T&E COMMITTEE #1
October 6, 2016

Worksession

MEMORANDUM

October 4, 2016

TO: County Council

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Worksession:** FY18 Washington Suburban Sanitary Commission (WSSC) Spending Control Limits

Revised Base Case

Spending Control Limits	FY18	Change from from FY17 Budget
Rate Increase	**6.9%**	
New Debt	570,022,000	7.9%
Debt Service	260,457,000	6.8%
Total W/S Oper. Expenses*	743,416,000	3.7%
Residential Customer Monthly Impact	**Dollar Increase**	**% Increase**
Impact at 160 gpd usage	$3.86	5.9%
Impact at 137 gpd usage	**$2.90**	**5.7%**
Impact at 100 gpd usage	$2.12	5.3%

*Assumes no unspecified reductions

Council Staff Recommendation

Spending Control Limits	FY18	Change from from FY17 Budget
Rate Increase	**5.0%**	
New Debt	570,022,000	7.9%
Debt Service	260,457,000	6.8%
Total W/S Oper. Expenses*	730,522,000	1.9%
Residential Customer Monthly Impact	**Dollar Increase**	**% Increase**
Impact at 160 gpd usage	$2.77	4.3%
Impact at 137 gpd usage	**$2.08**	**4.1%**
Impact at 100 gpd usage	$1.52	3.8%

*Assumes unspecified reductions of $11.3 million.

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

- Fausto Bayonet, Commission Chair
- Howie Denis, WSSC Commissioner
- Eloise Foster, WSSC Commissioner
- Joseph Beach, Chief Financial Officer, WSSC
- Letitia Carolina-Powell, Budget Group Leader, WSSC
- Julie Pohutsky, Budget Group, WSSC
- Matthew Schaeffer, Office of Management and Budget

Background

WSSC's spending control limits process was established in April 1994 via resolution by both Councils, with the goal of both Montgomery and Prince George's County 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, although the Councils did not agree on limits in FY02, FY06, and FY09 through FY12. However, even in years when there has not been 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.

NOTE: For the FY17 Approved Budget, the Councils approved the second-year phase-in of the Infrastructure Renewal Fee first begun in FY16. The FY16 budget also included a revised Account Maintenance Fee (to recover the five year average cost of providing account maintenance services). These changes resulted in increased fixed fee revenue and thus a lower water and sewer volumetric rate requirement in FY16 and FY17. Neither fee is assumed to change in FY18.

Schedule

- Bi-County Working Group Meetings: September 7 and September 22, 2016
- Montgomery County Council Public Hearing: September 27, 2016
- T&E Committee Discussion: October 6, 2016
- Montgomery County Council Action: TBD
- Prince George's County Council Review expected in late October

[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.

NOTE: The County Executive is expected to transmit his recommendation on WSSC's spending control limits prior to the T&E Committee's October 6 worksession.

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.

Table 1:
Spending Control Limits & Actual Rates

Fiscal Year	Approved* Limit	Actual	Fiscal Year	Approved* Limit	Actual
FY96	3.0%	3.0%	FY07	3.0%	3.0%
FY97	3.0%	3.0%	FY08	5.3%	6.5%
FY98	3.0%	2.9%	FY09*	9.7%	8.0%
FY99	2.0%	0.0%	FY10*	9.5%	9.0%
FY00	1.5%	0.0%	FY11*	9.9%	8.5%
FY01	0.0%	0.0%	FY12*	9.9%	8.5%
FY02*	2.0%	0.0%	FY13	8.5%	7.5%
FY03	0.0%	0.0%	FY14*	8.0%	7.25%
FY04	0.0%	0.0%	FY15	6.0%	5.5%
FY05	3.0%	3.0%	FY16**	2.1% (7.0%)	1% (6.0%)
FY06*	2.5%	2.5%	FY17	3.5% (7.0%)	3% (6.5%)

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

**Avg Residential Customer Impact in parenthesis reflects 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-FY17:** The Councils supported a recalibration of the Account Maintenance Fee in FY16 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 in FY16 and a 3.5 percent rate increase in FY17. Therefore, lower rate increase ceilings were approved in FY16 and FY17. Ultimately, the two Councils approved rate increases of 1.0 percent and 3.0 percent respectively in FY16 and FY17.

Multi-Year Context

While the spending control limits process is an annual process, the Bi-County Working Group takes a multi-year look at trends. The outyear estimates help staff identify issues that could arise in future years. For instance, rate increases in the first year help improve WSSC's fiscal situation in future years by increasing WSSC's base revenues. Conversely, deferring rate increases to future years, or using one-time revenue to reduce a rate increase in the first year, increases future fiscal challenges, since the revenue base is lower in future years.

However, with flat water and sewer consumption (90 percent of WSSC's revenue comes from its water/sewer consumption charges) combined with increasing debt service related to ongoing infrastructure needs, as well as increased costs for many operating categories, WSSC continues to face significant fiscal challenges going forward.

Public Hearing Testimony (see ©28-34)

At the Spending Control Limits public hearing on September 27, the Council heard from several speakers who expressed concern with: WSSC's rate structure; rate increases and expenditure increases in recent years (compared to inflation); current volumetric rate costs on customers (compared to Fairfax County in particular); WSSC's lack of comparative analysis of cost metrics with other utilities (such as Fairfax County); and some specific cost items. These concerns were forwarded to WSSC for their review. Some of these 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 just below 5.0 percent, a broader measure including part-time and discouraged workers stands at nearly double that level. Labor force participation has approached the lowest level in nearly four decades. While stock indexes have improved steadily since the depth of the recession to achieve new highs, performance in 2015 was flat, reflecting slower growth here and abroad, and performance in 2016 has been only fair. Housing and other key indicators are somewhat stronger but remain uneven. The expansion since the recession, while slow, is now one of the longest on record.

The regional economy has rebounded from the impact of federal sequestration and budget restraint on jobs and procurement. For the 2009-2014 period, the region ranked 64th among the largest metropolitan areas in job growth, but job growth now exceeds the national rate, in part because IT and related firms have been more successful in finding clients outside the federal government. The County's recovery continues to progress, with continued employment growth in 2016 and an unemployment rate below 4.0%. (The average unemployment rate in 2015 was 4.0%, well below its peak of 6.2% in January 2010 but well above its low of 2.4% in April 2007.) Housing sales have been strong, while median home sales prices have shown little growth.

Regarding pressures on the disposable income of County residents, one factor is this year's property tax increase (and for Prince George's residents, last year's increase). Another factor is the substantial increase in WSSC bills in recent years. Gasoline prices have declined but remain significant, as do costs for heating and electricity. As for the impact of the overall economy on disposable income, one issue to watch is State and County revenue growth. The State has lowered its revenue estimate for FY16-17 by about $1 billion, citing capital gains and workforce composition as factors. County revenues will be updated in November.

Benchmarking Study

On July 21, the T&E Committee received a briefing from the consultants who performed WSSC's Utility Benchmarking and Organizational Efficiency Review. This study had been supported by both Councils as part of the FY16 budget.

WSSC had not had a comprehensive benchmarking study since 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 FY17 Budget includes 1,776 positions. WSSC's rates have also increased substantially over that same time. From FY06 through FY17, rates increased 97.2 percent (the equivalent of a compounded rate of 5.8 percent per year).[2] However, expenditures increased at about half of rates (about 49 percent over that same time; about 4.1 percent per year).[3] The consumer price index from 2006 to 2016 was about 22 percent.

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).

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[2] From FY96, the average compounded increase in rates is only about 3.7 percent. This much lower rate of increase is a result of six straight years of no rate increase from FY99 through FY04.

[3] This differential between rate increases and WSSC expenditures over the same time period 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.

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

Some of the conclusions of the benchmarking study included:

- WSSC's current staffing appears to be at or below the median compared with its peers.
- For current average single-family residential bills across large national and regional water/sewer utilities, WSSC's bills are at or below the average in terms of total and affordability (as a percentage of household income). However, because of WSSC's current inclining block rate structure (with customers charged for all water used at increasing amounts based on average daily consumption, the affordability impact is much greater for higher water users. (See ©35). *NOTE: For other bill comparison information see ©36-38).*
- The study also looked at best practices for WSSC operations. Of these, WSSC exceeded the industry median in 6 of 10 attributes. Opportunities for improvement were found in the areas of: customer satisfaction, operational optimization, and infrastructure stability.
- In terms of financial performance, the results were mixed. WSSC is the only utility reviewed with an across the board AAA bond rating. WSSC also has the smallest percentage of revenue coming from its top 10 customers. However, WSSC is above the median in debt per capita and has an above average "capital intensity" (ratio of net asset value to revenues).
- The best practices review found three areas: customer service, Fleet, and CIP-asset management which were recommended for initial focus for improvements. Procurement and utility services also show potential for significant improvement.

On September 21, the WSSC Commissioners were briefed by WSSC staff on WSSC's follow-up efforts (see ©6-24) regarding the best practice areas identified above. WSSC teams have been assembled to develop action plans around the major recommendations. WSSC Staff will be available at the Committee meeting to provide further information on this work.

<u>Rate Structure</u>

Current Rate Structure – History and Issues

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 FY17 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 <u>every</u> 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.

Maryland Public Service Commission Rate Case

On September 9, 2016, the Maryland Public Service Commission's chief Public Utility Law Judge issued an order concluding that WSSC's volumetric rate structure is "unduly discriminatory among classes of customers, and as such is unreasonable." The judge encouraged WSSC to "undertake further studies to design a rate structure that is not unduly discriminatory."

