4.16	\$3.44
Bill percentage increase	7.6%	8.8%	6.6%	5.9%	5.1%	4.1%

23 Impact of Rate Increase on Residential Monthly Bill with 100 GPD usage
 24 Impact of Phased-In Infrastructure Investment Fee
 Total
 Bill percentage increase

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
23	\$1.48	\$3.18	\$2.58	\$2.48	\$2.28	\$1.89
24	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$3.48	\$3.18	\$2.58	\$2.48	\$2.28	\$1.89
Bill percentage increase	9.4%	7.8%	5.9%	5.4%	4.7%	3.7%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - Infrastructure Investment Fee Phase-In and Additional & Reinstated Programs
 Estimated Revenues and Expenditures (\$1,000)

	<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>FY 2022</u>
	<u>Approved</u>	<u>Proposed</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
1 REVENUE							
2 Water / Sewer Use Charges	\$583,375	\$576,346	\$605,143	\$666,982	\$717,258	\$765,599	\$809,996
3 Account Maintenance Fee (Ready to Serve Charge)	32,374	32,553	32,732	32,911	33,090	33,270	33,449
4 Infrastructure Renewal Fee (Ready to Serve Charge)	19,418	38,963	39,091	39,220	39,349	39,478	39,607
5 Interest Income	1,000	700	700	700	700	700	700
6 Plumbing/Inspection Fees	7,920	7,300	7,500	7,700	7,900	8,100	8,300
7 Rockville Sewer Use	2,773	2,632	2,664	2,680	2,711	2,741	2,771
8 Miscellaneous	18,000	17,252	17,704	18,165	18,638	19,124	19,524
9 Total Revenue	662,860	675,746	705,534	768,358	819,646	869,012	914,347
10 Adjustments to Revenue							
11 Use of Fund Balance	21,577	26,050	4,666	5,435	5,232	4,286	4,286
12 Less Rate Stabilization							
13 SDC Debt Service Offset	728	207	-	-	-	-	-
14 Reconstruction Debt Service Offset	8,500	7,000	5,500	4,000	2,500	1,000	-
15 Adjustments to Total Revenue	30,805	33,257	10,166	9,435	7,732	5,286	4,286
16 FUNDS AVAILABLE	<u>693,665</u>	<u>709,003</u>	<u>715,700</u>	<u>777,793</u>	<u>827,378</u>	<u>874,298</u>	<u>918,633</u>
17 EXPENDITURES							
18 Salaries and Wages	111,309	116,875	122,719	128,855	135,298	142,063	149,166
19 Salaries and Wages - Additional & Reinstated Programs	-	1,524	1,600	1,680	1,764	1,852	1,944
20 Heat, Light and Power	23,353	26,856	27,731	28,856	30,053	31,271	32,555
21 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
22 All Other	242,557	250,210	259,818	269,811	280,203	291,011	302,251
23 All Other - Additional & Reinstated Programs	-	7,987	2,394	2,490	2,590	2,694	2,802
24 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	<u>438,414</u>	<u>461,377</u>	<u>471,938</u>	<u>492,117</u>	<u>512,183</u>	<u>532,849</u>	<u>554,884</u>
28 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,669
29 Debt Reduction (PAYGO)	19,677	25,661	31,995	39,489	46,249	52,029	56,829
30 Total Financial Expenses	<u>255,251</u>	<u>276,423</u>	<u>305,601</u>	<u>335,952</u>	<u>363,536</u>	<u>385,846</u>	<u>400,498</u>
31 TOTAL GROSS EXPENSES (Operating & Financial)	<u>693,665</u>	<u>737,800</u>	<u>777,539</u>	<u>828,069</u>	<u>875,719</u>	<u>918,695</u>	<u>955,382</u>
32 NET EXPENSES	<u>693,665</u>	<u>737,800</u>	<u>777,539</u>	<u>828,069</u>	<u>875,719</u>	<u>918,695</u>	<u>955,382</u>
33 Revenue - Expenditure Gap before rate increase	-	(28,797)	(61,839)	(50,276)	(48,341)	(44,397)	(36,749)
34 Rate Increase	1.0%	5.0%	10.2%	7.5%	6.7%	5.8%	4.5%

Rate Increase Components (FY'17 Preliminary Proposed Budget - No Changes to Ready to Serve Charge in FY16)

	FY 2016	FY 2017	Dollar Change	Rate	Description
	Estimate	Estimate		Impact	
<u>Revenue</u>					
Water & Sewer Revenue	612,267,000	604,890,000	(7,377,000)	1.2%	Decrease in water production
Account Maintenance Fee	22,900,000	22,900,000	-	0.0%	
Miscellaneous Revenue	27,693,000	27,885,000	192,000	0.0%	Based on historical miscellaneous revenue
Use of Fund Balance	-	3,514,000	3,514,000	-0.6%	Lessen impact of decreased water production
Use of Fund Balance	91,000	-	(91,000)	0.0%	Blue Plains Debt Service Bi-County Council adjustment
Use of Fund Balance	1,500,000	-	(1,500,000)	0.2%	REDO Extinguishment
Use of Fund Balance	6,300,000	6,524,000	224,000	0.0%	For operating reserve contribution
Use of Fund Balance	2,086,000	500,000	(1,586,000)	0.3%	Multi-year Additional & Reinstated
Use of Fund Balance	8,000,000	8,000,000	-	0.0%	IT Strategic Plan
Use of Fund Balance	2,000,000	-	(2,000,000)	0.3%	AMI
Use of Fund Balance - Watershed	1,600,000	1,600,000	-	0.0%	Easements & Land Acquisition
Reconstruction Debt Service Offset	8,500,000	7,000,000	(1,500,000)	0.2%	
SDC Debt Service Offset	728,000	207,000	(521,000)	0.1%	
Revenue Subtotal	693,665,000	683,020,000	(10,645,000)	1.8%	
<u>Debt Service</u>					
Debt Service	235,574,000	250,762,000	15,188,000	2.5%	
<u>Expenses</u>					
All Other	242,557,000	250,210,000	7,653,000	1.3%	
Salaries & Wages	111,309,000	116,875,000	5,566,000	0.9%	
Additional & Reinstated Programs	-	-	-	0.0%	
Regional Sewage Disposal	54,895,000	51,601,000	(3,294,000)	-0.5%	
Operating Reserve Contribution	6,300,000	6,524,000	224,000	0.0%	
Additional PAYGO	1,406,000	-	(1,406,000)	-0.2%	Jt. Council Reduction in COLA to PAYGO
Fund Balance PAYGO	1,600,000	1,600,000	-	0.0%	Easements & Land Acquisition
30 Year 1.25x Coverage PAYGO	16,671,000	24,061,000	7,390,000	1.2%	
Heat, Light & Power	23,353,000	26,656,000	3,303,000	0.5%	Based on projection from WSSC Energy Manager.
Unspecified Reductions	-	-	-	0.0%	
Expenses Subtotal	458,091,000	477,527,000	19,436,000	3.2%	
			Total	7.5%	
Total Gross Expenses	693,665,000	728,289,000			

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - FY15 Status Quo (No Recalibrated AMF, No Infrastructure Investment Fee)
 Estimated Revenues and Expenditures (\$1,000)

	<u>FY 2016</u> <u>Approved</u>	<u>FY 2017</u> <u>Proposed</u>	<u>FY 2018</u> <u>Estimate</u>	<u>FY 2019</u> <u>Estimate</u>	<u>FY 2020</u> <u>Estimate</u>	<u>FY 2021</u> <u>Estimate</u>	<u>FY 2022</u> <u>Estimate</u>
1 Revenue							
2 Water & Sewer Rate Revenue	\$612,267	\$604,890	\$650,159	\$712,911	\$763,319	\$811,784	\$855,297
3 All Other Sources	81,398	78,130	60,634	60,580	59,581	58,852	58,482
4 Total Revenue	693,665	683,020	710,793	773,491	822,900	870,636	913,779
5 Expenses							
6 Maintenance & Operating	377,219	393,741	410,268	427,522	445,554	464,345	483,972
7 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	58,672	61,880
8 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,759
9 PAYGO	19,677	25,661	31,995	39,489	46,249	52,029	56,829
10 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,288	4,286
11 Unspecified reductions	-	-	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
13 Total Expenses	693,665	728,288	773,545	823,899	871,365	914,149	950,726
14 Revenue Gap (Revenue - Expenses)	-	(45,268)	(62,752)	(50,408)	(48,465)	(43,514)	(36,947)
15 Water Production (MGD)	166.0	164.0	164.0	164.0	164.0	164.0	164.0
16 Debt Service Ratio (debt service / budget)	34.0%	34.4%	35.4%	36.0%	36.4%	36.5%	36.2%

