



We Are Columbia

**COLUMBIA CITY COUNCIL MEETING AGENDA
TUESDAY, MAY 9, 2017**

The Columbia City Council will conduct a Budget Workshop at 2:00 p.m. on Tuesday, May 9, 2017 at City Hall, Conference Room, 1737 Main Street, Second Floor, Columbia, SC 29201.

The Honorable Mayor Stephen K. Benjamin
The Honorable Sam Davis, District I ■ The Honorable Tameika Isaac Devine, At-Large
The Honorable Howard E. Duvall, Jr., At-Large ■ The Honorable Edward H. McDowell, Jr., District II
The Honorable Daniel J. Rickenmann, District IV

Prior to entering the meeting please turn all electronic communication devices to the silent, vibrate or off position. All presenters are asked to speak directly into the microphone for recording purposes.

CALL TO ORDER

EXECUTIVE SESSION - 2:00 P.M.

1. Discussion of negotiations incident to proposed contractual arrangements pursuant to §30-4-70(a)(2) **Updated**
 - Intergovernmental Agreement
 - Cumberland v. City

FISCAL YEAR 2017/2018 BUDGET WORKSHOP - 2:30 P.M.

2. Fiscal Year 2017/2018 Proposed Budget - Ms. Melisa Caughman, Budget and Program Management Director
 - Storm Water
 - Water & Sewer
 - General Fund

ADJOURNMENT - 5:00 P.M.



We Are Columbia

MEETING DATE: May 9, 2017

DEPARTMENT: City Clerk

FROM: *Erika Moore, City Clerk*

SUBJECT: Discussion of negotiations incident to proposed contractual arrangements pursuant to §30-4-70(a)(2)

FINANCIAL IMPACT:

- Intergovernmental Agreement
- Cumberland v. City



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MEETING DATE: May 9, 2017

DEPARTMENT: Budget & Program Management

FROM: Missy Caughman,

SUBJECT: Fiscal Year 2017/2018 Proposed Budget - Ms. Melisa Caughman, Budget and Program Management Director

FINANCIAL IMPACT:

- Storm Water
- Water & Sewer
- General Fund

- Storm Water
- Water & Sewer
- General Fund

ATTACHMENTS:

- Budget Memo 5 SW WS GF Follow up (PDF)
- Storm Water Rate Study Update 05092017 (PDF)
- Water and Sewer Rate Study Update 05-09-2017 Final (PDF)
- 2017-05-09-Budget-v4-FINAL (PDF)



We Are Columbia

Office of Budget & Program Management
1136 Washington Street, Ste. 504, Columbia, SC 29201 • Phone: 803-545-3146 • Fax: 803-545-3147

TO: Honorable Steve Benjamin, Mayor & Columbia City Council
Teresa Wilson, City Manager

FROM: Missy Caughman, Budget & Program Management Director 

DATE: May 4, 2017

RE: FY 2017/2018 City Manager Proposed Budget – Follow up items

Discussions during the May 2nd budget workshop were informative and productive toward helping to finalize the budget for FY 17/18. Below are follow-up items and additional information requested by City Council.

Storm Water Fund

Staff along with our rate consultant have prepared information and projections based upon the proposed \$5.00 per ERU rate increase that would generate the revenue needed to fund an aggressive and comprehensive storm water capital improvement program. The approach anticipates the use of a program management team in order to advance the projects in an efficient, effective and timely manner in order to address city-wide flooding. Additional scenarios based upon Council's expressed intent to fund an aggressive and comprehensive CIP will also be presented. Staff is preparing information on an overview of the capital program and highlights of the projects anticipated to be under construction in the next 2-3 years.

Water & Sewer Fund

Based upon discussions with City Council during the recent budget workshop, staff has moved forward with adding the water and sewer bill calculator to the City's website based upon the proposed 4.75% rate increase. In addition, staff is preparing to demonstrate the rate calculator during the next budget workshop on May 9th. A copy of how to use the rate calculator is attached and is also available on the City's website. The calculator provides customers with a tool to estimate the impact of the rate increase on their water bill, based upon their current usage and explains how water bills are calculated.

The proposed 4.75% rate increase is anticipated to generate an additional \$6.3 million in new revenues for a total budget of \$152,886,000. The rate study included a thorough analysis of revenues, expenses, operating parameters and future demands on the system. Staff continues to focus efforts on efficiencies, improvements and customer service as a whole. The rate increase provides the revenue needed to fund the annual capital improvement campaign and supports the operations of the water and sewer system. The FY 17/18 capital improvement program totals \$120,000,000 of which \$40,000,000 is for Water projects and \$80,000,000 is for sewer related projects. The Water CIP includes funding to convert to



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automatic meter reading infrastructure (AMI/AMR). We anticipate a phased-in implementation of \$15,000,000 per year for this system. Sewer CIP focuses on projects for the Clean Water 2020 program. Through the Clean Water 2020 program, the City is committed to meeting EPA Consent Decree deliverables and is on track for timely delivery of the requirements. The issuance of the bond and the ability to fund the CIP is dependent upon the approval of the 4.75% water & sewer rate increase. Without the proposed rate increase, the CIP will be drastically reduced.

Beyond the capital improvement program, the City is and has been investing significant funding into the operations and routine maintenance of the water and sewer system. The costs for the projects and activities are reflected in the operating budget of the system, especially in the wastewater budgets. Projects such as the sewer mapping plan implementation, full implementation of City Works and comprehensive asset management program are aimed at proactively addressing the maintenance of our system thereby helping to manage the growth of the capital program. A system the size of Columbia's will always require a significant capital program. To achieve the resiliency we want for our future, we must invest our hard-earned capital in programs that improve our infrastructure for the long-term. The proposed rate increases will strengthen our City by providing infrastructure improvements and maintenance of the system that will endure and guide us into the next century. Thanks to the willingness and forethought of City Council to provide the funding needed to support the programs needed to efficiently and effectively manage this very important asset of the City.

General Fund

Staff is continuing to work to get the FY 17/18 General Fund budget in balance while meeting obligations, addressing immediate needs for providing basic services, and moving forward with initiatives of the Envision Columbia work plan. Balancing the budget is challenging as it is every year as we try to address a wide variety of priorities and needs with limited resources. At the May 9th Budget Workshop, our goal is to bring City Council a balanced budget and we will be prepared to continue our discussions on sound fiscal policies and guidelines. We appreciate the attention, focus and direction provided by City Council on this very important matter.



How To Use the Residential Water & Sewer Bill Estimator

www.ColumbiaSC.Net/Customer-Care/Estimator

Before Using the Estimator

To use the estimator, you need to know what type of customer you are and how much water use you are estimating.

Type of Customer

- Are you an inside-City or outside-City customer? Look on your bill to find out. See **RED** circle.
- If you are an outside-City customer, are you both a water and sewer customer? Look on your bill to find out. See **BLUE** circle.

Water Use

- How much water use would you like to estimate? The typical City household customer uses 8 units each month. You can also look at your past bills to find an average of how much water your household uses each month. See **GREEN** circle.

CITY OF COLUMBIA
WATER CUSTOMER SERVICE
1136 WASHINGTON STREET
COLUMBIA, SC 29201-3224
(803) 545-3300

ACCOUNT NUMBER 12-12345678-1234567-1
SERVICE ADDRESS 123 YOUR ST
BILL DATE 15-AUG-2015
DUE DATE 01-SEP-2015
TOTAL DUE NOW \$ 100.48

PREVIOUS BALANCE 0.00
PAYMENTS 0.00
TOTAL NET ADJUSTMENT 0.00
BALANCE FORWARD 0.00
TOTAL NEW CHARGE 100.48

ANNUAL WATER QUALITY REPORT The most recent City of Columbia water quality report is always available online at www.COLACCR.com. To request a paper copy, call (803) 545-3300.

A RESIDENTIAL CUSTOMER
123 YOUR ST
OUTSIDE COLUMBIA SC 29201-1234

WATER CONSUMPTION COMPARISON
METER 1
3000
2000
1000
0
JAN 2015 JAN 2014

Billing Summary: OUTSIDE CITY

	SERVICE PERIOD	DAYS OF SERVICE	METER NUMBER	PREVIOUS READING	PRESENT READING	CONSUMPTION / UNITS	CONSUMPTION 1 YEAR AGO	CHARGE
Residential Water	07/15/2014 08/15/2015	31	12345678	221	229	8	8	32.16
Residential Sewer	07/15/2014 08/15/2015	31						59.32
Hydrant Fee	07/15/2014 08/15/2015	31						8.00
Fire Fee	07/15/2014 08/15/2015	31						1.00
Total New Charges								100.48

Using the Estimator

- Visit www.columbiasc.net/customer-care/estimator.
- Answer **Where are you located?**, **Which City services do you use?** and your **Consumption Units**. If you need help figuring out how much water use to estimate, click **Need help with your consumption units?**

About You

Where are you located? ☒ Inside City Limits ☐ Outside City Limits

Which City services do you use? ☐ Water ☐ Sewer ☒ Water & Sewer

Consumption Units
Use the number of 100 cubic foot units you used. Ex: Type 8 for 800 cubic feet.

[Need help with your consumption units?](#)

About You

Where are you located? ☐ Inside City Limits ☒ Outside City Limits

Which City services do you use? ☐ Water ☐ Sewer ☒ Water & Sewer

Consumption Units
Use the number of 100 cubic foot units you used. Ex: Type 8 for 800 cubic feet.

[Need help with your consumption units?](#)

- The form will auto-calculate **The Estimated Bill** comparing **Current Rates** to **Proposed Rates**. The example below shows 8 Units for an Inside-City customer.

The Estimated Bill:	
Current Rates	Proposed Rates
Total Water Charges	18.45
Total Sewer Charges	34.04
Stormwater	6.80
Total	59.29
Total Water Charges	19.31
Total Sewer Charges	35.63
Stormwater	6.80
Total	61.74

- The form will also show a break-down of **How Water And Sewer Charges Are Calculated** for both **Current Rates** and **Proposed Rates**. The example below shows 8 units for an Inside-City customer.

How Water And Sewer Charges Are Calculated:

Current Rates

Breakdown of Current Water Charges

	Units X	Rate =	Charge
Water Base Charge	1	6.60	6.60
Water Volumetric Charge	5	2.37	11.85
Total Water Charges			18.45

Breakdown of Current Sewer Charges

	Units X	Rate =	Charge
Sewer Base Charge	1	6.60	6.60
Sewer Volumetric Charge	8	3.43	27.44
Total Sewer Charges			34.04

Proposed Rates

Breakdown of Proposed Water Charges

	Units X	Rate =	Charge
Water Base Charge	1	6.91	6.91
Water Volumetric Charge	5	2.48	12.40
Total Water Charges			19.31

Breakdown of Proposed Sewer Charges

	Units X	Rate =	Charge
Sewer Base Charge	1	6.91	6.91
Sewer Volumetric Charge	8	3.59	28.72
Total Sewer Charges			35.63

- The form also has additional information on base and volumetric charges, the 14 unit summer sewer cap, and where to go if you have questions.

Additional Information	
More About Base and Volumetric Charges	▶
What is the 14 Unit Summer Sewer Cap?	▶
Still Have Questions?	▶

STORMWATER RATE STUDY UPDATE

MAY 9, 2017



RATE STUDY UPDATE

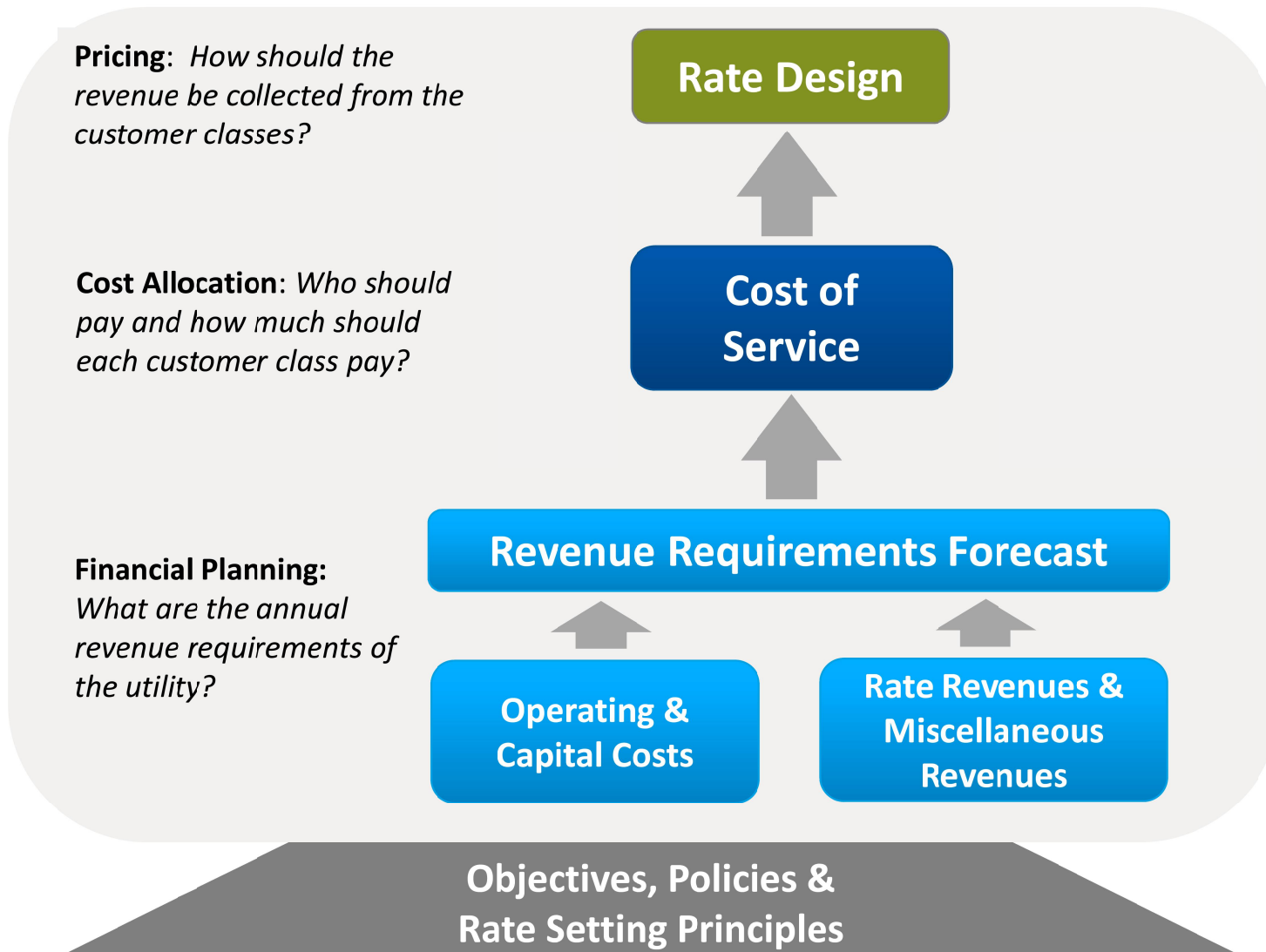
ASSUMPTIONS

FINANCIAL PLAN

BILL COMPARISON

QUESTIONS

STUDY APPROACH



ASSUMPTIONS

REVENUE

- Rate Revenue: Projected FY 2017 as Starting Point = \$7.3 Million

- Summary of ERUs Served

Line	Customer Classes	FY 2017	FY 2018
1	Single Family Residential	50,498	50,624
2	Other Developed Properties	39,327	39,425
3	Total ERUs	<u>89,825</u>	<u>90,049</u>
4	Total Customers	<u>32,564</u>	<u>32,645</u>

