



Fulton County Board of Commissioners
Agenda Item Summary

19-0907

BOC Meeting Date

11/20/19

Requesting Agency

Public Works

Commission Districts Affected

All Districts

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

The Department of Public Works and Finance Department request approval of a Resolution to approve a five percent (5%) water and sewer volumetric rate increase for each of the next 3 years; to make the necessary increases to the water and sewer fee schedules; to approve modifications to the water connection fees for North Fulton; to provide for an effective date; and for other purposes. The Resolution to authorize increases in water and sewer rates, fees and charges effective January 1, 2020, which are necessary to complete the projects included in the 2020 to 2026 Water and Wastewater Capital Improvements Program. To protect the interest of the County, the County Attorney is authorized to approve each of these documents as to form and make any necessary modification, prior to execution by the necessary County official.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

Pursuant to the Supplementary Powers provision of the Article 9, Section 2, ¶ III of the Constitution of the State of Georgia, Fulton County is delegated the authority to provide sewer and water services. The County's authority to "prescribe, revise, and collect rates, fees, tolls, or charges for the services..." is set out in O.C.G.A. § 36-82-62. The Metropolitan North Georgia Water Planning District ("MNGWPD") recommends to local governments in its Wastewater and Water Management Plans that "...water rates should be based on a local rate study and designed to provide a sufficient revenue stream to support program costs and facility maintenance." Wastewater Management Plan, May 2009, at 12-8; Water Supply and Water Conservation Management Plan, May 2009, at 13-8.; Policy and Procedure 600-69.

Is this Item related to a Strategic Priority Area? *(If yes, note strategic priority area below)*

Yes All People are healthy

Is this a purchasing item?

No

Summary & Background

(First sentence includes Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item.)

Agency Director Approval		County Manager's Approval
Typed Name and Title	Phone	
Signature	Date	

Revised 03/12/09 (Previous versions are obsolete)

Scope of Work:

On April 19, 2017, in Item No 17-0246, the Board of Commissioner approved the 2016 – 2025 Capital Improvement Program (CIP) that outlined a series of improvements necessary throughout North and South Fulton to continue providing water and treating wastewater to the residents of our service areas. The County must provide funding for the capital improvement projects identified in the Program, allocating the appropriate costs to both existing and future customers.

On June 7, 2017, the BOC approved a three-year water and sewer rate increase of 5% per year (years 2017, 2018, and 2019) to begin funding the 2016-2025 Capital Improvement Program (CIP) previously. This increase was necessary to fund projects in the CIP not including the expansion of the Big Creek facility. At the time of the rate approval, the design of the Big Creek facility had not begun and the full construction needs of the facility were not yet known. Although the Rate Study suggested that additional annual rate increases would be needed starting in 2020, the BOC decided to hold off on those increases until the Big Creek expansion needs were fully understood.

Over the past three years, Public Works staff has begun implementing projects in the CIP (including the Camp Creek Clarifier Upgrade, the Big Creek – Cobb County Diversion project, and construction of the Little River expansion facility). Additionally, the design of the Big Creek facility has progressed and staff is estimating a total construction budget of approximately \$300 million will be needed for the expansion.

Based on the work undertaken over the past three years and the need to address the Inflow and Infiltration into the sewer system under the Spill Mitigation Program, Public Works has updated the CIP to include the \$40 million in funds for the Spill Mitigation Program and \$300 million for the Big Creek expansion. The revised CIP was then reevaluated for total revenue needs in the spring and summer of 2019.

Based on the recent financial analysis and coordination with Finance's consultant for financial advisory services relative to the County's Water and Sewerage System revenue bond issuance, in order to complete the capital plan, Fulton County must provide additional funding for the capital improvement projects. The Department of Public Works held two public hearings in anticipation of this resolution to authorize three 5% increases over each of the next three years in water and sewer rates, fees and charges to go into effect January 1, 2020.

Community Impact:

The proposed changes to the rate structure would increase rates and enable implementation of the 2020-2026 CIP.

Department Recommendation:

The Department of Public Works recommends approval of the request to implement rate increases to fund the 2020-2026 CIP.

Project Implications:

Without the recommended rate increases, the full CIP would not be able to be constructed and implemented without severe reductions in the projects identified.

Community Issues/Concerns:

No issues/concerns have been raised by constituents or clients concerning this agenda item following the public hearings.

Department Issues/Concerns:

The Departments of Public Works and Finance believes that the rate increases are consistent with the needs of the CIP.

History of BOC Agenda Item: This item has not previously been before the BOC.

Contract & Compliance Information

(Provide Contractor and Subcontractor details.)

Agency Director Approval		County Manager's Approval
Typed Name and Title	Phone	
Signature	Date	

Revised 03/12/09 (Previous versions are obsolete)

Solicitation Information	NON-MFBE	MBE	FBE	TOTAL
No. Bid Notices Sent:				
No. Bids Received:				

Total Contract Value	.
Total M/FBE Values	.
Total Prime Value	.

Fiscal Impact / Funding Source *(Include projected cost, approved budget amount and account number, source of funds, and any future funding requirements.)*
 The Departments of Public Works and Finance, along with a professional consultant have concluded the necessary goal of maintaining and improving the System can best be met by this rate increase, issuance of new, water and sewer revenue bonds in 2019 along with current reserves in the Water and Sewer Utility Fund to fund the program;

Exhibits Attached *(Provide copies of originals, number exhibits consecutively, and label all exhibits in the upper right corner.)*
 Exhibit 1 – Resolution
 Exhibit 2 - Water and Wastewater Rate Study Update

Source of Additional Information *(Type Name, Title, Agency and Phone)*
 David E. Clark, Director, Public Works 404-612-8204

Agency Director Approval		County Manager's Approval
Typed Name and Title	Phone	
Signature	Date	

Revised 03/12/09 (Previous versions are obsolete)

Procurement

Contract Attached: .	Previous Contracts: .		
Solicitation Number: .	Submitting Agency: Public Works and Finance	Staff Contact: David Clark	Contact Phone: 404-612-2804

Description: Rate increase

FINANCIAL SUMMARY

Total Contract Value:	MBE/FBE Participation:
Original Approved Amount: .	Amount: . %: .
Previous Adjustments: .	Amount: . %: .
This Request: .	Amount: . %: .
TOTAL: .	Amount: . %: .

Grant Information Summary:

Amount Requested: .	<input type="checkbox"/>	Cash
Match Required: .	<input type="checkbox"/>	In-Kind
Start Date: .	<input type="checkbox"/>	Approval to Award
End Date: .	<input type="checkbox"/>	Apply & Accept
Match Account \$: .		

Funding Line 1: .	Funding Line 2: .	Funding Line 3: .	Funding Line 4: .
-----------------------------	-----------------------------	-----------------------------	-----------------------------

KEY CONTRACT TERMS

Start Date: .	End Date: .
Cost Adjustment: .	Renewal/Extension Terms: .

ROUTING & APPROVALS
(Do not edit below this line)

X	Originating Department:	Clark, David	Date: 10/25/2019
X	County Attorney:	Stewart, Derval	Date: 10/25/2019
.	Purchasing/Contract Compliance:	.	Date: .
X	Finance/Budget Analyst/Grants Admin:	Freeman, Ashley	Date: 10/24/2019
.	Grants Management:	.	Date: .
X	County Manager:	Anderson, Dick	Date: 10/25/2019

Water and Wastewater Rate Study Update

**Department of Water Resources
Fulton County, Georgia**

Project No. 106004

DRAFT Report
8/9/2019

Water and Wastewater Rate Study Update

prepared for

**Department of Water Resources
Fulton County, Georgia**

Project No. 106004

**DRAFT Report
8/9/2019**

prepared by

**Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri**

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
CIP	Capital Improvement Program
CPI / CPI-U	Consumer Price Index
FY	Fiscal Year
O&M	Operation & Maintenance Expense
WEF	Water Environment Federation
2016 Study	2016 Water and Wastewater Rate Study
2019 Study	2019 Water and Wastewater Rate Study Update

STATEMENT OF LIMITATIONS

In preparation of the Fulton County Water and Wastewater Rate Study Update (2019 Study), Burns & McDonnell relied upon information provided by the County. The information included various analyses, computer-generated information and reports, audited financial reports, and other financial and statistical information, as well as other documents such as operating budgets and current rate and fee schedules. In addition, input to key assumptions regarding expected future levels of revenue, sales, and expenditures was provided by County staff to Burns & McDonnell. While Burns & McDonnell has no reason to believe that the information provided, and upon which Burns & McDonnell has relied, is inaccurate or incomplete in any material respect, Burns & McDonnell has not independently verified such information and cannot guarantee its accuracy or completeness.

Estimates and projections prepared by Burns & McDonnell relating to financial forecasting and costs are based on Burns & McDonnell's experience, qualifications, and judgment as a professional consultant. Since Burns & McDonnell has no control over weather, cost and availability of labor, material and equipment, labor productivity, contractors' procedures and methods, unavoidable delays, economic conditions, government regulations and laws (including interpretation thereof), competitive bidding, and market conditions or other factors affecting such estimates or projections, Burns & McDonnell does not guarantee the accuracy of its estimates or predictions.

1.0 INTRODUCTION

1.1 Study Background

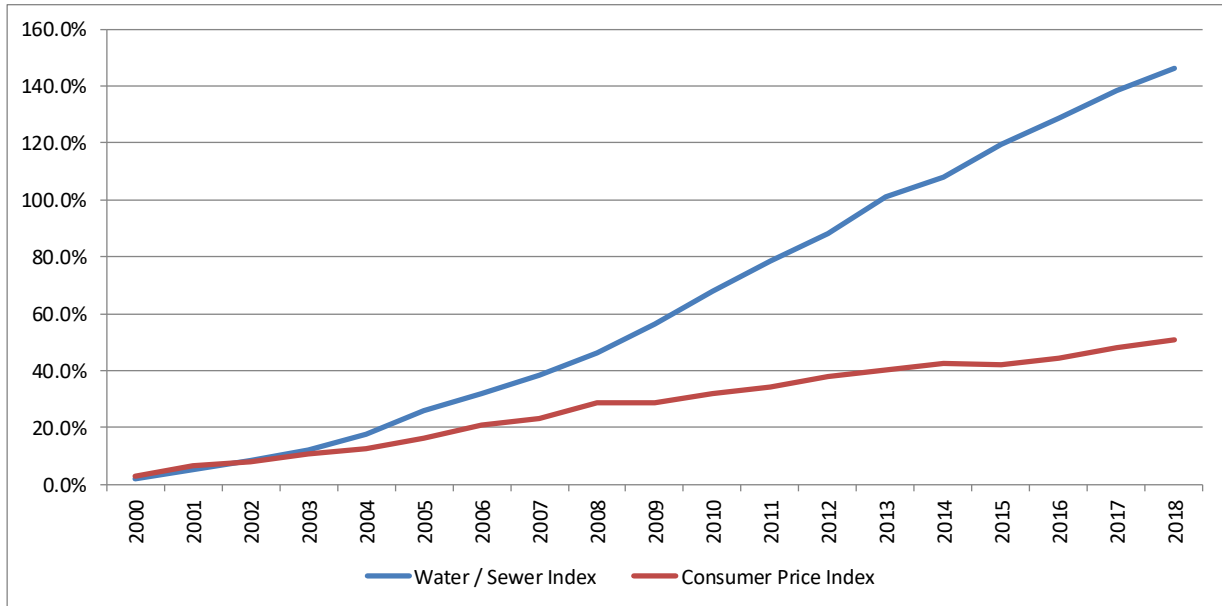
In 2016, Burns & McDonnell completed a “Water and Wastewater Rate Study” (the 2016 Study) for Fulton County that included a broad review of user charges, capacity fees, miscellaneous fees, and surcharge fees. Recommendations from the 2016 Study were subsequently adopted by Fulton County for the initial three years of the Study period, 2017 through 2019. The 2016 Study included preliminary cost estimates and funding assumptions for Fulton County’s largest capital improvement project, the Big Creek Wastewater Treatment Plant expansion. Since the completion of the 2016 Study, more detailed design has been completed for the Big Creek Wastewater Treatment Plant expansion, resulting in a more complete understanding of project cost.