	<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>FY 2022</u>
17 Rate Increase	6.0%	7.5%	9.7%	7.1%	6.3%	5.4%	4.3%
18 Operating Budget	\$693,665	\$728,288	\$773,545	\$823,899	\$871,365	\$914,149	\$950,726
19 Debt Service Expense	235,574	250,762	273,606	296,463	317,287	333,817	343,759
20 New Debt	422,681	476,810	462,345	396,326	365,349	303,170	238,095

NOTE:
 Impact of Rate Increase on Residential Monthly Bill with 160 GPD usage

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>
\$	4.23	\$ 5.89	\$ 4.72	\$ 4.53	\$ 4.09	\$ 3.46
	7.01%	9.12%	6.70%	6.02%	5.13%	4.12%

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - FY15 Status Quo (No Recalibrated AMF, No Infrastructure Investment Fee)
 Estimated Revenues and Expenditures (\$1,000)

	FY 2016 <u>Approved</u>	FY 2017 <u>Proposed</u>	FY 2018 <u>Estimate</u>	FY 2019 <u>Estimate</u>	FY 2020 <u>Estimate</u>	FY 2021 <u>Estimate</u>	FY 2022 <u>Estimate</u>
1 REVENUE							
2 Water / Sewer Use Charges	\$612,267	\$604,890	\$650,159	\$712,911	\$763,319	\$811,784	\$855,297
3 Account Maintenance Fee (Ready to Serve Charge)	22,900	22,900	22,900	22,900	22,900	22,900	22,900
4 Infrastructure Renewal Fee (Ready to Serve Charge)	-	-	-	-	-	-	-
5 Interest Income	1,000	700	700	700	700	700	700
6 Plumbing/Inspection Fees	7,920	7,300	7,500	7,700	7,900	8,100	8,300
7 Rockville Sewer Use	2,773	2,632	2,664	2,680	2,711	2,741	2,771
8 Miscellaneous	16,000	17,253	17,704	18,165	18,638	19,125	19,525
9 Total Revenue	<u>662,860</u>	<u>655,675</u>	<u>701,627</u>	<u>765,056</u>	<u>816,168</u>	<u>865,350</u>	<u>909,493</u>
10 Adjustments to Revenue							
11 Use of Fund Balance	21,577	20,138	3,666	4,435	4,232	4,286	4,286
12 Less Rate Stabilization	-	-	-	-	-	-	-
13 SDC Debt Service Offset	728	207	-	-	-	-	-
14 Reconstruction Debt Service Offset	8,500	7,000	5,500	4,000	2,500	1,000	-
15 Adjustments to Total Revenue	<u>30,805</u>	<u>27,345</u>	<u>9,166</u>	<u>8,435</u>	<u>6,732</u>	<u>5,286</u>	<u>4,286</u>
16 FUNDS AVAILABLE	<u>693,665</u>	<u>683,020</u>	<u>710,793</u>	<u>773,491</u>	<u>822,900</u>	<u>870,636</u>	<u>913,779</u>
17 EXPENDITURES							
18 Salaries and Wages	111,309	116,875	122,719	128,855	135,298	142,063	149,166
19 Salaries and Wages - Additional & Reinstated Programs	-	-	-	-	-	-	-
20 Heat, Light and Power	23,353	26,656	27,731	28,856	30,053	31,271	32,555
21 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
22 All Other	242,557	250,210	259,818	269,811	280,203	291,011	302,251
23 All Other - Additional & Reinstated Programs	-	-	-	-	-	-	-
24 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
25 Unspecified reductions	-	-	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	-	-	-	-	-
27 Total Operating Expenses	<u>438,414</u>	<u>451,866</u>	<u>467,944</u>	<u>487,947</u>	<u>507,829</u>	<u>528,303</u>	<u>550,138</u>
28 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,759
29 Debt Reduction (PAYGO)	19,677	25,661	31,995	39,489	46,249	52,029	56,829
30 Total Financial Expenses	<u>255,251</u>	<u>276,423</u>	<u>305,601</u>	<u>335,952</u>	<u>363,536</u>	<u>385,846</u>	<u>400,588</u>
31 TOTAL GROSS EXPENSES (Operating & Financial)	<u>693,665</u>	<u>728,289</u>	<u>773,545</u>	<u>823,899</u>	<u>871,365</u>	<u>914,149</u>	<u>950,726</u>
32 NET EXPENSES	<u>693,665</u>	<u>728,289</u>	<u>773,545</u>	<u>823,899</u>	<u>871,365</u>	<u>914,149</u>	<u>950,726</u>
33 Revenue - Expenditure Gap before rate increase	-	(45,289)	(62,752)	(50,408)	(48,465)	(43,514)	(36,947)
34 Rate Increase	6.0%	7.5%	9.7%	7.1%	6.3%	5.4%	4.3%

Increased FY'17 Expenditure Assumptions Over and Above Inflation Factor

FY'17 Additional & Reinstated Programs:

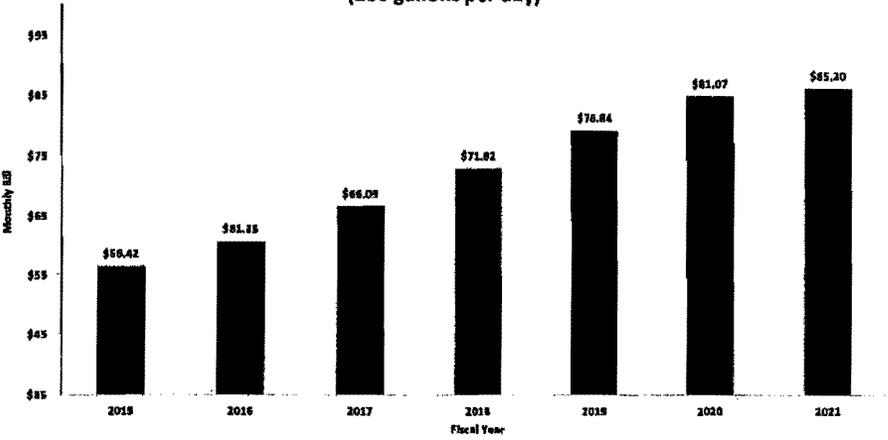
	Cost	W/S Impact
<i>New Workyears Impacting Water & Sewer Rates</i>		
<i>Operations</i>		
1 Potomac Solids Facility Operator	33,100	33,100
1 Patuxent Facility Technician	41,700	41,700
<i>Wastewater Preventive Maintenance</i>		
2 Unit Coordinators	170,000	170,000
<i>Supply Chain Management</i>		
7 Various Positions	628,600	502,880
<i>Water Quality</i>		
1 Water Quality Technician	63,700	63,700
<i>Contact Center Optimization</i>		
5 Various Positions	426,700	426,700
<i>County Permitting Offices</i>		
2 Permit Specialists	103,300	103,300
<i>Dental Mercury Compliance</i>		
2 Industrial Investigators	137,000	137,000
21 Subtotal Workyears		
<i>New Workyears With No Water & Sewer Rate Impact</i>		
<i>Bio-Energy Project</i>		
1 Bio-Energy Superintendent	102,000	-
<i>In-House Design and Infrastructure Projects</i>		
1 Survey Instrument Operator	55,500	-
<i>Infrastructure Projects</i>		
2 Sr. Civil Engineers	145,300	-
<i>Asset Management Program</i>		
1 Investment Planning Manager (50% operating)	91,000	45,500
26 New Workyears Salaries & Wages Impact	\$ 1,997,900	\$ 1,523,900
Benefits	1,098,800	838,100
4 Vehicles	98,000	8,200
<i>Other Additional & Reinstated Programs</i>		
Expansion of Community Outreach Activities	50,000	40,000
IT Security & Compliance	90,000	72,000
Storm Water Pollution Prevention	95,000	95,000
Public Information Dissemination	200,000	160,000
Annual Maintenance Fees on new system implementations	877,000	701,600
Software Licensing	200,000	160,000
Windows 10 / Office 2013 Upgrade	250,000	200,000 *
Water Quality Monitoring System	1,000,000	- *
Historical Archiving	100,000	80,000 *
WSSC 100th Anniversary	270,000	216,000 *
Demolition on Land Acquisition	250,000	250,000 *
Supply Chain Management Transformation	420,000	336,000 *
Contact Center Optimization	750,000	750,000 *
Additional IT Strategic Plan Costs	5,100,000	4,080,000 *
Total Other Additional & Reinstated Programs	<u>10,848,800</u>	<u>7,986,900</u>
Total Additional & Reinstated Programs	<u>\$ 12,846,700</u>	<u>\$ 9,510,800</u>

