COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Years Ended June 30, 2018 and 2017

Orange Water and Sewer Authority

(A COMPONENT UNIT OF THE TOWN OF CHAPEL HILL, NORTH CAROLINA)

Carrboro - Chapel Hill, North Carolina



A public, non-profit agency providing water, sewer and reclaimed water services to the Carrboro-Chapel Hill community.

(A COMPONENT UNIT OF THE TOWN OF CHAPEL HILL, NORTH CAROLINA)

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND 2017

Prepared by:

Orange Water and Sewer Authority

COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND 2017

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A public, non-profit agency providing water, sewer and reclaimed water services to the Carrboro-Chapel Hill community.

September 24, 2018

To our Customers, Bondholders and the Orange Water and Sewer Authority Board of Directors:

We are pleased to present our Comprehensive Annual Financial Report for the Fiscal Year beginning July 1, 2017 and ending June 30, 2018 (FY 2018). This report conforms to the reporting and accounting standards of the Governmental Accounting Standards Board (GASB), the Financial Accounting Standards Board (FASB), and the Government Finance Officers Association's (GFOA's) Governmental Accounting, Auditing and Financial Reporting document. Orange Water and Sewer Authority (OWASA) is responsible for the accuracy, completeness and fairness of the information presented including all disclosures.

Highlights

In FY 2018, OWASA served the Carrboro-Chapel Hill community in full compliance with federal and state standards for drinking water, treated wastewater, and reclaimed water quality.

OWASA's financial position improved during the year. OWASA ended the year with a modified accrual based net income less debt service of about \$10.7 million which was 26.7% percent over budget. The resulting increase in financial reserves will be used for future capital improvement needs.

Please refer to the management's discussion and analysis and the audited general purpose financial statements for additional information on OWASA's financial performance during FY 2018.

Scope and Organization of this Report

- The Introductory Section (unaudited) contains this letter of transmittal and information about OWASA's organizational structure, principal officers, major initiatives, accomplishments, and future projects.
- The Financial Section includes the independent auditor's report; OWASA management's discussion and analysis of the year; the general purpose financial statements; and supplementary schedules. The general purpose financial statements can be issued separately for securities offerings or other purposes.
- The Statistical Section (unaudited) presents fiscal and other data to provide a more complete understanding of OWASA, the community we serve and the local economy.
- The Compliance Section presents the independent auditor's report on compliance with various internal control and other requirements related to certain forms of financial assistance.

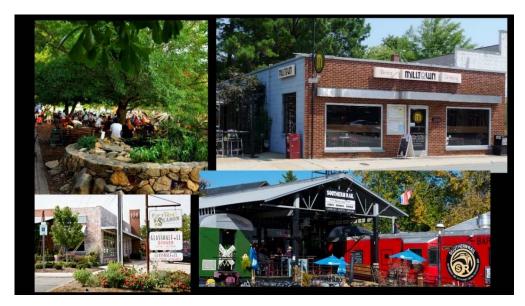
As a single-purpose governmental entity, OWASA's financial activities are reported as a sole enterprise fund through which is captured and disclosed the inflow and outflow of total economic resources under the full accrual method of accounting. For financial reporting purposes under GASB Statement 14, OWASA is considered a component unit of the Town of Chapel Hill because the Town Council appoints a majority of OWASA's Board Members and may remove them without cause. The Comprehensive

i

Annual Financial Report (CAFR) of the Town of Chapel Hill therefore includes OWASA's financial data and OWASA's CAFR includes statistical data about the Town.

Background

A special purpose local governmental entity organized under state law, OWASA is a public non-profit agency providing water, wastewater and reclaimed water services to the Carrboro-Chapel Hill community. We serve about 83,000 people.



Carrboro Businesses

Creation of OWASA

Before OWASA was established, the University of North Carolina at Chapel Hill (UNC) and the Towns of Chapel Hill and Carrboro provided public water and sewer services to the Carrboro-Chapel Hill community.



The Old Well on UNC's Campus

Following recommendations of a Utilities Study Commission created in 1971, on August 9, 1976, the state approved conveyance of the University's water and wastewater utilities to OWASA in accord with *Agreements of Sale and Purchase* among the University, the Towns and OWASA. The Town of Carrboro, the Town of Chapel Hill and Orange County governing boards incorporated OWASA under Chapter 162A of state law. OWASA began serving the community on February 16, 1977 upon transfer of the municipal and University systems to OWASA.

Governance

A nine-member Board of Directors governs OWASA. The Chapel Hill Town Council appoints five, and the Carrboro Board of Aldermen and the Orange County Board of Commissioners each appoints two Board Members. The OWASA Board adopts the annual budget; sets rates, fees, and charges based on cost-of-service principles; makes policy decisions; approves issuance of revenue bonds or other debt instruments; and appoints the Executive Director, General Counsel and Independent Auditor.

Water System

Our water comes from Cane Creek Reservoir, a three-billion gallon supply eight miles west of Carrboro; University Lake, a 450 million gallon reservoir on the west side of Carrboro; and the 200 million gallon Quarry Reservoir three miles west of Carrboro.



University Lake

OWASA has a state allocation of water supply storage capacity in Jordan Lake equivalent to about five million gallons of water per day (MGD). OWASA does not currently receive water from Jordan Lake to meet the daily needs of its service area nor does it own facilities to do so. However, through mutual aid agreements, OWASA can obtain drinking water from Jordan Lake from the Town of Cary through OWASA's system connection with the City of Durham. OWASA also maintains emergency water system connections with the Town of Hillsborough and Chatham County public drinking water systems.

Our Jones Ferry Road Water Treatment Plant (WTP) has a capacity of 20 MGD. Our drinking water storage capacity is eight million gallons and we maintain about 400 miles of raw water, finished water, and water interconnection lines.

Wastewater System

We operate and maintain about 340 miles of sanitary sewer and force main lines, and 21 pump stations to carry wastewater to the Mason Farm Wastewater Treatment Plant (WWTP), which has a peak treatment capacity of 14.5 MGD (daily average for a calendar month).



Bypass Piping During Construction on OWASA's Most Critical Pump Station

Highly treated wastewater is recycled to the natural environment at Morgan Creek on the southeast side of Chapel Hill or provided as reclaimed water for non-drinking uses as described below. Morgan Creek is a tributary of Jordan Lake, a water source for several communities in the region.

Reclaimed Water System

OWASA operates a reclaimed water (RCW) system at the Mason Farm WWTP. Federal and State grants funded about 10% of the project to build the system with UNC, OWASA's primary RCW customer, providing funds for the balance of the construction costs.

The RCW system is financially self-supporting. OWASA recovers all operating, maintenance, management, and overhead costs through rates and fees. Financial responsibilities, including rate decisions by OWASA and other technical matters are specified in a contract between OWASA and UNC. The University uses RCW for make-up water in cooling towers at chiller plants, toilet flushing, and irrigation. UNC's RCW use averaged about 617,000 gallons per day during FY 2018. By decreasing the amount of drinking water used for non-drinking purposes, the RCW system helps reduce the community's risks in future droughts and other water shortages. The system also enables OWASA to defer the need for expansion of water supply and treatment capacity.

Economic Conditions

In June 2018, the unemployment rate in Orange County was 3.7 percent compared to the North Carolina average of 4.2 percent and US average of 4.0 percent (Source: US Bureau of Labor Statistics). The estimated population of Orange County increased by 13 percent from 2000 to 2010.

The relative stability of the Carrboro-Chapel Hill economy is supported by the size and strength of UNC and UNC Healthcare which continue to actively plan and develop new facilities and infrastructure.



Elevated Water Storage Tank on the UNC Campus

Initiatives and Accomplishments

Advanced Metering Infrastructure – In FY 2017, OWASA's Board of Directors approved awarding a contract to implement an advanced metering infrastructure (AMI) system. A feasibility study completed in FY 2016 showed that installing AMI would provide significant benefits to OWASA and its customers and cost less than alternative meter replacement strategies.

We read our system's approximately 21,000 meters each month. Prior to implementing AMI, about one-third of the meters in our service area were read using equipment that collects meter readings as staff members drove in close proximity to the meters. The other two-thirds of our meters were read manually by staff members walking throughout our service area. In contrast, through the AMI system, meters are being read remotely over a computer network. This reduces costs associated with purchasing and maintaining vehicles, vehicle fuel, and staff time. AMI also significantly enhances our customer service

capability allowing OWASA staff and customers to view and analyze hourly water consumption and detect leaks.

The project will cost about \$5 million and is expected to take about two years to complete. As of June 2018, over 50% of our meters had been converted to AMI meters.

Increase in Monthly Water and Sewer Rates – After six consecutive years without a rate increase, OWASA's Board of Directors approved a new Schedule of Rates and Fees that includes a two-percent increase in monthly water and sewer rates.

System Development Fees – System development fees are one-time amounts charged for new connections (development) to OWASA's system. They are calculated to recover a portion of the capital costs of providing water and sewer system capacity. System development fees are calculated separately for water and sewer connections.

In July 2017, the North Carolina General Assembly passed a law (NC House Bill 436/Session Law 2017-138) that required a change to the way water and sewer utilities calculate system development fees. The statute required that the new fees be effective as of July 1, 2018.

On June 14, 2018, the Board approved system development fees in compliance with the new law. The new system development fee calculation method resulted in a decrease in the amount of the fees of between 10% and 40%.

Financial Information

The annual budget is an integral part of OWASA's financial operations. Appropriations are set at the departmental level. The annual budget and capital project ordinances are adopted by the OWASA Board of Directors creating a legal limit on annual spending. Multi-year project ordinances are adopted for capital projects. OWASA's operations are accounted for, and reported as, an enterprise fund because our services are primarily funded with user fees.

OWASA's management is responsible for the accounting system and for establishing and maintaining internal financial controls. The internal control system is designed to provide reasonable assurance regarding the safeguarding of assets against loss from unauthorized use or disposition and the reliability of financial records for preparing financial statements in conformity with accounting principles generally accepted in the United States of America. Management believes that OWASA's internal accounting controls adequately protect assets and provide reasonable assurance of the proper recording of financial transactions.

OWASA is required by law to use cost-of-service rates. We set our rates, fees and charges to cover the cost for each of our services. We use increasing block water rates for individually-metered residential customers and a year-round water rate for multi-family master-metered customers. OWASA uses seasonal water rates for non-residential customers; non-residential customers pay a higher water rate during the peak demand months of May through September and a lower rate in the remaining months. Irrigation-only water customers pay a year-round water rate which reflects the higher system capacity necessary to serve them. When development creates new connections to OWASA's system, fees are charged to ensure that the appropriate portion of the capital costs of providing system capacity is paid for by the parties that tap into and benefit from that capacity. Annual adjustments of rates, fees and charges normally occurs on October 1.

Independent Audit

OWASA is required by state law to undergo an annual independent financial audit. OWASA's auditor, Martin, Starnes & Associates, CPAs, P.A., was retained following an open, competitive, qualifications-based selection process. The independent auditor's report on the General Purpose Financial Statements is included in the Financial Section of this report.

Certificate of Achievement for Excellence in Financial Reporting

OWASA has received the GFOA Certificate of Achievement for Excellence in Financial Reporting each year since 2000. To receive 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 legal requirements.

The Certificate of Achievement is valid for a period of one year. We believe that our comprehensive annual financial report for FY 2018 continues to meet the Certificate of Achievement Program requirements and we will submit it to the GFOA to determine its eligibility for another award.

Distinguished Budget Presentation Award

OWASA received its 18th Distinguished Budget Presentation Award from the GFOA for our FY 2018 budget. This award program recognizes governments that prepare high quality budget documents to meet the needs of decision-makers and citizens. We believe that our budget report for FY 2019 continues to meet the Distinguished Budget Presentation Program requirements and we have submitted it to the GFOA to determine its eligibility for another certificate.

Acknowledgements

We express our appreciation to the independent certified public accountants, Martin, Starnes & Associates, CPAs, P.A., who assisted and significantly contributed to this report.

Preparation of this report could not have been accomplished without the efficient and dedicated work of the OWASA team.

We thank the OWASA Board of Directors for their responsible policy guidance in financial management.

Respectfully submitted,

Ed Kerwin

Executive Director

Stephen Winters, CPA

Director of Finance and Customer Service



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

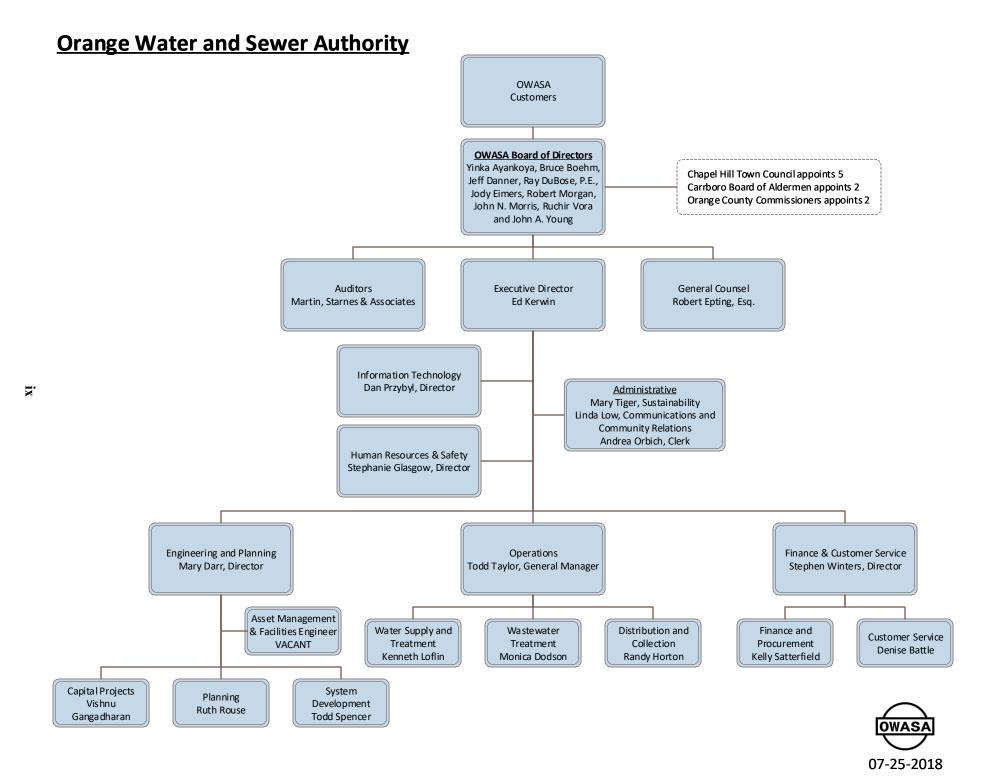
Orange Water and Sewer Authority North Carolina

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO



ORANGE WATER AND SEWER AUTHORITY BOARD OF DIRECTORS

CHAIR

Yinka Ayankoya 200 Gary Road Carrboro, NC 27510 Appointed by Carrboro; Term Expires 6/30/19

VICE CHAIR

Jeff Danner 423 New Parkside Drive Chapel Hill, NC 27516 Appointed by Chapel Hill; Term Expires 6/30/21

SECRETARY

Raymond DuBose 103 Easy Street Chapel Hill, NC 27516 Appointed by Orange County; Term Expires 6/30/20

MEMBERS

Bruce Boehm 1921 South Lakeshore Drive Chapel Hill, NC 27514 Appointed by Chapel Hill; Term Expires 6/30/19

Jody Eimers 3120 Landeau Drive Hillsborough, NC 27278 Appointed by Orange County; Term Expires 6/30/21

Robert Morgan 2019 Hunt Drive Hillsborough, NC 27510 Appointed by Orange County: Term Expires 6/30/21

John Morris 614 Beechtree Court Chapel Hill, NC 27514 Appointed by Chapel Hill; Term Expires 6/30/20