In 2019, Fulton County authorized Burns & McDonnell to update the financial planning forecast to reflect current assumptions, including an updated capital improvements plan. This report summarizes the preliminary findings of the Water and Wastewater Rate Study Update (the 2019 Study). The 2019 Study provides an eight-year financial plan that evaluates the sufficiency of revenues under existing rates to meet future operating and capital costs of the utility. If revenues are insufficient to meet funding requirements, recommendations are made to increase rates sufficiently to meet the utility’s revenue requirements. Such rate increases are applied to existing rates to determine a financial plan and rate path for the utility to move forward. This report summarizes the findings and recommendations resulting from the 2019 Study.

1.2 National Trends in Water and Sewer Rates

According to the Bureau of Labor Statistics, water and sewer rates have been increasing nationally at a rate of about 5.0 percent per year since 2000. At the same time, general inflation as measured by the Consumer Price Index (CPI) has risen approximately 2.2 percent per year. Figure 1-1 shows the cumulative increase in each of these indices since 2000.

Figure 1-1: Changes in General Inflation and Water and Wastewater Costs



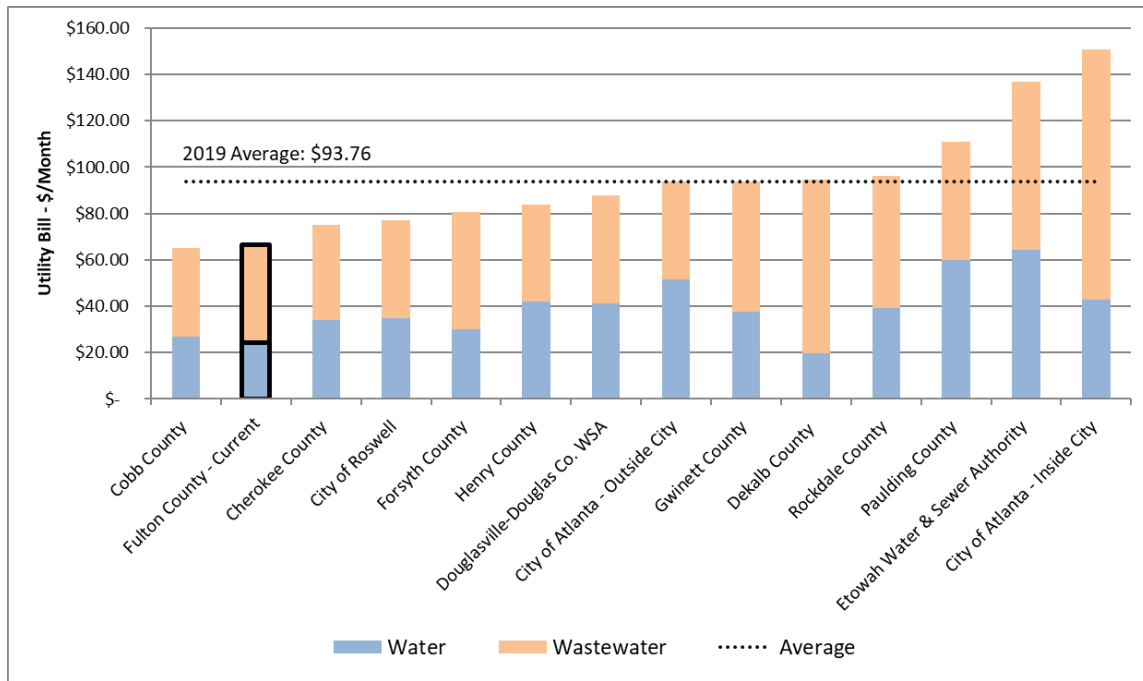
Source: Bureau of Labor Statistics, Consumer Price Index & Water & Sewer Maintenance Series

Following the 2016 Study, Fulton County increased user charge rates approximately 5 percent for each of the years 2017, 2018 and 2019. The 2016 Study indicated the need for further revenue increases of 4 percent per year from 2020 through 2025, but rate increases were only adopted for the first three years of the 2016 Study period to allow for completion of the detailed design for the Big Creek Wastewater Treatment Plant expansion.

1.3 Regional Comparison of Residential Typical Bills

Figure 1-2 shows a regional comparison of residential bills under existing rates at the 6,000 gallon monthly consumption level. Among communities surveyed, the average combined residential water and wastewater bill at 6,000 gallons per month was almost \$94 per month. After the 5 percent rate increases were implemented in 2017, 2018 and 2019, Fulton County rates continue to be among the lowest of the communities surveyed, as shown in Figure 1-2.

Figure 1-2: 2019 Residential Monthly Bill Comparison under Existing Rates



1.4 Report Structure

The remainder of this report discusses the approach and findings associated with three primary areas.

- Financial Planning:** The key goal in this assessment was to determine if revenues under existing water and wastewater rates are sufficient to meet the operating and capital needs of the utility systems through 2026. If existing revenues are not sufficient, determine the increases needed to meet the funding requirements through the study period. Analyses and findings associated with the Financial Planning efforts are detailed in Chapter 2 of this report.
- Proposed Rates:** Based on the findings from the Financial Planning efforts, proposed water and wastewater rates were developed utilizing the existing rate structure. Proposed Rate Design findings are addressed in Chapter 3 of this report.
- Ancillary Fees:** Fulton County charges a variety of miscellaneous fees regarding services it provides beyond the delivery of potable water and the collection and treatment of wastewater flow. Recommendations were made in the 2016 Study to modify several miscellaneous fees. Since that time, Fulton County staff have observed additional costs being incurred for certain services and recommends increases in applicable fees to improve cost recovery. Findings associated with Ancillary Fees are detailed in Chapter 4 of this report.

2.0 FINANCIAL PLANNING ANALYSIS

2.1 Project Approach

Fulton County's water and wastewater utilities are anticipated to require over \$596 million in capital investment from 2019 through 2026 (uninflated). Including the impact of inflation, the capital improvement program is estimated to be over \$618 million. The 2019 Study examines whether the revenues under existing user charges are sufficient to implement these capital projects, and fund the ongoing cost of operation and maintenance of the systems, while achieving targeted financial performance measures such as reserve fund balances and debt service coverage. To the extent user charge revenues are not sufficient to meet future funding needs and financial performance criteria, increases are identified for the Study period.

Based on the findings regarding revenue sufficiency, modifications to existing water and wastewater user charges have been developed. Typical residential bills under proposed rates are compared with regional peers to understand the competitiveness of proposed rates.

2.2 Water Utility Revenues under Existing Rates

The current rate schedule is shown below in **Error! Reference source not found.** and features a bi-monthly service charge and a volume charge for each utility. In response to drought conditions that have challenged the Atlanta metropolitan area in recent years, the utility implemented an inclining water block structure for domestic users effective in the summer months of April through October. Tiers or blocks are based on each domestic customer's base consumption during the winter months of November through March..

Table 2-1: Existing Water and Wastewater Rates

Water		<u>2019</u>
Service Charge (\$/Bill)	\$	7.99
Volume Charge (\$/1000 Gal)	\$	3.36
Wastewater		
Service Charge (\$/Bill)	\$	7.99
Volume Charge (\$/1000 Gal)	\$	6.38
Domestic Meter water conservation rates		
	<u>Consumption</u>	<u>Surcharge Rate</u>
Tier 1	Up to 130% of base	\$ 3.36
Tier 2	131% - 200% of base	\$ 4.20
Tier 3	Over 200% of base	\$ 6.73
Irrigation Meter water conservation rates		
	<u>Consumption</u>	<u>Surcharge Rate</u>
Service Charge (\$/Bill)	\$	7.99
Volume Charge (\$/1000 Gal)	\$	6.73

2.2.1 Historical and Projected Customers, Volumes, and Revenues

Table 2-2 presents the historical water and wastewater customers served by Fulton County from 2016 to 2018 and a projection of customers for the 2019 to 2026 planning period. Comparable to the 2016 Study, the forecast conservatively assumes a 1.25 percent annual growth in water and wastewater accounts from 2019 through 2026.

Table 2-2: Historical and Projected Accounts, Volumes, and Revenues

Line No.	Historical			Budgeted		Projected					
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Accounts											
1	74,250	74,529	74,962	75,899	76,848	77,808	78,781	79,766	80,763	81,772	82,794
2	97,500	97,552	98,617	99,850	101,098	102,362	103,641	104,937	106,248	107,576	108,921
3	171,750	172,081	173,579	175,749	177,946	180,170	182,422	184,702	187,011	189,349	191,716
System Demand Volume (1,000 Gallons)											
4	11,198,200	9,679,800	9,603,150	10,252,030	10,380,180	10,509,930	10,641,300	10,774,320	10,909,000	11,045,360	11,183,430
5	16,063,650	15,811,800	16,538,150	17,003,430	17,215,970	17,431,170	17,649,060	17,869,670	18,093,050	18,319,210	18,548,200
User Charge Revenues under Existing Rates											
6	\$ 36,819,661	\$ 32,039,973	\$ 36,414,100	\$ 36,180,300	\$ 36,632,600	\$ 37,090,500	\$ 37,554,100	\$ 38,023,500	\$ 38,498,800	\$ 38,980,000	\$ 39,467,300
7	81,174,410	78,192,158	86,152,300	86,152,300	87,229,200	88,319,600	89,423,600	90,541,400	91,673,100	92,819,000	93,979,300
8	\$ 117,994,071	\$ 110,232,131	\$ 122,566,400	\$ 122,332,600	\$ 123,861,800	\$ 125,410,100	\$ 126,977,700	\$ 128,564,900	\$ 130,171,900	\$ 131,799,000	\$ 133,446,600
Other Revenue											
9	\$ 3,416,510	\$ 3,535,236	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508	\$ 3,984,508
10	7,074,859	10,145,304	8,541,368	8,177,095	8,177,095	8,177,095	8,177,095	8,177,095	8,177,095	8,177,095	8,177,095
11	\$ 10,491,368	\$ 13,680,540	\$ 12,525,876	\$ 12,161,602	\$ 12,161,602	\$ 12,161,602	\$ 12,161,602	\$ 12,161,602	\$ 12,161,602	\$ 12,161,602	\$ 12,161,602
12	\$ 128,485,439	\$ 123,912,670	\$ 135,092,276	\$ 134,494,202	\$ 136,023,402	\$ 137,571,702	\$ 139,139,302	\$ 140,726,502	\$ 142,333,502	\$ 143,960,602	\$ 145,608,202

[1] Water accounts are estimated to grow at 1.25% annually from 2019 Budget
 [2] Wastewater accounts are estimated to grow at 1.25% annually from 2019 Budget
 [3] Volume forecast implied to be stable with no impact on revenue forecast
 [4] Excludes transfer in from fund 201
 [5] Other revenue set to be constant from 2019 budget

Historical water volumes are based on utility records of annual water system demand. Similarly, historical wastewater flow is based on utility records of collected wastewater flow. Forecasted water volumes and wastewater flow were estimated based on growth in accounts, assuming use per account remains consistent with recent system consumption patterns.

