



CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY

Comprehensive Annual Financial Report

For the fiscal year ended August 31, 2019

Prepared by: Finance Department

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Part I

Introductory Section



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CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
COMPREHENSIVE ANNUAL FINANCIAL REPORT
For the fiscal year ended August 31, 2019

	PAGE
INTRODUCTORY SECTION	
Table of Contents.....	11-12
Certificate of Achievement for Excellence in Financial Reporting.....	13
Listing of Principal Officials and Consultants.....	14
Organizational Chart.....	15
Letter of Transmittal.....	16-111
FINANCIAL SECTION	
Independent Auditor's Report.....	1-2
Management's Discussion and Analysis.....	3-7
Basic Financial Statements:	
Statement of Net Position.....	8-9
Statement of Revenues, Expenses and Changes in Net Position.....	10
Statement of Cash Flows.....	11-12
Notes to the Financial Statements.....	13-44
Required Supplementary Information:	
Schedule of Changes in the Net Pension Liability and Related Ratios.....	45-46
Schedule of Pension Contributions.....	47-48
Schedule of Changes in the Net OPEB Liability and Related Ratios.....	49
Schedule of OPEB Contributions.....	50
Notes to the Required Supplementary Information.....	51-53
Supplementary Information:	
Schedule of Costs of Water Purchases and Production.....	54
Schedule of Costs of Wastewater Treatment.....	55
Schedule of Distribution and Administration Expenses.....	56
Schedule of Budgeted Revenues and Expenses Compared with Actual.....	57-59
Schedule of Metered Water Sales, Wastewater Treatment Sales and Number of Customers Served.....	60
Schedule of Revenue Bond Coverage.....	61
Schedule of Water, Sewer and Irrigation Rates.....	62
Schedule of Insurance in Force.....	63
STATISTICAL SECTION	
Introduction to the Statistical Section	
Financial Trends	
Net Position by Component.....	64
Changes in Net Position.....	65
Operating Revenues by Source.....	66
Operating Expenses by Function.....	67
Non-Operating Revenues (Expenses).....	68
Capital Contributions by Source.....	69

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
COMPREHENSIVE ANNUAL FINANCIAL REPORT
For the fiscal year ended August 31, 2019

	PAGE
STATISTICAL SECTION (continued)	
Revenue Capacity	
Water Capacity Compared with Annual Average Daily Flow and Maximum Flow.....	70
Sewerage Treatment Capacity Compared with Annual Monthly Average Flow and Peak Day Flows.....	71
New Connections Added to the System.....	72
Number of Customers.....	73
Residential Water, Sewer and Irrigation Rates.....	74
Commercial Water, Sewer and Irrigation Rates.....	75
Top Ten Customers by Type.....	76
Debt Capacity	
Schedule of Revenue Bond Coverage.....	77
Ratios of Revenue Bond Debt Outstanding.....	78
Schedule of Revenue Bonds Payable.....	79
Demographic and Economic Information	
Principal Employers.....	80
Demographic and Economic Statistics.....	81
Operating Information	
Full-Time Water and Sewer Authority Employees by Department.....	82
Water Tank Storage Capacity.....	83
Raw Water Supply in Reservoir.....	84
OTHER REPORTING SECTION	
Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	85-86



Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

**Cherokee County
Water & Sewerage Authority
Georgia**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

August 31, 2018

Christopher P. Morill

Executive Director/CEO

Cherokee County Water & Sewerage Authority

Listing of Principal Officials and Consultants

CCWSA Board Members

Gary Winchester; Chairman

Eric Wilmarth; Vice-Chair

Doug Dabbs; Secretary

Lisa Woodruff

Harry Johnston

Nancy Martin

Barry Mansell

General Manager

Thomas Heard

Management

Wesley Banks	Financial Assurance/Billing/IT Manager	Beth Jones	Accounting Manager
Clint Blackwell	Water Treatment Plant Manager	David Kubala	Environmental Affairs Manager
Gaye Blackwell	Customer Service/Meter Tech Manager	Greg Long	Special Projects Manager
Sharon Clark	Data Systems Analyst	Rodney Satterfield	Development Compliance Manager
Mark Cochran	Reservoir Manager	Ryan Sarks	Human Resources/Risk/Fleet & Safety Manager
Dwayne Fowler	Construction Manager	Mike Venters	Wastewater Facilities Manager
Corey Ghorley	Capital Improvements Coordinator	Eric Wright	Wastewater Collections/Lift Station Manager
Jeff Hooper	GPS/GIS Manager		

Consultants and Professional Services

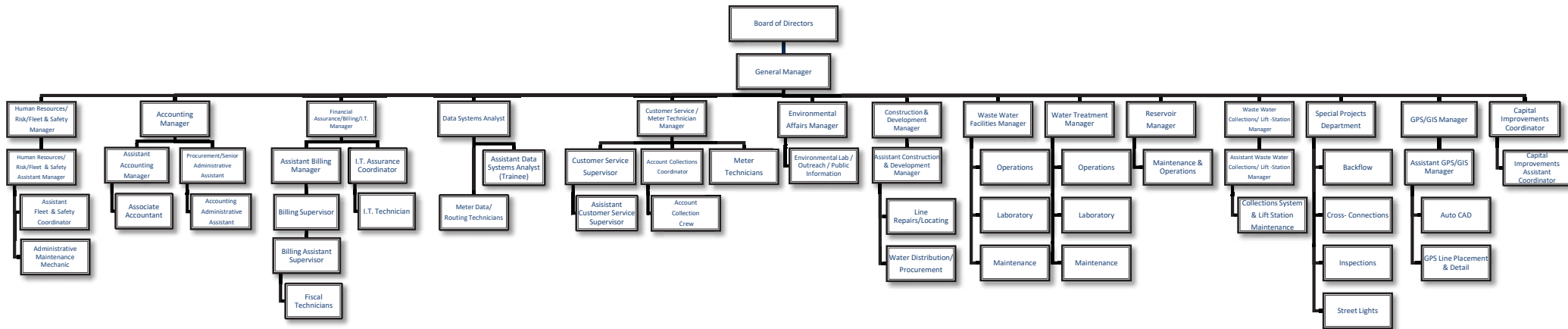
Legal Counsel:

Roach, Caudill & Gunn, LLP, Canton, Georgia

Auditors:

Rushton & Company, LLC

Cherokee County Water and Sewerage Authority



FY 2018-2019 Management Structure Chart



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Cherokee County Water & Sewerage Authority

November 15, 2019

Board of Directors, CCWSA
Customers of the Cherokee County Water & Sewerage Authority
And the Citizens of Cherokee County, Georgia

We are pleased to present the Comprehensive Annual Financial Report (CAFR) of the Cherokee County Water and Sewerage Authority for the fiscal year ended August 31, 2019. Cherokee County Water and Sewerage Authority's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America.

The Cherokee County Water & Sewerage Authority has established internal controls over financial reporting that provide reasonable assurance of proper recording of financial transactions and the preparation of financial statements and the accompanying information. To provide a reasonable basis for making these representations, management of the Authority has established a comprehensive internal control network that is designed to protect its assets from theft, loss or misuse. The cost of a control should not exceed the benefits to be derived as the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements.

The firm Rushton & Company, conducted an independent audit on the financial statements in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of Cherokee County Water and Sewerage Authority as of and for the year ended August 31, 2019 and the related notes to the financial statements, which collectively comprise Cherokee County Water and Sewerage Authority's basic financial statements, and as a result have issued an unmodified opinion on the financial statements of the Authority for the year ending August 31, 2019. The auditors' report is located at the front of the financial section of this report.

In accordance with Generally Accepted Accounting Principles, a narrative introduction, overview, and analysis accompany the basic financials statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the contents of the MD&A thus should be read in conjunction with it. Management's Discussion and Analysis is located immediately following the report of the independent auditors on pages 3-7.

Cherokee County Water & Sewerage Authority

It is anticipated that this Comprehensive Annual Financial Report (CAFR) may be read by a variety of users. The typical user of Authority's financial report may vary greatly in terms of informational needs and expertise in governmental accounting.

Profile of Cherokee County Water & Sewerage Authority

The Cherokee County Water & Sewerage Authority (CCWSA) was established as a subdivision of the government of the State of Georgia by an act of the Georgia Legislature in 1955. This Authority was created for the express purpose of providing public drinking water and sanitary sewer services to the citizens of Cherokee County. CCWSA has performed this mission since establishment, adding infrastructure and treatment systems in response to growing demands for services.

CCWSA is a public not-for-profit governmental entity tasked with the provision of drinking water and sanitary sewer services to Cherokee County. The Authority has no taxing powers, is not a part of Cherokee County government, and does not receive any tax revenue from county or city governments. CCWSA sells the services of high quality drinking water and efficient sewage conveyance and treatment, the charges for which go to pay on-going operations and maintenance costs. New customer connections fees are designed to repay any moneys the Authority borrows for capital improvement projects such as new or expanded water and sewer lines, or new or expanded treatment facilities.

The Authority owns and operates a water supply, treatment, distribution system, sanitary sewer treatment, and collection system. Currently the Authority pumps raw water from three intakes located on the Etowah River to the water treatment plant. Two of the intakes are located at the Water Treatment plant site, while the third raw water intake is located at the Riverbend Environmental Complex. The Riverbend raw water intake is located approximately 2,600 feet downstream from the Etowah River Water Treatment Plant and became operational in June 2016. The Authority currently owns three raw water pump stations located at each intake on the Etowah River with an aggregate raw water pumping capacity of 48.2 million gallons per day ("MGD"). The Authority maintains a raw water storage reservoir, with storage capacity of approximately 15 million gallons. The Authority has a water distribution network of approximately 1,287 miles of pipeline. The water system serves an approximate 300 square mile area containing an estimated population in excess of 188,000 and has approximately 75,273 active water connections.

The sewerage system consists of three active wastewater treatment plants with an aggregate treatment capacity of 12 MGD and a wastewater collection system of 77 wastewater pumping stations and approximately 600 miles of collection sewers. The sewerage system serves an approximate 100 square mile area containing an estimated population in excess of 90,000 and has approximately 35,888 active sewer connections.

Cherokee County Water & Sewerage Authority

Governance

CCWSA is governed by a seven person board of directors. The directors serve four-year terms and there is a term limit of two consecutive terms (8 years). A director who has served the term limit is eligible for reappointment after being off the Board for at least 4 years. The Board members are representative of the citizens of Cherokee County, and must be a customer of CCWSA. Cherokee County is divided into four districts for representation. A member is appointed from each of the four districts. Those members must be a CCWSA customer and represent one of the four respective districts.

Another member must be a CCWSA customer and is deemed the “at-large” member representing the county as a whole. Another member must be a CCWSA customer in one of the cities within the county that has consolidated its water and wastewater systems with the Authority. These six board members are appointed by the Grand Jury of Cherokee County. Candidates for appointment undergo questioning, qualification review and other scrutiny by the Grand Jury during the appointment process. This appointment process is somewhat unique since water/wastewater systems are most often part of a city or county government where appointees are either elected officials or political appointees. The apolitical appointment process has allowed the CCWSA Board to make decisions about water and sanitary sewer services for the citizens of Cherokee County based on need and economic viability instead of political expediency. The Chairman of the Cherokee County Commissioners is automatically the seventh board member by virtue of his/her elected position.

Accounting and Financial Reporting

The accounting and financial reporting treatment applied to governmental entities is determined by measurement focus. The Authority’s operations are accounted for entirely as a proprietary governmental fund type with an economic resources measurement focus. The financial statements are prepared in conformity with generally accepted accounting principles on the accrual basis of accounting whereby revenue is recognized when earned, expenses are recorded when incurred and all long-term assets, receivables, debt and other obligations are recognized.

Operating Budget

The Authority is not legally required to adopt a budget. The staff of the Authority, however, prepares an annual operating budget for management control purposes. The Authority uses the accrual basis of accounting in its annual operating budget. The Authority’s Board of Directors approves the budget and any changes made thereto.

Cherokee County Water & Sewerage Authority

Current Economic Environment

Local & National Environment

Cherokee County Water & Sewerage Authority supplies water to a geographic area of approximately 300 square miles containing a population in excess of 235,000. In addition, CCWSA provides sewer to a geographic area of approximately 100 square miles containing a population in excess of 99,000. Prior to the national economic downturn, Cherokee County experienced rapid growth. As the economic downturn became even more evident nationally and in the region there was a significant decrease of growth in the area along with minimal construction activity. In return, the number of new meters set and sold declined in years 2010 thru 2012 significantly from the amount sold prior to the downturn of the economy. However, in 2013 Cherokee County began to experience a slow return of growth and an uptick in the construction activity in the area. As a result, there was a more substantial increase of new connections beginning in 2013 and continuing through 2019. Currently, there is every indication for the near future CCWSA will continue to see a steady growth of new water and sewer connections as the projections continue to incorporate an increase in growth.

Continuous Improvement

The staff of the Authority has developed a multi-year capital improvements program and a plan to finance the program which relies on a combination of system revenues and proceeds of debt and investment earnings on such proceeds. The capital improvements program allows the staff of the Authority to plan, on a long-term basis, for future system capital needs. The capital improvements program is updated on an annual basis. Please refer to the Management's Discussion and Analysis (MD&A) on page 6 for more detailed information.

Long Term Financial Planning & Considerations

When the need arises, the Authority incurs capital financing debt through the issuance of revenue bonds. The Authority makes sinking fund deposits monthly for all issues. Annual totals are at least equal to the principal installments of and interest payable on the bonds in the current sinking fund year.

The various resolutions providing for the revenue bonds require that the Authority establish and maintain a schedule of rates, fees, and charges for services furnished by the systems to produce in each sinking fund year "net system revenues" in an amount at least equal to 1.20 times the highest annual amount of principal and interest payable on the bonds during any future sinking fund year. Effective with the issuance of the Series 2001 bonds, the Authority's annual net system revenues exclusive of water connection

Cherokee County Water & Sewerage Authority

and sewer tap fees must be no less than this highest annual amount of debt service payable during any future sinking fund year.

The Authority currently will continue to rely on operating revenues and connection fees contributions to fund capital improvements on a pay-as-you-go basis. If the need arises, the Authority's Capital Improvement Program will be funded through issuance of new debt.

Major Initiatives

The Cherokee County Water & Sewerage Authority continues to experience growth in its customer base. Current trends indicate that this growth will continue throughout the county, thereby requiring additional wastewater treatment capacity. To satisfy present and future wastewater treatment needs, the Authority completed the Riverbend Wastewater Treatment Complex and it became operational in September 2018.

The Riverbend Complex includes a 4.5 MGD fresh water withdrawal permit that has been converted from an Industrial permit to a 4.5 MGD potable water withdrawal permit. The Authority completed the raw water intake and pump station in June 2016. The intake is located approximately one mile downstream from the Authority's other two raw water intakes on the Etowah River. The improvements included an upgrade to the pumping station and tied the raw water delivery pipeline into the Authority's existing water treatment plant and will provide an additional 4.5 MGD of raw water capacity.

In addition to the Riverbend Wastewater Treatment facility completion, the Authority's capital improvement's program has several initiatives for the wastewater treatment facilities, the collection system, distribution system and water treatment facilities. Specifically, the Authority is pursuing a major initiative that involves the Fitzgerald Creek Wastewater Treatment facility to build out to 11.75 MG beginning the design phase in fiscal year 2019-2020. In addition to the expansion, the Fitzgerald Creek facility plans to add a belt press for a completion date expected in 2020 and the Rose Creek facility continues to phase 3 of its odor control upgrades.

The Authority's capital improvement program includes additional initiatives beginning in 2020 including Etowah River Water Treatment Plant asset replacements for the filter control system and tube settlers.

The distribution system includes initiatives involving major road and highway relocations, line extensions and improvements. Expansions of the construction complex and main office complex are also to begin in 2020.

Cherokee County Water & Sewerage Authority

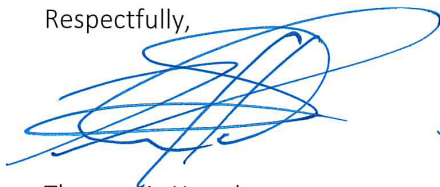
Awards and Acknowledgements

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to Cherokee County Water & Sewerage Authority for its comprehensive annual financial report for the fiscal year ended August 31, 2018. In order to be awarded a certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

It is our pleasure to express gratitude to the management of each department of the Authority. Thanks should also be expressed to the staff of the Finance Department for the dedication to the financial integrity of the Authority that makes this report possible. It truly is a commitment from each staff member to assist in compiling the information and assure that each transaction is properly and accurately accounted for. Finally, an enormous amount of thanks is expressed to the Board of the Authority. The Board of Directors' leadership, vision and professionalism is of highest integrity. The support received from the Board is greatly appreciated and is of utmost importance to the financial integrity and operations of the Authority.

Respectfully,



Thomas A. Heard
General Manager



Beth Jones
Accounting Manager

Part II

Financial Section



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Independent Auditor's Report

To the Board of Directors
Cherokee County Water and Sewerage Authority
Canton, Georgia

Report on the Financial Statements

We have audited the accompanying financial statements of Cherokee County Water and Sewerage Authority, as of and for the year ended August 31, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of Cherokee County Water and Sewerage Authority, as of August 31, 2019, and the respective changes in financial position and cash flows thereof, for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary information on pages 3 through 7 and 45 through 53, respectively, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Cherokee County Water and Sewerage Authority's basic financial statements. The introductory section, schedules in the supplementary information, and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules in the supplementary information are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules in the supplementary information are fairly stated in all material respects in relation to the financial statements as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 15, 2019, on our consideration of Cherokee County Water and Sewerage Authority's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Cherokee County Water and Sewerage Authority's internal control over financial reporting and compliance.

Rushton & Company, LLC

Certified Public Accountants
Gainesville, Georgia
November 15, 2019

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2019

Our discussion and analysis of Cherokee County Water and Sewerage Authority's financial performance provides an overview of the Authority's financial activities for the fiscal year ended August 31, 2019. Please read it in conjunction with the Authority's financial statements that begin on page 8.

USING THIS ANNUAL REPORT

This annual Comprehensive Annual Financial Report is presented in three sections: Introductory, Financial, Statistical and Other Reporting Section. The basic financial statements consist of the Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position, Statement of Cash Flows, and the Notes to the Financial Statements. The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position provide information about the activities of the Authority and present a long-term view of the Authority's finances.

One of the most important questions asked about the Authority's finances is "Is the Authority as a whole better off or worse off as a result of the fiscal year's activities?" The Statement of Net Position and the Statement of Revenues, Expenses and Changes in Net Position report information about the Authority and about its activities in a way that helps answer this question. These two statements include all assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position using the accrual basis of accounting, which is similar to the basis that is used by most private-sector companies. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid.