- Customer Account Growth
 - FY 2018 & FY 2019 – 0.25%
 - FY 2020 & FY 2021 – 0.50%
 - FY 2022 – 0.75%

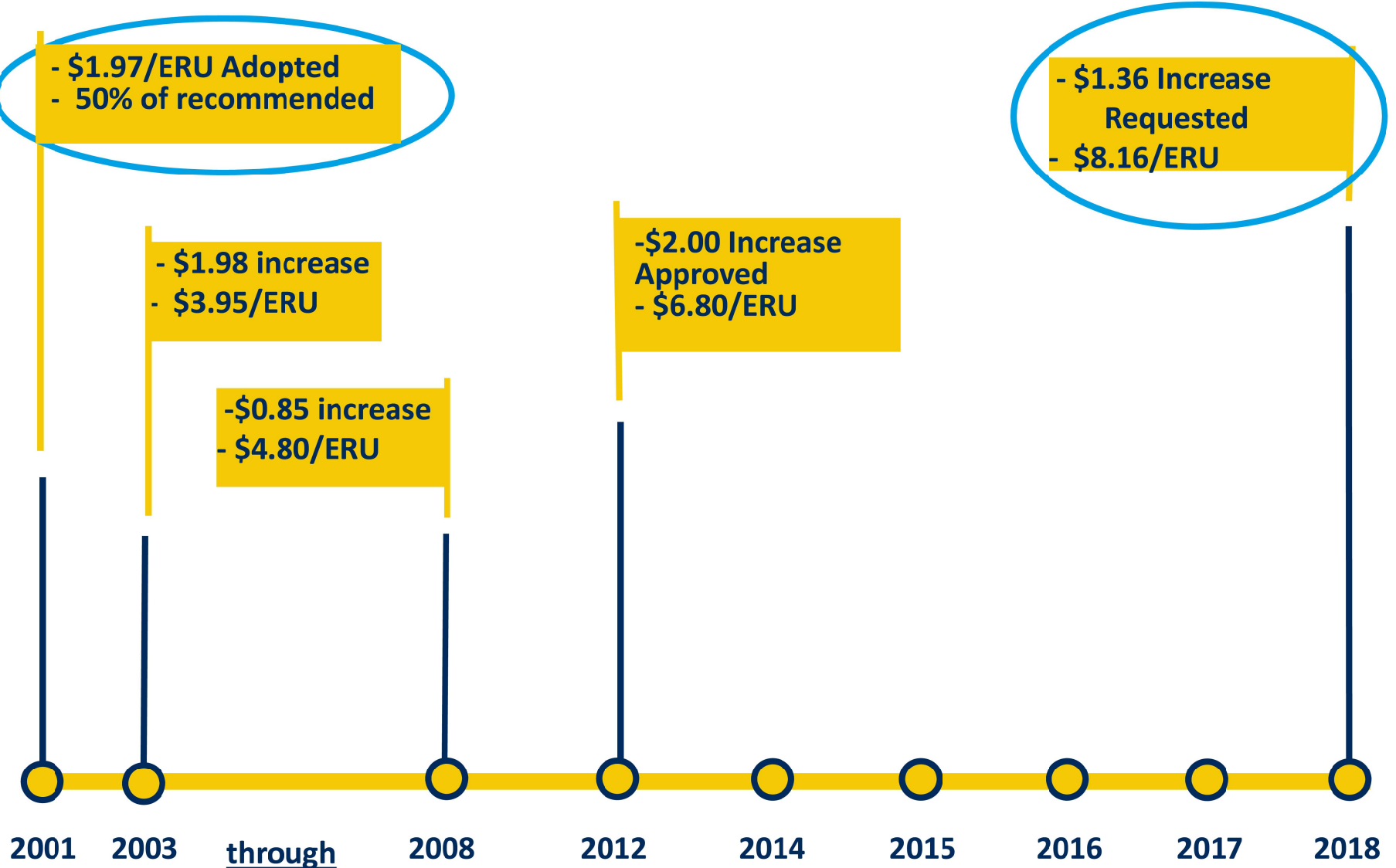
REVENUE

- **Other Revenue: Projected FY 2018 as Starting Point = \$81,800**
 - Interest Income - \$48,600 (@ assumed interest rate of 0.5%)
 - Other Sources - \$35,000
- **Delinquencies & Uncollectables:**
 - Estimated at approximately \$200,000 annually

REVENUE REQUIREMENTS

- **O&M: FY 2018 Budget as Starting Point = \$6.1 Million**
 - Annual Increase in O&M of 4%, reviewed and adjusted annually.
 - Includes incremental O&M
 - Implementation of Capital Program (staff augmentation)
 - Grows from \$0.5 million (FY 2018) to \$1.3 million (FY 2022)
- **No Existing Debt Service**
- **Annual Bond Issuance forecasted**
 - Revenue Bond Issuances (Term – 30 Years)
 - FY 2019 through FY 2022 (Annual Issuances)
 - Rate (%) – 5%
- **Annual “Pay-go” funded from rate revenue adjusted annually based on actual CIP requirements**

HISTORY OF REVENUE ADJUSTMENTS



Note:

1. The 2001 rate of \$1.97 represent the first stormwater charge furnished to customer for stormwater services.



HISTORY OF TYPICAL RESIDENTIAL BILL

DESCRIPTION	FISCAL YEAR	
	2008	2017
Historical Typical Residential Bill	\$4.80	\$6.80
Average Annual Increase	3.9%	

The increase in the typical bill from FY 2008 to FY 2017 reflects an annual average increase of 3.9%

FINANCIAL PLAN - SCENARIOS

FINANCIAL PLAN

• FY 2018 through FY 2022 Financial Plan Scenarios

Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Description: - \$93.0 million in CIP Projects (over 5 years) - Multi-Year Rate Increases (FY 2018 through FY 2022) - Cash and Revenue Bond Financing	Description: - \$12.3 million in CIP Projects (over 5 years) - FY 2018 Rate Increase - Cash and Revenue Bond Financing	Description: - \$20.0 million in CIP Projects (over 5 years) - FY 2018 Rate Increase - Cash and Revenue Bond Financing	Description: - \$40.0 million in CIP Projects (over 5 years) - FY 2018 Rate Increase - Cash and Revenue Bond Financing	Description: - \$64.0 million in CIP Projects (over 5 years) - FY 2018 Rate Increase - Cash and Revenue Bond Financing

FINANCIAL PLAN – REVENUE INCREASE COMPARISON

Fiscal Year	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
PROPOSED REVENUE INCREASES					
2018	20.0%	15.0%	21.0%	37.0%	73.5%
2019	18.0%	0.0%	0.0%	0.0%	0.0%
2020	18.0%	0.0%	0.0%	0.0%	0.0%
2021	16.0%	0.0%	0.0%	0.0%	0.0%
2022	16.0%	0.0%	0.0%	0.0%	0.0%
PROPOSED RATES					
2018	\$8.16	\$7.82	\$8.23	\$9.32	\$11.80
2019	\$9.63	\$7.82	\$8.23	\$9.32	\$11.80
2020	\$11.36	\$7.82	\$8.23	\$9.32	\$11.80
2021	\$13.18	\$7.82	\$8.23	\$9.32	\$11.80
2022	\$15.29	\$7.82	\$8.23	\$9.32	\$11.80
PROPOSED RATE INCREASES					
2018	\$1.36	\$1.02	\$1.43	\$2.52	\$5.00
2019	\$1.47				
2020	\$1.73				
2021	\$1.82				
2022	\$2.11				

PROPOSED REVENUE ADJUSTMENTS - ASSUMPTIONS

- Maintain the existing stormwater service charge structure
 - Charge based upon estimated system wide billable ERUs (i.e. stormwater billing units)
- Revenue adjustments are applied to all stormwater customer classes served by the City
- Rates are effective as of July 1st of each fiscal year
- Maintain adequate revenues to meet operating requirements
- Provide stability and sufficiency to meet anticipated stormwater revenue bond issuance

FINANCIAL PLAN - SUMMARY RESULTS

FY 2017 & FY 2018 REVENUE COMPARISON – SCENARIO 1

Line	Description	Fiscal Years:		
		2017 ⁽¹⁾	2018 ⁽¹⁾	Difference
1	Existing Revenues	\$ 7,330	\$ 7,348	0.2%
	Additional Revenue Required ⁽²⁾ :			
	Fiscal Year			% Increase
2	2018		\$1,470	20.00%
3	Total User Rate Revenues	\$ 7,330	\$ 8,818	20.3%
4	Delinquencies/Uncollectables	\$ (200)	\$ (201)	
5	Other Revenues	\$ 41	\$ 41	
6	Interest Income	\$ 50	\$ 47	-6.6%
7	Total System Revenues	\$ 7,221	\$ 8,705	20.6%

Notes:

1. All revenues outlined herein are presented in thousands of dollars.
2. Line 2, the proposed additional revenue required represents the forecasted increase in FY 2018 revenues associated with the proposed 20.0% revenue increase.

CAPITAL FINANCING PLAN BY SCENARIO

LINE	DESCRIPTION	SCENARIOS				
		1	2	3	4	5
Fiscal Years 2018-2022 Capital Financing Plan (\$ Millions)						
Sources of Capital Project Funds:						
1	Cash Funded CIP	\$20.4	\$4.4	\$4.0	\$16.0	\$22.0
Project Fund Deposits from Revenue Bonds:						
2	Fiscal Year 2018	\$0	\$0	\$0	\$0	\$42.0
3	Fiscal Year 2019	\$19.2	\$2.0	\$16.0	\$24.0	\$0
4	Fiscal Year 2020	\$21.0	\$2.3	\$0	\$0	\$0
5	Fiscal Year 2021	\$16.6	\$1.6	\$0	\$0	\$0
6	Fiscal Year 2022	\$15.8	\$2.0	\$0	\$0	\$0
7	Total Project Fund Deposits from Revenue Bonds	\$72.6	\$7.9	\$16.0	\$24.0	\$42.0
8	Total Funds Available for CIP	\$93.0	\$12.3	\$20.0	\$40.0	\$64.0
9	Cash Funded CIP as % of Total	22%	36%	20%	40%	34%
Uses of Capital Project Funds:						
10	Stormwater System Capital Projects	\$93.0	\$12.3	\$20.0	\$40.0	\$64.0
11	Total Funds Required for CIP	\$93.0	\$12.3	\$20.0	\$40.0	\$64.0

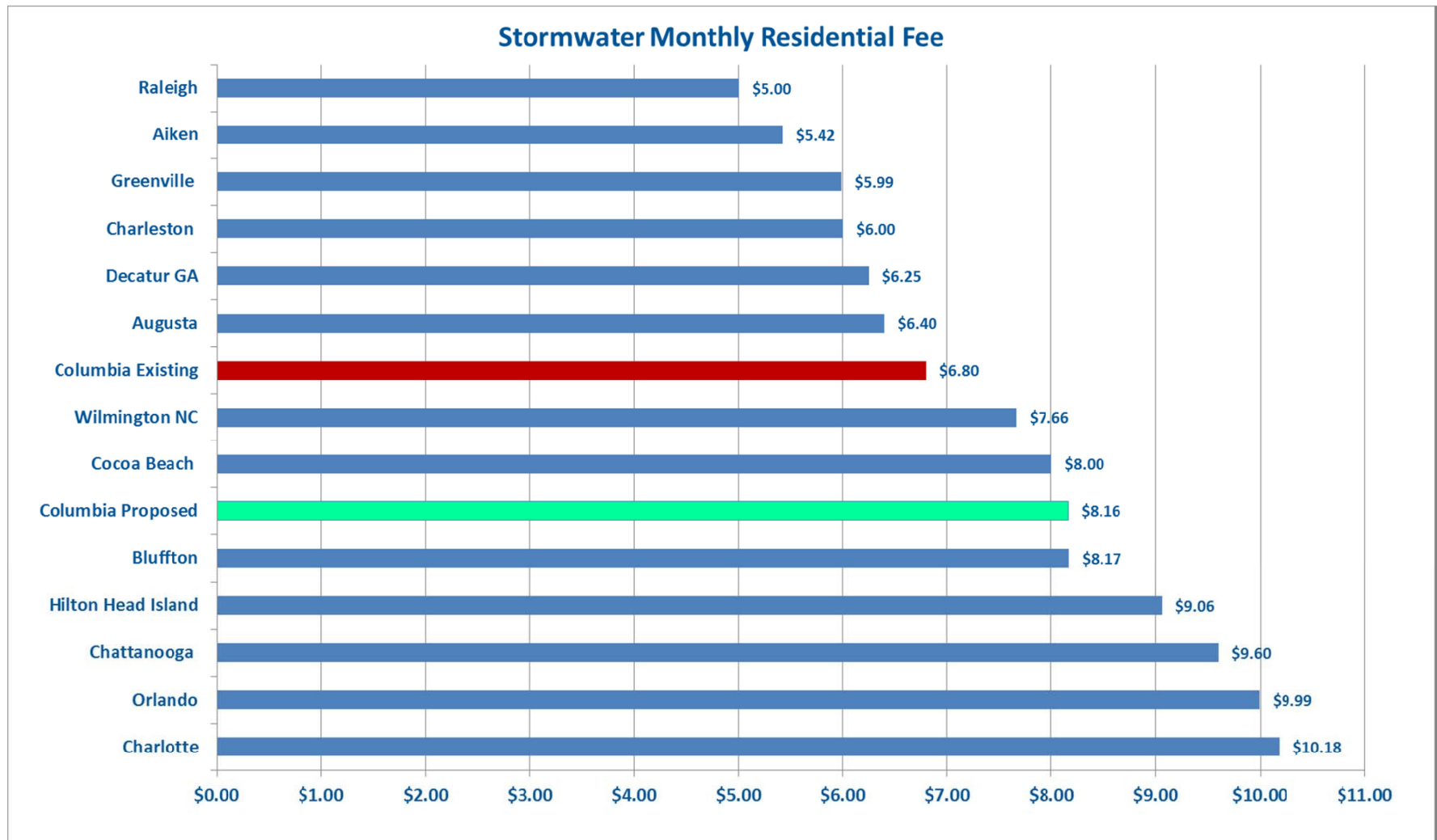
FINANCIAL PLAN SUMMARY RESULTS

LINE	DESCRIPTION	SCENARIOS				
		1	2	3	4	5
1	Fiscal Year 2018 Revenue Increase	20.0%	15.0%	21.0%	37.0%	73.5%
2	Fiscal Year 2019 Revenue Increase	18.0%	0.0%	0.0%	0.0%	0.0%
3	Fiscal Year 2020 Revenue Increase	18.0%	0.0%	0.0%	0.0%	0.0%
4	Fiscal Year 2021 Revenue Increase	16.0%	0.0%	0.0%	0.0%	0.0%
5	Fiscal Year 2022 Revenue Increase	16.0%	0.0%	0.0%	0.0%	0.0%
Fiscal Year 2018 Projections (\$ Millions)						
6	Revenue from Proposed Rates	\$8.8	\$8.5	\$8.9	\$10.0	\$12.7
7	O&M Expense	\$6.1	\$5.6	\$5.6	\$5.6	\$6.0
8	Debt Service	\$0	\$0	\$0	\$0	\$1.6
9	Cash Funded CIP	\$1.3	\$2.0	\$1.2	\$4.0	\$0.0
10	Capital Outlay	\$1.2	\$0.2	\$0.2	\$0.2	\$1.2
11	Operating Balance (To meet fund balance target)	\$0.2	\$0.6	\$0.9	\$0.1	\$3.0
12	Total Revenue Requirements	\$8.7	\$8.4	\$8.8	\$9.9	\$12.6
13	Less: Other Revenues and Adjustments	\$(0.1)	\$(0.1)	\$(0.1)	\$(0.1)	\$(0.1)
14	Net Revenue Requirements to be Recovered by Revenue from Rates	\$8.8	\$8.5	\$8.9	\$10.0	\$12.7
15	Debt Service Coverage	N/A	N/A	N/A	N/A	N/A
16	Target Debt Service Coverage Ratio	2.00	2.00	2.00	2.00	2.00



BILL COMPARISON

STORMWATER CUSTOMER BILL IMPACTS FY 2018



QUESTIONS?