Projected water user charges are forecasted to increase from the 2019 budget, resulting from assumed growth in accounts of 1.25 percent and stable usage patterns and no drought restrictions. Projected water user charges are anticipated to be \$36.6 million in 2020, increasing to \$39.5 million by 2026 under existing FY 2019 rates.

Future wastewater user charge revenues are forecasted in a manner consistent with projected water user charge revenues, where growth in future revenues reflects assumed growth in accounts and stable usage patterns. Projected wastewater user charges are anticipated to be \$87.2 million in 2020, increasing to \$93.9 million by 2026. As with the projection of water revenues, the wastewater revenue projection reflects revenues under existing FY 2019 rates.

Other revenues are also received by the utilities and are shown on Lines 9 and 10 of Table 2-2. Fund 201 revenues consist primarily of charges for other services, investment income, rents and other revenues. These revenues are forecasted based on 2019 budgeted levels and are assumed to remain constant through 2026. Fund 203 revenues include water and wastewater connection charges and are assumed to remain consistent with 2019 budgeted levels through 2026.

2.3 Utility Expenditures

The primary cash expenditures of the water and wastewater utilities include the following direct operating and capital costs:

- Operation and Maintenance (O&M) Expenses
- Capital Improvement Program Expenditures
- Debt Service Principal and Interest Payments

2.3.1 Operation and Maintenance Expenses

Table 2-3 presents recent water and wastewater O&M expense history and a projection of water and wastewater system O&M expenses through the 2026 planning period. Expenses summarized on Table 2-3 reflect operating costs associated with both utilities and are associated with either Fund 201 or Fund 203, as indicated.

Table 2-3: Historical and Projected Operating and Maintenance Expenses

Line No.	Historical			Budgeted		Projected						
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Fund 201												
1	Salaries	\$ 7,571,325	\$ 7,521,682	\$ 7,874,673	\$ 8,943,000	\$ 9,211,300	\$ 9,487,700	\$ 9,772,300	\$ 10,065,400	\$ 10,367,300	\$ 10,678,300	\$ 10,998,600
2	Social Security	546,247	541,025	562,503	668,200	688,200	708,800	730,000	751,900	774,500	797,700	821,700
3	Insurance	3,146,416	3,197,789	3,341,936	3,581,200	3,688,800	3,799,400	3,913,100	4,030,500	4,151,400	4,275,800	4,404,200
4	Pension	1,638,027	618,314	675,311	733,600	755,600	778,300	801,600	825,600	850,300	875,800	902,000
Services & Rentals												
6	Professional Services	18,948,743	19,496,670	21,389,394	23,214,100	23,910,500	24,627,800	25,366,600	26,127,600	26,911,400	27,718,700	28,550,300
7	All other	689,285	1,187,061	873,343	891,300	902,500	929,600	957,500	986,200	1,015,800	1,046,200	1,077,500
Contributions												
9	Naney Creek / Dekalb	584,033	415,576	389,511	420,000	432,600	445,600	459,000	472,800	487,000	501,600	516,600
10	Clayton	1,479,135	1,434,445	1,330,457	1,335,000	1,375,100	1,416,400	1,458,900	1,502,700	1,547,800	1,594,200	1,642,000
11	Utay	1,148,365	1,078,574	1,087,440	1,100,000	1,133,000	1,167,000	1,202,000	1,238,100	1,275,200	1,313,500	1,352,900
12	Cobb/Chattahoochee	5,102,223	4,046,030	4,671,063	4,050,000	4,171,500	4,296,600	4,425,500	4,558,300	4,695,000	4,835,900	4,981,000
13	Atlanta Fulton Plant	6,424,175	6,316,321	6,601,090	6,545,800	6,742,200	6,944,500	7,152,800	7,367,400	7,588,400	7,816,100	8,050,600
14	All Other Operating Expenses	11,397,550	8,562,217	9,284,706	9,825,200	10,120,000	10,423,600	10,736,100	11,058,400	11,389,800	11,731,100	12,083,300
15	Total Fund 201 O&M	\$ 58,675,525	\$ 54,415,702	\$ 58,081,427	\$ 61,307,400	\$ 63,131,300	\$ 65,025,300	\$ 66,975,400	\$ 68,984,900	\$ 71,053,900	\$ 73,184,900	\$ 75,380,700
16	Forecasted O&M [3]	95%			\$ 58,242,000	\$ 59,974,700	\$ 61,774,000	\$ 63,626,600	\$ 65,535,700	\$ 67,501,200	\$ 69,525,700	\$ 71,611,700
Fund 203												
17	Salaries	\$ 2,077,162	\$ 2,283,513	\$ 2,343,690	\$ 2,621,000	\$ 2,699,700	\$ 2,780,700	\$ 2,864,100	\$ 2,950,100	\$ 3,038,600	\$ 3,129,800	\$ 3,223,800
18	Social Security	147,751	162,587	166,351	191,800	197,500	203,500	209,600	215,900	222,400	229,100	235,900
19	Insurance	903,517	911,049	1,005,297	979,300	1,008,700	1,039,000	1,070,100	1,102,000	1,135,100	1,169,100	1,204,000
20	Pension	167,861	190,557	210,358	224,000	229,200	236,100	243,200	250,500	258,000	265,700	273,700
Services & Rentals												
21	Professional Services	1,338,586	584,453	2,473,311	3,925,700	4,043,500	4,164,800	4,289,700	4,418,400	4,551,000	4,687,500	4,828,100
22	All other	270,905	433,755	425,569	630,600	630,000	649,000	668,600	688,700	709,500	730,800	752,800
23	Operating Expenses	2,540,049	1,955,371	3,147,336	3,610,300	3,714,500	3,825,800	3,940,600	4,058,600	4,180,100	4,305,400	4,434,600
24	Total Fund 203 O&M	\$ 7,445,831	\$ 6,521,284	\$ 9,771,915	\$ 12,182,700	\$ 12,523,100	\$ 12,898,900	\$ 13,285,900	\$ 13,684,200	\$ 14,094,700	\$ 14,517,400	\$ 14,952,900
25	Forecasted O&M [4]	75%			\$ 9,137,000	\$ 9,392,300	\$ 9,674,200	\$ 9,964,400	\$ 10,263,200	\$ 10,571,000	\$ 10,888,100	\$ 11,214,700
26	Total O&M	\$ 66,121,356	\$ 60,936,986	\$ 67,853,342	\$ 73,490,100	\$ 75,654,400	\$ 77,924,200	\$ 80,261,300	\$ 82,669,100	\$ 85,148,600	\$ 87,702,300	\$ 90,333,600
27	Total Forecasted O&M				\$ 67,379,000	\$ 69,367,000	\$ 71,448,200	\$ 73,591,000	\$ 75,798,900	\$ 78,072,200	\$ 80,413,800	\$ 82,826,400

[1] 2019 is based on final adopted budget
 [2] 2020 forecast and beyond is based on 2018 budget plus 3%
 [3] 2019 budget is adjusted to be 95 percent of budget to account for historical favorability in O&M, actuals vs budget
 [4] 2019 budget is adjusted to be 75 percent of budget to account for historical favorability in O&M, actuals vs budget

Fund 201 O&M costs for 2019 are based on the approved budget, amounting to \$61.3 million. These expenses reflect operating costs for both the water and wastewater systems. The major cost categories in Fund 201 relate to employee salary and benefit costs, professional services, operating costs associated with water and wastewater treatment facilities, and other operating costs that include primarily utilities and indirect costs.

Projected O&M for Fund 201 is escalated from budgeted 2019 amounts based on assumed annual inflation of 3 percent. Historically, actual Fund 201 O&M has been favorable to budget, meaning costs incurred are less than costs budgeted for a given fiscal year. Consistent with forecasting performed for the 2016 Study, future O&M costs have been reduced from budgeted levels by 5 percent assuming the historical pattern of budget favorability continues. In doing so, forecasted O&M obligations are expected to reasonably approximate actual O&M costs incurred and to be paid for from rates. Projected Fund 201 O&M to be funded from rates is shown on Line 16 of Table 2-3.

Fund 203 O&M costs for 2019 are based on the approved budget. Projected expenses are escalated from 2019 budget amounts based on annual inflation of 3 percent. Comparable to the methodology used to forecast expenses for Fund 201, beginning in 2019 Fund 203 O&M was reduced by approximately 25 percent assuming the historical pattern of budget favorability continues. Projected Fund 203 O&M to be funded from rates is shown on Line 25 of Table 2-3. Total O&M, shown on Line 26, is projected to

increase from the 2019 budgeted amount of \$73.4 million to \$90.3 million in 2026. After adjustments for anticipated budget favorability, forecasted O&M to be funded from rates ranges from \$67.3 million in 2019 to \$82.8 million in 2026 as shown on Line 27 of Table 2-3.

2.3.2 Projected Capital Improvement Expenditures

Table 2-4 shows the projected capital improvement program (CIP) for the 2019 to 2026 planning period and summarizes water, wastewater, and standby projects.

On an uninflated basis, the water CIP totals \$16.8 million from 2019 through 2026. Major initiatives include projects related to water mains and water tank painting. The uninflated wastewater CIP totals \$431.9 million over the same period. While several projects are on the horizon, the Big Creek Wastewater Treatment Plan is the largest initiative and is heavily weighted to 2019 and 2020.

Standby projects are typically unforeseen projects, and/or on-demand contracts for engineering and consulting support. These projects are categorized as standby engineering, water, wastewater, meters, pipe lining and bursting, infiltration and inflow, road widening projects, and relocation. Total uninflated standby projects amount to \$148.0 million from 2019 to 2026.

