



CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY

Comprehensive Annual Financial Report

For the fiscal year ended August 31, 2018

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, 2018

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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, 2017

Christopher P. Morill

Executive Director/CEO

Cherokee County Water & Sewerage Authority

Listing of Principal Officials and Consultants

CCWSA Board Members

Mike Byrd

Eric Wilmarth

Robert Morrison

Gary Winchester

Lisa Woodruff

Doug Dabbs

Buzz Ahrens

General Manager

Thomas Heard

Management

Ryan Sarks-Human Resources/Risk/Fleet & Safety
Manager

Mike Venters- Waste Water Facilities Manager

Beth Jones-Accounting Manager

Clint Blackwell-Water Treatment Manager

Wesley Banks-Financial Assurance/Billing/IT
Manager

Mark Cochran-Reservoir Manager

Sharon Clark-Data Systems Analyst

Eric Wright-Waste Water Collections/Lift Station
Manager

Gaye Blackwell- Customer Service/Meter Technician
Manager

Rick Dobbs- Special Projects Manager

David Kubala- Environmental Affairs Manager

Jeff Hooper- GPS/GIS Manager

Corey Ghorley- Capital Improvement Coordinator

Dwayne Fowler-Construction/Development Manager

Consultants and Professional Services

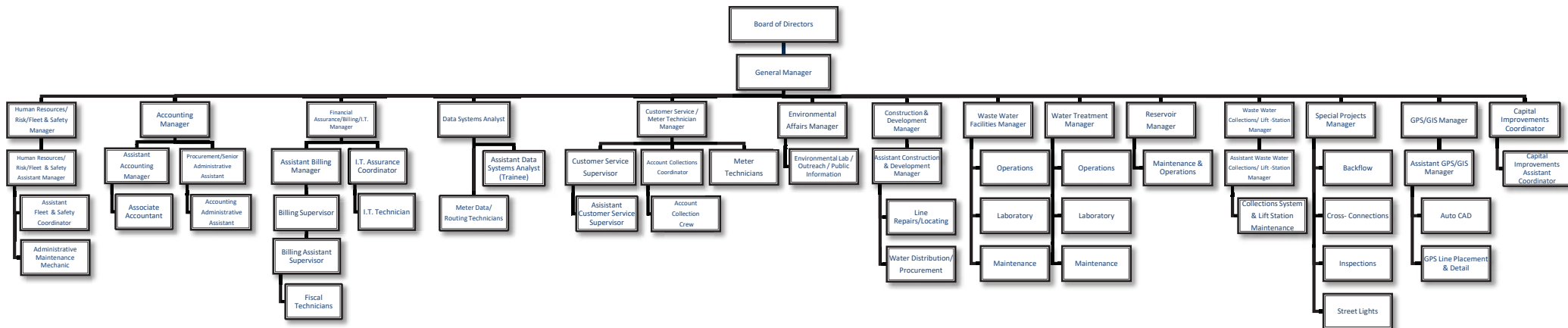
Legal Counsel:

Roach, Caudill & Gunn, LLP, Canton, Georgia

Auditors:

Rushton & Company, LLC

Cherokee County Water and Sewerage Authority



FY 2017-2018 Management Structure Chart



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Cherokee County Water & Sewerage Authority

December 18, 2018

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, 2018. 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, 2018 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 a clean opinion on the financial statements of the Authority for the year ending August 31, 2018. 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 1,270 miles of pipeline. The water system serves an approximate 300 square mile area containing an estimated population in excess of 180,000 and has approximately 73,610 active water connections.

The sewerage system consists of two active wastewater treatment plants with an aggregate treatment capacity of 11 MGD and a wastewater collection system of 76 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 80,000 and has approximately 34,686 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 180,000. In addition, CCWSA provides sewer supplies to a geographic area of approximately 100 square miles containing a population in excess of 80,000. Prior to the national economic downturn, Cherokee County experienced rapid growth. As demonstrated on page 70, within the revenue capacity section, approximately 400 new meters were installed annually in year 2009. 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 2009 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 2018. Currently, there is every indication for the near future CCWSA will continue to see an increase in new water and sewer connections as the projections continue to incorporate an increase in growth and construction activity.

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 thru 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

Cherokee County Water & Sewerage Authority

2001 bonds, the Authority's annual net system revenues exclusive of water connection 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 has experienced 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 will have Riverbend Wastewater Treatment Complex on-line and operational during the fall of 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. Additionally, the capital improvements program for the Authority includes the construction of a new wastewater treatment plant, to be known as the Riverbend plant. The Authority commenced building on the site in the last quarter of 2016. The site was formerly a poultry rendering plant. The owner of the poultry rendering plant held a permit from the State of Georgia Department of Natural Resources, Environmental Protection Division for the discharge of treated wastewater from the poultry rendering operations to the Etowah River. The Authority applied to EPD for a new permit that would replace the discharge permit for the poultry plant and allow the Authority to construct and operate the Riverbend plant. The plant is permitted to have a treatment capacity of 1.0 MGD, which ultimately could be upgraded in phases to 15.6 MGD. The Authority commenced construction of the Riverbend plant in the fall of 2016 and has a completion date for the fall of 2018. The Riverbend plant will provide additional current and future wastewater treatment capacity to the northeast quadrant of Cherokee County.

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

Cherokee County Water & Sewerage Authority

Wastewater Treatment facility to build out to 11.75 MG beginning the design phase in fiscal year 2019.

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, 2017. 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, 2018, and the related notes to the financial statements, which collectively comprise the Authority's 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 of 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, 2018, and the respective changes in the financial position and cash flows thereof, for the year then ended in conformity 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 43 through 51, 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 Governmental Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 18, 2018, 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
December 18, 2018

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2018

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, 2018. Please read it in conjunction with the Authority's financial statements that begin on page 8.

USING THIS ANNUAL REPORT

This annual report consists of a series of financial statements. The Statement of Net Position and the Statements of Revenues, Expenses and Changes In Net Position (on page 10) 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 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 and liabilities 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 and liabilities – 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 2018 by approximately \$21.3 million, from the beginning of the year, restated at \$366.0 million to \$387.3 million. Approximately \$8.3 million of the increase in 2018 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 \$12.7 million. The following tables focus on the Authority's net position (Table 1) and changes in its net position (Table 2).

The Authority implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, effective for the Authority's current fiscal year. The Authority also early implemented GASB Statement No. 89, *Accounting for Interest Cost incurred before the End of a Construction Period*, effective for the Authority's current fiscal year.

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2018

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

	8/31/2018	8/31/2017	\$ Change	% Change
Current assets	\$ 56,349	\$ 55,450	\$ 899	1.6%
Noncurrent assets	471,968	461,201	10,767	2.3%
Total assets	528,317	516,651	11,666	2.3%
Deferred outflows of resources	12,316	12,108	208	1.7%
Current liabilities	17,473	18,739	(1,266)	-6.8%
Noncurrent liabilities	134,273	142,132	(7,859)	-5.5%
Total liabilities	151,746	160,871	(9,125)	-5.7%
Deferred inflows of resources	1,576	669	907	135.6%
Net investment in capital assets	344,442	322,548	21,894	6.8%
Restricted net position	1,991	1,945	46	2.4%
Unrestricted net position	40,878	42,726	(1,848)	-4.3%
Total net position	\$ 387,311	\$ 367,219	\$ 20,092	5.5%

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

	8/31/2018	8/31/2017	\$ Changes	% Change
Operating revenues:				
Water sales	\$ 27,495	\$ 27,942	\$ (447)	-1.6%
Wastewater treatment sales	17,007	16,718	289	1.7%
Connection fees	802	718	84	11.7%
Other	2,603	2,570	33	1.3%
Non-operating revenues:				
Interest	744	412	332	80.6%
Other	1,386	1,446	(60)	-4.1%
Total revenues	50,037	49,806	231	0.5%
Operating expenses:				
Water	3,783	3,760	23	0.6%
Wastewater	10,295	9,147	1,148	12.6%
Distribution and administration	15,722	14,429	1,293	9.0%
Depreciation	11,830	11,616	214	1.8%
Streetlights	1,089	1,065	24	2.3%
Non-operating expenses:				
Interest	6,430	6,763	(333)	-4.9%
Other	612	846	(234)	-27.7%
Total expenses	49,761	47,626	2,135	4.5%
Excess before contributions	276	2,180	(1,904)	-87.3%
Capital contributions	21,001	16,556	4,445	26.8%
Increase in net position	21,277	18,736	2,541	13.6%
Net position, September 1 (original)	367,219	348,483	18,736	
Prior period adjustments	(1,185)	0	(1,185)	
Net position, September 1 (restated)	366,034	348,483	17,551	
Ending net position, August 31	\$ 387,311	\$ 367,219	\$ 20,092	

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Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2018

The Authority's revenues increased in 2018 by approximately \$231 thousand or 0.5% (\$50.0 million in 2018 compared to \$49.8 million in 2017). Total expenses increased \$2.1 million to approximately \$49.8 million or an approximate 4.5% increase in 2018 compared to the prior fiscal year. The factors driving these results include:

- The number of water customers in 2018 and 2017 grew by 1.4% and 2.4% respectively. Wastewater customers grew by 3.8% in 2018 compared to 3.9% in 2017. 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 \$231 thousand or 0.5% in FY 2018. Water sales decreased approximately 1.6% as compared with prior year and sewer sales revenue increased approximately 1.7% as compared with the prior year. The Authority's water sales were similar to the prior year water sales resulting in a slight decrease in water revenues for fiscal year 2018. Weather patterns and environmental factors drive revenue results. During fiscal year 2018 more rain events were recorded than in previous years along with continued conservation efforts seen throughout the Authority's customer base. The most recent rate change and revision to the Water and Sewer Rate Structure was effective May 1, 2014.
- Total expenses of the Authority increased by approximately \$2.1 million to \$49.8 million. In regards to departmental expense increases in FY 2018, distribution and administration increased (9.0%). The majority of the increases in the distribution and administration costs were primarily recognized in increased employee costs. In addition, equipment repair and maintenance expense increased by 37% from fiscal year 2017; however, still favorable in comparison to budget amounts. Wastewater Treatment Facilities expenses increased (12.6%). The primary driving factor for the increase in wastewater treatment facilities expenses were recognized in increased employee costs. Additional expense increases were also recognized in equipment repairs and maintenance and power expenses for wastewater treatment facilities, 27% and 10%, respectively. The water treatment facility expenses increased approximately (0.6%) in FY 2018. The increase in water treatment facility expenses is related to a slight increase in employee costs.
- 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 2018 decreased approximately 4.9% largely due to the 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 (\$181,957) in FY 2018 and interest earnings with an increase of 80.6% compared to the prior year.
- The Authority has noted capital contributions revenues of approximately \$21.0 million for FY 2018. As a result of an increase in donated lines accepted by the Authority, capital contributions increased by approximately 26.8%. The Authority received donated assets valued at \$8.3 million in FY 2018. In addition to donated lines, the Authority noted sewer tap fees contributions of approximately \$9.5 million compared to FY 2017 of approximately \$6.4 million. Sewer tap fee contributions in FY 2017 were \$6,403,784 compared to sewer tap fees contributions in FY 2018 of \$9,531,338 resulting in an increase in sewer tap contributions of \$3,127,554 or 48.8% increase. Also, the Authority noted a slight increase of approximately \$533,669 in meter connection fee contributions. The increases in meter connection fee contribution can be attributed to an increase of connections sold by the Authority in FY 2018. In FY 2018 there were approximately 50 more

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2018

meter connections sold than in the previous fiscal year and more substantial commercial connections sold than in previous years.