*Projects funded via use of fund balance. (5,912,000)

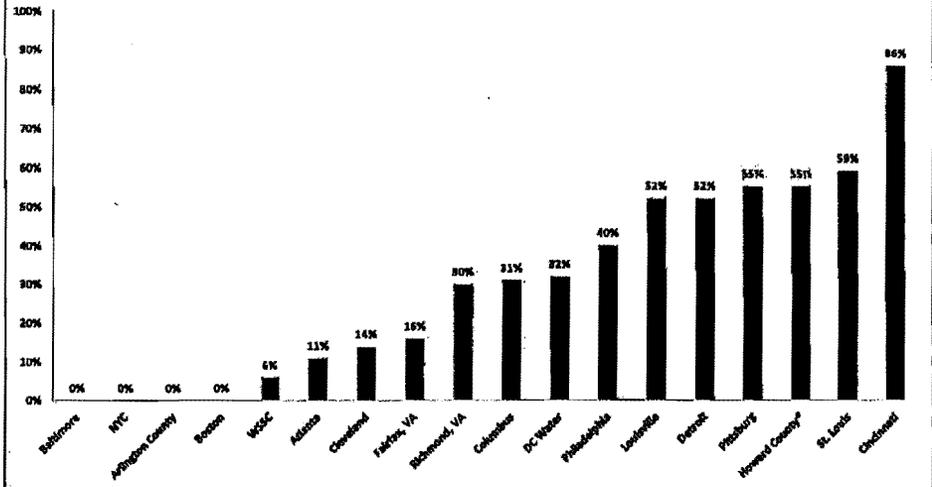
Water & Sewer operating impact of additional & reinstated programs. **\$ 3,598,800**

National Bill Analysis

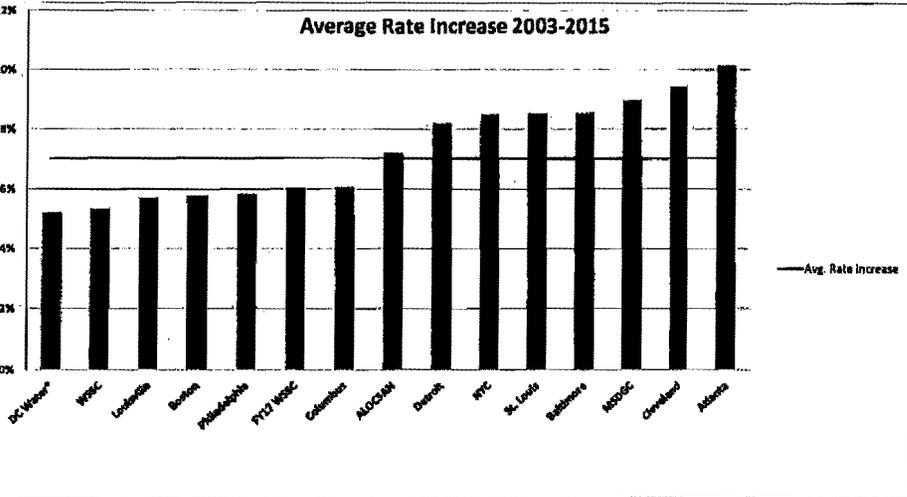
**WSSC Incremental Bill Increase
(160 gallons per day)**



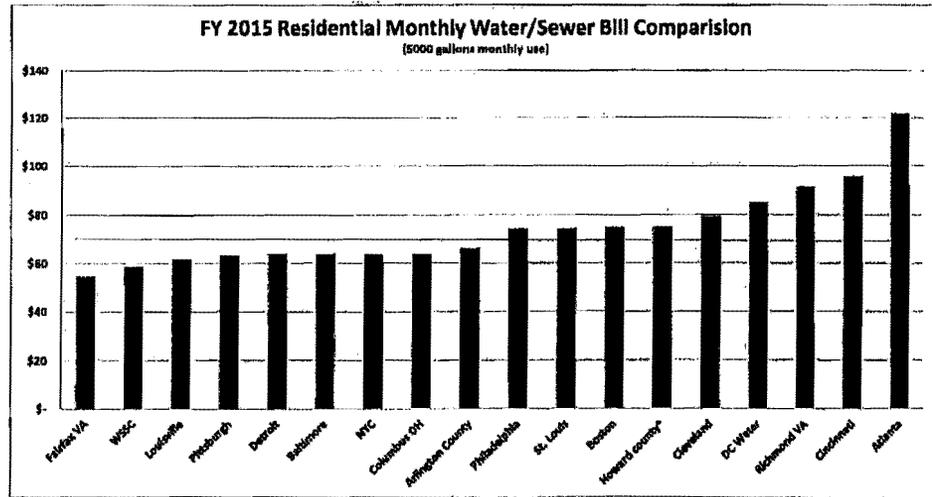
FY 2015 Percentage of Bill That Is Fixed



Average Rate Increase 2003-2015



**FY 2015 Residential Monthly Water/Sewer Bill Comparison
(5000 gallons monthly use)**



12

FY'16 One-Time Items Removed From FY'17 Base

Supply Chain Management Transformation	555,000
Vibration Analysis Pilot	150,000
Analysis of Water Production Trends & Projections	125,000
Communications & Community Relations Special Projects	156,000
Warehouse Distribution & Inventory Optimization Study	500,000
Globally Harmonized System of Classification and Labeling of Chemicals	100,000
Total	1,586,000

FY'17 Operating Ratios

Capital to Operating Ratio

	CIP	Reconstruction
Long -Term Interest Rate	5.0%	5.0%
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	\$ 15,000,000	\$ 12,000,000

Amount Needed to Impact Rates by X%

Water & Sewer Rate Revenue	\$ 576,346,000
% Desired to Impact Rates	1%
Amount Needed to Impact Rate by above %	\$ 5,763,460

Revenue Received for each MGD of Water Production

Water & Sewer Rate Revenue	\$ 576,346,000
Water Production (in MGD)	164
Revenue Received per MGD of Production	\$ 3,514,305

Background:

The Reconstruction Debt Service Offset (REDO) is the use of surplus funds from the General Bond Debt Service Fund to offset a portion of the debt service cost of the Water and Sewer Reconstruction programs. Essentially, REDO is a source of revenue to the water and sewer operating funds which would otherwise need to be covered by water and sewer rates. REDO was established in FY'83 to use the surplus that had accumulated in the General Bond Debt Service Fund to benefit all WSSC ratepayers on a long-term basis.

The General Bond Debt Service Fund's primary role is to pay the debt service on General Construction Bonds. The Fund's primary revenue source is Front Foot Benefit Charges. Since a customer's Front Foot Benefit Charge is fixed for the life of the bonds issued to fund that particular construction (generally 23 years) and is based on the interest rate received on that bond issuance, subsequent bond refundings (refinancings) over the years have generated surpluses in the General Bond Debt Service Fund. REDO was established as a reasonable means to return these surpluses to all WSSC ratepayers.