Ruchir Vora 522 Dogwood Drive Chapel Hill, NC 27516 Appointed by Chapel Hill; Term Expires 6/30/20

John Young 124 Meadowmont Village Circle Chapel Hill, NC 27517 Appointed by Chapel Hill; Term Expires 6/30/19

ORANGE WATER AND SEWER AUTHORITY MANAGEMENT TEAM

Denise Battle, Customer Service Manager Mary Darr, P.E., Director of Engineering and Planning Monica Dodson, Wastewater Treatment and Biosolids Recycling Manager Vishnu Gangadharan, P.E., Engineering Manager (Capital Projects) Stephanie Glasgow, M.E.S.H., P.H.R., Director of Human Resources and Safety Randy Horton, Water Distribution and Wastewater Collection Systems Manager Ed Kerwin, Executive Director Kenneth Loflin, Water Supply and Treatment Manager Linda Low, Communications and Community Relations Officer Andrea Orbich, Executive Assistant Dan Przybyl, Director of Information Technology Ruth Rouse, A.I.C.P., Planning and Development Manager Kelly Satterfield, CPA, Finance and Procurement Manager Todd Spencer, P.E., Engineering Manager (System Development) Todd Taylor, P.E., General Manager of Operations Mary Tiger, Sustainability Manager Stephen Winters, CPA, Director of Finance and Customer Service

GENERAL COUNSEL

Robert Epting, Esquire Epting and Hackney, Attorneys at Law



"A Professional Association of Certified Public Accountants and Management Consultants"

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors Orange Water and Sewer Authority Carrboro, North Carolina

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Orange Water and Sewer Authority (the "Authority") (a component unit of the Town of Chapel Hill, North Carolina), as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits 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 the business-type activities of the Orange Water and Sewer Authority as of June 30, 2018 and 2017, and the respective changes in financial position and cash flows, thereof, for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 9 to the financial statements for the fiscal year ending June 30, 2018, the Orange Water and Sewer Authority adopted new accounting guidance, Governmental Accounting Standards Board (GASB) No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Other Post-Employment Benefits Schedules of Changes in the Total OPEB Liability and Related Ratios, and the Local Governmental Employees' Retirement System Schedules of the Proportionate Share of Net Pension Asset/Liability and Contributions 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 the 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.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Orange Water and Sewer Authority's basic financial statements. The introductory information, budgetary schedules, the statistical section, as well as the Schedule of Expenditures of Federal and State Awards, as required by *Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, and the State Single Audit Implementation Act, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The budgetary schedules and the Schedule of Expenditures of Federal and State Awards 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 budgetary schedules and the Schedule of Expenditures of Federal and State Awards are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

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

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 24, 2018 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Orange Water and Sewer Authority's 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 the Authority's internal control over financial reporting and compliance.

Martin Starnes & Associates, CPAs, P.A.

Martin Starnes & associates, CPas, P.a.

Hickory, North Carolina September 24, 2018

Management's Discussion and Analysis

The management of the Orange Water and Sewer Authority (OWASA) offers the following discussion and analysis as a supplement to the organization's financial position and activities for the fiscal years ended June 30, 2018 and 2017. This presentation is intended to enhance the readers' understanding of the financial statements which follow and should be read in conjunction with those statements and the introductory letter of transmittal found on pages i—vii.

Financial Highlights

- At June 30, 2018, OWASA's assets and deferred outflows of resources exceeded its liabilities and deferred inflows of resources by \$264.8 million.
- OWASA's total net position increased by \$1.2 million, primarily resulting from income realized from operating activities.
- Due to the condition and capacity of OWASA's system, about 69% of the organization's \$19.2 million capital expenditures for Fiscal Year (FY) 2018 were invested in replacing and rehabilitating existing infrastructure.
- Non-current liabilities decreased by about \$0.6 million due to principal payments on long-term debt
- OWASA's credit ratings from Fitch of AA+ and Aa1 from Moody's, remain unchanged. Standard & Poor's increased OWASA's rating to AAA during the year.

Overview of the Financial Statements

OWASA's primary mission is to provide water, sewer, and reclaimed water services to Chapel Hill, Carrboro, and portions of southeastern Orange County. OWASA does not provide other general purpose government services or programs. OWASA's operations, capital improvements program, and debt payments are funded almost entirely through rates, fees and other charges for water, sewer, and reclaimed water services. OWASA is considered to be, and therefore presents its financial report, as a stand-alone enterprise fund.

As a stand-alone enterprise fund, OWASA's basic financial statements consist of a *Statements of Net Position*, a *Statements of Revenues, Expenses and Changes in Net Position* and a *Statements of Cash Flows*. These statements, together with the *Management's Discussion and Analysis*, provide both short- and long-term financial information about OWASA's financial position. Presentations of two-year and three-year comparative data in these schedules are intended to enhance the reader's ability to gauge OWASA's fiscal strength and provide useful trend information. *Notes to the Financial Statements* and a *Schedule of Revenues and Expenditures – Budget and Actual* appear immediately following the basic financial statements. In addition, other required supplementary information, generally statistical and demographic in nature, is presented.

The *Statements of Net Position* presents OWASA's basic financial position through disclosure of information about OWASA's assets and liabilities. Net position represents the difference between total assets and deferred outflows of resources and total liabilities. Over time, net position may serve as a useful indicator of OWASA's financial condition.

The Statements of Revenues, Expenses and Changes in Net Position provides information regarding OWASA's total economic resource inflow and outflow (accrual method of accounting). The difference between these inflows and outflows represents the change in net position, which links this statement to the Statements of Net Position.

The Statements of Cash Flows deals specifically with the flow of cash and cash equivalents arising from operating, capital and related financing and investing activities. Because OWASA's Statements of Revenues, Expenses and Changes in Net Position measures the flow of total economic resources, operating income usually differs from net cash flow from operations. To supplement the reader's understanding of this difference, the Statements of Cash Flows includes reconciliation between these two amounts. In accordance with accounting principles generally accepted in the United States, a reconciliation of cash and cash equivalents is also presented in this statement.

The *Notes to the Financial Statements* provide additional information that is essential to a full understanding of the data provided in the financial statements.

Financial Analysis

Orange Water and Sewer Authority Schedule of Net Position (\$ millions)						
	<u>Fisc</u>	cal Year E	Percentage of Change			
	<u>2018</u>	<u>2017</u>	<u>2016</u>	(2017 to 2018)		
Current assets	\$31.2	\$39.4	\$40.9	(20.8%)		
Capital and other long-term assets	<u>319.0</u>	<u>306.0</u>	<u>301.2</u>	4.2		
Total assets	350.2	345.4	342.1	1.4		
Total deferred outflows of resources	3.3	4.1	2.5	(19.5)		
Current liabilities	13.4	11.2	11.5	19.6		
Non-current liabilities	<u>74.0</u>	<u>74.6</u>	<u>78.2</u>	(0.8)		
Total liabilities	87.4	85.8	89.7	1.9		
Total deferred inflows of resources	1.2	0.1	0.3	1100.0		
Net position						
Net investment in capital assets	255.1	236.8	224.9	7.8		
Restricted	0.2	0.2	0.3	0.0		
Unrestricted	<u>9.5</u>	<u>26.6</u>	<u>29.3</u>	(64.3)		
Total net position	<u>\$264.8</u>	<u>\$263.6</u>	<u>\$254.5</u>	0.5		

OWASA's assets exceeded liabilities by \$264.8 million at June 30, 2018, compared to \$263.6 million and \$254.5 million at June 30, 2017 and 2016, respectively. OWASA's overall financial position strengthened between FY 2016 and 2018 as net position increased by \$10.3 million. Total assets increased during the same period by \$8.1 million. These trends indicate that a significant portion of recent infrastructure improvements has been funded through cash rather than debt.

Net capital assets comprised about 89% of total assets for the comparative years of 2016 through 2018. These capital assets are essential in providing water and sewer services to customers and are not available for future spending. The resources needed to repay the related debt must be provided by other sources. At June 30, 2018, these other unrestricted resources totaled \$9.5 million and may be used for any lawful purpose.

Non-current liabilities decreased by approximately 5.4% or \$4.2 million during the same period reflecting decreases from principal payments on long-term debt.

OWASA anticipates continued increases in net position arising from its planned capital improvements program and projected excess of revenues and contributions over expenditures.

Orange Water and Sewer Authority Revenues, Expenses and Change in Net Position (\$ Millions)						
	Percentage of Change					
	<u>2018</u>	<u>2018</u> <u>2017</u> <u>2016</u>				
Operating revenues						
Water, wastewater, reclaimed water	\$36.0	\$34.5	\$34.9	4.3%		
Other	<u>1.5</u>	<u>1.2</u>	<u>1.5</u>	25.0		
Total operating revenues	1.5 37.5	35.7	$3\overline{6.4}$	5.0		
Operating expenses	<u>31.5</u>	<u>30.5</u>	<u>29.0</u>	3.3		
Operating income	6.0	5.2	7.4	15.4		
Non-operating revenues (expenses)	<u>0.1</u>	<u>1.5</u>	(0.2)			
Income before contributions	5.9	6.7	7.2	(106.7)		
Capital contributions	<u>1.5</u>	<u>2.4</u>	<u>1.8</u>	(11.9)		
Increase (decrease) in net position	$\overline{7.4}$	<u>2.4</u> 9.1	$\overline{9.0}$	(18.7)		
Net position, July 1	263.6	254.5	245.5	3.6		
Change in accounting principles /						
restatement (see Note 9)	<u>(6.2)</u>	0.0	0.0			
Net position, June 30	<u>\$264.8</u>	<u>\$263.6</u>	<u>\$254.5</u>	0.4		

The above condensed three-year comparison of Revenues, Expenses and Change in Net Position, combined with the following discussion provides additional insight regarding changes in net position.

Operating Revenues: OWASA is not empowered to levy or collect taxes, nor does OWASA
receive funding from the taxing authorities within its service area. OWASA's operations, capital
improvements program and debt service are funded almost entirely from fees charged to customers
for water, sewer, and reclaimed water services, and other related services. As a result, OWASA's
revenue stream is impacted by fluctuations in demand for services and other economic factors.

Revenues derived from water, sewer, and reclaimed water services are comprised of two components; a fixed monthly service charge based on the size of the installed water meter and a monthly volume usage (commodity) charge per thousand gallons of water consumed. The sewer commodity charge is measured based on water consumption. However, for single-family residential customers, the sewer commodity charge incorporates the assumption that not all water consumed is returned to the sewer system. Sewer billings for residential customers are capped at 15,000 gallons per month. All rates, fees and charges are calculated under a cost-of-service ratemaking methodology.

In FY 2018, drinking water volume sales was an average of 6.2 million gallons per day (mgd). In FY 2017 and 2016, drinking water volume sales were 6.0 mgd. Drinking water demand remains much lower than long-term historical trends and reflects OWASA's and its customers' continued commitment to water conservation, the conservation signal delivered through the increasing block rate and seasonal pricing structures for single-family residential and nonresidential customers, respectively, and the use of reclaimed water by the University of North Carolina. With higher water volume sales, Operating revenues for FY 2018 were about 5% higher than the previous year or \$37.5 million.

- Operating Expenses: Operating expenses were \$31.5 million or about 3.3% more than FY 2017 and approximately 8.6% greater than FY 2016. OWASA's department managers expended about 1.4% less than the amount budgeted for FY 2018. Operating expenses includes an \$9.2 million charge for depreciation and a \$766,000 charge for post-employment benefits. OWASA's ability to meet operating expenses and adequately cover debt service remained positive.
- Non-Operating Revenues (Expenses): Non-operating revenues are comprised primarily of system development fees, interest earnings, and gains (or losses) from the sale of surplus property. System development fees are calculated to recover from new customers a share of the cost of system capacity when a new connection is made to the system. Non-operating expenditures are made up primarily of interest expense on debt and amortization of bond expenses.

System development fee revenue was approximately \$1.6 million in FY 2018: a decrease of about 27% or \$600,000 from FY 2017. For FY 2017 and 2016, system development fee revenue was about \$2.2 million and \$1.4 million, respectively. Interest earned in FY 2018 totaled about \$57,000. Investments remained in safe and liquid secured deposits.

• Capital Contributions: Capital contributions totaled approximately \$1.5 million for the year and were comprised of construction costs of developer dedicated facilities. Contributions in aid of construction in the form of dedicated service lines are classified as contributions after net income. Although OWASA receives such contributions annually, these transactions are not cash or cash equivalents and are not included in the budget under the modified accrual method.

Capital Assets

Each year, OWASA expands or places into service new and renewed capital assets. Capital assets net of depreciation as of the end of FY 2018 was about \$318.8 million, an increase of approximately \$13.1 million from FY 2017. The net increase consisted of additions totaling \$22.3 million and a reduction due to deprecation of \$9.2 million. The asset additions included the rehabilitation or replacement of various water and sewer mains and improvements to the Jones Ferry Road Water Treatment Plant and the Mason Farm Wastewater Treatment Plant.

The majority of OWASA's capital expenditures over the next 15 years is expected to be invested in replacing and rehabilitating existing assets. System capacity is expected to be sufficient to meet the community's needs well into the future. Please refer to page 23 for additional information on capital assets.

Orange Water and Sewer Authority Capital Assets (\$ Millions)						
	<u> </u>	iscal Year En	<u>led</u>	Percentage of Change		
	<u>2018</u>	<u>2017</u>	<u>2016</u>	(2017 to 2018)		
Land	\$17.6	\$17.6	\$17.6	0.0%		
Construction in progress	40.7	28.1	32.5	44.8		
Water treatment and distribution	99.4	99.3	101.4	0.1		
Sewer collection and treatment	148.1	148.0	138.0	0.1		
Fixtures and equipment	13.0	12.8	<u>11.4</u>	1.6		
Total	<u>\$318.8</u>	<u>\$305.8</u>	<u>\$300.9</u>	4.3		

Debt Administration

OWASA policy stipulates that at least 30% of capital improvements projects be funded with cash from operations. At June 30, 2018, 2017 and 2016, OWASA's outstanding bond and loan debt totaled \$60.4 million, \$67.4 million, and \$73.6 million respectively, net of applicable premiums, discounts and deferred refunding costs. These amounts consist of an interest-free loan from the state of North Carolina, and water and sewer system revenue refunding bonds issued in fiscal years 2010, 2014, 2015 and 2018. At year end, OWASA owed an accrued debt service liability of approximately \$5.7 million. This amount was credited in full to the trustee restricted bond service account as of June 30, 2018.

OWASA's credit ratings for its bonds are AAA by Standard & Poor's, Aa1 by the Moody's, AA+ by Fitch Ratings. These ratings reflect OWASA's strong fiscal policy and standards and are considered excellent for an entity that does not have taxing authority.

Please refer to page 25 in the Notes to Financial Statements section for greater detail on OWASA's outstanding debt obligations.

Economic Factors

OWASA's location in Orange County, North Carolina includes a number of factors that benefit the organization and, thereby, its customers.

- The University of North Carolina at Chapel Hill (UNC) is OWASA's largest customer and accounts for approximately 22% of total drinking water sales.
- The Carrboro-Chapel Hill economy benefits from the size and strength of UNC and UNC Healthcare: public entities that serve the entire state. The University continues to actively plan and develop new facilities and infrastructure.
- There are no major industries in the service area that are subject to significant changes in economic conditions.
- Orange County's unemployment rate has historically been better than the State and National average.

OWASA encourages water conservation through public education, voluntary and mandatory water use restrictions, and pricing structures. Reduced water use through conservation provides many benefits to the community including extending the life of OWASA's water supply and system capacity. The organization continues to strive to improve efficiencies and reduce costs to limit rate increases without adversely impacting services levels.

