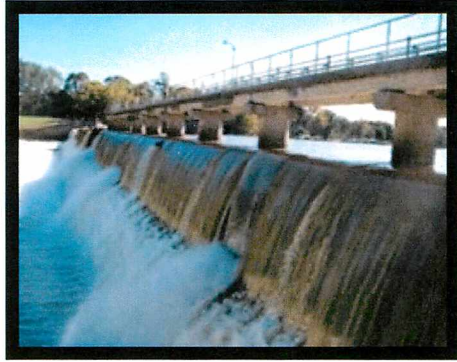


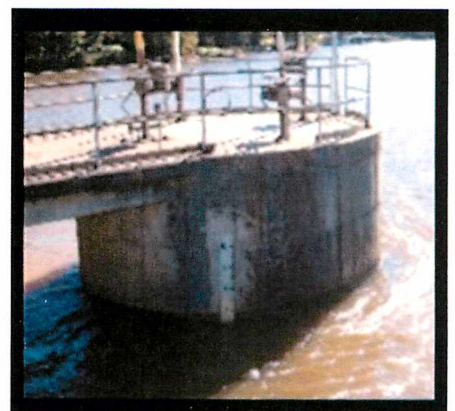
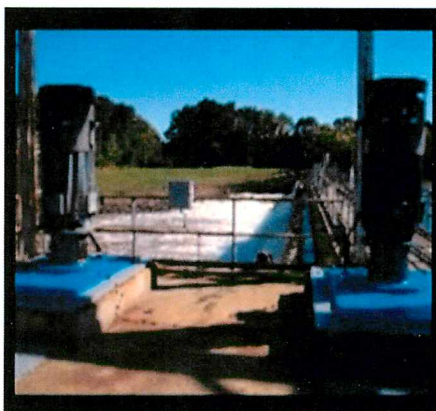
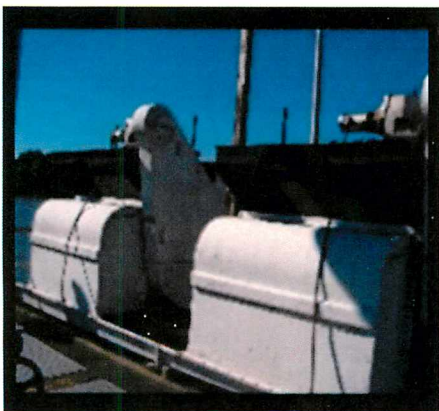
Tar River Water Supply Reservoir & Dam Fact Sheet



- ❖ Water Bond Issued August 18, 1964
- ❖ Completed in 1971 by Crowder Construction Company
- ❖ Structural Height = 35 feet
- ❖ Spillway section overall length = 450 feet with two hinged crest gates also known as bascule gates.
- ❖ Gates in the full up position = 125 feet above sea level. Gates in down position = 120 ft
- ❖ Original hydraulic cylinders and controls were replaced in 2000
- ❖ The six bascule cylinders were rebuilt in 2017
- ❖ Minimum release during Voluntary Conservation (June through October) is 45.3 million gallons per day. Remainder of year, it is 51.7 million gallons
- ❖ Reservoir is 1067 acres and impounds 2.7 billion gallons
- ❖ 2018 condition was rated “satisfactory”. This is highest possible rating

Accessories:

- ❖ Two traveling screens by Rex Corp. Installed 1998
- ❖ Two Raw Water Pumps installed 2000, each 200 HP, 12 million gallons per day. Motors refurbished in 2013 & 2017
- ❖ Three intake gate valves 48” x 48” to be replaced.