At the Council's public hearing on September 27, the Council heard from Mr. Richard Boltuck, the plaintiff in the rate case. He urged both Councils to "move ahead to assure a reasonable rate structure is implemented" by FY19.

Ongoing Rate Study

At the request of both Councils during the FY17 budget review process, WSSC initiated a comprehensive rate study this past summer with the assistance of a consultant. Staff from both counties are participating in a bi-County Rate Study Workgroup and a stakeholder group made up of various ratepayer classes will be formed shortly. The intent is to implement a recommended rate structure by FY19. As noted in past discussions, this timeframe provides time for WSSC to upgrade its Customer Service Information System (i.e. its billing system) which is a critical prerequisite to implementing any significant rate structure changes. For the FY18 budget, the existing rate model is being used for purposes of the spending control limits process.

Council Staff recommends updating the language in the Spending Control Limits resolution with regard to the ongoing rate study to clarify the intent to complete the rate study work with an implementation goal of FY19.

FY18 Spending Control Limits Revised Base Case

For the upcoming budget, WSSC staff prepared a preliminary Base Case spending control limits scenario for review and comment by County staffs. Based on feedback from staffs from both counties, WSSC staff developed a revised base case (see ©1-2 for details) as summarized in Table #2 below:

Table #2:
WSSC Revised Base Case Summary

Spending Control Limits	FY18	Change from from FY17 Budget
Rate Increase	**6.9%**	
New Debt	570,022,000	7.9%
Debt Service	260,457,000	6.8%
Total W/S Oper. Expenses	743,416,000	3.7%
Residential Customer Monthly Impact	**Dollar Increase**	**% Increase**
Impact at 160 gpd usage	$3.86	5.9%
Impact at 137 gpd usage	**$2.90**	**5.7%**
Impact at 100 gpd usage	$2.12	5.3%

This revised base case scenario assumes:

- Full funding of WSSC's Proposed FY18-23 Capital Improvements Program
- An increase in the "completion factor" for water/sewer, Blue Plains, and ENR construction projects from 80% to 92% based on current experience.
- Compensation increases (+4.5% in FY18)
- Inflationary increases in current programs (+2.0% in FY18)
- An increase in regional sewage disposal costs (+2.9%)
- A phase-out of Reconstruction Debt Service Offset (REDO)[4]: $7.7 million in FY18 (down from $9.8 million in FY17) with further reductions through FY21 until the Fund is exhausted)
- Use of $13.2 million in excess fund balance in FY18 (down sharply from $26.05 million in FY17), with $11.1 million for the IT Strategic Plan and $1.6 million for an additional operating reserve contribution. These uses are consistent with prior assumptions supported by both Councils during last year's spending control limits process.
- NOTE: No new one-time or additional and reinstated programs are assumed in base case. Any dollars sought would have to come from savings elsewhere in the WSSC budget.

The elements of the Revised Base Case funding gap are shown in Table 3 below. The overall gap is $40.3 million.

[4] 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.

Table #3
Contributors to the FY18 Base Case Gap

Contributors to the FY18 Revised Base Case Gap	Change from FY17 (in $Millions)	Impact on Rate	Cumulative Rate Incr.
Changes in Funds Available (incl. Oper Reserve Contribution)	8.99	1.55%	1.55%
Debt Service	16.65	2.87%	4.42%
PAYGO (Debt Service Coverage of 1.25x)	7.10	1.22%	5.64%
Regional Sewage Disposal	1.62	0.28%	5.92%
Heat, Light, and Power	(1.13)	-0.20%	5.72%
Salaries and Wage Increases	5.13	0.88%	6.61%
All Other	1.96	0.34%	6.94%
Total Revised Base Case Gap	**40.31**	**6.94%**	

Changes in funds available (including revenue estimates, revenue adjustments, and use of fund balance discussed below) requires about a 1.55 percent rate increase. This is a result of flat water production noted earlier as well as a significant reduction in the use of fund balance from FY17 to FY18.

Debt service costs are up (2.87 percent rate impact) as is PAYGO (1.22 percent rate impact). Both of these assumptions are based on WSSC's soon-to-be-transmitted FY18-23 CIP.

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 up (0.28 percent impact). Heat, light, and power costs are expected to decline slightly (-0.20 percent rate impact). The "All Other" category is up slightly (0.34 percent rate impact).

To cover changes in funds available; debt service; PAYGO; regional sewer disposal; and heat, light, and power requires about a 5.72 percent rate increase. Assuming salary and wage increases moves the rate requirement up to 6.61 percent. Finally, "All Other" inflationary increases (2.0% in FY18) bumps the rate increase requirement up to 6.94 percent.

Overall, the revised base case scenario assumes a total water/sewer operating expense increase of $26.4 million from FY17 (a 3.7 percent increase).

The monthly impact of the base case scenario on an average residential account (currently 137 gallons per day of water usage) is $2.90 per month (with a percentage increase from the current bill of 5.7 percent).

Use of Fund Balance

Each year, WSSC carries over fund balance from the prior year. WSSC's current policy is to maintain a working capital reserve that is 10% of revenues. Fund balance amounts above that are considered unallocated reserves. WSSC estimates to have $61.907 million in unallocated reserves heading into FY18. As noted earlier for the revised based case, $13.18 million is assumed to be used. That leaves $48.7 million available in FY19 and beyond. Prior assumptions for uses of fund balance in FY19-21 total about $39.6 million. The biggest use of fund balance is assumed to keep working capital reserves at 10% of revenues ($17.6 million over three years, followed by implementation of the asset management recommendations for support facilities $13.5 million, and continued work on the climate change vulnerability assessment and strategic energy plan implementation at $500,000 each. This leaves about $9.1 million not reserved for any uses at this time.

In general, County staffs have supported the use of excess fund balance for one-time budget items but to reduce rates in the upcoming year. To do so, means creating a bigger hole in year two.

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, several years 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 has continued to increase to keep pace with debt service increases.

- **Salaries and Wages**: The salaries and wages rate of increase assumed in the Base Case for FY18 (4.5 percent) is a similar percentage as 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 four fiscal years after difficult processes in FY12 and FY13.

  The Council included specific language in its FY14 through FY17 resolutions. The FY17 language says:

  5. *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.*

  6. *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.*

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 FY18 spending control limits resolutions.

NOTE: Benefit costs are included in the "All Other" expense category. During the annual operating budget review, the Government Operations 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 decrease about $1.1 million (-4.8 percent). Electricity unit costs for FY18 decreased by 7 percent. Sewage flow projections for FY18 wastewater pumped and treated are down 5 percent compared to FY17.

- **Regional Sewage Disposal**: The Blue Plains regional sewage disposal costs are expected to increase by $1.6 million (3.0 percent). This increase comes after prior decreases resulting from savings associated with the Blue Plains anaerobic digesters coming on line. WSSC is reviewing with DCWater why these costs are going back up even with the digesters fully operational.

- **"All Other" Costs**: With the exception of the cost increases noted above, "All Other" costs are assumed to go up 2.0 percent in FY18 (half the increase assumed last year for FY17) and then gradually increase in future years back to 4.0 percent. 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 for July 2015 to July 2016 is 1.4 percent.

- **Additional and Reinstated Programs**: WSSC typically does an initial review of its needs for additional and reinstated programs and identifies a list of items for consideration. These items are then included as part of a base case "plus" scenario. However, for FY18, WSSC has not included any items for the spending model. This means that any additional and reinstated programs WSSC identifies later would have to fit within existing resources. Council Staff will identify any additional and reinstated programs included in the FY18 budget transmittal next spring.

Alternative Scenarios

As in past years, the Bi-County Working Group developed a number of scenarios off of the revised base case based on varying rate increases in FY18. These scenarios assumed rate increases ranging from 3 percent to 5 percent.

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 42 cent monthly impact to the average residential customer (137 gpd).

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 after FY21 so gradual reductions in this revenue assumption are needed to create a "soft landing" when the Fund is fully extinguished.*
  - Allocate excess fund balance to reduce the rate requirement. *The base cases already assume to allocate much but not all of the projected excess fund balance over the next several years. Some of these dollars could be accelerated into FY18 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 FY19 if the FY18 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. Also, WSSC is engaged in a number of operational reviews that may yield some cost and/or productivity savings over time.*
  - Reduce compensation assumptions.
  - Assume lower "All Other" costs rate of increase.
  - Reduce CIP expenditures. *This year, debt service and Paygo account for over a 4.0 percent rate increase within the revised base case scenario. While potential savings in the CIP should be considered, reductions in debt service and Paygo have a relatively small impact on the operating budget in the short-term. For instance, to save a $1.0 million in debt service in year one of the operating budget requires over $30 million in CIP reductions in year one of the CIP (although year two savings are doubled). The Paygo amount is a formula driven number based on a policy of optimizing long-term debt savings. Cutting Paygo would lead to higher debt service costs in the future.*

The spending control limits process requires balancing WSSC's revenue estimates and expenditure pressures with what are reasonable rate increases to assume in the coming year (and future years). As noted earlier, the spending control limits approved by both Councils creates a ceiling for the WSSC budget to stay within. Given WSSC has not gone through its budget process yet, some level of reasonable budget constraint is appropriate. 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 until WSSC's infrastructure catch-up stabilizes and some of WSSC's internal improvement initiatives take hold.