Table 2-4: Capital Improvement Plan

Line No.		Projected							Total	
		2019	2020	2021	2022	2023	2024	2025		2026
Water System										
1	Alpharetta (Kimbal Bridge Road) Water Transmission Main.	\$ -	\$ -	\$ 6,200,000	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ 9,200,000
2	Gap II (Buice Rd & Kimbal Bridge Road) 54"	-	-	-	-	-	-	-	-	-
3	Providence Water Main	-	-	-	-	-	-	-	-	-
4	Hwy 141 Water Main Addition	1,170,000	1,170,000	1,170,000	-	-	-	-	-	3,510,000
5	North Coleman (Shallowford Road)	-	-	-	-	-	1,317,500	1,317,500	-	2,635,000
6	Birmingham Water Main Loop	-	-	-	-	-	-	-	-	-
7	Water Security	-	-	-	-	-	-	-	-	-
8	Water Tank Painting	800,000	650,000	-	-	-	-	-	-	1,450,000
9	Other	-	-	-	-	-	-	-	-	-
10	Total Water System	\$ 1,970,000	\$ 1,820,000	\$ 7,370,000	\$ 3,000,000	\$ -	\$ 1,317,500	\$ 1,317,500	\$ -	\$ 16,795,000
Wastewater System										
11	Little River Expansion - Design Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Little River Expansion	\$ 19,000,000	\$ 9,554,607	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,554,607
13	Chattahoochee III PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Willeo Creek PS	\$ -	\$ -	\$ -	\$ 520,000	\$ -	\$ -	\$ -	\$ -	\$ 520,000
15	Hopewell Road PS	\$ -	\$ 1,000,000	\$ 2,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 4,000,000
16	Crooked Creek PS	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000
17	Riverchase PS	\$ -	\$ -	\$ -	\$ 330,000	\$ -	\$ -	\$ -	\$ -	\$ 330,000
18	River Bluff PS	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000
19	Little Riverside PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	Windward Village PS	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
21	Blessed Trinity PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	Pine Bloom PS	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
23	Cameron Glen PS, elimination station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Cobb Willeo PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Ball Mill PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	Camp Creek PS	\$ -	\$ 1,500,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000
27	Graham Drive PS	\$ -	\$ 3,300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,300,000
28	Morning Creek PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,600,000	\$ -	\$ 1,600,000
29	Great Southwest PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	Deep Creek PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,600,000	\$ 1,600,000
31	Stone Wall PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000
32	White Water PS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	\$ -	\$ 2,500,000
33	Big Creek WWTP	\$ 300,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000,000
34	Big Creek WWTP Expansion Design Phase 1A	\$ 178,949	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 178,949
35	Big Creek WWTP Expansion Design Phase 1B	\$ 6,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 2,793,637	\$ -	\$ -	\$ -	\$ 17,793,637
36	Big Creek WWTP Expansion Construction Mgmt	\$ 680,000	\$ 1,909,000	\$ 2,000,000	\$ 2,000,000	\$ 980,000	\$ -	\$ -	\$ -	\$ 7,569,000
37	City of Atl Plant Improvements (IGA Cost Share)	\$ 500,000	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000
38	Big Creek to Cobb Diversion	\$ 15,000,000	\$ 13,366,020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,366,020
39	JCEC Reuse Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
40	JCEC Membrane Replacement	\$ -	\$ -	\$ -	\$ 4,500,000	\$ 9,770,000	\$ 6,500,000	\$ -	\$ -	\$ 20,770,000
41	Camp Creek WRF Improvements	\$ 4,230,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,230,000
42	Big Creek WRF Immediate Needs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Big Creek WRF Immediate Needs Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44	Arlington Cemetery Ponds Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
45	Serenbe/Little Bear PS and Force Main	\$ 1,000,000	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000,000
46	Total Wastewater System	\$ 346,788,949	\$ 35,629,627	\$ 10,000,000	\$ 11,500,000	\$ 15,543,637	\$ 6,500,000	\$ 4,100,000	\$ 1,800,000	\$ 431,862,213
Standby CIP										
47	Emergency Procurements	\$ 7,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,200,000
48	Standby Engineering	\$ 3,000,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 13,500,000
49	Standby Misc. Const - Emergency Water System	\$ 2,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 9,000,000
50	Standby Misc. Construction - Wastewater System	\$ 10,500,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 4,500,000	\$ 4,500,000	\$ 49,500,000
51	Standby Misc. Pipe Lining and PipeBursting	\$ 500,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 1,000,000	\$ 1,000,000	\$ 12,500,000
52	Flow Monitoring	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 2,100,000	\$ 16,800,000
53	Standby Water Meter Replacement	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 4,000,000
54	Water and Sewer Relocation Due to Road Widening	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 15,500,000
55	Water and Sewer Relocation (SPLOST)	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ -	\$ -	\$ -	\$ 20,000,000
56	Total Standby CIP	\$ 30,800,000	\$ 18,100,000	\$ 18,100,000	\$ 19,600,000	\$ 19,600,000	\$ 15,600,000	\$ 13,100,000	\$ 13,100,000	\$ 148,000,000
57	Total System CIP	\$ 379,558,949	\$ 55,549,627	\$ 35,470,000	\$ 34,100,000	\$ 35,143,637	\$ 23,417,500	\$ 18,517,500	\$ 14,900,000	\$ 596,657,213
58	Total System CIP - Inflated [1]	\$ 379,558,900	\$ 57,216,100	\$ 37,630,100	\$ 37,262,000	\$ 39,554,500	\$ 27,147,300	\$ 22,110,900	\$ 18,325,100	\$ 618,804,900

[1] CIP plan reflects 3% annual inflation beginning in 2020

For use in cash flow planning and funding analysis, the CIP was inflated by 3 percent beginning in 2020, as shown on Line 58 of Table 2-4. Including the impact of inflation, the total CIP for the water and wastewater systems amounts to \$618.8 million from 2019 through 2026.

2.3.3 Existing and Proposed Debt Service Requirements

Table 2-5 summarizes the existing and proposed debt service requirements for the water and wastewater utilities. Fulton County currently has two outstanding debt obligations related to the water and wastewater utilities. As shown on Table 2-5, the existing debt service payments have been structured with generally stable payment levels throughout the forecast period. The 2011 revenue bond will be fully amortized by the end of 2028. The 2013 revenue bond will be fully amortized by the end of 2035. As can be seen in Table 2-5, debt service requirements for the two outstanding issues decline by about \$1.5 million in 2025, to approximately \$34.7 million per year. For reference, annual debt service payments remain at or near \$34.7 million from 2025 until fully amortized in 2035.

The proposed debt will finance the Big Creek wastewater treatment plant expansion. Debt service payments are estimated based on an assumed equal annual payment structure, a twenty-year term, 1.5 percent issuance expense, and interest rates of 3.75 percent. A debt service reserve is funded through each issue equal to one year’s principal and interest payment, and debt service payments are assumed to start one year after issuance. The estimated payments shown in Table 2-5 are estimated solely for the purpose of depicting future revenue requirements and evaluating the sufficiency of revenues under approved and future rates. The actual structure of future debt may vary based on the recommendations of the County’s Financial Advisor and market conditions at the time of issuance.

Including both existing and proposed debt, total annual water and wastewater debt service payments increase from approximately \$36.3 million in 2019 to nearly \$62.2 million in 2020, as shown on Line 6 of Table 2-5. As noted previously, total debt existing debt service declines in 2025, providing a reduction of \$1.5 million to existing debt service cost.

Table 2-5: Existing and Proposed Debt Service

Line No.	Projected								
	2019	2020	2021	2022	2023	2024	2025	2026	
Existing Debt Issues									
1	2011 [1]	\$ 25,935,300	\$ 25,918,500	\$ 25,902,600	\$ 25,875,800	\$ 25,851,000	\$ 25,816,100	\$ 20,845,800	\$ 20,823,400
2	2013 [1]	10,417,000	10,417,000	10,417,000	10,417,000	10,417,000	10,417,000	13,888,000	13,880,600
3	Total Existing Debt Service	\$ 36,352,300	\$ 36,335,500	\$ 36,319,600	\$ 36,292,800	\$ 36,268,000	\$ 36,233,100	\$ 34,733,800	\$ 34,704,000
Proposed Debt									
4	2020 [2]	\$ -	\$ 25,834,400	\$ 25,834,400	\$ 25,834,400	\$ 25,834,400	\$ 25,834,400	\$ 25,834,400	\$ 25,834,400
5	2022 [2]	-	-	-	-	-	-	-	-
6	Total Debt Service	\$ 36,352,300	\$ 62,169,900	\$ 62,154,000	\$ 62,127,200	\$ 62,102,400	\$ 62,067,500	\$ 60,568,200	\$ 60,538,400
7	Total Debt Issuance [2]	\$ 359,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

[1] Existing debt is based on payment schedule from the 2013 official statement

[2] Proposed debt
20 year, 3.75% interest, and 1.5% issuance cost
First payment begins the next year

2.4 Financial Planning Guiding Principles

Comparing forecasted utility revenues and expenses described in this report provides a basis for evaluating the sufficiency of revenues under existing rates. The following guiding principles were used to assess the adequacy of proposed financial plans.

- Operating reserves for Fund 201 will maintain a balance of at least 90 days of the following year's O&M expenses.
- Use of existing capital reserves to fund capital projects is considered reasonable under the following conditions:
 - The draw down in capital reserves does not extend beyond 2026, the final year of the study period, and
 - Capital balances by 2026 should be sufficient to fund at least one year's worth of capital projects, estimated in 2026 to be approximately \$18 million.
- Annual debt service coverage of at least 1.20x is targeted, while higher debt service coverage is preferred. Minimum covenant requirements are 1.10x.

These principles are used to evaluate the sufficiency of revenues under existing and approved rates to meet future operating and capital requirements.

2.4.1 Operating Flow of Funds

A detailed cash flow is presented in Table 2-6. Lines 1 and 2 of Table 2-6 show user revenues under existing rates, forecasted previously in Table 2-2. Lines 3 through 11 present proposed revenue increases. It is important to note that FY 2019 was the last year of a three-year rate increase adopted following the conclusion of the 2016 Study. Beginning in FY 2020, a 5 percent annual rate increase is proposed for each of the fiscal years 2020, 2021, and 2022. These proposed increases, if approved, would become effective January 1.

Total user charge revenues are summarized on Line 13. Line 14 shows miscellaneous revenue previously forecasted on Line 11 of Table 2-2. Line 15 presents the total operating revenue for Fund 201 including the effect of proposed increases. Over the study period, total utility revenues increase from \$126.3 million in 2020 to \$158.5 million in 2026.

Operating revenue requirements are shown on Lines 16 through 20 and consist of capital costs, O&M, and debt service. Fund 201 O&M, shown on Line 17 of Table 2-6, is consistent with O&M previously forecasted on Line 16 of Table 2-3. Debt service on Lines 18 through 20 correspond to the existing and proposed debt service payments shown previously in Table 2-5.