Financial Plan and Cost of Service Analysis Update

City of Rocky Mount, North Carolina

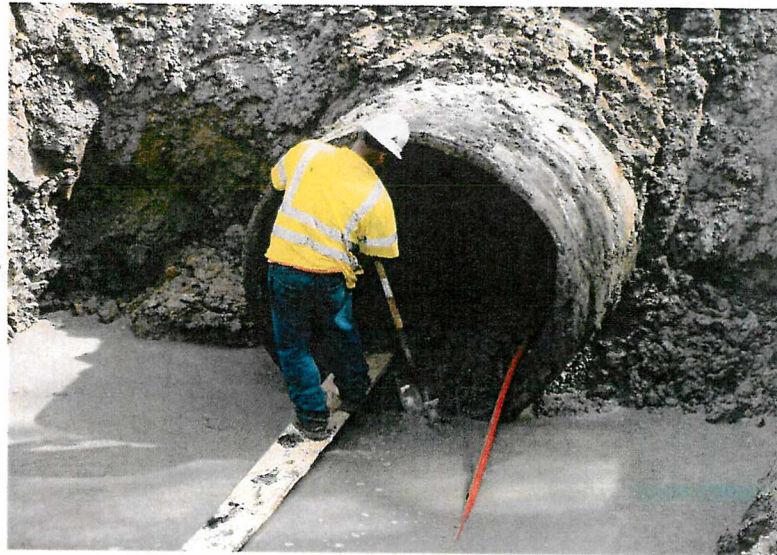
November 5, 2018



Why undertake a Cost of Service Analysis?

The city needs a financial plan and cost of service analysis (COSA) that reflects local knowledge and brings best industry practices to address:

- **Fair and equitable rates and charges (Local & State Statute)**
- **Current and future affordability challenges**
- **Consideration of operational challenges**
- **Integrated financial planning for economic development**
- **Building block to pursue alternative sources of capital and revenue for needed capital reinvestment**



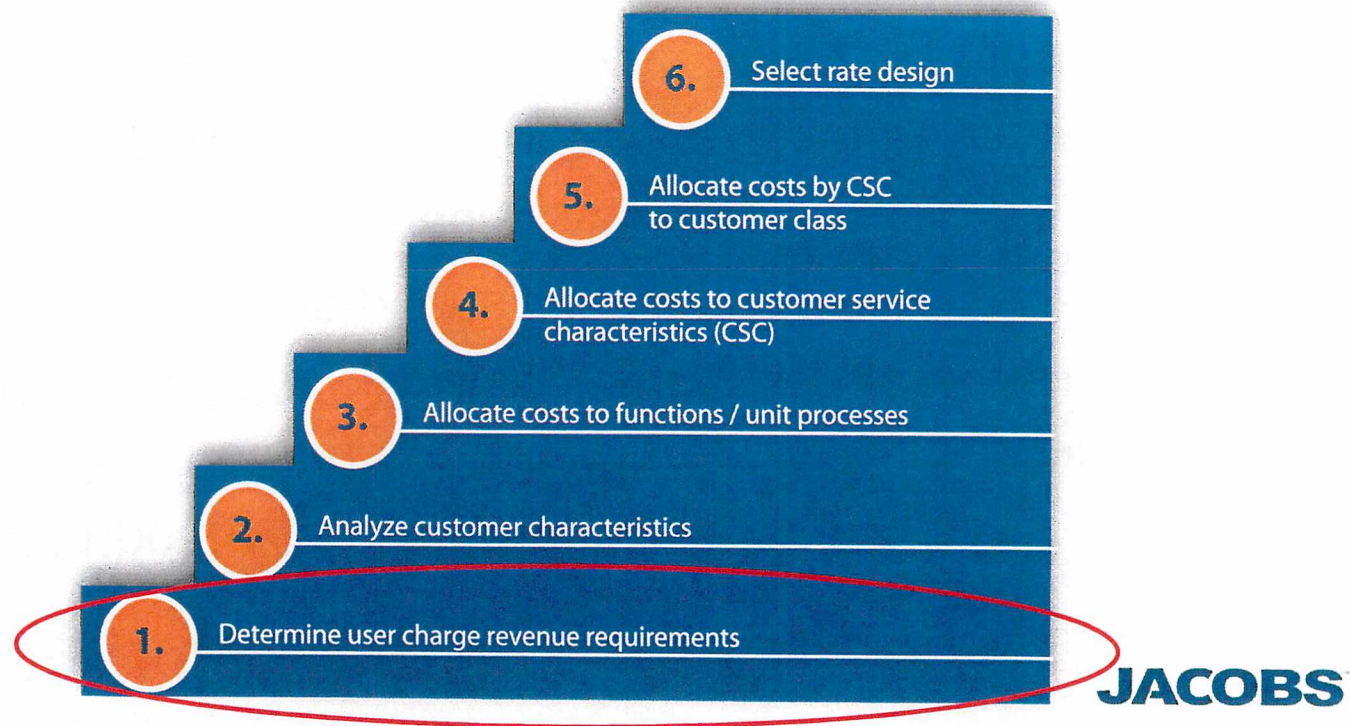
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Meeting Objectives

- Provide update on Cost of Service Analysis
- Review funded and unfunded (unmet needs) capital projects in the water, sewer, and stormwater utilities
- Confirm key assumptions
 - Capital projects (existing assets)
 - O&M expenses for current and future facilities
 - Capital Funding strategy (cash and short term financing)

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Six Step Method to Cost of Service Analysis



Three key takeaways for today...