- Management of the Authority attributes the increase in the growth of Net Position in 2018 primarily to capital contributions which include developer contributions and easement valuations valued at \$8.3 million as well as water meter connections and sewer tap fees for approximately \$12.7 million.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets

At August 31, 2018 and 2017, the Authority had \$472.0 million and \$459.9 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 \$12.1 million in 2018.

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

	8/31/2018	8/31/2017
Land and easements	\$ 8,723	\$ 7,973
Construction in progress, including structures, improvements & equipment not in service	55,633	44,980
Total nondepreciable	64,356	52,953
Structures and improvements	582,227	570,976
Machinery and equipment	11,144	10,269
Office furniture and equipment	352	340
Total depreciable	593,723	581,585
Less accumulated depreciation	(186,111)	(174,642)
Net capital assets	\$ 471,968	\$ 459,896

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 2019 capital improvement program calls for it to spend \$58 million for capital projects in 2018-2019, principally for upgrades, improvements and additions to water & wastewater treatment facilities and for utility relocations within the water system. 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 \$3.8 million in future work at August 31, 2018. 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

Cherokee County Water & Sewerage Authority

MANAGEMENT'S DISCUSSION AND ANALYSIS

AUGUST 31, 2018

financial statements. Each year the capital improvements program is updated and reviewed on an ongoing basis throughout the year.

Debt Administration

At August 31, 2018 and 2017, the Authority had \$133.1 million and \$142.0 million (net of discounts and premiums) in revenue bonds outstanding, respectively. The net decrease of \$8.9 million is due primarily to the repayment of the Authority's previously issued debt. Additional information is presented in Note 6 of 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 2019 budget and capital improvement program have been prepared taking into account that economic and population growth for the Authority's service area is expected to increase at a more steady pace than in prior years due to new construction activity in the Authority's service area. Other factors affecting next year's and future budgets are listed below.

- The Authority anticipates the Board passing rate increases for the water or wastewater rates during FY 2019. Rates are analyzed on a regular basis and will be adjusted when deemed necessary. The Authority anticipates the customer base to increase by adding approximately 1,990 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 1,450 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, 2018

ASSETS

Current assets

Cash and cash equivalents	\$ 42,539,077
Accounts receivable	6,183,265
Accrued interest receivable	5,786
Prepaid expenses	375
Inventories	384,881
Restricted assets	
Cash and cash equivalents	5,411,440
Investments	1,824,328
	<hr/>
Total current assets	56,349,152

Noncurrent assets

Capital assets	
Land and easements	8,723,510
Construction in progress	55,632,663
Structures and improvements	582,227,288
Machinery and equipment	11,143,736
Office furniture and equipment	352,126
Accumulated depreciation	(186,111,481)
	<hr/>
Net capital assets	471,967,842

Total assets	<hr/> 528,316,994 <hr/>
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DEFERRED OUTFLOWS OF RESOURCES

Deferred amount on refunding	7,337,609
Deferred outflows of resources - pension	3,873,588
Deferred outflows of resources - OPEB	1,105,037
	<hr/>
Total deferred outflows of resources	12,316,234

LIABILITIES

Current liabilities

Trade accounts payable	1,297,041
Construction accounts and retainage payable	1,726,912
Accrued salaries and other payroll liabilities	196,527
Compensated absences	816,757
Unearned revenues	290,867
Current liabilities payable from restricted assets	
Customer deposits payable	4,736,797
Accrued interest payable	508,106
Revenue bonds payable	7,900,000
	<hr/>
Total current liabilities	17,473,007

Noncurrent liabilities

Compensated absences	90,751
Unearned interest revenue	110,384
Net pension liability	6,515,696
Net OPEB liability	1,888,085
Revenue bonds payable	125,236,415
Other noncurrent liabilities	431,479
	<hr/>
Total noncurrent liabilities	134,272,810

Total liabilities	<hr/> 151,745,817 <hr/>
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CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF NET POSITION
August 31, 2018

DEFERRED INFLOWS OF RESOURCES

Deferred inflows of resources - pension	\$ 1,095,505
Deferred inflows of resources - OPEB	480,646
	<hr/>
Total deferred inflows of resources	1,576,151

NET POSITION

Net investment in capital assets	344,442,124
Restricted for debt service	695,167
Restricted for bond retirement	1,295,698
Unrestricted	40,878,271
	<hr/>
Total net position	\$ 387,311,260

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF REVENUES, EXPENSES AND
CHANGES IN NET POSITION
For the fiscal year ended August 31, 2018

OPERATING REVENUES

Metered water sales	\$ 27,494,824
Wastewater treatment sales	17,007,346
Street light fees	1,447,043
Water connection fees	802,464
Transfer fees	214,075
Forfeited discounts and penalties	705,479
Customer repairs and service charges	235,666

Total operating revenues	47,906,897
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OPERATING EXPENSES

Water purchases and production	3,782,823
Wastewater treatment	10,294,946
Streetlights	1,089,476
Distribution and administration	15,721,580
Depreciation	11,829,839

Total operating expenses	42,718,664
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Operating income (loss)	5,188,233
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Non-operating revenues (expenses)

Interest revenue	
Sinking funds	126,523
Revenue funds	617,639
Interest expense	(6,429,880)
Change in fair value of derivative	(181,957)
Amortization of deferred amount on refunding	(589,517)
Amortization of bond premiums, net	1,151,939
Gain (loss) on disposition of capital assets	(22,940)
Miscellaneous revenues	415,861

Total non-operating revenues (expenses)	(4,912,332)
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Net income (loss) before capital contributions	275,901
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Capital contributions

Sewer tap fees	9,531,338
Water connection fees	3,122,686
Contributions of capital assets	8,347,668

Total capital contributions	21,001,692
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Change in net position	21,277,593
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Net position, September 1 (original)	367,218,569
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Prior period adjustments	(1,184,902)
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Net position, September 1 (restated)	366,033,667
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Net position, August 31	\$ 387,311,260
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CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF CASH FLOWS
For the fiscal year ended August 31, 2018

Cash flows from operating activities:

Receipts from customers	\$ 48,369,266
Payments to suppliers	(13,523,009)
Payments to employees	<u>(17,290,735)</u>
Net cash provided (used) by operating activities	<u>17,555,522</u>

Cash flows from capital and related financing activities:

Receipts of sewer tap and water connection fees	12,621,071
Proceeds from sale and disposal of capital assets	74,759
Payments for acquisitions of capital assets	(13,924,737)
Payment of capital related accounts payable	(3,231,775)
Principal payments on revenue bonds	(7,755,000)
Interest paid on revenue bonds	<u>(6,459,805)</u>
Net cash provided (used) by capital and related financing activities	<u>(18,675,487)</u>

Cash flows from investing activities:

Interest received	723,784
Purchases of investments	<u>(5,338)</u>
Net cash provided (used) by investing activities	<u>718,446</u>

Net increase (decrease) in cash and cash equivalents (401,519)

Cash and cash equivalents, September 1 48,352,036

Cash and cash equivalents, August 31 \$ 47,950,517

Reconciliation of operating income (loss) to net cash provided (used) by operating activities:

Operating income (loss) \$ 5,188,233

Adjustments to reconcile operating income to net cash provided by operating activities:

Depreciation expense	11,829,839
Miscellaneous revenues	415,861
(Increase) decrease in accounts receivable	(126,361)
(Increase) decrease in prepaid expenses	165,949
(Increase) decrease in inventories	(39,514)
(Increase) decrease in unamortized street light costs	8,879
(Increase) decrease in deferred outflows of resources - pension	307,662
(Increase) decrease in deferred outflows of resources - OPEB	(227,468)
Increase (decrease) in trade accounts payable	145,396
Increase (decrease) in accrued salaries and other payroll liabilities	(148,003)
Increase (decrease) in compensated absences	77,388
Increase (decrease) in unearned revenues	27,191
Increase (decrease) in customer deposits	145,678
Increase (decrease) in net pension liability	(948,171)
Increase (decrease) in net OPEB liability	(174,386)
Increase (decrease) in deferred inflows of resources - pension	426,703
Increase (decrease) in deferred inflows of resources - OPEB	<u>480,646</u>

Total adjustments 12,367,289

Net cash provided (used) by operating activities \$ 17,555,522

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
STATEMENT OF CASH FLOWS
For the fiscal year ended August 31, 2018

Cash and cash equivalents reconciliation:

Cash and cash equivalents	\$ 42,539,077
Restricted cash and cash equivalents	<u>5,411,440</u>
Total cash and cash equivalents	<u><u>\$ 47,950,517</u></u>

Noncash investing, capital and financing activities:

Contributions of capital assets	\$ 8,347,668
Acquisition of capital assets through accounts payable	1,726,912
Increase (decrease) in fair value of investment derivatives	(181,957)

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

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
August 31, 2018

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
August 31, 2018

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
August 31, 2018

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
August 31, 2018

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
August 31, 2018

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
August 31, 2018

2. Summary of Significant Accounting Policies (continued)

O. Pension Plans

For purposes of measuring the net pension liability, and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Georgia Municipal Employees Benefit System (GMEBS) plan (Plan) and additions to/deductions from the Plan's 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
August 31, 2018

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
August 31, 2018

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 AAAf 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
August 31, 2018

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 22 days. At the end of the current fiscal year, the Authority's balance in Georgia Fund 1 was \$41,363,665.