FY 2019 Budget Highlights

After six consecutive years without a rate increase, OWASA's Board of Directors approved a budget that includes a two-percent increase in the monthly rates charged for water, sewer and reclaimed water services. The FY 2019 budget for Operating expenses is about 2.8% greater than the FY 2018 budget. Capital improvement expenditures are budgeted to be approximately \$21.0 million.

Requests for Information

This report is designed to provide an overview of Orange Water and Sewer Authority's finances. Questions concerning any of the information found in this report or requests for additional information may be directed to the Director of Finance and Customer Service, 400 Jones Ferry Road, Carrboro, North Carolina 27510-2001.

STATEMENTS OF NET POSITION PROPRIETARY FUND JUNE 30, 2018 AND 2017

	2018	2017
Assets:		
Current assets:		
Cash and cash equivalents	\$ 15,961,713	\$ 25,953,678
Receivables:		
Trade accounts (net of allowances for uncollectible		
accounts of approximately \$85,000 for 2018 and 2017)	5,090,491	4,133,233
Other	1,938,335	1,050,244
Inventory, materials, and supplies	1,191,251	1,046,669
Prepaid expenses	38,880	249,466
Restricted cash and cash equivalents:		
Cash and cash equivalents	1,057,140	1,333,998
Cash and cash equivalents, trustee	 5,892,557	 5,671,864
Total current assets	 31,170,367	 39,439,152
Non-current assets:		
Restricted cash and cash equivalents	 206,053	 171,013
Capital assets:		
Non-depreciable	58,290,237	45,668,275
Depreciable	 260,508,128	 260,126,247
Total capital assets, net of accumulated depreciation	 318,798,365	 305,794,522
Total non-current assets, net	319,004,418	305,965,535
,		
Total assets	350,174,785	 345,404,687
Deferred Outflows of Resources:		
Contributions to pension plan in current fiscal year	617,219	598,984
Pension deferrals	903,222	1,817,261
Contributions to OPEB plan in current fiscal year	196,582	-
OPEB deferrals	20,671	-
Deferred charge on refunding	 1,518,829	 1,710,448
Total deferred outflows of resources	 3,256,523	 4,126,693

STATEMENTS OF NET POSITION PROPRIETARY FUND JUNE 30, 2018 AND 2017

	2018	2017
Liabilities:		
Current liabilities:		
Payable from current assets:		
Trade and construction contracts payable	4,553,451	2,480,222
Accrued expenses	270,463	261,691
Payable from restricted cash and cash equivalents:		
Accrued interest	904,907	873,738
Customer deposits and advances	1,263,193	1,505,011
Current maturity of note payable	328,000	328,000
Current maturities of bonds payable	5,676,526	5,289,894
Current portion of compensated absences	428,362	495,019
Total current liabilities	13,424,902	11,233,575
Non-current liabilities:		
Note payable	4,920,000	5,248,000
Bonds payable	54,255,989	59,710,364
Compensated absences	142,787	60,640
Net pension liability	1,941,888	2,733,991
Total OPEB liability	12,738,543	6,788,961
Total non-current liabilities	73,999,207	74,541,956
Total liabilities	87,424,109	85,775,531
Deferred Inflows of Resources:		
Pension deferrals	58,668	95,802
OPEB deferrals	1,110,457	
Total deferred inflows of resources	1,169,125	95,802
Net Position:		
Net investment in capital assets	255,136,679	236,928,712
Restricted for capital reserve	206,053	171,013
Unrestricted	9,495,342	26,560,322
Total net position	\$ 264,838,074	\$ 263,660,047

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

	 2018	2017
Operating Revenues:		
Water	\$ 19,013,363	\$ 17,540,247
Sewer	16,868,447	16,561,076
Service initiation fees	156,225	169,965
Reclaimed water	441,303	431,185
Other	 1,063,905	 1,037,921
Total operating revenues	 37,543,243	 35,740,394
Operating Expenses:		
Water supply and treatment	5,601,957	5,145,181
Water distribution	2,659,501	3,554,221
Sewer treatment	4,607,301	4,813,684
Sewer collections	1,264,196	1,329,131
General and administrative	7,352,499	6,331,018
Depreciation and amortization	9,226,257	8,909,129
Other post-employment benefits	 765,944	 493,193
Total operating expenses	 31,477,655	 30,575,557
Operating income (loss)	 6,065,588	 5,164,837
Non-Operating Revenues (Expenses):		
System development fees	1,599,382	2,219,227
Investment income, net of fair value of investments adjustment	56,524	32,802
Interest expense	(1,863,061)	(1,668,138)
Amortization of bond and lease expense	102,842	914,691
Gain (Loss) on disposal of capital assets	-	75,348
Costs of issuance	 (19,340)	
Total non-operating revenues (expenses)	 (123,653)	 1,573,930

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

	2018	2017
Income (loss) before capital contributions	5,941,935	6,738,767
Capital Contributions:		
Contributions in aid of construction	1,509,516	2,363,076
Total capital contributions	1,509,516	2,363,076
•		_
Change in net position	7,451,451	9,101,843
Net Position:		
Beginning of year - July 1	263,660,047	254,558,204
Restatement	(6,273,424)	
Beginning of year, restated	257,386,623	254,558,204
End of year - June 30	\$ 264,838,074	\$ 263,660,047

STATEMENTS OF CASH FLOWS PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

		2018	 2017
Cash Flows from Operating Activities:		_	_
Receipts from customers	\$	34,633,989	\$ 34,377,152
Payments to suppliers		(8,573,470)	(10,246,305)
Payments to employees		(11,237,096)	(11,163,539)
Other receipts		822,087	 1,248,299
Net cash provided (used) by operating activities	_	15,645,510	 14,215,607
Cash Flows from Capital and Related Financing Activities:			
Acquisition and construction of capital assets		(20,720,584)	(11,394,323)
Proceeds from sale of property, plant, and equipment		-	92,182
Costs of issuance		(19,340)	-
Principal paid on bond maturities and other long-term debt		(25,113,000)	(6,213,000)
Interest paid on bond maturities and other long-term debt		(1,831,892)	(1,802,375)
Customer fees received		1,702,224	3,133,918
Proceeds from issuance of debt		20,267,468	
Net cash provided (used) by capital and related financing activities		(25,715,124)	 (16,183,598)
Cash Flows from Investing Activities:			
Interest and dividends on investments		56,524	 32,802
Net increase (decrease) in cash and cash equivalents		(10,013,090)	(1,935,189)
Cash and Cash Equivalents:			
Beginning of year - July 1		33,130,553	 35,065,742
End of year - June 30	\$	23,117,463	\$ 33,130,553

STATEMENTS OF CASH FLOWS PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

	 2018		2017
Reconciliation of Operating Income (Loss) to	 	'	
Net Cash Provided (Used) by Operating Activities:			
Operating income (loss)	\$ 6,065,588	\$	5,164,837
Adjustments to reconcile operating income (loss) to			
net cash provided (used) by operating activities:			
Depreciation	9,226,257		8,909,129
Pension (benefit) expense	(18,235)		-
Changes in assets and liabilities:			
(Increase) decrease in trade accounts receivable	(957,258)		(573,132)
(Increase) decrease in other receivables	(888,091)		247,811
(Increase) decrease in deferred outflows	-		(1,761,424)
(Increase) decrease in inventory	(144,582)		(154,524)
(Increase) decrease in prepaid expenses	210,586		49,218
(Increase) decrease in deferred outflows of resources for OPEB	(217,253)		-
(Increase) decrease in deferred outflows of resources for pensions	914,039		(183,996)
(Increase) decrease in deferred outflows of resources			
for deferred refunding costs	(358,592)		(914,692)
Increase (decrease) in trade and construction contracts payable	2,073,229		727,954
Increase (decrease) in customer deposits	(241,818)		210,378
Increase (decrease) accrued expenses	8,772		(117,060)
Increase (decrease) compensated absences	15,490		10,976
Increase (decrease) in net pension liability	(792,103)		2,195,661
Increase (decrease) in deferred inflows of resources for pensions	(37,134)		(88,722)
Increase (decrease) in deferred inflows of resources for OPEB	1,110,457		-
Increase (decrease) in other post-employment benefits	 (323,842)		493,193
Net cash provided (used) by operating activities	\$ 15,645,510	\$	14,215,607
Non-Cash Capital and Related Financing Activities:			
Property, plant, and equipment contributed by private developers	\$ 1,509,516	\$	2,363,076

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

1. Summary of Significant Accounting Policies

The accounting policies of the Orange Water and Sewer Authority conform to generally accepted accounting principles as they apply to governments. The following is a summary of the more significant accounting policies:

A. Reporting Entity

The Orange Water and Sewer Authority (the "Authority") was created pursuant to Chapter 162A of the North Carolina General Statutes by the Board of Commissioners of Orange County and the Town Council of Chapel Hill and the Board of Aldermen of the Town of Carrboro in June 1975, as a public entity, politic and corporate, for the purpose of acquiring, consolidating, improving, and operating the existing water and sewer systems serving the above governmental jurisdictions and certain contiguous areas. The Authority is a separate governmental unit granted independent authority by the North Carolina General Statutes to allow the Authority's Board of Directors to set rates, fees, and charges without oversight, supervision, or direction from any other state or local entity or agency.

Because the Town Council of Chapel Hill appoints a majority of the Authority's Board of Directors and may remove them without cause, the Authority falls within the definition of a "Component Unit" provided in applicable accounting standards. For this reason, the Authority's financial data is incorporated into the Comprehensive Annual Financial Report of the Town of Chapel Hill.

B. Basis of Presentation

The business-type activities are financed in whole or in part by fees charged to external parties. All activities of the Authority are considered business-type activities.

Fund Financial Statements. The fund financial statements provide information about the Authority's funds.

Proprietary fund operating revenues, such as charges for services, result from exchange transactions associated with the principal activity of the fund. Exchange transactions are those in which each party receives and gives up essentially equal values. Non-operating revenues, such as subsidies and investment earnings, result from non-exchange transactions. The Authority has one fund category - proprietary funds.

Enterprise Fund

The Enterprise Fund is used to account for those operations that (a) are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that the periodic determination of revenues earned, expenses incurred and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes. The Authority operates as a singular enterprise fund.

The Enterprise Fund is considered a major fund for the year ended June 30, 2018.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

C. Measurement Focus and Basis of Accounting

In accordance with North Carolina General Statutes, all funds of the Authority are maintained during the year using the modified accrual basis of accounting.

Proprietary Fund Financial Statements. The proprietary fund financial statements are reported using the economic resources measurement focus. The proprietary fund financial statements are reported using the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place. 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. The principal operating revenues of the Authority's Enterprise Fund are charges to customers for sales and services. 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.

D. Budgetary Data

Annual budgets are adopted on a basis consistent with provisions of the North Carolina Local Government Budget and Fiscal Control Act, which is the modified accrual method of accounting. All annual appropriations lapse at fiscal year-end.

The Authority begins developing its budget in the second quarter of each year and the Board of Directors approves the budget in early June after public hearings are held.

Budgeted revenues are reflected by source and budgeted expenses by department. On a periodic basis, as required by changing conditions, the budgeted amounts are amended. The budgeted amounts shown in the supplemental schedules reflect the governing board's amendments through the fiscal year-end. Expenditures may not legally exceed appropriations at the object level.

E. Assets, Liabilities, Deferred Outflows/Inflows of Resources, and Fund Equity

Deposits and Investments

All deposits of the Authority are made in board-designated official depositories and are secured as required by G.S. 159-31.

The Authority may designate, as an official depository, any bank or savings association whose principal office is located in North Carolina. Also, the Authority may establish time deposit accounts such as money market accounts and certificates of deposits.

State law [G.S. 159-30(c)] authorizes the Authority to invest in obligations of the United States or obligations fully guaranteed both as to principal and interest by the United States; obligations of the State of North Carolina; bonds and notes of any North Carolina local government or public authority; obligations of certain non-guaranteed federal agencies; certain high quality issues of commercial paper and bankers' acceptances; and the North Carolina Capital Management Trust ("NCCMT").

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

The Authority's investments with a maturity of more than one year at acquisition and non-money market investments are reported at cost or amortized cost, which approximates their fair value as determined by quoted market prices. The NCCMT Government Portfolio's securities, a SEC-registered 2a-7 government money market fund, is measured at amortized cost, which is the NCCMT's share price. Money market investments that have a remaining maturity at the time of purchase of one year or less are reported at amortized cost.

Cash and Cash Equivalents

The Authority's cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

Restricted Assets

Certain proceeds of the Authority's revenue bonds, as well as certain resources set aside for their repayment, are classified as restricted assets on the Statement of Net Position, because they are maintained in separate bank accounts and their use is limited by applicable bond covenants. Customer deposits held by the Authority before any services were supplied are restricted to the service for which the deposits were collected. Capital reserve amounts are restricted for future maintenance and repairs.

Orange	Water and	Sewer Aut	hority F	Restricted	l Cash
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Business-Type Activities:		2018		2017	
Bond service	\$	5,892,557	\$	5,671,864	
Capital reserve		206,053		171,013	
Customer deposits		1,057,140		1,333,998	
Total business-type activities	\$	7,155,750	\$	7,176,875	

Receivables

All trade receivables are shown net of an allowance for uncollectibles. Trade receivables are determined to be uncollectible based on collection history for similar customers. The Authority grants credit to residential, business and industrial customers, substantially all of whom are local to the Orange County, North Carolina area.

Allowance for Doubtful Accounts

The Authority historically experiences uncollectible accounts, and accounts receivable is shown net of an allowance for doubtful accounts. This amount is estimated by analyzing the percentage of receivables that were written off in prior years. The allowance was \$85,000 at June 30, 2018 and June 30, 2017.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Inventory and Prepaid Items

Materials and supplies are valued at average cost and are held for subsequent use. The cost of these inventories is expensed when consumed rather than when purchased.

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in the Statement of Net Position and expensed as the items are used.

Capital Assets

Capital assets, which include property, plant, equipment, and infrastructure assets, are reported in the financial statements. Capital assets are defined by the Authority as assets with an initial, individual cost of more than \$5,000 and an estimated useful life in excess of one year. Such assets are recorded at historical cost if purchased or constructed. Donated capital assets received prior to June 30, 2015 are recorded at their estimated fair market value at the date of donation. Donated capital assets received after June 30, 2015 are recorded at acquisition value. All other purchased or constructed capital assets are reported at cost or estimated historical cost. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets' lives are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of capital assets is included as part of the capitalized value of the assets constructed.

Property, plant, and equipment are depreciated using the straight-line method by groups or classes of property over the following expected service lives:

	Years
Water treatment and distribution	20-60
Sewer collection and treatment	40-60
Fixtures and equipment	5-20

Assets under capitalized lease obligations are recorded at the discounted present value of the future minimum lease payments at the inception of the respective leases. The amounts capitalized are being amortized by the straight-line method over the lesser of the term of the lease or the estimated life of the asset. Amortization of these assets is included in depreciation expense.

Deferred Outflows/Inflows of Resources

In addition to assets, the Statement of Net 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 and so will not be recognized as an expense or expenditure until then. The Authority has several items that meet this criterion, an unamortized loss on bond defeasance for Water and Sewer Refunding bonds, pension related deferrals, contributions made to the pension plan in the current fiscal year, contributions made to the OPEB plan in the current fiscal year, and OPEB related deferrals. In

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

addition to liabilities, the Statement of Net 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 and so will not be recognized as revenue until then. The Authority has two items that meets this criterion in the current year – pension related deferrals and OPEB related deferrals.

Compensated Absences

It is the Authority's policy to permit employees to accumulate earned, but unused, vacation and sick pay benefits. There is no liability for unpaid accumulated sick leave since the Authority does not have a policy to pay any amounts when employees separate from service with the Authority. All vacation pay is accrued when incurred in the financial statements. At June 30, 2018 and 2017, the Authority had recorded a liability for accrued vacation and the salary-related payments of \$571,149 and \$555,659, respectively.