Council Staff Recommendations

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

- **Assume a 5 percent rate increase in FY18.**
- **Assume the same level of new debt and debt service as in the revised base case.**
- **Reduce total water/sewer operating expenses by $11.3 million to offset the lower rate increase assumption.** These savings are assumed as unspecified reductions at this time. The net effect is a smaller increase in operating expenses from FY17 ($13.5 million or 1.9 percent increase).

New Debt:	**$570.022 million**
Debt Service:	**$260.457 million**
Total W/S Operating Expenses:	**$730.522 million**
Maximum Average Rate Increase:	**5.0 percent**

WSSC will need to do some reprioritization within its Base Case expenditure and/or revenue assumptions to address the unspecified reductions noted above. 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.

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

Montgomery County Council action on FY18 spending control limits does not presume approval of any specific level of WSSC workforce compensation or benefits adjustments for FY18. Compensation and benefits decisions for the FY18 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 FY18, 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 updating the language in the Spending Control Limits resolution as follows:

7. *The Montgomery County Council supports completion of WSSC's ongoing comprehensive rate study with an implementation goal of FY19.*

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 and also noting support for WSSC's large valve replacement program.

Attachments

- WSSC's Multi-Year Financial Forecast
    - FY18-23 Revised Base Case (©1-2)
    - Assumptions (©3)
    - Water/Sewer Capital and Bond Funds Summary (©4)
    - FY18 Operating Ratios (©5)
- Response to Veolia Benchmarking Report - September 21, 2016 (©6-24)
- WSSC Approved Volumetric Rates (FY16 and FY17) (©25)
- Council Staff Recommended Spending Control Limits Scenario (©26-27)
- Public Hearing Testimony (©28-34)
- WSSC Bill Affordability and Other Bill Comparison Information (©35-38)

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

FY 2018 thru 2023 Forecast : Preliminary Budget - Scenario - Revised Base Case

Estimated Revenues and Expenditures ($1,000)

		FY 2017 Approved	FY 2018 Proposed	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate	FY 2023 Estimate
1	**Revenue**							
2	Water & Sewer Rate Revenue	$579,236	$580,580	$620,892	$682,440	$746,700	$800,324	$843,808
3	All Other Sources	137,782	122,524	114,518	114,068	111,417	110,129	110,590
4	Total Revenue	717,018	703,104	735,410	796,508	858,117	910,453	954,398
5	**Expenses**							
6	Maintenance & Operating	389,090	395,049	408,825	425,163	442,159	459,861	477,399
7	Regional Sewage Disposal	54,501	56,117	58,193	60,346	62,579	64,894	67,295
8	Debt Service	243,808	260,457	285,772	321,709	347,104	364,204	379,479
9	PAYGO	23,095	30,193	38,386	47,102	54,514	60,606	66,511
10	Additional Operating Reserve Contribution	6,524	1,600	5,783	6,448	5,385	4,372	4,495
11	Total Expenses	717,018	743,416	796,959	860,768	911,741	953,937	995,179
12	Revenue Gap (Revenue - Expenses)	-	(40,312)	(61,549)	(64,260)	(53,624)	(43,483)	(40,781)
13	**Water Production (MGD)**	164.0	164.0	164.0	164.0	164.0	164.0	164.0
14	**Debt Service Ratio (debt service / budget)**	34.0%	35.0%	35.9%	37.4%	38.1%	38.2%	38.1%

			FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
15.	Rate Increase		3.0%	6.9%	9.9%	9.4%	7.2%	5.4%	4.8%
16	Operating Budget		$717,018	$743,416	$796,959	$860,768	$911,741	$953,937	$995,179
17	Debt Service Expense		243,808	260,457	285,772	321,709	347,104	364,204	379,479
18	New Debt		528,048	570,022	505,115	510,153	428,914	331,785	317,102

NOTE:

		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
19	**Impact of Rate Increase on Residential Monthly Bill with 100 GPD usage**	***$2.12***	***$3.23***	***$3.38***	***$2.82***	***$2.29***	***$2.14***
20	**Impact of Rate Increase on Residential Monthly Bill with 137 GPD usage**	***$2.90***	***$4.43***	***$4.63***	***$3.86***	***$3.13***	***$2.94***

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

FY 2018 thru 2023 Forecast : Preliminary Budget - Scenario - Revised Base Case

Estimated Revenues and Expenditures ($1,000)

		FY 2017 Approved	FY 2018 Proposed	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate	FY 2023 Estimate
1	**REVENUE**							
2	Water / Sewer Use Charges	$579,236	$580,580	$620,892	$682,440	$746,700	$800,324	$843,808
3	Account Maintenance Fee (Ready to Serve Charge)	32,552	32,119	32,298	32,477	32,657	32,836	33,015
4	Infrastructure Renewal Fee (Ready to Serve Charge)	38,962	38,360	38,489	38,618	38,747	38,876	39,004
4	Interest Income	700	700	700	700	700	700	700
5	Plumbing/Inspection Fees	9,380	9,580	9,680	9,780	9,880	9,980	9,980
6	Rockville Sewer Use	2,632	2,632	2,664	2,680	2,711	2,741	2,771
7	Miscellaneous	17,500	18,253	18,804	19,365	19,938	20,625	20,625
8	Total Revenue	680,962	682,224	723,527	786,060	851,333	906,082	949,903
9	**Adjustments to Revenue**							
10	Use of Fund Balance	26,050	13,180	6,283	6,948	5,385	4,372	4,495
11	Less Rate Stabilization							
12	SDC Debt Service Offset	206	-	-	-	-	-	-
13	Reconstruction Debt Service Offset	9,800	7,700	5,600	3,500	1,400	-	-
14	Adjustments to Total Revenue	36,056	20,880	11,883	10,448	6,785	4,372	4,495
15	**FUNDS AVAILABLE**	717,018	703,104	735,410	796,508	858,118	910,454	954,398
16	**EXPENDITURES**							
17	Salaries and Wages	114,088	119,222	124,587	130,194	136,053	142,175	148,573
18	Heat, Light and Power	23,581	22,447	26,840	27,675	28,520	29,397	29,405
19	Regional Sewage Disposal	54,501	56,117	58,193	60,346	62,579	64,894	67,295
20	All Other	251,421	253,380	257,398	267,294	277,586	288,289	299,421
21	Additional Operating Reserve Contribution	6,524	1,600	5,783	6,448	5,385	4,372	4,495
22	**Total Operating Expenses**	450,115	452,766	472,801	491,957	510,123	529,127	549,189
23	Debt Service	243,808	260,457	285,772	321,709	347,104	364,204	379,479
24	Debt Reduction (PAYGO)	23,095	30,193	38,386	47,102	54,514	60,606	66,511
25	**Total Financial Expenses**	266,903	290,650	324,158	368,811	401,618	424,810	445,990
26	**TOTAL GROSS EXPENSES (Operating & Financial)**	717,018	743,416	796,959	860,768	911,741	953,937	995,179
27	**NET EXPENSES**	717,018	743,416	796,959	860,768	911,741	953,937	995,179
28	Revenue - Expenditure Gap before rate increase	-	(40,312)	(61,549)	(64,260)	(53,623)	(43,483)	(40,781)
29	Rate Increase	3.0%	6.9%	9.9%	9.4%	7.2%	5.4%	4.8%

ASSUMPTIONS
WSSC's Multi-Year Financial Forecast
FY 2018 thru 2023 Forecast : Preliminary Budget - Scenario - Revised Base Case

	FY 2018 Proposed	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate	FY 2023 Estimate
WATER PRODUCTION						
Yearly Growth Increment (MGD)	-	-	-	-	-	-
Estimated Annual Average Water Production (MGD)	164.0	164.0	164.0	164.0	164.0	164.0
OPERATING FUNDS						
Salaries & Wages Rate of Increase	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Heat, Light & Power Annual Expenses (includes savings from Energy Performance Program)						
Water ($ thousands)	12,346	14,762	15,221	15,686	16,168	16,173
Sewer ($ thousands)	10,101	12,078	12,454	12,834	13,229	13,232
Blue Plains (Regional Sewage Disposal) Rate of Increase	2.9%	3.7%	3.7%	3.7%	3.7%	3.7%
All Other - % Annual Increase	2.00%	3.50%	4.00%	4.00%	4.00%	4.00%
GASB 045 Expense	10,000	10,000	10,000	10,000	10,000	10,000
Water REDO ($ thousands)	-	-	-	-	-	-
Sewer REDO ($ thousands)	7,700	5,600	3,500	1,400	-	-
Work Years / FTE $s	-	-	-	-	-	-
Operating Program	-	-	-	-	-	-
Capital Programs	-	-	-	-	-	-
BOND FUNDS						
Short-term Construction Note Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Long-Term Bond Interest Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Life for Non-SRF Water and Sewer Debt (years)	30	30	30	30	30	30
Life for SRF Water and Sewer Debt (years)	20	20	20	20	20	20
CAPITAL EXPENDITURES RELATED PARAMETERS						
Construction Inflation	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Construction Completion Factor	92%	92%	92%	92%	92%	92%
Sewer Construction Completion Factor	92%	92%	92%	92%	92%	92%
Blue Plains Sewer Construction Completion Factor	92%	92%	92%	92%	92%	92%
ENR Construction Completion Factor	92%	92%	92%	92%	92%	92%
Reconstruction Completion Factor	100%	100%	100%	100%	100%	100%