When REDO was first established, it was set at \$5.5 million per year. In FY'92, REDO was increased to \$6.5 million per year. In FY'00, REDO was increased to \$8 million per year and, in FY'07, REDO was increased to \$10 million per year. In FY'08, REDO was increased to \$12 million per year based on a plan to use \$12 million in FY'08 and FY'09, decrease to \$11.5 million in FY'10 and FY'11, decrease to \$11 million in FY'12 and FY'13, decrease to \$10.5 million in FY'14 and FY'15, and then decrease back to \$10 million in FY'16. At the time, it was assumed that REDO would then remain at \$10 million per year.

Current State:

- Since developers are now building most of the subdivision-sized water and sewer lines and since WSSC's average interest rate for General Construction Bonds is under 5%, the unallocated balance in the General Bond Debt Service Fund will be gone in the near future.
- When the unallocated balance in the General Bond Debt Service Fund is exhausted and there are no longer any funds for REDO, the REDO amount will have to be covered by water and sewer rates. Therefore, any REDO plan should include a planned gradual decline in the REDO amount towards the end rather than a steep drop-off. The current planned decline is to decrease REDO as shown in the table below:

FY'16	FY'17	FY'18	FY'19	FY'20	FY'21
\$8.5M	\$7.0M	\$5.5M	\$4.0M	\$2.5M	\$1.0M

FY 2017 Additional & Reinstated Workyear Requests

Category	Position	Program	Brief Description	Proposed				
				Workyears	Position Costs with Benefits	Vehicle Costs	Total	Water & Sewer Operating
Savings	Various Positions	Supply Chain Management	Multi-year re-engineering of WSSC's Supply Chain Management Transformation (year 3)	7	\$ 974,300	\$ -	\$ 974,300	\$ 779,400
Bi-County Request	Permit Specialists	Co-Location of County Offices	Permit Specialists to Support County Requests for Co-Location at County Permitting Offices	2	160,100	-	160,100	160,100
Capital	Piscataway Bio-Energy Superintendent	Bio-Energy	This Superintendent will have overall responsibility for the operations and maintenance of the Bio-Energy Project.	1	158,100	24,500	182,600	2,000
Capital	Survey Instrument Operator	Capital Improvement Program	Add one Instrument Operator because of the expansion of In-House Design and Increase in Infrastructure Projects	1	86,000	-	86,000	-
Capital	Sr. Civil Engineers	Capital Improvement Program	To support: 1. Capital Improvement Program; 2. Large Diameter Water Program; 3. Small Diameter Water Program; 4. Relocations Program; 5. Sewer Program & 6. Structural Lining Program.	2	225,200	-	225,200	-
50% Capital	Request Investment Planning Manager Workyear	Enterprise Asset Management Program	This position is needed to manage the development of the capital program investment requirements, new CIP/ESP Validation and Prioritization process and development of the Enterprise Asset Management Plan (EAMP).	1	141,100	-	141,100	70,500
Regulatory	Potomac Solids Facility Operator	Operations	Although the Potomac Plant treats and dewateres about 32 million wet pounds of water treatment residuals annually (over 4,000 dry tons) at the Solids Handling Facility, the new Discharge Permit will likely require significantly higher residuals process volumes and continuous operation. This will necessitate the requested staffing modification.	1	51,200	-	51,200	51,200
Regulatory	Industrial Investigators	RSG Dental Mercury Compliance	EPA is proposing to adopt effluent limitations guidelines and standards for dental facilities. EPA expects to promulgate the rule by June/July 2016.	2	212,400	-	212,400	212,400
Customer Service	Various Positions	Contact Center Optimization	This initiative is to begin the implementation of the Contact Center Strategic Optimization Project Consultant's recommendations to ensure the level of service to support the WSSC vision "that our customers will be delighted with our excellent products and innovative services."	5	661,400	-	661,400	661,400

FY 2017 Additional & Reinstated Workyear Requests

Category	Position	Program	Brief Description	Proposed				
				Workyear	Position Costs with Benefits	Vehicle Costs	Total	Water & Sewer Operating
Safety	Water Quality Technician	Water Quality	The Water Quality Technician will allow full operation of existing fish bio-monitors and full operation of on-line water quality monitoring system. This position will also be part of Contamination Rapid Responses Team (CRRT), greatly strengthening the CRRT's capacity to respond to contamination events in timely manner.	1	98,700	24,500	123,200	100,700
Operations	Patuxent Facility Technician I	Operations	A new water treatment process, solids handling, is currently in the construction process as part of the Patuxent Plant Phase II Expansion Project. When completed it is anticipated that up to 70% of the solids currently being treated at the Parkway WWTP will be handled at the Patuxent Water Treatment Plant. There will be considerable efforts required to bring the new treatment process on line and functionally maintained thereafter. Current Patuxent staffing pattern is not sufficient for the operational demands of this new treatment process.	1	64,600	-	64,600	64,600
Operations	Field Unit Coordinators	Wastewater Preventative Maintenance Program	Request for additional Wastewater Field Unit Coordinators to improvement management's span of control.	2	263,500	49,000	312,500	267,600
				26	\$ 3,096,600	\$ 98,000	\$ 3,194,600	\$ 2,369,900

WSSC SPENDING AFFORDABILITY

FY 2017 ADDITIONAL & REINSTATED PROGRAM REQUESTS SUMMARY

Program: OPERATIONS

Request: 1 Solids Facility Operator

Cost including benefits: \$51,200, Water/Sewer Impact: \$51,200

Justification:

The current Discharge Permit for the Potomac WFP expired in 2002 though the request for renewal was duly submitted by WSSC in a timely manner. It is with certainty the new Discharge Permit will include provisions that will include significantly increased water plant residuals processing requirements and continuous operation. It is anticipated, the Potomac Solids Facility will be pushed to its limits operationally, the need for additional dedicated staffing at that facility will be of paramount importance both from a Clean Water Act perspective as well as a Safe Drinking Water Act perspective because if solids are not moved from the basins effectively and on a continuous basis, water quality, WSSC's primary mission, can be negatively impacted. Additionally, this position will be actively involved in sharing the responsibility of maintaining Solids Facilities equipment through the preventative maintenance program.

Request: 1 Facility Technician

Cost including benefits: \$64,600, Water/Sewer Impact: \$64,600

Justification:

A new water treatment process, solids handling, is currently in the construction process as part of the Patuxent Plant Phase II Expansion Project. When completed it is anticipated that up to 70% of the solids currently being treated at the Parkway WWTP will be handled at the Patuxent Water Treatment Plant. There will be considerable efforts required to bring the new treatment process on line and functionally maintained thereafter. Current Patuxent staffing pattern is not sufficient for the operational demands of this new treatment process.

Program: WASTEWATER PREVENTATIVE MAINTENANCE PROGRAM

Request: 2 Wastewater Field Unit Coordinators

Cost including benefits and vehicles: \$312,500, Water/Sewer Impact: \$267,600

Justification:

Currently, the Utility Management Group only has two Field Unit Coordinators and they both manage at least 10 crews in two locations. They are responsible for their entire County Service area, which is making it very difficult to effectively manage field personnel. Two more field unit coordinators would improve management and efficiency for Collection Technicians. If approved, the Field Unit Coordinators will have approximately 10 to 11 (5 to 6 crews) employees to manage. This will increase and encourage more opportunities for field training, coaching sessions, goal setting, improved workload management, improved accountability and performance evaluation, and increased productivity/efficiency.

Program: PISCATAWAY BIO-ENERGY**Request: 1 Bio-Energy Superintendent**

Cost including benefits and vehicle: \$182,600, Water/Sewer Impact: \$2,000

Justification:

During the feasibility study for the Anaerobic Digestion/Combined Heat and Power (AD/CHP) Project, the Project Team identified the need for a Superintendent for the project. This position is needed during the design phase of the project to assist in the engineering review and as well as the design of the project.