Long-Term Debt

Long-term debt is reported net of applicable bond premium or discount, which are deferred and amortized over the life of the bonds using the effective interest method.

Net Position

Net position in the proprietary fund financial statements is classified as net investment in capital assets; restricted; and unrestricted. Restricted net position represents constraints on resources that are either externally imposed by creditors, grantors, contributors, or laws or regulations of other governments or imposed by law through state statute.

Net position classified as net investment in capital assets, consist of capital assets, net of accumulated depreciation, and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.

Restricted for Capital Reserve – represents a portion of net position that is restricted by revenue source for future maintenance and capital.

Unrestricted net position consists of net position that does not meet the definition of "restricted" or "net investment in capital assets."

F. Operating Revenues and Expenses

Operating revenues and expenses generally result from providing services in connection with the Authority's principal ongoing operations, which is the sale of water and treatment of wastewater for its customers. The Authority also recognizes as operating revenue the portion of tap fees intended to recover the cost of connecting new customers to the system. Operating expense for the Authority includes the cost of services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

G. Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from these estimates.

H. Defined Benefit Cost-Sharing Pension Plans

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net positions of the Local Governmental Employees' Retirement System (LGERS) and additions to/deductions from LGERS fiduciary net positions have been determined on the same basis as they are reported by LGERS. For this purpose, plan member contributions are recognized in the period in which the contributions are due. The Authority's employer contributions are recognized when due and the Authority has a legal requirement to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the state-administered defined benefit pension plans. Investments are reported at fair value.

2. Detail Notes On All Funds

Assets

Deposits

All of the Authority's deposits are either insured or collateralized by using one of two methods. Under the Dedicated Method, all deposits exceeding the federal depository insurance coverage level are collateralized with securities held by the Authority's agents in the unit's name. Under the Pooling Method, which is a collateral pool, all uninsured deposits are collateralized with securities held by the State Treasurer's agent in the name of the State Treasurer. Since the State Treasurer is acting in a fiduciary capacity for the Authority, these deposits are considered to be held by their agents in the Authority's name. The amount of the pledged collateral is based on an approved averaging method for non-interest bearing deposits and the actual current balance for interest-bearing deposits. Depositories using the Pooling Method report to the State Treasurer the adequacy of their pooled collateral covering uninsured deposits. The State Treasurer does not confirm this information with the Authority, or with the escrow agent. Because of the inability to measure the exact amount of collateral pledged for the Authority, under the Pooling Method, the potential exists for undercollaterization, and this risk may increase in periods of high cash flows. However, the State Treasurer of North Carolina enforces strict standards of financial stability for each depository that collateralizes public deposits under the Pooling Method. The Authority has no policy regarding custodial credit risk for deposits but relies on the State Treasurer to enforce standards for minimum capitalization for all pooling method financial institutions and to monitor them for compliance. The Authority complies with the provisions of G.S. 159-31 when designating official depositories and verifying that deposits are properly secured.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

At June 30, 2018, the Authority's deposits had a carrying amount of \$17,161,360 and a bank balance of \$17.088.000. Of the bank balance, \$250,000 was covered by federal depository insurance, and \$16,838,000 in deposits was covered by collateral held under the Pooling Method. The Authority had cash on hand of \$2,700 at June 30, 2018.

At June 30, 2017, the Authority's deposits had a carrying amount of \$27,399,465 and a bank balance of \$27,569,629. Of the bank balance, \$2,293,200 was covered by federal depository insurance, and \$25,276,429 in interest-bearing deposits was covered by collateral held under the Pooling Method. The Authority had cash on hand of \$2,700 at June 30, 2017.

Cash Equivalents

At June 30, 2018 and 2017, the Authority's cash equivalents balances were as follows:

	2018	2017
The North Carolina Capital Management Trust,		
government portfolio	\$ 5,953,403	\$ 5,728,388

Interest Rate Risk. The Authority does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

Credit Risk. The Authority has no policy regarding credit risk. State law limits investments in commercial paper to the top rating issued by nationally recognized statistical rating organizations ("NRSROs"). The Authority's investment in the NCCMT Government Portfolio carried a credit rating of AAAm by Standard & Poor's as of June 30, 2018 and 2017.

Receivables

Receivables, net of allowances for uncollectible accounts, at June 30, 2018 and 2017 were as follows:

	2018	2017
Utility accounts receivable	\$ 5,090,491	\$ 4,133,233
Other receivable	1,938,335	1,050,244
Total receivables, net	\$ 7,028,826	\$ 5,183,477

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Capital Assets

A summary of changes in the Authority's capital assets follows:

]	Balance						Balance	
	Ju	ly 1, 2017	Increases	Decrea	ises	Transfers	Ju	June 30, 2018	
Non-Depreciable Assets:									
Land	\$	17,605,354	\$ -	\$	-	\$ -	\$	17,605,354	
Construction in progress		28,062,921	19,685,332			(7,063,370)		40,684,883	
Total non-depreciable assets		45,668,275	19,685,332			(7,063,370)		58,290,237	
Depreciable Assets:									
Water treatment and distribution	1	163,709,114	460,015		-	3,264,358		167,433,487	
Sewer collection and treatment	2	215,699,542	906,578		-	3,581,102		220,187,222	
Fixtures and equipment		46,004,205	1,178,175			217,910		47,400,290	
Total depreciable assets		125,412,861	2,544,768			7,063,370	_	435,020,999	
Less Accumulated Depreciation:									
Water treatment and distribution		64,426,461	3,599,691		-	-		68,026,152	
Sewer collection and treatment		67,702,086	4,344,494		-	-		72,046,580	
Fixtures and equipment		33,158,067	1,282,072					34,440,139	
Total accumulated depreciation	1	165,286,614	\$ 9,226,257	\$		\$ -	_	174,512,871	
Total depreciable assets	2	260,126,247						260,508,128	
Capital assets, net	\$ 3	305,794,522					\$	318,798,365	

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

	Balance July 1, 2016	Increases	Decreases	Transfers	Balance June 30, 2017	
Non-Depreciable Assets:						
Land	\$ 17,605,354	\$ -	\$ -	\$ -	\$ 17,605,354	
Construction in progress	32,601,526	9,857,418		(14,396,023)	28,062,921	
Total non-depreciable assets	50,206,880	9,857,418		(14,396,023)	45,668,275	
Depreciable Assets:						
Water treatment and distribution	162,205,005	1,035,406	-	468,703	163,709,114	
Sewer collection and treatment	201,626,364	1,160,914	-	12,912,264	215,699,542	
Fixtures and equipment	43,558,605	1,703,661	(273,117)	1,015,056	46,004,205	
Total depreciable assets	407,389,974	3,899,981	(273,117)	14,396,023	425,412,861	
Less Accumulated Depreciation:						
Water treatment and distribution	60,774,202	3,652,259	-	-	64,426,461	
Sewer collection and treatment	63,631,954	4,070,132	-	-	67,702,086	
Fixtures and equipment	32,227,612	1,186,738	(256,283)		33,158,067	
Total accumulated depreciation	156,633,768	\$ 8,909,129	\$ (256,283)	<u> </u>	165,286,614	
Total depreciable assets	250,756,206				260,126,247	
Capital assets, net	\$ 300,963,086				\$ 305,794,522	

Net Investment in Capital Assets

The total net investment in capital assets is composed of the following elements:

	2018	2017
Capital assets	\$ 318,798,365	\$ 305,794,522
Total debt, gross	(65,180,515)	(70,576,258)
Deferred charge		
related to debt	1,518,829	1,710,448
Net investment		
in capital assets	\$ 255,136,679	\$ 236,928,712

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Long-Term Debt

Long-term debt as of June 30, 2018 and 2017 consists of the following:

	2018	2017
Revenue Bonds: Revenue bonds payable, Series 2018 Refunding Revenue Serial Bonds, in the amount of \$18,075,000, issued April 10, 2018, with a coupon rate of 2.3%, final maturity July 2029, net of unamortized premium of \$2,147,151 at June 30, 2018	\$ 18,075,000	\$ -
Revenue bonds payable, Series 2015 Refunding Revenue Serial Bonds, in the amount of \$8,995,000, issued July 1, 2015, with a coupon rate of 4.5%, final maturity July 2031, net of deferred refunding loss of \$27,519 at June 30, 2018	6,470,000	8,915,000
Revenue bonds payable, Series 2014 Refunding Revenue Serial Bonds, in the amount of \$15,695,000, issued December 18, 2014, with coupon rates of 3.0% and 5.0%, final maturity July 2031, net of unamortized premium of \$911,828 at June 30, 2018	14,955,000	15,695,000
Revenue bonds payable, Series 2010 Refunding Revenue Serial Bonds, in the amount of \$21,645,000, issued September 30, 2010, with coupon rates of 3.0% and 5.0%, final maturity July 2026, net of unamortized premium of \$257,227 at June 30, 2018	15,625,000	17,225,000
Revenue bonds payable, Series 2004A Revenue Bonds, in the amount of \$21,265,000, issued June 1, 2004, with coupon rates of 3.0% and 5.25%, final maturity July 2021; revenue bonds payable, Series 2004B Revenue Bonds, in the amount of \$20,000,000, issued June 1, 2004, bearing a weekly interest rate determined		
by a remarketing agent (0.90% at June 30, 2017), final maturity July 1, 2029. Refunded in fiscal year 2018.		20,000,000
	\$ 55,125,000	\$ 61,835,000
Note Payable:	2018	2017
Note payable to NCDEQ in the amount of \$6,560,000 issued October 4, 2014, interest at 0%, Federal Revolving Loan, beginning May 2015, payable in annual installments of \$328,000, with a final		
payment due in May 2034	\$ 5,248,000	\$ 5,576,000

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

A Drinking Water State Revolving Fund Loan note payable to NCDEQ in the amount of \$1,056,000 was issued April 23, 2018 at an interest rate of 1.53%, payable in annual installments beginning upon completion of the Brandywine Road Water Main Replacement project. As of June 30, 2018, no drawdowns have been made on this loan.

Bond payable maturities are as follows:

Year Ending June 30	N	I aturities	of and R	nortization Premiums d Deferred efunding Losses		Total	Interest
2019	\$	4,940,000	\$	544,907	\$	5,484,907	\$ 1,422,502
2020		5,130,000		523,529		5,653,529	1,307,003
2021		4,105,000		495,166		4,600,166	1,162,082
2022		3,875,000		452,858		4,327,858	997,125
2023		4,150,000		368,514		4,518,514	865,500
2024-2028		22,810,000		851,446		23,661,446	2,361,163
2029-2033		10,115,000		52,265	_	10,167,265	 423,175
Total	\$	55,125,000	\$	3,288,685	\$	58,413,685	\$ 8,538,550

Note payable maturities are as follows:

Year Ending						
June 30	Maturities	Interest	Total			
2019	\$ 328,000	\$ -	\$ 328,000			
2020	328,000	-	328,000			
2021	328,000	-	328,000			
2022	328,000	-	328,000			
2023	328,000	-	328,000			
2024-2028	1,640,000	-	1,640,000			
2029-2033	1,640,000	-	1,640,000			
2034	328,000		328,000			
Total	\$5,248,000	\$ -	\$ 5,248,000			

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Current Refunding

On April 10, 2018, the Authority issued \$18,075,000 of Series 2018 revenue bonds to provide resources to current refund \$20,000,000 of Series 2004A revenue bonds. This refunding was undertaken to reduce the total debt service payments over the next 12 years by \$427,280 and resulted in an economic gain of \$291,522.

Advance Refunding

On December 18, 2014, the Authority issued \$15,695,000 of Series 2014 revenue bonds to provide resources that were placed in an irrevocable trust to be used for all future debt service payments of \$16,430,000 of Series 2006 revenue bonds. As a result, the refunded bonds are considered to be defeased and the liability has been removed from the Statement of Net Position. The reacquisition price exceeded the net carrying amount of the old debt by \$561,010. This amount is being amortized over the life of the refunded debt, which is shorter than the life of the new debt issued. This advanced refunding was undertaken to reduce total debt service payments over the next 17 years by \$1,984,121 and resulted in an economic gain of \$1,596,310. On June 30, 2018, \$16,430,000 of bonds outstanding are considered defeased.

Direct Purchase Forward Refunding

On July 1, 2015, the Authority issued \$8,995,000 of Series 2015 revenue bonds to provide resources that were placed in an irrevocable trust to be used for all future debt service payments of \$8,930,000 of Series 2005 revenue bonds. As a result, the refunded bonds are considered to be defeased and the liability has been removed from the Statement of Net Position. The reacquisition price exceeded the net carrying amount of the old debt by \$65,000. This amount is being amortized over the life of the new debt issued, which is shorter than the life of the refunded debt. This direct purchase forward refunding was undertaken to reduce total debt service payments over the next 5 years by \$613,660 and resulted in an economic gain of \$584,285. On June 30, 2018, \$8,930,000 of bonds outstanding is considered defeased.

Long-term liability activity for the years ended June 30, 2018 and 2017 is as follows:

	Balance July 1, 2017	Additions	Retirements	Balance June 30, 2018	Due Within One Year
Notes Payable	\$ 5,576,000	\$ -	\$ 328,000	\$ 5,248,000	\$ 328,000
Bonds Payable:					
Revenue bonds	61,835,000	18,075,000	24,785,000	55,125,000	4,940,000
For issuance premiums	3,165,258	2,192,468	550,211	4,807,515	736,526
Compensated absences	555,659	823,042	807,552	571,149	428,362
Net pension liability (LGERS)	2,733,991	-	792,103	1,941,888	-
Total OPEB liability	13,303,313		564,770	12,738,543	
Total	\$ 87,169,221	\$ 21,090,510	\$ 27,827,636	\$ 80,432,095	\$ 6,432,888

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

	Balance			Balance	Due Within
	July 1, 2016	Additions	Retirements	June 30, 2017	One Year
Notes Payable	\$ 5,904,000	\$ -	\$ 328,000	\$ 5,576,000	\$ 328,000
Bonds Payable:					
Revenue bonds	67,720,000	-	5,885,000	61,835,000	4,785,000
For issuance premiums	4,271,568	-	1,106,310	3,165,258	504,894
Compensated absences	544,683	505,995	495,019	555,659	495,019
Net pension liability (LGERS)	538,330	2,195,661	-	2,733,991	-
Total OPEB liability	6,295,768	762,025	268,832	6,788,961	
Total	\$ 85,274,349	\$ 3,463,681	\$ 8,083,161	\$ 80,654,869	\$ 6,112,913

The Authority has pledged future water and sewer customer revenues, net of specified operating expenses, to repay \$55,125,000 in revenue bonds issued in 2004A, 2010, 2014, 2015 and 2018. Proceeds from the bonds were used for rehabilitation or expansion of the Authority's water and sewer systems. Annual principal and interest payments are expected to require less than 23% of net revenues. Principal and interest on the bonds are payable through 2033, solely from the water and sewer customer net revenues. The total principal and interest remaining to be paid on the bonds is \$63,663,550. Principal and interest paid in the years ended June 30, 2018 and 2017 were \$7,007,230 and \$7,930,519, respectively, and total customer net revenues for the years ended June 30, 2018 and 2017 were \$39,199,149 and \$35,740,394, respectively.

The Authority is in compliance with the covenants to rates, fees, rentals, and charges in the Bond Order, authorizing the issuance of the Water and Sewer Revenue Bonds, Series 2004A, 2010, 2014, 2015, and 2018. The Bond Order requires the debt service coverage ratio to be no less than 120% of the debt service requirements for parity indebtedness.