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

FY 2018 thru 2023 Forecast : Preliminary Budget

Estimated Revenues and Expenditures ($1,000)

		FY 2017 Approved	FY 2018 Proposed	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate	FY 2023 Estimate
	Capital Expenditures							
1	Water & Sewer CIP Projects	$ 498,023	$ 488,394	$ 391,327	$ 376,414	$ 268,872	$ 191,835	$ 174,960
2	Information Only Projects (@ < 100% completion)	25,520	29,096	46,566	42,442	46,259	18,176	18,041
3	Additional High Probability Future CIP Projects	-	-	-	-	-	-	-
4	SAG Adjustments (unspecified capital spending reductions)	-	-	-	-	-	-	-
5	Subtotal - Capital Expenditures less unspecified SAG capital spending reductions	523,543	517,490	437,893	418,856	315,131	210,011	193,001
6	Subtotal - Capital Expenditures w/ scaling, completion, & inflation index factors	$ 481,660	$ 476,092	$ 414,948	$ 408,816	$ 316,805	$ 217,461	$ 205,843
	Information Only Projects (@ 100% completion)							
7	Water Reconstruction	100,226	111,956	116,721	119,342	123,560	125,302	128,987
8	Sewer Reconstruction	55,811	63,114	65,009	66,957	68,967	71,034	73,168
9	EPP & Water Storage Facility Rehab	23,150	26,189	14,075	8,000	8,000	8,000	8,000
10	***Total Capital Funding Required***	660,847	677,351	610,753	603,115	517,332	421,797	415,998
	Funding							
11	Debt Issues (includes SRF Water and Sewer Debt)	528,048	570,022	505,115	510,153	428,914	331,785	317,102
12	5% Debt Buydown of Short-term Construction Notes	-	-	-	-	-	-	-
13	System Development Charges (w/ scaling, completion & inflation index factors)	71,741	37,847	34,238	16,390	5,446	4,504	4,639
14	Infrastructure Investment Fee	-	-	-	-	-	-	-
15	PAYGO	23,095	30,193	38,386	47,102	54,514	60,606	66,511
16	Grants - Federal & State (includes ENR Grants)	13,458	14,710	15,143	22,297	21,504	21,000	21,000
17	Developers and Government Contrib. (w/ scaling, completion & inflation index factors)	24,505	24,579	17,872	7,174	6,955	3,902	6,746
18	Previous Year's Funds Available after Construction	-	-	-	-	-	-	-
19	***Total Funds Available***	660,847	677,351	610,753	603,115	517,332	421,797	415,998
20	Funds Available after Construction	-	-	-	-	-	-	-

FY'18 Operating Ratios

Capital to Operating Ratio

Assumptions	CIP	Reconstruction
Long -Term Interest Rate	5.0%	5.0%
Annual Amortization	3.3%	3.3%
Completion Factor	92%	100%
Desired Debt Service Savings	$1;000,000	$1,000,000
Capital Expenses to achieve above debt svc savings	$ 33,420,000	$ 30,746,000

Amount Needed to Impact Rates by X%

Water & Sewer Rate Revenue	$ 580,580,000
% Desired to Impact Rates	1%
Amount Needed to Impact Rate by above %	$ 5,805,800

Revenue Received for each MGD of Water Production

Water & Sewer Rate Revenue	$ 580,580,000
Water Production (in MGD)	164
Revenue Received per MGD of Production	$ 3,540,122

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Response to Veolia Benchmarking Report

September 21, 2016

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Response to Veolia Benchmarking Study

- Background
  - Purpose: Provide an independent review of WSSC's efficiency and effectiveness compared to industry peers and similar privately operated systems
    - Staffing levels
    - Rates
    - Financial Management
    - Business Areas
- Results Presented to
  - Commission on June 19
  - Prince Georges County Council on June 21
  - Montgomery County Transportation and Environment Committee on July 21

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Composite gap analysis summary identifies how significant differences in performance are

Business Area	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
Customer Service	2.0	4.0	2.0	Yes
Fleet	2.3	4.0	1.7	Potentially
CIP-Asset Management	2.0	3.6	1.6	Potentially
Procurement	2.4	4.0	1.6	Potentially
Utility Services	2.5	4.1	1.6	Potentially
Wastewater Treatment	3.2	4.1	0.9	No
Water Treatment	4.0	4.5	0.5	No

Recommended Areas of Initial Focus

Calculating the gap:

- The difference between actual performance and the near-term performance goal forms the basis of a gap analysis used to prioritize areas that have potential for additional improvement
- Any arithmetic difference of 2.0 or greater between actual performance and the near term performance goal was considered significant, and any difference in scores between 1.5 and 1.9 was considered potentially significant

Response to Veolia Benchmarking Study

- Teams were asked to review findings and develop action plans to improve performance to best practice levels indicating:
  - Resources needed
  - Timeline
- Many of the actions were already underway or planned
- Most plans assume using existing resources

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Customer Relations Team

From Veolia Report

Table C.1. Assessment Analysis Summary

Category	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
Call Center	2.0	4.0	2.0	Yes
Billing	2.5	3.5	1.0	No
Payment Options	4.3	4.5	0.2	No
Collections and Revenue Protection	1.0	3.0	2.0	Yes
Peformance Management and Training	1.5	4.0	2.5	Yes
Customer Satisfaction	1.5	4.5	3.0	Yes
Organizational Effectiveness	1.0	4.0	3.0	Yes

Action Plan Summary

- Call Center & Performance Management & Training
  - Develop workforce management program to support training; quality assurance; and performance management
- Collections and Revenue Protection
  - Develop collection strategies and implement a collections program
- Customer Satisfaction
  - Establish a Cross Functional, enterprise wide Team to measure, monitor, and reinforce customer satisfaction
- Organizational Effectiveness
  - Establish a Center of Excellence to support continuous improvement

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Procurement Team

From Veolia Report

Category	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
Governance Structure	3.3	4.0	0.7	No
Processes and Systems	3.0	4.0	1.0	No
Performance Management	2.5	4.0	1.5	Potentially
Commercial Mindsets, Skills and Knowledge	1.9	4.0	2.1	Yes
Preparation and Identification of Needs	2.1	4.0	1.9	Potentially
Execution and Contract Award	2.1	4.0	1.9	Potentially
Vendor Management	1.8	4.0	2.2	Yes

Action Plan Summary

- Performance Management
  - Conduct Cycle Time Studies
  - Develop Procurement Dashboard
- Commercial Mindsets
  - Conduct Spend Analysis using Strategic Sourcing methodology
  - Track Actual Savings
- Preparation & Identification of Needs
  - Implement forecasting and procurement planning with contracting officers
- Execution of Contract Award
  - Conducts quarterly "How to Do Business With WSSC" event.
  - Enhanced outreach to local businesses
- Vendor Management
  - Implement contractor evaluation tool

Fleet/Logistics Team

From Veolia Report

Category	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
Policies and Procedures	2.5	3.5	1.0	No
Asset Knowledge	2.8	4.4	1.6	Potentially
Maintenance	3.0	4.0	1.0	No
Financial Accountability	2.9	4.3	1.4	No
Demand Management	1.8	4.0	2.2	Yes
Performance Management	1.5	3.5	2.0	Yes
Transparancy and Communication	1.5	4.0	2.5	Yes
Mindsets and Capabilities	1.8	4.0	2.2	Yes

Action Plan Summary

- Implement Strategic Sourcing analysis to standardize and right size fleet.
- Develop dashboard
- Conduct monthly meetings with affected Group Leaders

(N)

Utility Services Team

Category	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
CMMS	2.1	3.8	1.6	Potentially
Work Order Management	3.1	4.3	1.3	No
Mapping/GIS	3.8	4.0	0.3	No
Work Planning	1.6	3.9	2.3	Yes
Work Scheduling	2.1	4.1	2.0	Yes
Capacity/Demand Management	3.3	4.7	1.3	No
Work Execution	1.5	3.8	2.3	Yes
Special Programs	2.8	4.0	1.2	No
Review of Process	2.5	4.0	1.5	Potentially
Reliability Centered Maintenance	1.0	3.5	2.5	Yes
Performance Management	1.6	4.3	2.6	Yes
Organization	3.0	4.5	1.5	Potentially
Information Reporting	2.5	4.2	1.7	Potentially
Financial Accountability	2.3	4.1	1.8	Potentially
Direction and Leadership	3.2	3.8	0.7	No
Attitudes and Environment	2.9	4.1	1.2	No
Continuous Improvement	1.8	3.9	2.1	Yes
Staff Development	3.0	4.0	1.0	No

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(W)

Utility Services Team

- Computerized Maintenance Management System (CMMS)
  - Improve cost tracking, trend analysis, and inventory management in CMMS
- Work Planning
  - Establish a central planning section
- Work Scheduling
  - Optimize work scheduling through mobile dispatching technology.
- Work Execution
  - Track and monitor actual work backlog
  - Conduct work order close-out procedures.
- Review of Process
  - Develop & implement QA/QC review process for field work and CMMS data
- Reliability Centered Maintenance
  - Implement operational consistency at depots

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Utility Services Team

- Performance Management
  - Standardize metrics across work groups
- Organization
  - Establish control ratios across all groups
  - Conduct cross-training across all depots
- Information Reporting
  - Evaluate existing reports to determine usefulness
- Financial Accountability
  - Evaluate cost trends for use in annual budgeting.
- Continuous Improvement
  - Conduct weekly performance meetings for each group to focus on performance gaps and root causes.