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	\$ 528,885	1	8	Aaa
Repurchase agreement	1,295,443	2	83	N/A
Total	<u>\$ 1,824,328</u>			

(1) - Moody's

4. Accounts Receivable

Accounts receivable consists of \$2,791,145 billed and \$3,392,120 unbilled for a total receivable of \$6,183,265 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
August 31, 2018

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	\$ 7,972,984	\$ 750,526	\$ 0	\$ 8,723,510
Construction in progress	44,980,003	13,100,947	(2,448,287)	55,632,663
Total non-depreciable assets	52,952,987	13,851,473	(2,448,287)	64,356,173
Depreciable assets:				
Structures and improvements	570,975,751	11,460,983	(209,446)	582,227,288
Machinery and equipment	10,268,989	1,123,546	(248,799)	11,143,736
Office furniture and equipment	340,524	11,602	0	352,126
Total depreciable assets	581,585,264	12,596,131	(458,245)	593,723,150
Less accumulated depreciation:				
Structures and improvements	(167,468,725)	(11,106,852)	116,054	(178,459,523)
Machinery and equipment	(6,932,704)	(678,963)	244,492	(7,367,175)
Office furniture and equipment	(240,759)	(44,024)	0	(284,783)
Total accumulated depreciation	(174,642,188)	(11,829,839)	360,546	(186,111,481)
Total depreciable assets, net	406,943,076	766,292	(97,699)	407,611,669
Capital assets, net	<u>\$ 459,896,063</u>	<u>\$ 14,617,765</u>	<u>\$ (2,545,986)</u>	<u>\$ 471,967,842</u>

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.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

6. Long-Term Debt (continued)

Revenue Bonds (continued)

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. 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. Portions of this series were refunded by the Series 2010 and Series 2011 revenue refunding bonds, and were called and redeemed in 2011.

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%. 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%. In 2016, \$18,880,000 of the outstanding bonds were refunded by the Series 2016 Revenue Refunding Bonds.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

6. Long-Term Debt (continued)

Revenue Bonds (continued)

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.

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.

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.

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.

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.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

6. Long-Term Debt (continued)

Revenue Bonds (continued)

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:

Series	Principal
1995	\$ 1,715,000
1998	3,110,000
Totals	<u>\$ 4,825,000</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 \$7,337,609.

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. 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.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

6. Long-Term Debt (continued)

Revenue Bonds (continued)

Annual debt service requirements for bonds payable are as follows:

Fiscal Year Ending August 31,	Principal	Interest	Total
2019	\$ 7,900,000	\$ 6,097,278	\$ 13,997,278
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
2024-2028	54,485,000	14,355,985	68,840,985
2029-2033	20,000,000	4,313,600	24,313,600
2034-2035	5,430,000	410,500	5,840,500
Totals	<u>\$ 123,215,000</u>	<u>\$ 45,323,085</u>	<u>\$ 168,538,085</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 2.17 for the current fiscal year.

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 1.22.

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 125% of the average annual debt service, or \$12,640,341. 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.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

6. Long-Term Debt (continued)

Changes in Long-Term Debt

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

	Beginning Balance	Additions	Deductions	Ending Balance	Due Within One Year
Revenue bonds	\$ 130,970,000	\$ 0	\$ (7,755,000)	\$ 123,215,000	\$ 7,900,000
Unamortized bond discounts	(74,467)	0	12,644	(61,823)	0
Unamortized bond premiums	11,147,821	0	(1,164,583)	9,983,238	0
Compensated absences	830,120	824,496	(747,108)	907,508	816,757
	<u>\$ 142,873,474</u>	<u>\$ 824,496</u>	<u>\$ (9,654,047)</u>	<u>\$ 134,043,923</u>	<u>\$ 8,716,757</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 \$6,429,880.

7. 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 \$110,384 at the end of the current fiscal year and is being recognized on the straight-line basis over the life of each respective agreement.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

7. Investment Derivative Financial Instruments (continued)

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.

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	\$ (181,957)	Other noncurrent liability	\$ (431,479)	\$ 40,821,523

8. 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).

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

9. 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	\$ 658,079,323
Accumulated depreciation	<u>(186,111,481)</u>
Book value	471,967,842
Construction accounts and retainage payable	(1,726,912)
Revenue bonds payable	(133,136,415)
Deferred charge on refunding	<u>7,337,609</u>
Net investment in capital assets	<u><u>\$ 344,442,124</u></u>

10. 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 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).

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

10. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

Current membership is as follows:

Retired participants and beneficiaries currently receiving benefits	33
Vested terminated participants entitled to but not yet receiving benefits	25
Active participants	<u>178</u>
Total number of participants	<u><u>236</u></u>

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 \$1,585,284, or PC 13.77% 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 \$6,515,696. The net pension liability was measured as of September 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2018. For the current fiscal year, the Authority recognized pension expense of \$1,371,478.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

10. 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, 2016	\$ 25,102,356	\$ 17,638,489	\$ 7,463,867
Changes for the year:			
Service cost	422,034	0	422,034
Interest	1,910,997	0	1,910,997
Differences between expected and actual experience	357,188	0	357,188
Contributions - employer	0	1,430,342	(1,430,342)
Net investment income	0	2,696,020	(2,696,020)
Benefit payments, including refunds of employee contributions	(888,663)	(888,663)	0
Administrative expense	0	(39,074)	39,074
Other changes	448,898	0	448,898
Net changes	<u>2,250,454</u>	<u>3,198,625</u>	<u>(948,171)</u>
Balances at September 30, 2017	<u><u>\$ 27,352,810</u></u>	<u><u>\$ 20,837,114</u></u>	<u><u>\$ 6,515,696</u></u>

Plan fiduciary net position as a percentage of the total pension liability	76.18%
Covered payroll	\$ 9,667,079
Net pension liability as a percentage of covered payroll	67.40%

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	\$ 1,453,177	\$ 0
Differences between expected and actual experience	2,046,331	0
Changes of assumptions	374,080	(46,196)
Net difference between projected and actual earnings on pension plan investments	0	(1,049,309)
Totals	<u><u>\$ 3,873,588</u></u>	<u><u>\$ (1,095,505)</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

10. Retirement Plans (continued)

Defined Benefit Pension Plan, continued

The \$1,453,177 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	
2019	\$ 385,829
2020	474,369
2021	201,390
2022	128,971
2023	134,347
Totals	<u><u>\$ 1,324,906</u></u>

Actuarial Assumptions. The total pension liability in the January 1, 2018 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 mortality and economic actuarial assumptions used in the January 1, 2018 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
August 31, 2018

10. 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 weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

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, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	45%	6.71%
International equity	20%	7.71%
Real estate	10%	5.21%
Global fixed income	5%	3.36%
Domestic fixed income	20%	2.11%
Cash	0%	
Total	100%	

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
August 31, 2018

10. 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:

	Discount Rate	Net Pension Liability
1% decrease	6.50%	\$ 9,897,266
Current discount rate	7.50%	6,515,696
1% increase	8.50%	3,685,296

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 \$280,585 for the current fiscal year.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

11. 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 June 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	<u>182</u>
Total number of participants	<u><u>198</u></u>

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
August 31, 2018

11. Postemployment Benefits Other Than Pensions

Contributions. The Authority has elected to advance fund the OPEB Plan. The Authority's contributions totaled \$1,105,037, or 9.60% 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 \$1,888,085. The net OPEB liability was measured as of August 31, 2017, 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 \$1,183,873.

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, 2016	\$ 8,728,627	\$6,666,201	\$ 2,062,426
Changes for the year:			
Service cost	223,365	0	223,365
Interest	667,586	0	667,586
Changes of benefit terms	913,976	0	913,976
Differences between expected and actual experience	(178,846)	0	(178,846)
Contributions-employer	0	877,568	(877,568)
Net investment income	0	937,625	(937,625)
Benefit payments, including refunds of member contributions	(103,568)	(103,568)	0
Administrative expense	0	(14,771)	14,771
Net changes	<u>1,522,513</u>	<u>1,696,854</u>	<u>(174,341)</u>
Balances at August 31, 2017	<u>\$ 10,251,140</u>	<u>\$8,363,055</u>	<u>\$ 1,888,085</u>
Plan fiduciary net position as a percentage of the total OPEB liability		81.58%	
Covered employee payroll		\$ 9,924,068	
Plan net OPEB liability as a percentage of covered employee payroll		19.03%	

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

11. 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	\$ 1,105,037	\$ 0
Differences between expected and actual experience	0	(153,294)
Net difference between projected and actual earnings on OPEB plan investments	0	(327,352)
Totals	<u>\$ 1,105,037</u>	<u>\$ (480,646)</u>

The \$1,105,037 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	
2019	\$ (107,387)
2020	(107,387)
2021	(107,387)
2022	(107,387)
2023	(25,549)
Thereafter	(25,549)
Totals	<u>\$ (480,646)</u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

11. 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	3.25%
Projected salary increases	3.75% to 8.75%, including inflation
Actuarial cost method	Entry age normal
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 July 1, 2017 valuation were based on the results of an actuarial experience study for the period of January 1, 2010 through 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
August 31, 2018

11. Postemployment Benefits Other Than Pensions (continued)

Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of August 31, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
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	100%	

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:

Discount Rate		Net OPEB Liability
1% decrease	6.50%	\$ 3,438,605
Current discount rate	7.50%	1,888,085
1% increase	8.50%	621,507

Healthcare Cost Trend Rates		Net OPEB Liability
1% decrease		\$ 519,797
Current discount rate		1,888,085
1% increase		3,574,532

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
August 31, 2018

11. 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.

12. 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.

13. 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 \$3,840,000.

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
August 31, 2018

14. Operations

The Authority produced approximately 99.6% 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 92.2% 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.

15. Changes in Beginning Balances

A prior period adjustment has been made to record a net OPEB liability and related deferred outflows/inflows of resources at August 31, 2017. This adjustment was required with the implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This adjustment decreased beginning net position by \$1,184,902.

16. New Accounting Standards

The Authority implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, effective for the Authority's current fiscal year.

The Authority early implemented GASB Statement No. 89, *Accounting for Interest Cost incurred before the End of a Construction Period*, effective for the Authority's current fiscal year.