The debt service coverage ratio calculation for the year ended June 30, 2018, is as follows:

Operating revenues and charges for services	\$ 39,199,149
Operating expenses*	21,485,454
Income available for debt service	<u>\$ 17,713,695</u>
Debt service, principal and interest paid	\$ 7,007,230
Debt service coverage ratio for parity debt	<u>252.79%</u>

^{*}Per rate covenants, this does not include depreciation, amortization, interest expense, or OPEB.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

3. Pension Plan Obligations

Local Governmental Employees' Retirement System

Plan Description. The Authority is a participating employer in the state-wide Local Governmental Employees' Retirement System (LGERS), a cost-sharing multiple-employer defined benefit pension plan administered by the State of North Carolina. LGERS membership is comprised of general employees and local law enforcement officers (LEOs) of participating local governmental entities. Article 3 of G.S. Chapter 128 assigns the authority to establish and amend benefit provisions to the North Carolina General Assembly. Management of the plan is vested in the LGERS Board of Trustees, which consists of 13 members – nine appointed by the Governor, one appointed by the State Senate, one appointed by the State House of Representatives, and the State Treasurer and State Superintendent, who serve as ex-officio members. The LGERS is included in the Comprehensive Annual Financial Report (CAFR) for the State of North Carolina. The state's CAFR includes financial statements and required supplementary information for LGERS. That report may be obtained by writing to the Office of the State Controller, 1410 Mail Service Center, Raleigh, North Carolina 27699-1410, by calling (919) 981-5454, or at www.osc.nc.gov.

Benefits Provided. LGERS provides retirement and survivor benefits. Retirement benefits are determined as 1.85% of the member's average final compensation times the member's years of creditable service. A member's average final compensation is calculated as the average of a member's four highest consecutive years of compensation. Plan members are eligible to retire with full retirement benefits at age 65 with five years of creditable service, at age 60 with 25 years of creditable service, or at any age with 30 years of creditable service. Plan members are eligible to retire with partial retirement benefits at age 50 with 20 years of creditable service or at age 60 with five years of creditable service (age 55 for firefighters). Survivor benefits are available to eligible beneficiaries of members who die while in active service or within 180 days of their last day of service and who have either completed 20 years of creditable service regardless of age (15 years of creditable service for firefighters and rescue squad members who are killed in the line of duty) or have completed five years of service and have reached age 60. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life or a return of the member's contributions. The plan does not provide for automatic post-retirement benefit increases. Increases are contingent upon actuarial gains of the plan.

LGERS plan members who are LEOs are eligible to retire with full retirement benefits at age 55 with five years of creditable service as an officer, or at any age with 30 years of creditable service. LEO plan members are eligible to retire with partial retirement benefits at age 50 with 15 years of creditable service as an officer. Survivor benefits are available to eligible beneficiaries of LEO members who die while in active service or within 180 days of their last day of service and who also have either completed 20 years of creditable service regardless of age, or have completed 15 years of service as a LEO and have reached age 50, or have completed five years of creditable service as a LEO and have reached age 55, or have completed 15 years of creditable service as a LEO if killed in the line of duty. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life or a return of the member's contributions.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Contributions. Contribution provisions are established by General Statute 128-30 and may be amended only by the North Carolina General Assembly. Authority employees are required to contribute 6% of their compensation. Employer contributions are actuarially determined and set annually by the LGERS Board of Trustees. The Authority's contractually required contribution rate for the year ended June 30, 2018, was 7.55% of compensation for general employees, actuarially determined as an amount that, when combined with employee contributions, is expected to finance the costs of benefits earned by employees during the year. Contributions to the pension plan from the Authority were \$617,219, for the year ended June 30, 2018.

Refunds of Contributions – Authority employees who have terminated service as a contributing member of LGERS, may file an application for a refund of their contributions. By state law, refunds to members with at least five years of service include 4% interest. State law requires a 60-day waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's right to employer contributions or any other benefit provided by LGERS.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2018, the Authority reported a liability of \$1,941,888 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2017. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2016. The total pension liability was then rolled forward to the measurement date of June 30, 2017 utilizing update procedures incorporating the actuarial assumptions. The Authority's proportion of the net pension liability was based on a projection of the Authority's long-term share of future payroll covered by the pension plan, relative to the projected future payroll covered by the pension plan of all participating LGERS employers, actuarially determined. At June 30, 2017, the Authority's proportion was 0.12711%, which was a decrease of 0.00171% from its proportion measured as of June 30, 2016.

For the year ended June 30, 2018, the Authority recognized pension expense of \$683,786. At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

]	De fe rre d	Deferred Inflows of	
	O	utflows of		
	R	esources	Re	sources
Differences between expected and actual experience	\$	111,871	\$	54,969
Changes of assumptions		277,329		-
Net difference between projected and actual earnings				
on pension plan investments		471,493		-
Changes in proportion and differences between employer				
contributions and proportionate share of contributions		42,529		3,699
Employer contributions subsequent to the measurement date		617,219		
Total	\$	1,520,441	\$	58,668

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

\$617,219 reported as deferred outflows of resources related to pensions resulting from Authority contributions subsequent to the measurement date will be recognized as a decrease of the net pension liability in the year ended June 30, 2019. Other amounts reported as deferred inflows and outflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending	
June 30	Amount
2019	\$ 126,823
2020	574,159
2021	289,210
2022	(145,638)
Total	\$ 844,554

Actuarial Assumptions. The total pension liability in the December 31, 2016 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.0 percent
Salary increases	3.50 to 7.75 percent, including inflation
	and productivity factor
Investment rate of return	7.20 percent, net of pension plan
	investment expense, including inflation

The plan currently uses mortality tables that vary by age, gender, employee group (i.e. general, law enforcement officer) and health status (i.e. disabled and healthy). The current mortality rates are based on published tables and based on studies that cover significant portions of the U.S. population. The mortality rates also contain a provision to reflect future mortality improvements.

The actuarial assumptions used in the December 31, 2016 valuation were based on the results of an actuarial experience study for the period January 1, 2010 through December 31, 2014.

Future ad hoc Cost of Living Adjustment amounts are not considered to be substantively automatic and are therefore not included in the measurement.

The projected long-term investment returns and inflation assumptions are developed through review of current and historical capital markets data, sell-side investment research, consultant whitepapers, and historical performance of investment strategies. Fixed income return projections reflect current yields across the U.S. Treasury yield curve and market expectations of forward yields projected and interpolated for multiple tenors and over multiple year horizons. Global public equity return projections are established through analysis of the equity risk premium and the fixed income return projections.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Other asset categories and strategies' return projections reflect the foregoing and historical data analysis. These projections are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2017 are summarized in the following table:

		Long-Term
	Target	Expected Real
Asset Class	Allocation	Rate of Return
Fixed income	29.0%	1.4%
Global equity	42.0%	5.3%
Real estate	8.0%	4.3%
Alternatives	8.0%	8.9%
Credit	7.0%	6.0%
Inflation protection	<u>6.0%</u>	4.0%
Total	<u>100%</u>	

The information above is based on 30-year expectations developed with the consulting actuary for the 2016 asset, liability, and investment policy study for the North Carolina Retirement Systems, including LGERS. The long-term nominal rates of return underlying the real rates of return are arithmetic annualized figures. The real rates of return are calculated from nominal rates by multiplicatively subtracting a long-term inflation assumption of 3.00%. All rates of return and inflation are annualized.

Discount Rate. The discount rate used to measure the total pension liability was 7.20%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Authority's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate. The following presents the Authority's proportionate share of the net pension liability (asset) calculated using the discount rate of 7.20 percent, as well as what the Authority's proportionate share of the net pension asset or net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.20 percent) or 1-percentage-point higher (8.20 percent) than the current rate:

	1% Decrease (6.20%)]	Current Discount te (7.20%)	1% Increase (8.20%)	
Authority's proportionate share of the net pension liability (asset)	\$	5,829,594	\$	1,941,888	\$ (1,303,118)	

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in the separately issued Comprehensive Annual Financial Report (CAFR) for the State of North Carolina.

Other Post-Employment Benefits (OPEB)

Plan Description. The Authority administers a single-employer defined benefit plan (the OPEB plan) that provides health and life insurance benefits to eligible retirees. The Authority has the authority to establish and amend the benefit terms and financing requirements. No assets are accumulated in a trust that meets the criteria in Paragraph 4 of GASB Statement No. 75.

Benefits Provided. An employee who retires with 30 or more years of service, or is at least age 60 with at least 10 years of service may continue in the Authority's group health plan until death. Eligible retirees are also provided life insurance coverage of \$5,000. Retiree cost sharing is as follows: For retirees age 60 with 10 to 15 years of service, the retiree pays 50% of the retiree premium. For retirees age 60 with 15 to 20 years of service, the retiree pays 25% of the retiree premium. For retirees age 60 with 20 or more years of service, the retiree pays 0% of the retiree premium. There is no spousal coverage provided. The Authority may amend the benefit provisions at any time. Coverage for all retirees who are eligible for Medicare will be transferred to a Medicare Supplemental plan after qualifying for Medicare. A separate stand-alone report is not issued.

All active full-time employees are eligible for membership. At June 30, 2017, the plan membership consisted of:

<u>Members</u>	
Retirees and dependents receiving benefits	35
Active members	128
Total	163

Total OPEB Liability

The Authority's total OPEB Liability of \$12,738,543 was measured as of June 30, 2017 and was determined by an actuarial valuation as of that date.

Actuarial Assumptions and Other Inputs. The total OPEB liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement unless otherwise specified:

Inflation 3.0 percent
Salary increases 3.50 - 7.75 percent, average, including inflation

Discount rate 3.56 percent

Healthcare cost trend rates Pre-Medicare - 7.50% for 2017 decreasing to an

ultimate rate of 5.00% by 2023

Medicare - 5.50% for 2017 decreasing to an ultimate

rate of 5.00% by 2020

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

The discount rate used to measure the total OPEB liability is based on the June average of the Bond Buyer General Obligation 20-year Municipal Bond Index published weekly by The Bond Buyer.

Changes in the Total OPEB Liability

Total OPEB Liability:

Balance at July 1, 2017	\$ 13,303,313
Changes for the year:	
Service cost at end of year	537,550
Interest	396,831
Difference between expected and actual experience	23,866
Changes of assumptions or other inputs	(1,282,089)
Benefit payments and implicit subsidy credit	(240,928)
Net change in total OPEB liability	(564,770)
Balance at June 30, 2018	\$ 12,738,543

Changes in assumptions and other inputs reflect a change in the discount rate from 3.01% to 3.56%.

Mortality rates were based on the RP-2014 mortality tables, with adjustments for LGERS experience and generational mortality improvements using Scale MP-2015.

The demographic actuarial assumptions for retirement, disability incidence, withdrawal, and salary increases used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2010 – December 31, 2014, adopted by the LGERS.

The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the June 30, 2017 valuation were based on a review of recent plan experience done concurrently with the June 30, 2017 valuation.

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate. The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.56 percent) or 1-percentage-point higher (4.56 percent) than the current discount rate:

	Current					
		1% Decrease		Discount		1% Increase
		(2.56%)		Rate (3.56%)		(4.56%)
Total OPEB Liability	\$	15,208,207	\$	12,738,543	\$	10,800,837

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates. The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	(Pre-Medicare - 6.50%		(1	Pre-Medicare - 7.50%	(Pre-Medicare - 8.50%		
		Medicare - 4.50%)		Medicare - 5.50%)		Medicare - 6.50%)	
Total OPEB Liability	\$	10,649,333	\$	12,738,543	\$	15,463,494	

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to **OPEB**

For the year ended June 30, 2018, the Authority recognized OPEB expense of \$765,944. At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Oı	Deferred of esources	Deferred Inflows of Resources		
Differences between expected and actual experience	\$	20,671	\$	-	
Changes of assumptions or other inputs		-		1,110,457	
Contributions made to the OPEB plan in the current year		196,582		_	
Total	\$	217,253	\$	1,110,457	

\$196,582 reported at deferred outflows of resources related to pensions resulting from benefit payments made and administrative expenses incurred subsequent to the measurement date will be recognized as a decrease of the total pension liability in the year ended June 30, 2019. Other amounts reported as deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending June 30	Amount
2019	\$ (168,437)
2020	(168,437)
2021	(168,437)
2022	(168,437)
2023	(168,437)
Thereafter	(247,601)
Total	\$ (1,089,786)

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

Other Employment Benefits

The Authority has elected to provide death benefits to employees through the Death Benefit Plan for members of the Local Government Employees' Retirement System (Death Benefit Plan), a multiple-employer, state-administered, cost-sharing plan funded on a one-year term cost basis. The beneficiaries of those employees who die in active service after one year of contributing membership in the System, or who die within 180 days after retirement or termination of service and have at least one year of contributing membership service in the System at the time of death are eligible for death benefits. Lump sum death benefit payments to beneficiaries are equal to the employee's 12 highest months' salary in a row during the 24 months prior to the employee's death, but the benefit may not exceed \$50,000 or be less than \$25,000. Because all death benefit payments are made from the Death Benefit Plan and not by the Authority, the Authority does not determine the number of eligible participants. The Authority has no liability beyond the payment of monthly contributions. The contributions to the Death Benefit Plan cannot be separated between the post-employment benefit amount and the other benefit amount. Contributions are determined as a percentage of monthly payroll based upon rates established annually by the state. Separate rates are set for employees not engaged in law enforcement and law enforcement officers. The Authority considers these contributions to be immaterial.

4. Deferred Outflows and Inflows of Resources

The Authority has several deferred outflows and deferred inflows of resources comprised of the following:

	2018		2017	
Deferred Outflows:				
Contributions to pension plan in current fiscal year	\$	617,219	\$	598,984
Pension deferrals		903,222		1,817,261
Contributions to OPEB plan in current fiscal year		196,582		-
OPEB deferrals		20,671		-
Deferred charge on refunding		1,518,829		1,710,448
Total	\$	3,256,523	\$	4,126,693
Deferred Inflows:				
Pension deferrals	\$	58,668	\$	95,802
OPEB deferrals		1,110,457		_
Total	\$	1,169,125	\$	95,802

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

5. Risk Management and Commitments

Risk Management. The Authority is exposed to various risks of losses related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees and natural disasters. The Authority has property, general liability, workers' compensation, and employee health coverage. Claims have not exceeded coverage in any of the past three fiscal years. The Authority currently does not carry flood insurance.

In accordance with G.S. 159-29, the Authority's employees that have access to \$100 or more at any given time of the Authority's funds are performance bonded through a commercial surety bond. The Finance Officer is individually bonded for \$200,000. The remaining employees that have access to funds are bonded under a blanket bond for \$200,000.

Commitments. The Authority is committed under various contracts for the completion of water and wastewater treatment facilities and other water and sewer projects. Management estimates the cost to complete these contracts to be approximately \$9,911,496 at June 30, 2018.

6. Net Position

At June 30, 2018 and 2017, the Board of Directors had approved the use of the unrestricted net position for the following purposes:

	 2018	2017
Operating reserve	\$ 9,495,342	\$ 8,303,415
Other reserves	-	4,550,000
Capital projects	 <u>-</u>	 13,706,907
Total	\$ 9,495,342	\$ 26,560,322

7. Summary Disclosure of Significant Contingencies

Federal and State-Assisted Programs

The Authority has received proceeds from federal and state grants. Periodic audits of these grants are required and certain costs may be questioned as not being appropriate expenditures under the grant agreements. Such audits could result in the refund of grant monies to the grantor agencies. Management believes that any required refunds will be immaterial. No provisions have been made in the accompanying financial statements for the refund of grant monies.

8. Reclassifications

Certain reclassifications have been made to the prior year's financial statements to conform to the current year's presentation. These reclassifications had no effect on previously reported results of operations or net position.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2018 AND 2017

9. Restatement

Change in Accounting Principle

The Authority implemented Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, in the fiscal year ending June 30, 2018. The implementation of the statement required the Authority to record beginning total OPEB liability and the effects on net position of benefit payments and administrative expenses paid by the Authority related to OPEB during the measurement period (fiscal year ending June 30, 2017). Beginning deferred outflows and inflows of resources associated with the implementation were excluded from the restatement. As a result, net position for the business-type activities decreased by \$6,273,424.