WATER AND SEWER RATE STUDY UPDATE

MAY 9, 2017

RATE STUDY UPDATE

2.c

ASSUMPTIONS

MINIMUM ALLOWANCE SUMMARY

FINANCIAL PLAN

BILL COMPARISON & IMPACTS

QUESTIONS

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

STUDY APPROACH

Pricing: *How should the revenue be collected from the customer classes?*

Cost Allocation: *Who should pay and how much should each customer class pay?*

Financial Planning: *What are the annual revenue requirements of the utility?*

Rate Design

Cost of Service

Revenue Requirements Forecast

Operating & Capital Costs

Rate Revenues & Miscellaneous Revenues

Objectives, Policies & Rate Setting Principles

EXISTING WATER AND SEWER RATES - RESIDENTIAL

2.c

Line	Description	Water	Sewer
	Monthly Service Charges* (Inside City):		
1	5/8"	\$6.60	\$6.60
2	1.0"	\$11.02	\$6.60
3	1.5"	\$16.50	\$6.60
4	2.0"	\$26.50	\$10.56
5	3.0"	\$52.80	\$21.12
6	4.0"	\$82.50	\$33.00
7	6.0"	\$165.20	\$66.00
8	8.0"	\$264.00	\$105.60
9	10.0"	\$524.17	\$165.00
	Volumetric Rates (Inside City):		
10	Block 1 (min. allow. – 300 CF)	\$0.00	
11	Block 2 (301 – 10,000 CF)	\$2.37	
12	Block 3 (10,001 – 100,000 CF)	\$2.25	
13	Block 4 (Above 100,000 CF)	\$2.13	
14	All Usage (per CF)		\$3.43

* Note:

1. The Monthly Service Charges includes a minimum allowance of 300 CF for all water usage.

ASSUMPTIONS

REVENUE

2.c

- **Rate Revenue: Estimated FY 2017 as Starting Point = \$131.7 Million**
 - 1% Customer Account and Volume Growth.
 - State Rates are equal to Commercial rates as of 7/1/2016
- **Other Revenue: Estimated FY 2017 as Starting Point = \$11.5 Million**
 - Ni-America revenue adjusted annually per the proposed contract rates
 - Increase forecasted in FY 2018 before dropping off the System in FY 2019
 - FY 2018 Increase - \$1.9 million
 - Other revenue sources are projected to increase 1.0% per year
 - Interest income
 - Interest Rate – 0.5%

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

FY 2017 & FY 2018 REVENUE COMPARISON

2.c

Line	Description	Fiscal Years:		
		2017 ⁽¹⁾	2018 ⁽¹⁾	Difference
	Existing Revenues:			
1	Water Service - Existing Rates	\$ 81,670	\$ 82,475	1.0%
2	Wastewater Service - Existing Rates	50,045	50,871	1.7%
3	Total Existing Revenues	\$ 131,715	\$ 133,346	1.2%
	Additional Revenue Required ⁽²⁾ :			
	Fiscal Year	% Increase		
4	2018	4.75%	\$6,334	
5	Total User Rate Revenues	\$ 131,715	\$ 139,680	6.0%
6	Billing Adjustments	\$ (1,427)	\$ (1,495)	4.7%
7	Other Revenue Sources ⁽³⁾	\$ 12,927	\$ 14,701	13.7%
8	Total System Revenues	\$ 143,215	\$ 152,886	6.8%

Notes:

1. All revenues outlined herein are presented in thousands of dollars.
2. Line 4, the proposed additional revenue required represents the forecasted increase in FY 2018 revenues associated with the proposed 4.75% revenue increase.
3. Line 7, the 13.7% increase in other revenue sources is primarily driven by the forecasted \$1.9 million Ni-American revenue increase in FY 2018.

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

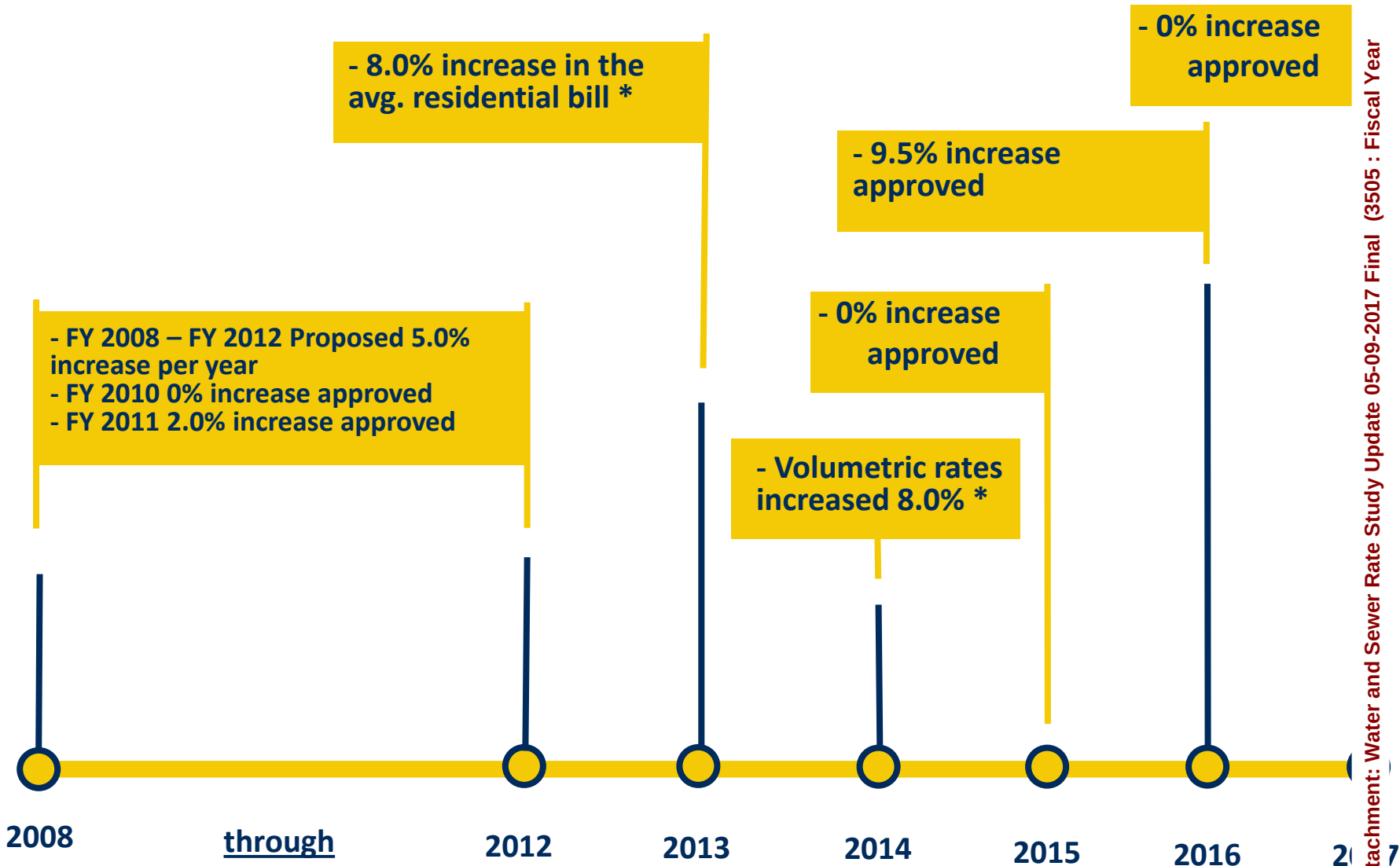
REVENUE REQUIREMENTS

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- **O&M: FY 2018 Budget as Starting Point = \$87.9 Million**
 - Annual Increase in O&M of 4%, reviewed and adjusted annually.
 - Recognition of general market inflation and Clean Water 2020 efforts
- **Outstanding Debt Service Payment = \$28 Million Annually**
 - New Money Revenue Bond Issuances Annually from 2017-2022.
- **Annual “Pay-go” funded from rate revenue adjusted annually based on actuals**
- **West Columbia capital costs (5 yr. total of \$6.6 Million)**
 - FY 2018 = \$1.5 Million
 - FY 2019 = \$0.8 Million
 - FY 2020 = \$2.4 Million
 - FY 2021 = \$1.7 Million
 - FY 2022 = \$0.2 Million

HISTORY OF REVENUE ADJUSTMENTS

2.c



* Note:

1. In FY 2013, the City implemented structural water and sewer rate adjustments.
2. In FY 2014, the City implemented a decrease in base rates and an increase in volumetric rates.

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

HISTORY OF TYPICAL RESIDENTIAL BILL

2.c

DESCRIPTION	FISCAL YEAR	
	2008	2017
Historical Typical Residential Bill	\$37.37	\$52.49
Average Annual Increase	3.8%	

The increase in the typical residential water & sewer bill from FY 2008 to FY 2017 reflects an annual average increase of 3.8%

Note:

- Reflects the typical bill for a residential customer with a 5/8" meter and 800 cubic feet of water usage (approximately 6 thousand gallons)

REVENUE ADJUSTMENTS

2.c

- Programmatic and balanced approach to meeting the City's obligations
 - Operating & Capital Requirements
- 2.0 Debt Service Coverage Ratio Target
- Proposing a 4.75% increase in combined system rate revenues for FY 2018
- Revenue increases are applied across the water and wastewater systems
- All revenue generated from the proposed FY 2018 4.75% revenue increase are applied to fund the capital and operating obligations as applicable

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

MINIMUM ALLOWANCE SUMMARY

MINIMUM ALLOWANCE

2.c

- Serves as a minimum water usage allowance for which a customer pay one specific charge
 - One fixed charge applied to water usage
 - Water volumetric rate assessed to water usage over minimum allowance
 - Customers plan household budgets around the fixed utility bill

Line	Description	Water	Sewer
	Monthly Service Charges* (Inside City):		
1	5/8"	\$6.60	\$6.60
	Volumetric Rates (Inside City):		
2	<u>Block 1 (min. allow. – 300 CF)</u>	<u>\$0.00</u>	
3	Block 2 (301 – 10,000 CF)	\$2.37	
4	Block 3 (10,001 – 100,000 CF)	\$2.25	
5	Block 4 (Above 100,000 CF)	\$2.13	
6	All Usage (per CF)		\$3.43

MINIMUM ALLOWANCE

2.c

- Total Customer Bills within the Minimum Allowance

Line	Description	Inside City	Outside City	Total
1	Total Utility Bills	485,043	1,189,404	1,674,447
	Cumulative Bills:			
2	0 cubic feet	67,542	105,815	173,357
3	100 cubic feet	103,469	174,190	277,659
4	200 cubic feet	149,957	276,490	426,447
5	300 cubic feet	199,153	394,659	593,812
	Percent of Bills:			
6	0 cubic feet	13.9%	8.9%	10.4%
7	100 cubic feet	21.3%	14.6%	16.6%
8	200 cubic feet	30.9%	23.2%	25.5%
9	300 cubic feet	41.1%	33.2%	35.5%

About 49,500 customers are impacted under the current minimum usage allowance scheme

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

FINANCIAL PLAN - SUMMARY RESULTS

FINANCIAL PLAN

- For Period FY 2018 – FY 2022

Scenario 1 – Financial Plan	Scenario 2 – Financial Plan
Conditions: - \$120 Million Annual CIP • \$40 Million – Water; and • \$80 Million – Sewer - Combination of Debt and Cash Financing • 31.0% Cash; • 68.0% Revenue Bonds; and • 1.0% West Columbia	Conditions: - Removal of the minimum allowance • 100 cubic feet reduction per year over three years - \$120 Million Annual CIP • \$40 Million – Water; and • \$80 Million – Sewer - Combination of Debt and Cash Financing • 31.0% Cash; • 68.0% Revenue Bonds; and • 1.0% West Columbia

Balanced financial plans that meet the City's financial metrics

FINANCIAL PLAN SUMMARY – SCENARIO 1

2.c

LINE	DESCRIPTION	2017	2018	2019	2020	2021	2022
1	Revenue Increase	0.0%	4.75%	13.0%	7.4%	7.3%	6.0%
	Fiscal Year 2017 Projections (\$ Millions)						
2	Revenue from Proposed Rates	\$131.7	\$139.7	\$159.5	\$173.0	\$187.4	\$200.0
3	O&M Expense	\$76.8	\$87.9	\$91.5	\$95.1	\$98.9	\$100.0
4	Debt Service	\$29.4	\$32.1	\$37.7	\$43.5	\$48.8	\$50.0
5	Cash Funded CIP	\$14.3	\$12.3	\$26.6	\$32.0	\$37.1	\$40.0
6	Transfers and Other Expenditures	\$4.4	\$4.4	\$4.4	\$4.4	\$4.4	\$4.4
7	Transfer for Flood	\$10.0	\$10.0				
8	Capital Outlay	\$3.0	\$3.1	\$3.2	\$3.4	\$3.5	\$3.5
9	Operating Balance (To meet financial metrics)	\$5.4	\$3.1	\$3.5	\$3.7	\$3.9	\$3.9
10	Total Revenue Requirements	\$143.2	\$152.9	\$166.9	\$182.1	\$196.6	\$211.0
11	Less: Other Revenues and Adjustments	\$11.5	\$13.2	\$7.4	\$9.1	\$9.2	\$9.2
12	Net Revenue Requirements to be Recovered by Revenue from Rates	\$131.7	\$139.7	\$159.5	\$173.0	\$187.4	\$200.0
13	Debt Service Coverage	2.26	2.02	2.00	2.00	2.00	2.00
14	Target Debt Service Coverage Ratio	2.00	2.00	2.00	2.00	2.00	2.00

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

FINANCIAL PLAN SUMMARY – SCENARIO 2

2.c

LINE	DESCRIPTION	2017	2018	2019	2020	2021	2022
1	Revenue Increase	0.0%	1.10%	8.80%	3.40%	7.20%	6.40%
	Fiscal Year 2017 Projections (\$ Millions)						
2	Revenue from Proposed Rates	\$131.7	\$139.6	\$159.4	\$173.1	\$187.4	\$200.0
3	O&M Expense	\$76.8	\$87.9	\$91.5	\$95.1	\$98.9	\$100.0
4	Debt Service	\$29.4	\$32.1	\$37.7	\$43.5	\$48.8	\$50.0
5	Cash Funded CIP	\$14.3	\$12.3	\$26.6	\$32.0	\$37.1	\$40.0
6	Transfers and Other Expenditures	\$4.4	\$4.4	\$4.4	\$4.4	\$4.4	\$4.4
7	Transfer for Flood	\$10.0	\$10.0				
8	Capital Outlay	\$3.0	\$3.1	\$3.2	\$3.4	\$3.5	\$3.6
9	Operating Balance (To meet financial metrics)	\$5.4	\$3.1	\$3.6	\$3.8	\$3.9	\$4.0
10	Total Revenue Requirements	\$143.2	\$152.9	\$166.9	\$182.2	\$196.5	\$210.0
11	Less: Other Revenues and Adjustments	\$11.5	\$13.2	\$7.4	\$9.1	\$9.2	\$9.3
12	Net Revenue Requirements to be Recovered by Revenue from Rates	\$131.7	\$139.6	\$159.4	\$173.1	\$187.4	\$200.0
13	Debt Service Coverage	2.26	2.02	2.00	2.00	2.00	2.00
14	Target Debt Service Coverage Ratio	2.00	2.00	2.00	2.00	2.00	2.00