Table 2-6: Water & Sewer Financial Plan

Line No.	Projected							
	2019	2020	2021	2022	2023	2024	2025	2026
Water & Wastewater Utility Operating Flow of Funds								
1	\$ 36,180,300	\$ 36,632,600	\$ 37,090,500	\$ 37,554,100	\$ 38,023,500	\$ 38,498,800	\$ 38,980,000	\$ 39,467,300
2	86,152,300	87,229,200	88,319,600	89,423,600	90,541,400	91,673,100	92,819,000	93,979,300
Proposed Revenue Adjustments [1]								
3	<u>Year</u>	<u>Month</u>	<u>Increase</u>					
4	2020	2	5.00%	-	5,677,000	6,270,500	6,348,900	6,428,200
5	2021	2	5.00%	-	-	6,035,400	6,666,300	6,749,700
6	2022	2	5.00%	-	-	-	6,416,300	7,087,100
7	2023	2	0.00%	-	-	-	-	7,175,700
8	2024	2	0.00%	-	-	-	-	7,265,400
9	2025	2	0.00%	-	-	-	-	-
10	2026	2	0.00%	-	-	-	-	-
12	Total Proposed Additional Revenue			-	5,677,000	12,305,900	19,431,500	20,265,000
13	Total Utility User Charge Revenue			122,332,600	129,538,800	137,716,000	146,409,200	148,829,900
14	Total Other Revenue [2]			3,984,508	3,984,508	3,984,508	3,984,508	3,984,508
15	Fund 201 Total Revenue			\$ 126,317,108	\$ 133,523,308	\$ 141,700,508	\$ 150,393,708	\$ 152,814,408
Revenue Requirements								
16	Capital Costs			\$ 1,145,000	\$ 1,179,400	\$ 1,214,800	\$ 1,251,200	\$ 1,288,700
17	O&M [3]	95%		58,242,000	59,974,700	61,774,000	63,626,600	65,535,700
Debt Service								
18	Existing Debt			36,352,200	36,335,500	36,319,600	36,292,700	36,268,000
19	Proposed Debt			-	25,834,400	25,834,400	25,834,400	25,834,400
20	Total Debt Service			\$ 36,352,200	\$ 62,169,900	\$ 62,154,000	\$ 62,127,100	\$ 62,102,400
21	Fund 201 Revenue Requirements			\$ 95,739,200	\$ 123,324,000	\$ 125,142,800	\$ 127,004,900	\$ 128,926,800
22	Annual Operating Balance			\$ 30,577,908	\$ 10,199,308	\$ 16,557,708	\$ 23,388,808	\$ 23,887,608
23	Beginning Balance Operating Funds			\$ 14,872,200	\$ 15,079,108	\$ 15,531,415	\$ 15,997,123	\$ 16,477,930
24	Annual Operating Balance			30,577,908	10,199,308	16,557,708	23,388,808	23,887,608
25	Transfer to Renewal & Extension [4]			(30,371,000)	(9,747,000)	(16,092,000)	(22,908,000)	(23,394,000)
26	Transfer to Other			-	-	-	-	-
27	Ending Operating Balance			\$ 15,079,108	\$ 15,531,415	\$ 15,997,123	\$ 16,477,930	\$ 16,971,538
28	Target Operating Balance [5]			\$ 15,079,000	\$ 15,531,000	\$ 15,997,000	\$ 16,477,000	\$ 16,971,000
Fund 203								
Revenue								
29	Total Charges For Other Services			\$ 8,177,095	\$ 8,177,095	\$ 8,177,095	\$ 8,177,095	\$ 8,177,095
30	Other Revenue			-	-	-	-	-
31	Transfer In - General			30,371,000	9,747,000	16,092,000	22,908,000	23,394,000
32	Fund 203 Revenue			\$ 38,548,095	\$ 17,924,095	\$ 24,269,095	\$ 31,085,095	\$ 31,571,095
Revenue Requirements								
33	Capital Costs			\$ 398,100	\$ 410,000	\$ 422,300	\$ 435,000	\$ 448,100
34	O&M [6]	75%		9,137,000	9,392,300	9,674,200	9,964,400	10,263,200
35	Fund 203 Revenue Requirements			\$ 9,535,100	\$ 9,802,300	\$ 10,096,500	\$ 10,399,400	\$ 10,711,300
36	Annual Operating Balance			\$ 29,012,995	\$ 8,121,795	\$ 14,172,595	\$ 20,685,695	\$ 20,859,795
Utility Capital Flow of Funds								
37	Beginning Balance Operating Funds			\$ 150,758,000	\$ 127,992,695	\$ 78,898,390	\$ 55,440,885	\$ 38,864,580
38	Beginning Balance Fund 234 Sources			-	-	-	-	-
39	Annual Operating Balance			29,012,995	8,121,795	14,172,595	20,685,695	20,859,795
40	Transfers to Capital Projects			-	-	-	-	-
41	Gross Proposed Debt			359,000,000	-	-	-	-
42	Total Capital Sources			\$ 538,770,995	\$ 136,114,490	\$ 93,070,985	\$ 76,126,580	\$ 59,724,374
Uses								
43	Inflated CIP			\$ 379,558,900	\$ 57,216,100	\$ 37,630,100	\$ 37,262,000	\$ 39,554,500
44	Bond Issuance Expense & Transfer			31,219,400	-	-	-	-
45	Total Capital Uses			\$ 410,778,300	\$ 57,216,100	\$ 37,630,100	\$ 37,262,000	\$ 39,554,500
46	Ending Capital Balance			\$ 127,992,695	\$ 78,898,390	\$ 55,440,885	\$ 38,864,580	\$ 20,169,874
47	Year / Year Change in Capital Balance			(49,094,305)	(23,457,505)	(16,576,305)	(18,694,705)	(6,732,705)
Debt Service Coverage Ratio								
48	Net Revenues			\$ 134,494,202	\$ 141,700,402	\$ 149,877,602	\$ 158,570,802	\$ 160,991,502
49	O&M			(67,379,000)	(69,367,000)	(71,448,200)	(73,591,000)	(75,798,900)
50	Revenues Available for Debt Service			\$ 67,115,202	\$ 72,333,402	\$ 78,429,402	\$ 84,979,802	\$ 85,192,602
51	Debt Service			\$ 36,352,200	\$ 62,169,900	\$ 62,154,000	\$ 62,127,100	\$ 62,102,400
52	Annual Debt Service Coverage Ratio			1.85	1.16	1.26	1.37	1.37
53	MADS Coverage Ratio			1.84	1.16	1.26	1.37	1.37
54	Requirement			1.10	1.10	1.10	1.10	1.10
55	Internal Goal			1.20	1.20	1.20	1.20	1.20

[1] All rate increases are assumed to be January 1st with a 30 day lag in revenue receipt
 [2] Other Revenue based on 2019 Budget and forecasted to be constant
 [3] O&M for fund 201 has been factored down by 5% to account for historical favorability in Actual vs. Budget
 [4] Transfer to fund 203 based on 2019 budget, future transfers are set to meet the 90 day O&M reserve
 [5] Target balance is 90 days of O&M expense from upcoming year
 [6] O&M for fund 203 has been factored down by 25% to account for historical favorability in Actual vs. Budget

Total revenue requirements for Fund 201 are summarized on Line 21. These annual costs are deducted from Line 15, total revenue, to determine the annual operating balance. With the proposed revenue adjustments, the operating balance is positive throughout the forecast and allows for a transfer for Renewal & Extension to Fund 203, as shown on Line 25 of Table 2-6. After the transfer for Renewal & Extension, the ending balance in Fund 201 aligns with the target as shown on Lines 27 and 28.

Fund 203 cash flows begin on Line 29 of Table 2-6 with revenues consisting primarily of connection fee revenue that was previously forecasted on Line 10 of Table 2-2. Line 30 includes total other revenue which has historically been a nominal amount. Line 31 is based on available revenues from Fund 201 that are in excess of the minimum fund requirement. Total revenue for Fund 203 is shown on Line 32.

2.4.2 Capital Project Funding

The capital improvement funding plan is shown in Table 2-6 on Lines 37 through 47. Sources of funds include existing available balances, the annual operating balance of Fund 203, and the issuance of debt. Line 37 is the 2019 beginning year balance for Fund 203, amounting to approximately \$150.8 million. As discussed previously in the development of Table 2-5, debt issuance is anticipated for the Big Creek wastewater treatment plant. Proposed debt issuance of \$359.0 million in 2019 will provide about \$327.8 million in proceeds to fund the Big Creek project and \$32.2 million for bond issuance expense and debt service reserve provisioning. All other projects are assumed to be funded out of annual cash and available balances.

Uses of capital funds is shown on Lines 43 through 45. Line 43 includes the CIP, which comes directly from Line 58 of Table 2-4. The other use of the funds is bond issuance expense and the creation of a debt service reserve amounting to one year's principal and interest payment, which is consistent with past practice in the issuance of new debt.

Line 46 of Table 2-6 shows the ending capital balance for Fund 203, while Line 47 shows the year over year change in capital balance projected over the study period. As shown on Line 46, available balances are drawn down over the study period, ending at \$15.2 million in 2026. While this does not fully meet the target equal to the 2026 CIP of \$18.3 million, it was considered reasonably compliant for planning purposes.

Total utility debt service coverage is calculated on Lines 52 through 55. Except for 2020, debt service coverage is projected to remain above the 1.20x target in each year. As shown on Line 52, debt service coverage exceeds the minimum requirement of 1.10x annual debt service in all forecasted years, ranging

from a low of 1.16x in 2020 and a high of 1.39x in 2025. It is possible the debt could be structured to improve debt service coverage in 2020.

3.0 PROPOSED RATES

3.1 Introduction

In accordance with the scope for this rate study update, proposed rates were designed reflecting an across the board rate increase to water and wastewater user charges. The increases in rates will correlate to the proposed revenue increases shown in the financial plan in Table 2-6.

3.2 Existing Water Rates

The existing schedule of water rates, which was shown previously in Table 2-1, became effective in 2019. The rate schedule features bi-monthly charges and volume charges for the water and wastewater utilities. The rate schedule also includes the water conservation rates for domestic meter and irrigation meter charges.

3.3 Proposed Water Rates

The total user charge revenue increase shown in Table 2-6 was 5 percent annually for 2020, 2021 and 2022. Existing and proposed water and wastewater rates are shown in Table 3-1, reflecting the 5 percent increase assumed to be effective on January 1 of each prospective year.

Table 3-1: Existing and Proposed Rates

	<u>Existing</u>		<u>Proposed</u>			
		<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	
Water						
Service Charge (\$/Bill)	\$	7.99	\$ 8.39	\$ 8.81	\$ 9.25	
Volume Charge (\$/1000 Gal)	\$	3.36	\$ 3.53	\$ 3.71	\$ 3.90	
Wastewater						
Service Charge (\$/Bill)	\$	7.99	\$ 8.39	\$ 8.81	\$ 9.25	
Volume Charge (\$/1000 Gal)	\$	6.38	\$ 6.70	\$ 7.04	\$ 7.39	
Domestic Meter water conservation rates						
	<u>Consumption</u>	<u>Surcharge Rate</u>				
Tier 1	Up to 130% of base	\$ 3.36	\$ 3.53	\$ 3.71	\$ 3.90	
Tier 2	131% - 200% of base	\$ 4.20	\$ 4.41	\$ 4.63	\$ 4.86	
Tier 3	Over 200% of base	\$ 6.73	\$ 7.07	\$ 7.42	\$ 7.79	
Irrigation Meter water conservation rates						
	<u>Consumption</u>	<u>Surcharge Rate</u>				
Volume Charge (\$/1000 Gal)		\$ 6.73	\$ 7.07	\$ 7.42	\$ 7.79	

3.4 Typical Bill Comparison

Table 3-2 illustrates the bi-monthly impact that the proposed rates will have on utility bills under different levels of usage in 2020, 2021 and 2022. Lines 1 through 3 of Table 3-2 show the impact to a residential water customer at different consumption levels, with 12,000 gallons per bill (or 6,000 gallons per month) considered typical. Lines 4 through 6 show the impact to wastewater bills under the same residential consumption characteristics. The typical water and wastewater bills were then combined on Lines 7 through 9 of Table 3-2 to show the total bill at the indicated consumption levels under existing and proposed rates. As shown on Line 17 of Table 3-2, residential customers using 6,000 gallons per month will experience an increase of approximately \$6.68 per bi-monthly period, or about \$3.34 per month, equivalent to a change of about 5 percent. The percent change for all user charge ratepayers will amount to approximately 5 percent per year, subject to rounding.