Program: SUPPLY CHAIN MANAGEMENT TRANSFORMATION**Request: 7 workyears, funds for professions services**

Cost including benefits and professional services: \$1,394,300, Water/Sewer Impact: \$779,000

Justification:

Supply Chain Management Transformation allows WSSC to bring all areas of spend within the scope of best in class procurement practices. WSSC will also be able to better control spending and ensure compliance within all major areas of contracting. As WSSC transforms, opportunities abound for cost reductions and added value via improved spend analytics, strategic sourcing, category management, supplier relationship management, procurement dashboards, early pay incentives, improved asset recovery (idle asset identification, internal redeployment and surplus asset disposition that compliments total lifecycle costing, or total cost of ownership). Further, those involved in the process need to be properly trained and provided the right tools for successful implementation.

Programs: CONTACT CENTER STRATEGIC OPTIMIZATION and C.A.P.**Request: Additional funding and 5 workyears to implement the recommendations of the Contact Center Strategic Optimization Project and handle increased workload associated with the Customer Assistance Program**

Cost including benefits and professional services: \$1,411,400, Water/Sewer Impact: \$661,400

Justification:

The Contact Center is a complex eco-system that requires specialized skills and tools to plan work, allocate resources, and achieve performance goals. The Contact Center Optimization Project Consultant identified two gaps that are resulting in standard Contact Center operating fundamentals and best practices not being followed. A Workforce Management Center of Excellence (CoE) is needed to forecast, plan, schedule, and handle intraday adjustments, so staffing levels required to meet service levels are achieved. The benefit of this initiative is that the Workforce Management CoE will proactively monitor staffing levels. This includes maintaining best services routing between in-house and out-sourced staff. The Quality Management CoE will develop and lead training in Quality Management processes and standards for supervisors on "how to coach" design, develop, and assist in the delivery of new hire and existing staff training.

Program: SURVEYS**Request: 1 Survey Instrument Operator**

Cost including benefits: \$86,000, Water/Sewer Impact: \$0

Justification:

The Commission currently has only one Instrument Operator. Since last year, workload has increased from 7500 man-hours to 9700 man-hours. This instrument operator will complete the second team survey and allow our teams to meet the requirements of our customers. The request addresses an increase in workload for infrastructure, development design, and to support the expansion of the in-house design program in the Civil Engineering Unit as well as to provide for additional survey support for the Asset Management Program. Unable to keep up with the survey support required for the continued expansion will result in having to hire an outside consultant to provide an instrument operator to meet our needs will cost approximately \$110,000/year.

Program: WATER QUALITY**Request: Water Quality Monitoring System**

Cost including design and implementation: \$1,000,000, Water/Sewer Impact: \$0

Justification:

WSSC is significantly behind compared to other utilities in the region in its capability to detect contamination events and provide early warning to protect safety of water. Currently the only on-line monitoring specifically designed to detect accidental/deliberate contamination events are the fish-monitors and two water quality panels. WSSC will make full use of monitoring capabilities that are regionally owned and shared, but a water quality monitoring system strategically designed and placed in WSSC system will markedly reduce the response time and improve our ability to minimize the impact if a contamination event occurs. The monitoring system will also provide significant dual use benefit in day to day operations, providing real-time water quality data in general water quality problems areas, which will help addressing problems proactively and assure continued compliance with drinking water regulations.

Request: 1 Water Quality Technician

Cost including benefits and vehicle: \$123,200, Water/Sewer Impact: \$100,700

Justification:

WSSC operates three fish bio-monitors at Potomac and Patuxent WFPs, which are currently the only line of defense against drinking water contamination events. These instruments have been minimally operational for several years due to limited staff resources to properly maintain and operate them. In addition, WSSC is in process of implementing additional on-line Water Quality Monitoring (WQM) system at WFPs and in the distribution system. Implementation and successful operation of WQM system will require dedicated staff to monitor, calibrate, and troubleshoot the equipment on routine basis. The Water Quality Technician will allow full operation of existing fish bio-monitors and full operation of on-line water quality monitoring system. This position will also be part of Contamination Rapid Responses Team (CRRT), greatly strengthening the CRRT's capacity to respond to contamination events in timely manner.

Program: INFRASTRUCTURE**Request: 2 Senior Civil Engineers**

Cost including benefits: \$225,200, Water/Sewer Impact: \$0

Justification:

Capital Improvement Program includes the replacement of distribution and transmission mains. This supports that effort as well as the relocation of existing infrastructure when others need it done. This program provides engineering design and project management for all new water pipeline projects in the CIP. The Distribution, Transmission and Meter / Vault programs have increased by approximately 51%, 248%, and 67% respectively. New programs such as Looping and Structural Lining have further increased the workload. Additionally, 12 miles are identified for the Systems Enhancement Unit within the Support Services Group, Utility Services Team. These projects must be identified, analyzed, reviewed, and packaged into individual projects before being scoped for designed. The benefit is that the work years will strengthen the Commission's ability to handle the growing workload required for accomplishing the WSSC's mission for infrastructure renewal. Major risks include inadequate resources for complex CIP projects; the increase in CIP projects was not accompanied by the requisite work years to handle the load, lack of resources for the evaluation, analysis, and planning for Water Programs.

Program: ASSET MANAGEMENT**Request: 1 Investment Planning Manager**

Cost including benefits: \$141,100, Water/Sewer Impact: \$70,500

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, analysis and optimization of the capital investment requirements needed to sustain the infrastructure, coordinate with the Finance team and perform the financial analysis needed for the Enterprise Asset Management Plan (EAMP), develop the EAMP, and manage the new CIP/ESP Validation and Prioritization process which includes functions transferred from the Project Delivery Group. This position would supervise one or more economics analysts. The analysis will improve the decision making process to ensure that utilization of available resources achieves the best balance in meeting levels of service, reducing risk, and making cost effective decisions to address the infrastructure needs.

Program: STORM WATER POLLUTION PREVENTION INSPECTIONS**Request: Inspection & Monitoring Services Funding**

Cost: \$95,000, Water/Sewer Impact: \$95,000

Justification:

In order to meet MDE Permit 12-SW Inspection & Monitoring Requirements; without increasing WSSC staffing levels. The Engineering & Construction Team's Environmental Group identified a new MDE/NPDES Requirement for WSSC to register and manage their Depots [Maintenance, Repair, &

Operations (MRO)] Facilities under MDE General Permit for Discharges from Storm water Associated with Industrial Activities: Permit 12-SW; by December 31, 2014, WSSC Submitted to MDE Notice of Intent (NOI) to Comply with and Register our Depots for Discharge Permit No. 12-SW; An Engineering Consultant was hired to develop the required Pollution Prevention Plans and Inspection, Monitoring, and Record Keeping Programs for WSSC Staff/Contractors; All Depot Permits are managed by the Utilities Services Zone Group Leaders with half of Anacostia assigned to the Property Management Group Leader; To provide additional programming time needed for budgets, the Depot Manager/Zone Group Leaders have decided it to be in the best interest of the Commission to contract this inspection service and not increase staffing levels. This is a request for Inspection & Monitoring Services Funding.

Program: CO-LOCATION OF COUNTY OFFICES

Request: 2 Permit Specialists

Cost including benefits: \$160,100, Water/Sewer Impact: \$160,100

Justification:

The Counties have both requested that WSSC co-locate in County Permit Buildings. This program is to expand the staff in both offices from one Supervisor Program manager and one Project Manager to include one permit specialist. The benefit of this is that it will promote better coordination with a one stop shop at county permitting buildings.

Program: DENTAL MERCURY COMPLIANCE

Request: 2 Industrial Investigators

Cost including benefits: \$212,400, Water/Sewer Impact: \$212,400

Justification:

On the basis of the Commission's 2005 dental survey and the 2011 dental facilities list from the State of Maryland's Department of Health and Mental Hygiene, it is estimated that the Commission would have to permit and regulate an additional 708 dental facilities as Significant Industrial Users (SIUs). The dental amalgam program will be a federal and state requirement. The success of this program can be measured by the percent reduction of mercury concentrations in the wastewater treatment plant headworks, and sludge, as well as the number of dental facilities permitted as SIUs. The need for this expanded program is based on adoption of the proposed Dental Category rule (40 CFR Part 441). Once this rule is finalized, the Commission must comply with all federal pretreatment program implementation requirements. If the Commission does not comply with the rule requirements within 3 years of promulgation, the Commission could be found in significant noncompliance with the federal pretreatment program implementation requirements as well as the Commission's delegation requirements with the State.