These two statements report the Authority's net position and the changes in it. You can think of the Authority's net position – the difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources – as one way to measure the Authority's financial health. Over time, increases or decreases in the Authority's net position are one indicator of whether its financial health is improving or deteriorating. You will need to consider other nonfinancial factors, however, to assess the overall health of the Authority.

THE AUTHORITY AS A WHOLE

The Authority's net position increased in fiscal year 2019 by approximately \$20.6 million, from the beginning of the fiscal year, from \$387.3 million to \$408.0 million. Approximately \$6.4 million of the increase in the current fiscal year was donated assets attributable to contributions by developers, primarily of water and sewer lines. In addition, the increase in net position can be attributed to sewer tap and water meter connections of approximately \$8.9 million. The following tables focus on the Authority's net position (Table 1) and changes in its net position (Table 2).

The Authority implemented Governmental Accounting Standards Board Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, effective for the Authority's current fiscal year. The requirements of this statement are effective for periods beginning after June 15, 2018.

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2019

Table 1 - Condensed Statement of Net Position (in thousands)

	8/31/2019	8/31/2018	\$ Change	% Change
Current assets	\$ 67,032	\$ 56,349	\$ 10,683	19.0%
Capital assets	472,663	471,968	695	0.1%
Total assets	<u>539,695</u>	<u>528,317</u>	<u>11,378</u>	<u>2.2%</u>
Deferred outflows of resources	11,099	12,316	(1,217)	-9.9%
Current liabilities	17,977	17,473	504	2.9%
Noncurrent liabilities	122,870	134,273	(11,403)	-8.5%
Total liabilities	<u>140,847</u>	<u>151,746</u>	<u>(10,899)</u>	<u>-7.2%</u>
Deferred inflows of resources	1,989	1,576	413	26.2%
Net investment in capital assets	353,878	344,442	9,436	2.7%
Restricted net position	2,056	1,991	65	3.3%
Unrestricted net position	52,024	40,878	11,146	27.3%
Total net position	<u>\$ 407,958</u>	<u>\$ 387,311</u>	<u>\$ 20,647</u>	<u>5.3%</u>

Table 2 - Condensed Statement of Revenues, Expenses and Changes in Net Position (in thousands)

	8/31/2019	8/31/2018	\$ Changes	% Change
Operating revenues:				
Water sales	\$ 30,109	\$ 27,495	\$ 2,614	9.5%
Wastewater treatment sales	18,318	17,007	1,311	7.7%
Connection fees	660	802	(142)	-17.7%
Other	2,640	2,603	37	1.4%
Non-operating revenues:				
Interest	1,151	744	407	54.7%
Other	1,942	1,386	556	40.1%
Total revenues	<u>54,820</u>	<u>50,037</u>	<u>4,783</u>	<u>9.6%</u>
Operating expenses:				
Water purchases and production	3,731	3,783	(52)	-1.4%
Wastewater treatment	10,540	10,295	245	2.4%
Streetlights	1,103	1,089	14	1.3%
Distribution and administration	14,705	15,722	(1,017)	-6.5%
Depreciation	12,096	11,830	266	2.2%
Non-operating expenses:				
Interest	6,064	6,430	(366)	-5.7%
Other	589	612	(23)	-3.8%
Total expenses	<u>48,828</u>	<u>49,761</u>	<u>(933)</u>	<u>-1.9%</u>
Excess before contributions	5,992	276	5,716	2071.0%
Capital contributions	14,655	21,001	(6,346)	-30.2%
Increase in net position	<u>20,647</u>	<u>21,277</u>	<u>(630)</u>	<u>-3.0%</u>
Net position, September 1 (original)	387,311	367,219	20,092	
Prior period adjustments	0	(1,185)	1,185	
Net position, September 1 (restated)	<u>387,311</u>	<u>366,034</u>	<u>21,277</u>	
Ending net position, August 31	<u>\$ 407,958</u>	<u>\$ 387,311</u>	<u>\$ 20,647</u>	

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2019

The Authority's revenues increased in 2019 by approximately \$4.8 million, or 9.6% (\$54.8 million in 2019 compared to \$50.0 million in 2018). Total expenses decreased approximately \$933 thousand to approximately \$48.8 million, or an approximate 1.9% decrease in 2019 compared to the prior fiscal year. The factors driving these results include:

- The number of water customers in 2019 and 2018 grew by 2.3% and 1.4%, respectively. Wastewater customers grew by 3.5% in 2019 compared to 3.8% in 2018. The growth of the water and wastewater customers can be attributed to the return of population growth and consistent new construction activity that is occurring throughout Cherokee County specifically in the areas served by CCWSA's sewer system. The Authority's revenues as displayed in Table 2 above shows total revenues increasing by approximately \$4.8 million or 9.6% in FY 2019. Water sales increased approximately 9.5% as compared with prior year and sewer sales revenue increased approximately 7.7% as compared with the prior year. The Authority Board passed a rate increase effective January 1, 2019 contributing to an increase in water and sewer operating revenues. In addition, weather patterns and environmental factors typically drive revenue results. During fiscal year 2019 the weather patterns were indicative of dry summer months with longer periods of continuous heat than in the prior year resulting in an increase in water demand. The most recent rate change and revision to the Water and Sewer Rate Structure was effective January 1, 2019 and prior to that date the most recent rate change and revision was May 1, 2014.
- Total expenses of the Authority decreased by approximately \$933 thousand to \$48.8 million. In regard to departmental expense increases in FY 2019, distribution and administration decreased (6.5%). The majority of the decreases in the distribution and administration costs were primarily recognized in reclassification of employee costs to capital costs due to an increase in capitalization of salaries. Wastewater treatment facilities expenses increased (2.4%). The water treatment facility expenses decreased approximately (1.4%) in FY 2019.
- Non-operating expenses include interest on debt service, loss on disposition of capital assets-net, amortization of deferred amount on refunding and cost of issuance expenses. Specifically, interest on debt service for FY 2019 decreased approximately 5.7% largely due to the continued savings realized on the Series 2016 refunding of Series 2006 and Series 2007 bond issue which resulted in significant savings for the Authority. Non-operating revenues consist of a change in the fair market value of the 1993 & 1995 debt service forward delivery agreements improved in the amount of (\$205,017) in FY 2019 and interest earnings improved approximately 46.6% compared to budget projections.
- The Authority has noted capital contributions revenues of approximately \$14.7 million for FY 2019. As a result of donated lines accepted by the Authority and other contributions, the Authority received donated assets valued at \$6.4 million in FY 2019. In addition to donated lines, the Authority noted sewer tap fees contributions of approximately \$5.9 million. Also, the Authority noted approximately \$2.3 million in meter connection fee contributions. The Authority notes a decrease compared to prior year contributions of 30.2% primarily due to a decrease in developer donated assets compared to FY 2018 and significant sewer tap fee contributions related to commercial developments.
- Management of the Authority attributes the increase in the growth of net position in 2019 primarily to capital contributions which include developer contributions and easement valuations valued at \$6.4 million as well as water meter connections and sewer tap fees for approximately \$8.2 million. In addition, excess before contributions increased due to an increase in water and

P.O. Box 5000 ~ Canton, Georgia 30114 ~ 770-479-1813

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2019

wastewater treatment sales revenue from the prior year of approximately 9.5% and 7.7%, respectively.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets

At August 31, 2019 and 2018, the Authority had \$472.7 million and \$472.0 million, respectively, invested in a range of capital assets including equipment, buildings, land and water and sewer lines (see Table 3). This represents a net increase after additions and disposals of approximately \$700 thousand in 2019.

**Table 3 - Capital Assets at Fiscal Year End
(Net of Depreciation - in thousands)**

	8/31/2019	8/31/2018
Land and easements	\$ 9,400	\$ 8,723
Construction in progress, including structures, improvements & equipment not in service	3,611	55,633
Total nondepreciable	<u>13,011</u>	<u>64,356</u>
Structures and improvements	644,214	582,227
Machinery and equipment	12,872	11,144
Office furniture and equipment	354	352
Total depreciable	<u>657,440</u>	<u>593,723</u>
Less accumulated depreciation	<u>(197,788)</u>	<u>(186,111)</u>
Net capital assets	<u>\$ 472,663</u>	<u>\$ 471,968</u>

The staff of the Authority has developed a multi-year capital improvements program and a plan to finance the program, which relies on a combination of system revenues and proceeds of debt and investment earnings on such proceeds. The capital improvements program allows the staff of the Authority to plan, on a long-term basis, for future system capital needs. Each year the capital improvements program is updated.

The Authority's fiscal year 2020 capital improvement program calls for it to spend \$11.4 million for capital projects in 2019-2020, principally for upgrades, improvements and additions to water & wastewater treatment facilities and for utility relocations within the water system. The extended capital improvement plan consists of \$56.6 million including the capital projects beginning in 2019-2020. The capital improvements program allows the staff of the Authority to plan, on a long-term basis, for future System capital needs. In connection with existing construction projects, the Authority has outstanding agreements with contractors for approximately \$5.4 million in future work at August 31, 2019. Capital disbursements will be financed by a combination of resources on hand, future system revenues and the proceeds from future revenue bonds. More detailed information about the Authority's capital assets is presented in Note 5 in the financial statements. Each year the capital improvements program is updated and reviewed on an ongoing basis throughout the year.

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2019

Debt Administration

At August 31, 2019 and 2018, the Authority had \$123.6 million and \$133.1 million (net of discounts and premiums) in revenue bonds outstanding, respectively. The net decrease of \$9.5 million is due primarily to the repayment of the Authority's previously issued debt. Additional information is presented in Notes 6 and 7 to the financial statements.

The Authority's Revenue Bonds have been assigned ratings by Moody's Investors Service, Inc. and Standard and Poor's Rating Services of Aa2 and AA, respectively. Standard & Poor's upgraded the Authority's rating from AA- to AA in May 2011. These very high ratings reflect the rating agencies' consideration of factors such as financial liquidity, debt service coverage and the growth rate of the Authority's customer base.

The Authority's other significant obligations include customer deposits, accounts payable, accrued interest, salaries and other expenses as can be seen on the Statement of Net Position.

ECONOMIC FACTORS AND NEXT YEARS BUDGET

The 2020 budget and capital improvement program have been prepared taking into account that economic and population growth for the Authority's service area will continue. It is expected to continue to see growth in the area although projected at a slightly slower pace than in prior years. Other factors affecting next year's and future budgets are listed below.

- Rates are analyzed on a regular basis and will be adjusted when deemed necessary. The Authority Board passed a rate increase effective as of January 1, 2019. The Authority anticipates the customer base to increase by adding approximately 1,685 new water customers to the system during the year at tap-on fees of \$1,700 for regular residential and sprinkler meters and commercial tap-ons sold at varying rates. The Authority estimates an addition of approximately 1,220 new wastewater treatment customers to the system during the year at tap-on fees starting at \$4,500.
- The Authority's Capital Improvement Program is funded through issuance of new debt, capital contributions from tap fees and developers, and operating revenue in excess of operating expenses and debt service expenses. The Authority will continue to rely on operating revenues to fund capital improvements on a pay-as-you-go basis. However, management and the Board of Directors will monitor on a regular basis the need to issue new debt to fund capital improvements.

CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide our customers and creditors with a general overview of the Authority's finances and to show the Authority's accountability for the money it receives. If you have questions about this report or need additional information, contact the office of the Authority's Finance Department at 140 W. Main Street, Canton, Georgia 30114.

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BASIC FINANCIAL STATEMENTS

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF NET POSITION
August 31, 2019

ASSETS

Current assets

Cash and cash equivalents	\$ 51,846,132
Accounts receivable	7,136,464
Accrued interest receivable	5,786
Prepaid expenses	141,308
Inventories	550,314
Restricted assets	
Cash and cash equivalents	5,528,529
Investments	1,823,053
	67,031,586

Noncurrent assets

Capital assets	
Land and easements	9,399,640
Construction in progress	3,611,213
Structures and improvements	644,213,965
Machinery and equipment	12,872,889
Office furniture and equipment	353,999
Accumulated depreciation	(197,788,301)
	472,663,405
Net capital assets	
	539,694,991

DEFERRED OUTFLOWS OF RESOURCES

Deferred amount on refunding	6,748,093
Deferred outflows of resources - pension	3,722,516
Deferred outflows of resources - OPEB	628,036
	11,098,645

LIABILITIES

Current liabilities

Trade accounts payable	1,585,254
Construction accounts and retainage payable	1,401,519
Accrued salaries and other payroll liabilities	199,693
Compensated absences	887,596
Unearned revenues	302,452
Current liabilities payable from restricted assets	
Customer deposits payable	4,820,882
Accrued interest payable	474,556
Revenue bonds payable	8,305,000
	17,976,952

Noncurrent liabilities

Compensated absences	98,622
Unearned interest revenue	90,006
Net pension liability	5,901,262
Net OPEB liability	726,420
Revenue bonds payable	115,826,922
Other noncurrent liabilities	226,462
	122,869,694
Total liabilities	140,846,646

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF NET POSITION
August 31, 2019

DEFERRED INFLOWS OF RESOURCES

Deferred inflows of resources - pension	\$ 1,225,102
Deferred inflows of resources - OPEB	763,999
	<hr/>
Total deferred inflows of resources	1,989,101

NET POSITION

Net investment in capital assets	353,878,057
Restricted for debt service	760,445
Restricted for bond retirement	1,295,699
Unrestricted	52,023,688
	<hr/>
Total net position	\$ 407,957,889

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF REVENUES, EXPENSES AND
CHANGES IN NET POSITION
For the fiscal year ended August 31, 2019

OPERATING REVENUES	
Metered water sales	\$ 30,109,349
Wastewater treatment sales	18,318,463
Street light fees	1,474,998
Water connection fees	659,955
Transfer fees	201,850
Forfeited discounts and penalties	722,436
Customer repairs and service charges	240,120
	<hr/>
Total operating revenues	51,727,171
OPERATING EXPENSES	
Water purchases and production	3,731,239
Wastewater treatment	10,539,795
Streetlights	1,102,667
Distribution and administration	14,705,598
Depreciation	12,095,742
	<hr/>
Total operating expenses	42,175,041
Operating income (loss)	<hr/> 9,552,130
Non-operating revenues (expenses)	
Interest revenue	
Sinking funds	154,911
Revenue funds	996,140
Interest expense	(6,063,727)
Change in fair value of derivative	205,017
Amortization of deferred amount on refunding	(589,516)
Amortization of bond premiums, net	1,104,493
Gain (loss) on disposition of capital assets	81,366
Miscellaneous revenues	551,069
	<hr/>
Total non-operating revenues (expenses)	(3,560,247)
Net income (loss) before capital contributions	<hr/> 5,991,883
Capital contributions	
Sewer tap fees	5,888,075
Water connection fees	2,341,316
Contributions of capital assets	6,425,355
	<hr/>
Total capital contributions	14,654,746
Change in net position	20,646,629
Net position, September 1	<hr/> 387,311,260
Net position, August 31	<hr/> \$ 407,957,889 <hr/>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF CASH FLOWS
For the fiscal year ended August 31, 2019

Cash flows from operating activities:	
Receipts from customers	\$ 51,420,711
Payments to suppliers	(13,730,298)
Payments to employees	<u>(17,020,354)</u>
Net cash provided (used) by operating activities	<u>20,670,059</u>
Cash flows from capital and related financing activities:	
Receipts of sewer tap and water connection fees	8,229,391
Proceeds from sale and disposal of capital assets	96,573
Payments for acquisitions of capital assets	(4,979,638)
Payment of capital related accounts payable	(1,726,912)
Principal payments on revenue bonds	(7,900,000)
Interest paid on revenue bonds	<u>(6,097,277)</u>
Net cash provided (used) by capital and related financing activities	<u>(12,377,863)</u>
Cash flows from investing activities:	
Interest received	1,130,673
Proceeds from sale of investments	528,883
Purchases of investments	<u>(527,608)</u>
Net cash provided (used) by investing activities	<u>1,131,948</u>
Net increase (decrease) in cash and cash equivalents	9,424,144
Cash and cash equivalents, September 1	<u>47,950,517</u>
Cash and cash equivalents, August 31	<u><u>\$ 57,374,661</u></u>
Reconciliation of operating income (loss) to net cash provided (used) by operating activities:	
Operating income (loss)	<u>\$ 9,552,130</u>
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation expense	12,095,742
Miscellaneous revenues	551,069
(Increase) decrease in accounts receivable	(953,199)
(Increase) decrease in prepaid expenses	(140,933)
(Increase) decrease in inventories	(165,433)
(Increase) decrease in deferred outflows of resources - pension	151,072
(Increase) decrease in deferred outflows of resources - OPEB	477,001
Increase (decrease) in trade accounts payable	288,213
Increase (decrease) in accrued salaries and other payroll liabilities	3,166
Increase (decrease) in compensated absences	78,710
Increase (decrease) in unearned revenues	11,585
Increase (decrease) in customer deposits	84,085
Increase (decrease) in net pension liability	(614,434)
Increase (decrease) in net OPEB liability	(1,161,665)
Increase (decrease) in deferred inflows of resources - pension	129,597
Increase (decrease) in deferred inflows of resources - OPEB	<u>283,353</u>
Total adjustments	<u>11,117,929</u>
Net cash provided (used) by operating activities	<u><u>\$ 20,670,059</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF CASH FLOWS
For the fiscal year ended August 31, 2019

Cash and cash equivalents reconciliation:

Cash and cash equivalents	\$ 51,846,132
Restricted cash and cash equivalents	5,528,529
	<hr/>
Total cash and cash equivalents	<u>\$ 57,374,661</u>

Noncash investing, capital and financing activities:

Contributions of capital assets	\$ 6,425,355
Acquisition of capital assets through accounts and retainage payable	1,401,519
Increase (decrease) in fair value of investment derivatives	205,017

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

1. Description of Authority

Cherokee County Water and Sewerage Authority (the Authority) is a public corporation and body, corporate and politic, an independent governmental unit created and existing under the laws of the State of Georgia. The Authority was created by an act of the General Assembly of the State of Georgia that became effective March 7, 1955. The Authority Act declared that the general purpose of the Authority is to acquire adequate sources of water supply, treat such water and distribute it to the water system throughout Cherokee and adjoining counties. The Authority Act states that this general purpose will not restrict the Authority from selling and delivering water directly to consumers in those areas where water distribution systems do not exist and where no other county or municipality deems it desirable or feasible to furnish water. The Authority Act also provides that the general purpose of the Authority includes sewerage projects.

The Authority Board is composed of seven members. Six members are appointed by the Cherokee County Grand Jury for staggered terms of four years and the seventh member is the current chair of the Cherokee County Commission. The Authority is a fiscally independent entity with self-sustaining operations. No other government is financially accountable for the Authority. The Authority has no taxing power; however, it does have the ability to establish the rates it charges customers. Thus, the Authority is considered a reporting entity in conformity with the Governmental Accounting Standards Board's (GASB) definition. The financial statements of the Authority have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The more significant accounting policies of the Authority are described below.