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

CAPITAL FINANCING PLAN – SCENARIO 1 & 2

2.c

LINE	DESCRIPTION	SCENARIOS					
		2017	2018	2019	2020	2021	2022
	Fiscal Years 2017-2021 Capital Financing Plan (\$ Millions)						
Sources of Capital Project Funds:							
1	Capital Contributions from West Columbia	\$0.2	\$1.5	\$0.8	\$2.4	\$1.7	
2	Cash Funded CIP	\$45.1	\$32.8	\$29.7	\$36.0	\$40.8	\$4
Project Fund Deposits from Revenue Bonds:							
3	Fiscal Year 2017	\$74.7					
4	Fiscal Year 2018		\$85.7				
5	Fiscal Year 2019			\$89.5			
6	Fiscal Year 2020				\$81.6		
6	Fiscal Year 2021					\$77.5	
7	Fiscal Year 2022						\$7
8	Total Project Fund Deposits from Revenue Bonds	\$74.7	\$85.7	\$89.5	\$81.6	\$77.5	\$7
9	Total Funds Available for CIP	\$120.0	\$120.0	\$120.0	\$120.0	\$120.0	\$12
10	Cash Funded CIP as % of Total	38%	29%	25%	32%	35%	3
Uses of Capital Project Funds:							
11	Water System Capital Projects	\$40	\$40	\$40	\$40	\$40	\$
12	Wastewater System Capital Projects	\$80	\$80	\$80	\$80	\$80	\$
13	Total Funds Required for CIP	\$120	\$120	\$120	\$120	\$120	\$

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

PROPOSED ADJUSTMENT

PROPOSED REVENUE ADJUSTMENTS

2.c

Line	Description	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
1	Scenario 1 - Proposed	0.0%	4.75%	13.00%	7.40%	7.30%	6.40%
2	Scenario 2	0.0%	1.10%	8.80%	3.40%	7.20%	6.40%

- Maintain existing rate structures for both water and wastewater rates
- Contractual and other rate customers (West Columbia and For Jackson) rates are adjusted as part of their contractual arrangements and are not reflected in these rate adjustments
- New State Rates are already incorporated into existing rate revenues as of July 1, 2016
- Rate adjustments are made only to other retail customers
- Proposed adjustment maintain adequate and stable revenues to meet all operating and capital requirements

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

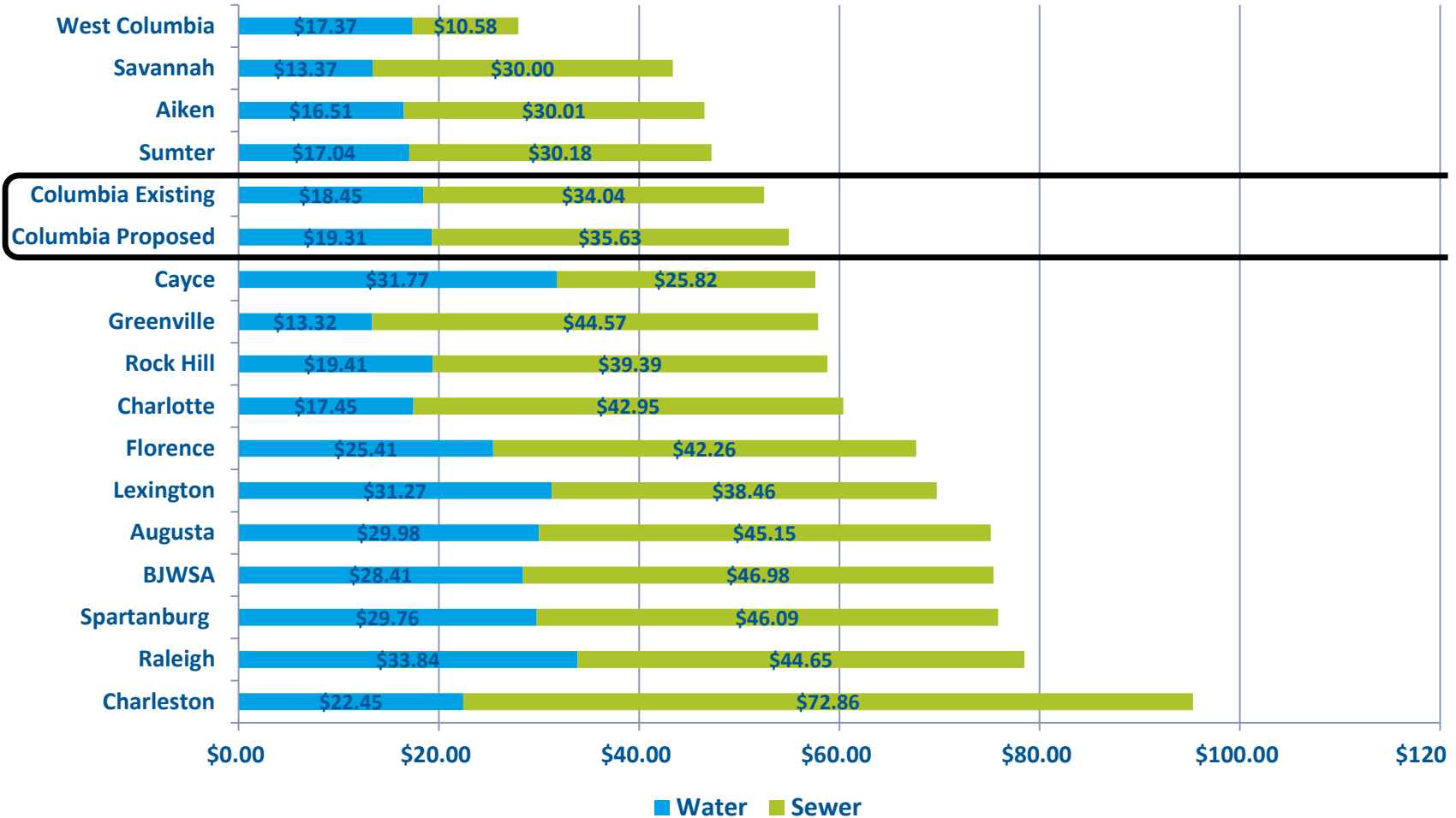
BILL COMPARISON

CUSTOMER BILL COMPARISON

2.c

Residential Inside City Combined Water and Sewer Bill: 5/8" Meter

Water and Sewer Monthly Residential Inside Bill (5,984 Gallons)

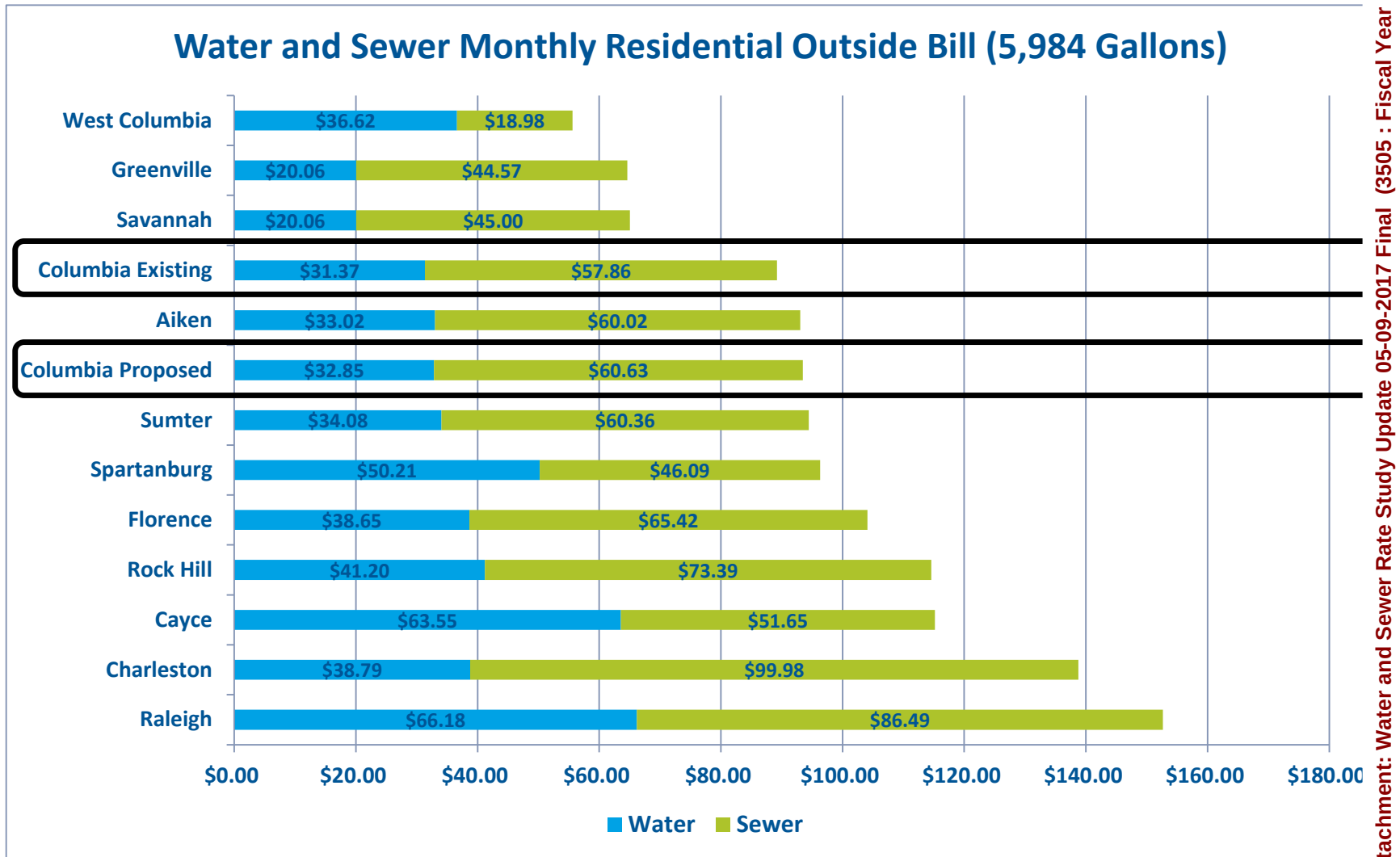


Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

CUSTOMER BILL COMPARISON

2.c

Residential Outside City Combined Water and Sewer Bill: 5/8" Meter



Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

FISCAL YEAR 2018 RATES AND BILL IMPACTS

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 1) 2.c

Residential Inside City Combined Water and Sewer Bill: 5/8" Meter

		Water			Sewer			Total			Bill
Usage	Usage	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff	
CF	Gallons	\$	\$	%	\$	\$	%	\$	\$	%	\$
0	0	\$ 6.60	\$ 6.91	4.75%	\$ 6.60	\$ 6.91	4.75%	\$ 13.20	\$ 13.83	4.75%	\$
100	748	\$ 6.60	\$ 6.91	4.75%	\$ 10.03	\$ 10.51	4.75%	\$ 16.63	\$ 17.42	4.75%	\$
200	1,496	\$ 6.60	\$ 6.91	4.75%	\$ 13.46	\$ 14.10	4.75%	\$ 20.06	\$ 21.01	4.75%	\$
300	2,244	\$ 6.60	\$ 6.91	4.75%	\$ 16.89	\$ 17.69	4.75%	\$ 23.49	\$ 24.61	4.75%	\$
400	2,992	\$ 8.97	\$ 9.40	4.75%	\$ 20.32	\$ 21.29	4.75%	\$ 29.29	\$ 30.68	4.75%	\$
500	3,740	\$ 11.34	\$ 11.88	4.75%	\$ 23.75	\$ 24.88	4.75%	\$ 35.09	\$ 36.76	4.75%	\$
600	4,488	\$ 13.71	\$ 14.36	4.75%	\$ 27.18	\$ 28.47	4.75%	\$ 40.89	\$ 42.83	4.75%	\$
700	5,236	\$ 16.08	\$ 16.84	4.75%	\$ 30.61	\$ 32.06	4.75%	\$ 46.69	\$ 48.91	4.75%	\$
Avg. Use	800	\$ 18.45	\$ 19.33	4.75%	\$ 34.04	\$ 35.66	4.75%	\$ 52.49	\$ 54.98	4.75%	\$
	900	\$ 20.82	\$ 21.81	4.75%	\$ 37.47	\$ 39.25	4.75%	\$ 58.29	\$ 61.06	4.75%	\$
	1,000	\$ 23.19	\$ 24.29	4.75%	\$ 40.90	\$ 42.84	4.75%	\$ 64.09	\$ 67.13	4.75%	\$
	1,100	\$ 25.56	\$ 26.77	4.75%	\$ 44.33	\$ 46.44	4.75%	\$ 69.89	\$ 73.21	4.75%	\$
	1,200	\$ 27.93	\$ 29.26	4.75%	\$ 47.76	\$ 50.03	4.75%	\$ 75.69	\$ 79.29	4.75%	\$
	1,300	\$ 30.30	\$ 31.74	4.75%	\$ 51.19	\$ 53.62	4.75%	\$ 81.49	\$ 85.36	4.75%	\$
	1,400	\$ 32.67	\$ 34.22	4.75%	\$ 54.62	\$ 57.21	4.75%	\$ 87.29	\$ 91.44	4.75%	\$
	1,500	\$ 35.04	\$ 36.70	4.75%	\$ 58.05	\$ 60.81	4.75%	\$ 93.09	\$ 97.51	4.75%	\$
	1,600	\$ 37.41	\$ 39.19	4.75%	\$ 61.48	\$ 64.40	4.75%	\$ 98.89	\$ 103.59	4.75%	\$
	1,700	\$ 39.78	\$ 41.67	4.75%	\$ 64.91	\$ 67.99	4.75%	\$ 104.69	\$ 109.66	4.75%	\$
	1,800	\$ 42.15	\$ 44.15	4.75%	\$ 68.34	\$ 71.59	4.75%	\$ 110.49	\$ 115.74	4.75%	\$
	1,900	\$ 44.52	\$ 46.63	4.75%	\$ 71.77	\$ 75.18	4.75%	\$ 116.29	\$ 121.81	4.75%	\$
	2,000	\$ 46.89	\$ 49.12	4.75%	\$ 75.20	\$ 78.77	4.75%	\$ 122.09	\$ 127.89	4.75%	\$

