

3.06.18

**2018 SWAC
Meeting #7**

Meeting Topics (review)

1. Extent of Service (EOS)
2. Level of Service (LOS) and Staff Presentation recap
3. Funding Sources and Revenue Options
4. Structural BMP's
5. Stormwater/Watershed Planning
6. Water Quality Compliance
7. Floodplain Management
8. Regulatory Reforms/Ordinances

Level of Service

(recap from last meeting)

Recap of decisions

Level of Service Grade	Program Management and Regulatory Compliance
A	Comprehensive program planning, aggressive state and federal regulatory compliance that exceeds minimum requirements in all cases, state of the art practices, full program implementation
B	Basin master planning, above average state and federal regulatory compliance that exceeds minimum requirements in most cases, systematic program implementation
C	Limited planning, average state and federal regulatory compliance that exceeds minimum requirements in some cases, priority program implementation
D	Minimal planning, minimum required state and federal compliance, partial program implementation
E	No planning, minimum required state and federal compliance, minimal program implementation

- Staff indicated a current level of service of B
- SWAC indicated a current level of service of C
- Staff and SWAC agreed the **desired level of service is B**

Recap of decisions

Level of Service Grade	Operations and Maintenance
A	Fully preventative and proactive maintenance, state of the art practices
B	Fully routine and partially inspections based maintenance
C	Limited routine maintenance, limited inspection based maintenance, partially reactive maintenance
D	No routine or inspection based maintenance, reactive maintenance only
E	Limited reactive maintenance

- Staff indicated a current level of service of C
- SWAC indicated a current level of service of C
- Staff and SWAC agreed the **desired level of service is B**

Recap of decisions

Level of Service Grade	Capital Improvement (CIP)
A	All known CIP needs completed in 10 years
B	All known CIP needs completed in 20 years
C	All known CIP needs completed in 30 years
D	All known CIP needs completed in 40 years
E	All known CIP needs completed in 50 years

- Staff indicated a current level of service of D
- SWAC indicated a current level of service of C
- Staff desired level of service is C
- SWAC desired level of service is B

The group agreed to wait and see how much money was available for CIP before deciding on a level of service and prioritizing CIP needs

Staff Presentation

(recap from December 5th meeting)

Stormwater Needs

- The costs presented in the staff presentation represent the costs required to shift the Greenville stormwater program from a more **reactive** program to a **proactive** program.
 - Capital Replacement
 - Engineering Operational
 - Maintenance Operational

Stormwater Needs

- **Capital Replacement:** Includes replacement of pipes and structures based on a 40 year life cycle

	Full Life Cycle Costs	Annual Costs
Pipes	\$219M	\$5,475,000
Structures	\$51M	\$1,275,000
Less Secondary projects	-\$40M	-\$1,000,000
Total Costs	\$230M	\$5,750,000

Stormwater Needs

- **Engineering Operational:** Includes inventory and assessment, new infrastructure inspection, asset management, and easement acquisition

	Annual Costs
Inventory and Assessment	\$188,000
New Infrastructure Inspection	\$345,000
Asset Management	\$123,000
Easement Acquisition	TBD
Total Costs	\$656,000

Stormwater Needs

- **Maintenance Operational:** Includes open channel and closed system maintenance

	Annual Costs
Open Channel – Maintain Flow	\$575,000
Open Channel – Tree Removal	\$433,000
Closed System – Pipe Cleaning	\$295,000
Closed System – Basin Cleaning	\$157,000
Closed System – Street Sweeping	*
Total Costs	\$1,460,000

*Street sweeping costs were originally included in the staff presentation, but street sweeping is expected to be moved to the solid waste division.

Funding Sources and Revenue Options

Assigning Costs to Desired Level of Service

- **Program Management and Regulatory Compliance:** Level of service costs are assigned based on the current expenses related to program management and regulatory compliance.
- **Operation and Maintenance:** Level of service costs are assigned based on current expenses and new operation and maintenance expenses presented during the staff presentation
- **Capital Improvement:** Costs are not devoted to specific projects and are treated as funds set aside to devote to CIP needs

Program Management and Regulatory Compliance

Level of Service	% of Current Funded	Ramping years	Year 1	Year 2	Year 3	Year 4	Year 5	Approximate Dollar Increase
A	200%	5	120%	140%	160%	180%	200%	\$420,000
B	150%	5	110%	120%	130%	140%	150%	\$215,000
C	100%	0	100%	100%	100%	100%	100%	\$0
D	80%	0	80%	80%	80%	80%	80%	-\$74,000
E	60%	0	60%	60%	60%	60%	60%	-\$157,000