2. Summary of Significant Accounting Policies

A. Basis of Presentation

The statement of net position and the statement of revenues, expenses and changes in net position display information in the format of a business-type activity. Such activities are financed through exchange transactions in whole or in part by fees charged to each participant. Exchange transactions are those in which each party receives and gives up essentially equal values. Non-operating revenues and expenses, such as subsidies, investment earnings and interest expense, result from non-exchange transactions or ancillary activities.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

B. Reporting Entity

The financial statements present the Authority as a business-type activity in accordance with Governmental Accounting Standards Board Statement No. 34.

C. Fund Financial Statements

The Authority is accounted for as an enterprise fund on a flow of economic resource measurement focus. The accounting objective is a determination of change in net position, financial position and changes in cash flows. All assets and liabilities associated with the Authority's activities are included in its Statement of Net Position.

Enterprise funds are established to account for operations that are financed and operated in a manner similar to private business enterprises, where the intent is that costs of providing goods and services to the general public on a continuing basis are to be financed or recovered primarily through user charges.

D. Measurement Focus, Basis of Accounting, and Financial Statement Presentation

These statements are reported using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

E. Cash and Cash Equivalents

Cash and cash equivalents, as reported in the statement of cash flows, includes amounts in demand deposits, amounts with fiscal agents and investments with an original maturity at three months or less.

F. Receivables and Revenue Recognition

The Authority bills its customers on a cyclical basis throughout the month based on meter readings taken during the previous month.

The Authority records receivables at the amount it expects to collect on balances due at the end of the year. Advance deposits are obtained from customers, but the Authority does not obtain collateral or other security for any of its trade accounts or other amounts receivable. Accordingly, it is exposed to credit losses in the event of nonperformance. Management closely monitors outstanding balances and writes off uncollectible amounts as of year-end in accordance with approved policies.

Billed accounts receivable represent charges for customer water and wastewater treatment usage billed to customers and not paid at August 31. Unbilled accounts receivable represent charges billed to customers after August 31 for services provided by the Authority prior to September 1.

Metered water and wastewater treatment sales and streetlight fees are based on rates established by the Authority Board.

G. Prepaid Expenses

Payments made to vendors for services that will benefit periods beyond the current fiscal year are recorded as prepaid expenses using the consumption method by recording an asset for the prepaid amount and reflecting the expense in the fiscal year in which services are consumed.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

H. Inventories

Inventories are stated at cost using specific identification.

I. Investments

Investments are reported at fair value and may include U.S. government and agency obligations, repurchase agreements and money market funds, including investment in a local government investment pool, interest rate management agreements and other investments as permitted by the laws of the State of Georgia, the Official Code of Georgia (OCGA). Unrealized gains and losses are included in the statement of revenues, expenses, and changes in net position. The Authority has adopted an interest rate management plan meeting the requirements of OCGA §36-82-250 and approved the parameters within which interest rate swap agreements may be executed.

The Authority measures and records its investments using fair value measurement guidelines established by generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1: Quoted prices for identical investments in active markets
- Level 2: Observable inputs other than quoted market prices
- Level 3: Unobservable inputs

The Authority reports investments using net asset value (NAV) when NAV is calculated in a manner consistent with fair value measurement guidelines, fair value is not readily determinable, and it is not probable for the investment to be sold at an amount other than NAV.

J. Capital Assets

Capital assets include infrastructure acquired since 1959 and are stated at cost except for contributed water and sewer lines, which are recorded at acquisition value at the date they are accepted by the Authority. All acquisitions of property and equipment in excess of \$1,000 are capitalized and depreciated.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

J. Capital Assets, continued

Expenses for maintenance and repairs not considered to substantially lengthen the property lives are charged to expense as incurred. The cost of incomplete construction and system improvement projects is reported as construction-in-progress and is not depreciated.

Depreciation of the water and sewer systems, machinery, equipment, and furnishings is computed using the straight-line method over the following estimated useful lives:

<u>Asset Category</u>	<u>Useful Life in Years</u>
Structures and improvements	20-50
Machinery and equipment	5-20
Office furniture and equipment	5

K. Capitalization of Salaries

The Authority capitalizes salaries of employees in distribution and administration who perform construction activities. The amount capitalized is based upon the portion of the respective employees' work hours that is spent performing these functions.

L. Restricted Assets

Assets are reported as restricted when limitations on their use change the nature or normal understanding of the availability of the asset. Such constraints are either externally imposed by creditors, contributors, grantors, or laws of other governments, or are imposed by law through constitutional provisions or enabling legislation. Restricted assets also represent cash and cash equivalents and investments set aside for repayment of deposits to utility customers.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

M. Compensated Absences

Full time employees are granted vacation benefits in varying amounts depending on tenure with the Authority. An expense and liability are recognized for accrued vacation leave as it is earned. Unused leave is lost if not taken each year. Sick leave accrues to full-time employees to a specified maximum but does not vest and is paid only for an absence for medical-related causes. Since such future absences cannot be reasonably predicted, no liability for unused sick pay is recorded.

N. Deferred Outflows/Inflows of Resources

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/ expenditure) until then. The Authority reports deferred outflows of resources for deferred charges on bond refunding, defined benefit pension plan, and other postemployment benefit plan. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Authority reports deferred inflows of resources related to their defined benefit pension and other postemployment benefit plans.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

O. Pension and OPEB Plans

For purposes of measuring the net pension liability, net OPEB liability, deferred outflows/inflows of resources related to pensions and OPEB, and pension and OPEB expense, information about the fiduciary net position of the Georgia Municipal Employees Benefit System (GMEBS) plans (Plans) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by GMEBS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

P. Amortization

Amortization of bond premiums and discounts is computed using the effective interest method over the life of the bond issue for which the charges have been deferred. Amortization of the deferred amount on refunding is computed using the straight-line method over the shorter of the remaining life of the defeased debt had it not been refunded, or the life of the new debt.

Q. Net Position

Net position represents the difference between assets and liabilities. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowing used for the acquisition, construction or improvement of those assets. Net position is reported as restricted when there are limitations imposed on its use either through the enabling legislation adopted by the Authority or through external restrictions imposed by creditors, grantors, or laws or regulations of other governments. All other components of net position are reported as unrestricted.

The Authority applies restricted resources when an expense is incurred for purposes for which both restricted and unrestricted assets are available.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

2. Summary of Significant Accounting Policies (continued)

R. Capital Contributions

Federal, state and local government assistance in the form of grants that are permanent in nature and restricted for the construction or acquisition of specific property and equipment is recorded as an asset and as non-operating revenue.

S. Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from these estimates.

T. Operating Budget

The Authority is not legally required to adopt a budget. However, the staff of the Authority prepares an annual operating budget for management control purposes. The staff of the Authority uses the accrual basis of accounting in its annual operating budget, which is consistent with the basis of accounting used in the Authority's financial statements. The Authority's Board of Directors approves the budget and any changes made thereto.

The Authority's budget for the current fiscal year is included in the supplementary information to the accompanying financial statements. This budget is based upon certain assumptions and estimates of the staff of the Authority regarding future events, transactions and circumstances. Realization of the results projected in this budget will depend upon implementation by management of the Authority of policies and procedures consistent with the assumptions. There can be no assurance that actual events will correspond with such assumptions, that uncontrollable factors will not affect such assumptions or that the projected results will be achieved. Accordingly, the actual results achieved could materially vary from those projected in the budget.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

3. Deposit and Investment Risk

Custodial Credit Risk – Deposits

Custodial credit risk is the risk that in the event of a financial institution failure, the Authority's deposits may not be returned. The Authority's investment policy follows the State of Georgia requirement that all deposits be federally insured or fully collateralized. At the end of the current fiscal year, the Authority had no uninsured or uncollateralized deposits. These deposits are collateralized with securities not held in the Authority's name. These deposits are held by the pledging financial institution's agent, the Georgia Bankers Association, in the State of Georgia Pledging Pool. The State of Georgia Pledging Pool is collateralized by securities within the pool at 111% of deposits.

Interest Rate Risk

The Authority's investment policy limits investment maturities as a means of managing its exposure to fair values from increasing interest rates.

Credit Risk

State of Georgia law limits investments to include certificates of deposit, repurchase agreements, direct and agency obligations of the United States, obligations of the State of Georgia or other states, obligations of other political subdivisions of the State of Georgia, and pooled investment programs of the State of Georgia. The Authority has not adopted a formal credit risk policy.

Concentration of Credit Risk

The Authority's policy does not limit the amount the Authority may invest in any one issuer, but it does require that the Authority monitor the credit worthiness of each institution at least annually.

The Authority participates in the State of Georgia Local Government Investment Pool (Georgia Fund 1). Assets in this pool are invested in the Georgia Fund 1, created by OCGA §36-83-8, which is a stable net asset investment pool that follows Standard and Poor's criteria for AAf rated money market funds. However, Georgia Fund 1 operates in a manner consistent with Rule 2a-7 of the Investment Company Act of 1940 and is considered to be a 2a-7 like pool. The pool is not registered with the SEC as an investment company.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

3. Deposit and Investment Risk (continued)

The pool's primary objectives are safety of capital, investment income, liquidity and diversification while maintaining principal (\$1.00 per share value). Net asset value is calculated weekly to ensure stability. The pool distributes earnings (net of management fees) on a monthly basis and determines participant's shares sold and redeemed based on \$1.00 per share. Georgia Fund 1 is managed by the Georgia Office of the State Treasurer. The investment policies of Georgia Fund 1 are established by the Georgia State Depository Board.

The Georgia Fund 1 is rated AA+ by Standard & Poor's. The weighted average maturity at the end of the current fiscal year was 29 days. At the end of the current fiscal year, the Authority's balance in Georgia Fund 1 was \$50,097,694.

Foreign currency risk

The Authority has no investments denominated in a foreign currency.

At the end of the current fiscal year, the Authority had investments with recurring fair value measurements with the following maturities and credit ratings:

<u>Investment Type</u>	<u>Fair Value</u>	<u>Input Level</u>	<u>Average Maturity (in months)</u>	<u>Credit Rating (1)</u>
U.S. Treasury notes	\$ 527,610	1	8	Aaa
Repurchase agreement	1,295,443	2	71	N/A
Total	<u>\$ 1,823,053</u>			

(1) - Moody's

4. Accounts Receivable

Accounts receivable consists of \$3,347,778 billed and \$3,788,686 unbilled for a total receivable of \$7,136,464 at the end of the current fiscal year. All receivables are considered fully collectible. Therefore, no allowance for doubtful accounts has been established.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

5. Capital Assets

Capital asset activity for the current fiscal year was as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Non-depreciable assets:				
Land and easements	\$ 8,723,510	\$ 676,130	\$ 0	\$ 9,399,640
Construction in progress	55,632,663	2,419,224	(54,440,674)	3,611,213
Total non-depreciable assets	<u>64,356,173</u>	<u>3,095,354</u>	<u>(54,440,674)</u>	<u>13,010,853</u>
Depreciable assets:				
Structures and improvements	582,227,288	61,988,650	(1,973)	644,213,965
Machinery and equipment	11,143,736	2,161,309	(432,156)	12,872,889
Office furniture and equipment	352,126	1,873	0	353,999
Total depreciable assets	<u>593,723,150</u>	<u>64,151,832</u>	<u>(434,129)</u>	<u>657,440,853</u>
Less accumulated depreciation:				
Structures and improvements	(178,459,523)	(11,385,122)	1,973	(189,842,672)
Machinery and equipment	(7,367,175)	(676,888)	416,949	(7,627,114)
Office furniture and equipment	(284,783)	(33,732)	0	(318,515)
Total accumulated depreciation	<u>(186,111,481)</u>	<u>(12,095,742)</u>	<u>418,922</u>	<u>(197,788,301)</u>
Total depreciable assets, net	<u>407,611,669</u>	<u>52,056,090</u>	<u>(15,207)</u>	<u>459,652,552</u>
Capital assets, net	<u>\$ 471,967,842</u>	<u>\$ 55,151,444</u>	<u>\$ (54,455,881)</u>	<u>\$ 472,663,405</u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

6. Long-Term Debt

Revenue Bonds

Revenue bonds issued are comprised of the following individual issues at the end of the current fiscal year:

In December 1993, the Authority issued \$28,460,000 in Water and Sewerage Revenue Bonds, Refunding and Improvements Series 1993 maturing in 2023 with interest rates from 5.30% to 5.50%, to advance refund all of the Series 1991 revenue bonds in the principal amount of \$10,000,000 and to provide funds to make certain additions and improvements to the water and sewerage systems. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately.

In December 1995, the Authority issued \$22,460,000 in Water and Sewerage Revenue Bonds Series 1995, maturing in 2025 with an interest rate of 5.20%, to provide funds to make certain additions and improvements to the water and sewerage systems. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately. A portion of this series was refunded by the Series 2001 revenue bonds.

In May 2001, the Authority issued \$70,505,000 in Refunding and Improvement Revenue Bonds Series 2001, maturing in 2030 with interest rates ranging from 3.25% to 5.125%, to advance refund portions of the Series 1991, 1995, 1997, and 1998 revenue bonds in the principal amount of \$38,765,000, to pay a surety bond premium to fund the bond Debt Service Reserve, and to provide funds to make certain additions, extensions, and improvements to the water and sewerage systems. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately. Portions of this series were refunded by the Series 2010 and Series 2011 revenue refunding bonds, and were called and redeemed in 2011.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

6. Long-Term Debt (continued)

Revenue Bonds (continued)

In May 2006, the Authority issued \$25,000,000 in Revenue Bonds Series 2006 as auction rate securities maturing in 2035. The bonds were issued to provide funds to make certain additions, extensions, and improvements to the water and sewerage systems. These bonds were remarketed in April 2008 in order to convert their interest rates to long-term fixed rates that range from 3.00% to 5.00%. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately. In 2016, \$18,880,000 of the outstanding bonds were refunded by the Series 2016 Revenue Refunding Bonds.

In June 2007, the Authority issued \$25,000,000 in Revenue Bonds Series 2007 as auction rate securities maturing in 2035. The bonds were issued to provide funds to make certain additions, extensions, and improvements to the water and sewerage systems. These bonds were remarketed in April 2008 in order to convert their interest rates to long-term fixed rates that range from 3.00% to 5.00%. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately. In 2016, \$18,880,000 of the outstanding bonds were refunded by the Series 2016 Revenue Refunding Bonds.

In April 2008, because of significant disruptions to the auction rate securities market, the Authority converted the interest rates on the Series 2006 and 2007 bonds from auction rates to long-term fixed rates. The Authority paid \$456,157 in remarketing fees and other costs in connection with the conversion and remarketing of the bonds. All were successfully remarketed in April 2008, resulting in a premium of \$268,023.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

6. Long-Term Debt (continued)

Revenue Bonds (continued)

In January 2010, the Authority issued \$39,710,000 in Water and Sewerage Revenue Refunding Bonds, Series 2010, maturing in 2028 with interest rates ranging from 3.00% to 5.00%. The bonds were issued by the Authority for the purpose of advance refunding the Authority's remaining Series 1997 and 1998 revenue bonds and a portion of the Series 2001 revenue bonds in the aggregate principal amount of \$39,645,000. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately.

In June 2011, the Authority issued \$29,310,000 in Water and Sewerage Revenue Refunding Bonds, Series 2011, maturing in 2030 with interest rates ranging from 3.00% to 5.00%. The bonds were issued by the Authority for the purpose of advance refunding the Authority's Series 2001 revenue bonds and a portion of the Series 2003 revenue bonds in the aggregate principal amount of \$30,355,000. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately.

In May 2013, the Authority issued \$16,260,000 in Water and Sewerage Revenue Refunding Bonds, Series 2013, maturing in 2033 with interest rates ranging from 3.25% to 5.00%. The bonds were issued by the Authority for the purpose of advance refunding a portion of the Authority's Series 2003 revenue bonds in the aggregate principal amount of \$18,970,000. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

6. Long-Term Debt (continued)

Revenue Bonds (continued)

In February 2016, the Authority issued \$32,980,000 in Water and Sewerage Revenue Refunding Bonds, Series 2016, maturing in 2035 at 5.00% interest. The bonds were issued by the Authority for the purpose of advance refunding a portion of each of the Authority's Series 2006 and 2007 revenue bonds in the aggregate principal amount of \$37,760,000. The cash flows required to service the Series 2016 bonds are approximately \$6.5 million less than those for the refunded bonds providing an economic gain from the refunding of approximately \$5.4 million. The Authority paid \$413,838 in underwriting fees and other issuance costs in connection with the refunding. The bonds are secured by a pledge and lien on net system revenues. Upon the happening and continuance of an event of default, the holders of not less than a majority in principal amount of the bonds then outstanding may declare the principal of all bonds outstanding to be due and payable immediately.

The U.S. government securities purchased in connection with the defeased and advance refunded bonds are deposited in irrevocable trusts with escrow agents to provide for all future debt service payments of the affected bonds. As a result, the bonds are considered to be defeased and the liabilities for them have been removed from long-term debt. At the end of the current fiscal year, outstanding principal balances remain as follows:

<u>Series</u>	<u>Principal</u>
1995	\$ 1,290,000
1998	2,545,000
Totals	<u>\$ 3,835,000</u>

The defeasance, advance refundings, and remarketing of the bonds described above resulted in differences between the reacquisition prices and the net carrying amounts of the old debt. The deferred amount on refunding, reported in the accompanying financial statements as a deferred outflow of resources, is being charged to operations using the straight-line method of amortization. The amount remaining at the end of the current fiscal year is \$6,748,093.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

6. Long-Term Debt (continued)

Revenue Bonds (continued)

The revenue bonds are secured by a pledge of the revenues derived by the Authority from the ownership and operation of the water and sewerage systems remaining after payment of the reasonable and necessary expenses of operating, maintaining, and repairing the systems (net system revenues). Payment of the principal of and interest on the revenue bonds, when due, is guaranteed by municipal bond insurance policies issued by Financial Guaranty Insurance Company and Assured Guaranty Municipal Corp. (formerly known as Financial Security Assurance, Inc.).

The Authority makes sinking fund deposits monthly for all issues. Annual totals are at least equal to the principal installments of and interest payable on the bonds in the current sinking fund year.