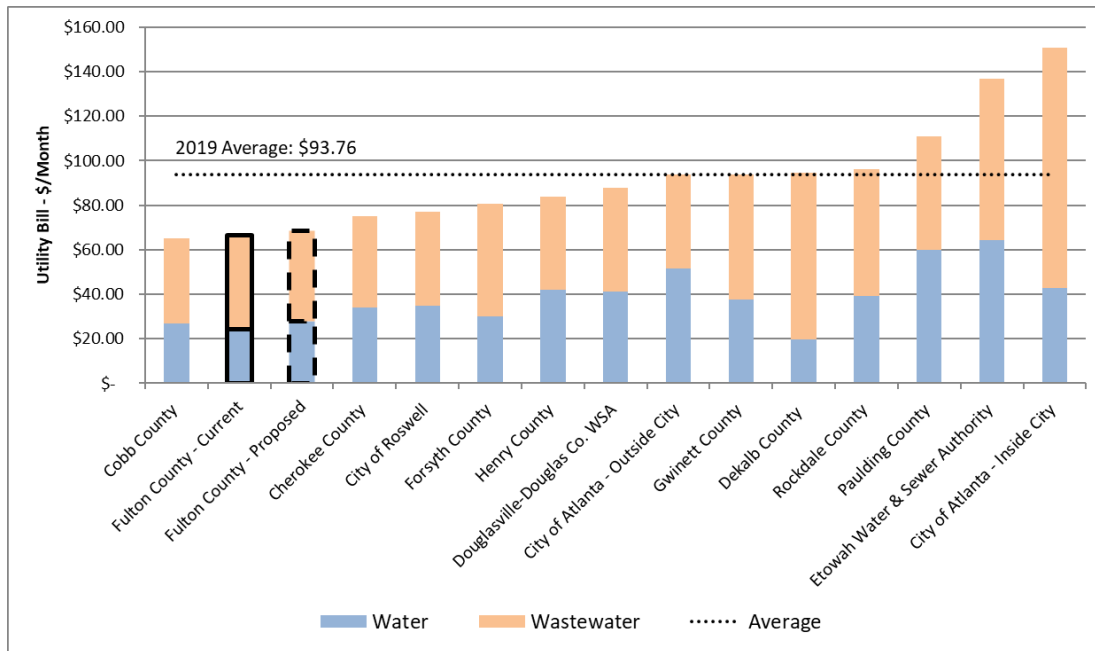
Table 3-2: Combined Water and Wastewater Bill Comparisons

Line No.	Description	Billable Flow gal/Month	Bi-Monthly Bill			
			2019 Existing Rates \$	2020 Proposed Rates \$	2021 Proposed Rates \$	2022 Proposed Rates \$
Single Family Residential, Water						
1	6,000 gallons per bill	3,000	\$ 28.15	\$ 29.57	\$ 31.07	\$ 32.65
2	12,000 gallons per bill	6,000	\$ 48.31	\$ 50.75	\$ 53.33	\$ 56.05
3	18,000 gallons per bill	9,000	\$ 68.47	\$ 71.93	\$ 75.59	\$ 79.45
Single Family Residential, Wastewater						
4	6,000 gallons per bill	3,000	\$ 46.27	\$ 48.59	\$ 51.05	\$ 53.59
5	12,000 gallons per bill	6,000	\$ 84.55	\$ 88.79	\$ 93.29	\$ 97.93
6	18,000 gallons per bill	9,000	\$ 122.83	\$ 128.99	\$ 135.53	\$ 142.27
Total Single Family Residential Bill						
7	6,000 gallons per bill	3,000	\$ 74.42	\$ 78.16	\$ 82.12	\$ 86.24
8	12,000 gallons per bill	6,000	\$ 132.86	\$ 139.54	\$ 146.62	\$ 153.98
9	18,000 gallons per bill	9,000	\$ 191.30	\$ 200.92	\$ 211.12	\$ 221.72
Proposed Increase / (Decrease)						
Single Family Residential, Water						
10	6,000 gallons per bill			\$ 1.42	\$ 1.50	\$ 1.58
11	12,000 gallons per bill			\$ 2.44	\$ 2.58	\$ 2.72
12	18,000 gallons per bill			\$ 3.46	\$ 3.66	\$ 3.86
Single Family Residential, Wastewater						
13	6,000 gallons per bill			\$ 2.32	\$ 2.46	\$ 2.54
14	12,000 gallons per bill			\$ 4.24	\$ 4.50	\$ 4.64
15	18,000 gallons per bill			\$ 6.16	\$ 6.54	\$ 6.74
Total Single Family Residential Bill						
16	6,000 gallons per bill			\$ 3.74	\$ 3.96	\$ 4.12
17	12,000 gallons per bill			\$ 6.68	\$ 7.08	\$ 7.36
18	18,000 gallons per bill			\$ 9.62	\$ 10.20	\$ 10.60

3.5 Regional Typical Bill

Figure 3-1 shows a regional comparison of residential bills at the 6,000 gallon monthly consumption level under both existing and proposed rates. Among communities surveyed, the average combined residential water and wastewater bill at 6,000 gallons per month was nearly \$94 per month. As shown in Figure 3-1, overall Fulton County rates are among the lowest of the communities surveyed. The comparison shown in Figure 3-1 indicates that after the proposed 2020 revenue adjustment, the utility’s typical bill is anticipated to remain among the lowest of the sampled utilities. Lastly, recalling that water and wastewater rates nationally are increasing at about 5 percent annually, it is highly likely that rates for other communities will be trending upward over time but are not yet approved or published.

Figure 3-1: Residential Monthly Bill Comparison



4.0 ANCILLARY FEES

4.1 Ancillary Fees

Fulton County provides certain services that extend beyond potable water treatment and delivery or wastewater collection and treatment. These services currently include various permits and inspections, meter replacement, fire flow testing, hydrant use, meter testing, wastewater clean-out, tap fees, septic hauling, lab fees, fees for non-payment, and other fees. Recommendations were made in the 2016 Study to modify several miscellaneous fees. Since that time, Fulton County staff have observed additional costs being incurred for certain services and recommends increases in applicable fees to improve cost recovery. Table 4-1 shows the ancillary fees that are proposed to change. All other ancillary fees not shown in Table 4-1 are not changing.

Table 4-1: Ancillary Fees

	Water Meter Cost	Water System Capacity Fee	Total Water System Connection
5/8 "	\$1,922.33	\$1,518.00	\$3,097.33
5/8" Drop In	\$241.00		
3/4 "	\$1,958.69	\$1,175.00	\$3,133.69
3/4 " Drop In	\$277.00		
1"	\$2,783.66	\$1,958.00	\$4,741.66
1" Drop In	\$316.00		
1 – 1/2 "	\$5,642.81	\$3,917.00	\$9,559.81
2"	\$7,096.01	\$6,265.00	\$13,361.01
3"	\$13,136.55	\$11,747.00	\$24,883.55
4"	\$24,883.55	\$19,579.00	\$44,023.00
6"	\$29,816.85	\$39,159.00	\$68,975.85
8"	\$33,826.80	\$62,654.00	\$96,480.80
<u>WATER METER REPLACEMENT</u>			
5/8 "	\$250.00	Up to 1 "	\$100.00
3/4 "	\$350.00	1-1/2 "	\$113.00
1"	\$500.00	2"	\$133.00
1-1/2 "	\$528.00	3"	\$183.00
2"	\$1,372.00	4"	\$193.00
3" – 6"	\$1,078.00	6"	\$21,300
8"	\$1,278.00	8"	\$263.00
		10"	\$318.00
Fire Flow Test			\$100.00
Meter Box Replacement (5/8" to 1")			\$350.00
Meter Box Replacement 1-1/2" to (2")			\$650.00
Road Bore (5/8 ", 3/4 ", or 1" Meter)	\$528.00 for 2 lanes; \$1,056.00 for more than 2 lanes		
Road Bore (1-1/2 " or 2" Meter)	\$720.00 for 2 lanes; \$1,440.00 for more than 2 lanes		
Road Bore (3 " or 4" Meter)	\$7,000.00 for 2 lanes; \$10,500.00 for more than 2 lanes		
Road Bore (6 " or 8" Meter)	\$10,000.00 for 2 lanes; \$15,000.00 for more than 2 lanes		
Fire Hydrant Meter Deposit			\$2,000.00
Shut off for non-payment			\$46.00
Standby Petition Water	\$50 per linear foot of frontage per property		
Standby Petition Sewer	\$60 per linear foot of frontage per property		
Existing Homeowner Lateral	\$6,300 per lateral*		
* Additional paving required outside the repair cost will be transferred to homeowner			



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1 **A RESOLUTION TO APPROVE A FIVE PERCENT (5%) WATER AND SEWER**
2 **VOLUMETRIC RATE INCREASE FOR EACH OF THE NEXT 3 YEARS; TO MAKE**
3 **THE NECESSARY INCREASES TO THE WATER AND SEWER FEE SCHEDULES;**
4 **TO APPROVE MODIFICATIONS TO THE WATER CONNECTION FEES FOR**
5 **NORTH FULTON; TO PROVIDE FOR AN EFFECTIVE DATE; AND FOR OTHER**
6 **PURPOSES.**
7

8 **WHEREAS**, counties in Georgia are delegated the authority to provide
9 sewer and water services in the Supplementary Powers provision of the Georgia
10 Constitution (Art. 9, § 2, ¶ III of the Georgia Constitution of 1983); and,

11 **WHEREAS**, Fulton County’s authority to “prescribe, revise, and collect
12 rates, fees, tolls, or charges for the services...” is set out in O.C.G.A. § 36-82-62;
13 and,

14 **WHEREAS**, the Metropolitan North Georgia Water Planning District
15 (“MNGWPD”) recommends to local governments in its Wastewater and Water
16 Management Plans that “...water rates should be based on a local rate study and
17 designed to provide a sufficient revenue stream to support program costs and
18 facility maintenance;” and,

19 **WHEREAS**, the Fulton County Public Works Department and the Fulton
20 County Finance Department, with the assistance of a professional consultant, have
21 conducted a local rate study which has determined the short and long term needs for
22 the County’s water and sewer infrastructure system (“System”); and

23 **WHEREAS**, a detailed analysis of the System was conducted to identify
24 comprehensive capital improvement projects needed for Fulton County (the “County”)
25 to continue to provide adequate and cost-effective water and wastewater services to
26 its existing and future customers for the foreseeable time horizon; and

27 **WHEREAS**, in conjunction with this effort, the Public Works Department
28 presented, and the Fulton County Board of Commissioners (“BOC”) approved, a
29 detailed list of capital improvements designated as the 2016 to 2025 Capital
30 Improvement Program (“Program”), which are necessary to meet the System needs;
31 and

32 **WHEREAS**, in order to meet the current and future water and sewer needs
33 of Fulton County through 2026, and to sustain and improve the quality of health for its
34 citizens, the County must provide funding for the capital improvement projects
35 identified in the Program, allocating the appropriate costs to both existing and future
36 customers, with increases where necessary; and

37 **WHEREAS**, Fulton County’s rates are currently the second lowest in the
38 region, and even with the proposed increases, they would be remain the second
39 lowest in the region today; and

40 **WHEREAS**, Fulton County must now apply an appropriate level of new
41 capital funds to continue meeting customer and regulatory system requirements; and

42 **WHEREAS**, the Department of Public Works and the Finance Department,
43 along with a professional consultant, have concluded the necessary analysis for
44 maintaining and improving the System and that these goals can best be met
45 through a multi-pronged effort of: (1) issuing new water and sewer revenue bonds, (2)
46 utilizing current reserves in the Water and Sewer Utility Fund to fund the Program, (3)
47 increasing water and sewer rates across-the-board by 5% each year for the next 3
48 years, (4) making necessary increases to the water and sewer fee schedules,
49 effective January 1, 2020 for the year 2020, on January 1, 2021 for the increases in

50 year 2021, and on January 1, 2022, for the increases in year 2022, and
51 increasing water connection permit fees for North Fulton, effective January 1,
52 2020; and

53 **WHEREAS**, the Fulton County Board of Commissioners recognizes the need
54 for the capital improvement projects identified in the Program, and is committed
55 to providing quality services that help to sustain and enhance the System along
56 with the quality of life for all its citizens.