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Asset Management & CIP

Category	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
Asset Knowledge	2.5	4.0	1.5	**Potentially**
Risk Management - Criticality	3.0	4.0	1.0	No
Risk Management - Asset Condition	2.5	4.0	1.5	**Potentially**
Plant Maintenance - Organization	2.0	3.0	1.0	No
Plant Maintenance - Quality	1.0	3.5	2.5	Yes
Document Management	2.0	3.0	1.0	No
Inventory Management	1.0	3.0	2.0	Yes
Financial Accountability	1.5	3.0	1.5	Potentially
CIP Production Process	2.5	4.0	1.5	**Potentially**
Capital Delivery	2.0	4.5	2.5	Yes

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Asset Management & CIP

- Asset Knowledge – Production & Utility Services
  - Two year engineering effort to complete plans, verify data, & develop procedures.
  - Create a third Planner/Scheduler position.
- Risk Management Asset Condition
  - Develop dashboard and reporting logic for assets.
- Plant Maintenance Quality
  - Review work orders & score for accuracy

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Asset Management & CIP

- Inventory Management: Cross Functional Effort
  - Materials Management/Procurement
    - Closely manage inventory status to support planned maintenance efforts.
- Evaluate currently stocked parts vs. criticality of supported assets
- Provide guidance to Materials Management to adjust warehouse inventory
- Review Preventive Maintenance Benchmark to determine material requirements.

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Asset Management & CIP

- Inventory Management
  - Review equipment specifications during design for input on the spare parts to be included in delivery.
  - Provide guidance to Teams on appropriate accounting treatment of inventory
- Financial Accountability Production
  - Score work orders for data accuracy
  - Develop strategies for annual maintenance forecasts for facility budgets

Asset Management & CIP

- CIP Production Process
  - Define performance standards for each level of the Asset Management Hierarchy
  - Develop a process to monetize Level of Service
- Capital Delivery
  - Develop Project Planning Function in the Planning Group prior to initiating CIP projects
  - Create benchmark metrics to track CIP Project Delivery & add to Engineering & Construction Dashboard.

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N8

Wastewater Treatment

Category	WSSC Current Performance Score	Near-Term Improvement Goal	Arithmetic Difference	Significant?
Treatment Process	4.4	4.5	0.1	No
Sludge Treatment	3.2	4.1	0.9	No
Crisis Management	3.5	4.3	0.8	No
Health and Safety	2.5	4.0	1.5	Potentially
Organizational Development	3.4	4.2	0.8	No
Performance Management	2.6	3.8	1.2	No
Financial Responsibility	2.8	3.7	0.9	No

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N

Wastewater Treatment

- Health & Safety
  - Develop On-site Safety Accountability
  - Establish Safety Audit Program
  - Installation of Performance Boards

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Response to Veolia Benchmarking Study

- Next Steps
  - Evaluate Action Plans & Recommend implementation based on availability of resources in FY17-20 Period
  - Review recommendations with staff from both Counties as part of Spending Affordability and Proposed Budget Process
  - Execute Action Plans FY17-20
  - WSSC Stat to Monitor, Assess and Report Progress periodically

WSSC
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(23)

QUESTIONS

WSSC
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(24)

WASHINGTON SUBURBAN SANITARY COMMISSION
WATER AND SEWER RATE SCHEDULE

APPROVED FOR IMPLEMENTATION JULY 1, 2016

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	Water Rates		Sewer Rates		Combined Water & Sewer Rates	
	July 1, 2015 Rates Per 1,000 Gallons	July 1, 2016 Rates Per 1,000 Gallons	July 1, 2015 Rates Per 1,000 Gallons	July 1, 2016 Rates Per 1,000 Gallons	July 1, 2015 Rates Per 1,000 Gallons	July 1, 2016 Rates Per 1,000 Gallons
0-49	$ 3.20	$ 3.38	$ 4.26	$ 4.30	$ 7.46	$ 7.68
50-99	3.57	3.78	4.98	5.03	8.55	8.81
100-149	3.94	4.18	5.80	5.85	9.74	10.03
150-199	4.41	4.67	6.69	6.76	11.10	11.43
200-249	5.16	5.46	7.29	7.36	12.45	12.82
250-299	5.59	5.92	7.90	7.97	13.49	13.89
300-349	5.92	6.27	8.42	8.50	14.34	14.77
350-399	6.16	6.53	8.84	8.92	15.00	15.45
400-449	6.40	6.78	9.04	9.12	15.44	15.90
450-499	6.58	6.98	9.32	9.40	15.90	16.38
500-749	6.70	7.10	9.51	9.60	16.21	16.70
750-999	6.86	7.27	9.72	9.81	16.58	17.08
1,000-3,999	6.99	7.41	10.14	10.23	17.13	17.64
4,000-6,999	7.15	7.58	10.37	10.46	17.52	18.04
7,000-8,999	7.25	7.68	10.52	10.62	17.77	18.30
9,000 & Greater	7.37	7.81	10.80	10.90	18.17	18.71

Flat Rate Sewer Charge - $105.00 per quarter

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

FY 2018 thru 2023 Forecast : Preliminary Budget - Scenario 3

Estimated Revenues and Expenditures ($1,000)

		FY 2017 Approved	FY 2018 Proposed	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate	FY 2023 Estimate
1	**Revenue**							
2	Water & Sewer Rate Revenue	$579,236	$580,580	$609,598	$670,750	$734,542	$787,680	$830,658
3	All Other Sources	137,782	120,924	114,518	114,068	111,417	110,129	110,590
4	Total Revenue	717,018	701,504	724,116	784,818	845,959	897,809	941,248
5	**Expenses**							
6	Maintenance & Operating	389,090	395,049	408,825	425,163	442,159	459,861	477,399
7	Regional Sewage Disposal	54,501	56,117	58,193	60,346	62,579	64,894	67,295
8	Debt Service	243,808	260,457	285,772	321,709	347,104	364,204	379,479
9	PAYGO	23,095	30,193	38,386	47,102	54,514	60,606	66,511
10	Additional Operating Reserve Contribution	6,524	-	5,783	6,448	5,385	4,372	4,495
11	Unspecified reductions	-	(11,294)	-	-	-	-	-
12	Unspecified reduction of future year's expenditure base	-	-	(11,690)	(12,158)	(12,644)	(13,150)	(13,676)
13	Total Expenses	717,018	730,522	785,269	848,610	899,097	940,787	981,503
14	Revenue Gap (Revenue - Expenses)	-	(29,018)	(61,153)	(63,792)	(53,138)	(42,977)	(40,255)
15	**Water Production (MGD)**	164.0	164.0	164.0	164.0	164.0	164.0	164.0
16	**Debt Service Ratio (debt service / budget)**	34.0%	35.7%	36.4%	37.9%	38.6%	38.7%	38.7%

		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
17	Rate Increase	3.0%	5.0%	10.0%	9.5%	7.2%	5.5%	4.8%
18	Operating Budget	$717,018	$730,522	$785,269	$848,610	$899,097	$940,787	$981,503
19	Debt Service Expense	243,808	260,457	285,772	321,709	347,104	364,204	379,479
20	New Debt	528,048	570,022	505,115	510,153	428,914	331,785	317,102

NOTE:

		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
21	**Impact of Rate Increase on Residential Monthly Bill with 100 GPD usage**	***$1.52***	***$3.21***	***$3.35***	***$2.79***	***$2.26***	***$2.11***
22	**Impact of Rate Increase on Residential Monthly Bill with 137 GPD usage**	***$2.08***	***$4.40***	***$4.59***	***$3.82***	***$3.09***	***$2.90***

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

FY 2018 thru 2023 Forecast : Preliminary Budget - Scenario 3

Estimated Revenues and Expenditures ($1,000)