Annual debt service requirements for bonds payable are as follows:

Fiscal Year Ending August 31,	Principal	Interest	Total
2020	\$ 8,305,000	\$ 5,694,678	\$ 13,999,678
2021	8,725,000	5,271,103	13,996,103
2022	8,960,000	4,821,503	13,781,503
2023	9,410,000	4,358,438	13,768,438
2024	9,890,000	3,877,507	13,767,507
2025-2029	48,395,000	11,726,928	60,121,928
2030-2034	18,850,000	3,336,650	22,186,650
2035	2,780,000	139,000	2,919,000
Totals	<u>\$ 115,315,000</u>	<u>\$ 39,225,807</u>	<u>\$ 154,540,807</u>

The various resolutions providing for the revenue bonds require that the Authority establish and maintain a schedule of rates, fees, and charges for services furnished by the systems to produce in each sinking fund year (“net system revenues”) in an amount at least equal to 1.20 times the highest annual amount of principal and interest payable on the bonds during any future sinking fund year. The revenue bond coverage was 2.26 for the current fiscal year.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

6. Long-Term Debt (continued)

Revenue Bonds (continued)

Effective with the issuance of the Series 2001 bonds, the Authority's annual net system revenues, exclusive of water connection and sewer tap fees, must be no less than the highest annual amount of debt service payable during any future sinking fund year. For the current fiscal year, this ratio was 1.62.

The Authority is also required to maintain a reserve account in an amount equal to the lesser of a three-prong test in the Authority's Bond Resolution: 10% of the principal amount of the Authority's outstanding bonds; the Authority's maximum annual debt service; or 125% of the Authority's average annual debt service. Currently, the debt service reserve requirement is 10% of the principal amount of the Authority's outstanding bonds, or \$11,531,500. The Authority satisfies the debt service reserve requirement using a combination of funds in the reserve account and surety bonds. At the end of the current fiscal year, the balances in the reserve account and the surety bonds exceed the debt service reserve requirement.

7. Long-Term Liabilities

Changes in Long-Term Liabilities

The following is a summary of changes in long-term liabilities of the Authority for the current fiscal year:

	Beginning Balance	Additions	Deductions	Ending Balance	Due Within One Year
Revenue bonds	\$ 123,215,000	\$ 0	\$ (7,900,000)	\$ 115,315,000	\$ 8,305,000
Unamortized bond discounts	(61,823)	0	12,138	(49,685)	0
Unamortized bond premiums	9,983,238	0	(1,116,631)	8,866,607	0
Compensated absences	907,508	895,467	(816,757)	986,218	887,596
	<u>\$ 134,043,923</u>	<u>\$ 895,467</u>	<u>\$ (9,821,250)</u>	<u>\$ 125,118,140</u>	<u>\$ 9,192,596</u>

Amortization of bond discounts and premiums is computed using the effective interest method over the life of the bond issue for which the charges have been deferred. The total interest incurred and charged to expense for the current fiscal year was \$6,063,727.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

8. Investment Derivative Financial Instruments

The Authority has entered into two debt service forward delivery agreements with Lehman Brothers Special Financing, Inc. (Lehman), which were assigned in March 2017 to CRC Bond Opportunity Trading Fund LP (CRC BOTF). Under these contracts, CRC BOTF has the option to require the Authority to use revenue bond sinking funds to purchase qualified U.S. Treasury securities that will mature by the semi-annual debt service payment dates from a Qualified Dealer (as defined in the agreements) chosen by CRC BOTF.

In exchange for these agreements, Lehman paid the Authority \$958,600, which represented the present value of the expected interest earnings in the sinking fund over the life of the related revenue bonds. The remaining balance of this unearned revenue is \$90,006 at the end of the current fiscal year and is being recognized on the straight-line basis over the life of each respective agreement.

The forward delivery agreements relate to the following bond series:

<u>Dealer</u>	<u>Series</u>	<u>Cash Payment</u>
Lehman	1993 Refunding & Improvement Bonds	\$ 740,600
Lehman	1995 Revenue Bonds	218,000

As the investments purchased by the Authority are U.S. Treasury securities and are held in the Authority's revenue bond sinking fund, there is no significant credit risk. Interest rate risk is limited to the effect of a change in rate on the value of the investments from the time of purchase through the next scheduled debt service payment date, which can be no more than one year.

The Authority entered into these agreements to obtain a higher long-term than short-term yield and not for the purpose of hedging any financial risk. Accordingly, these forward delivery arrangements are investment derivative financial instruments and classified as other noncurrent liabilities in the statement of net position. The gains or losses are reported as other revenues or expenses, respectively, on the statement of revenues, expenses, and changes in net position.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

8. Investment Derivative Financial Instruments (continued)

The fair value balance and notional amount of debt service forward delivery agreements outstanding at the end of the current fiscal year and the corresponding changes in fair value of such derivative instruments for the fiscal year then ended were as follows:

<u>Change in Fair Value</u>		<u>Fair Value</u>		
<u>Classification</u>	<u>Amount</u>	<u>Classification</u>	<u>Amount</u>	<u>Notional</u>
Change in fair value of derivative	\$ 205,017	Other noncurrent liability	\$ (226,462)	\$ 35,267,805

9. Restricted Net Position

Net position restricted for debt service includes the excess of assets restricted for debt service on revenue bonds over the related liabilities. Net position restricted for bond retirement represents assets set aside for that purpose as required by the revenue bond resolutions (see Note 6).

10. Net Investment in Capital Assets

The net investment in capital assets reported on the statement of net position is calculated as follows at the end of the current fiscal year:

Cost of capital assets	\$ 670,451,706
Accumulated depreciation	<u>(197,788,301)</u>
Book value	472,663,405
Construction accounts and retainage payable	(1,401,519)
Revenue bonds payable	(124,131,922)
Deferred charge on refunding	<u>6,748,093</u>
Net investment in capital assets	<u><u>\$ 353,878,057</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

11. Retirement Plans

Defined Benefit Pension Plan

Plan Description. The Authority has established the Cherokee County Water and Sewerage Authority Retirement Plan (the Plan) and participates in the Georgia Municipal Employees Benefit System (GMEBS) to provide certain retirement and death benefits to Plan members and beneficiaries. Only the Authority may amend the benefit provisions of the Plan. GMEBS is an agent multiple-employer, statewide public employee pension plan established by the Georgia legislature and administered by a board of trustees. GMEBS issues a publicly available financial report that may be obtained by contacting the administrator, Georgia Municipal Association (GMA), The Burgess Building, 201 Pryor Street, SW, Atlanta, Georgia 30303.

All qualified employees are eligible to participate in the Plan with no waiting period. Officials are not covered by the Plan. Benefits vested at 100% after five years of service. Participants become eligible for early retirement with 10 years of service and attainment of age 55. Participants become eligible for normal retirement with 5 years of service and attainment of age 65. Participants also become eligible for normal retirement with combined service and age equal to at least 80, if still employed (the Rule of 80).

Current membership is as follows:

Retired participants and beneficiaries currently receiving benefits	37
Vested terminated participants entitled to but not yet receiving benefits	26
Active participants	<u>187</u>
Total number of participants	<u><u>250</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

11. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

Benefits Provided. Upon eligibility for retirement at normal retirement age, the following benefit formula applies: 2.0% x Years of Credited Service (30 maximum) x Final Average Earnings (Annual average of 5 consecutive years preceding the most recent termination in which participant's earnings were the highest). Upon eligibility for retirement at early retirement age, the benefit formula above is reduced ranging from 93.3% to 50.0%. The Plan also provides benefits in the event of death before retirement and early retirement subject to certain early retirement reduction factors.

Contributions. Authority employees are not required to contribute to the Plan. The Authority is required to contribute amounts at least equal to the actuarially determined rate established by the GMEBS board of trustees. The Plan is also subject to the minimum funding standards of the OCGA, which will be met by the amount developed under the GMEBS actuarial funding policy. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The Authority's contributions totaled \$1,606,072, or 14.16% of covered payroll, for the current fiscal year. The Authority's board of directors provides for the benefits and funding policy through Authority resolution and maintains the authority to change the policy.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. At the end of the current fiscal year, the Authority reported a net pension liability of \$5,901,262. The net pension liability was measured as of September 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2019. For the current fiscal year, the Authority recognized pension expense of \$1,272,305.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

11. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

The components of the net pension liability are as follows:

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances at September 30, 2017	<u>\$ 27,352,810</u>	<u>\$ 20,837,114</u>	<u>\$ 6,515,696</u>
Changes for the year:			
Service cost	391,796	0	391,796
Interest	2,041,795	0	2,041,795
Differences between expected and actual experience	591,609	0	591,609
Contributions - employer	0	1,587,016	(1,587,016)
Net investment income	0	2,090,459	(2,090,459)
Benefit payments, including refunds of employee contributions	(1,041,341)	(1,041,341)	0
Administrative expense	0	(37,841)	37,841
Net changes	<u>1,983,859</u>	<u>2,598,293</u>	<u>(614,434)</u>
Balances at September 30, 2018	<u>\$ 29,336,669</u>	<u>\$ 23,435,407</u>	<u>\$ 5,901,262</u>
Plan fiduciary net position as a percentage of the total pension liability		79.88%	
Covered payroll		\$ 10,504,974	
Net pension liability as a percentage of covered payroll		56.18%	

At the end of the current fiscal year, the Authority reported deferred outflows of resources and deferred inflows of resources related to the Plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Authority contributions subsequent to the measurement date	\$ 1,472,233	\$ 0
Differences between expected and actual experience	1,951,020	0
Changes of assumptions	299,263	(23,098)
Net difference between projected and actual earnings on pension plan investments	<u>0</u>	<u>(1,202,004)</u>
Totals	<u>\$ 3,722,516</u>	<u>\$ (1,225,102)</u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

11. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

The \$1,472,233 of deferred outflows of resources resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the subsequent fiscal year. Other amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Fiscal Year Ending August 31	
2020	\$ 471,245
2021	198,266
2022	125,847
2023	131,223
2024	98,600
Totals	<u>\$ 1,025,181</u>

Actuarial Assumptions. The total pension liability in the January 1, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Future salary increases	2.75% plus service based merit increases
Cost of living adjustments	0.00%
Net investment rate of return	7.50%

Healthy mortality rates were based on the RP-2000 Combined Healthy Mortality Table with sex-distinct rates, set forward two years for males and one year for females. Disabled rates were based on the RP-2000 Disabled Retiree Mortality Table with sex-distinct rates.

The investment return and inflation assumptions used in the January 1, 2019 valuation were based on the results of an actuarial study conducted in September 2017. The mortality and economic actuarial assumptions used in the January 1, 2019 valuation were based on the results of an actuarial experience study for the period of January 1, 2010 through June 30, 2014.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

11. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The difference between the resulting rate and the rate on the ongoing basis is a margin for adverse deviation.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of March 31, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic equity	45%	6.40%
International equity	20%	7.40%
Real estate	10%	5.10%
Global fixed income	5%	3.03%
Domestic fixed income	20%	1.75%
Cash	0%	
Total	<u>100%</u>	

Discount Rate. The discount rate used to measure the total pension liability was 7.50 percent. The projection of cash flows used to determine the discount rate assumed that contributions from employer will be made at contractually required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

11. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents what the net pension liability would be if it were calculated using a discount rate that is one percentage-point lower (6.50 percent) or one percentage-point higher (8.50 percent) than the current rate:

	<u>Discount Rate</u>	<u>Net Pension Liability</u>
1% decrease	6.50%	\$ 9,516,790
Current discount rate	7.50%	5,901,262
1% increase	8.50%	2,871,729

Plan Fiduciary Net Position. Detailed information about the Plan's fiduciary net position is available in the separately issued Georgia Municipal Employees Benefit System financial report.

Deferred Compensation Plan

The Authority provides a governmental deferred compensation Section 457 plan (the 457 Plan) authorized by the Authority Board, which covers all employees. The 457 Plan is administered by the Variable Annuity Life Insurance Company. It does not allow for employer contributions. These defined contribution retirement benefits are dependent on employee contributions and investment earnings on those contributions. Participants self-direct the investment of their contributions. Any expenses incurred in conjunction with their investments are paid by the participants. Amounts employees defer under the 457 Plan are immediately vested and subject to statutory limits. Employee deferrals totaled \$311,606 for the current fiscal year.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

12. Postemployment Benefits Other Than Pensions

Plan Description. The Cherokee County Water and Sewerage Authority Other Postemployment Benefits Plan (the OPEB Plan) is an agent multiple-employer defined benefit medical and prescription drug plan. The OPEB Plan is administered through the Georgia Municipal Employees Benefit System (GMEBS), an agent-multiple employer OPEB Plan administered by the Georgia Municipal Association (GMA). The benefit levels, employee contributions, and employer contributions are governed by the Authority and can be amended by the Authority. The Authority participates in the GMEBS OPEB Trust, an irrevocable trust established for the purpose of accumulating assets to fund postemployment benefits other than pensions. The GMEBS OPEB Trust issues separate financial statements that may be obtained by contacting the administrator, Georgia Municipal Association (GMA), The Burgess Building, 201 Pryor Street, SW, Atlanta, Georgia 30303.

At July 1, 2017, there were 198 participants consisting of the following:

Retired members or beneficiaries currently receiving benefits	16
Vested terminated members entitled to but not yet receiving benefits	0
Active members	182
Total number of participants	198

Benefits Provided. The Authority provides post-retirement health insurance benefits to all employees who retire after meeting age and tenure conditions and who do not have other coverage. Eligible retirees must meet the Rule of 80 (as described in the defined benefit pension plan note disclosure) regarding their combined age and years of service and have a minimum of 15 continuous years of service with the Authority. Employees must also meet other eligibility criteria as specified by the terms of the Plan. The retiree's spouse and dependent(s) may also receive coverage under certain circumstances. Retirees will pay 20% of the cost of their own coverage and 60% of spouse and dependent coverage. For retirees who qualify, the benefits are coordinated with Medicare.

Current Authority retirees who qualify for health benefits receive an implicit rate subsidy by participating in the active employee health care risk pool.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

12. Postemployment Benefits Other Than Pensions

Contributions. The Authority has elected to advance fund the OPEB Plan. The Authority's contributions totaled \$582,334, or 5.13% of covered employee payroll, for the current fiscal year. The Authority's board of directors provides for the benefits and funding policy through Authority resolution and maintains the authority to change the policy. The GMA issues a publicly available financial report that includes financial statements and required supplementary information for GMEBS.

OPEB Liabilities, OPEB Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to OPEB. At the end of the current fiscal year, the Authority reported a net OPEB liability of \$726,420. The net OPEB liability was measured as of August 31, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation using data as of July 1, 2017. For the current fiscal year, the Authority recognized OPEB expense of \$181,023.

The components of the net OPEB liability are as follows:

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Balances at August 31, 2017	<u>\$ 10,251,140</u>	<u>\$8,363,055</u>	<u>\$ 1,888,085</u>
Changes for the year:			
Service cost	245,329	0	245,329
Interest	779,412	0	779,412
Differences between expected and actual experience	(69,876)	0	(69,876)
Changes of assumptions	53,321	0	53,321
Contributions-employer	0	1,105,037	(1,105,037)
Net investment income	0	1,074,058	(1,074,058)
Benefit payments, including refunds of member contributions	(208,629)	(208,629)	0
Administrative expense	0	(9,244)	9,244
Net changes	<u>799,557</u>	<u>1,961,222</u>	<u>(1,161,665)</u>
Balances at August 31, 2018	<u>\$ 11,050,697</u>	<u>\$10,324,277</u>	<u>\$ 726,420</u>
Plan fiduciary net position as a percentage of the total OPEB liability		93.43%	
Covered employee payroll		\$ 10,976,683	
Plan net OPEB liability as a percentage of covered employee payroll		6.62%	

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

12. Postemployment Benefits Other Than Pensions (continued)

At the end of the current fiscal year, the Authority reported deferred outflows of resources and deferred inflows of resources related to the OPEB Plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Authority contributions subsequent to the measurement date	\$ 582,334	\$ 0
Changes of assumptions	45,702	0
Differences between expected and actual experience	0	(187,637)
Net difference between projected and actual earnings on OPEB plan investments	0	(576,362)
Totals	\$ 628,036	\$ (763,999)

The \$582,334 of deferred outflows of resources resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the subsequent fiscal year. Other amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Fiscal Year Ending August 31		
2020	\$	(192,464)
2021		(192,464)
2022		(192,464)
2023		(110,626)
2024		(27,914)
Thereafter		(2,365)
Totals	\$	(718,297)

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

12. Postemployment Benefits Other Than Pensions (continued)

Actuarial Assumptions. The total OPEB liability in the July 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.75%
Projected salary increases	3.25% to 8.25%, including inflation
Actuarial cost method	Entry age level percent of pay
Discount rate	7.50%
Healthcare cost trend rates	Medical: 7.00% trend down to 4.50% by 2022 Prescription Drug: 7.00% trend down to 4.50% by 2022
Healthy mortality rates	RP-2000 Combined Healthy Mortality Table with sex-distinct rates, set forward two years for males and one year for females
Disabled mortality rates	RP-2000 Disabled Retiree Mortality Table with sex-distinct rates
Amortization method	Closed 20 years, level dollar
Remaining amortization period	20 years
Asset valuation method	Market value

The actuarial assumptions used in the August 31, 2018 valuation were based on the results of an actuarial experience study for the period of January 1, 2010 to June 30, 2014.

Development of Long-Term Rate. The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

12. Postemployment Benefits Other Than Pensions (continued)

The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic equity	45%	6.75%
International equity	20%	7.45%
Global fixed income	5%	3.30%
Domestic fixed income	20%	1.75%
Real estate	10%	4.55%
Total	<u>100%</u>	

Discount Rate. The discount rate used to measure the Total OPEB liability was 7.50%. The projection of cash flows used to determine the discount rate assume that Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to cover all projected benefit payments of current plan members.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate. The following presents what the net OPEB liability would be if it were calculated using a discount rate that is one percentage-point lower (6.50%) or one percentage-point higher (8.50%) than the current rate. Also shown is the net OPEB liability as if it were calculated using healthcare cost trend rates that were one percentage-point lower or one percentage-point higher than the current healthcare trend rates:

<u>Discount Rate</u>		<u>Net OPEB Liability (Asset)</u>
1% decrease	6.50%	\$ 2,367,496
Current discount rate	7.50%	726,420
1% increase	8.50%	(615,321)
<u>Healthcare Cost Trend Rates</u>		<u>Net OPEB Liability (Asset)</u>
1% decrease		\$ (799,840)
Current discount rate		726,420
1% increase		2,610,908

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

12. Postemployment Benefits Other Than Pensions (continued)

OPEB Plan Fiduciary Net Position. Detailed information about the Plan's fiduciary net position is available in the separately issued Georgia Municipal Employees Benefit System financial report.

13. Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; workers compensation; employee health care; errors and omissions; and natural disasters. The Authority has elected to manage its risk financing activities through the purchase of commercial insurance.

There have been no significant reductions in coverage from the prior year and there have been no insurance settlements exceeding insurance coverage for any of the past three fiscal years.

Management estimates liabilities for unpaid claims based on the probability of losses exceeding the occurrence limits and the reasonableness of estimating those losses. At the end of the current fiscal year, the Authority has no losses that are probable or estimable and, accordingly, has not recognized any liability.

14. Commitments and Contingencies

Commitments

At the end of the current fiscal year, the Authority has outstanding agreements with contractors for future work on existing construction projects in the approximate amount of \$5,365,792.