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, 2018
(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
\$ 404,668	\$ 422,034
1,688,560	1,910,997
1,539,214	357,188
0	448,898
(635,902)	(888,663)
0	0
2,996,540	2,250,454
22,105,816	25,102,356
<u>\$ 25,102,356</u>	<u>\$ 27,352,810</u>
\$ 1,305,137	\$ 1,430,342
1,735,345	2,696,020
(635,902)	(888,663)
(19,282)	(39,074)
2,385,298	3,198,625
15,253,191	17,638,489
<u>\$ 17,638,489</u>	<u>\$ 20,837,114</u>
<u>\$ 7,463,867</u>	<u>\$ 6,515,696</u>
70.27%	76.18%
\$ 9,924,068	\$ 9,667,079
75.21%	67.40%

See accompanying notes to the required supplementary information.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF PENSION CONTRIBUTIONS
LAST TEN FISCAL YEARS
August 31, 2018
(Unaudited)

	Fiscal Year	
	2015	2016
Actuarially determined contribution	\$ 1,282,799	\$ 1,295,035
Contributions in relation to the actuarially determined contribution	<u>(1,232,688)</u>	<u>(1,283,819)</u>
Contribution deficiency (excess)	<u>\$ 50,111</u>	<u>\$ 11,216</u>
Covered payroll	\$ 9,746,095	\$ 10,032,140
Contributions as a percentage of covered payroll	12.65%	12.80%

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

Fiscal Year	
2017	2018
\$ 1,416,256	\$ 1,585,284
<u>(1,305,137)</u>	<u>(1,585,284)</u>
<u>\$ 111,119</u>	<u>\$ 0</u>
\$ 10,585,874	\$ 11,509,424
12.33%	13.77%

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, 2018
(Unaudited)

	<u>Fiscal Year</u>
	<u>2018</u>
Total OPEB liability	
Service cost	\$ 223,365
Interest	667,586
Change of benefit terms	913,976
Differences between expected and actual experience	(178,846)
Benefit payments, including refunds of member contributions	<u>(103,568)</u>
Net change in total OPEB liability	1,522,513
Total OPEB liability - beginning	<u>8,728,627</u>
Total OPEB liability - ending (a)	<u><u>\$ 10,251,140</u></u>
Plan fiduciary net position	
Contributions - employer	\$ 877,568
Net investment income	937,625
Benefit payments, including refunds of employee contributions	(103,568)
Administrative expense	<u>(14,771)</u>
Net change in plan fiduciary net position	1,696,854
Plan fiduciary net position - beginning	<u>6,666,201</u>
Plan fiduciary net position - ending (b)	<u><u>\$ 8,363,055</u></u>
Net OPEB liability - ending : (a) - (b)	<u><u>\$ 1,888,085</u></u>
Plan fiduciary net position as a percentage of the total OPEB liability	81.58%
Covered employee payroll	\$ 9,924,068
Net OPEB liability as a percentage of covered employee payroll	19.03%

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, 2018
(Unaudited)

	<u>Fiscal Year</u>
	<u>2018</u>
Actuarially determined contribution	\$ 977,900
Contributions in relation to the actuarially determined contribution	<u>(1,105,037)</u>
Contribution deficiency (excess)	<u>\$ (127,137)</u>
Covered employee payroll	\$ 11,509,424
Contributions as a percentage of covered employee payroll	9.60%

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
August 31, 2018

Pension Plan

1. Valuation Date

The actuarially determined contribution was determined as of January 1, 2018, 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, 2019.

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
August 31, 2018

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 determined as of August 31, based on the most recent valuation date, one year prior to the end of the fiscal year in which contributions are reported.

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 = 3.75% to 8.75%, including inflation

Inflation = 3.25%

Discount rate = 7.50%.

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
August 31, 2018

OPEB Plan (continued)

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

Healthcare cost trend rates = Medical: 7.00% trend down to 4.5% by 2022
Prescription Drug: 7.00% trend down to 4.5% 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.

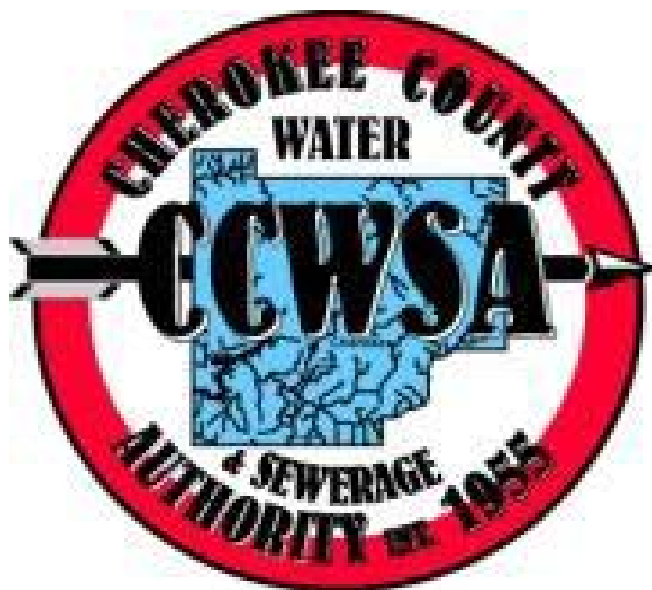
3. Changes in Benefits

Effective November 1, 2017, the BCBS plans were replaced by UHC plans.

4. Changes of Assumptions

There have been no benefit changes since GASB 75 implementation.

Supplementary Information



CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF COSTS OF WATER PURCHASES AND PRODUCTION
For the fiscal year ended August 31, 2018

Purchased water	\$ 62,024
Water production	
Salaries and wages	1,106,709
Payroll taxes	82,977
Group insurance	276,985
Retirement	106,819
Other postemployment benefits	84,536
Billing and accounting	23,485
Computer equipment and maintenance	0
Continuing education	26,689
Insurance - other than group	39,074
Lab fees and supplies	45,831
Miscellaneous	1,291
Office supplies	1,291
Operating supplies	251,459
Postage	554
Power	1,238,164
Professional fees	2,809
Repair and maintenance	313,769
Small tools and equipment	5,005
Stream monitoring	59,300
Telephone	31,547
Uniforms	6,698
Vehicle	15,807
Total water production	<u>3,720,799</u>
Total water purchases and production before depreciation	3,782,823
Depreciation	<u>1,413,721</u>
Total water purchases and production cost	<u><u>\$ 5,196,544</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF COSTS OF WASTEWATER TREATMENT
For the fiscal year ended August 31, 2018

Purchased wastewater treatment	\$ 804,504
Wastewater treatment	
Salaries and wages	2,867,951
Payroll taxes	210,789
Group insurance	705,800
Retirement	387,547
Other postemployment benefits	306,440
Billing and accounting	23,485
Computer equipment and maintenance	10,014
Continuing education	41,589
Insurance - other than group	141,523
Lab fees and supplies	70,610
Miscellaneous	7,475
Office supplies	9,220
Operating supplies	1,029,128
Postage	212
Power	1,591,739
Professional fees	10,182
Regulatory actions	44,250
Repair and maintenance	1,909,996
Small tools and equipment	11,232
Telephone	34,070
Uniforms	19,452
Vehicle	57,738
Total wastewater treatment	<u>9,490,442</u>
Total purchased treatment and wastewater treatment before depreciation	10,294,946
Depreciation	<u>2,342,467</u>
Total wastewater treatment cost	<u><u>\$ 12,637,413</u></u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF DISTRIBUTION AND ADMINISTRATION EXPENSES
For the fiscal year ended August 31, 2018

Salaries and wages	\$ 7,500,292
Payroll taxes	540,451
Group insurance	1,999,937
Retirement	842,001
Other postemployment benefits	665,716
Bad debts	76,302
Billing and accounting	391,178
Computer equipment and maintenance	26,887
Continuing education	84,568
Contract meter readers	666,529
Director fees and expenses	56,477
Equipment repairs and maintenance	1,025,238
Insurance - other than group	307,622
Lab fees and supplies	15,084
Legal and audit	75,381
Line and meter repairs	352,963
Miscellaneous	29,051
Office supplies	30,652
Operating supplies	75,225
Postage	9,078
Power	154,947
Professional fees	280,266
Public outreach	4,318
Real estate taxes	14,931
Service charges	433,454
Small tools and equipment	30,480
Stream monitoring	10,600
Telephone	105,940
Toilet rebates	18,300
Uniforms	36,359
Vehicle	295,248
	<hr/>
Subtotal	16,155,475
Less capitalized salaries	<hr/> (433,895)
Total distribution and administration expenses before depreciation	15,721,580
Depreciation	<hr/> 8,073,651
Total distribution and administration expenses	<hr/> <hr/> \$ 23,795,231

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF BUDGETED REVENUES AND EXPENSES
COMPARED WITH ACTUAL
For the fiscal year ended August 31, 2018

	<u>BUDGET</u>	<u>ACTUAL</u>	<u>VARIANCE</u>
REVENUES			
Operating revenues			
Metered water sales	\$ 27,800,000	\$ 27,494,824	\$ (305,176)
Wastewater treatment sales	16,600,000	17,007,346	407,346
Street light fees	1,434,000	1,447,043	13,043
Water connection fees	663,000	802,464	139,464
Transfer fees	216,000	214,075	(1,925)
Forfeited discounts and penalties	710,400	705,479	(4,921)
Customer repairs and service charges	250,000	235,666	(14,334)
Total operating revenues	<u>47,673,400</u>	<u>47,906,897</u>	<u>233,497</u>
Non-operating revenues			
Interest revenue			
Sinking funds	96,300	126,523	30,223
Revenue funds	415,000	617,639	202,639
Change in fair value of derivative	0	(181,957)	(181,957)
Amortization of bond premiums, net	1,152,000	1,151,939	(61)
Miscellaneous	145,000	415,861	270,861
Total non-operating revenues	<u>1,808,300</u>	<u>2,130,005</u>	<u>321,705</u>
TOTAL REVENUES	<u>49,481,700</u>	<u>50,036,902</u>	<u>555,202</u>
EXPENSES			
Operating expenses			
Water purchases and production			
Purchased water	68,000	62,024	5,976
Water production			
Salaries and wages	1,147,000	1,106,709	40,291
Payroll taxes	87,800	82,977	4,823
Group insurance	337,200	276,985	60,215
Retirement	124,020	106,819	17,201
Other postemployment benefits	78,232	84,536	(6,304)
Billing and accounting	24,000	23,485	515
Computer equipment and maintenance	4,000	0	4,000
Continuing education	40,000	26,689	13,311
Insurance - other than group	39,500	39,074	426
Lab fees and supplies	64,000	45,831	18,169
Miscellaneous	2,500	1,291	1,209
Office supplies	3,500	1,291	2,209
Operating supplies	315,000	251,459	63,541
Postage	1,000	554	446
Power	1,300,000	1,238,164	61,836
Professional fees	10,000	2,809	7,191
Repair and maintenance	293,000	313,769	(20,769)
Small tools and equipment	3,000	5,005	(2,005)
Stream monitoring	57,750	59,300	(1,550)
Telephone	34,000	31,547	2,453
Uniforms	6,000	6,698	(698)
Vehicle	12,500	15,807	(3,307)
Operating expenses before depreciation	<u>4,052,002</u>	<u>3,782,823</u>	<u>269,179</u>
Depreciation	<u>1,410,300</u>	<u>1,413,721</u>	<u>(3,421)</u>
Total water purchases and production	<u>5,462,302</u>	<u>5,196,544</u>	<u>265,758</u>

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF BUDGETED REVENUES AND EXPENSES
COMPARED WITH ACTUAL
For the fiscal year ended August 31, 2018