		FY 2017 Approved	FY 2018 Proposed	FY 2019 Estimate	FY 2020 Estimate	FY 2021 Estimate	FY 2022 Estimate	FY 2023 Estimate
1	**REVENUE**							
2	Water / Sewer Use Charges	$579,236	$580,580	$609,598	$670,750	$734,542	$787,680	$830,658
3	Account Maintenance Fee (Ready to Serve Charge)	32,552	32,119	32,298	32,477	32,657	32,836	33,015
4	Infrastructure Renewal Fee (Ready to Serve Charge)	38,962	38,360	38,489	38,618	38,747	38,876	39,004
4	Interest Income	700	700	700	700	700	700	700
5	Plumbing/Inspection Fees	9,380	9,580	9,680	9,780	9,880	9,980	9,980
6	Rockville Sewer Use	2,632	2,632	2,664	2,680	2,711	2,741	2,771
7	Miscellaneous	17,500	18,253	18,804	19,365	19,938	20,625	20,625
8	Total Revenue	680,962	682,224	712,233	774,370	839,175	893,438	936,753
9	**Adjustments to Revenue**							
10	Use of Fund Balance	26,050	11,580	6,283	6,948	5,385	4,372	4,495
11	Less Rate Stabilization							
12	SDC Debt Service Offset	206	-	-	-	-	-	-
13	Reconstruction Debt Service Offset	9,800	7,700	5,600	3,500	1,400	-	-
14	Adjustments to Total Revenue	36,056	19,280	11,883	10,448	6,785	4,372	4,495
15	**FUNDS AVAILABLE**	717,018	701,504	724,116	784,818	845,960	897,810	941,248
16	**EXPENDITURES**							
17	Salaries and Wages	114,088	119,222	124,587	130,194	136,053	142,175	148,573
18	Heat, Light and Power	23,581	22,447	26,840	27,675	28,520	29,397	29,405
19	Regional Sewage Disposal	54,501	56,117	58,193	60,346	62,579	64,894	67,295
20	All Other	251,421	253,380	257,398	267,294	277,586	288,289	299,421
21	Additional Operating Reserve Contribution	6,524	-	5,783	6,448	5,385	4,372	4,495
22	Unspecified reductions	-	(11,294)	-	-	-	-	-
23	Unspecified reduction of future year's expenditure base	-	-	(11,690)	(12,158)	(12,644)	(13,150)	(13,676)
24	**Total Operating Expenses**	450,115	439,872	461,111	479,799	497,479	515,977	535,513
25	Debt Service	243,808	260,457	285,772	321,709	347,104	364,204	379,479
26	Debt Reduction (PAYGO)	23,095	30,193	38,386	47,102	54,514	60,606	66,511
27	**Total Financial Expenses**	266,903	290,650	324,158	368,811	401,618	424,810	445,990
28	**TOTAL GROSS EXPENSES (Operating & Financial)**	717,018	730,522	785,269	848,610	899,097	940,787	981,503
29	**NET EXPENSES**	717,018	730,522	785,269	848,610	899,097	940,787	981,503
30	Revenue - Expenditure Gap before rate increase	-	(29,018)	(61,153)	(63,792)	(53,137)	(42,977)	(40,255)
31	Rate Increase	3.0%	5.0%	10.0%	9.5%	7.2%	5.5%	4.8%

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FY18_6yr_Forecast - Scenario 3 with 11.3M in unspecified reductions @ 5.0%- H,L,P update.xlsx

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WSSC Rate Testimony- Montgomery County Taxpayers League

Gordie Brenne, VP MCTL, 9/27/16

Rates rose in the last ten years at an annual rate of 6.63%, almost 3 times the CPI (Levchenko, 7/19/16, pg. 2). This is because cost controls are weak. In addition, fees for customer service and infrastructure maintenance were added last year to fortify revenues, but will undermine any cost control incentives in these areas.

You would think the revenue picture is rosy at this point. But it's not, and it will always be desperate because weak cost controls and declining water demand create constant pressure on revenue sources. (WSSC is now faced with a judgement to change its rate structure to address the equity of higher tier pricing beginning from the first gallon.)

Even if our residents had deep pockets and could subsidize WSSC indefinitely, our family rates are 34% higher than Fairfax County (combined water and sewer rates of $11.69/1,000 gals vs. $8.71, OLO 2016-7, pg. 22- this is for an average family of 3), and we estimate business rates are 69% higher ($15.02/1,000 gals at 500 gallons ADC vs. $8.89, Sue Lacourse. 11/15). Fairfax is our primary economic development competitor. Our families are disadvantaged and we could be losing business opportunities and jobs because of this. What are Fairfax best practices that we can adopt to lower our costs? Is their overhead rate as high as ours? Do they manage fixed costs differently than variable costs? Do their cost controls link to their strategic plan? Do they outsource activities we don't to capture cost savings? Does their supply chain management system generate greater cost savings? Do their sewer rates subsidize water rates like ours? What have they done to achieve a lower unbilled water rate and increase revenues?

Our recent letter to Joe Beach (7/27/16) outlined three areas that are key to reliability of service, and highlighted in the benchmarking report as having weak practices: Utility Services, Fleet Management, and Asset Management/CIP. We're still waiting for a response. These three areas contribute to productivity weaknesses, result in growing fixed costs, and are key to bringing costs and rates under control.

Basically, WSSC operates on a cost plus contract basis with the taxpayers. They spend more, we pay more. There is no incentive to control rates and costs will continue to rise indefinitely. Why aren't there incentives in the budgeting and rate setting process to improve performance?

Council Member Berliner has stressed the importance of reliability and we believe high costs impede reliable performance. Until these cost control questions are resolved, no rate increases should be approved. No pay increases should be budgeted, and a hiring freeze should be imposed until WSSC has implemented new cost controls and realigned rates to compete with Fairfax County.

Finally, a state law requires both counties to agree on changes to both the operating and capital budget proposed by WSSC, or the proposed budget must be adopted. This ridiculous rule resulted in excessive salary cost increases last year, and will guarantee the same result again this year. The council must amend this rule to allow common sense to reign in cost and rate increases. We also recommend that a citizen advisory panel be established to provide common sense criteria for the rate study.

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Susan LaCourse
16007 Jerald Rd.
Laurel, Md. 20707
301-498-8421
suelacourse@verizon.net

My name is Susan LaCourse, and I am a resident of West Laurel. I would like to speak on behalf of the many WSSC customers who send this message: DON'T RAISE OUR RATES!

Over the past three years, I have networked with over a thousand WSSC customers through my petitions on Change.org (649 signatures) and MoveOn.org (198 signatures) and through my Facebook page, "Marylanders for Affordable WSSC Water". Dozens of customers have posted comments that specifically condemn the WSSC rate increases over the past 12 years and cry out for relief. (One comment was, "Help!") Public perception is that WSSC spends money extravagantly and wastefully. Here are some examples of what we see as customers:

- WSSC's newish fleet of spiffy 4WD SUVs that I personally have repeatedly observed WSSC employees use to drive to meetings (almost never with more than one occupant).
- The $60 million expansion at the Patuxent Plant (WSSC has very publicly pointed out that total consumption is flat or declining and will remain so for the foreseeable future, and peak usage is far below capacity, so how necessary is this expansion?)
- WSSC's Annapolis office suite in a brand-new, state-of-the-art building (with an automated, robotic indoor parking garage) on some of the most expensive real estate in Annapolis (7 State Circle) that presumably allows WSSC lobbyists easy access to the State House (How many other utilities own office suites on State Circle?)
- The spiffy Headquarters building in Laurel (this is mentioned a lot by customers)
- The rumored 6-digit "birthday party" that WSSC plans to throw for itself to celebrate its 100th year

I have also repeatedly heard customers conjecture about executive compensation, salaries, benefit packages, pension and retirement benefits, etc. etc.

These are just the extravagances that we know about. How much more waste is there that we are not aware of?

The argument that excessive rate increases are needed every year to replace aging pipes is as old and tired as the pipes themselves. Pipe replacement is just a small part of WSSC spending.

It seems that everyone (including WSSC's own consultant) acknowledges that WSSC has a customer relations problem. It can't be solved by hiring more staff (WSSC's plan). WSSC would do far, far more to improve customer satisfaction if they did some belt-tightening and passed the savings on to customers, than if they hired 100 more customer service staff. And hiring more staff just makes the spending problem - and the public perception of waste - worse.

I encourage you to serve your constituents responsibly by not raising WSSC rates for FY18.

I've also submitted additional testimony that shows the error in WSSC's ADC calculation formula to be +- 11 gallons per day. In any given quarter, many customers are being charged the wrong rate. Rates should be frozen until this error can be resolved.

Respectfully Submitted,
Susan LaCourse

Susan LaCourse
16007 Jerald Rd.
Laurel, Md. 20707
301-498-8421
suelacourse@verizon.net

My name is Susan LaCourse, and I am a resident of West Laurel.

When I received my June WSSC bill, I noted that the usage amount was 9000 gallons and the billing period length was 90 days, resulting in a calculated Average Daily Consumption (ADC) of 100 gallons. Hmm. That's exactly on the bottom edge of a rate tier. I started taking a look at the numbers, at how the ADC is calculated, and I discovered something disturbing.

The meters only read every 1000 gallons of usage. My understanding is that they work like the analog odometers in older cars, giving the same reading until they "roll over" every mile, or in the case of water meters every thousand gallons. A reading of 10,000 gallons could represent anywhere from 10,000 to 10,999 gallons. So, given this "error" in both the starting reading and the ending reading when the usage is determined, the usage amount given on a bill can be +-999 gallons, resulting in an ADC error of +-999/(length of billing period) or approximately +-11 gallons per day. So, when my ADC is given as 100 gallons per day, it could actually be as much as 111 gpd or as little as 89 gpd. No one knows exactly what it is because the meter only registers every 1000 gallons.

Any error in the usage amount will be compensated in future readings, but not the rate-determining ADC. As an example, I've put together a spreadsheet showing the amount charged to a customer who uses exactly 100 gallons per day for 90-day billing periods and for 91-day billing periods. Over the course of 2 ½ years, the difference in how much the customer is billed is almost $100, even though exactly the same amount of water is used in each case. Sometimes this error works to the customer's advantage, sometimes not.

If WSSC were to favor 90 day billing periods and avoid 91 or 92 day billing periods, they could generate more revenue by charging more customers at the higher rate. This is of particular concern as WSSC plans to move toward automated monthly billing. Automated billing makes it easier to manipulate the length of the billing cycle, and monthly billing increases the ADC error to +-33 gallons per day.

This is a serious problem that needs careful consideration and evaluation by the councils and WSSC. It is a very compelling reason to change the rate structure to one that does not depend on ADC to determine the rate paid.

See the spreadsheet on the following (back of this) page.