Contingencies

The Authority's legal counsel has stated there are presently no determinable lawsuits.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
For the fiscal year ended August 31, 2019

15. Operations

The Authority produced approximately 94.7% of its customers' water needs during the current fiscal year, purchasing most of the remaining amount from the City of Woodstock, Georgia, Cobb County, Georgia, and Pickens County, Georgia. The Authority provided 94.1% of sewage treatment required during the current fiscal year, purchasing the remainder primarily from the City of Canton, Georgia, Cobb County, Georgia, and Fulton County, Georgia.

16. New Accounting Pronouncements

The Authority implemented Governmental Accounting Standards Board Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, effective for the Authority's current fiscal year. The requirements of this statement are effective for periods beginning after June 15, 2018.

Required Supplementary Information



CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
AND RELATED RATIOS
LAST TEN FISCAL YEARS
August 31, 2019
(Unaudited)

	Fiscal Year	
	2015	2016
Total pension liability		
Service cost	\$ 416,262	\$ 384,036
Interest	1,374,131	1,505,560
Differences between expected and actual experience	565,359	1,068,153
Changes of assumptions	0	0
Benefit payments, including refunds of employee contributions	(485,554)	(557,037)
Other	(138,589)	0
Net change in total pension liability	1,731,609	2,400,712
Total pension liability - beginning	17,973,495	19,705,104
Total pension liability - ending (a)	\$ 19,705,104	\$ 22,105,816
Plan fiduciary net position		
Contributions - employer	\$ 1,232,688	\$ 1,283,819
Net investment income	1,421,199	135,060
Benefit payments, including refunds of employee contributions	(485,554)	(557,037)
Administrative expense	(16,290)	(21,095)
Net change in plan fiduciary net position	2,152,043	840,747
Plan fiduciary net position - beginning	12,260,401	14,412,444
Plan fiduciary net position - ending (b)	\$ 14,412,444	\$ 15,253,191
Net pension liability - ending : (a) - (b)	\$ 5,292,660	\$ 6,852,625
Plan fiduciary net position as a percentage of the total pension liability	73.14%	69.00%
Covered payroll	\$ 8,586,584	\$ 9,276,547
Net pension liability as a percentage of covered payroll	61.64%	73.87%

Note: Fiscal year 2015 was the first year of implementation. Therefore, fiscal years prior are not reported.

Fiscal Year		
2017	2018	2019
\$ 404,668	\$ 422,034	\$ 391,796
1,688,560	1,910,997	2,041,795
1,539,214	357,188	591,609
0	448,898	0
(635,902)	(888,663)	(1,041,341)
0	0	0
2,996,540	2,250,454	1,983,859
22,105,816	25,102,356	27,352,810
\$ 25,102,356	\$ 27,352,810	\$ 29,336,669
\$ 1,305,137	\$ 1,430,342	\$ 1,587,016
1,735,345	2,696,020	2,090,459
(635,902)	(888,663)	(1,041,341)
(19,282)	(39,074)	(37,841)
2,385,298	3,198,625	2,598,293
15,253,191	17,638,489	20,837,114
\$ 17,638,489	\$ 20,837,114	\$ 23,435,407
\$ 7,463,867	\$ 6,515,696	\$ 5,901,262
70.27%	76.18%	79.88%
\$ 9,924,068	\$ 9,667,079	\$ 10,504,974
75.21%	67.40%	56.18%

See accompanying notes to the required supplementary information.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF PENSION CONTRIBUTIONS
LAST TEN FISCAL YEARS
August 31, 2019
(Unaudited)

	Fiscal Year	
	2015	2016
Actuarially determined contribution	\$ 1,282,799	\$ 1,295,035
Contributions in relation to the actuarially determined contribution	(1,232,688)	(1,283,819)
Contribution deficiency (excess)	\$ 50,111	\$ 11,216
Covered payroll	\$ 9,310,777	\$ 9,583,210
Contributions as a percentage of covered payroll	13.24%	13.40%

Note: Fiscal year 2015 was the first year of implementation. Therefore, fiscal years prior are not reported.

Fiscal Year		
<u>2017</u>	<u>2018</u>	<u>2019</u>
\$ 1,416,256 <u>(1,305,137)</u>	\$ 1,585,284 <u>(1,585,284)</u>	\$ 1,606,072 <u>(1,606,072)</u>
<u>\$ 111,119</u>	<u>\$ 0</u>	<u>\$ 0</u>
\$ 10,073,060	\$ 10,976,683	\$ 11,344,107
12.96%	14.44%	14.16%

See accompanying notes to the required supplementary information.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY
AND RELATED RATIOS
LAST TEN FISCAL YEARS
August 31, 2019
(Unaudited)

	<u>Fiscal Year</u>	
	<u>2018</u>	<u>2019</u>
Total OPEB liability		
Service cost	\$ 223,365	\$ 245,329
Interest	667,586	779,412
Change of benefit terms	913,976	0
Differences between expected and actual experience	(178,846)	(69,876)
Changes of assumptions	0	53,321
Benefit payments, including refunds of member contributions	(103,568)	(208,629)
	<hr/>	<hr/>
Net change in total OPEB liability	1,522,513	799,557
Total OPEB liability - beginning	<hr/> 8,728,627	<hr/> 10,251,140
Total OPEB liability - ending (a)	<u><u>\$ 10,251,140</u></u>	<u><u>\$ 11,050,697</u></u>
Plan fiduciary net position		
Contributions - employer	\$ 877,568	\$ 1,105,037
Net investment income	937,625	1,074,058
Benefit payments, including refunds of employee contributions	(103,568)	(208,629)
Administrative expense	(14,771)	(9,244)
	<hr/>	<hr/>
Net change in plan fiduciary net position	1,696,854	1,961,222
Plan fiduciary net position - beginning	<hr/> 6,666,201	<hr/> 8,363,055
Plan fiduciary net position - ending (b)	<u><u>\$ 8,363,055</u></u>	<u><u>\$ 10,324,277</u></u>
Net OPEB liability - ending : (a) - (b)	<u><u>\$ 1,888,085</u></u>	<u><u>\$ 726,420</u></u>
Plan fiduciary net position as a percentage of the total OPEB liability	81.58%	93.43%
Covered employee payroll	\$ 10,073,060	\$ 10,976,683
Net OPEB liability as a percentage of covered employee payroll	18.74%	6.62%

Note: Fiscal year 2018 was the first year of implementation. Therefore, fiscal years prior are not reported.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF OPEB CONTRIBUTIONS
LAST TEN FISCAL YEARS
August 31, 2019
(Unaudited)

	<u>Fiscal Year</u>	
	<u>2018</u>	<u>2019</u>
Actuarially determined contribution	\$ 977,900	\$ 450,347
Contributions in relation to the actuarially determined contribution	<u>(1,105,037)</u>	<u>(582,334)</u>
Contribution deficiency (excess)	<u>\$ (127,137)</u>	<u>\$ (131,987)</u>
Covered employee payroll	\$ 10,976,683	\$ 11,344,107
Contributions as a percentage of covered employee payroll	10.07%	5.13%

Note: Fiscal year 2018 was the first year of implementation. Therefore, fiscal years prior are not reported.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
For the fiscal year ended August 31, 2019

Pension Plan

1. Valuation Date

The actuarially determined contribution was determined as of January 1, 2019, with an interest adjustment to the fiscal year. Contributions in relation to this actuarially determined contribution will be reported for the fiscal year ending August 31, 2020.

2. Methods and Assumptions Used to Determine Contribution Rates

Actuarial cost method = Projected unit credit

Amortization method = Closed level dollar for remaining unfunded liability

Remaining amortization period = Remaining amortization period varies for the bases, with a net effective amortization period of 10 years

Asset valuation method = Sum of actuarial value at beginning of year and the cash flow during the year plus the assumed investment return, adjusted by 10% of the amount that the value exceeds or is less than the market value at end of year. The actuarial value is adjusted, if necessary, to be within 20% of market value.

Net investment rate of return = 7.50%

Projected salary increases = 2.75% plus service based merit increases

Cost of living adjustments = 0.00%

Retirement age for inactive vested participants = 65

Mortality = Healthy mortality rates were based on the RP-2000 Combined Healthy Mortality Table with sex-distinct rates, set forward two years for males and one year for females. Disabled mortality rates were based on the RP-2000 Disabled Retiree Mortality Table with sex-distinct rates.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
For the fiscal year ended August 31, 2019

Pension Plan (continued)

3. Changes in Benefits

There were no changes in benefit provisions in the last two fiscal years.

4. Changes of Assumptions

Amounts reported for the fiscal year ending in 2018 and later reflect the following assumption changes based on an actuarial study conducted in September 2017:

The investment return assumption was decreased from 7.75% to 7.50%.

The inflation assumption was decreased from 3.25% to 2.75%.

OPEB Plan

1. Valuation Date

The actuarially determined contribution rates are calculated as of August 31, 2017 and adjusted for timing.

2. Methods and Assumptions Used to Determine Contribution Rates

Actuarial cost method = Entry age normal

Amortization method = Closed 20 years, level dollar

Remaining amortization period = 20 years

Asset valuation method = Market value

Projected salary increases = 3.25% to 8.25%, including inflation

Inflation = 2.75%

Discount rate = 7.50%.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
For the fiscal year ended August 31, 2019

OPEB Plan (continued)

2. Methods and Assumptions Used to Determine Contribution Rates (continued)

Healthcare cost trend rates = Medical: 7.00% trend down to 4.50% by 2022
Prescription Drug: 7.00% trend down to 4.50% by 2022

Mortality = Healthy mortality rates were based on the RP-2000 Combined Healthy Mortality Table with sex-distinct rates, set forward two years for males and one year for females. Disabled mortality rates were based on the RP-2000 Disabled Retiree Mortality Table with sex-distinct rates.

3. Changes in Benefits

There have been no benefit changes since GASB 75 implementation.

4. Changes of Assumptions

Effective for the year ended August 31, 2018, the salary scale was lowered by 0.50% and the assumed inflation decreased from 3.25% to 2.75%.

Supplementary Information



CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF COSTS OF WATER PURCHASES AND PRODUCTION
For the fiscal year ended August 31, 2019

Purchased water	<u>\$ 79,693</u>
Water production	
Salaries and wages	1,175,354
Payroll taxes	85,580
Group insurance	257,291
Retirement	96,860
Other postemployment benefits	2,785
Billing and accounting	23,022
Computer equipment and maintenance	1,675
Continuing education	30,309
Insurance - other than group	39,979
Lab fees and supplies	56,650
Miscellaneous	451
Office supplies	880
Operating supplies	269,653
Postage	1,204
Power	1,248,440
Professional fees	2,939
Repair and maintenance	244,454
Small tools and equipment	3,441
Stream monitoring	60,800
Telephone	30,023
Uniforms	6,541
Vehicle	<u>13,215</u>
Total water production	<u>3,651,546</u>
Total water purchases and production before depreciation	3,731,239
Depreciation	<u>1,445,827</u>
Total water purchases and production cost	<u><u>\$ 5,177,066</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF COSTS OF WASTEWATER TREATMENT
For the fiscal year ended August 31, 2019

Purchased wastewater treatment	<u>\$ 726,548</u>
Wastewater treatment	
Salaries and wages	3,062,840
Payroll taxes	222,102
Group insurance	743,006
Retirement	357,138
Other postemployment benefits	10,108
Billing and accounting	23,022
Computer equipment and maintenance	5,721
Continuing education	58,579
Insurance - other than group	147,624
Lab fees and supplies	78,688
Miscellaneous	6,490
Office supplies	5,684
Operating supplies	1,123,558
Postage	624
Power	1,634,867
Professional fees	13,799
Regulatory actions	0
Repair and maintenance	2,183,971
Small tools and equipment	13,308
Telephone	40,627
Uniforms	21,454
Vehicle	<u>60,037</u>
Total wastewater treatment	<u>9,813,247</u>
Total purchased treatment and wastewater treatment before depreciation	10,539,795
Depreciation	<u>2,381,867</u>
Total wastewater treatment cost	<u><u>\$ 12,921,662</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF DISTRIBUTION AND ADMINISTRATION EXPENSES
For the fiscal year ended August 31, 2019

Salaries and wages	\$ 7,742,522
Payroll taxes	558,864
Group insurance	1,966,796
Retirement	780,832
Other postemployment benefits	21,967
Bad debts	56,463
Billing and accounting	391,520
Computer equipment and maintenance	13,446
Continuing education	96,062
Contract meter readers	676,017
Director fees and expenses	56,309
Equipment repairs and maintenance	976,537
Insurance - other than group	323,030
Lab fees and supplies	17,498
Legal and audit	79,564
Line and meter repairs	272,934
Miscellaneous	27,322
Office supplies	28,494
Operating supplies	77,319
Postage	10,244
Power	143,913
Professional fees	247,009
Public outreach	4,089
Real estate taxes	20,238
Service charges	481,394
Small tools and equipment	26,517
Stream monitoring	3,870
Telephone	120,309
Toilet rebates	16,945
Uniforms	38,296
Vehicle	287,102
	<hr/>
Subtotal	15,563,422
Less capitalized salaries	<u>(857,824)</u>
Total distribution and administration expenses before depreciation	14,705,598
Depreciation	<u>8,268,048</u>
Total distribution and administration expenses	<u><u>\$ 22,973,646</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF BUDGETED REVENUES AND EXPENSES
COMPARED WITH ACTUAL
For the fiscal year ended August 31, 2019

	<u>BUDGET</u>	<u>ACTUAL</u>	<u>VARIANCE</u>
REVENUES			
Operating revenues			
Metered water sales	\$ 28,000,000	\$ 30,109,349	\$ 2,109,349
Wastewater treatment sales	17,000,000	18,318,463	1,318,463
Street light fees	1,474,000	1,474,998	998
Water connection fees	676,600	659,955	(16,645)
Transfer fees	213,000	201,850	(11,150)
Forfeited discounts and penalties	726,000	722,436	(3,564)
Customer repairs and service charges	225,000	240,120	15,120
Total operating revenues	<u>48,314,600</u>	<u>51,727,171</u>	<u>3,412,571</u>
Non-operating revenues			
Interest revenue			
Sinking funds	122,000	154,911	32,911
Revenue funds	679,400	996,140	316,740
Change in fair value of derivative	0	205,017	205,017
Amortization of bond premiums, net	1,104,500	1,104,493	(7)
Gain on disposition of capital assets	0	81,366	81,366
Miscellaneous	385,000	551,069	166,069
Total non-operating revenues	<u>2,290,900</u>	<u>3,092,996</u>	<u>802,096</u>
TOTAL REVENUES	<u>50,605,500</u>	<u>54,820,167</u>	<u>4,214,667</u>
EXPENSES			
Operating expenses			
Water purchases and production			
Purchased water	68,000	79,693	(11,693)
Water production			
Salaries and wages	1,193,000	1,175,354	17,646
Payroll taxes	91,300	85,580	5,720
Group insurance	287,000	257,291	29,709
Retirement	123,030	96,860	26,170
Other postemployment benefits	35,294	2,785	32,509
Billing and accounting	24,000	23,022	978
Computer equipment and maintenance	5,000	1,675	3,325
Continuing education	40,000	30,309	9,691
Insurance - other than group	38,415	39,979	(1,564)
Lab fees and supplies	64,000	56,650	7,350
Miscellaneous	2,500	451	2,049
Office supplies	3,500	880	2,620
Operating supplies	300,000	269,653	30,347
Postage	1,000	1,204	(204)
Power	1,300,000	1,248,440	51,560
Professional fees	10,000	2,939	7,061
Repair and maintenance	315,000	244,454	70,546
Small tools and equipment	3,000	3,441	(441)
Stream monitoring	62,000	60,800	1,200
Telephone	34,000	30,023	3,977
Uniforms	7,000	6,541	459
Vehicle	19,000	13,215	5,785
Operating expenses before depreciation	<u>4,026,039</u>	<u>3,731,239</u>	<u>294,800</u>
Depreciation	<u>1,430,300</u>	<u>1,445,827</u>	<u>(15,527)</u>
Total water purchases and production	<u>5,456,339</u>	<u>5,177,066</u>	<u>279,273</u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF BUDGETED REVENUES AND EXPENSES
COMPARED WITH ACTUAL
For the fiscal year ended August 31, 2019

	<u>BUDGET</u>	<u>ACTUAL</u>	<u>VARIANCE</u>
Wastewater treatment			
Purchased wastewater treatment	\$ 822,000	\$ 726,548	\$ 95,452
Wastewater treatment			
Salaries and wages	3,294,000	3,062,840	231,160
Payroll taxes	252,000	222,102	29,898
Group insurance	781,000	743,006	37,994
Retirement	453,665	357,138	96,527
Other postemployment benefits	130,147	10,108	120,039
Billing and accounting	24,000	23,022	978
Computer equipment and maintenance	12,000	5,721	6,279
Continuing education	65,100	58,579	6,521
Insurance - other than group	141,650	147,624	(5,974)
Lab fees and supplies	65,000	78,688	(13,688)
Miscellaneous	3,500	6,490	(2,990)
Office supplies	24,900	5,684	19,216
Operating supplies	1,106,200	1,123,558	(17,358)
Postage	2,300	624	1,676
Power	1,820,000	1,634,867	185,133
Professional fees	20,000	13,799	6,201
Regulatory actions	20,000	0	20,000
Repair and maintenance	1,938,500	2,183,971	(245,471)
Small tools and equipment	15,300	13,308	1,992
Telephone	39,500	40,627	(1,127)
Uniforms	20,000	21,454	(1,454)
Vehicle	71,000	60,037	10,963
Operating expenses before depreciation	11,121,762	10,539,795	581,967
Depreciation	2,407,600	2,381,867	25,733
Total wastewater treatment	<u>13,529,362</u>	<u>12,921,662</u>	<u>607,700</u>
Distribution and administration			
Salaries and wages	7,814,000	7,742,522	71,478
Payroll taxes	597,750	558,864	38,886
Group insurance	2,135,000	1,966,796	168,204
Retirement	991,910	780,832	211,078
Other postemployment benefits	284,559	21,967	262,592
Bad debts	100,000	56,463	43,537
Billing and accounting	406,000	391,520	14,480
Computer equipment and maintenance	23,000	13,446	9,554
Continuing education	115,000	96,062	18,938
Contract meter readers	678,000	676,017	1,983
Director fees and expenses	60,000	56,309	3,691
Equipment repairs and maintenance	1,082,700	976,537	106,163
Insurance - other than group	309,710	323,030	(13,320)
Lab fees and supplies	15,500	17,498	(1,998)
Legal and audit	95,000	79,564	15,436
Line and meter repairs	462,000	272,934	189,066
Miscellaneous	35,000	27,322	7,678
Office supplies	40,500	28,494	12,006
Operating supplies	85,700	77,319	8,381
Postage	10,000	10,244	(244)
Power	170,000	143,913	26,087
Professional fees	255,000	247,009	7,991
Public outreach	4,500	4,089	411