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 1) 2.c

Residential Outside City Combined Water and Sewer Bill: 5/8" Meter

		Water			Sewer			Total			
Usage	Usage	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff	Bill
CF	Gallons	\$	\$	%	\$	\$	%	\$	\$	%	\$
0	0	\$ 11.22	\$ 11.75	4.75%	\$ 11.22	\$ 11.75	4.75%	\$ 22.44	\$ 23.51	4.75%	\$
100	748	\$ 11.22	\$ 11.75	4.75%	\$ 17.05	\$ 17.86	4.75%	\$ 28.27	\$ 29.61	4.75%	\$
200	1,496	\$ 11.22	\$ 11.75	4.75%	\$ 22.88	\$ 23.97	4.75%	\$ 34.10	\$ 35.72	4.75%	\$
300	2,244	\$ 11.22	\$ 11.75	4.75%	\$ 28.71	\$ 30.07	4.75%	\$ 39.93	\$ 41.83	4.75%	\$
400	2,992	\$ 15.25	\$ 15.97	4.75%	\$ 34.54	\$ 36.18	4.75%	\$ 49.79	\$ 52.16	4.75%	\$
500	3,740	\$ 19.28	\$ 20.20	4.75%	\$ 40.37	\$ 42.29	4.75%	\$ 59.65	\$ 62.48	4.75%	\$
600	4,488	\$ 23.31	\$ 24.42	4.75%	\$ 46.20	\$ 48.39	4.75%	\$ 69.51	\$ 72.81	4.75%	\$
700	5,236	\$ 27.34	\$ 28.64	4.75%	\$ 52.03	\$ 54.50	4.75%	\$ 79.37	\$ 83.14	4.75%	\$
Avg. Use	800	\$ 31.37	\$ 32.86	4.75%	\$ 57.86	\$ 60.61	4.75%	\$ 89.23	\$ 93.47	4.75%	\$
	900	\$ 35.40	\$ 37.08	4.75%	\$ 63.69	\$ 66.72	4.75%	\$ 99.09	\$ 103.80	4.75%	\$
	1,000	\$ 39.43	\$ 41.30	4.75%	\$ 69.52	\$ 72.82	4.75%	\$ 108.95	\$ 114.13	4.75%	\$
	1,100	\$ 43.46	\$ 45.52	4.75%	\$ 75.35	\$ 78.93	4.75%	\$ 118.81	\$ 124.45	4.75%	\$
	1,200	\$ 47.49	\$ 49.75	4.75%	\$ 81.18	\$ 85.04	4.75%	\$ 128.67	\$ 134.78	4.75%	\$
	1,300	\$ 51.52	\$ 53.97	4.75%	\$ 87.01	\$ 91.14	4.75%	\$ 138.53	\$ 145.11	4.75%	\$
	1,400	\$ 55.55	\$ 58.19	4.75%	\$ 92.84	\$ 97.25	4.75%	\$ 148.39	\$ 155.44	4.75%	\$
	1,500	\$ 59.58	\$ 62.41	4.75%	\$ 98.67	\$ 103.36	4.75%	\$ 158.25	\$ 165.77	4.75%	\$
	1,600	\$ 63.61	\$ 66.63	4.75%	\$ 104.50	\$ 109.46	4.75%	\$ 168.11	\$ 176.10	4.75%	\$
	1,700	\$ 67.64	\$ 70.85	4.75%	\$ 110.33	\$ 115.57	4.75%	\$ 177.97	\$ 186.42	4.75%	\$
	1,800	\$ 71.67	\$ 75.07	4.75%	\$ 116.16	\$ 121.68	4.75%	\$ 187.83	\$ 196.75	4.75%	\$
	1,900	\$ 75.70	\$ 79.30	4.75%	\$ 121.99	\$ 127.78	4.75%	\$ 197.69	\$ 207.08	4.75%	\$
	2,000	\$ 79.73	\$ 83.52	4.75%	\$ 127.82	\$ 133.89	4.75%	\$ 207.55	\$ 217.41	4.75%	\$

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 2)

2.c

Residential Inside City Combined Water and Sewer Bill: 5/8" Meter

Total Water & Sewer Bill											
Usage	Usage	Existing	Proposed			Percent Increase			Bill Increase		
			2018	2019	2020	2018	2019	2020	2018	2019	2020
CF	Gallons	\$	\$	\$	\$	%	%	%	\$	\$	\$
0	0	\$ 13.20	\$ 13.35	\$ 14.52	\$ 15.01	1.10%	8.80%	3.40%	\$ 0.15	\$ 1.17	\$
100	748	\$ 16.63	\$ 16.81	\$ 18.29	\$ 21.61	1.10%	8.80%	18.14%	\$ 0.18	\$ 1.48	\$
200	1,496	\$ 20.06	\$ 20.28	\$ 24.67	\$ 28.21	1.10%	21.65%	14.33%	\$ 0.22	\$ 4.39	\$
300	2,244	\$ 23.49	\$ 26.14	\$ 31.05	\$ 34.80	11.30%	18.77%	12.08%	\$ 2.65	\$ 4.91	\$
400	2,992	\$ 29.29	\$ 32.01	\$ 37.43	\$ 41.40	9.28%	16.94%	10.60%	\$ 2.72	\$ 5.42	\$
500	3,740	\$ 35.09	\$ 37.87	\$ 43.81	\$ 48.00	7.93%	15.68%	9.55%	\$ 2.78	\$ 5.94	\$
600	4,488	\$ 40.89	\$ 43.74	\$ 50.19	\$ 54.59	6.96%	14.76%	8.77%	\$ 2.85	\$ 6.46	\$
700	5,236	\$ 46.69	\$ 49.60	\$ 56.57	\$ 61.19	6.23%	14.06%	8.16%	\$ 2.91	\$ 6.97	\$
Avg. Use	800	\$ 52.49	\$ 55.46	\$ 62.95	\$ 67.79	5.66%	13.50%	7.68%	\$ 2.97	\$ 7.49	\$
	900	\$ 58.29	\$ 61.33	\$ 69.33	\$ 74.38	5.21%	13.05%	7.29%	\$ 3.04	\$ 8.00	\$
	1,000	\$ 64.09	\$ 67.19	\$ 75.71	\$ 80.98	4.84%	12.68%	6.96%	\$ 3.10	\$ 8.52	\$
	1,100	\$ 69.89	\$ 73.05	\$ 82.09	\$ 87.58	4.53%	12.37%	6.68%	\$ 3.16	\$ 9.04	\$
	1,200	\$ 75.69	\$ 78.92	\$ 88.47	\$ 94.17	4.27%	12.10%	6.45%	\$ 3.23	\$ 9.55	\$
	1,300	\$ 81.49	\$ 84.78	\$ 94.85	\$ 100.77	4.04%	11.87%	6.24%	\$ 3.29	\$ 10.07	\$
	1,400	\$ 87.29	\$ 90.65	\$ 101.23	\$ 107.37	3.84%	11.68%	6.06%	\$ 3.36	\$ 10.58	\$
	1,500	\$ 93.09	\$ 96.51	\$ 107.61	\$ 113.96	3.67%	11.50%	5.90%	\$ 3.42	\$ 11.10	\$
	1,600	\$ 98.89	\$ 102.37	\$ 113.99	\$ 120.56	3.52%	11.35%	5.76%	\$ 3.48	\$ 11.62	\$
	1,700	\$ 104.69	\$ 108.24	\$ 120.37	\$ 127.16	3.39%	11.21%	5.64%	\$ 3.55	\$ 12.13	\$
	1,800	\$ 110.49	\$ 114.10	\$ 126.75	\$ 133.75	3.27%	11.08%	5.53%	\$ 3.61	\$ 12.65	\$
	1,900	\$ 116.29	\$ 119.97	\$ 133.13	\$ 140.35	3.16%	10.97%	5.42%	\$ 3.68	\$ 13.16	\$
	2,000	\$ 122.09	\$ 125.83	\$ 139.51	\$ 146.95	3.06%	10.87%	5.33%	\$ 3.74	\$ 13.68	\$

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 2)

2.c

Residential Outside City Combined Water and Sewer Bill: 5/8" Meter

			Total Water & Sewer Bill								
			Proposed			Percent Increase			Bill Increase		
Usage	Usage	Existing	2018	2019	2020	2018	2019	2020	2018	2019	2020
CF	Gallons	\$	\$	\$	\$	%	%	%	\$	\$	\$
0	0	\$ 22.44	\$ 22.69	\$ 24.68	\$ 25.52	1.10%	8.80%	3.40%	\$ 0.25	\$ 2.00	\$ 2.71
100	748	\$ 28.27	\$ 28.58	\$ 31.10	\$ 36.74	1.10%	8.80%	18.14%	\$ 0.31	\$ 2.52	\$ 3.91
200	1,496	\$ 34.10	\$ 34.48	\$ 41.94	\$ 47.95	1.10%	21.66%	14.33%	\$ 0.38	\$ 7.47	\$ 13.15
300	2,244	\$ 39.93	\$ 44.44	\$ 52.79	\$ 59.17	11.30%	18.77%	12.08%	\$ 4.51	\$ 8.34	\$ 11.01
400	2,992	\$ 49.79	\$ 54.41	\$ 63.63	\$ 70.38	9.28%	16.95%	10.60%	\$ 4.62	\$ 9.22	\$ 10.60
500	3,740	\$ 59.65	\$ 64.38	\$ 74.48	\$ 81.59	7.93%	15.69%	9.55%	\$ 4.73	\$ 10.10	\$ 11.94
600	4,488	\$ 69.51	\$ 74.35	\$ 85.32	\$ 92.81	6.96%	14.76%	8.77%	\$ 4.84	\$ 10.98	\$ 13.30
700	5,236	\$ 79.37	\$ 84.32	\$ 96.17	\$ 104.02	6.23%	14.06%	8.17%	\$ 4.95	\$ 11.85	\$ 14.65
Avg. Use	800	\$ 89.23	\$ 94.29	\$ 107.02	\$ 115.24	5.67%	13.50%	7.68%	\$ 5.06	\$ 12.73	\$ 15.18
	900	\$ 99.09	\$ 104.25	\$ 117.86	\$ 126.45	5.21%	13.05%	7.29%	\$ 5.16	\$ 13.61	\$ 16.45
	1,000	\$ 108.95	\$ 114.22	\$ 128.71	\$ 137.67	4.84%	12.68%	6.96%	\$ 5.27	\$ 14.48	\$ 17.72
	1,100	\$ 118.81	\$ 124.19	\$ 139.55	\$ 148.88	4.53%	12.37%	6.68%	\$ 5.38	\$ 15.36	\$ 18.98
	1,200	\$ 128.67	\$ 134.16	\$ 150.40	\$ 160.10	4.27%	12.10%	6.45%	\$ 5.49	\$ 16.24	\$ 20.24
	1,300	\$ 138.53	\$ 144.13	\$ 161.24	\$ 171.31	4.04%	11.88%	6.24%	\$ 5.60	\$ 17.12	\$ 21.50
	1,400	\$ 148.39	\$ 154.10	\$ 172.09	\$ 182.52	3.85%	11.68%	6.06%	\$ 5.71	\$ 17.99	\$ 22.76
	1,500	\$ 158.25	\$ 164.07	\$ 182.94	\$ 193.74	3.67%	11.50%	5.91%	\$ 5.82	\$ 18.87	\$ 24.02
	1,600	\$ 168.11	\$ 174.03	\$ 193.78	\$ 204.95	3.52%	11.35%	5.77%	\$ 5.92	\$ 19.75	\$ 25.28
	1,700	\$ 177.97	\$ 184.00	\$ 204.63	\$ 216.17	3.39%	11.21%	5.64%	\$ 6.03	\$ 20.63	\$ 26.54
	1,800	\$ 187.83	\$ 193.97	\$ 215.47	\$ 227.38	3.27%	11.09%	5.53%	\$ 6.14	\$ 21.50	\$ 27.80
	1,900	\$ 197.69	\$ 203.94	\$ 226.32	\$ 238.60	3.16%	10.97%	5.43%	\$ 6.25	\$ 22.38	\$ 29.06
	2,000	\$ 207.55	\$ 213.91	\$ 237.16	\$ 249.81	3.06%	10.87%	5.33%	\$ 6.36	\$ 23.26	\$ 30.32

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 1) 2.c

Commercial Inside City Combined Water and Sewer Bill: 5/8" Meter

		Water			Sewer			Total			Bill	f
Usage	Usage	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff		
CF	Gallons	\$	\$	%	\$	\$	%	\$	\$	%		
0	0	\$ 6.60	\$ 6.91	4.75%	\$ 6.60	\$ 6.91	4.75%	\$ 13.20	\$ 13.83	4.75%	\$	13
1,000	7,480	\$ 22.35	\$ 23.41	4.75%	\$ 40.90	\$ 42.84	4.75%	\$ 63.25	\$ 66.25	4.75%	\$	10
2,000	14,960	\$ 44.85	\$ 46.98	4.75%	\$ 75.20	\$ 78.77	4.75%	\$ 120.05	\$ 125.75	4.75%	\$	10
Avg. Use 3,000	22,440	\$ 67.35	\$ 70.55	4.75%	\$ 109.50	\$ 114.70	4.75%	\$ 176.85	\$ 185.25	4.75%	\$	10
4,000	29,920	\$ 89.85	\$ 94.12	4.75%	\$ 143.80	\$ 150.63	4.75%	\$ 233.65	\$ 244.75	4.75%	\$	10
5,000	37,400	\$ 112.35	\$ 117.69	4.75%	\$ 178.10	\$ 186.56	4.75%	\$ 290.45	\$ 304.25	4.75%	\$	10
6,000	44,880	\$ 134.85	\$ 141.26	4.75%	\$ 212.40	\$ 222.49	4.75%	\$ 347.25	\$ 363.74	4.75%	\$	19
7,000	52,360	\$ 157.35	\$ 164.82	4.75%	\$ 246.70	\$ 258.42	4.75%	\$ 404.05	\$ 423.24	4.75%	\$	19
8,000	59,840	\$ 179.85	\$ 188.39	4.75%	\$ 281.00	\$ 294.35	4.75%	\$ 460.85	\$ 482.74	4.75%	\$	19
9,000	67,320	\$ 202.35	\$ 211.96	4.75%	\$ 315.30	\$ 330.28	4.75%	\$ 517.65	\$ 542.24	4.75%	\$	19
10,000	74,800	\$ 224.85	\$ 235.53	4.75%	\$ 349.60	\$ 366.21	4.75%	\$ 574.45	\$ 601.74	4.75%	\$	19

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

CUSTOMER BILL IMPACTS FY 2017: INCREASE TO BOTH WATER AND SEWER (SCENARIO 1) 2.c

Commercial Outside City Combined Water and Sewer Bill: 5/8" Meter

		Water			Sewer			Total			Bill	f
Usage	Usage	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff	Existing	Proposed	Bill Diff		
CF	Gallons	\$	\$	%	\$	\$	%	\$	\$	%		
0	0	\$ 11.22	\$ 11.75	4.75%	\$ 11.22	\$ 11.75	4.75%	\$ 22.44	\$ 23.51	4.75%	\$	07
1,000	7,480	\$ 38.03	\$ 39.84	4.75%	\$ 69.52	\$ 72.82	4.75%	\$ 107.55	\$ 112.66	4.75%	\$	11
2,000	14,960	\$ 76.33	\$ 79.96	4.75%	\$ 127.82	\$ 133.89	4.75%	\$ 204.15	\$ 213.85	4.75%	\$	00
Avg. Use	3,000	\$ 114.63	\$ 120.07	4.75%	\$ 186.12	\$ 194.96	4.75%	\$ 300.75	\$ 315.04	4.75%	\$	09
	4,000	\$ 152.93	\$ 160.19	4.75%	\$ 244.42	\$ 256.03	4.75%	\$ 397.35	\$ 416.22	4.75%	\$	07
	5,000	\$ 191.23	\$ 200.31	4.75%	\$ 302.72	\$ 317.10	4.75%	\$ 493.95	\$ 517.41	4.75%	\$	06
	6,000	\$ 229.53	\$ 240.43	4.75%	\$ 361.02	\$ 378.17	4.75%	\$ 590.55	\$ 618.60	4.75%	\$	05
	7,000	\$ 267.83	\$ 280.55	4.75%	\$ 419.32	\$ 439.24	4.75%	\$ 687.15	\$ 719.79	4.75%	\$	04
	8,000	\$ 306.13	\$ 320.67	4.75%	\$ 477.62	\$ 500.31	4.75%	\$ 783.75	\$ 820.98	4.75%	\$	03
	9,000	\$ 344.43	\$ 360.79	4.75%	\$ 535.92	\$ 561.38	4.75%	\$ 880.35	\$ 922.17	4.75%	\$	02
	10,000	\$ 382.73	\$ 400.91	4.75%	\$ 594.22	\$ 622.45	4.75%	\$ 976.95	\$1,023.36	4.75%	\$	01