	BUDGET	ACTUAL	VARIANCE
Wastewater treatment			
Purchased wastewater treatment	\$ 813,000	\$ 804,504	\$ 8,496
Wastewater treatment			
Salaries and wages	3,256,500	2,867,951	388,549
Payroll taxes	249,200	210,789	38,411
Group insurance	791,200	705,800	85,400
Retirement	449,600	387,547	62,053
Other postemployment benefits	283,591	306,440	(22,849)
Billing and accounting	24,000	23,485	515
Computer equipment and maintenance	14,000	10,014	3,986
Continuing education	63,500	41,589	21,911
Insurance - other than group	144,000	141,523	2,477
Lab fees and supplies	60,500	70,610	(10,110)
Miscellaneous	3,500	7,475	(3,975)
Office supplies	20,000	9,220	10,780
Operating supplies	1,002,200	1,029,128	(26,928)
Postage	2,300	212	2,088
Power	1,550,000	1,591,739	(41,739)
Professional fees	15,000	10,182	4,818
Regulatory actions	20,000	44,250	(24,250)
Repair and maintenance	1,771,500	1,909,996	(138,496)
Small tools and equipment	14,300	11,232	3,068
Telephone	38,800	34,070	4,730
Uniforms	20,000	19,452	548
Vehicle	52,000	57,738	(5,738)
Operating expenses before depreciation	10,658,691	10,294,946	363,745
Depreciation	2,324,500	2,342,467	(17,967)
Total wastewater treatment	12,983,191	12,637,413	345,778
Distribution and administration			
Salaries and wages	7,306,800	7,500,292	(193,492)
Payroll taxes	559,000	540,451	18,549
Group insurance	2,357,800	1,999,937	357,863
Retirement	976,610	842,001	134,609
Other postemployment benefits	616,077	665,716	(49,639)
Bad debts	100,000	76,302	23,698
Billing and accounting	400,000	391,178	8,822
Computer equipment and maintenance	32,000	26,887	5,113
Continuing education	94,800	84,568	10,232
Contract meter readers	665,000	666,529	(1,529)
Director fees and expenses	60,200	56,477	3,723
Equipment repairs and maintenance	1,082,000	1,025,238	56,762
Insurance - other than group	310,900	307,622	3,278
Lab fees and supplies	10,000	15,084	(5,084)
Legal and audit	95,000	75,381	19,619
Line and meter repairs	517,000	352,963	164,037
Miscellaneous	35,000	29,051	5,949
Office supplies	35,300	30,652	4,648
Operating supplies	82,600	75,225	7,375
Postage	10,000	9,078	922
Power	168,500	154,947	13,553
Professional fees	312,000	280,266	31,734
Public outreach	4,500	4,318	182

CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF BUDGETED REVENUES AND EXPENSES
COMPARED WITH ACTUAL
For the fiscal year ended August 31, 2018

	BUDGET	ACTUAL	VARIANCE
Distribution and administration (continued)			
Real estate taxes	\$ 20,000	\$ 14,931	\$ 5,069
Service charges	448,000	433,454	14,546
Small tools and equipment	33,300	30,480	2,820
Stream monitoring	15,600	10,600	5,000
Telephone	117,000	105,940	11,060
Toilet rebates	30,000	18,300	11,700
Uniforms	35,500	36,359	(859)
Vehicle	243,500	295,248	(51,748)
Less capitalized salaries	(311,325)	(433,895)	122,570
Operating expenses before depreciation	16,462,662	15,721,580	741,082
Depreciation	7,978,200	8,073,651	(95,451)
Total distribution and administration	24,440,862	23,795,231	645,631
Streetlights	1,099,000	1,089,476	9,524
Total operating expenses	43,985,355	42,718,664	1,266,691
Non-operating expenses			
Interest expense	6,426,717	6,429,880	(3,163)
Amortization of deferred amount on refunding	589,520	589,517	3
Loss on disposition of capital assets	0	22,940	(22,940)
Total non-operating expenses	7,016,237	7,042,337	(26,100)
TOTAL EXPENSES	51,001,592	49,761,001	1,240,591
CAPITAL CONTRIBUTIONS			
Sewer tap fees	6,300,000	9,531,338	3,231,338
Water connection fees	2,652,000	3,122,686	470,686
Contributions of capital assets	61,000	8,347,668	8,286,668
TOTAL CAPITAL CONTRIBUTIONS	9,013,000	21,001,692	11,988,692
CHANGE IN NET POSITION	\$ 7,493,108	\$ 21,277,593	\$ 13,784,485

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>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Metered water sales	<u>\$ 24,286,454</u>	<u>\$ 25,980,155</u>	<u>\$ 27,730,410</u>	<u>\$ 27,941,584</u>	<u>\$ 27,494,824</u>
Number of customers served	<u>67,965</u>	<u>69,302</u>	<u>70,893</u>	<u>72,601</u>	<u>73,610</u>
Sales per customer	<u>\$ 357.34</u>	<u>\$ 374.88</u>	<u>\$ 391.16</u>	<u>\$ 384.87</u>	<u>\$ 373.52</u>
Wastewater treatment sales	<u>\$ 14,538,327</u>	<u>\$ 15,607,818</u>	<u>\$ 16,435,678</u>	<u>\$ 16,717,722</u>	<u>\$ 17,007,346</u>
Number of customers served	<u>30,012</u>	<u>31,044</u>	<u>32,174</u>	<u>33,413</u>	<u>34,686</u>
Sales per customer	<u>\$ 484.42</u>	<u>\$ 502.76</u>	<u>\$ 510.84</u>	<u>\$ 500.34</u>	<u>\$ 490.32</u>

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

	2014		2015		2016		2017		2018	
	With Tap Fees	Without Tap Fees	With Tap Fees	Without Tap Fees	With Tap Fees	Without Tap Fees	With Tap Fees	Without Tap Fees	With Tap Fees	Without Tap Fees
Net revenue available for debt service	<u>\$ 23,150</u>	<u>\$ 16,786</u>	<u>\$ 27,068</u>	<u>\$ 18,623</u>	<u>\$ 28,882</u>	<u>\$ 20,313</u>	<u>\$ 29,044</u>	<u>\$ 19,433</u>	<u>\$ 30,832</u>	<u>\$ 17,376</u>
Highest annual debt service requirements	<u>\$ 14,421</u>	<u>\$ 14,421</u>	<u>\$ 14,421</u>	<u>\$ 14,421</u>	<u>\$ 14,237</u>	<u>\$ 14,237</u>	<u>\$ 14,211</u>	<u>\$ 14,211</u>	<u>\$ 14,215</u>	<u>\$ 14,215</u>
Revenue Bond Coverage:										
Actual	<u>1.61</u>	<u>1.16</u>	<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>
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, 2018

CONSUMPTION (GALLONS)	WATER NET	SEWER NET	IRRIGATION NET
0	\$ 9.00	\$ 12.60	\$ 12.00
1,000	10.10	12.60	17.25
2,000	11.20	12.60	22.50
3,000	16.45	19.55	27.75
4,000	21.70	26.50	33.00
5,000	26.95	33.45	38.25
6,000	32.20	40.40	43.50
7,000	37.45	47.35	48.75
8,000	42.70	54.30	54.00
9,000	47.95	61.25	59.25
10,000	53.20	68.20	64.50
Over 10,000	Additional \$6.30 per 1,000	Additional \$6.95 per 1,000	Additional \$6.30 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 May 1, 2014.

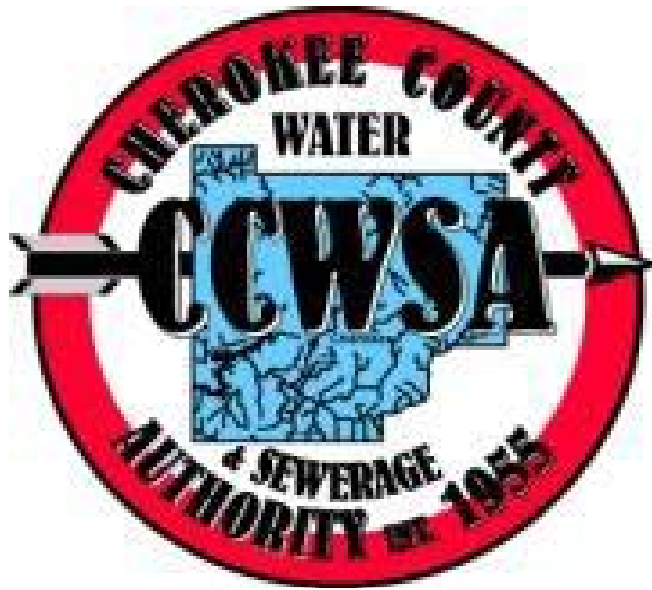
CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY
SCHEDULE OF INSURANCE IN FORCE
As of August 31, 2018

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	\$244,121,234 blanket coverage for buildings \$4,830,700 blanket coverage for business property
Inland Marine	\$2,855,075 computers, software \$2,338,095 contractors equipment \$25,000 data breach limit (any one occurrence and aggregate)
Workers Compensation	\$500,000 for bodily injury each accident, \$500,000 aggregate limit, and \$500,000 disease limit
Commercial Umbrella	\$10,000,000 for each occurrence \$10,000,000 aggregate limit \$4,000,000 for failure to supply and sexual abuse (each claim 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 - each occurrence premises medical payments \$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..... 62-67

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

Revenue Capacity..... 68-74

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

Debt Capacity..... 75-77

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..... 78-79

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

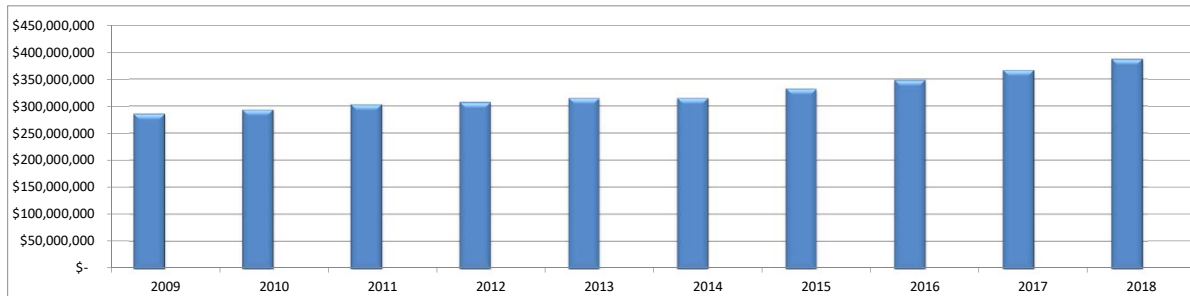
Operating Information..... 80-82

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net investment in capital assets	\$ 239,421,805	\$ 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
Restricted for:										
Debt Service	2,904,509	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
Capital Projects					828,731					
Unrestricted	43,916,564	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
Total Net Position	<u>\$ 286,242,878</u>	<u>\$ 294,077,321</u>	<u>\$ 303,577,351</u>	<u>\$ 307,264,099</u>	<u>\$ 315,187,740</u>	<u>\$ 315,568,892</u>	<u>\$ 332,612,690</u>	<u>\$ 348,483,499</u>	<u>\$ 367,218,569</u>	<u>\$ 387,311,260</u>