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF BUDGETED REVENUES AND EXPENSES
COMPARED WITH ACTUAL
For the fiscal year ended August 31, 2019

	<u>BUDGET</u>	<u>ACTUAL</u>	<u>VARIANCE</u>
Distribution and administration (continued)			
Real estate taxes	\$ 24,000	\$ 20,238	\$ 3,762
Service charges	448,000	481,394	(33,394)
Small tools and equipment	41,500	26,517	14,983
Stream monitoring	15,600	3,870	11,730
Telephone	121,500	120,309	1,191
Toilet rebates	30,000	16,945	13,055
Uniforms	35,500	38,296	(2,796)
Vehicle	350,000	287,102	62,898
Less capitalized salaries	(473,395)	(857,824)	384,429
Operating expenses before depreciation	16,363,534	14,705,598	1,657,936
Depreciation	8,222,400	8,268,048	(45,648)
Total distribution and administration	24,585,934	22,973,646	1,612,288
Streetlights	1,100,200	1,102,667	(2,467)
Total operating expenses	44,671,835	42,175,041	2,496,794
Non-operating expenses			
Interest expense	6,067,178	6,063,727	3,451
Amortization of deferred amount on refunding	589,520	589,516	4
Total non-operating expenses	6,656,698	6,653,243	3,455
TOTAL EXPENSES	51,328,533	48,828,284	2,500,249
CAPITAL CONTRIBUTIONS			
Sewer tap fees	6,525,000	5,888,075	(636,925)
Water connection fees	2,706,400	2,341,316	(365,084)
Contributions of capital assets	50,000	6,425,355	6,375,355
TOTAL CAPITAL CONTRIBUTIONS	9,281,400	14,654,746	5,373,346
CHANGE IN NET POSITION	\$ 8,558,367	\$ 20,646,629	\$ 12,088,262

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF METERED WATER SALES, WASTEWATER TREATMENT SALES
AND NUMBER OF CUSTOMERS SERVED
For the fiscal years ended August 31,

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Metered water sales	\$ 25,980,155	\$ 27,730,410	\$ 27,941,584	\$ 27,494,824	\$ 30,109,349
Number of customers served	69,302	70,893	72,601	73,610	75,273
Sales per customer	<u>\$ 374.88</u>	<u>\$ 391.16</u>	<u>\$ 384.87</u>	<u>\$ 373.52</u>	<u>\$ 400.00</u>
Wastewater treatment sales	\$ 15,607,818	\$ 16,435,678	\$ 16,717,722	\$ 17,007,346	\$ 18,318,463
Number of customers served	31,044	32,174	33,413	34,686	35,888
Sales per customer	<u>\$ 502.76</u>	<u>\$ 510.84</u>	<u>\$ 500.34</u>	<u>\$ 490.32</u>	<u>\$ 510.43</u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF REVENUE BOND COVERAGE
For the fiscal years ended August 31,
(IN THOUSANDS)

	2015		2016		2017		2018		2019	
	<u>With Tap Fees</u>	<u>Without Tap Fees</u>	<u>With Tap Fees</u>	<u>Without Tap Fees</u>	<u>With Tap Fees</u>	<u>Without Tap Fees</u>	<u>With Tap Fees</u>	<u>Without Tap Fees</u>	<u>With Tap Fees</u>	<u>Without Tap Fees</u>
Net revenue available for debt service	\$ 27,068	\$ 18,623	\$ 28,882	\$ 20,313	\$ 29,044	\$ 19,433	\$ 30,832	\$ 17,376	\$ 31,579	\$ 22,690
Highest annual debt service requirements	\$ 14,421	\$ 14,421	\$ 14,237	\$ 14,237	\$ 14,211	\$ 14,211	\$ 14,215	\$ 14,215	\$ 13,997	\$ 13,997
Revenue Bond Coverage:										
Actual	<u>1.88</u>	<u>1.29</u>	<u>2.03</u>	<u>1.43</u>	<u>2.04</u>	<u>1.37</u>	<u>2.17</u>	<u>1.22</u>	<u>2.26</u>	<u>1.62</u>
Required	<u>1.20</u>	<u>1.00</u>	<u>1.20</u>	<u>1.00</u>	<u>1.20</u>	<u>1.00</u>	<u>1.20</u>	<u>1.00</u>	<u>1.20</u>	<u>1.00</u>

Note: Net revenue available for debt service equals income from operations plus depreciation and other income less interest earned on construction funds and the value of contributed capital. Required revenue bond coverage is measured both including and excluding water connection and sewer tap fees.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF WATER, SEWER AND IRRIGATION RATES
As of August 31, 2019

<u>CONSUMPTION (GALLONS)</u>	<u>WATER NET</u>	<u>SEWER NET</u>	<u>IRRIGATION NET</u>
0	\$ 10.00	\$ 12.60	\$ 13.00
1,000	11.15	12.60	18.40
2,000	12.30	12.60	23.80
3,000	17.70	19.75	29.20
4,000	23.10	26.90	34.60
5,000	28.50	34.05	40.00
6,000	33.90	41.20	45.40
7,000	39.30	48.35	50.80
8,000	44.70	55.50	56.20
9,000	50.10	62.65	61.60
10,000	55.50	69.80	67.00
Over 10,000	Additional \$6.50 per 1,000	Additional \$7.15 per 1,000	Additional \$6.50 per 1,000

Note: There is a 10% penalty added when paid after due date. These rates apply only to 3/4" meters serving a single family dwelling. A larger minimum bill will apply to larger meters. Rates effective January 1, 2019.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF INSURANCE IN FORCE
As of August 31, 2019

TYPE OF COVERAGE	LIMITS OF LIABILITY
Public Officials and Employment Practices Legal Liability	\$1,000,000 for each loss and \$3,000,000 aggregate for each policy year
Commercial Automobile	\$1,000,000 for liability per accident \$75,000 for uninsured/underinsured per accident Actual cash value for collision
Commercial Crime	\$500,000 employee theft \$100,000 ERISA employee theft per occurrence \$100,000 forgery and alteration \$500,000 computer fraud
Commercial Property: Fire and Extended Coverage including boiler and machinery	\$318,533,633 blanket coverage for buildings \$1,250,000 blanket coverage for business personal property
Inland Marine	\$5,048,328 hardware and media \$2,335,490 contractors equipment \$50,000 data breach limit (any one occurrence and annual aggregate)
Workers Compensation	\$1,000,000 for bodily injury each accident, \$1,000,000 aggregate limit, and \$1,000,000 disease limit
Commercial Umbrella	\$10,000,000 for each occurrence \$10,000,000 aggregate limit \$4,000,000 for failure to supply (each claim and annual aggregate)
Commercial General Liability	\$3,000,000 for general aggregate \$3,000,000 for products and completed operations aggregate \$1,000,000 for personal and advertising injury \$1,000,000 for bodily injury and property damage \$1,000,000 for damage to premises rented to you \$1,000,000 for employee benefits liability - each claim \$3,000,000 for employee benefits liability - aggregate \$1,000,000 for sexual abuse - each occurrence \$1,000,000 for failure to supply - each occurrence \$1,000,000 for health care and social services - each wrongful act

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Part III

Statistical Section



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Cherokee County Water & Sewerage Authority

Introduction to the Statistical Section
(UNAUDITED)

The contents of the statistical section of the comprehensive annual financial report presents information regarding financial trends, revenue capacity, debt service and debt capacity, demographic and economic information and operating information.

Financial Trends..... 64-69

These schedules should help the reader understand how the Authority's financial performance and well-being have changed over time.

Revenue Capacity..... 70-76

These schedules contain information in order for the reader to assess the Authority's most significant revenue sources.

Debt Capacity..... 77-79

These schedules contain information in order for the reader to assess the affordability of the Authority's current levels of outstanding debt and the ability for the Authority to issue additional debt in the future.

Demographic and Economic Information..... 80-81

These schedules offer demographic and economic indicators to help thte reader understand the environment within which the Authority's financial activities take place.

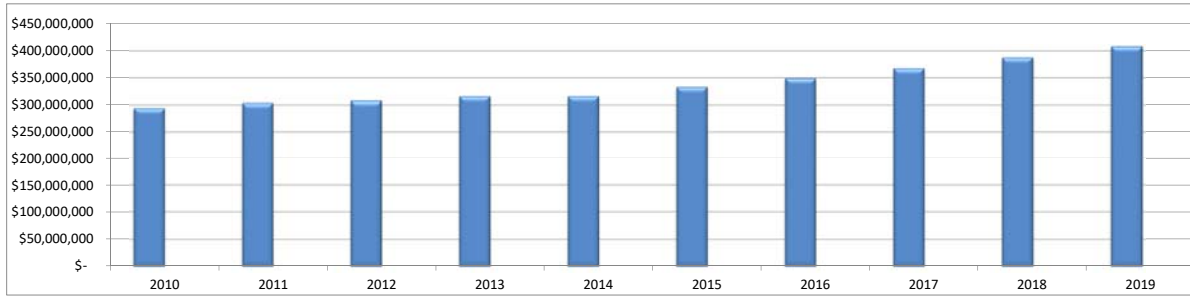
Operating Information..... 82-84

These schedules contain service and infrastructure data to help the reader understand how the information in the Authority's financial report relates to the services the Authority provides and the activities it performs.

Cherokee County Water & Sewerage Authority

Net Position by Component
Last Ten Fiscal Years

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Net investment in capital assets	\$ 246,127,575	\$ 252,722,983	\$ 254,997,871	\$ 276,087,369	\$ 281,151,583	\$ 291,424,715	\$ 301,934,404	\$ 322,548,060	\$ 344,442,124	\$ 353,878,057
Restricted for:										
Debt Service	4,848,640	4,832,668	5,529,572	4,868,422	4,931,244	4,949,250	1,925,221	1,944,936	1,990,865	2,056,144
Capital Projects	0	0	0	828,731	0	0	0	0	0	0
Unrestricted	43,101,106	46,021,700	46,736,656	33,403,218	29,486,065	36,238,725	44,623,874	42,725,573	40,878,271	52,023,688
Total Net Position	\$ 294,077,321	\$ 303,577,351	\$ 307,264,099	\$ 315,187,740	\$ 315,568,892	\$ 332,612,690	\$ 348,483,499	\$ 367,218,569	\$ 387,311,260	\$ 407,957,889

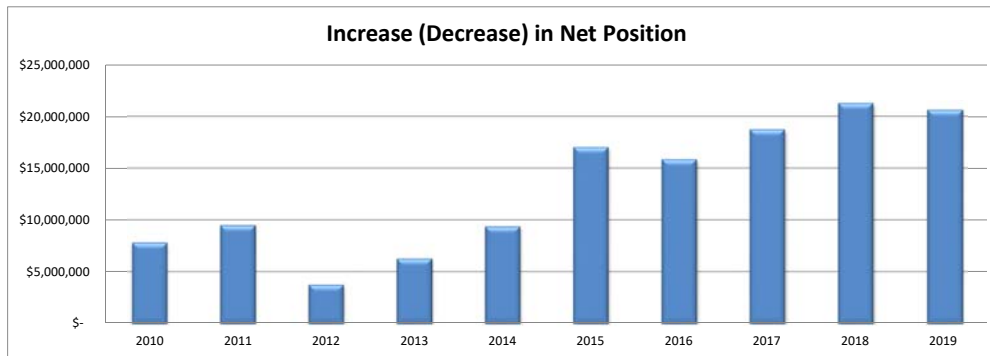


Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Changes in Net Position
Last Ten Fiscal Years

Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Revenues	\$ 41,383,583	\$ 42,347,019	\$ 41,032,207	\$ 38,674,973	\$ 41,382,200	\$ 44,442,890	\$ 47,196,424	\$ 47,948,092	\$ 47,906,897	\$ 51,727,171
Operating Expenses	32,070,123	32,984,658	33,987,476	34,426,663	35,600,188	36,947,246	38,320,683	40,017,439	42,718,664	42,175,041
Income from Operations	9,313,460	9,362,361	7,044,731	4,248,310	5,782,012	7,495,644	8,875,741	7,930,653	5,188,233	9,552,130
Non-Operating Revenues (Expenses)	(9,080,570)	(8,645,999)	(8,015,283)	(8,260,211)	(6,925,380)	(6,854,441)	(6,369,781)	(5,751,538)	(4,912,332)	(3,560,247)
Gain (Loss) Before Capital Contributions	232,890	716,362	(970,552)	(4,011,901)	(1,143,368)	641,203	2,505,960	2,179,115	275,901	5,991,883
Capital Contributions	7,601,553	8,783,668	4,741,959	10,278,080	10,515,135	16,402,595	13,364,849	16,555,955	21,001,692	14,654,746
Increase (decrease) in Net Position	\$ 7,834,443	\$ 9,500,030	\$ 3,771,407	\$ 6,266,179	\$ 9,371,767	\$ 17,043,798	\$ 15,870,809	\$ 18,735,070	\$ 21,277,593	\$ 20,646,629



Note:

See Operating Revenues statistical schedule for a detailed breakdown by revenue source.
See the Non-Operating Revenue (Expenses) statistical schedule for a breakdown by non-operating revenue(expense) items.

Beginning in fiscal year 2012, the Authority reclassified certain revenue and capital contribution items so certain of the revenue and capital contribution categories shown for fiscal year 2010 and 2011 have been reclassified to facilitate comparison to fiscal year 2012-2019. Portions of water meter connections included under capital contributions were not reclassified for fiscal year 2010 and 2011 to facilitate comparison to 2012-2019 because the data and information was not sorted in such a way that it was obtainable to make this reclassification for comparison purposes.

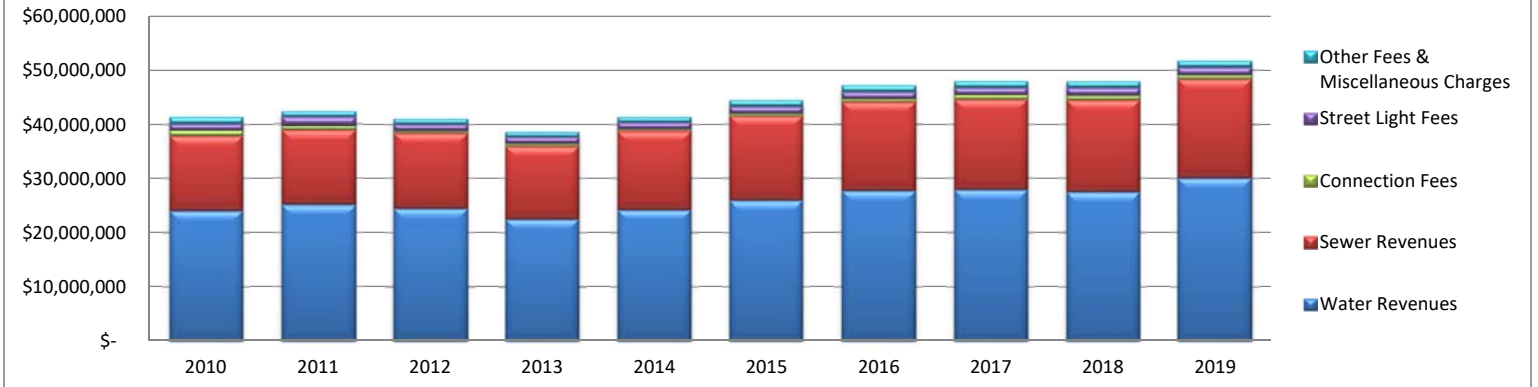
Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Operating Revenues by Source Last Ten Fiscal Years

Fiscal Year	Water Revenues	Sewer Revenues	Connection Fees	Street Light Fees	Other Fees & Miscellaneous Charges	Total
2010	\$ 24,106,505	\$ 13,818,212	\$ 939,350	\$ 1,251,173	\$ 1,268,343	\$ 41,383,583
2011	25,177,691	13,787,286	773,900	1,617,410	990,732	42,347,019
2012	24,472,779	14,011,430	307,445	1,263,493	977,060	41,032,207
2013	22,544,851	13,529,139	412,715	1,288,766	899,502	38,674,973
2014	24,286,454	14,538,327	291,639	1,322,783	942,997	41,382,200
2015	25,980,155	15,607,818	373,344	1,342,068	1,139,505	44,442,890
2016	27,730,410	16,435,678	467,202	1,364,046	1,199,088	47,196,424
2017	27,941,584	16,717,722	718,183	1,405,888	1,164,715	47,948,092
2018	27,494,824	17,007,346	802,464	1,447,043	1,155,220	47,906,897
2019	30,109,349	18,318,463	659,955	1,474,998	1,164,406	51,727,171

Operating Revenues by Source



Note:

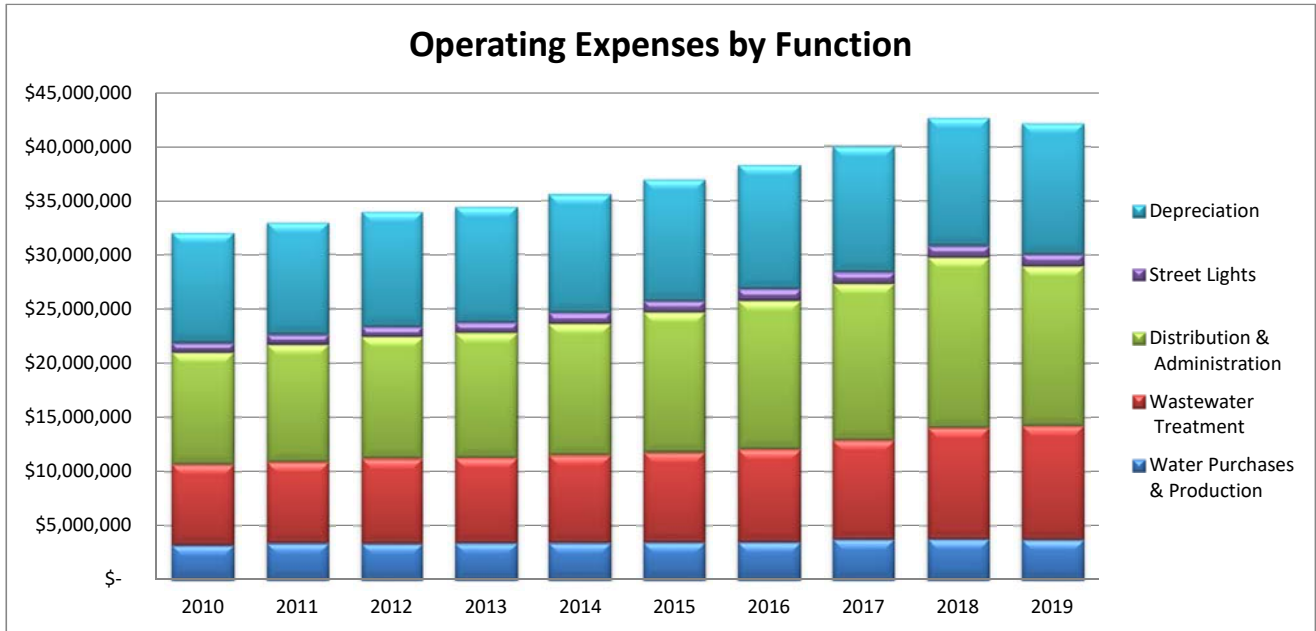
Beginning in fiscal year 2012, the Authority reclassified certain revenue and capital contribution items so certain of the revenue and capital contribution categories shown for fiscal year 2010 through 2012 have been reclassified to facilitate comparison to fiscal year 2012-2019. Portions of water meter connections included under Capital Contributions were not reclassified for fiscal years 2010-2011 to facilitate comparison to 2012-2019 because the data and information was not sorted in such a way that it was obtainable to make this reclassification for comparison purposes.