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 2)

2.c

Commercial Inside City Combined Water and Sewer Bill: 5/8" Meter

Total Water & Sewer Bill												
			Proposed			Percent Increase			Bill Increase			
Usage	Usage	Existing	2018	2019	2020	2018	2019	2020	2018	2019	2020	
CF	Gallons	\$	\$	\$	\$	%	%	%	\$	\$	\$	
0	0	\$ 13.20	\$ 13.35	\$ 14.52	\$ 15.01	1.10%	8.80%	3.40%	\$ 0.15	\$ 1.17	\$	
1,000	7,480	\$ 63.25	\$ 66.22	\$ 74.52	\$ 79.62	4.70%	12.54%	6.83%	\$ 2.97	\$ 8.30	\$	
2,000	14,960	\$ 120.05	\$ 123.65	\$ 137.00	\$ 144.22	2.99%	10.80%	5.27%	\$ 3.60	\$ 13.36	\$	
Avg. Use 3,000	22,440	\$ 176.85	\$ 181.07	\$ 199.48	\$ 208.82	2.39%	10.17%	4.68%	\$ 4.22	\$ 18.41	\$	
4,000	29,920	\$ 233.65	\$ 238.49	\$ 261.96	\$ 273.42	2.07%	9.84%	4.38%	\$ 4.84	\$ 23.46	\$ 1	
5,000	37,400	\$ 290.45	\$ 295.92	\$ 324.44	\$ 338.03	1.88%	9.64%	4.19%	\$ 5.47	\$ 28.52	\$ 1	
6,000	44,880	\$ 347.25	\$ 353.34	\$ 386.91	\$ 402.63	1.76%	9.50%	4.06%	\$ 6.09	\$ 33.57	\$ 1	
7,000	52,360	\$ 404.05	\$ 410.77	\$ 449.39	\$ 467.23	1.66%	9.40%	3.97%	\$ 6.72	\$ 38.62	\$ 1	
8,000	59,840	\$ 460.85	\$ 468.19	\$ 511.87	\$ 531.83	1.59%	9.33%	3.90%	\$ 7.34	\$ 43.68	\$ 1	
9,000	67,320	\$ 517.65	\$ 525.62	\$ 574.35	\$ 596.44	1.54%	9.27%	3.85%	\$ 7.97	\$ 48.73	\$ 2	
10,000	74,800	\$ 574.45	\$ 583.04	\$ 636.83	\$ 661.04	1.50%	9.22%	3.80%	\$ 8.59	\$ 53.78	\$ 2	

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

CUSTOMER BILL IMPACTS FY 2018: INCREASE TO BOTH WATER AND SEWER (SCENARIO 2)

2.c

Commercial Outside City Combined Water and Sewer Bill: 5/8" Meter

Total Water & Sewer Bill											
			Proposed			Percent Increase			Bill Increase		
Usage	Usage	Existing	2018	2019	2020	2018	2019	2020	2018	2019	2020
CF	Gallons	\$	\$	\$	\$	%	%	%	\$	\$	\$
0	0	\$ 22.44	\$ 22.69	\$ 24.68	\$ 25.52	1.10%	8.80%	3.40%	\$ 0.25	\$ 2.00	\$ 3.08
1,000	7,480	\$ 107.55	\$ 112.61	\$ 126.73	\$ 135.39	4.70%	12.54%	6.84%	\$ 5.06	\$ 14.12	\$ 27.84
2,000	14,960	\$ 204.15	\$ 210.27	\$ 232.98	\$ 245.26	3.00%	10.80%	5.27%	\$ 6.12	\$ 22.72	\$ 41.11
Avg. Use 3,000	22,440	\$ 300.75	\$ 307.93	\$ 339.24	\$ 355.13	2.39%	10.17%	4.68%	\$ 7.18	\$ 31.31	\$ 54.38
4,000	29,920	\$ 397.35	\$ 405.59	\$ 445.50	\$ 465.00	2.07%	9.84%	4.38%	\$ 8.24	\$ 39.91	\$ 67.65
5,000	37,400	\$ 493.95	\$ 503.26	\$ 551.75	\$ 574.87	1.88%	9.64%	4.19%	\$ 9.31	\$ 48.50	\$ 81.92
6,000	44,880	\$ 590.55	\$ 600.92	\$ 658.01	\$ 684.74	1.76%	9.50%	4.06%	\$ 10.37	\$ 57.09	\$ 94.19
7,000	52,360	\$ 687.15	\$ 698.58	\$ 764.27	\$ 794.61	1.66%	9.40%	3.97%	\$ 11.43	\$ 65.69	\$ 107.46
8,000	59,840	\$ 783.75	\$ 796.24	\$ 870.53	\$ 904.48	1.59%	9.33%	3.90%	\$ 12.49	\$ 74.28	\$ 121.73
9,000	67,320	\$ 880.35	\$ 893.91	\$ 976.78	\$ 1,014.35	1.54%	9.27%	3.85%	\$ 13.56	\$ 82.88	\$ 135.00
10,000	74,800	\$ 976.95	\$ 991.57	\$ 1,083.04	\$ 1,124.22	1.50%	9.22%	3.80%	\$ 14.62	\$ 91.47	\$ 148.27

Includes only water and sewer related user charges, does not include stormwater, fire hydrant, fire sprinklers, or any other charges found on customer's water and sewer bills

Attachment: Water and Sewer Rate Study Update 05-09-2017 Final (3505 : Fiscal Year

QUESTIONS?

Fiscal Year 2017/2018 Proposed Budget: Storm Water, Water & Sewer

Joey Jaco, PE

Dana Higgins, PE

May 9, 2017



Overview

- Storm Water
 - Funding Option
 - Project Map
 - Major Projects
- Water & Sewer
 - Funding Option
 - Project Map
 - Major Projects
- Online Bill Estimator

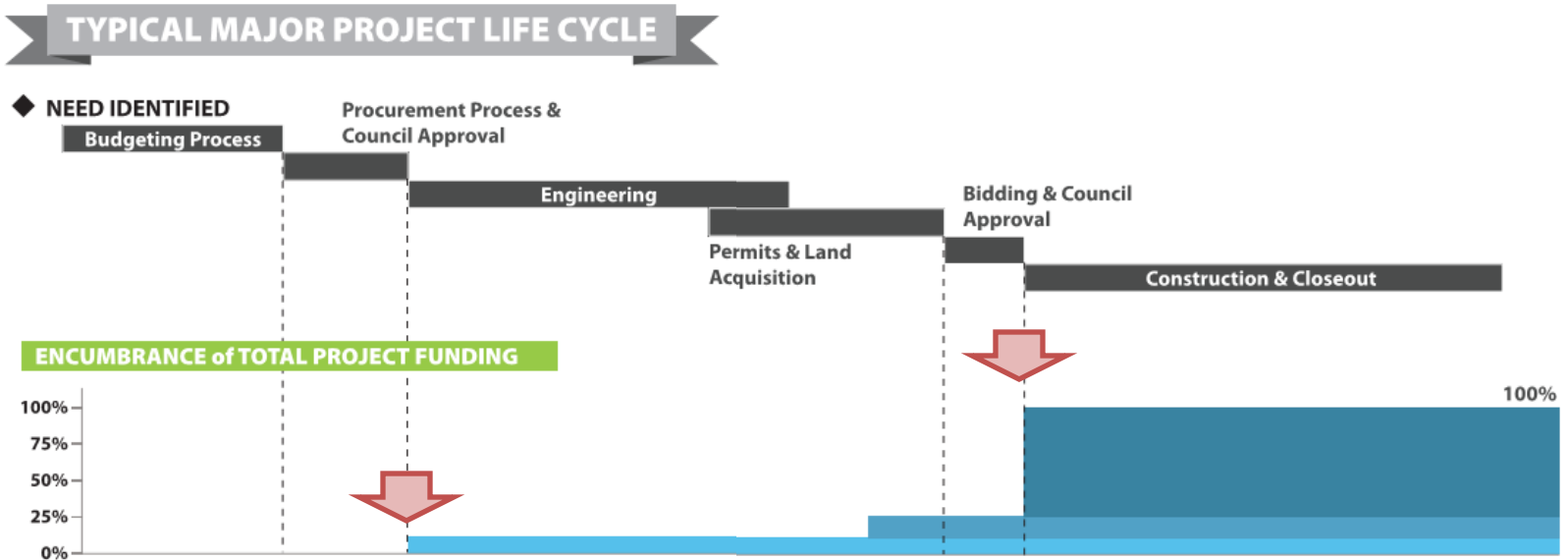


Storm Water Funding Option: Overview

Scenario 1: \$93.0 M CIP	Scenario 2: \$12.3 M CIP	Scenario 3: \$20.0 M CIP	Scenario 4: \$40.0 M CIP	Scenario 5: \$64.0 M CIP
\$93.0 M in CIP projects over 5 years - Multi-year rate increases (FY 2018 through FY 2022) - Cash and revenue bond financing	\$12.3 M in CIP projects over 5 years \$1.02 ERU rate increase in 2018 - Cash and revenue bond financing	\$20.0 M in CIP projects over 5 years \$1.43 ERU rate increase in 2018 - Cash and revenue bond financing	\$40.0 M in CIP projects over 5 years \$2.52 ERU rate increase in 2018 - Cash and revenue bond financing	\$64.0 M in CIP projects over 5 years \$5.00 ERU rate increase in 2018 - Cash and revenue bond financing



Storm Water Major Projects: Lifecycle



Arrows indicate major encumbrances for design & construction

Photos from Around the City



3119 Harrison Road



Earlewood Dog Park



Millwood Avenue @ Gervais Street



Harden Street @ Saluda Avenue



Main Street @ Whaley Street

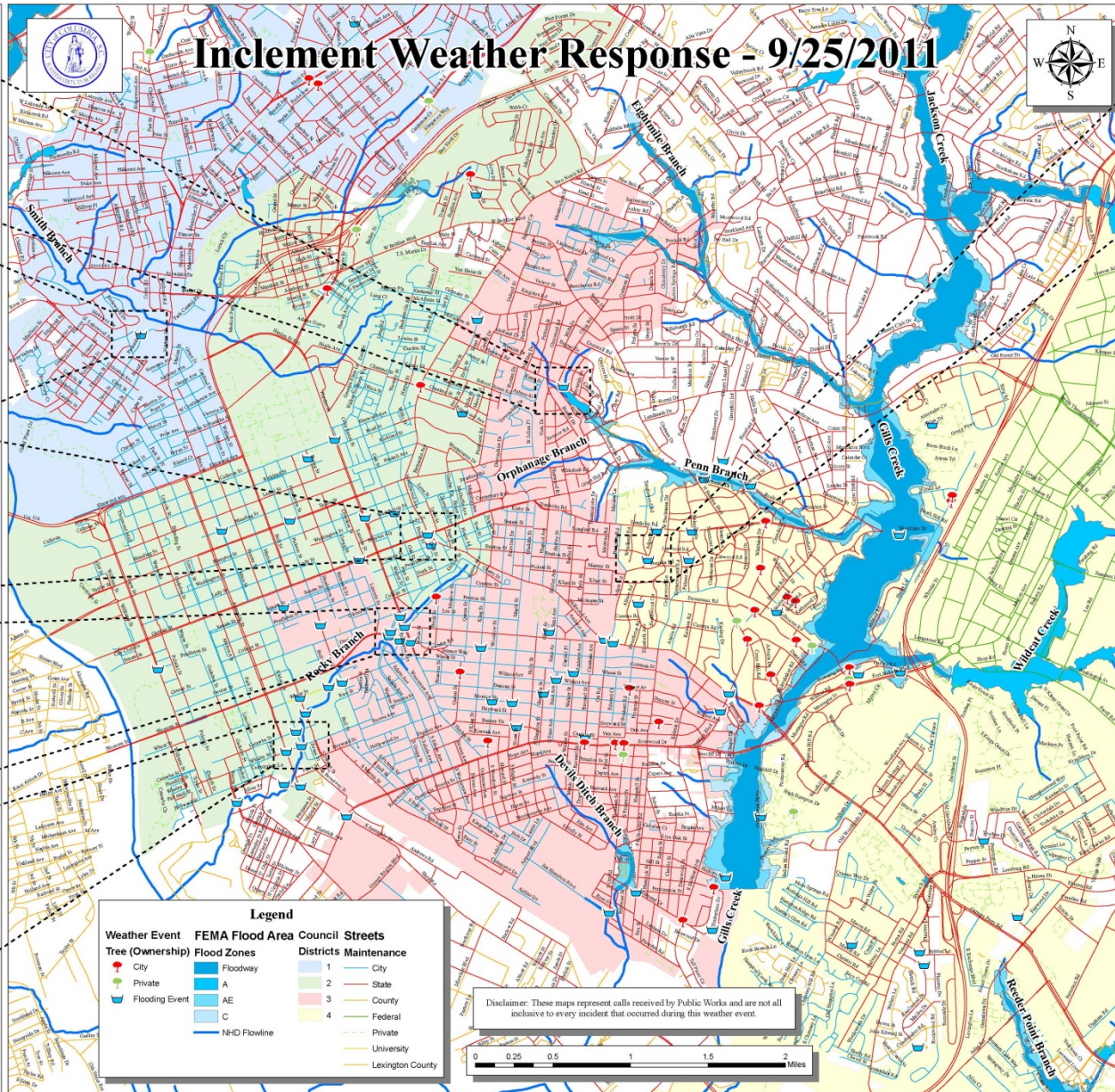
Definitions of FEMA Flood Zone Designations

A – Areas with a 1% annual chance of flooding and a 35% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these areas.

AE – The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRM maps instead of A1-A30 Zones.