Respectfully Submitted,

Susan LaCourse

WSSC Usage Amount Billed for exactly 100 gallons per day with 91 day billing periods (left) and 90 day billing periods (right) (FY 2016 rates)

	91 DAY BILLING PERIODS						90 DAY BILLING PERIODS					
Quarter	Meter Reading	True Reading	Gallons Billed	ADC	Rate	Usage Amount Billed	Meter Reading	True Reading	Gallons Billed	ADC	Rate	Usage Amount Billed
0	9,000	9,000					9,000	9,000				
1	18,000	18,100	9,000	98.9	8.55	76.95	18,000	18,000	9,000	100	9.74	87.66
2	27,000	27,200	9,000	98.9	8.55	76.95	27,000	27,000	9,000	100	9.74	87.66
3	36,000	36,300	9,000	98.9	8.55	76.95	36,000	36,000	9,000	100	9.74	87.66
4	45,000	45,400	9,000	98.9	8.55	76.95	45,000	45,000	9,000	100	9.74	87.66
5	54,000	54,500	9,000	98.9	8.55	76.95	54,000	54,000	9,000	100	9.74	87.66
6	63,000	63,600	9,000	98.9	8.55	76.95	63,000	63,000	9,000	100	9.74	87.66
7	72,000	72,700	9,000	98.9	8.55	76.95	72,000	72,000	9,000	100	9.74	87.66
8	81,000	81,800	9,000	98.9	8.55	76.95	81,000	81,000	9,000	100	9.74	87.66
9	90,000	90,900	9,000	98.9	8.55	76.95	90,000	90,000	9,000	100	9.74	87.66
10	100,000	100,000	10,000	110	9.74	97.40	99,000	99,000	9,000	100	9.74	87.66
TOTAL						**$789.95**						$876.60
								Adding in for 10 days usage				$9.74
												$886.34

Susan LaCourse
27-Sep-16

Testimony for WSSC Spending Control Limits
September 27, 2016
Edward J Amatetti, 301.728.6505

For nearly 15 years, I was an auditor and consultant to dozens of regulated utilities, and municipal and county water and wastewater utilities, including as large as Cleveland, Providence, and the greater Oakland area. My work has included rates.

The proposed rate increase should be denied unquestionably. Rate increases far above inflation for 10 years running, and a poorly designed rate structure are reasons enough. But I want to focus on another compelling reason: that being, we do not have a handle on WSSC's cost structure, which determines the utility's revenue requirements, and therefore, rates. The Commission knows precious little about WSSC's costs and whether WSSC is performing even the most basic utility activities at an acceptable level of efficiency. This remains the case even after reading the recently completed, long overdue benchmarking study, which did almost nothing to shine the light on costs or quantitative operational performance.

Case in point: Montgomery Councilmember Leventhal is quoted by the Sentinel as saying he and the Montgomery council did not object to the rate increase "because of WSSC's need to repair and replace aging infrastructure." This quote may have been taken out of context; however, rather than an argument for a rate increase, this is a giant red flag and an argument for review of WSSC maintenance activities. Infrastructure rehabilitation and maintenance should be part of a utility's normal activities, and included as an ongoing line item in the operating budget each and every year for determining revenue requirements and rates. Thus, we have a situation where WSSC is being rewarded with yet another rate increase and a new customer charge for not having kept up with maintenance and repair even while rates increased at three times the rate of inflation for 10 years running.

In the meantime, we know little about the miles of transmission mains inspected, rehabbed, or replaced each year or the costs of these activities, and how this compares to other utilities with similar size, age, and composition of pipe, and corrosiveness of WSSC 's water. We know nothing about the number or percentage of valves in the system inspected or replaced each year, by size and age, or the costs per valve associated with these activities - and how these compare to other utilities. Same thing with activity after activity -- none of which have been audited properly.

Then we have the $60M treatment plant expansion moving forward at a time water demand is absolutely stagnant. The recent study did not even review cost-benefit justifications for the proposed scope of this project. This is critical because these facilities get added to the Rate Base and make future rate increases far more likely.

These are not specious or unwarranted complaints. Without this type of cost data, a case for reducing costs cannot be effectively made and effective oversight of the utility is futile. Changes have to be made of how oversight of WSSC is conducted or we are just playing games.

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Statement of

Richard D. Boltuck

Before the Montgomery County Council
Rockville, Maryland
September 27, 2016
(FY 2018 Budget of the Washington Suburban Sanitary Commission)

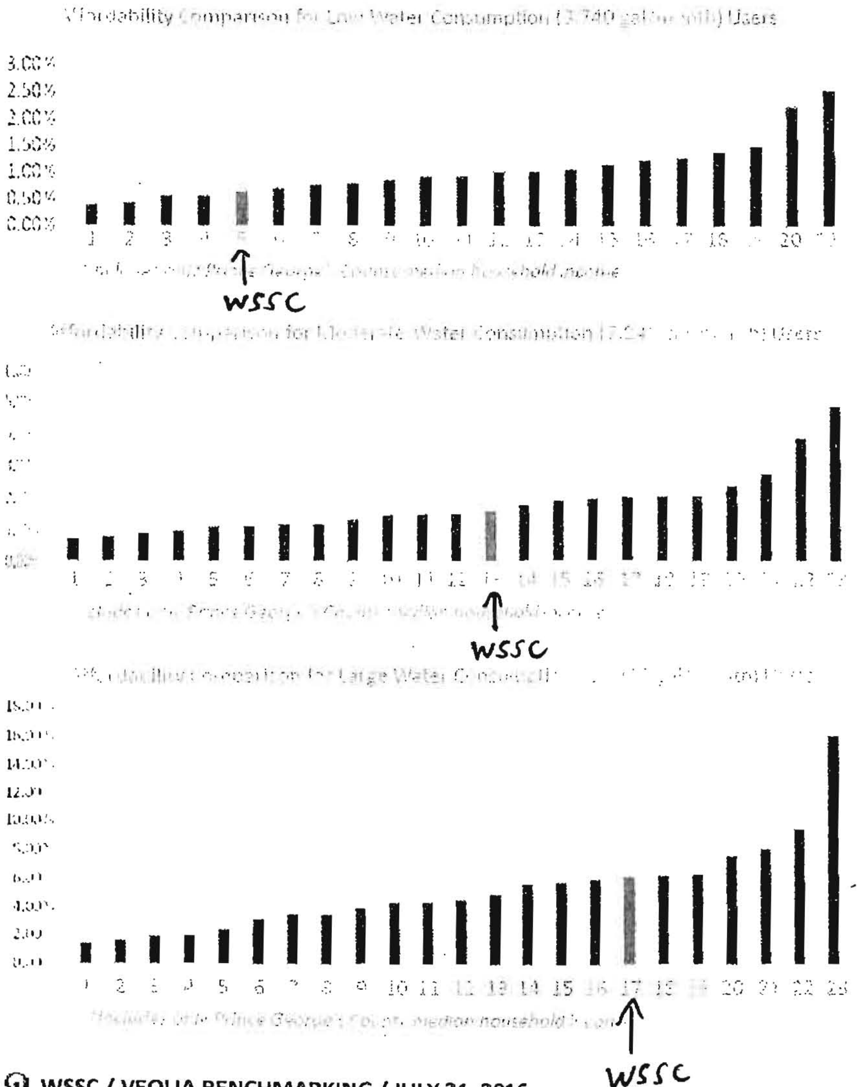
In July last year, I filed an appeal challenging the "reasonableness" of WSSC's volumetric rate structure before the Maryland Public Service Commission, because the rate structure discriminates unconscionably and unnecessarily against multi-person households by charging them frequently much higher rates per thousand gallons consumed for water and sewer service, even where the people in the household are equally, or often more, efficient at conserving water than members of smaller households. My appeal was brought under section 25-105 of the Public Utilities Article of the Maryland statutes. This provision guarantees WSSC's ratepayers who conclude that WSSC's rates are unreasonable a fair and comprehensive hearing as to the validity of their allegations – it is the primary means for assuring due process in the case of such claims.

As you may be aware, on September 9th this year, after a year of testimony, submission of evidence, a one-day oral hearing with cross-examination, and written briefings, the PSC's Chief Public Utility Law Judge, Judge Terry Romine, issued a proposed order concluding that WSSC's volumetric rate structure is unreasonable because it discriminates. She specifically reviewed the record evidence with respect to WSSC's defense that the rate structure distinctively incentivizes greater water conservation, and found that the record failed to support that claim.

I recall that at last October's T&E Committee hearing on the FY 17 WSSC budget, Chair Roger Berliner indicated that he was following my case closely and awaiting the decision. Now we are at that point. The ball is now squarely in your court, and that of the PG County Council, to move ahead to assure a reasonable rate structure is implemented that treats all of WSSC's residential ratepayers – your constituents – fairly. Perhaps that will not happen in FY 18, but there are simply no remaining excuses for it to be delayed beyond FY 19. For that to happen, however, you must insist clearly and unequivocally to WSSC now that this Council will not approve an unduly discriminatory rate structure next year.

Thank you for the opportunity to testify today. I will email each of you a copy of the judge's decision in the next few days. I would be pleased to respond to any questions you might have.

Bill affordability, compared with its peers, mixed depending on overall water usage (WSSC in green)



Findings:

- **In general, WSSC's overall cost of service is reasonable** and not out of line with other large utilities, especially those with consent decrees.
- **For most WSSC customers, monthly bills are affordable in comparison:**. Average residential consumption is approximately 5,000 gallons per month.
- WSSC uses a maximum rate inverted conservation scale, where customers pay the highest rate for the average flow that ends up in that rate block.