10. Significant Effects of Subsequent Events

Subsequent to year end, a Drinking Water State Revolving Fund Loan note payable to NCDEQ in the amount of \$5,131,656 was issued July 24, 2018 at an interest rate of 1.53%, payable in annual installments on May 1st beginning upon completion of the Advanced Metering Infrastructure Project. As of June 30, 2018, no drawdowns have been made on this loan.

OTHER POST-EMPLOYMENT BENEFITS REQUIRED SUPPLEMENTARY INFORMATION FOR THE YEAR ENDED JUNE 30, 2018

Schedule of Changes in the Total OPEB Liability and Related Ratios

Total OPEB Liability	 2018
Service cost at end of year	\$ 537,550
Interest	396,831
Difference between expected and actual experience	23,866
Changes of assumptions or other inputs	(1,282,089)
Benefit payments and implicit subsidy credit	 (240,928)
Net change in total OPEB liability	(564,770)
Total OPEB liability - beginning	 13,303,313
Total OPEB liability - ending	\$ 12,738,543
Covered payroll	\$ 7,751,275
Total OPEB liability as a percentage of covered payroll	164.34%

Notes to Schedule:

Changes of assumptions: Changes of assumptions and other inputs reflect the effects of changes in the discount rate of each period. The following are the discount rates used in each period:

Fiscal Year	Rate
2018	3.56%

PROPORTIONATE SHARE OF NET PENSION LIABILITY (ASSET) REQUIRED SUPPLEMENTARY INFORMATION LAST FIVE FISCAL YEARS *

Local Government Employees' Retirement System

	2018	2017	2016	2015	2014
Authority's proportion of the net pension liability (asset) (%)	0.12711%	0.12882%	0.11995%	0.12040%	11.89000%
Authority's proportion of the net pension liability (asset) (\$)	\$ 1,941,888	\$ 2,733,991	\$ 538,330	\$ (709,819)	\$ 1,433,202
Authority's covered-employee payroll	\$ 8,194,045	\$ 6,980,328	\$ 7,352,374	\$ 7,297,821	\$ 6,909,854
Authority's proportionate share of the net pension liability (asset) as a percentage of its covered-employee payroll	23.70%	39.17%	7.32%	(9.73%)	20.74%
Plan fiduciary net position as a percentage of the total pension liability	94.18%	91.47%	98.09%	102.64%	94.35%

^{*} The amounts presented for each fiscal year were determined as of the prior fiscal year ending June 30

The pension schedules are intended to report information for ten years, and additional years' information will be displayed as it becomes available.

CONTRIBUTIONS REQUIRED SUPPLEMENTARY INFORMATION LAST FIVE FISCAL YEARS

Local Government Employees' Retirement System

				3						
	2018 2017			2016	2015			2014		
Contractually required contribution	\$	617,219	\$	598,984	\$	510,262	\$	519,888	\$	516,608
Contributions in relation to the contractually required contribution		617,219	_	598,984	_	510,262	_	519,888	_	516,608
Contribution deficiency (excess)	\$		\$		\$		\$		\$	
Covered-employee payroll	\$	8,171,152	\$	8,194,045	\$	6,980,328	\$	7,352,374	\$	7,297,821
Contributions as a percentage of covered-employee payroll		7.55%		7.31%		7.31%		7.07%		7.08%

The pension schedules are intended to report information for ten years, and additional years' information will be displayed as it becomes available.

	Final Budget			Actual	Variance Over/Under			
Revenues:								
Operating revenues:								
Water	\$	17,824,170	\$	19,013,363	\$	1,189,193		
Sewer		16,734,274		16,868,447		134,173		
Reclaimed water		450,060		441,303		(8,757)		
Service initiation fees		165,650		156,225		(9,425)		
Other		717,138		1,063,905		346,767		
Total operating revenues		35,891,292		37,543,243		1,651,951		
Non-operating revenues:								
Interest income		38,441		56,524		18,083		
Customer fees		1,416,657		1,599,382		182,725		
Total non-operating revenues		1,455,098		1,655,906		200,808		
Total revenues	-	37,346,390		39,199,149		1,852,759		
Expenditures:								
Water supply and treatment:								
Salaries and wages		1,422,170		1,510,042		(87,872)		
Fringe benefits		686,471		568,436		118,035		
Materials and supplies		198,394		210,714		(12,320)		
Chemicals		1,249,647		1,613,128		(363,481)		
Utilities		363,020		448,265		(85,245)		
Maintenance		1,072,495		1,002,399		70,096		
Professional services		120,886		600		120,286		
Insurance		-		77,780		(77,780)		
Communication		4,000		1,535		2,465		
Education and development		16,050		9,439		6,611		
Miscellaneous		73,609		74,817		(1,208)		
Total water supply and treatment		5,206,742		5,517,155		(310,413)		
Water distribution:								
Salaries and wages		1,583,841		527,258		1,056,583		
Fringe benefits		843,706		1,417,102		(573,396)		
Materials and supplies		79,227		88,900		(9,673)		
Utilities		194,245		196,933		(2,688)		

	Final Budget	Actual	Variance Over/Under
Maintenance	594,699	498,866	95,833
Insurance	5,247	8,837	(3,590)
Communication	1,500	2,764	(1,264)
Printing and reproduction	3,000	448	2,552
Education and development	17,595	15,937	1,658
Miscellaneous	1,900	2,947	(1,047)
Total water distribution	3,324,960	2,759,992	564,968
Construction credits	(90,000)	(100,491)	10,491
Wastewater treatment:			
Salaries and wages	1,396,772	1,432,562	(35,790)
Fringe benefits	649,595	543,951	105,644
Materials and supplies	906,103	209,906	696,197
Chemicals	-	788,779	(788,779)
Utilities	799,680	608,995	190,685
Maintenance	941,800	842,992	98,808
Professional services	98,652	9,875	88,777
Insurance	-	93,804	(93,804)
Communication	11,400	8,242	3,158
Education and development	20,000	10,374	9,626
Miscellaneous	67,625	57,821	9,804
Total wastewater treatment	4,891,627	4,607,301	284,326
Sewer collections:			
Salaries and wages	523,607	500,522	23,085
Fringe benefits	280,841	244,667	36,174
Materials and supplies	247,415	28,134	219,281
Chemicals	-	186,161	(186,161)
Utilities	140,230	110,638	29,592
Maintenance	190,000	214,229	(24,229)
Insurance	6,184	8,461	(2,277)
Communication	500	73	427
Printing and distribution	4,000	-	4,000
Education and development	14,510	4,537	9,973
Miscellaneous	2,000	5,752	(3,752)
Total sewer collections	1,409,287	1,303,174	106,113

	Final Budget	Actual	Variance Over/Under
Construction credits		(38,978)	38,978
General and administrative:			
Salaries and wages	3,327,127	3,333,652	(6,525)
Fringe benefits	1,539,968	1,053,151	486,817
Materials and supplies	144,890	114,689	30,201
Utilities	191,300	193,191	(1,891)
Maintenance	312,205	326,861	(14,656)
Professional services	1,303,480	1,080,732	222,748
Insurance	-	37,613	(37,613)
Communication	153,687	177,641	(23,954)
Printing and reproduction	29,960	4,037	25,923
Education and development	63,360	61,650	1,710
Miscellaneous	181,885	184,010	(2,125)
Total general and administrative	7,247,862	6,567,227	680,635
Construction credits	(70,000)	(123,422)	53,422
Debt Service:			
Principal		5,113,000	
Interest		1,894,230	
Total debt service	6,949,537	7,007,230	(57,693)
Capital outlay	21,521,276	20,720,584	800,692
Total expenditures	50,391,291	48,219,772	2,171,519
Revenues over (under) expenditures	(13,044,901)	(9,020,623)	4,024,278
Other Financing Sources (Uses):			
Refunding bonds issued	18,075,000	18,075,000	-
Bond refunding premium	2,192,468	2,192,468	-
Payment to bondholders-retired debt	(20,000,000)	(20,000,000)	-
Appropriated fund balance	12,777,433	<u>-</u>	12,777,433
Total other financing sources (uses)	13,044,901	267,468	12,777,433

	Final Budget	Actual	Variance Over/Under
Net change in fund balance	\$ -	(8,753,155)	\$ (8,753,155)
Reconciliation from Budgetary Basis			
(Modified Accrual) to Full Accrual Basis:			
Principal payments debt		5,113,000	
Refunding bonds issued		(18,075,000)	
Bond refunding premium		(2,192,468)	
Payment to bondholders - retired debt		20,000,000	
Change in interest accrual for bonded debt		31,169	
Depreciation		(9,226,257)	
Change in deferred outflows of resources - pensions		(914,039)	
Change in deferred outflows of resources - OPEB		217,253	
Change in net pension liability		792,103	
Change in deferred inflows of resources - pensions		37,134	
Change in deferred inflows of resources - OPEB		(1,110,457)	
Change in compensated absences		(15,490)	
Change in OPEB liability		(765,944)	
Amortization of bond expense and patent		102,842	
Capital outlay		20,720,584	
Costs of issuance		(19,340)	
Capital contributions		1,509,516	
Change in net position		\$ 7,451,451	

SCHEDULE OF REVENUE AND EXPENDITURES - PROJECT FUNDS FROM INCEPTION THROUGH JUNE 30, 2018

		Project Budget		Cumulative Total to June 30, 2018		nexpended dance as of ne 30, 2018
Raw Water Supply Sources:						
Revenues: General Fund	\$	1,734,103	\$	1,584,265	\$	149,839
General Fund	Ψ	1,751,105	Ψ	1,001,200	4	1.5,055
Expenditures:						
Jordan Lake raw water supply intake and pumping facility	\$	332,558	\$	339,356	\$	(6,798)
Stone quarry development		366,545		147,872		218,673
University Lake pump station improvements		115,000		208,518		(93,518)
University Lake permanganate facility		-		46,200		(46,200)
Cane Creek permanganate facility		920,000		842,318		77,682
Total expenditures	\$	1,734,103	\$	1,584,264	\$	149,839
Water Treatment:						
Revenues:						
General Fund	\$	3,481,500	\$	3,591,956	\$	(110,455)
Expenditures:						
Water treatment plant rehabilitation projects	\$	710,500	\$	968,518	\$	(258,018)
Water treatment and Mason Farm waste water treatment plant risk assessment	Ψ	150,000	Ψ	237,512	Ψ	(87,512)
Water facility security upgrades		310,000		490,855		(180,855)
Water treatment plant switchgear upgrade		145.000		86,815		58,185
Water treatment plant and adjacent facilities paving		114,000		89,583		24,417
Water treatment plant chemical containment		127,000		136,273		(9,273)
Water treatment plant generator building louver replacement		128,000		55,193		72,807
Water treatment plant lighting improvements		50,000		41,786		8,214
Water treatment plant power monitoring		-		36,983		(36,983)
Water treatment plant sedimentation basin rehabilitation		202,000		109,076		92,924
Concrete condition assessment		175,000		88,331		86,669
Water treatment plant filter media and backwash improvements		1,130,000		1,019,078		110,922
Water treatment plant flash mix basins isolation valve replacement		25,000		21,840		3,160
Water treatment plant belt filter press rehabilitation		65,000		31,239		33,761
Water treatment plant fluoride system improvements		150,000		178,873		(28,873)
Total expenditures	\$	3,481,500	\$	3,591,955	\$	(110,455)
Water Transmission and Distribution:						
Revenues:						
General Fund	\$	16,802,547	\$	14,876,616	\$	2,163,416
The state of the s		· · · · · · · · · · · · · · · · · · ·			-	· · · · · · · · · · · · · · · · · · ·
Expenditures:	¢.	260,000	e.	1/7.2/2	•	102 727
Water main - road improvement projects	\$		\$	167,263	2	192,737
Water main rehabilitation/replacement projects		5,416,547 107,000		5,227,555		188,992
High priority water main replacement Dobbins Drive water main replacement		134,000		258,214 93,484		(151,214) 40,516
Dobbins Drive water main condition assessment		50,000		93,464		50,000
				723,600		30,000
Cameron Avenue water main replacement Cameron Avenue water main design alternatives assessment		984,000 25,000		723,000		-
Water distribution system hydraulic model		70,000		65,339		4,661
Rosemary, Henderson, Hillsborough Streets water mains		2,110,000		1,938,790		171,210
Advanced meter infrastructure		3,930,000		3,766,533		163,467
Galvanized water main replacement		783,000		212,851		570,149
Kensington water line replacement				85		-
Hillsborough Street water main replacement		1,900,000		2,422,801		-
1		,,		, ,		

SCHEDULE OF REVENUE AND EXPENDITURES - PROJECT FUNDS FROM INCEPTION THROUGH JUNE 30, 2018

		Project Budget		Cumulative Total to ine 30, 2018	В	Jnexpended alance as of une 30, 2018
Distribution system prioritization model		-		102		(102)
Lake Ellen water main replacement		160,000		-		160,000
Brandywine Road water main replacement		739,000		_		739,000
Barnes Street valve evaluation		34,000		-		34,000
Total expenditures	\$	16,802,547	\$	14,876,617	\$	2,163,416
Wastewater Collection Lines:						
Revenues:						
General Fund	\$	16,495,000	\$	11,818,295	\$	4,676,705
Expenditures:						
Gravity sewer condition evaluation	\$	3,135,000	\$	2,369,181	\$	765,819
Gravity sewer rehabilitation		7,416,000		5,718,155		1,697,845
Bolinwood Drive interceptor replacement		904,000		89,881		814,119
Little Creek interceptor replacement		3,059,000		2,568,238		490,762
Dobbins Drive interceptor replacement		255,000		_		255,000
Kenan Stadium interceptor replacement		575,000		568,810		6,190
Creek crossing access improvement		621,000		136,643		484,357
Rogers Road sanitary sewer extension		1,803,000		958,228		844,772
Credit (Orange County reimbursement) Rogers Road sewer		(1,673,000)		(834,669)		(838,331)
Easement acquisition program		99,000 301,000		32,348 211,480		66,652
Gravity sewer hydraulic modeling	•		•		•	89,520
Total expenditures	\$	16,495,000	\$	11,818,295	\$	4,676,705
Wastewater Pumping Stations and Force Mains: Revenues:						
General Fund	\$	4,358,000	\$	4,156,358	\$	201,642
General Fund	D	4,338,000	Ф	4,130,338	Φ	201,042
Expenditures:						
Pump station improvements	\$	312,000	\$	251,945	\$	60,055
Eastowne, Eubanks and Meadowmont I pump station rehabilitation		947,000		1,011,735		(64,735)
Rogerson Drive force main redundancy evaluation		95,000		50,000		45,000
Rogerson Drive pump station rehabilitation		1,619,000		1,136,910		482,090
Knolls pump station rehabilitation/replacement		135,000		53,118		81,882
Rogerson Drive force main rehabilitation		1,250,000		1,652,650	_	(402,650)
Total expenditures	\$	4,358,000	\$	4,156,358	\$	201,642
Wastewater Treatment and Disposal: Revenues:						
General Fund	\$	9,932,000	\$	8,876,214	\$	1,055,784
Expenditures:						
Mason Farm waste water treatment plant rehabilitation and improvement project	\$	1,597,000	\$	1,940,745	\$	(343,745)
Mason Farm waste water treatment plant comprehensive coatings program		1,229,000		1,616,187		(387,187)
Mason Farm waste water treatment plant digesters #1 and #2		2,944,000		2,815,425		128,575
Mason Farm waste water treatment plant IPS rehabilitation		703,000		167,462		535,538
Mason Farm waste water treatment plant solids thickening system improvements		710,000		654,980		55,020
Mason Farm waste water treatment plant non-potable water pump replacement		504,000		70,333		433,667
Mason Farm waste water treatment plant non-potator water pump replacement Mason Farm waste water treatment plant and pump station LED upgrades		74,000		124,962		(50,962)
Mason Farm waste water treatment plant and pump station						, , ,
rehabilitation/replacement		90,000		11,286		78,714