C -- Area of minimal flood hazard, usually depicted on FIBMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base

Inclement Weather Response - 9/25/2011



Photos from Around the City



1420 Adger Road

Area Precipitation



Forestry Issues

ADDRESS	OWENSHIP MP	ADDRESS
Two North Road & Chestnut Street	City	2017 Shady Ln
115 South Western Street	City	908 W. 64th St
300 Banks	City	1700 Pennington
Old Street & Killbuck Road	Private	906 Russellville Cir
1000 W. 10th St	Private	1000 W. 10th St
Arbwood	Private	4140 Timber Lake Dr
4975 Beckingham Circle	City	5133 Whitman Dr
1000 W. 10th St	Private	1021 W. 10th St
1619 Rockingham	Private	2400 Beacon St
1000 W. 10th St	Private	425 S. Emerald St
1000 W. 10th St	Private	1718 Foxwood Dr
1000 W. 10th St	Private	1856 W. 10th St
Farmer Road & Vana	Private	1784 Becker
900 Hollins	City	2055 S. 10th St
1000 W. 10th St & William Street	City	4833 Kankakee
Kilbuck & Earl Jackson	City	1015 Lincoln
1000 W. 10th St	Private	Garsons Ferry at Wm
Clashoon & Timberline	City	
1000 South Hollins	City	
Stacy & Downstreet	City	
32 Downing	City	
3023 Harvard Street	City	

Flooding Issues

[illegible]

Storm Water Funding Option: \$20 M

Project	Description	Type of Improvement	Branch	Watershed	Council District	FY 16/17 Funded	FY 17/18 Needed	FY 18/19 Needed	FY 19/20 Needed	Proposed Bond
SD8431	Whaley and Main upgrade	Improvement	Rocky Branch	Lower Congaree	2		\$ 300,000	\$ 1,350,000	\$ 1,350,000	\$ 3,000,000
SD8386	Harlem Heights Drainage Project	Improvement	Smith Branch	Broad River	1		\$ 1,000,000			\$ 1,000,000
SD8433	MLK/Greg Property Detention	Improvement	Rocky Branch	Lower Congaree	2,3		\$ 100,000	\$ 700,000		\$ 800,000
SD8407	Wallace Street Improvements	Improvement	Smith Branch	Broad River	1	\$ 2,000,000	\$ 500,000			\$ 500,000
SD832502	Shandon phase II	Improvement	Gills Creek	Gills Creek	3		\$ 1,000,000	\$11,500,000		\$12,500,000
SD8371	Penn Branch	Improvement	Penn Branch	Gills Creek	4			\$ 500,000		\$ 500,000
SD8059B	Randall Avenue	Improvement	Smith Branch	Broad River	1		\$ 200,000	\$ 800,000		\$ 1,000,000
SD8159	Gregg Street & Gervais Street, Phase 2	Improvement	Rocky Branch	Lower Congaree	3		\$ 150,000	\$ 1,350,000		\$ 1,500,000
Storm Water Total						\$ 2,000,000	\$ 3,250,000	\$16,200,000	\$ 1,350,000	\$20,800,000



Storm Water Funding Option: \$40 M

Project	Description	Type of Improvement	Branch	Watershed	Council District	FY 16/17 Funded	FY 17/18 Needed	FY 18/19 Needed	FY 19/20 Needed	Proposed Bond
SD8431	Whaley and Main upgrade	Improvement	Rocky Branch	Lower Congaree	2		\$ 300,000	\$ 1,350,000	\$ 1,350,000	\$ 3,000,000
SD8386	Harlem Heights Drainage Project	Improvement	Smith Branch	Broad River	1		\$ 1,000,000			\$ 1,000,000
SD8433	MLK/Greg Property Detention	Improvement	Rocky Branch	Lower Congaree	2,3		\$ 100,000	\$ 700,000		\$ 800,000
SD8407	Wallace Street Improvements	Improvement	Smith Branch	Broad River	1	\$ 2,000,000	\$ 500,000			\$ 500,000
SD832502	Shandon phase II	Improvement	Gills Creek	Gills Creek	3		\$ 1,000,000	\$11,500,000		\$12,500,000
SD8371	Penn Branch	Improvement	Penn Branch	Gills Creek	4			\$ 500,000	\$ 500,000	\$ 1,000,000
SD8059B	Randall Avenue	Improvement	Smith Branch	Broad River	1		\$ 200,000	\$ 1,800,000		\$ 2,000,000
SD8159	Gregg Street & Gervais Street, Phase 2	Improvement	Rocky Branch	Lower Congaree	3		\$ 150,000	\$ 1,350,000		\$ 1,500,000
SD8423	Sumter/Catawba Detention	Improvement	Rocky Branch	Lower Congaree	2	\$ 1,000,000	\$ 25,000	\$ 975,000		\$ 1,000,000
SD8395	Taylor/Washington 60" Improvement	Improvement	Rocky Branch	Lower Congaree	2		\$ 150,000	\$ 1,350,000		\$ 1,500,000
SD8435	Whaley at Railroad Crossing	Improvement	Rocky Branch	Lower Congaree	2		\$ 100,000	\$ 900,000		\$ 1,000,000
SD8434	Stream Restoration along Rocky Branch	Improvement	Rocky Branch	Lower Congaree	3		\$ 500,000			\$ 500,000
SD8013	Eightmile Branch from Danfield to Chinaberry	Improvement	Eightmile Branch	Gills Creek	2		\$ 50,000	\$ 350,000		\$ 400,000
SD8437	4000 Old Leesburg	Improvement	Wildcat Branch	Gills Creek	4		\$ 350,000			\$ 350,000
SD8432	Windsor Hill Evaluation and Flood Study	Improvement	Rocky Branch	Lower Congaree	1		\$ 350,000			\$ 350,000
SD8438	800 King and Queen Street from Lee to Preston	Improvement	Rocky Branch	Lower Congaree	3		\$ 350,000			\$ 350,000
SDXXXX	Sumter and Marion Streets Bio-retention Bumpouts	Improvement	Smith Branch	Broad River			\$ 140,000	\$ 1,260,000		\$ 1,400,000
SDXXXX	Gills Creek Debris Removal	Maintenance	Gills Creek	Gills Creek	3		\$10,000,000			\$10,000,000
Storm Water Total						\$ 3,000,000	\$15,265,000	\$22,035,000	\$ 1,850,000	\$39,150,000

Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)



Storm Water Funding Option: \$64 M

Project	Description	Type of Improvement	Branch	Watershed	Council District	FY 16/17 Funded	FY 17/18 Needed	FY 18/19 Needed	FY 19/20 Needed	Proposed Bond
SD8431	Whaley and Main upgrade	Improvement	Rocky Branch	Lower Congaree	2		\$ 300,000	\$ 1,350,000	\$ 1,350,000	\$ 3,000,000
SD8386	Harlem Heights Drainage Project	Improvement	Smith Branch	Broad River	1		\$ 1,000,000			\$ 1,000,000
SD8433	MLK/Greg Property Detention	Improvement	Rocky Branch	Lower Congaree	2,3		\$ 100,000	\$ 700,000		\$ 800,000
SD8407	Wallace Street Improvements	Improvement	Smith Branch	Broad River	1	\$ 2,000,000	\$ 500,000			\$ 500,000
SD832502	Shandon phase II	Improvement	Gills Creek	Gills Creek	3		\$ 1,000,000	\$11,500,000		\$12,500,000
SD8371	Penn Branch	Improvement	Penn Branch	Gills Creek	4			\$ 500,000	\$ 500,000	\$ 1,000,000
SD8059B	Randall Avenue	Improvement	Smith Branch	Broad River	1		\$ 200,000	\$ 1,800,000		\$ 2,000,000
SD8159	Gregg Street & Gervais Street, Phase 2	Improvement	Rocky Branch	Lower Congaree	3		\$ 150,000	\$ 8,850,000		\$ 9,000,000
SD8423	Sumter/Catawba Detention	Improvement	Rocky Branch	Lower Congaree	2	\$ 1,000,000	\$ 25,000	\$ 975,000		\$ 1,000,000
SD8395	Taylor/Washington 60" Improvement	Improvement	Rocky Branch	Lower Congaree	2		\$ 150,000	\$ 1,350,000		\$ 1,500,000
SD8435	Whaley at Railroad Crossing	Improvement	Rocky Branch	Lower Congaree	2		\$ 100,000	\$ 900,000		\$ 1,000,000
SD8434	Stream Restoration along Rocky Branch	Improvement	Rocky Branch	Lower Congaree	3		\$ 500,000			\$ 500,000
SD8013	Eightmile Branch from Danfield to Chinaberry	Improvement	Eightmile Branch	Gills Creek	2		\$ 50,000	\$ 350,000		\$ 400,000
SD8437	4000 Old Leesburg	Improvement	Wildcat Branch	Gills Creek	4		\$ 350,000			\$ 350,000
SD8432	Windsor Hill Evaluation and Flood Study	Improvement	Rocky Branch	Lower Congaree	1		\$ 350,000			\$ 350,000
SD8438	800 King and Queen Street from Lee to Preston	Improvement	Rocky Branch	Lower Congaree	3		\$ 350,000			\$ 350,000
SDXXXX	Sumter and Marion Streets Bio-retention Bumpouts	Improvement	Smith Branch	Broad River			\$ 140,000	\$ 1,260,000		\$ 1,400,000
SDXXXX	Gills Creek Debris Removal	Maintenance	Gills Creek	Gills Creek	3		\$10,000,000			\$10,000,000
	Project Management for Bond Projects	Project Management					\$ 3,207,500			\$ 3,207,500
SD8049	Smith Branch Drainage Area - Tier 1 (not included as separate projects)	Improvement	Smith Branch	Broad River	1, 2				\$ 7,141,250	\$ 7,141,250
SD8436	Rocky Branch Watershed Plan Tier 1 (not included as separate projects)	Improvement	Rocky Branch	Lower Congaree	3				\$ 7,151,250	\$ 7,151,250
Storm Water Total						\$ 3,000,000	\$18,472,500	\$29,535,000	\$16,142,500	\$64,150,000

Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)



Storm Water Funding Option: \$93 M

Project	Description	Type of Improvement	Branch	Watershed	Council District	FY 16/17 Funded	FY 17/18 Needed	FY 18/19 Needed	FY 19/20 Needed	Proposed Bond
SD8431	Whaley and Main upgrade	Improvement	Rocky Branch	Lower Congaree	2		\$ 300,000	\$ 1,350,000	\$ 1,350,000	\$ 3,000,000
SD8386	Harlem Heights Drainage Project	Improvement	Smith Branch	Broad River	1		\$ 1,000,000			\$ 1,000,000
SD8433	MLK/Greg Property Detention	Improvement	Rocky Branch	Lower Congaree	2,3		\$ 100,000	\$ 700,000		\$ 800,000
SD8407	Wallace Street Improvements	Improvement	Smith Branch	Broad River	1	\$ 2,000,000	\$ 500,000			\$ 500,000
SD832502	Shandon phase II	Improvement	Gills Creek	Gills Creek	3		\$ 1,000,000	\$11,500,000		\$12,500,000
SD8371	Penn Branch	Improvement	Penn Branch	Gills Creek	4			\$ 500,000	\$ 500,000	\$ 1,000,000
SD8059B	Randall Avenue	Improvement	Smith Branch	Broad River	1		\$ 200,000	\$ 1,800,000		\$ 2,000,000
SD8159	Gregg Street & Gervais Street, Phase 2	Improvement	Rocky Branch	Lower Congaree	3		\$ 150,000	\$ 8,850,000		\$ 9,000,000
SD8423	Sumter/Catawba Detention	Improvement	Rocky Branch	Lower Congaree	2	\$ 1,000,000	\$ 25,000	\$ 975,000		\$ 1,000,000
SD8395	Taylor/Washington 60" Improvement	Improvement	Rocky Branch	Lower Congaree	2		\$ 150,000	\$ 1,350,000		\$ 1,500,000
SD8435	Whaley at Railroad Crossing	Improvement	Rocky Branch	Lower Congaree	2		\$ 100,000	\$ 900,000		\$ 1,000,000
SD8434	Stream Restoration along Rocky Branch	Improvement	Rocky Branch	Lower Congaree	3		\$ 500,000			\$ 500,000
SD8013	Eightmile Branch from Danfield to Chinaberry	Improvement	Eightmile Branch	Gills Creek	2		\$ 50,000	\$ 350,000		\$ 400,000
SD8437	4000 Old Leesburg	Improvement	Wildcat Branch	Gills Creek	4		\$ 350,000			\$ 350,000
SD8432	Windsor Hill Evaluation and Flood Study	Improvement	Rocky Branch	Lower Congaree	1		\$ 350,000			\$ 350,000
SD8438	800 King and Queen Street from Lee to Preston	Improvement	Rocky Branch	Lower Congaree	3		\$ 350,000			\$ 350,000
SDXXXX	Sumter and Marion Streets Bio-retention Bumpouts	Improvement	Smith Branch	Broad River			\$ 140,000	\$ 1,260,000		\$ 1,400,000
SDXXXX	Gills Creek Debris Removal	Maintenance	Gills Creek	Gills Creek	3		\$10,000,000			\$10,000,000
	Project Management for Bond Projects	Project Management					\$ 4,650,000			\$ 4,650,000
SD8049	Smith Branch Drainage Area - Tier 1 (not included as separate projects)	Improvement	Smith Branch	Broad River	1, 2				\$10,912,500	\$10,912,500
SD8436	Rocky Branch Watershed Plan Tier 1 (not included as separate projects)	Improvement	Rocky Branch	Lower Congaree	3				\$10,912,500	\$10,912,500
SD8049	Smith Branch Drainage Area - Tier 2 (not included as separate projects)	Improvement	Smith Branch	Broad River	1, 2				\$10,912,500	\$10,912,500
SD8436	Rocky Branch Watershed Plan Tier 2 (not included as separate projects)	Improvement	Rocky Branch	Lower Congaree	3				\$ 8,962,500	\$ 8,962,500
Storm Water Total						\$ 3,000,000	\$19,915,000	\$29,535,000	\$43,550,000	\$93,000,000

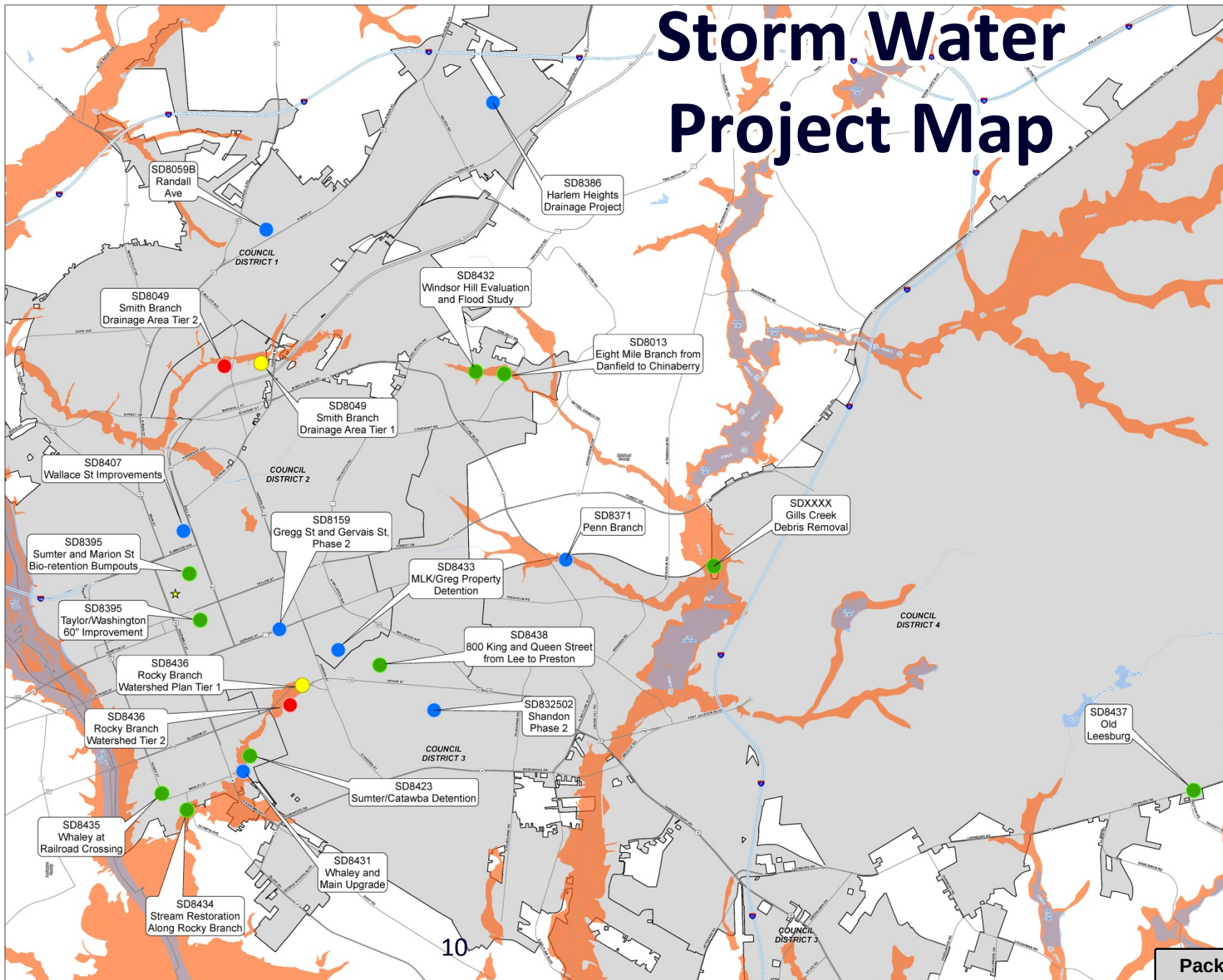
Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)