Program: WATERSHED PROTECTION

Request: Funds for demolition

Cost: \$250,000, Water/Sewer Impact: \$0

Justification:

An expanded program acquisition of properties and easements to serve as riparian buffers along streams of the Patuxent Reservoirs watershed, upstream from T. Howard Duckett Dam was approved as part of the TSG FY16 budget. Acquisitions of properties and easements to serve as riparian buffers along streams will require some demolition if the property contains an existing structure. This initiative will provide operating budget for demolition of existing structures, re-grading of the property, elimination of any hazardous materials on the sites, installation of fencing, trees and native grasses, if required. These activities will restore the property to the nature buffer required to protect the riparian buffers along streams.

Program: PROJECT COMMUNICATION AND OUTREACH

Request: Funds for program implementation

Cost: \$50,000, Water/Sewer Impact: \$0

Justification:

WSSC receives a large volume of complaints regarding the lack of communication at the community and municipality level. The goal is to better inform the public at the local level regarding projects and related inconveniences. The Project Outreach Manager (new FY16 workyear) will be responsible for creating the program to ensure reliable dissemination of information about projects to communities and municipalities. This is expected to require a combination of existing resources as well as the potential to use operating and capital funds to contract vendors.

Program: PUBLIC INFORMATION DISSEMINATION

Request: Funds for advertising

Cost: \$200,000, Water/Sewer Impact: \$0

Justification:

WSSC continues to launch new initiatives and promote existing ones, it would be appropriate to add dollars for broadcast time and other outlets. One issue is basement backups and SSOs, which under the Consent Decree, we must reduce. A substantial portion of this money will coincide with efforts by the FOG Unit (Regulatory Services) to see new information and data related to backups and SSOs. The new Project Outreach Manager could conceivably use some of these dollars for public outreach. In general, the benefits will be customers who are not only better-informed about WSSC programs and projects, but also more inclined to think WSSC is doing a good job in the present and in planning for the future, and more inclined to think WSSC is an environmental and valuable organization that performs well.

Program: WSSC HISTORICAL ARCHIVING

Request: Funding for document management vendor

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

Justification:

The Commission possesses thousands of photographs, negatives and documents that hold historical value and capture the robust history of WSSC. The goal is to have a searchable database that includes all of the

documents. This will allow authorized staff to quickly access digital assets. Digital assets include all kinds of files in different formats: product images, stock photos, audio, video, presentations, etc. This digital asset would be used to create the WSSC 100th Anniversary History Book.

Program: WSSC 100TH ANNIVERSARY

Request: Funding for preparation of the 100th Anniversary

Cost: \$270,000, Water/Sewer Impact: \$0

Justification:

During FY'17, the Commission will begin the necessary planning to properly celebrate the 100th anniversary of WSSC which will occur May 1, 2018. Historically, planning has been done solely by the staff members of the Communications and Community Relations office. The funds will cover the cost of the writer for the 100th Anniversary Book, Promotional Items and Advertising. The objective will be to produce a program that reflects the importance of the Commission's core values of individual initiative, environmental stewardship, integrity & respect, accountability, cost awareness and excellence.

Program: IT SYSTEMS MAINTENANCE

Request: Funding for software fees

Cost: \$877,000, Water/Sewer Impact: \$701,600

Justification:

When new software systems and IT infrastructure systems are implemented, an annual maintenance fee is usually incurred. Software and hardware products, when applicable, incur an annual maintenance fee approximately 20% of its initial purchase price. Maintenance insures that WSSC's IT assets (software and hardware) remain vendor-supported and in compliance with the original software/hardware contract.

Program: IT STRATEGIC PLAN

Request: Funds for implementation of technology initiatives

Cost: \$5,100,000, Water/Sewer Impact: \$0

Justification:

Delivering high quality services in the modern era requires more of a water utility than just our pipes and pumps. The 21st century water and wastewater utility faces many substantial issues in the coming years relative to availability of clean drinking water, new regulations, an aging infrastructure and the increasing funding needs to support it. When it comes to how today's water and wastewater utility must respond to challenges, modernizing business processes and improving infrastructure management practices are the heart of the challenge. Leading utilities are more and more aware that information technology is integral to every aspect of its operations and that an organization's ability to take advantage of new solutions will depend on the strength of its IT investments. This Project will measurably enhance operational efficiency and customer service.

Program: WINDOWS 10/ OFFICE 2013 UPGRADES**Request: Windows 10/ Office 2013 Upgrades**

Cost: \$250,000, Water/Sewer Impact: \$0

Justification:

The Commission's desktop computing assets require upgrades in order to sustain new software applications and system integrations built upon ever changing, advancing platforms. IT implements and configures the necessary infrastructure enhancements to support consolidation efforts. This budget requires extensive amount of severally tasks completed since it would be an enterprise change. Professional services funds are required for the system administrator tasks such as implementation, project management, software testing and more etc. Training is required to ensure all end users are made familiar with the new Windows Operating system and Office.

Program: SOFTWARE LICENSING**Request: Funds for general software licensing**

Cost: \$200,000, Water/Sewer Impact: \$160,000

Justification:

WSSC must make sure it is properly licensed for all software products to be deployed to meet our needs. New initiatives require additional software licensing. This project will ensure that WSSC is compliant with all agreements covering deployed software. The software licensing program will enhance monitoring efforts as well as new self-service initiatives. This budget assumes a standard growth of the number of virtual machines and general use. A failure to proceed with this project could cause compliance issues with the software vendors, leading to penalties and/or termination of right-to-use.

Program: IT SECURITY & COMPLIANCE**Request: Funds for IT security and compliance**

Cost: \$90,000, Water/Sewer Impact: \$72,000

Justification:

Reliable and dependable data are critical for almost every business activity in WSSC. In order to reconfigure the IT security posture at WSSC, IT plans on being able to predict behavior based on information garnered from critical points and assets connected to the network either hard-wired or through wireless fidelity. Policies, Technology and Tools have been created and identified to provide these capabilities and will be implemented over the near, medium and long terms.

FY16

ASSUMPTIONS

WSSC's Multi-Year Financial Forecast

FY 2016 thru 2021 Forecast : Preliminary Budget with Changes to AMF (2:Year Phase-In) - Includes A & R

	<u>FY 2016</u> <u>Approved</u>	<u>FY 2017</u> <u>Estimate</u>	<u>FY 2018</u> <u>Estimate</u>	<u>FY 2019</u> <u>Estimate</u>	<u>FY 2020</u> <u>Estimate</u>	<u>FY 2021</u> <u>Estimate</u>
<u>WATER PRODUCTION</u>						
Yearly Growth Increment (MGD)	-	-	-	-	-	-
Estimated Annual Average Water Production (MGD)	166.0	166.0	166.0	166.0	166.0	166.0
<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)	1,000	3,188	2,125	1,063	-	-
Sewer REDO (\$ thousands)	4,250	3,188	2,125	1,063	-	-
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%

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Enterprise Technology Initiatives (ETI)

Strategic Plan Progress Report

Dashboard view of 5-Year Information Technology Strategic Plan Key IT Projects: 5-Year IT Strategic Plan Initiatives

	2013				2014				2015				2016				2017				Status
	Q1	Q2	Q3	Q4																	
Asset Management - Production	P	P																			●
Permitting	P	P																			●
Asset Management - Linear				P																	●
CSIS																					●
AP/PO/Inventory/CM																					●
Construction Operations Mgmt																					●
CIP Decision Support																					●
Financial Reporting																					●
Fixed Assets																					●
CIP Budget Management																					●
HRIS Enhancements																					●
Dashboard																					●
Mobile Workforce (MWM)																					●
Contact Ctr BPR/Enhancements																					●
Master Data Management (MDM)																					●
GIS - Geographical Info Systems																					●

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

Note: please refer to the 5-Year IT Strategic Plan for a comprehensive view of project timelines.