- Gain an understanding of basis for CIP requirements
- COSA will yield valuable information with which to evaluate our current rate structure
- We will be updating the COSA over time as we complete additional work on the Water & Sewer Asset Management Plan and prioritization of projects in Stormwater Basin Master Plans. This will require future discussions regarding the revenue requirements for all three utilities.

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Review decision on the following items:

- CIP Scenarios
 - Baseline
 - Unmet Needs
 - Asset Management Plan (future)

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Define Revenue Requirements

Definition of “Revenue Requirements”

- Consistent terminology is key to understanding:
 - *Total revenue* is all available funds generated within each enterprise fund
 - *Total revenue requirements* are all of the utility’s costs and expenses combined

Definition of “Revenue Requirements”

- Consistent terminology is key to understanding:
 - *Net Revenue Requirements* is exclusively costs and expenses to be paid from revenue generated by rate payers
 - Net revenue requirements isolate other factors and simply show what is required to generate revenue from rate payers
 - *Annual Surplus (Deficit)* is the variance between net revenue requirements and operating revenues (from rate payers)

Review Near-Term Capital Needs

Basis for Near-Term Funding Requirements

- Approved FY19-23 CIP
- Unmet Needs* (Capital Items not funded in CIP)
 - Includes projects anticipated in FY20-24 funding cycle
- Capital Projects identified through work on Asset Management Plan (future)

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FY 2019-23 CIP

[illegible]

CIP Overview FY 2016 District Budget		Water Resources - Sewer						
Description	Current Year		2015-2016 CIP Funding Period					CIP Total
	FY 2016 Prop	FY 2019 Prop	FY 2020 Prop	FY 2021 Prop	FY 2022 Prop	FY 2023 Prop		
Water Resources	1,771,000	1,869,000	2,471,000	1,952,000	1,428,000	810,000	7,219,000	
Water Main Replacement	1,770,000	199,000	2,471,000	2,000,000	1,428,000	790,000	7,219,000	
Water Mains				3,200,000			3,200,000	
Sub Totals	\$1,871,000	\$2,128,000	\$4,141,999	\$4,199,000	\$1,759,000	\$610,000	\$12,769,000	
Projects Scheduled for Funding (Order of Funding, by Year)								
Water Main Replacement - 24" dia								
Water Main Replaces	180,000	400,000	3,200,000	400,000	190,000	740,000	5,110,000	
Water Main Replacement - 18" dia								
Water Main Replaces	250,000	250,000	45,000	230,000	290,000	280,000	1,650,000	
Water Main Replacement - 12" dia								
Water Main Replaces		250,000					250,000	
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Major Funded Capital Improvements (FY19-23)

	Cost	Fiscal Year
Water Fund		
Replace High Duty Pumps (SAP)	\$1.2M	FY19/22
2" Water Main Replacement Program	\$1.5M	FY19-23
Meter Replacements	\$1.25M	FY19-23
Water Tank Maintenance	\$1.18M	FY19-23
Wesleyan Blvd Widening Relocations	\$1.68M	FY20
Sewer Fund		
Construction Equipment	\$1.3M	FY19-23
Sewer Rehab	\$1.45M	FY19-23
Meter Replacements	\$1.25M	FY19-23
Screw Pump Replacements	\$1.23M	FY20/21
54" Outfall Rehab	\$3.25M	FY21
Aeration Basin Rehabilitation (WWTP)	\$1.15M	FY22
Stormwater Fund		
Construction Equipment	\$1.37M	FY19-23
Parkers Canal Phase 2	\$1.25M	FY20

Unmet Capital Needs

	Amount
Water Fund	
AMR/AMI	\$2.3M
SAP Filter Rehab	\$1.8M
Relocate Amonia Feed Point	\$250K
Replace Raw Water Pumps at TRR WTP	\$750K
Total =	\$5.1M
Sewer Fund	
Beech Branch Outfall	\$10.5M
AMR/AMI	\$2.3M
Tertiary Filter Rehab	\$2.6M
Inflow & Infiltration Related Improvements	\$3.5M
Total =	\$18.9M
Stormwater Fund	
Downtown Culvert (100 SE Main to Atlantic Ave.)	\$5.6M
Total =	\$5.6M

What is the Asset Management Plan (AMP)?