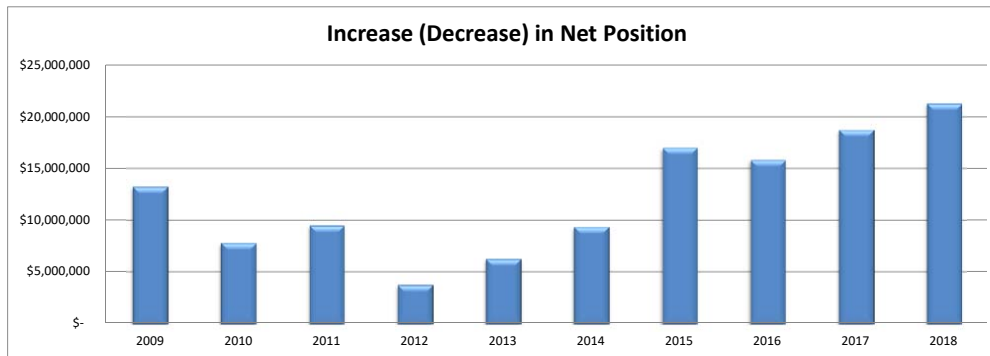


Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Changes in Net Position Last Ten Fiscal Years

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operating Revenues	\$ 40,519,186	\$ 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
Operating Expenses	30,357,010	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
Income from Operations	10,162,176	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
Non-Operating Revenues (Expenses)	(9,605,497)	(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)
Gain (Loss) Before Capital Contributions	556,679	232,890	716,362	(970,552)	(4,011,901)	(1,143,368)	641,203	2,505,960	2,179,115	275,901
Capital Contributions	12,688,413	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
Increase (decrease) in Net Position	\$ 13,245,092	\$ 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



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.

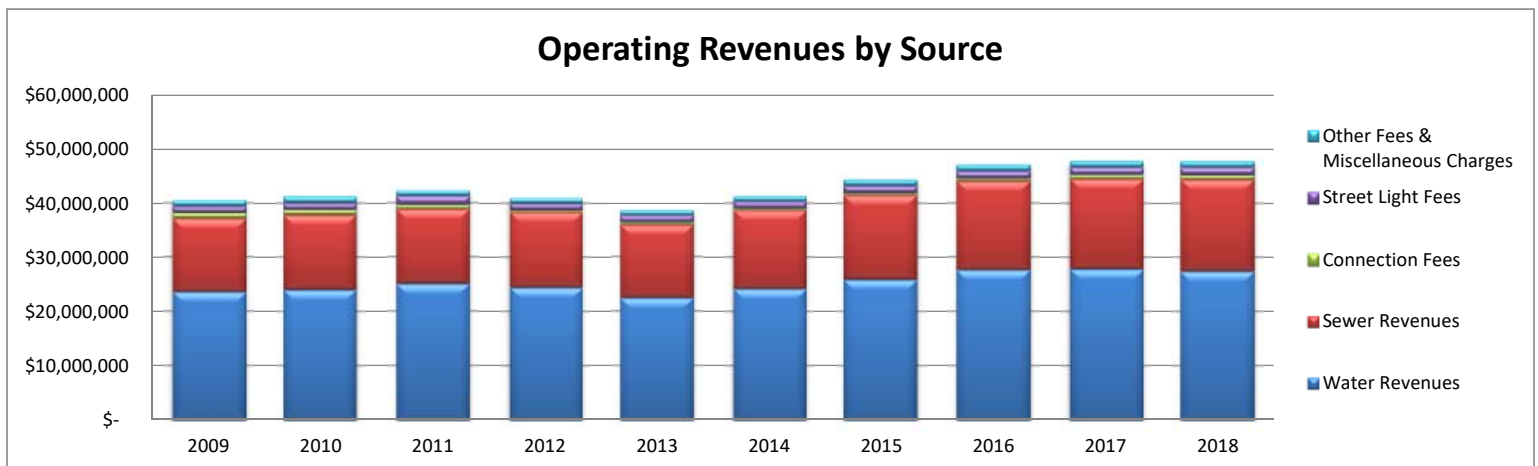
Beginning in fiscal year 2012, the Authority reclassified certain revenue and capital contribution items so certain of the revenue and capital contribution categories shown for fiscal year 2009 through 2011 have been reclassified to facilitate comparison to fiscal year 2012-2018. Portions of water meter connections included under Capital Contributions were not reclassified for fiscal years 2009-2011 to facilitate comparison to 2012-2018 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
2009	\$ 23,671,252	\$ 13,559,105	\$ 981,908	\$ 1,244,934	\$ 1,061,987	\$ 40,519,186
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



Note:

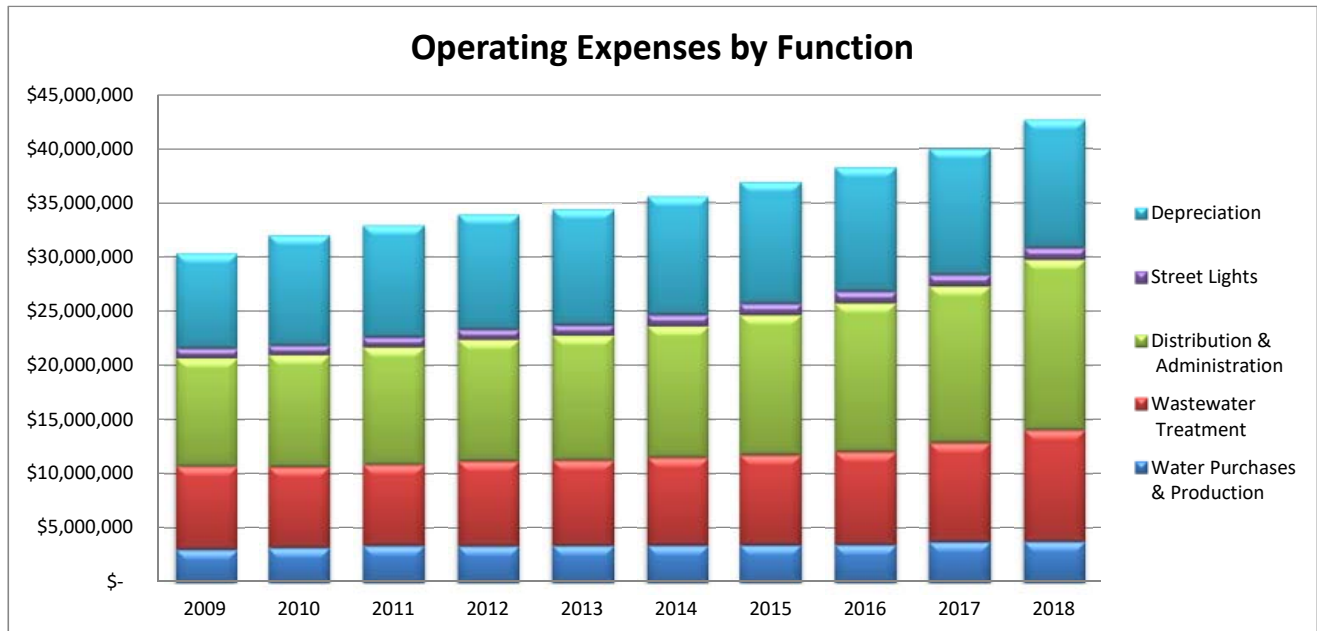
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Source: Cherokee County Water & Sewerage Authority Historical Financial Records

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
2009	\$ 3,029,734	\$ 7,697,153	\$ 9,999,424	\$ 876,136	\$ 8,754,563	\$ 30,357,010
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



Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Non-Operating Revenues (Expenses)
Last Ten Fiscal Years

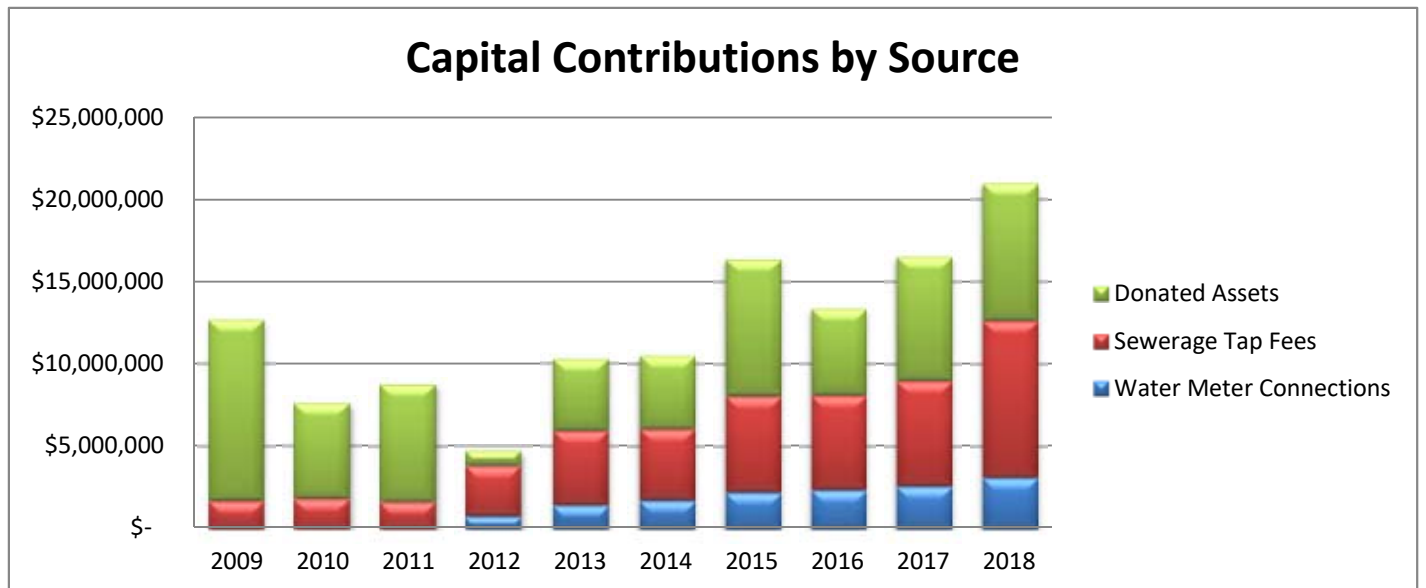
Fiscal Year	Interest Income	Change in Fair Value of Derivatives	Gain (Loss) on Disposal of	Miscellaneous	Interest Expense & Other Fiscal Charges	Other	Total
2009	\$ 484,858	\$ -	\$ (102,502)	\$ 150,611	\$ (10,030,796)	\$ (107,668)	\$ (9,605,497)
2010	201,937	-	12,888	111,631	(9,294,932)	(112,094)	(9,080,570)
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)