National Trends – Rate Increases Since 2002

MINNEAPOLIS +77%
PROVIDENCE +81%
NEWARK +75%
SACRAMENTO +79%
SAN JOSE +89%
SALT LAKE CITY +80%
DENVER +78%
DES MOINES +78%
INDIANAPOLIS +80%
LOUISVILLE +76%
CINCINNATI +71%
WASHINGTON, D.C. +81%
RICHMOND +88%
GREENSBORO +79%
OKLAHOMA CITY +77%
LITTLE ROCK +77%
DALLAS 75%
HONOLULU +73%
ANCHORAGE +78%
SAN ANTONIO 85%
JACKSONVILLE +71%

← **70-89% Increase**

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

SEATTLE +109%
BOSTON +119%
HARTFORD 127%
ALLENTOWN +108%
LANSING +113%
DETROIT +119%
CHICAGO +116%
COLUMBUS +118%
OMAHA +92%
KANSAS CITY +92%
ALAMEDA COUNTY +102%
SANTA CRUZ +113%
LAS VEGAS +129%
COLORADO SPRINGS +97%
CHARLOTTE +112%
SPARTANBURG +107%
JACKSON +110%
AUSTIN 96%
TAMPA 117%

90-129% Increase →

PORTLAND +161%
SAN FRANCISCO +211%
SAN DIEGO +141%
SIOUX FALLS +140%
WATERLOO +145%
WICHITA +153%
BINGHAMTON +143%
CLEVELAND +130%
NEW YORK +151%
PHILADELPHIA +164%
BALTIMORE +140%
WILMINGTON +200%
ATLANTA +233%
AUGUSTA +141%

← **130-233% Increase**

from WSSC

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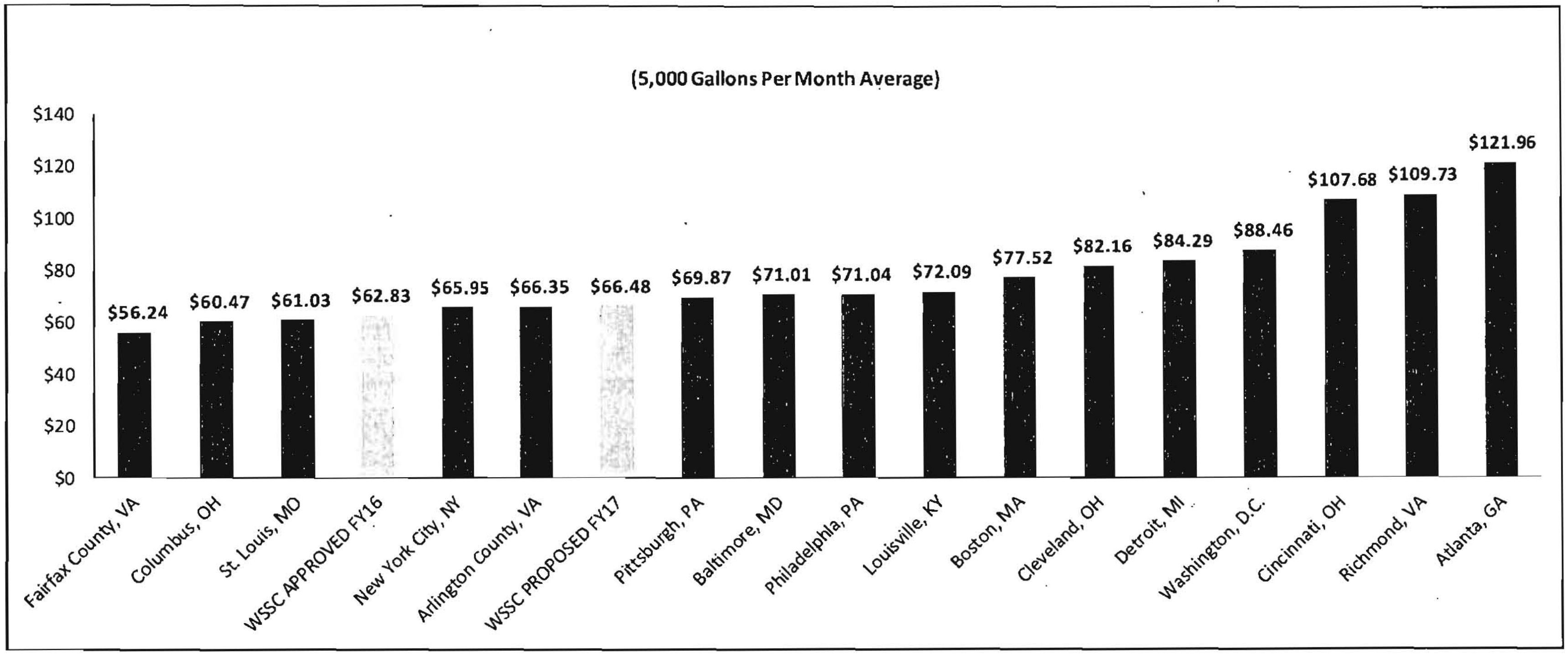
FY 2016 RESIDENTIAL MONTHLY WATER/SEWER BILL COMPARISON



Presented is a comparison of WSSC's rates to other cities and communities, both nationally and locally, for residential customers using 5,000 gallons of water per month. The rates used in this comparison were in effect in November 2015 at the time of this analysis. The chart includes WSSC bills at FY'16 approved and FY'17 proposed rates.

From FY17 WSSC Proposed Budget

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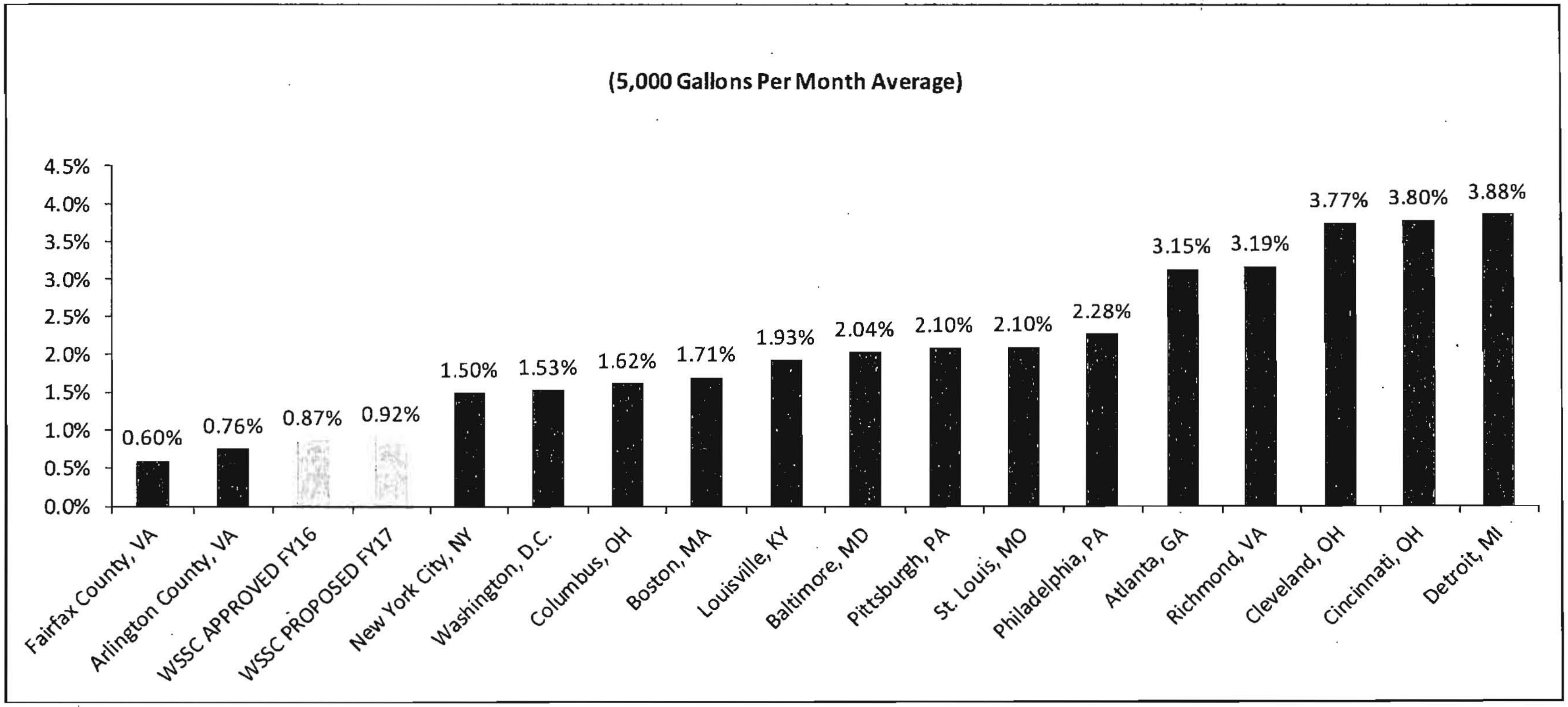
AVERAGE MONTHLY BILL COMPARISON AS A PERCENTAGE OF MEDIAN INCOME



Median household income (in 2014 dollars) 2010-2014. (Source: www.census.gov)

From FY17 WSSC Proposed Budget

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