SCHEDULE OF REVENUE AND EXPENDITURES - PROJECT FUNDS FROM INCEPTION THROUGH JUNE 30, 2018

	Project Budget	Cumulative Total to June 30, 2018	Unexpended Balance as of June 30, 2018
Mason Farm waste water treatment plant pavement improvements	133,000	65,668	67,332
Mason Farm waste water treatment plant hyper-pitch mixer blades	58,000	-	58,000
Mason Farm waste water treatment plant piping heat tracing and insulation	35,000	-	35,000
Plants facilities building envelope rehabilitation	600,000	401,409	198,591
Mason Farm waste water treatment plant biosolids conveyance and loading	91,000	-	91,000
Mason Farm waste water treatment plant filtrate side stream treatment	194,000	-	194,000
Mason Farm waste water treatment plant backflow prevention	105,000	138,981	(33,981)
Mason Farm waste water treatment plant secondary clarifier rehabilitation			
and pumping improvements	200,000	162,558	37,442
Mason Farm waste water treatment plant warehouse improvements	25,000	112	24,888
Mason Farm waste water treatment plant supervisory control and data acquisition system (SCADA) upgrade	300,000	395,697	(95,697)
Mason Farm waste water treatment plant digester complex rehabilitation and	300,000	373,077	(75,071)
improvements	40,000	55,143	(15,143)
Mason Farm waste water treatment plant critical spare pumps	125,000	87,807	37,193
Mason Farm waste water treatment plant primary sludge pump station rehabilitation	120,000	07,007	27,172
and old lab building demo	50,000	-	50,000
Mason Farm waste water treatment plant rehabilitation and replacement of			
chemical building and piping	125,000	76,710	48,290
Mason Farm waste water treatment plant headworks rehabilitation	-	18,846	(18,846)
Mason Farm waste water treatment plant remote storage facility electrical upgrade		71,905	(71,905)
Total expenditures	\$ 9,932,000	\$ 8,876,216	\$ 1,055,784
Facility Improvements:			
Revenues:			
General Fund	\$ 2,044,000	\$ 2,069,785	\$ (25,785)
Expenditures:			
Administration building LED lighting retrofit	\$ 95,000	\$ 58,420	\$ 36,580
Administration building HVAC system upgrade	1,949,000	2,011,365	(62,365)
Total expenditures	\$ 2,044,000	\$ 2,069,785	\$ (25,785)

Net Position by Components

Last Ten Fiscal Years (Accrual Basis of Accounting) (Unaudited)

	Fiscal Year										
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	
Net investment in capital assets	\$ 255,136,679	\$ 236,928,712	\$ 224,969,584	\$ 218,421,756	\$ 219,522,714	\$ 206,109,733	\$ 200,603,988	\$ 190,756,445	\$ 188,106,716	\$ 184,466,042	
Restricted for capital reserve	206,053	171,013	260,978	222,470	187,910	151,600	125,721	98,616	1,252,498	1,226,604	
Restricted for future capital projects	-	-	-	-	-	14,116,382	-	-	-	-	
Restricted for debt service	-	-	-	-	-	-	-	-	1,116	6,114	
Unrestricted	9,495,342	26,560,322	29,327,642	26,899,507	18,686,692	11,759,800	26,082,644	26,865,314	21,113,133	15,140,975	
Total	\$ 264,838,074	\$ 263,660,047	\$ 254,558,204	\$ 245,543,733	\$ 238,397,316	\$ 232,137,515	\$ 226,812,353	\$ 217,720,375	\$ 210,473,463	\$ 200,839,735	

Table 2

ORANGE WATER AND SEWER AUTHORITY

Changes in Net Position

Last Ten Fiscal Years (Accrual Basis of Accounting) (Unaudited)

	Fiscal Year									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Operating Revenues:										
Water	\$ 19,013,363	\$ 17,540,247	\$ 17,894,907	\$ 18,291,453	\$ 17,969,519	\$ 17,819,790	\$ 18,556,754	\$ 18,534,150	\$ 16,943,596	\$ 15,364,026
Sewer	16,868,447	16,561,076	16,514,394	16,739,718	16,589,072	16,313,731	16,550,596	15,962,181	14,848,339	12,798,394
Service initiation fees	156,225	169,965	169,660	167,410	167,615	161,015	170,270	147,015	148,750	141,355
Other	1,505,208	1,469,106	1,790,409	1,762,261	1,116,826	1,163,077	1,211,529	1,360,484	1,618,087	1,233,515
Total operating revenues	37,543,243	35,740,394	36,369,370	36,960,842	35,843,032	35,457,613	36,489,149	36,003,830	33,558,772	29,537,290
Operating Expenses:										
Water supply and treatment	5,601,957	5,145,181	4,692,599	4,553,491	4,267,802	4,587,852	4,326,429	4,075,074	2,619,340	2,665,629
Water distribution	2,659,501	3,554,221	2,781,136	2,782,489	2,720,838	2,323,295	2,296,726	2,507,512	2,217,957	2,160,231
Sewer treatment	4,607,301	4,813,684	4,561,981	4,457,289	4,721,294	4,763,520	4,946,090	4,768,788	3,050,834	3,487,838
Sewer collections	1,264,196	1,329,131	1,185,549	1,254,390	1,224,941	1,352,127	1,434,619	1,313,106	1,129,237	1,035,025
General and administrative	7,352,499	6,331,018	6,403,637	5,951,983	5,662,788	5,754,629	5,709,219	5,172,326	4,230,197	4,567,519
Customer relations	-	-	-	· · ·	· · ·	-	-	-	540,582	598,092
Maintenance	-	-	-	-	-	-	-	-	2,128,731	2,135,038
Lab	-	-	-	-	-	-	-	-	732,563	837,770
Depreciation and amortization	9,226,257	8,909,129	8,919,124	9,384,310	9,393,739	9,514,909	9,539,846	9,310,159	9,053,691	8,765,924
Other post-employment benefits	765,944	493,193	466,573	372,993	1,012,532	1,033,149	1,038,521	750,503	883,497	738,000
Total operating expenses	31,477,655	30,575,557	29,010,599	28,756,945	29,003,934	29,329,481	29,291,450	27,897,468	26,586,629	26,991,066
Operating income (loss)	6,065,588	5,164,837	7,358,771	8,203,897	6,839,098	6,128,132	7,197,699	8,106,362	6,972,143	2,546,224
Non-Operating Revenues (Expenses):										
Customer fees	1,599,382	2,219,227	1,397,652	1,429,244	1,069,551	1,769,883	1,899,056	1,713,417	1,436,564	2,498,459
Investment adjustment	56,524	32,802	20,663	15,133	14,755	15,664	17,964	29,261	29,169	80,343
Interest expense	(1,863,061)	(1,668,138)	(1,729,871)	(2,637,681)	(2,644,155)	(2,334,944)	(2,274,113)	(2,623,208)	(2,702,687)	(3,305,193)
Amortization of bond expense and patent	102,842	914,691	120,781	(177,021)	107,636	111,529	19,139	71,676	(73,283)	
Other	(19,340)	75,348		(145,273)	23,591	4,228	(235,552)	(1,320,156)	(92,613)	5,687
Income (loss) before contributions	5,941,935	6,738,767	7,167,996	6,688,299	5,410,476	5,694,492	6,624,193	5,977,352	5,569,293	1,742,182
Capital Contributions:										
Capital grants and contributions	-	-	18,170	2,320	-	-	142,329	14,354	101,451	1,577,049
Contributions in aid of construction	1,509,516	2,363,076	1,828,305	1,372,391	849,325	420,251	2,325,456	1,255,206	3,962,984	12,916,939
Total capital contributions	1,509,516	2,363,076	1,846,475	1,374,711	849,325	420,251	2,467,785	1,269,560	4,064,435	14,493,988
Increase in net position	7,451,451	9,101,843	9,014,471	8,063,010	6,259,801	6,114,743	9,091,978	7,246,912	9,633,728	16,236,170
Net Position:										
Beginning of year, previously reported - July 1	263,660,047	254,558,204	245,543,733	238,397,316	232,137,515	226,812,353	217,720,375	210,473,463	200,839,735	184,603,565
Restatement	(6,273,424)	-	-	(916,593)	-	(789,581)	-	-	-	-
Beginning of year, restated	257,386,623	254,558,204	245,543,733	237,480,723	232,137,515	226,022,772	217,720,375	210,473,463	200,839,735	184,603,565
End of year - June 30	\$ 264,838,074	\$ 263,660,047	\$ 254,558,204	\$ 245,543,733	\$ 238,397,316	\$ 232,137,515	\$ 226,812,353	\$ 217,720,375	\$ 210,473,463	\$ 200,839,735

Water Processed and Wastewater Treated

(Thousands of Gallons)
Last Ten Fiscal Years
(Unaudited)

Fiscal Year Ended June 30	Water Processed and Pumped to System	Wastewater Treated		
2009	2,915,405	2,889,705		
2010	2,863,425	2,933,870		
2011	2,741,182	2,662,290		
2012	2,515,000	2,784,486		
2013	2,413,000	2,942,331		
2014	2,477,000	3,027,879		
2015	2,521,096	2,954,345		
2016	2,440,937	3,149,225		
2017	2,397,093	3,094,963		
2018	2,463,021	2,843,422		

Source: Orange Water and Sewer Authority's records

Ratio of Bonded Debt to Net Operating Revenues and Net Bonded Debt Per Customer

Last Ten Fiscal Years

(Unaudited)

Fiscal Year Ended June 30	Customer Estimate	Net Operating Revenues	Debt Service Requirements	Net Bonded Debt	Ratio of Net Revenues to Debt Service Requirements	Net Bonded Debt Per Customer
2009	20,137	13,813,299	9,027,729	106,040,000	1.53	5,266.00
2010	20,241	17,325,671	9,034,556	101,205,000	1.92	5,000.00
2011	20,453	19,910,110	8,938,298	94,695,000	2.23	4,630.00
2012	20,916	19,693,086	8,550,976	89,245,000	2.30	4,266.83
2013	21,043	18,461,737	7,898,190	83,845,000	2.34	3,984.46
2014	21,105	18,329,675	7,814,155	78,675,000	2.35	3,727.79
2015	21,239	19,405,577	8,542,276	72,910,000	2.27	3,432.84
2016	21,385	18,162,783	7,662,664	67,720,000	2.37	3,166.71
2017	21,526	16,819,188	7,930,519	61,835,000	2.12	2,872.57
2018	21,585	17,713,695	7,007,230	55,125,000	2.53	2,553.86

Principal Water and Sewer Customers

Year Ended June 30, 2018 and 2009 (Unaudited)

	Percent of Water Sales <u>2018</u>	Percent of Water Sales 2009
University of North Carolina at Chapel Hill	23%	38%
Chapel Hill - Carrboro City Schools	2%	2%
Town of Chapel Hill	<1%	<1%
University Mall	<1%	<1%
Triangle Communities (Apartments)	<1%	1%
Carol Woods Retirement Community	<1%	<1%
Kingswood Apartments	<1%	1%
The Villages Apartments	<1%	<1%
Aspen Square Apartments	<1%	<1%
Estes Park Apartments	<1%	<1%

Source: Orange Water and Sewer Authority's Records

Town of Chapel Hill NC, Property Tax Levies and Collections

Last Ten Fiscal Years

(Unaudited)

Fiscal Year	Fiscal Year Taxes Levied Fiscal Year Ended for the June 30 Fiscal Year Amount		.,		Total Collec	Outstanding			
			Percent of Original Levy	Subsequent Years		Amount	Percentage of Adjusted Levy	Delinquent Taxes	
2009	\$ 33,972,050	\$ 33,779,684	99.43%	\$	139,190	\$ 33,918,874	99.84%	\$	53,716
2010	35,119,150	34,836,717	99.20%		254,454	35,091,171	99.92%		27,979
2011	35,604,158	35,284,111	99.10%		258,936	35,543,047	99.83%		61,111
2012	35,887,926	35,604,067	99.21%		-	35,604,067	99.21%		283,859
2013	36,084,217	35,809,148	99.24%		-	35,809,148	99.24%		275,069
2014	38,361,125	38,115,148	99.36%		-	38,115,148	99.36%		245,977
2015	39,009,200	38,849,950	99.59%		-	38,849,950	99.59%		159,250
2016	39,789,825	39,638,269	99.62%		-	39,638,269	99.62%		151,556
2017	39,471,449	39,314,757	99.60%		-	39,314,757	99.60%		156,692
2018	40,816,019	40,679,175	99.66%		-	40,679,175	99.66%		136,844

Table 7

Ratio of

Town of Chapel Hill, NC Assessed Value and Actual Value of Taxable Property Last Ten Fiscal Years

(Unaudited)

Fiscal Year Ended June 30	Residential Property	Commercial Property	Combined Real Property	Personal Property	Public Service Companies (3)	Total Taxable Assessed Value	l Direct Rate (4)	Estimated Actual Taxable Value (5)	Assessed Value to Estimated Actual Value (6)
2009	\$ 3,787,131,548	\$ 1,300,363,815	\$ 5,087,495,363	\$ 471,708,077	\$ 63,678,158	\$ 5,622,881,598	\$ 0.581	\$ 5,681,400,018	98.97%
2010	(1) 4,710,604,169	1,617,450,867	6,328,055,036	455,030,840	67,647,776	6,850,733,652	0.494	6,944,484,189	98.65%
2011	4,956,322,691	1,701,821,709	6,658,144,400	452,486,487	62,491,249	7,173,122,136	0.494	7,237,536,208	99.11%
2012	*	*	6,730,528,993	471,001,413	63,232,013	7,264,762,419	0.494	6,908,951,421	105.15%
2013	*	*	6,701,285,738	536,958,587	66,253,143	7,304,497,468	0.494	7,035,732,487	103.82%
2014	*	*	6,823,181,920	573,309,679	66,762,306	7,463,253,905	0.514	7,421,692,427	100.56%
2015	*	*	6,862,576,184	519,383,543	65,246,662	7,447,206,389	0.524	7,606,952,389	97.90%
2016	*	*	6,913,283,131	541,047,846	85,443,691	7,539,774,668	0.524	7,599,047,236	99.22%
2017	*	*	6,902,832,865	546,117,755	83,768,622	7,532,719,242	0.524	7,562,971,127	99.60%
2018	(1) *	*	7,399,771,971	550,409,864	84,467,574	8,034,649,409	0.508	8,062,060,414	99.66%

^{*}The Breakdown between residential and commercial property is not available for fiscal years after 2011.

Notes:

- (1) Revaluation year.
- (2) Increase due to revaluation and the addition of \$200 million from a major annexation.
- (3) Public service companies valuations are provided by the North Carolina Department of Revenue. These amounts include both real and personal property.
- (4) Per \$100 of value. Includes taxes for General Fund, Debt Service Fund, and Transit Fund.
- (5) The estimated market value is calculated by dividing the assessed value by an assessment-to-sales ratio determined by the North Carolina Department of Revenue. The ratio is based on actual property sales which took place during the fiscal year.
- (6) Source is the Property Tax Division of the North Carolina Department of Revenue.