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
2009	\$ -	\$ 1,710,209	\$ 10,978,204	\$ 12,688,413
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



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 2009 through 2011 have been reclassified to facilitate comparison to fiscal year 2012-2018

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)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	14.70	14.45	14.79	14.92	14.00	14.61	14.91	16.14	16.22	16.26
Maximum Daily Flow	21.76	21.48	22.49	24.56	19.68	20.74	22.40	27.17	22.45	22.84

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)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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⁾
Total	11.0	11.0	11.0	11.0	11.0	11.0	11.0	12.0	12.0	12.0
<u>Rose Creek GA0046451</u>										
Monthly Average	2.24	2.88	2.90	2.63	2.82	2.47	2.39	2.31	2.10	2.52
Peak Day Flow	6.11	5.26	4.27	3.46	4.78	3.72	4.97	4.51	4.04	4.23
<u>Fitzgerald Creek GA0038555</u>										
Monthly Average	4.18	3.32	3.07	3.22	3.67	3.70	3.70	4.05	4.26	4.32
Peak Day Flow	9.81	8.41	6.56	7.21	8.42	5.88	5.13	6.32	5.62	5.97
<u>Riverbend GA0000728 ⁽²⁾</u>										
Monthly Average					0.0081 ⁽¹⁾	0.00	0.00	0.02	0.00	0.00
Peak Day Flow					0.1400 ⁽¹⁾	0.00	0.00	0.21	0.00	0.00

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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
3/4 INCH											
Residential	390	390	335	511	929	1,081	1,352	1,492	1,642	1,684	9,913
Commercial	13	8	12	9	6	6	11	11	10	21	
1 INCH											
Residential	2	2	1	2	1		6	6	9	3	106
Commercial	9	4	5	7	11	5	9	6	9	9	
1.5 INCH											
Residential		1	1	1		1			1		40
Commercial	5	4	3	1	4	3	4	4	3	4	
2 INCH											
Residential						2			2	3	59
Commercial	4	7	2	1	9	5	8	2	6	8	
3 INCH											
Residential								1			19
Commercial	1	2	2	3			2		7	1	
4 INCH											
Residential										1	3
Commercial	1							1			
6 INCH											
Residential										1	2
Commercial										1	
8 INCH											
Residential										2	3
Commercial								1			
TOTAL	425	418	361	535	960	1,103	1,392	1,524	1,689	1,738	10,145

New Sewer Taps Sold

Last Ten Fiscal Years

TYPE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
Residential	307	326	247	424	810	905	1,037	1,149	1,244	1,292	7,741
Commercial	16	14	16	10	15	12	16	18	14	14	145
TOTAL	323	340	263	434	825	917	1,053	1,167	1,258	1,306	7,886

Cherokee County Water & Sewerage Authority

Number of Customers
Last Ten Fiscal Years

Number of Water Connections

<u>Customer Class</u>	As of August 31									
	<u>2009</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>
Residential	57,976	58,172	58,702	59,277	60,323	61,658	62,978	64,687	66,336	67,965
Commercial & Industrial	5,952	6,049	5,957	6,242	6,250	6,307	6,324	6,206	6,265	5,645
Total	63,928	64,221	64,659	65,519	66,573	67,965	69,302	70,893	72,601	73,610

Number of Sewer Connections

<u>Customer Class</u>	As of August 31									
	<u>2009</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>
Residential	26,140	26,482	27,043	27,494	28,401	29,449	30,467	31,489	32,724	33,979
Commercial & Industrial	515	532	536	559	543	563	577	685	689	707
Total	26,655	27,014	27,579	28,053	28,944	30,012	31,044	32,174	33,413	34,686

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Water										
Base Rate	8.00	8.00	8.00	8.00	8.00	9.00	9.00	9.00	9.00	9.00
3/4"										
1,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
3,000-10,000	5.00/1000	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
>10,000	6.00/1000	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
Minimum Charge:										
1"	50.20	50.20	50.20	50.20	50.20	53.20	53.20	53.20	53.20	53.20
1.5"	100.20	100.20	100.20	100.20	100.20	105.70	105.70	105.70	105.70	105.70
2"	170.20	170.20	170.20	170.20	170.20	179.20	179.20	179.20	179.20	179.20
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	6.00	6.30	6.30	6.30	6.30	6.30
Sewerage										
Minimum Charge:	11.60	11.60	11.60	11.60	11.60	12.60	12.60	12.60	12.60	12.60
1"	64.40	64.40	64.40	64.40	64.40	68.20	68.20	68.20	68.20	68.20
1.5"	130.40	130.40	130.40	130.40	130.40	137.70	137.70	137.70	137.70	137.70
2"	222.80	222.80	222.80	222.80	222.80	235.00	235.00	235.00	235.00	235.00
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	6.60	6.95	6.95	6.95	6.95	6.95
Irrigation										
Base Rate:	11.00	11.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	12.00
Minimum Charge:										
3/4"										
1,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25
2,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25
3,000-10,000 Gallons	5.00/1000	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
> 10,000 Gallons	6.00/1000	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
1"	53.20	53.20	53.20	53.20	53.20	56.20	56.20	56.20	56.20	64.50
1.5"	103.20	103.20	103.20	103.20	103.20	108.70	108.70	108.70	108.70	117.00
2"	173.20	173.20	173.20	173.20	173.20	182.20	182.20	182.20	182.20	190.50
3"	233.20	233.20	233.20	233.20	233.20	245.20	245.20	245.20	245.20	n/a
4"	298.20	298.20	298.20	298.20	298.20	313.45	313.45	313.45	313.45	n/a
6"	423.20	423.20	423.20	423.20	423.20	444.70	444.70	444.70	444.70	n/a
8"	503.20	503.20	503.20	503.20	503.20	528.70	528.70	528.70	528.70	n/a
Charge per 1,000 Gallons:										
Above Minimum	6.00	6.00	6.00	6.00	6.00	6.30	6.30	6.30	6.30	6.30

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Water										
Base Rate	8.00	8.00	8.00	8.00	8.00	9.00	9.00	9.00	9.00	9.00
3/4"										
1,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2,000	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
3,000-10,000	5.00/1000	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
>10,000	5.00/1000	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
Minimum Charge:										
1"	50.20	50.20	50.20	50.20	50.20	53.20	53.20	53.20	53.20	53.20
1.5"	100.20	100.20	100.20	100.20	100.20	105.70	105.70	105.70	105.70	105.70
2"	170.20	170.20	170.20	170.20	170.20	179.20	179.20	179.20	179.20	179.20
3"	230.20	230.20	230.20	230.20	230.20	242.20	242.20	242.20	242.20	242.20
4"	295.20	295.20	295.20	295.20	295.20	310.45	310.45	310.45	310.45	310.45
6"	420.20	420.20	420.20	420.20	420.20	441.70	441.70	441.70	441.70	441.70
8"	500.20	500.20	500.20	500.20	500.20	525.70	525.70	525.70	525.70	525.70
Charge per 1,000 Gallons:										
Above Minimum	5.00	5.00	5.00	5.00	5.00	5.25	5.25	5.25	5.25	5.25
Sewerage										
Minimum Charge:	11.60	11.60	11.60	11.60	11.60	12.60	12.60	12.60	12.60	12.60
1"	64.40	64.40	64.40	64.40	64.40	68.20	68.20	68.20	68.20	68.20
1.5"	130.40	130.40	130.40	130.40	130.40	137.70	137.70	137.70	137.70	137.70
2"	222.80	222.80	222.80	222.80	222.80	235.00	235.00	235.00	235.00	235.00
3"	302.00	302.00	302.00	302.00	302.00	318.40	318.40	318.40	318.40	318.40
4"	387.80	387.80	387.80	387.80	387.80	408.75	408.75	408.75	408.75	408.75
6"	552.80	552.80	552.80	552.80	552.80	582.50	582.50	582.50	582.50	582.50
8"	658.40	658.40	658.40	658.40	658.40	693.70	693.70	693.70	693.70	693.70
Charge per 1,000 Gallons:										
Above Minimum	6.60	6.60	6.60	6.60	6.60	6.95	6.95	6.95	6.95	6.95
Irrigation										
Base Rate:	11.00	11.00	11.00	11.00	11.00	12.00	12.00	12.00	12.00	9.00
Minimum Charge:										
3/4"										
1,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25
2,000 Gallons	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	5.25
3,000-10,000 Gallons	5.00/1000	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
> 10,000 Gallons	6.00/1000	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
1"	53.20	53.20	53.20	53.20	53.20	56.20	56.20	56.20	56.20	61.50
1.5"	103.20	103.20	103.20	103.20	103.20	108.70	108.70	108.70	108.70	114.00
2"	173.20	173.20	173.20	173.20	173.20	182.20	182.20	182.20	182.20	187.50
3"	233.20	233.20	233.20	233.20	233.20	245.20	245.20	245.20	245.20	250.50
4"	298.20	298.20	298.20	298.20	298.20	313.45	313.45	313.45	313.45	318.75
6"	423.20	423.20	423.20	423.20	423.20	444.70	444.70	444.70	444.70	450.00
8"	503.20	503.20	503.20	503.20	503.20	528.70	528.70	528.70	528.70	534.00
Charge per 1,000 Gallons:										
Above Minimum	6.00	6.00	6.00	6.00	6.00	6.30	6.30	6.30	6.30	6.30

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

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	2018			2009			
Water Customers	Gallons Metered	Water Revenue	% of Water Revenue	Water Customers	Gallons Metered	Water Revenue	% of Water Revenue
Pilgrim Pride	260,583,000	\$521,166	1.90%	Pilgrim Pride	257,630,000	\$584,462	2.47%
City Of Waleska	96,023,000	\$248,553	0.90%	Cherokee County Board of Education	49,709,000	\$261,519	1.10%
City Of Woodstock	95,710,000	\$232,507	0.85%	Shadowood MHP	47,987,000	\$237,533	1.00%
City Of Canton	65,007,000	\$154,259	0.56%	City of Woodstock	89,876,000	\$206,132	0.87%
Pickens County Water	62,237,000	\$148,137	0.54%	Bartow County Water Department	90,879,000	\$204,903	0.87%
Cherokee County Board of Education	50,859,000	\$305,896	1.11%	Pickens County Government	90,508,000	\$203,643	0.86%
Bartow County Water	50,718,000	\$119,551	0.43%	City of Waleska	86,975,000	\$196,136	0.83%
Yes Investors (Shadowood MHP)	35,014,000	\$188,410	0.69%	City of Canton	51,645,000	\$117,208	0.50%
Colony Homes (River Park)	25,600,000	\$143,807	0.52%	Towne Lake Apartments	19,813,000	\$97,851	0.41%
The Palmer LLC	19,334,000	\$104,689	0.38%	Colony Homes (River's Edge HOA)	17,587,000	\$90,480	0.38%
Total	761,085,000	\$2,166,975	7.88%		802,609,000	\$2,199,867	9.29%