Note: Master Data Management (MDM) initiative has been deferred until the baseline COTS data architecture is implemented for the major systems. This will ensure that WSSC's MDM design integrates consistently with the newly installed systems (thus lessening the risk of rework).

WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - Infrastructure Investment Fee Phase-In and Additional & Reinstated Programs (3.5% Rate Increase)
 Estimated Revenues and Expenditures (\$1,000)

	<u>FY 2016</u> <u>Approved</u>	<u>FY 2017</u> <u>Proposed</u>	<u>FY 2018</u> <u>Estimate</u>	<u>FY 2019</u> <u>Estimate</u>	<u>FY 2020</u> <u>Estimate</u>	<u>FY 2021</u> <u>Estimate</u>	<u>FY 2022</u> <u>Estimate</u>
1 Revenue							
2 Water & Sewer Rate Revenue	\$583,375	\$576,346	\$596,511	\$658,004	\$707,920	\$755,887	\$799,896
3 All Other Sources	110,290	132,657	110,557	110,811	110,120	108,699	108,637
4 Total Revenue	693,665	709,003	707,068	768,815	818,040	864,586	908,533
5 Expenses							
6 Maintenance & Operating	377,219	403,252	414,262	431,692	449,908	468,891	488,718
7 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
8 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,669
9 PAYGO	19,677	25,661	31,995	39,489	46,249	52,029	56,829
10 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
11 Unspecified reductions	-	(8,632)	-	-	-	-	-
12 Unspecified reduction of future year's expenditure base	-	-	(8,978)	(9,338)	(9,712)	(10,100)	(10,504)
13 Total Expenses	693,665	729,168	768,561	818,731	866,007	908,595	944,878
14 Revenue Gap (Revenue - Expenses)	-	(20,165)	(61,493)	(49,916)	(47,967)	(44,009)	(36,345)
15 Water Production (MGD)	166.0	164.0	164.0	164.0	164.0	164.0	164.0
16 Debt Service Ratio (debt service / budget)	34.0%	34.4%	35.6%	36.2%	36.6%	36.7%	36.4%

	<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>FY 2022</u>
17 Rate Increase	1.0%	3.5%	10.3%	7.6%	6.8%	5.8%	4.5%
18 Operating Budget	\$693,665	\$729,168	\$768,561	\$818,731	\$866,007	\$908,595	\$944,878
19 Debt Service Expense	235,574	250,762	273,606	296,463	317,287	333,817	343,669
20 New Debt	422,681	476,810	462,345	396,326	365,349	303,170	238,095

NOTE:

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
21 Impact of Rate Increase on Residential Monthly Bill with 160 GPD usage	\$1.89	\$5.76	\$4.89	\$4.51	\$4.11	\$3.40
22 Impact of Phased-In Infrastructure Investment Fee	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$3.89	\$5.76	\$4.89	\$4.51	\$4.11	\$3.40
Bill percentage Increase	6.4%	8.8%	6.6%	5.9%	5.2%	4.0%
23 Impact of Rate Increase on Residential Monthly Bill with 100 GPD usage	\$1.04	\$3.18	\$2.57	\$2.47	\$2.25	\$1.87
24 Impact of Phased-In Infrastructure Investment Fee	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$3.04	\$3.18	\$2.57	\$2.47	\$2.25	\$1.87
Bill percentage Increase	8.2%	7.9%	5.9%	5.4%	4.7%	3.7%

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WSSC's Multi-Year Financial Forecast : Combined Water/Sewer Operating Funds Summary
FY 2017 thru 2022 Forecast : Preliminary Budget - Infrastructure Investment Fee Phase-In and Additional & Reinstated Programs (3.5% Rate Increase)
 Estimated Revenues and Expenditures (\$1,000)

	FY 2016 Approved	FY 2017 Proposed	FY 2018 Estimate	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate
1 REVENUE							
2 Water / Sewer Use Charges	\$583,375	\$576,346	\$596,511	\$658,004	\$707,920	\$755,887	\$799,896
3 Account Maintenance Fee (Ready to Serve Charge)	32,374	32,553	32,732	32,911	33,090	33,270	33,449
4 Infrastructure Renewal Fee (Ready to Serve Charge)	19,418	38,963	39,091	39,220	39,349	39,478	39,607
5 Interest Income	1,000	700	700	700	700	700	700
6 Plumbing/Inspection Fees	7,920	7,300	7,500	7,700	7,900	8,100	8,300
7 Rockville Sewer Use	2,773	2,632	2,664	2,680	2,711	2,741	2,771
8 Miscellaneous	16,000	17,252	17,704	18,165	18,638	19,124	19,524
9 Total Revenue	662,860	675,746	696,902	759,380	810,308	859,300	904,247
10 Adjustments to Revenue							
11 Use of Fund Balance	21,577	26,050	4,666	5,435	5,232	4,286	4,286
12 Less Rate Stabilization							
13 SDC Debt Service Offset	728	207	-	-	-	-	-
14 Reconstruction Debt Service Offset	8,500	7,000	5,500	4,000	2,500	1,000	-
15 Adjustments to Total Revenue	30,805	33,257	10,166	9,435	7,732	5,286	4,286
16 FUNDS AVAILABLE	<u>693,665</u>	<u>709,003</u>	<u>707,068</u>	<u>768,815</u>	<u>818,040</u>	<u>864,586</u>	<u>908,533</u>
17 EXPENDITURES							
18 Salaries and Wages	111,309	116,875	122,719	128,855	135,298	142,063	149,166
19 Salaries and Wages - Additional & Reinstated Programs	-	1,524	1,600	1,680	1,764	1,852	1,944
20 Heat, Light and Power	23,353	26,656	27,731	28,856	30,053	31,271	32,555
21 Regional Sewage Disposal	54,895	51,601	53,510	55,490	57,543	59,672	61,880
22 All Other	242,557	250,210	259,818	269,811	280,203	291,011	302,251
23 All Other - Additional & Reinstated Programs	-	7,987	2,394	2,490	2,590	2,694	2,802
24 Additional Operating Reserve Contribution	6,300	6,524	4,166	4,935	4,732	4,286	4,286
25 Unspecified reductions	-	(8,632)	-	-	-	-	-
26 Unspecified reduction of future year's expenditure base	-	-	(8,978)	(9,338)	(9,712)	(10,100)	(10,504)
27 Total Operating Expenses	<u>438,414</u>	<u>452,745</u>	<u>462,960</u>	<u>482,779</u>	<u>502,471</u>	<u>522,749</u>	<u>544,380</u>
28 Debt Service	235,574	250,762	273,606	296,463	317,287	333,817	343,669
29 Debt Reduction (PAYGO)	19,677	25,661	31,995	39,489	46,249	52,029	56,829
30 Total Financial Expenses	<u>255,251</u>	<u>276,423</u>	<u>305,601</u>	<u>335,952</u>	<u>363,536</u>	<u>385,846</u>	<u>400,498</u>
31 TOTAL GROSS EXPENSES (Operating & Financial)	<u>693,665</u>	<u>729,168</u>	<u>768,561</u>	<u>818,731</u>	<u>866,007</u>	<u>908,595</u>	<u>944,878</u>
32 NET EXPENSES	<u>693,665</u>	<u>729,168</u>	<u>768,561</u>	<u>818,731</u>	<u>866,007</u>	<u>908,595</u>	<u>944,878</u>
33 Revenue - Expenditure Gap before rate increase	-	(20,165)	(61,493)	(49,916)	(47,967)	(44,009)	(36,345)
34 Rate Increase	1.0%	3.5%	10.3%	7.6%	6.8%	5.8%	4.5%

Estimated Excess Fund Balance Calculation (in \$000s)