Town of Chapel Hill, NC Direct and Overlapping Property Tax Rates (Per \$100 of Assessed Value)

Last Ten Fiscal Years (Unaudited)

	Years Taxes Payable									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Chapel Hill within Orange County:		*								
Town direct rates:										
General Fund	\$ 0.423	\$ 0.360	\$ 0.360	\$ 0.378	\$ 0.378	\$ 0.388	\$ 0.388	\$ 0.388	\$ 0.388	\$ 0.376
Transportation	0.048	0.041	0.041	0.041	0.041	0.051	0.051	0.051	0.051	0.050
Debt Service**	0.110	0.093	0.093	0.075	0.075	0.075	0.085	0.085	0.085	0.082
Downtown Service District	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.070
Overlapping rates:										
Orange County	0.998	0.858	0.858	0.858	0.858	0.858	0.878	0.878	0.878	0.838
Chapel Hill - Carrboro School										
District	0.230	0.188	0.188	0.188	0.188	0.208	0.208	0.208	0.208	0.202
Total	1.880	1.611	1.611	1.611	1.611	1.651	1.681	1.681	1.681	1.618
Chapel Hill within Durham County:										
Town direct rates:										
General Fund	0.423	0.360	0.360	0.378	0.378	0.388	0.388	0.388	0.388	0.376
Transportation	0.048	0.041	0.041	0.041	0.041	0.051	0.051	0.051	0.051	0.050
Debt Service	0.110	0.093	0.093	0.075	0.075	0.075	0.085	0.085	0.085	0.082
Overlapping rates:										
Durham County	0.708	0.690	0.746	0.746	0.744	0.744	0.744	0.793	0.740	0.768
Total	1.289	1.184	1.240	1.240	1.238	1.258	1.268	1.317	1.264	1.276

Table 8

Source: North Carolina State Department of Revenue

^{*}Revaluation Year

Town of Chapel Hill, NC Demographic and Economic Statistics

Last Ten Fiscal Years (Unaudited)

Year	Population (1)	Personal Income (in thousands)(2)		Per Capita Personal Income (2)		Median Age (3)	Education Level in Years of Schooling (3)	School Enrollment (4)	Unemployment Rate % (5)
2009	55,616	\$	5,450,187	\$	43,844	24.2	15.82	40,316	4.5
2010	56,778		5,976,341		47,063	25.6	15.82	39,428	5.6
2011	57,233		6,186,352		47,925	25.6	15.82	41,139	5.4
2012	57,757		6,268,886		46,713	25.6	15.82	41,059	5.6
2013	58,424		6,608,945		48,683	25.6	15.82	41,402	5.6
2014	59,271		7,131,776		51,702	25.3	15.82	41,242	4.4
2015	59,653		7,345,876		52,339	25.3	15.82	41,176	4.9
2016	59,753		7,440,708		52,989	25.8	15.82	41,490	5.2
2017	59,569		7,822,299		55,338	25.7	15.82	41,199	4.9
2018	59,903		8,286,315		58,438	26.2	15.82	42,038	4.3

Notes:

- (1) Town of Chapel Hill Department of Planning, Office of State Budget and Management
- (2) U.S. Department of Commerce, Bureau of Economic Analysis. Data available for Orange County only. Most recent available census data.
- (3) U.S. Department of Commerce, most recent available census data.
- (4) Chapel Hill-Carrboro City Schools and The University of North Carolina at Chapel Hill.
- (5) N.C. Employment Security Commission, Local Area Unemployment Statistics.

Source: Orange Water and Sewer Authority's Records

Miscellaneous Statistical Data				
Year Ended June 30, 2018				
(Unaudited)				

Year Founded and Incorporated	1975
Size of Service Area:	
Square miles	31
Miles of water pipe	401
Miles of wastewater collection pipe	343
Customer accounts	21,585
Budgeted Employee Positions	135.0
Water Treatment Plant Capacity (in MGD):	
Capacity	20
Production average, FY 2017	7.9
Production peak, FY 2017	12.8
Wastewater Treatment Plant Capacity (in MGD):	
Capacity	14.5
Average daily flow, FY 2017	8.5
Number of Water Supply Resources	4
Total Capacity of Water Supply Resources (millions of gallons):	
Cane Creek Reservoir	3,000
University Lake	450
Quarry Reservoir	200
Jordan Lake Level II Allocation	5 MGD

Full-Time Equivalents (authorized)

Last Ten Fiscal Years (Unaudited)

Department	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
General and Administrative:										
Office of the Executive Director	6.00	5.50	5.50	5.50	6.50	7.00	6.00	7.00	7.00	7.00
Customer Service	9.00	9.00	9.00	9.00	7.50	7.50	6.50	7.00	7.00	7.33
Engineering	15.00	14.00	14.00	14.00	13.00	13.00	14.00	14.00	14.00	13.50
Human Resources	3.00	3.00	3.00	3.00	2.50	2.50	3.00	2.00	3.00	3.50
Finance	6.00	6.00	6.00	6.00	7.50	7.50	7.00	9.00	8.00	6.34
Purchasing	-	-	-	-	-	-	-	-	-	1.33
Information Technology	5.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00
Operations:										
Water Supply and Treatment	26.00	25.50	25.50	25.50	26.50	25.00	25.00	24.00	24.00	13.50
Water Distribution	33.00	32.00	32.00	32.00	32.00	30.00	32.00	32.00	32.00	32.00
Plants Maintenance	-	-	-	-	-	-	-	-	-	13.00
Laboratory	-	-	-	-	-	-	-	-	-	8.00
Wastewater Treatment	23.00	22.50	22.50	22.50	21.50	23.00	23.00	24.00	24.00	13.50
Sewer Collection	13.00	15.00	14.00	14.00	14.00	16.00	15.00	15.00	15.00	15.00
Totals	139.00	136.50	135.50	135.50	135.00	135.50	135.50	139.00	139.00	138.00

Source: Orange Water and Sewer Authority's Human Resource Department



"A Professional Association of Certified Public Accountants and Management Consultants"

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

Independent Auditor's Report

To the Board of Directors Orange Water and Sewer Authority Carrboro, North Carolina

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities of the Orange Water and Sewer Authority (the "Authority"), a component unit of the Town of Chapel Hill, North Carolina, as of and for the years ended June 30, 2018 and 2017 and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated September 24, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the 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 opinion 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 a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity'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 the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, non-compliance 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 non-compliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is 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 the entity'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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Martin Starnes & Associates, CPAs, P.A.

Martin Starnes & associates, CPas, P.a.

Hickory, North Carolina September 24, 2018



"A Professional Association of Certified Public Accountants and Management Consultants"

Report On Compliance For Each Major Federal Program; Report On Internal Control Over Compliance; In Accordance With Uniform Guidance; And The State Single Audit Implementation Act

Independent Auditor's Report

To the Board of Directors Orange Water and Sewer Authority Carrboro, North Carolina

Report on Compliance for Each Major Federal Program

We have audited the Orange Water and Sewer Authority's compliance with the types of compliance requirements described in the *OMB Compliance Supplement* and the *Audit Manual for Governmental Auditors in North Carolina*, issued by the Local Government Commission, that could have a direct and material effect on each of the Orange Water and Sewer Authority's major federal programs for the year ended June 30, 2018. The Orange Water and Sewer Authority's major federal program is identified in the summary of auditor's results section of the accompanying Schedule of Findings and Responses.

Management's Responsibility

Management is responsible for compliance federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the Orange Water and Sewer Authority's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of *Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and the State Single Audit Implementation Act. Those standards, the Uniform Guidance, and the State Single Audit Implementation Act require that we plan and perform the audit to obtain reasonable assurance about whether non-compliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Orange Water and Sewer Authority's compliance with those requirements and performing such other procedures, as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the Orange Water and Sewer Authority's compliance.

Opinion on Each Major Federal Program

In our opinion, the Orange Water and Sewer Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2018.

Report on Internal Control Over Compliance

Management of the Orange Water and Sewer Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Orange Water and Sewer Authority's internal control over compliance with the types of requirements that could have a direct and material effect on a major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing our opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

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

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

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Martin Starnes & Associates, CPAs, P.A.

Martin Starnes & associated, CPas, P.a.

Hickory, North Carolina September 24, 2018



"A Professional Association of Certified Public Accountants and Management Consultants"

Report On Compliance For Each Major State Program; Report On Internal Control Over Compliance; In Accordance With Uniform Guidance; And The State Single Audit Implementation Act

Independent Auditor's Report

To the Board of Directors Orange Water and Sewer Authority Carrboro, North Carolina

Report on Compliance for Each Major State Program

We have audited the Orange Water and Sewer Authority's, compliance with the types of compliance requirements described in the *Audit Manual for Governmental Auditors in North Carolina*, issued by the Local Government Commission, that could have a direct and material effect on each of the Orange Water and Sewer Authority's major state programs for the year ended June 30, 2018. The Orange Water and Sewer Authority's major state program is identified in the summary of auditor's results section of the accompanying Schedule of Findings and Responses.

Management's Responsibility

Management is responsible for compliance with state statutes, regulations, and the terms and conditions of its state awards applicable to its state programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the Orange Water and Sewer Authority's major state programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and applicable sections of *Title 2 US Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), as described in the *Audit Manual for Governmental Auditors in North Carolina*, and the State Single Audit Implementation Act. Those standards, Uniform Guidance, and the State Single Audit Implementation Act require that we plan and perform the audit to obtain reasonable assurance about whether non-compliance with the types of compliance requirements referred to above that could have a direct and material effect on a major state program occurred. An audit includes examining, on a test basis, evidence about the Orange Water and Sewer Authority's compliance with those requirements and performing such other procedures, as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major state program. However, our audit does not provide a legal determination of the Orange Water and Sewer Authority's compliance.

Opinion on Each Major State Program

In our opinion, the Orange Water and Sewer Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major state program for the year ended June 30, 2018.

Report on Internal Control Over Compliance

Management of the Orange Water and Sewer Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Orange Water and Sewer Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major state program to determine the types of auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major state program and to test and report on internal control over compliance in accordance with Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Orange Water and Sewer Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, non-compliance with a type of compliance requirement of a state program on a timely basis. A material weakness in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material non-compliance with a type of compliance requirement of a state program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance with a type of compliance requirement of a state program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

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

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Martin Starnes & Associates, CPAs, P.A.

Martin Starnes & associates, CPas, P.a.

Hickory, North Carolina September 24, 2018

SCHEDULE OF FINDINGS AND RESPONSES FOR THE YEAR ENDED JUNE 30, 2018

1. Summary of Auditor's Results

Financial Statem	<u>ents</u>			
	report issued on whether nents audited were prepared AAP:	Unmodified		
Internal control ov	er financial reporting:			
Material weak	ness(es) identified?	Yes	X	No
• Significant de	ficiency(ies) identified?	Yes	X	None reported
Non-compliance n statements noted?	naterial to financial	Yes	X	_ No
Federal Awards				
Internal control ov	er major federal programs:			
Material weak	ness(es) identified?	Yes	X	No
• Significant de	ficiency(ies) identified?	Yes	X	None reported
Type of auditor's r for major federal p	report issued on compliance rograms:	Unmodified		
	s disclosed that are orted in accordance with?	Yes	X	. No
Identification of m	najor federal programs:			
<u>CFDA No(s).</u> 66.468	Names of Federal Program Drinking Water State Revolv			
Dollar threshold us between Type A an	sed to distinguish nd Type B Programs	\$750,000		
Auditee qualified:	Ves	X	No	

SCHEDULE OF FINDINGS AND RESPONSES FOR THE YEAR ENDED JUNE 30, 2018

State Awards

Internal control over major state programs:			
• Material weakness(es) identified?	Yes	<u>X</u>	No
• Significant deficiency(ies) identified?	Yes	X	None reported
Type of auditor's report issued on compliance for major state programs:	Unmodified		
Any audit findings disclosed that are required to be reported in accordance with the State Single Audit Implementation Act?	Yes	X	No
Identification of major state programs:			
Drinking Water State Revolving Fund			

SCHEDULE OF FINDINGS AND RESPONSES FOR THE YEAR ENDED JUNE 30, 2018

2.	Findings Related to the Audit of the Basic Financial Statements
	None

3. Findings Related to the Audit of Federal Awards

None

4. Findings Related to the Audit of State Awards

None

SCHEDULE OF PRIOR YEAR AUDIT FINDINGS FOR THE YEAR ENDED JUNE 30, 2018

None reported

SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS FOR THE YEAR ENDED JUNE 30, 2018

Grantor/Pass-through Grantor/Program Title	Federal CFDA Number	State/ Pass-through Grantor's Number	Federal (Direct & Passed-through) Expenditures		State Expenditures		Passed Through To Subrecipients	
Federal Grants:								
U.S. Environmental Protection Agency Passed-through the N.C. Department of Environmental Quality: Division of Water Infrastructure: Drinking Water State Revolving Fund Cluster:								
Capitalization Grants for Drinking Water State Revolving Funds	66.468	WIF-1930	\$	3,766,533	\$	-	\$ -	
Capitalization Grants for Drinking Water State Revolving Funds	66.468	WIF-1928		109,076		<u>-</u>		
Total Drinking Water State Revolving Fund Cluster				3,875,609				
Total U.S. Environmental Protection Agency				3,875,609			_	
Total Federal Assistance			\$	3,875,609	\$		\$ -	
N.C. Department of Environmental Quality Division of Water Infrastructure:								
Drinking Water State Revolving Fund		H-SRP-D-17-0012	\$	-	\$	653,055	\$ -	
State Reserve Loan		E-SRP-W-17-0049		-		167,462	-	
State Reserve Loan		H-SRP-D-17-0021				93,484		
Total N.C. Department of Environmental Quality						914,001		
Total State Assistance			\$		\$	914,001	\$ -	
Total Federal and State Assistance			\$	3,875,609	\$	914,001	\$ -	

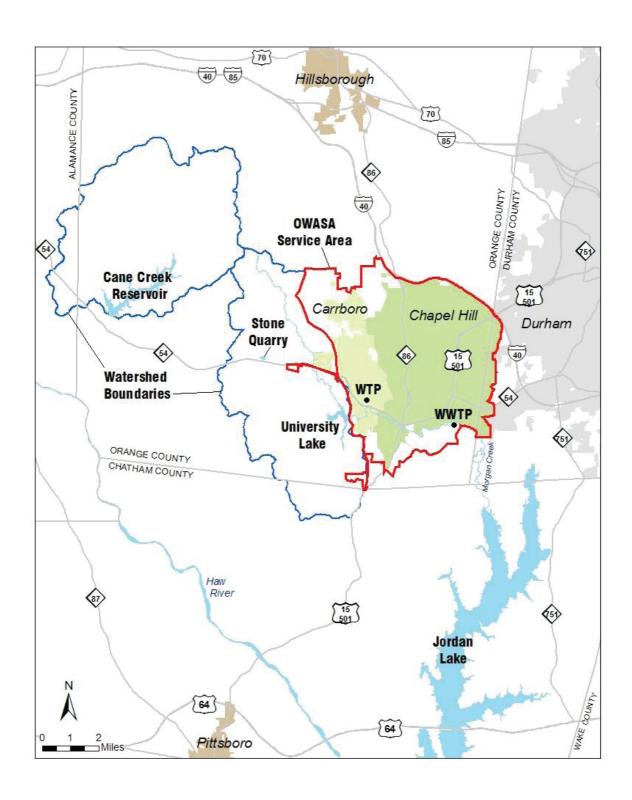
Notes to the Schedule of Expenditures of Federal and State Awards:

1. Basis of Presentation

The accompanying Schedule of Expenditures of Federal and State Awards (SEFSA) includes the federal and State grant activity of the Orange Water and Sewer Authority under the programs of the federal government and the State of North Carolina for the year ended June 30, 2018. The information in this SEFSA is presented in accordance with the requirements of *Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* and the State Single Audit Implementation Act. Because the Schedule presents only a selected portion of the operations of the Orange Water and Sewer Authority, it is not intended to and does not present the financial position, changes in net position, or cash flows of the Orange Water and Sewer Authority.

2. <u>Summary of Significant Accounting Policies</u>

Expenditures reported in the SEFSA are reported on the modified accrual basis of accounting. Such expenditures are recognized following the cost principles contained in Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Orange Water and Sewer Authority has elected not to use the 10-percent de minimus indirect cost rate as allowed under the Uniform Guidance.





Orange Water and Sewer Authority

A public, non-profit agency providing water, sewer and reclaimed water services to the Carrboro-Chapel Hill community.