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Operating Expenses by Function
Last Ten Fiscal Years

Fiscal Year	Water Purchases & Production	Wastewater Treatment	Distribution & Administration	Street Lights	Depreciation	Total Operating Expenses
2010	\$ 3,203,144	\$ 7,482,282	\$ 10,318,847	\$ 877,458	\$ 10,188,392	\$ 32,070,123
2011	3,398,081	7,488,990	10,842,235	903,511	10,351,841	32,984,658
2012	3,371,731	7,831,106	11,243,067	915,727	10,625,845	33,987,476
2013	3,395,278	7,881,795	11,502,139	971,867	10,675,584	34,426,663
2014	3,415,804	8,123,714	12,101,019	1,036,563	10,923,088	35,600,188
2015	3,446,719	8,327,094	12,902,290	1,051,386	11,219,757	36,947,246
2016	3,472,663	8,594,347	13,710,183	1,063,994	11,479,496	38,320,683
2017	3,760,355	9,147,271	14,428,635	1,065,086	11,616,092	40,017,439
2018	3,782,823	10,294,946	15,721,580	1,089,476	11,829,839	42,718,664
2019	3,731,239	10,539,795	14,705,598	1,102,667	12,095,742	42,175,041



Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Non-Operating Revenues (Expenses)
Last Ten Fiscal Years

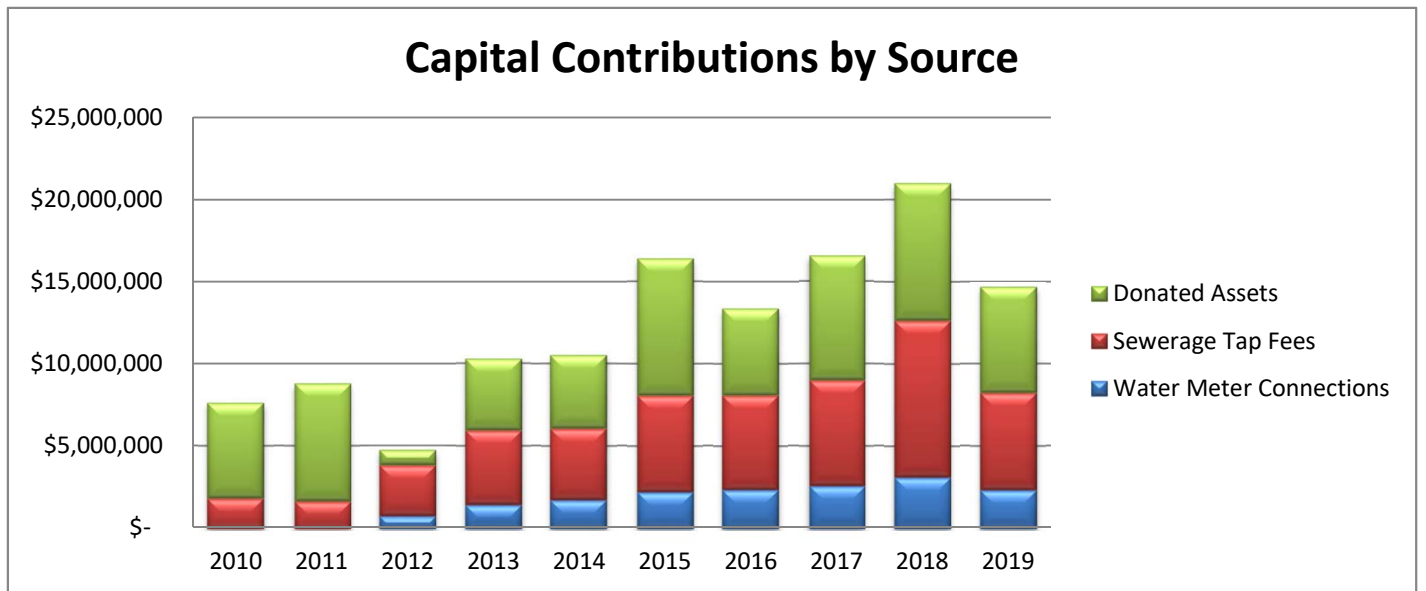
Fiscal Year	Interest Income	Change in Fair Value of Derivatives	Gain (Loss) on Disposal of Assets	Miscellaneous	Interest Expense & Other Fiscal Charges	Other	Total
2010	\$ 201,937	\$ -	\$ 12,888	\$ 111,631	\$ (9,294,932)	\$ (112,094)	\$ (9,080,570)
2011	174,641	-	(35,097)	119,520	(8,789,599)	(115,464)	(8,645,999)
2012	164,191	98,613	(19,595)	113,382	(8,295,890)	(75,984)	(8,015,283)
2013	185,022	(360,374)	(54,257)	131,406	(8,063,069)	(98,939)	(8,260,211)
2014	228,744	191,330	17,999	143,381	(7,845,282)	338,448	(6,925,380)
2015	146,925	178,641	(56,913)	133,766	(7,552,660)	295,800	(6,854,441)
2016	222,502	384,942	(83,118)	202,175	(7,521,999)	425,717	(6,369,781)
2017	411,959	43,590	(240,913)	192,624	(6,778,504)	619,706	(5,751,538)
2018	744,162	(181,957)	(22,940)	415,861	(6,429,880)	562,422	(4,912,332)
2019	1,151,051	205,017	81,366	551,069	(6,063,727)	514,977	(3,560,247)

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Capital Contributions by Source
Last Ten Fiscal Years

Fiscal Year	Water Meter Connections	Sewerage Tap Fees	Donated Assets	Total Capital Contributions
2010	\$ -	\$ 1,835,666	\$ 5,765,887	\$ 7,601,553
2011	-	1,666,600	7,117,068	8,783,668
2012	765,059	3,057,288	919,612	4,741,959
2013	1,442,985	4,515,196	4,319,899	10,278,080
2014	1,743,611	4,328,898	4,442,626	10,515,135
2015	2,224,156	5,847,315	8,331,124	16,402,595
2016	2,367,398	5,734,547	5,262,904	13,364,849
2017	2,589,017	6,403,784	7,563,154	16,555,955
2018	3,122,686	9,531,338	8,347,668	21,001,692
2019	2,341,316	5,888,075	6,425,355	14,654,746



Note:

Beginning in fiscal year 2012, the Authority reclassified certain revenue and capital contribution items so certain of the revenue and capital contribution categories shows for fiscal year 2010 and 2011 have been reclassified to facilitate comparison to fiscal year 2012-2019

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Water Capacity Compared with Annual Average Daily Flow and Maximum Flow
Last Ten Fiscal Years
(All Numbers Presented in Million Gallons Per Day)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Maximum Rated Capacity for the Plant										
<u>Treatment Plant</u>										
Etowah River Water Treatment Plant	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00
Average Daily Flow	14.45	14.79	14.92	14.00	14.61	14.91	16.14	16.22	16.26	16.58
Maximum Daily Flow	21.48	22.49	24.56	19.68	20.74	22.40	27.17	22.45	22.84	25.43

Source: Cherokee County Water & Sewerage Authority Historical Data Records

Cherokee County Water & Sewerage Authority

Sewerage Treatment Capacity Compared with Annual Monthly Average Flow and Peak Day Flows
Last Ten Fiscal Years
(All Numbers Presented in Million Gallons Per Day)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Permit Limit on Flows										
<u>Treatment Plants</u>										
Rose Creek	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Fitzgerald Creek	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Riverbend ⁽²⁾							1.0 ⁽²⁾	1.0 ⁽²⁾	1.0 ⁽²⁾	1.0 ⁽²⁾
Total	11.0	11.0	11.0	11.0	11.0	11.0	12.0	12.0	12.0	12.0
<u>Rose Creek GA0046451</u>										
Monthly Average	2.88	2.90	2.63	2.82	2.47	2.39	2.31	2.10	2.52	2.88
Peak Day Flow	5.26	4.27	3.46	4.78	3.72	4.97	4.51	4.04	4.23	6.35
<u>Fitzgerald Creek GA0038555</u>										
Monthly Average	3.32	3.07	3.22	3.67	3.70	3.70	4.05	4.26	4.32	4.50
Peak Day Flow	8.41	6.56	7.21	8.42	5.88	5.13	6.32	5.62	5.97	8.91
<u>Riverbend GA0000728⁽²⁾</u>										
Monthly Average				0.0081 ⁽¹⁾	0.00	0.00	0.02	0.00	0.00	0.30
Peak Day Flow				0.1400 ⁽¹⁾	0.00	0.00	0.21	0.00	0.00	1.07

Source: Cherokee County Water & Sewerage Authority Historical Data Records

(1) 2013 for Riverbend is from August through December.

(2) The Authority assumed the Industrial Permit for Riverbend in 2013 after the facility was purchased from a rendering plant. There were no process flows other than rain water infiltration. The domestic permit has an initial permitted treatment capacity of 1.0 MGD.

Cherokee County Water & Sewerage Authority
New Connections Added to the System

New Water Meters Sold

Last Ten Fiscal Years

METER SIZE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
3/4 INCH											
<i>Residential</i>	390	335	511	929	1,081	1,352	1,492	1,642	1,684	1,585	11,111
<i>Commercial</i>	8	12	9	6	6	11	11	10	21	16	
1 INCH											
<i>Residential</i>	2	1	2	1		6	6	9	3	3	117
<i>Commercial</i>	4	5	7	11	5	9	6	9	9	19	
1.5 INCH											
<i>Residential</i>	1	1	1		1			1			37
<i>Commercial</i>	4	3	1	4	3	4	4	3	4	2	
2 INCH											
<i>Residential</i>					2			2	3		57
<i>Commercial</i>	7	2	1	9	5	8	2	6	8	2	
3 INCH											
<i>Residential</i>							1				19
<i>Commercial</i>	2	2	3			2		7	1	1	
4 INCH											
<i>Residential</i>									1		3
<i>Commercial</i>							1			1	
6 INCH											
<i>Residential</i>									1		3
<i>Commercial</i>									1	1	
8 INCH											
<i>Residential</i>									2		3
<i>Commercial</i>							1				
TOTAL	418	361	535	960	1,103	1,392	1,524	1,689	1,738	1,630	11,350

New Sewer Taps Sold

Last Ten Fiscal Years

TYPE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
Residential	326	247	424	810	905	1,037	1,149	1,244	1,292	1,106	8,540
Commercial	14	16	10	15	12	16	18	14	14	17	146
TOTAL	340	263	434	825	917	1,053	1,167	1,258	1,306	1,123	8,686

Cherokee County Water & Sewerage Authority

Number of Customers
Last Ten Fiscal Years

Number of Water Connections

<u>Customer Class</u>	<u>As of August 31</u>									
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Residential	58,172	58,702	59,277	60,323	61,658	62,978	64,687	66,336	67,965	69,616
Commercial & Industrial	6,049	5,957	6,242	6,250	6,307	6,324	6,206	6,265	5,645	5,657
Total	64,221	64,659	65,519	66,573	67,965	69,302	70,893	72,601	73,610	75,273

Number of Sewer Connections

<u>Customer Class</u>	<u>As of August 31</u>									
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Residential	26,482	27,043	27,494	28,401	29,449	30,467	31,489	32,724	33,979	35,164
Commercial & Industrial	532	536	559	543	563	577	685	689	707	724
Total	27,014	27,579	28,053	28,944	30,012	31,044	32,174	33,413	34,686	35,888

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority
Residential Water, Sewer and Irrigation Rates
Last Ten Fiscal Years

	2010	2011	2012	2013	2014	2015	2016	2017	2018	*2019
Water										
Base Rate	8.00	8.00	8.00	8.00	9.00	9.00	9.00	9.00	9.00	10.00
3/4"										
1,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.15
2,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.15
3,000-10,000	5.00/1000	5.00/1000	5.00/1000	5.00/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.40/1000
>10,000	6.00/1000	6.00/1000	6.00/1000	6.00/1000	6.30/1000	6.30/1000	6.30/1000	6.30/1000	6.30/1000	6.50/1000
Minimum Charge:										
1"	50.20	50.20	50.20	50.20	53.20	53.20	53.20	53.20	53.20	55.50
1.5"	100.20	100.20	100.20	100.20	105.70	105.70	105.70	105.70	105.70	109.50
2"	170.20	170.20	170.20	170.20	179.20	179.20	179.20	179.20	179.20	185.10
3"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
6"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Charge per 1,000 Gallons: Above Minimum										
	6.00	6.00	6.00	6.00	6.30	6.30	6.30	6.30	6.30	6.50
Sewerage										
Mimumum Charge:	11.60	11.60	11.60	11.60	12.60	12.60	12.60	12.60	12.60	12.60
1"	64.40	64.40	64.40	64.40	68.20	68.20	68.20	68.20	68.20	69.80
1.5"	130.40	130.40	130.40	130.40	137.70	137.70	137.70	137.70	137.70	141.30
2"	222.80	222.80	222.80	222.80	235.00	235.00	235.00	235.00	235.00	241.40
3"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
6"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Charge per 1,000 Gallons: Above Minimum										
	6.60	6.60	6.60	6.60	6.95	6.95	6.95	6.95	6.95	7.15
Irrigation										
Base Rate:	11.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00	13.00
Minimum Charge:										
3/4"										
1,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25	5.40
2,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25	5.40
3,000-10,000 Gallons	5.00/1000	5.00/1000	5.00/1000	5.00/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.40/1000
> 10,000 Gallons	6.00/1000	6.00/1000	6.00/1000	6.00/1000	6.30/1000	6.30/1000	6.30/1000	6.30/1000	6.30/1000	6.50/1000
1"	53.20	53.20	53.20	53.20	56.20	56.20	56.20	56.20	64.50	67.00
1.5"	103.20	103.20	103.20	103.20	108.70	108.70	108.70	108.70	117.00	121.00
2"	173.20	173.20	173.20	173.20	182.20	182.20	182.20	182.20	190.50	196.60
3"	233.20	233.20	233.20	233.20	245.20	245.20	245.20	245.20	n/a	n/a
4"	298.20	298.20	298.20	298.20	313.45	313.45	313.45	313.45	n/a	n/a
6"	423.20	423.20	423.20	423.20	444.70	444.70	444.70	444.70	n/a	n/a
8"	503.20	503.20	503.20	503.20	528.70	528.70	528.70	528.70	n/a	n/a
Charge per 1,000 Gallons: Above Minimum										
	6.00	6.00	6.00	6.00	6.30	6.30	6.30	6.30	6.30	6.50

Note: Rates are presented as of August 31 of each Fiscal Year, respectively

*Rate Change Effective January 1, 2019

Source: Cherokee County Water & Sewerage Authority Historical Data

Cherokee County Water & Sewerage Authority
Commercial Water, Sewer and Irrigation Rates
Last Ten Fiscal Years

	2010	2011	2012	2013	2014	2015	2016	2017	2018	*2019
Water										
Base Rate	8.00	8.00	8.00	8.00	9.00	9.00	9.00	9.00	9.00	10.00
3/4"										
1,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.15
2,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.15
3,000-10,000	5.00/1000	5.00/1000	5.00/1000	5.00/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.40/1000
>10,000	5.00/1000	5.00/1000	5.00/1000	5.00/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.40/1000
Minimum Charge:										
1"	50.20	50.20	50.20	50.20	53.20	53.20	53.20	53.20	53.20	55.50
1.5"	100.20	100.20	100.20	100.20	105.70	105.70	105.70	105.70	105.70	109.50
2"	170.20	170.20	170.20	170.20	179.20	179.20	179.20	179.20	179.20	185.10
3"	230.20	230.20	230.20	230.20	242.20	242.20	242.20	242.20	242.20	249.90
4"	295.20	295.20	295.20	295.20	310.45	310.45	310.45	310.45	310.45	320.10
6"	420.20	420.20	420.20	420.20	441.70	441.70	441.70	441.70	441.70	455.10
8"	500.20	500.20	500.20	500.20	525.70	525.70	525.70	525.70	525.70	541.50
Charge per 1,000 Gallons: Above Minimum										
	5.00	5.00	5.00	5.00	5.25	5.25	5.25	5.25	5.25	5.40
Sewerage										
Minimum Charge:	11.60	11.60	11.60	11.60	12.60	12.60	12.60	12.60	12.60	12.60
1"	64.40	64.40	64.40	64.40	68.20	68.20	68.20	68.20	68.20	69.80
1.5"	130.40	130.40	130.40	130.40	137.70	137.70	137.70	137.70	137.70	141.30
2"	222.80	222.80	222.80	222.80	235.00	235.00	235.00	235.00	235.00	241.40
3"	302.00	302.00	302.00	302.00	318.40	318.40	318.40	318.40	318.40	327.20
4"	387.80	387.80	387.80	387.80	408.75	408.75	408.75	408.75	408.75	420.15
6"	552.80	552.80	552.80	552.80	582.50	582.50	582.50	582.50	582.50	598.90
8"	658.40	658.40	658.40	658.40	693.70	693.70	693.70	693.70	693.70	713.30
Charge per 1,000 Gallons: Above Minimum										
	6.60	6.60	6.60	6.60	6.95	6.95	6.95	6.95	6.95	7.15
Irrigation										
Base Rate:	11.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	9.00	10.00
Minimum Charge:										
3/4"										
1,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25	5.40
2,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25	5.40
3,000-10,000 Gallons	5.00/1000	5.00/1000	5.00/1000	5.00/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.25/1000	5.40/1000
> 10,000 Gallons	6.00/1000	6.00/1000	6.00/1000	6.00/1000	6.30/1000	6.30/1000	6.30/1000	6.30/1000	6.30/1000	6.50/1000
1"	53.20	53.20	53.20	53.20	56.20	56.20	56.20	56.20	61.50	64.00
1.5"	103.20	103.20	103.20	103.20	108.70	108.70	108.70	108.70	114.00	118.00
2"	173.20	173.20	173.20	173.20	182.20	182.20	182.20	182.20	187.50	193.60
3"	233.20	233.20	233.20	233.20	245.20	245.20	245.20	245.20	250.50	258.40
4"	298.20	298.20	298.20	298.20	313.45	313.45	313.45	313.45	318.75	328.60
6"	423.20	423.20	423.20	423.20	444.70	444.70	444.70	444.70	450.00	463.60
8"	503.20	503.20	503.20	503.20	528.70	528.70	528.70	528.70	534.00	550.00
Charge per 1,000 Gallons: Above Minimum										
	6.00	6.00	6.00	6.00	6.30	6.30	6.30	6.30	6.30	6.50