- Asset Management is an integrated system of processes to minimize life cycle costs of infrastructure, at an acceptable level of risk, while continuously delivering established levels of service.
- Asset Management Plan efforts primarily focused on:
 - Improvements to O&M related activities
 - Improvements to more advanced and predictive asset management practices
 - Improvements to communication and change management processes
 - Development of Renewal and Replacement costs for wastewater and water system for a 20-year planning horizon based on existing assets (no expansion or enhancement)

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Asset Management Plan (AMP) results to date

- Completed inventory of nearly 1,600 assets across three treatment plants and preliminary assessment of water distribution and sewer collection system
- Key findings to date include
 - Approximately 74% of assets inventoried at WWTP, 50% of assets at TRR WTP, and 73% of assets at SAP WTP are over 20 years old
 - Over 47% of Lift Stations and Booster Pump Stations are over 20 years old
 - Over 37% of sewer mains and 38% of water mains are over 50 years old

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DRAFT - Scenario Comparisons for 5-year Capital Needs

Baseline

Wastewater = \$14M

Water = \$12.3M

Stormwater = \$6.4M

Total = \$32.7M

Unmet Needs

Wastewater = \$32.9M

Water = \$17.4M

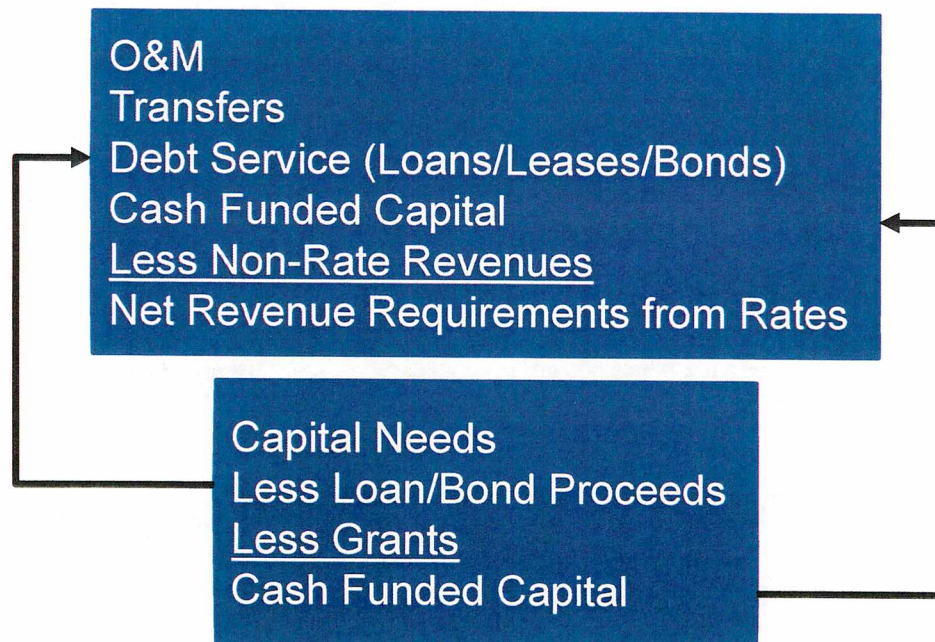
Stormwater = \$12M

Total = \$62.3M

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Financial Planning Projections

Capital Investment will be the Primary Driver for Revenue Requirements



FY2019 Budget & Anticipated Utility Sales

	O&M	ASC	Capital	Other	Total	Utility Sales
Water	\$7.8M	\$2.7M	\$2.8M	\$825K	\$14.1M	\$11.3M
Sewer	\$8.0M	\$5.0M	\$2.4M	0	\$15.4M	\$13.0M
Stormwater	\$3.35M	\$700K	\$850K	0	\$4.9M	\$4.1M
Total =	\$19.2M	\$8.4M	\$6.05M	\$825K	\$34.4M	\$28.4M

ASC = Admin Service Charge

Obligations and Administrative Service Charges

- Obligations
- Administrative Service Charge -- HR, IT, Finance (including Customer Service), etc. as percentage of O&M costs
 - 35% for Water,
 - 40% for Sewer, and
 - 18% for Stormwater

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Where are we going?

Next Steps

- Evaluate Approaches to address Unmet Capital Needs
- Develop Additional Scenarios and Long Term Financials
- Begin Cost of Service Allocations
- Benchmark Comparison of user fees and rates, miscellaneous fees, etc.

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Questions?