Storm Water Project Map

2.d

Storm Water
5-Year CIP Funding

- ★ City Hall
- CIP Locations
- \$20M
- \$40M
- \$64M
- \$93M
- Council Dist
- Flood Plain - Zone A, A



Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)



Storm Water Major Projects: SD8431 – Whaley and Main Upgrade

TYPICAL MAJOR PROJECT LIFE CYCLE



- Cost: \$3 M
- Status: Project Identified
 - Design: 2017/2018
 - Construction Phase 1: 2018/2019
 - Construction Phase 2: 2019/2020
 - Estimated Completion: Spring 2020
- Expected Benefits: Infrastructure Improvement



Storm Water Major Projects:

SD8386 – Harlem Heights Drainage Project

TYPICAL MAJOR PROJECT LIFE CYCLE

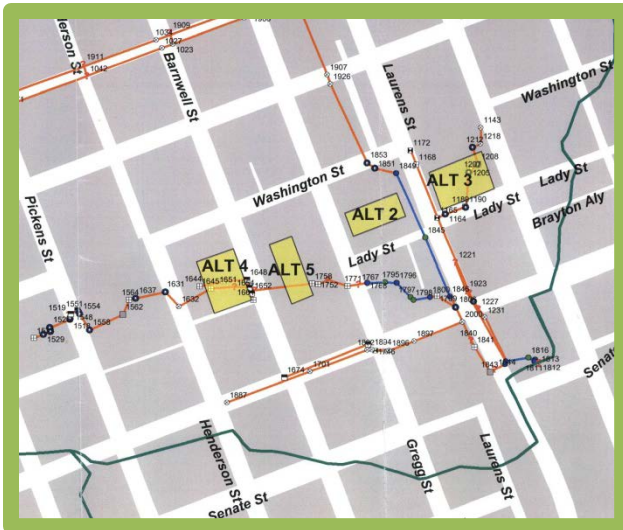


- Cost: \$1 M
- Status: Project Identified
 - Design & Construction: 2017/2018
 - Estimated Completion: Spring 2020
- Expected Benefits: Infrastructure Improvement



Storm Water Major Projects: SD8159 – Greg Street & Gervais Street

TYPICAL MAJOR PROJECT LIFE CYCLE



- Cost: \$ 9 M
- Status: Project Identified
 - Design: 2017/2018
 - Construction: 2019/2020
 - Estimated Completion: Fall 2021
- Expected Benefits: Infrastructure Improvement



Storm Water Major Projects: SD8407 – Wallace Street Improvements

TYPICAL MAJOR PROJECT LIFE CYCLE



- Cost: \$2.5 M
- Status: Construction Underway
 - Construction Started: 2017
 - Estimated Completion: Winter 2018
- Expected Benefits: Infrastructure Improvement



Storm Water Major Projects: SD832502 – Shandon Phase II

TYPICAL MAJOR PROJECT LIFE CYCLE



- Cost: \$12.5 M
- Status: Project Identified
 - Design: 2017/2018
 - Construction: 2018/2019
 - Estimated Completion: Spring 2020
- Expected Benefits: Infrastructure Improvement



Water & Sewer Funding Option: Overview

Scenario 1: 4.75%	Scenario 2: Remove Minimum Allowance
Conditions: • \$120 M Annual CIP • \$40 M –Water • \$80 M – Sewer • Combination of Debt and Cash Financing • 31.0% Cash • 68.0% Revenue Bonds • 1.0% West Columbia	Conditions: • Removal of the minimum allowance • 100 cubic feet reduction per year over three years • \$120 M Annual CIP • \$40 M –Water • \$80 M – Sewer • Combination of Debt and Cash Financing • 31.0% Cash • 68.0% Revenue Bonds • 1.0% West Columbia



Water Project Map

2.d

Water
2017-2018
CIP Projects

- ★ City Hall
- WTP Water Treatment Plant
- CIP Point Lc (e.g. Intersect Improver)
- CIP Line Lc (e.g. Waterline Replacer)
- CIP Polygon (e.g. Neighb Replacer)
- City of Color
- Water Serv
- Council Dist



System-wide CIP	
CIP Number	CIP Name
WM3001	Water Quality Projects (Services & 2" water line replacement)
WM3355	Utility Conflicts
WM3358	Pay Difference Agreements
WM4323	Unforeseen Projects
WM4354	AMR/AMI

17

Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)

Packet Pg. 78

Sewer Project Map

2.d

Waste Water
2017-2018
CIP Projects

Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)

- ★ City Hall
- WTP Metro WWTP
- CIP Point Loc (e.g. Pump Station)
- CIP Line Loc (e.g. Gravity Sewer)
- CIP Polygon (e.g. Substation)
- Basin Boundary
- Council District

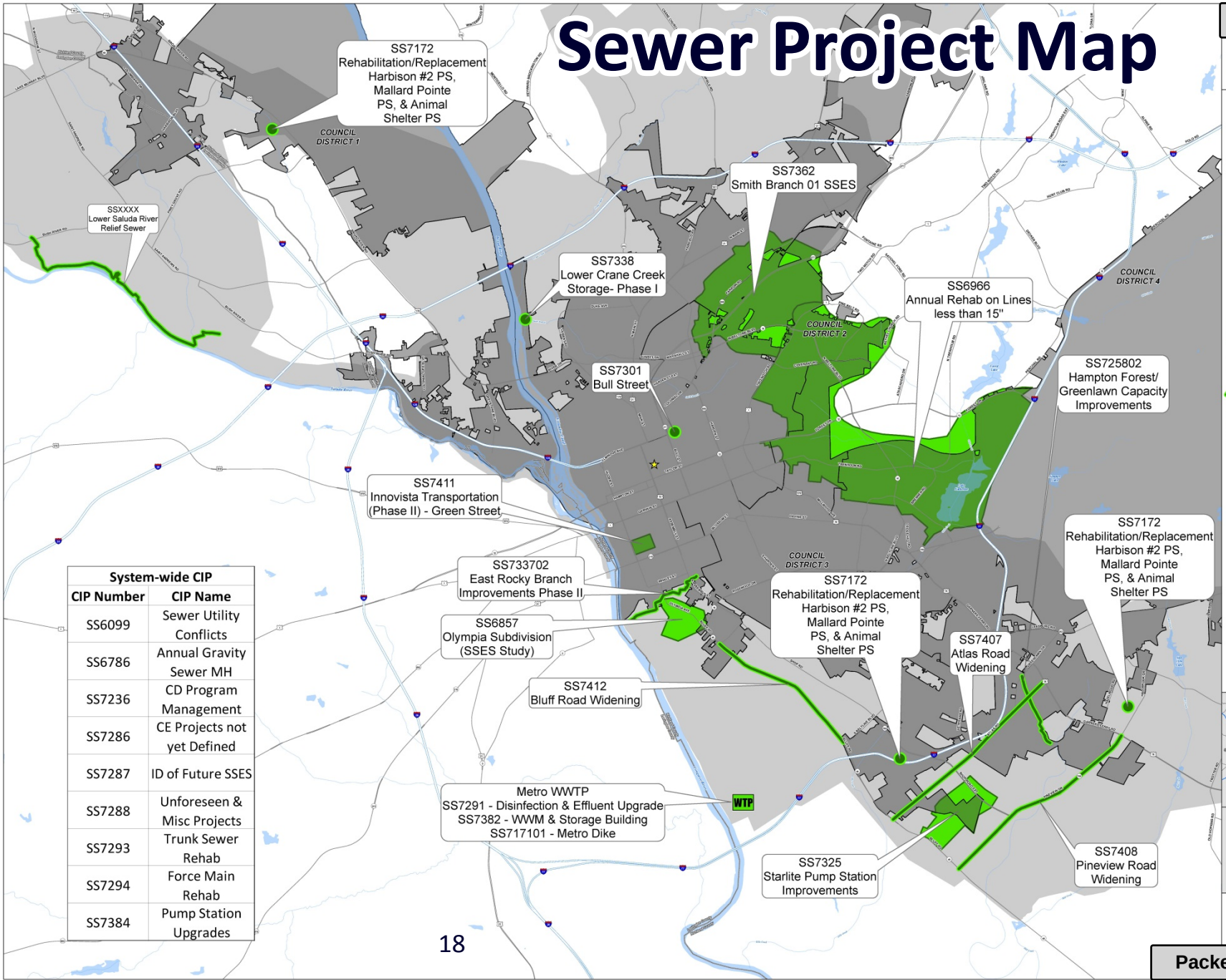


City of Charlotte



Packet Pg. 79

System-wide CIP	
CIP Number	CIP Name
SS6099	Sewer Utility Conflicts
SS6786	Annual Gravity Sewer MH
SS7236	CD Program Management
SS7286	CE Projects not yet Defined
SS7287	ID of Future SSES
SS7288	Unforeseen & Misc Projects
SS7293	Trunk Sewer Rehab
SS7294	Force Main Rehab
SS7384	Pump Station Upgrades



Water & Sewer Major Projects

- Requesting \$120M CIP for FY 17-18
 - \$80M Wastewater CIP
 - Sewer Assessment and Rehab
 - Capacity Enhancing
 - Utility Relocation
 - \$40M Water CIP
 - AMR/AMI
 - Water Quality
 - Utility Relocation



Online Bill Estimator: What You Need

- Before Using Estimator
 - Type of Customer
 - Inside City or Outside City?
 - Water AND sewer?
 - Water Use
 - Typical use: 8 Units
 - Look at Consumption Units on your bill

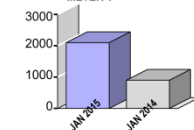
 **CITY OF COLUMBIA**
WATER CUSTOMER SERVICE
1136 WASHINGTON STREET
COLUMBIA, SC 29201-3224
(803) 545-3300

ACCOUNT NUMBER		PREVIOUS BALANCE
12-12345678-1234567-1		0.00
SERVICE ADDRESS		PAYMENTS
123 YOUR ST		0.00
BILL DATE	DUE DATE	TOTAL NET ADJUSTMENT
15-AUG-2015	01-SEP-2015	0.00
TOTAL DUE NOW		\$ 100.48
		BALANCE FORWARD
		0.00
		TOTAL NEW CHARGE
		100.48

ANNUAL WATER QUALITY REPORT The most recent City of Columbia water quality report is always available online at www.COLACCR.com. To request a paper copy, call (803) 545-3300.

 A RESIDENTIAL CUSTOMER
123 YOUR ST
OUTSIDE COLUMBIA SC 29201-1234

WATER CONSUMPTION COMPARISON
METER 1



Billing Summary: OUTSIDE CITY

CONSUMPTION	SERVICE PERIOD	DAYS OF SERVICE	METER NUMBER	PREVIOUS READING	PRESENT READING	CONSUMPTION / UNITS	CONSUMPTION 1 YEAR AGO	CHARGE
Residential Water	07/15/2014 08/15/2015	31	12345678	221	229	8	8	32.16
Residential Sewer	07/15/2014 08/15/2015	31						59.32
Hydrant Fee	07/15/2014 08/15/2015	31						8.00
Fire Fee	07/15/2014 08/15/2015	31						1.00
Total New Charges								100.48



Online Bill Estimator: How It Works

- Visit

www.columbiasc.net/customer-care/estimator

- You answer

About You

Where are you located? *

☒ Inside City Limits
 ☐ Outside City Limits

Which City services do you use? *

☐ Water
☐ Sewer
☒ Water & Sewer

Consumption Units

Use the number of 100 cubic foot units you used. Ex: Type 8 for 800 cubic feet.

Need help with your consumption units?

- Form auto-calculates

The Estimated Bill:	
Current Rates	Proposed Rates
Total Water Charges 18.45	Total Water Charges 19.31
Total Sewer Charges 34.04	Total Sewer Charges 35.63
Stormwater 6.80	Stormwater 6.80
Total 59.29	Total 61.74

How Water And Sewer Charges Are Calculated:

Current Rates			
Breakdown of Current Water Charges			
	Units X	Rate =	Charge
Water Base Charge	1	6.60	6.60
Water Volumetric Charge	5	2.37	11.85
Total Water Charges			18.45

Proposed Rates			
Breakdown of Proposed Water Charges			
	Units X	Rate =	Charge
Water Base Charge	1	6.91	6.91
Water Volumetric Charge	5	2.48	12.40
Total Water Charges			19.31

Breakdown of Current Sewer Charges			
	Units X	Rate =	Charge
Sewer Base Charge	1	6.60	6.60
Sewer Volumetric Charge	8	3.43	27.44
Total Sewer Charges			34.04

Breakdown of Proposed Sewer Charges			
	Units X	Rate =	Charge
Sewer Base Charge	1	6.91	6.91
Sewer Volumetric Charge	8	3.59	28.72
Total Sewer Charges			35.63



Questions?



Completed Sewer Project Map

**CIP Project Value
Over \$200M**

2.d

Recent Major
Sewer System
CIP Projects

Attachment: 2017-05-09-Budget-v4-FINAL (3505 : Fiscal Year 2017/2018 Proposed Budget)

- CIP Point Loc (e.g. Pump St Improvement)
- CIP Line Loca (e.g. Gravity L Improvement)
- Sub-Basin Are Beginning Re Projects
- Metro WWTP
- SSES Project
- ★ City Hall
- City of Colum Sewer Basin



Packet Pg. 84

SSSES Rehab Basins Under-Going Pipe Rehab
Saluda River 03, 10, 12
IN CONSTRUCTION

Crane Creek Phase II Gravity
Gravity Sewer Improvements
COMPLETE

Crane Creek Phase I Gravity
Gravity Sewer Improvements
DESIGN

SSSES Rehab Basins Under-Going Pipe Rehab
Saluda River 06, 07, 08, 13
West Columbia 02
COMPLETE

SS711601 - Saluda River Pump Station
Pump Station Rehab and Wet Weather Storage
COMPLETE

SS71101 - Broad River Pump Station
Pump Station Rehab
COMPLETE

SS7073 - 48", 54", 60" Trunk Line
Trunk Line Rehab
COMPLETE

SS711501 - West Columbia Pump Station
Pump Station Rehab
COMPLETE

SS711502 - 42" Congaree Force Main
Force Main Construction
COMPLETE

Metro WWTP Projects

- SS6871 - Secondary Clarifier Upgrades - **COMPLETE**
- SS6722 - Head Works - **COMPLETE**
- SS7182 - Train 1 Aeration Improvements - **COMPLETE**
- SS7058 - Disinfection Improvements - **COMPLETE**
- SS7197 - DAF Improvements - **COMPLETE**
- SS7155 - Train 2 Pump Station Improvements - **COMPLETE**

SS7102 - North Columbia Pump Station
Pump Station Rehab
COMPLETE

SSSES Rehab Basins
Rocky Branch 01 & Smith Branch 02
IN CONSTRUCTION

Lake Katherine Gravity
Gravity Sewer Improvements
DESIGN

SS7076 - Burnside to Bluff Rd. 30" Gravity
Gravity Sewer Construction
COMPLETE

SS7101 - Mill Creek Pump Station
Pump Station Rehab
COMPLETE