Note: Rates are presented as of August 31 of each Fiscal Year, respectively

*Rate Change Effective January 1, 2019

Source: Cherokee County Water & Sewerage Authority Historical Data

Cherokee County Water & Sewerage Authority

Top Ten Customers by Type
Current Year and Nine Years Ago

Fiscal Year	2019			2010				
	Water Customers	Gallons Metered	Water Revenue	% of Water Revenue	Water Customers	Gallons Metered	Water Revenue	% of Water Revenue
	Pilgrim Pride	266,413,000	\$544,998	1.81%	Pilgrim Pride	301,420,000	\$676,141	2.80%
	City Of Woodstock	103,371,000	\$257,476	0.85%	Cherokee County Board of Education	44,569,000	\$240,809	1.00%
	City Of Waleska	77,677,000	\$185,705	0.62%	City of Woodstock	94,975,000	\$218,835	0.91%
	Pickens County Water	70,874,000	\$169,115	0.56%	Bartow County Water Department	91,558,000	\$206,409	0.86%
	City Of Canton	60,445,000	\$145,699	0.48%	Pickens County Government	79,283,000	\$178,980	0.74%
	Cherokee County Board of Education	55,591,000	\$353,891	1.17%	City of Waleska	78,960,000	\$178,091	0.74%
	Bartow County Water	52,964,000	\$127,007	0.42%	Shadowwood Mobile Home Park	31,640,000	\$159,510	0.66%
	Yes Investors (Shadowwood MHP)	37,867,000	\$211,603	0.70%	City of Canton	55,255,000	\$125,922	0.52%
	The Palmer LLC	26,419,000	\$148,905	0.49%	Georga National Cemetery	21,664,000	\$110,742	0.46%
	Colony Homes (River Park)	22,804,000	\$133,299	0.44%	Towne Lake Apartments	21,950,000	\$110,384	0.46%
	Total	774,425,000	\$2,277,698	7.54%		821,274,000	\$2,205,823	9.15%

Fiscal Year	2019			2010				
	Sewer Customers	Gallons Metered	Sewer Revenue	% of Sewer Revenue	Sewer Customers	Gallons Metered	Sewer Revenue	% of Sewer Revenue
	Pilgrim Pride	285,601,000	\$584,260	3.19%	Pilgrim Pride	287,319,000	\$672,326	4.87%
	Cherokee County Board of Education	44,597,000	\$340,191	1.86%	Cherokee County Board of Education	36,066,000	\$242,323	1.75%
	City of Ball Ground	42,690,000	\$178,527	0.97%	Shadowwood Mobile Home Park	31,640,000	\$198,341	1.44%
	Yes Investors (Shadowwood MHP)	37,867,000	\$258,405	1.41%	Towne Lake Apartments	21,950,000	\$139,801	1.01%
	The Palmer LLC	24,606,000	\$169,575	0.93%	Colony Homes (River Edge HOA)	16,255,000	\$100,102	0.72%
	Colony Homes (River Park)	20,072,000	\$135,339	0.74%	Cherokee County Sheriff's Office (Jail)	15,140,000	\$99,905	0.72%
	Cherokee County Sheriff's Office (Jail)	17,770,000	\$126,178	0.69%	Pointe Development Group (HOA)	12,717,000	\$83,913	0.61%
	Mar Harbor Creek LLC	15,621,000	\$104,833	0.57%	Gray Property (Brooke Mill Apts)	11,789,000	\$71,683	0.52%
	Pointe Development Group (HOA)	14,792,000	\$105,030	0.57%	Columbia Creek Ltd.(Summit Apts)	11,471,000	\$70,429	0.51%
	Deancurt Acworth - Peaks of Bells Ferry	14,136,000	\$95,659	0.52%	Alta Ridgeway Apartments	10,741,000	\$64,752	0.47%
	Total	517,752,000	\$2,097,997	11.45%		455,088,000	\$1,743,575	12.62%

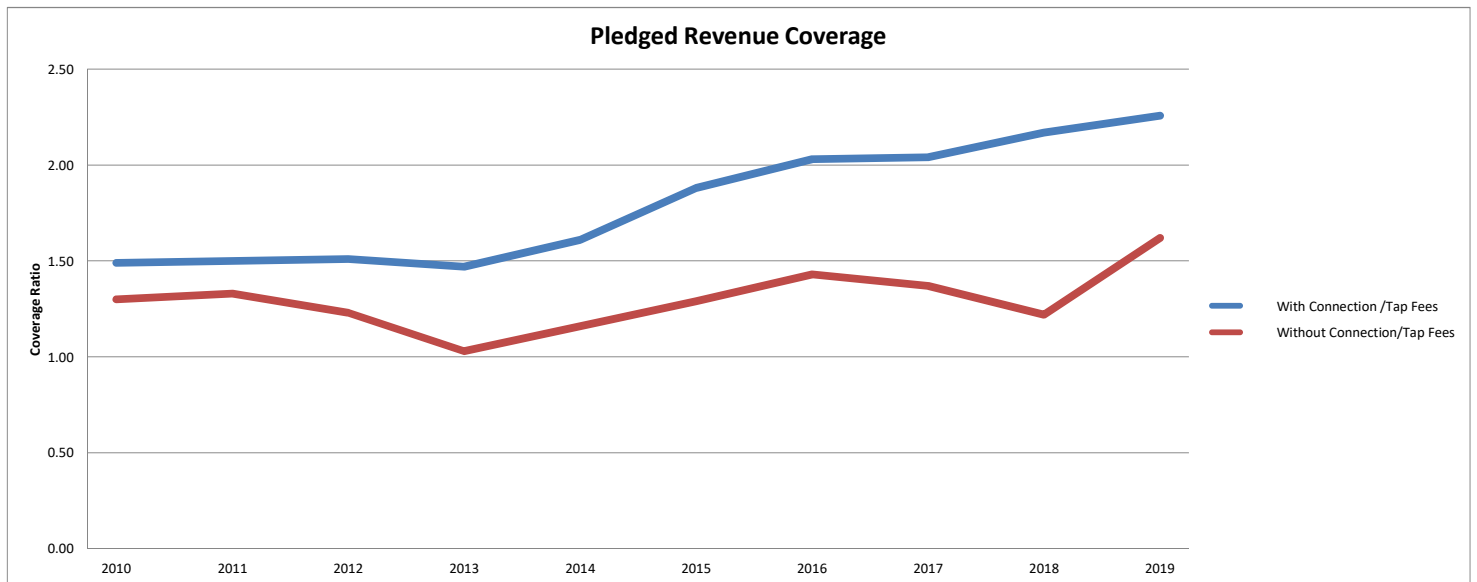
Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Schedule of Revenue Bond Coverage Last Ten Fiscal Years

Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Revenues	\$40,444,233	\$41,573,119	\$40,724,762	\$38,262,258	\$41,090,561	\$44,069,546	\$46,729,222	\$47,948,092	\$47,906,897	\$51,727,171
Connection Fees	2,775,016	2,440,500	4,129,792	6,370,896	6,364,148	8,444,815	8,569,147	8,992,801	12,654,024	8,229,391
Other Income	340,499	322,959	376,186	316,428	372,125	280,691	424,677	504,582	1,160,023	1,702,120
Gross Total Revenues	43,559,748	44,336,578	45,230,740	44,949,582	47,826,834	52,795,052	55,723,046	57,445,475	61,720,944	61,658,682
Less Operating Expenses Excluding Depreciation	21,881,731	22,632,817	23,361,631	23,751,079	24,677,100	25,727,489	26,841,187	28,401,347	30,888,825	30,079,299
Net Revenue Available	\$21,678,017	\$21,703,761	\$21,869,109	\$21,198,503	\$23,149,734	\$27,067,563	\$28,881,859	\$29,044,128	\$30,832,119	\$31,579,383
Total Highest Annual Debt Service	\$14,564,000	\$14,452,000	\$14,452,000	\$14,421,000	\$14,421,000	\$14,421,000	\$14,237,000	\$14,210,602	\$14,214,802	\$13,997,278

Coverage Ratio										
With Connection /Tap Fees	1.49	1.50	1.51	1.47	1.61	1.88	2.03	2.04	2.17	2.26
Without Connection/Tap Fees	1.30	1.33	1.23	1.03	1.16	1.29	1.43	1.37	1.22	1.62



Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Ratios of Revenue Bond Debt Outstanding
Last Ten Fiscal Years

Fiscal Year	Revenue Bonds	Total Outstanding Debt	Debt to Number of Customers	Debt Per Capita	Debt as Share of Personal Income (%)
2010	\$ 182,437,556	\$ 182,437,556	2.84	851	2.44%
2011	176,796,705	176,796,705	2.73	809	2.20%
2012	169,609,038	169,609,038	2.59	768	1.98%
2013	163,133,456	163,133,456	2.45	725	1.81%
2014	163,242,202	163,242,202	2.40	707	1.71%
2015	155,712,493	155,712,493	2.25	674	1.63%
2016	150,672,578	150,672,578	2.13	639	1.46%
2017	142,043,354	142,043,354	1.96	588	1.26%
2018	133,136,415	133,136,415	1.81	538 ⁽¹⁾	1.10% ⁽²⁾
2019	124,131,922	124,131,922	1.65	488 ⁽¹⁾	0.96% ⁽²⁾

(1) 2018 Population data used to calculate debt per capita

(2) Personal Income Data used from 2018 to calculate debt as share of personal income

Note: The only outstanding debt is Revenue Bond debt

Sources: US Census Bureau, US Bureau of Economic Analysis

Cherokee County Water & Sewerage Authority

Schedule of Revenue Bonds Payable

Fiscal Year Ending August 31,	Principal	Interest	Total
2020	\$ 8,305,000	\$ 5,694,678	\$ 13,999,678
2021	8,725,000	5,271,103	13,996,103
2022	8,960,000	4,821,503	13,781,503
2023	9,410,000	4,358,438	13,768,438
2024	9,890,000	3,877,507	13,767,507
2025-2029	48,395,000	11,726,928	60,121,928
2030-2034	18,850,000	3,336,650	22,186,650
2035	2,780,000	139,000	2,919,000
Total	<u>\$ 115,315,000</u>	<u>\$ 39,225,807</u>	<u>\$ 154,540,807</u>

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Principal Employers Prior Year and Nine Years Ago

2018			
Employer	Employees	Rank	% of Total County Employment
Northside-Cherokee Hospital	2,145	1	1.83%
Inalfa Roof Systems	1,000	2	0.85%
Pilgrims Pride	760	3	0.65%
Chart Industries	715	4	0.61%
Piolax	615	5	0.53%
Universal Alloy Corporation	559	6	0.48%
Belnick	490	7	0.42%
MEYN American, Inc.	267	8	0.23%
Roytec Industries, LLC	250	9	0.21%
Wellstar Health Systems	223	10	0.19%
Totals	7,024		6.00%

2010			
Employers	Employees	Rank	% of Total County Employment
Pilgrims Pride Corp.	850	1	0.86%
Northside-Cherokee Hospital	740	2	0.75%
Chart	313	3	0.32%
Universal Alloy Corporation	245	4	0.25%
Meyn America, LLC	218	5	0.22%
Reinhardt College	205	6	0.21%
Piolax Corporation	186	7	0.19%
Biz Chair/Belnick, Inc.	130	8	0.13%
HydroChem	127	9	0.13%
Kirk-Rudy, Inc.	84	10	0.09%
Totals	3,098		3.15%

Note: Most recent data available is presented in table

Sources: Cherokee County of Economic Development

Cherokee County Water & Sewerage Authority

Demographic and Economic Statistics Last Ten Years

Year	Estimated Population	Personal Income (Amounts Expressed in Thousands)	Per Capita Personal Income	Median Age	School Enrollment	Unemployment Rate %
2009	215,084	\$ 7,311,454	\$ 34,450	35.2	38,105	10.0
2010	214,346	7,486,312	34,780	34.1	38,585	8.9
2011	218,500	8,054,368	36,898	36.3	38,290	7.9
2012	220,800	8,581,906	38,837	36.7	39,161	6.9
2013	225,106	8,988,534	39,930	36.0	39,324	6.0
2014	230,985	9,544,757	41,322	37.0	40,504	5.6
2015	235,900	10,350,744	30,299	36.0	41,169	4.6
2016	241,689	11,249,864	32,002	37.0	41,769	5.4
2017	247,573	12,147,718	32,002	37.0	43,122	3.4
2018	254,149	12,996,343	51,137	38.0	42,216	2.9

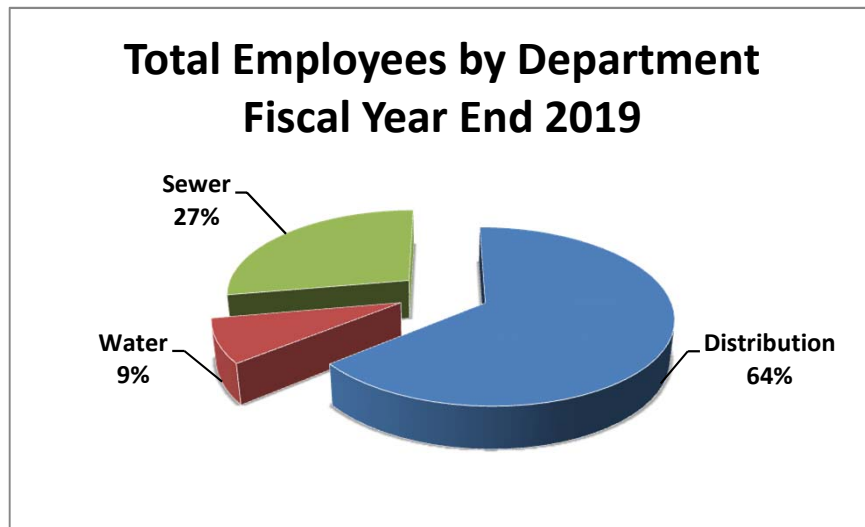
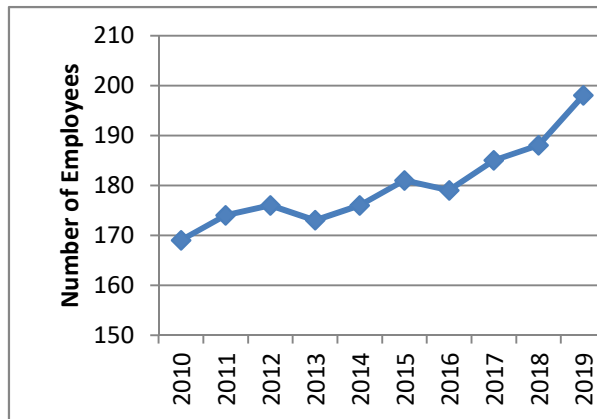
Note: Most recent data available is presented in table

Sources: Georgia Labor Market Explorer and US Bureau of Economic Analysis

Cherokee County Water and Sewerage Authority

Full-Time Water and Sewer Authority Employees by Department
Last Ten Fiscal Years

Fiscal Year End	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
DISTRIBUTION:	107	110	113	111	113	119	118	119	123	127
WATER:	17	17	17	17	16	15	15	16	16	16
SEWER:	45	47	46	45	47	47	46	50	49	55
TOTAL EMPLOYEES:	169	174	176	173	176	181	179	185	188	198



Source: Cherokee County Water & Sewerage Authority Historical Data

Cherokee County Water & Sewerage Authority
Water Tank Storage Capacity

Last Ten Fiscal Years
(All Numbers are Presented in Million Gallons)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ground Level Tanks										
Tunnel Hill 10 MG	10	10	10	10	10	10	10	10	10	10
Tunnel Hill 2 MG	2	2	2	2	2	2	2	2	2	2
Elevated Tanks										
Clayton	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Free Home	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Holly Springs	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Macedonia	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nelson	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Rose Creek	1	1	1	1	1	1	1	1	1	1
Tyson	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Unviter #1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Univeter #2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Yellow Creek	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Storage at Water Plant										
Clearwells 1-4	3.865	3.865	3.865	3.865	3.865	3.865	3.865	3.865	3.865	3.865
Total Finished Water Storage	21.015	21.015	21.015	21.015	21.015	21.015	21.015	21.015	21.015	21.015

Source: Cherokee County Water & Sewerage Authority Historical Data

Cherokee County Water & Sewerage Authority
Raw Water Supply in Reservoir

Last Ten Fiscal Years

(All Numbers are Presented in Million Gallons)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Drought Contingency Reservoir										
Yellow Creek	3,540	3,540	3,540	3,540	3,540	3,540	3,540	3,540	3,540	3,540
River										
Etowah	36	36	36	36	36	36	*40.5	40.5	40.5	40.5
Water Available for Use	3,576	3,576	3,576	3,576	3,576	3,576	3,580.5	3,580.5	3,580.5	3,580.5
Average Daily Flow										
Average Daily Production	14.27	14.79	15.08	13.91	14.71	14.79	16.14	16.22	16.26	16.58
Daily Release Down Stream	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Daily Flow	14.27	14.79	15.08	13.91	14.71	14.79	16.14	16.22	16.26	16.58
Number of Days Supply	251	241	237	257	243	242	222	221	220	216
Releases from Drought Contingency Reservoir⁽¹⁾										
Yellow Creek	0	91.1	0	0	0	0	0	728.3	0	0

Source: Cherokee County Water & Sewerage Authority Historical Data

*Riverbend intake & pump station in operation as of 6/22/2016 (permit # 028-1491-03)

⁽¹⁾ Represents the total gallons released during drought period

Part IV

Other Reporting Section



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**Independent Auditor's Report on Internal Control over Financial Reporting and on
Compliance and Other Matters Based on an Audit of Financial Statements
Performed In Accordance with *Government Auditing Standards***

To the Board of Directors
Cherokee County Water and Sewerage Authority
Canton, Georgia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of Cherokee County Water and Sewerage Authority, as of and for the year ended August 31, 2019, and the related notes to the financial statements, which collectively comprise the Cherokee County Water and Sewerage Authority's basic financial statements and have issued our report thereon dated November 15, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Cherokee County Water and Sewerage Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Authority's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Cherokee County Water and Sewerage Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grants agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

This report is intended solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Cherokee County Water and Sewerage Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Rushton & Company, LLC

Certified Public Accountants
Gainesville, Georgia
November 15, 2019