57 **NOW, THEREFORE BE IT RESOLVED**, that the Fulton County Board of
58 Commissioners hereby approves a five percent (5%) water and sewer volumetric rate
59 increase each year for the next 3 years and making necessary increases to the water
60 and sewer fee schedules, effective January 1, 2020 for the year 2020 on January 1,
61 2021 for the increases in year 2021 and January 1, 2022 for the increases in year 2022.

62 **BE IT FURTHER RESOLVED**, that the Fulton County Board of Commissioners
63 hereby approves and authorizes modifications to the existing water connection permit
64 fees in North Fulton, effective January 1, 2020 as set forth in the Water and Wastewater
65 Rate Study, dated November 14, 2016.

66 **BE IT FINALLY RESOLVED**, that this Resolution shall become effective when
67 adopted, and that all resolutions and provisions of the Code of Laws in conflict with this
68 Resolution are hereby repealed to the extent of the conflict.

69 **PASSED AND ADOPTED**, by the Board of Commissioners of Fulton County,
70 Georgia the ____ day of _____, 2019.

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APPROVED AS TO FORM:

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Patrise Perkins-Hooker

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County Attorney

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P:\CALegislation\PubWks\Resolutions\11.6.19.Resolution 5% Water and Sewer Volumetric Rate.docx

**FULTON COUNTY BOARD OF
COMMISSIONERS**

Robert L. Pitts, Chairman

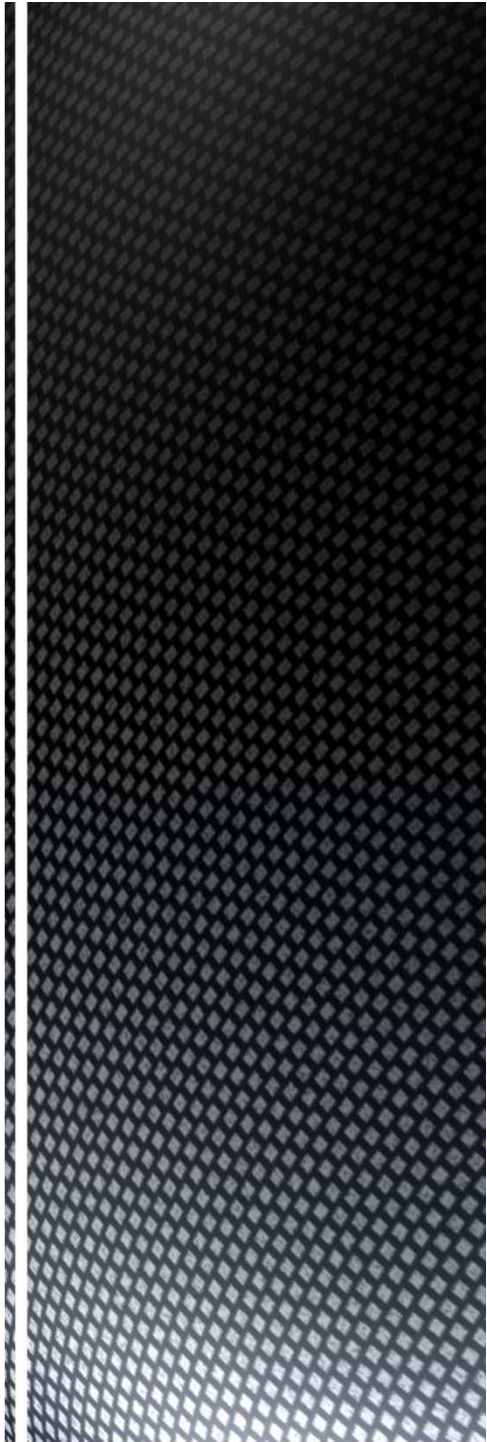
ATTEST:

Tonya R. Grier
Interim Clerk to the Commission



**FULTON COUNTY
DEPARTMENT OF PUBLIC WORKS**

**REVISED 2020 – 2026
CAPITAL IMPROVEMENT PROGRAM
AND RATE STUDY REVIEW**



Fulton County Proposed Rate Change

Previous Action:

- 5% increases in 2017, 2018, 2019
- Reevaluate funding needs before 2020

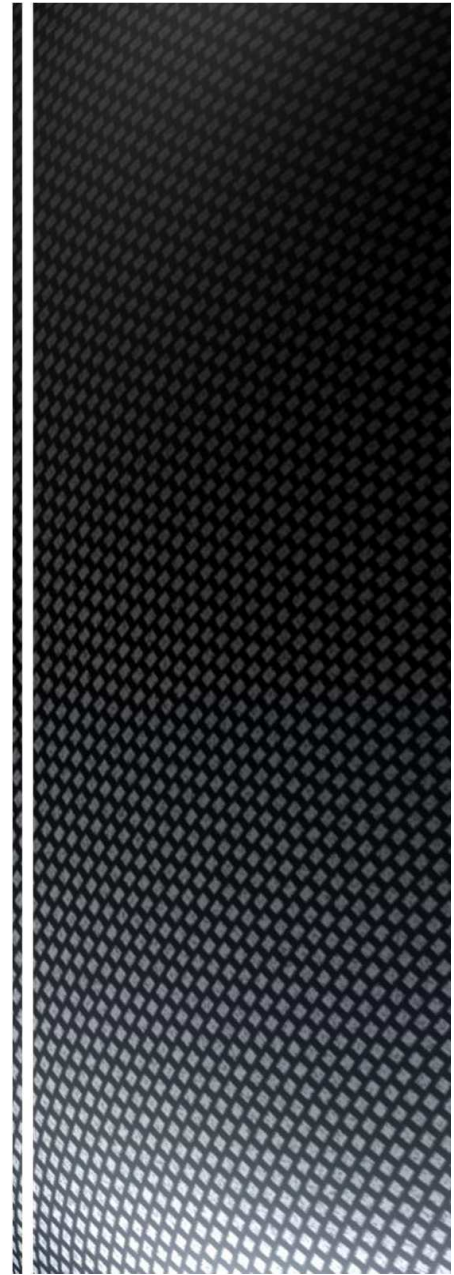
Proposed Action:

- 5% increases in 2020, 2021, 2022
- Provides necessary increase in funding for bond debt-coverage

Future Action:

- Review funding needs again in 2022

Proposed Revenue Increases	
Year	Proposed Plan
2017	5%
2018	5%
2019	5%
2020	5%
2021	5%
2022	5%
2023	TBD
2024	TBD
2025	TBD



Previously Approved 2016 to 2025 Capital Improvement Program Projects Underway

Water System Improvements

Water Main extensions along Medlock Bridge Road and within Alpharetta

Water Tank Security and Painting Measures

Wastewater Treatment Plant Expansions

Construction of Little River WRF expansion to 2.6 MGD

Design of Big Creek WRF expansion to 38 MGD

Camp Creek WRF Clarifier Improvements

Camp Creek WRF UV Improvements

Wastewater Collection System Improvements

14 Pump Station Upgrades

Cobb County Diversion from Big Creek

Water and Wastewater Relocations & Repairs

GDOT and TSPLOST roadway projects

Routine capital improvements and repairs

Revised 2020 to 2026 Capital Improvement Program Projects to be Added

Additions to CIP include:

Construction of Big Creek expansion to 32 MGD
\$300 Million Guaranteed Maximum Price (GMP)

Spill Mitigation Strategy

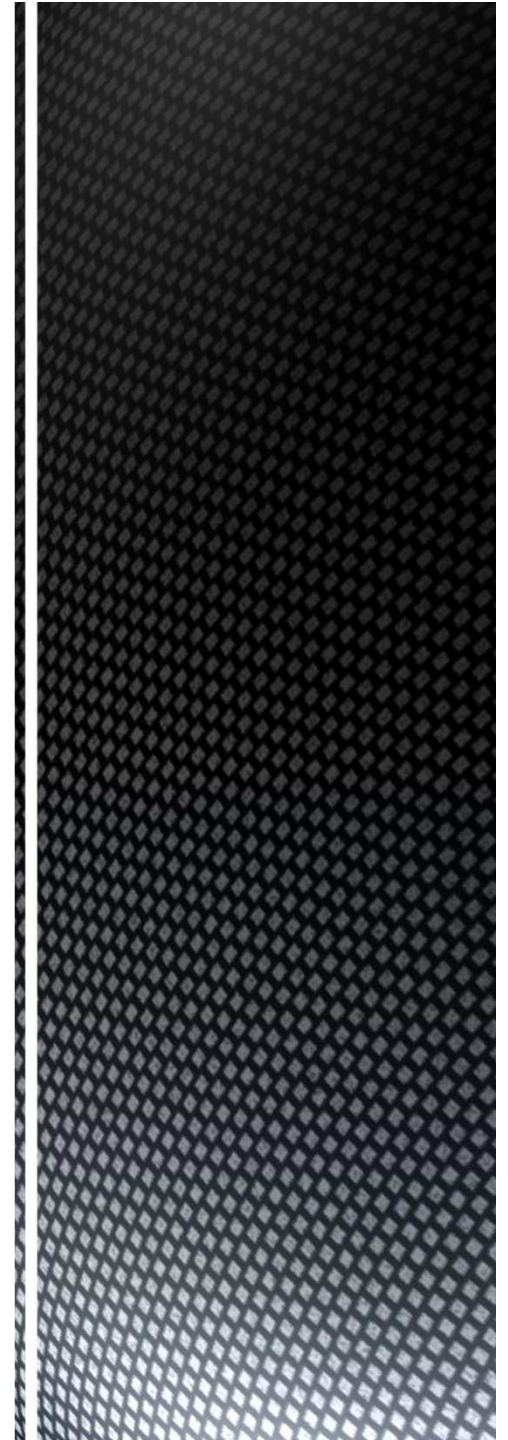
\$40 Million Program Implementation to reduce Inflow and Infiltration in the Big Creek and Camp Creek service areas