	Estimated Fund Balance (end of FY15)	87,239
FY16	REDO Extinguishment	(1,500)
	Debt Service on Bi-County adjustments to Blue Plains Projects	(91)
	Use of Fund Balance - IT Strategic Plan	(8,000)
	FY15 Use of Fund Balance: AMI/Billing System Replacement	(2,000)
	Operating Reserve Contribution (to maintain 10% of budgeted revenues)	(6,300)
	Easements and Land Acquisition for Watershed Protection	(1,600)
	use of Fund Balance - Supply Chain Management Transformation	(555)
	Vibration Analysis Pilot	(150)
	Analysis of Water Production Trends and Projections	(125)
	Climate Change Vulnerability Assessment	(300)
	Communications & Community Relations Special Projects	(156)
	Strategic Energy Plan Implementation	(200)
	Warehouse Distribution & Inventory Optimization Study	(500)
	Globally Harmonized System of Classification and Labeling of Chemicals	(100)
Total Use of Fund Balance in FY16 (no additional and reinstated programs)	(21,577)	
	Unallocated Reserve (end of FY16)	65,662
	Additional Use of Fund Balance (included in Base Case Scenario #3)	
FY17	FY17 Use of Fund Balance: IT Strategic Plan	(12,080)
	FY17 Use of Fund Balance: One-Time Additional and Reinstated Projects	(1,082)
	Operating Reserve Contribution (to maintain 10% of budgeted revenues)	(6,524)
	Easements and Land Acquisition for Watershed Protection (A&R)	(1,600)
	Decrease in Water Production	(3,514)
	Contact Center Optimization (FY17 A&R)	(750)
	Strategic Energy Plan Implementation (FY16 A&R)	(250)
	Climate Change Vulnerability Assessment (FY16 A&R)	(250)
Additional Use of Fund Balance in FY17 Total	(26,050)	
	Unallocated Reserve (end of FY17)	39,612
	Uses of Fund Balance in FY18 and Beyond	
FY18+	FY18-20 Climate Change Vulnerability Assessment	(750)
	FY18-20 Strategic Energy Plan Implementation	(750)
	FY18-20 AMI Billing System Replacement	(6,000)
	FY18-21 Implementation of Space Study Recommendations for Support Facilities	(12,500)
	FY18-21 Additional Operating Reserve Increase	(18,100)
Total Use of Fund Balance in FY16 and Beyond	(38,100)	
	Remaining Excess Fund Balance after All Uses	1,512

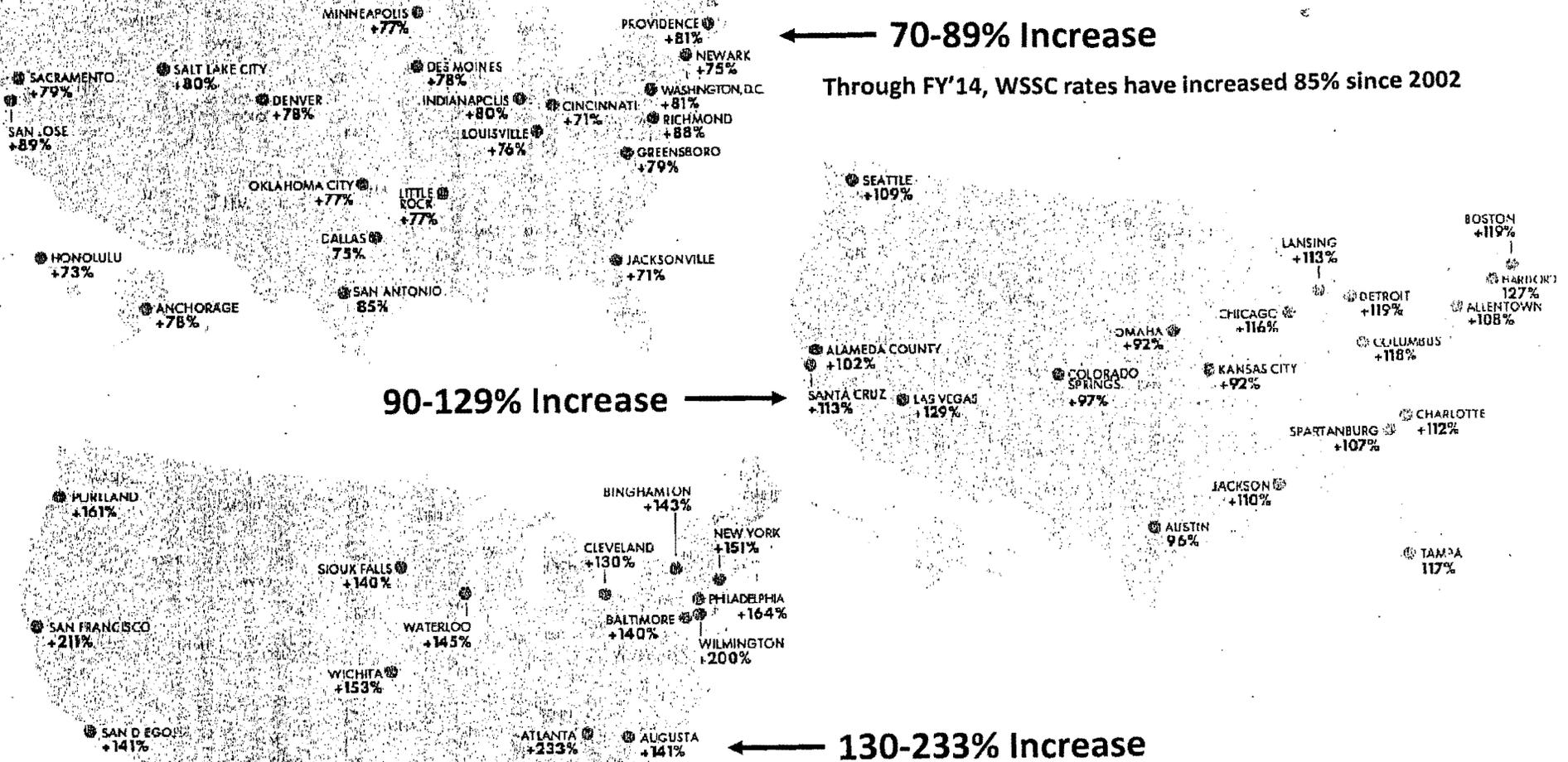
National Trends – Rate Increases Since 2002

← 70-89% Increase

Through FY'14, WSSC rates have increased 85% since 2002

90-129% Increase →

← 130-233% Increase



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WASHINGTON SUBURBAN SANITARY COMMISSION
WATER AND SEWER RATE SCHEDULE

APPROVED FOR IMPLEMENTATION JULY 1, 2015

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	Water Rates		Sewer Rates		Combined Water & Sewer Rates	
	July 1, 2014 Rates Per 1,000 Gallons	July 1, 2015 Rates Per 1,000 Gallons	July 1, 2014 Rates Per 1,000 Gallons	July 1, 2015 Rates Per 1,000 Gallons	July 1, 2014 Rates Per 1,000 Gallons	July 1, 2015 Rates Per 1,000 Gallons
0-49	\$ 3.17	\$ 3.20	\$ 4.22	\$ 4.26	\$ 7.39	\$ 7.46
50-99	3.54	3.57	4.93	4.98	8.47	8.55
100-149	3.89	3.94	5.75	5.80	9.64	9.74
150-199	4.36	4.41	6.63	6.69	10.99	11.10
200-249	5.10	5.16	7.23	7.29	12.33	12.45
250-299	5.53	5.59	7.83	7.90	13.36	13.49
300-349	5.85	5.92	8.35	8.42	14.20	14.34
350-399	6.09	6.16	8.76	8.84	14.85	15.00
400-449	6.33	6.40	8.96	9.04	15.29	15.44
450-499	6.50	6.58	9.24	9.32	15.74	15.90
500-749	6.62	6.70	9.43	9.51	16.05	16.21
750-999	6.78	6.86	9.64	9.72	16.42	16.58
1,000-3,999	6.91	6.99	10.05	10.14	16.96	17.13
4,000-6,999	7.07	7.15	10.28	10.37	17.35	17.52
7,000-8,999	7.16	7.25	10.43	10.52	17.59	17.77
9,000 & Greater	7.29	7.37	10.70	10.80	17.99	18.17

Flat Rate Sewer Charge - \$104.00 per quarter

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