Operation and Maintenance - Current

Level of Service	% of Current Funded	Ramping years	Year 1	Year 2	Year 3	Year 4	Year 5	Approximate Dollar Increase
A	100%	0	100%	100%	100%	100%	100%	\$0
B	100%	0	100%	100%	100%	100%	100%	\$0
C	100%	0	100%	100%	100%	100%	100%	\$0
D	100%	0	100%	100%	100%	100%	100%	\$0
E	100%	0	80%	80%	80%	80%	80%	-\$375,000

Operation and Maintenance - New

Level of Service	% of New Funded	Ramping years	Year 1	Year 2	Year 3	Year 4	Year 5	Approximate Dollar Increase
A	100%	5	20%	40%	60%	80%	100%	\$2,150,000
B	80%	3	27%	53%	80%	80%	80%	\$1,715,000
C	60%	2	30%	60%	60%	60%	60%	\$1,282,000
D	40%	0	40%	40%	40%	40%	40%	\$846,000
E	0%	0	0%	0%	0%	0%	0%	\$0

Note that these expenses are based on the percentage of **new** operation and maintenance costs

Capital Replacement

Level of Service	% of New Funded	Ramping years	Year 1	Year 2	Year 3	Year 4	Year 5	Approximate Dollar Increase
A	100%	5	20%	40%	60%	80%	100%	\$5,900,000
B	80%	3	27%	53%	80%	80%	80%	\$4,757,000
C	60%	2	30%	60%	60%	60%	60%	\$3,536,000
D	40%	0	40%	40%	40%	40%	40%	\$2,300,000
E	0%	0	0%	0%	0%	0%	0%	\$0

Note that these expenses are based on the percentage of costs associated with capital replacement costs that assume a 40 year life cycle.

Other Considerations

- **CIP:** \$1,000,000/year set aside for CIP needs
- **Inflation:** Varies from 2% to 5% depending on the type of expense
- **Rate Base Growth:** 1% growth in equivalent residential units per year

Other Considerations

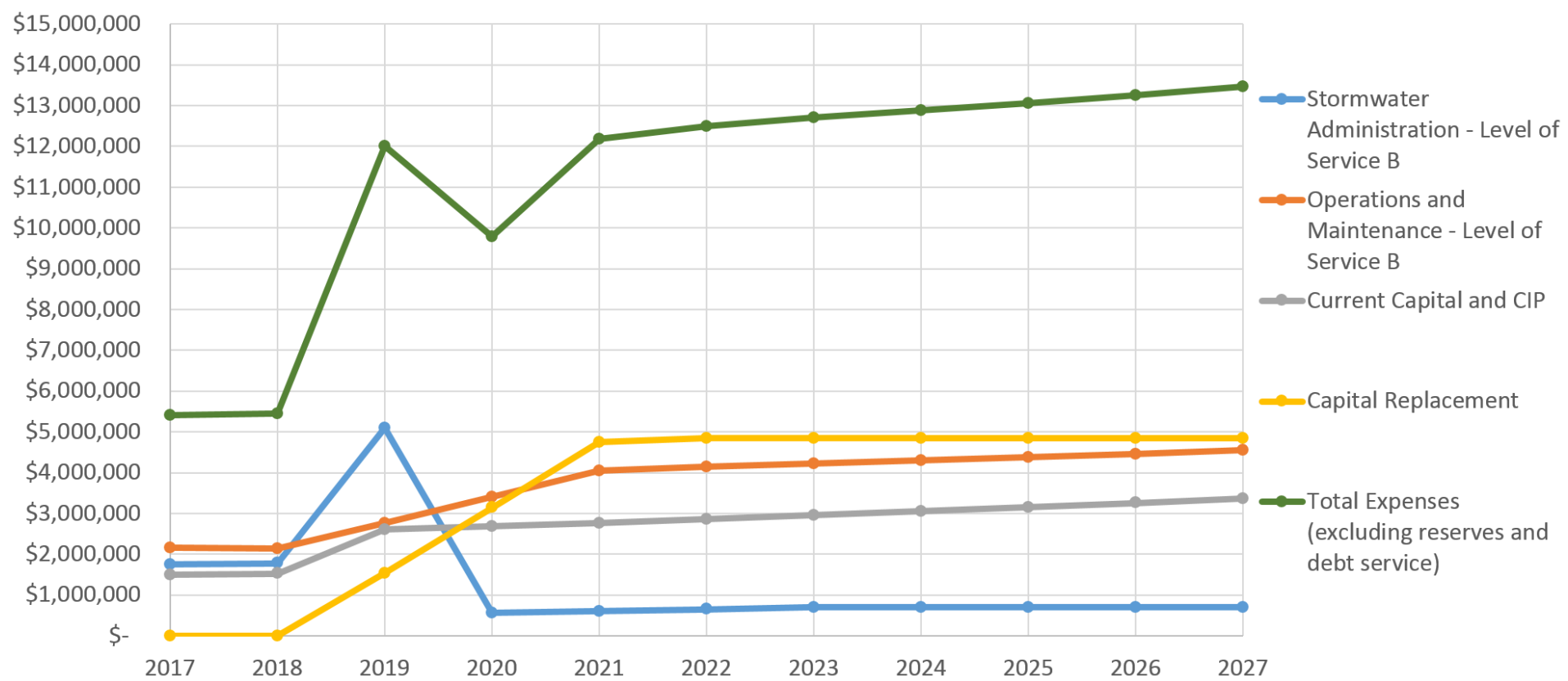
- **Collection Rate:** 92% collection rate on billed impervious area
- **Reserve Funds:** Operating and Emergency reserve funds established.
 - Operating Reserves: \$100,000/year. Operating Fund balance will be \$1,000,000 after 10 years if no funds are used.
 - Emergency Reserves: \$150,000/year. Emergency Fund balance will be \$1,500,000 after 10 years if no funds are used.
 - Long term recommended reserve targets: \$1,500,000 for Operations and Maintenance and \$4,000,000 for Emergency