Fiscal Year	2018			2009			
Sewer Customers	Gallons Metered	Sewer Revenue	% of Sewer Revenue	Sewer Customers	Gallons Metered	Sewer Revenue	% of Sewer Revenue
Pilgrim Pride	269,023,000	\$538,046	3.16%	Pilgrim Pride	244,022,000	\$571,011	4.21%
Cherokee County Board of Education	56,704,000	\$308,675	1.81%	Shadowood MHP	47,987,000	\$305,357	2.25%
Yes Investors (Shadowood MHP)	35,014,000	\$234,830	1.38%	Cherokee Co. Board of Education	29,796,000	\$205,003	1.51%
Colony Homes (River Park)	25,600,000	\$145,648	0.86%	Towne Lake Apartments	19,813,000	\$125,697	0.93%
The Palmer LLC	19,334,000	\$130,956	0.77%	Cherokee County Jail	15,620,000	\$103,073	0.76%
Cherokee County Sheriff's Office (Jail)	17,296,000	\$120,192	0.71%	Colony Homes (River Edge HOA)	15,768,000	\$96,290	0.71%
Deancurt Acworth - Peaks of Bells Ferry	16,550,000	\$111,154	0.65%	Pointe Development Group (HOA)	13,672,000	\$90,214	0.67%
Mar Harbor Creek LLC	14,261,000	\$94,184	0.55%	Gray Property (Brooke Mill Apts)	12,171,000	\$73,693	0.54%
Pointe Development Group (HOA)	13,962,000	\$97,020	0.57%	Columbia Creek Ltd.(Summit Apts)	10,887,000	\$66,722	0.49%
Lindon Corp (Apartments)	13,013,000	\$84,185	0.49%	Alta Ridgewalk	10,082,000	\$62,461	0.46%
Total	480,757,000	\$1,864,890	10.95%		419,818,000	\$1,699,521	12.53%

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

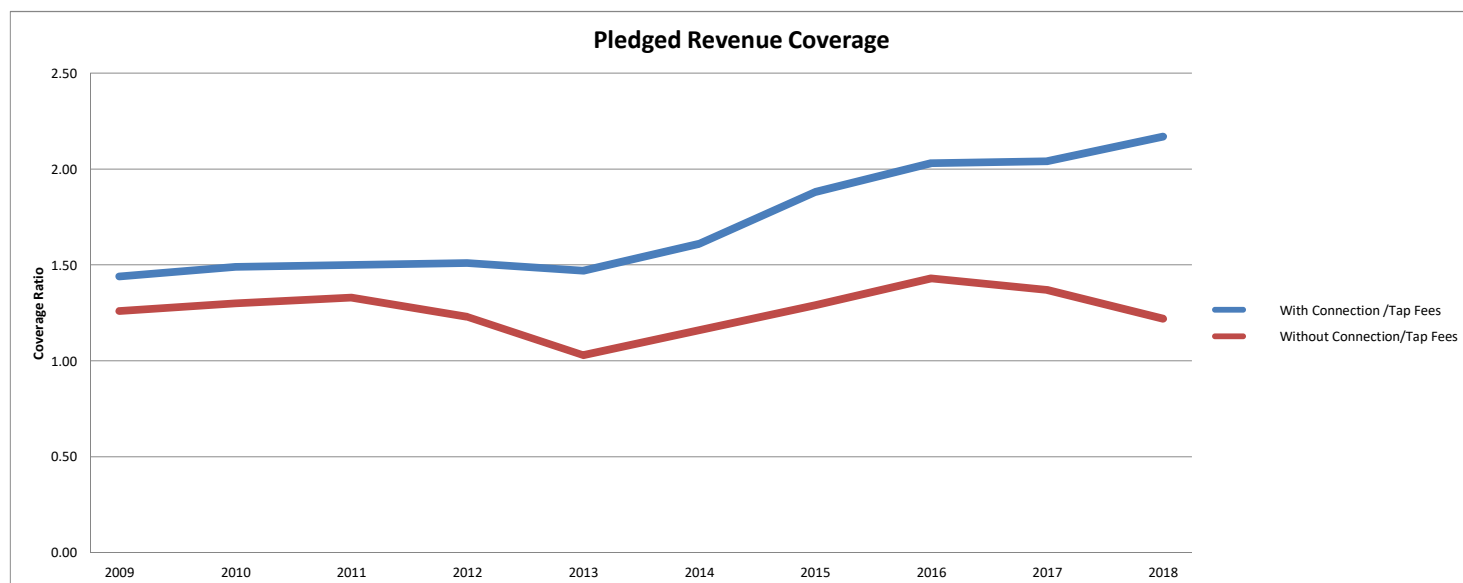
Cherokee County Water & Sewerage Authority

Schedule of Revenue Bond Coverage Last Ten Fiscal Years

Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operating Revenues	\$39,537,278	\$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
Connection Fees	2,692,117	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
Other Income	634,774	340,499	322,959	376,186	316,428	372,125	280,691	424,677	504,582	1,160,023
Gross Total Revenues	42,864,169	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
Less Operating Expenses Excluding Depreciation	21,602,447	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
Net Revenue Available	\$21,261,722	\$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

Total Highest Annual Debt Service	\$14,724,000	\$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
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Coverage Ratio										
With Connection /Tap Fees	1.44	1.49	1.50	1.51	1.47	1.61	1.88	2.03	2.04	2.17
Without Connection/Tap Fees	1.26	1.30	1.33	1.23	1.03	1.16	1.29	1.43	1.37	1.22



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 (%)
2009	\$ 187,574,711	\$ 187,574,711	2.93	872	2.57%
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⁾

⁽¹⁾ 2017 Population data used to calculate debt per capita

⁽²⁾ Personal Income Data used from 2017 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
2019	\$ 7,900,000	\$ 6,097,278	\$ 13,997,278
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
2024-2028	54,485,000	14,355,985	68,840,985
2029-2033	20,000,000	4,313,600	24,313,600
2034-2035	5,430,000	410,500	5,840,500
Total	<u>\$ 123,215,000</u>	<u>\$ 45,323,085</u>	<u>\$ 168,538,085</u>

Source: Cherokee County Water & Sewerage Authority Historical Financial Records

Cherokee County Water & Sewerage Authority

Principal Employers Prior Year and Nine Years Ago

2017			
Employer	Employees	Rank	% of Total County Employment
Cherokee County Schools	4,771	1	2.0%
Cherokee County Government	1,665	2	0.7%
Northside-Cherokee Hospital	1,500	3	0.6%
Publix Supermarkets	1,085	4	0.5%
Pilgrims Pride	835	5	0.3%
Chart Industries	650	6	0.3%
Piolax	500	7	0.2%
Universal Alloy Corporation	440	8	0.2%
Belnick	415	9	0.2%
MEYN American, Inc.	350	10	0.1%
Totals	<u>12,211</u>		<u>5.1%</u>

2009			
Employers	Employees	Rank	% of Total County Employment
Cherokee County Schools	5,000	1	*
Cherokee County Government	1,330	2	*
Pilgrims Pride Corp.	850	3	*
Publix Supermarkets	740	4	*
Universal Alloy Corporation	500	5	*
Meyn America, Inc.	285	6	*
Chart Inc.	262	7	*
Piolax Corporation	250	8	*
Reinhardt University	205	9	*
City of Woodstock	193	10	*
Totals	<u>9,615</u>		<u>0.0%</u>

* Information not available

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 %
2008	210,529	\$ 7,618,522	\$ 36,580	33.0	36,500	8.2
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

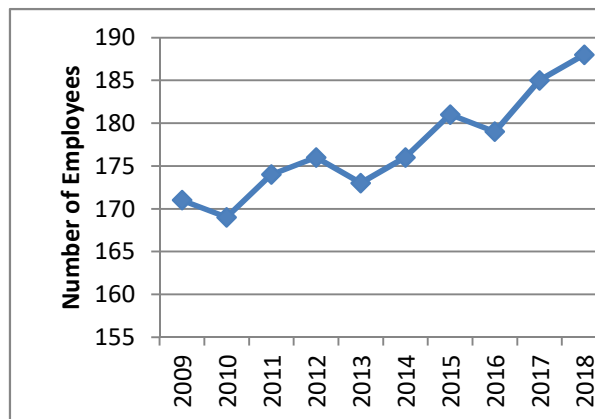
Note: Most recent data available is presented in table

Sources: Bureau of the Census, Georgia Labor Market Explorer, Atlanta Regional Commission,
and US Bureau of Economic Analysis

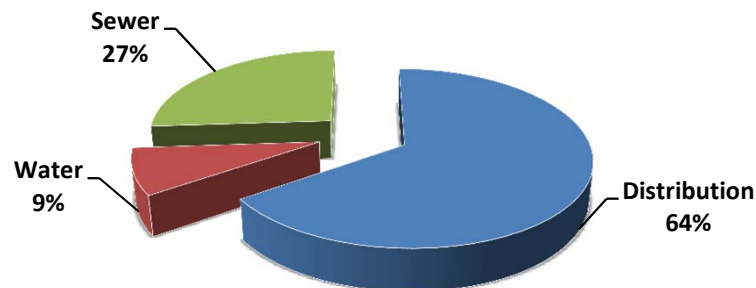
Cherokee County Water and Sewerage Authority

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

Fiscal Year End	<u>2009</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>
DISTRIBUTION:	108	107	110	113	111	113	119	118	119	123
WATER:	17	17	17	17	17	16	15	15	16	16
SEWER:	46	45	47	46	45	47	47	46	50	49
TOTAL EMPLOYEES:	171	169	174	176	173	176	181	179	185	188



Total Employees by Department Fiscal Year End 2018



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)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	36	*40.5	40.5	40.5
Water Available for Use	3,576	3,576	3,576	3,576	3,576	3,576	3,576	3,580.5	3,580.5	3,580.5
Average Daily Flow										
Average Daily Production	14.79	14.27	14.79	15.08	13.91	14.71	14.79	16.14	16.22	16.26
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	14.79	14.27	14.79	15.08	13.91	14.71	14.79	16.14	16.22	16.26
Number of Days Supply	242	251	241	237	257	243	242	222	221	220
Releases from Drought Contingency Reservoir⁽¹⁾										
Yellow Creek	526.6	0	91.1	0	0	0	0	0	728.3	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, 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements and have issued our report thereon dated December 18, 2018.

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
December 18, 2018