John Creek Environmental Campus WRF Membrane Replacement

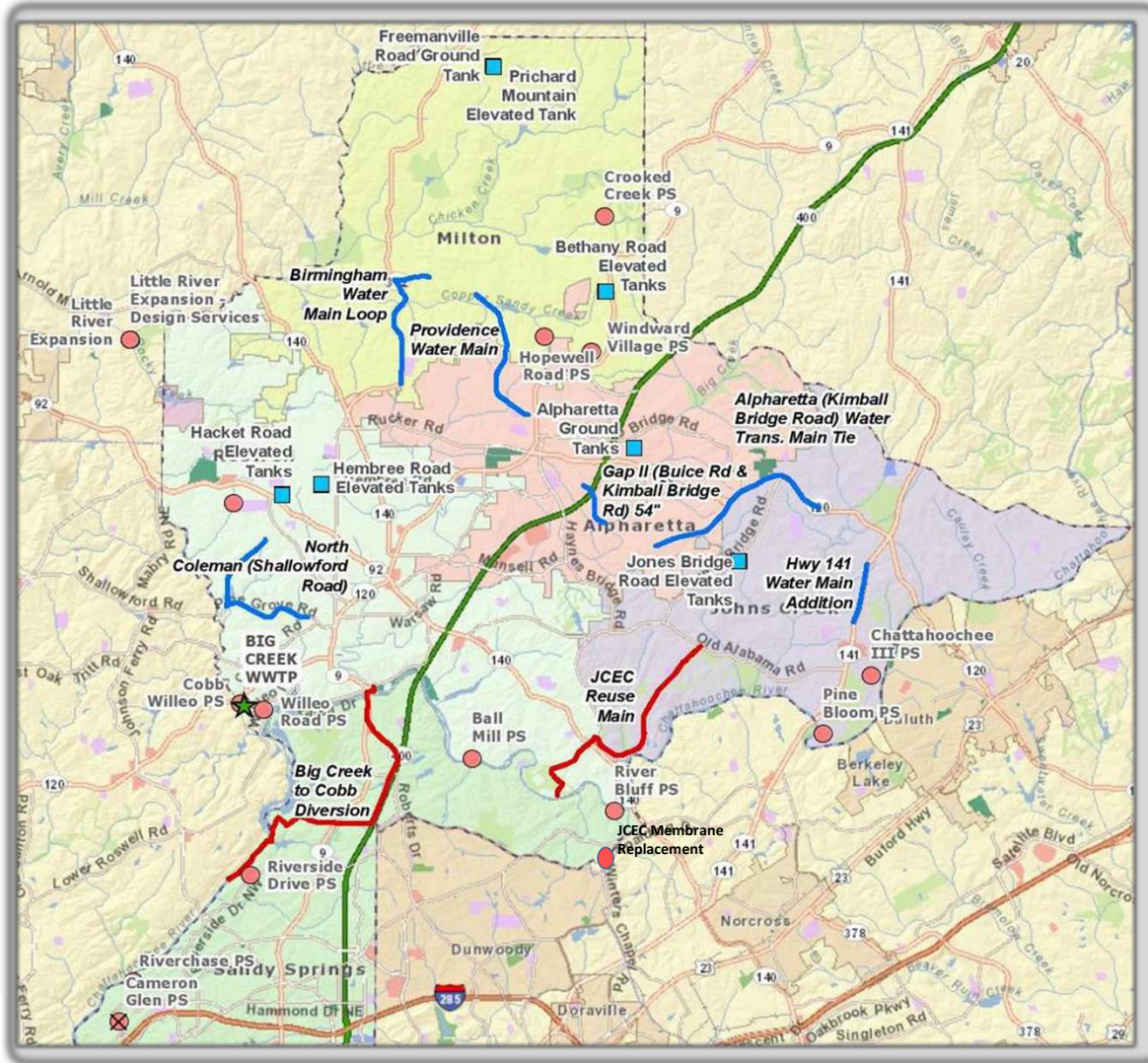
\$21 Million replacement of membranes

Chattahoochee Hills Pump Station and Force Main

\$4 Million force main to collect flow from southeast portions of Chattahoochee Hills and treat it at Camp Creek



North Fulton Service Area Capital Improvement Program



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South Fulton Service Area Capital Improvement Program



Revised 2020 – 2026 Capital Improvement Program Cash Flow Needs

Water System Improvements

\$16,795,000

Wastewater Treatment Plant Expansions

\$391,097,000

Wastewater Collection System Improvements

\$122,466,000

Water and Wastewater Relocations & Repairs

\$66,300,000

Total Six-Year CIP Project Needs: \$596,658,000



Existing and Proposed Rates

Water

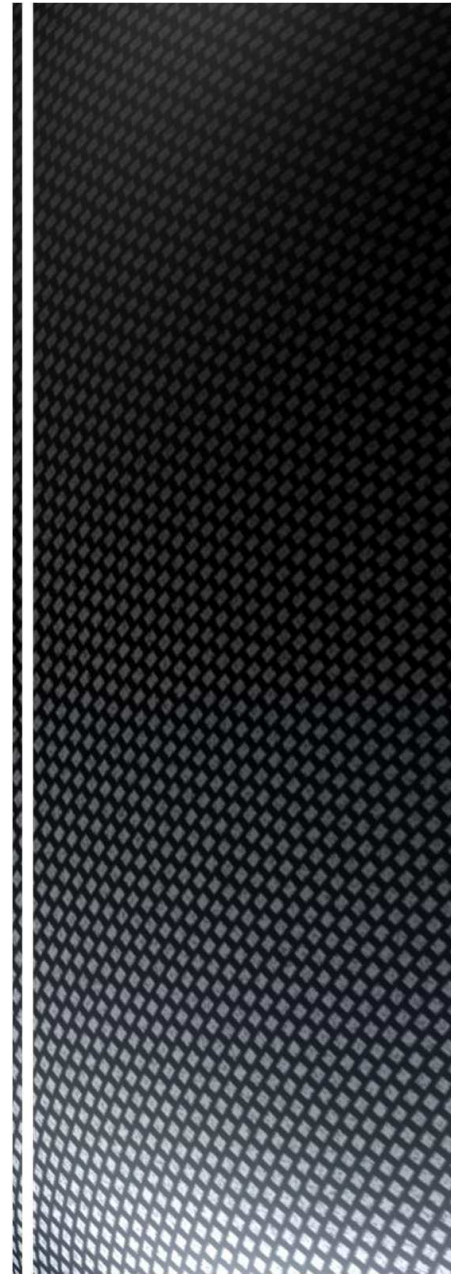
Service Charge (\$/Bill)	\$7.99	\$8.39	\$8.81	\$9.25
Domestic Meter Water Conservation Rates				
Tier 1 - Up to 130% of base (\$/1000)	\$3.36	\$3.53	\$3.71	\$3.90
Tier 2 - 131% - 200% of base (\$/1000)	\$4.20	\$4.41	\$4.63	\$4.86
Tier 3 - Over 200% of base (\$/1000)	\$6.73	\$7.07	\$7.42	\$7.79
Irrigation Meter Rates (\$/1000)	\$6.73	\$7.07	\$7.42	\$7.79

Wastewater

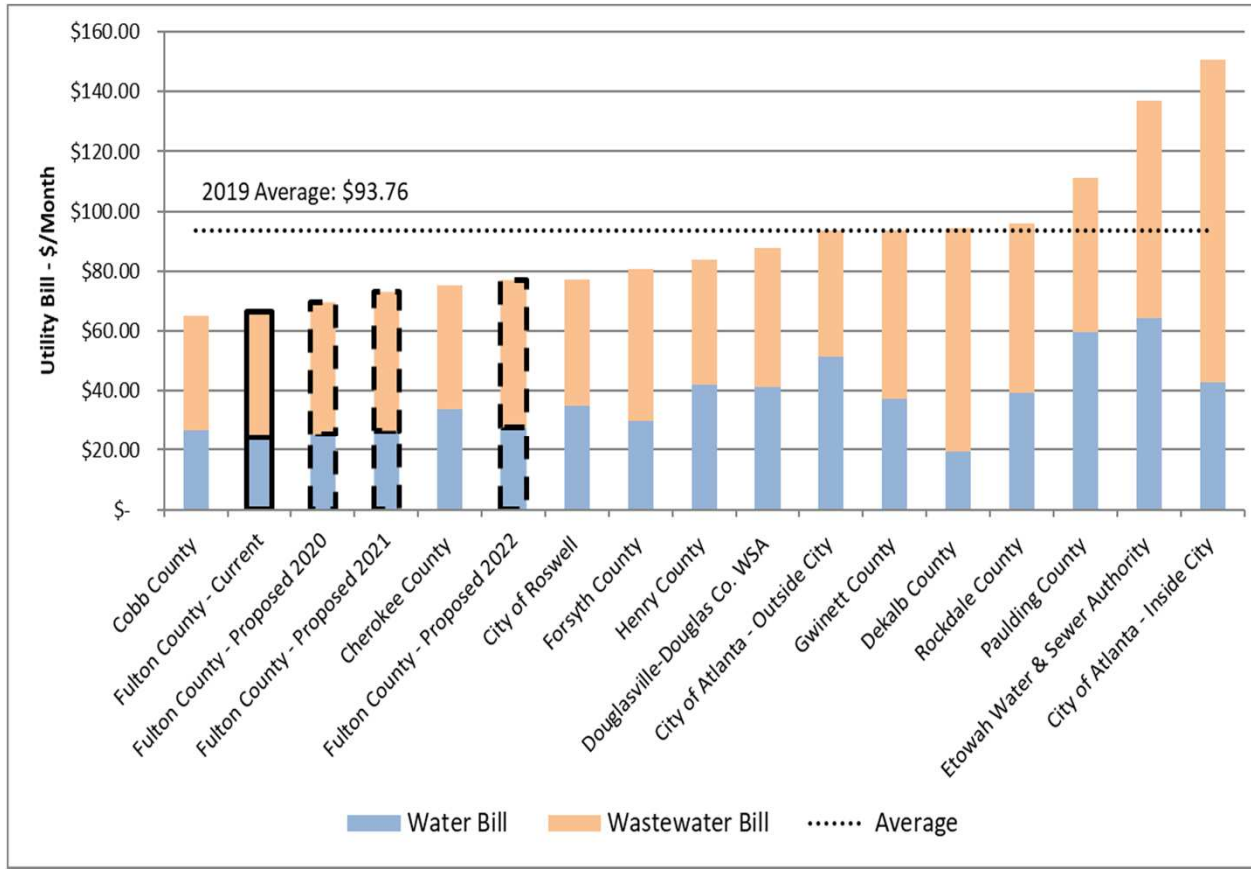
Service Charge (\$/Bill)	\$7.99	\$8.39	\$8.81	\$9.25
Volume Charge (\$/1000 Gal)	\$6.38	\$6.70	\$7.04	\$7.39

Monthly Avg Household (12,000 gallons per 2 mths) \$66.43 \$69.77 \$73.31 \$76.99

Monthly Avg Household - Sewer Only \$42.28 \$44.40 \$46.65 \$48.97



Impact of Proposed Increases on Typical Bills



§ Fulton County remains reasonably priced compared to regional utilities, increasing about \$3.50/month for 6,000 gallon per month residential user

§ This assumes that other utilities do not increase their rates over time