Revenue Requirements

Revenue Requirements	FY 2020
Stormwater Administration	\$557,870
Operations and Maintenance - Current	\$2,270,605
Operations and Maintenance - New	\$1,139,818
Reserves	\$250,000
Debt Service	\$1,962,300
Rate Funded Capital – Current	\$1,685,524
Capital Replacement – New	\$3,143,333
CIP – New	\$1,000,000
Revenue Offset (Non-Operating Revenue)	-\$489,736
Total Revenue to be Recovered from Rates	\$11,519,713

Note that current revenue is approximately \$6,000,000

Revenue Requirements



Rate Calculations

Rate Calculation	FY 2020
Revenue Requirement	\$11,519,713
Billable ERUs	93,787.95
Number of Bills in a Year	12
Collection Rate	92%
Calculated Rate per ERU per month	~ \$11.10*
Percent Increase over Current Rates	~ 108%

* Approximate rates based on the currently available information

Rate Calculations

Rate Calculation	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Revenue Requirement	\$10,730,072	\$11,519,713	\$13,905,440	\$14,200,370	\$14,414,277
Calculated Rate per ERU per month	~\$10.50*	~\$11.10*	~\$13.30*	~\$13.40*	~\$13.50*
Percent Increase over Current Rates	~96%	~108%	~149%	~151%	~153%

5-Year Average Rate	~\$12.40*
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* Approximate rates based on the currently available information

Residential Customer Impacts

- Under the current rate structure, residential rates would be as follows:

Tier	Impervious Area (Sq. Ft.)	Current Monthly Fee	FY 2020 Monthly Fee	FY 2020 Annual Fee
I	200 – 2,000	\$5.35	~\$11.10*	~\$133.20*
II	2,001 – 4,000	\$10.70	~\$22.20*	~\$266.40*
III	4,001 – 6,000	\$16.05	~\$33.30*	~\$399.60*
IV	Over 6,000	\$21.40	~\$44.40*	~\$532.80*

* Approximate rates based on the currently available information

Discussion

- Do these rates seem palatable?
- If these rates are too high, how can we reduce them?
 - Modify levels of service
 - Reduce capital replacement and/or CIP funding
 - Consider debt financing
 - Explore other revenue sources
 - Review and potentially revise billing policies
 - Modify the rate structure

Next Steps

- What other scenarios do you want to see?
- What other information do you need?
- Any other modifications to the model?

Questions and/or Comments