# COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Years Ended June 30, 2017 and 2016

### 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)

#### **AUDITED FINANCIAL REPORT**

FOR THE FISCAL YEARS ENDED JUNE 30, 2017 AND 2016

Prepared by:

**Orange Water and Sewer Authority** 

#### AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED JUNE 30, 2017 AND 2016

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

September 21, 2017

#### 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, 2016 and ending June 30, 2017 (FY 2017). 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 2017, 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 million which was 13% 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 2017.

#### **Scope and Organization of this Report**

- <u>The Introductory Section</u> (unaudited) contains this letter of transmittal and information about OWASA's organizational structure, principal officers, major initiatives, accomplishments, and future projects.
- <u>The Financial Section</u> 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.
- <u>The Statistical Section</u> (unaudited) presents fiscal and other data to provide a more complete understanding of OWASA, the community we serve and the local economy.
- <u>The Compliance Section</u> 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 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 Fire Station

#### **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.



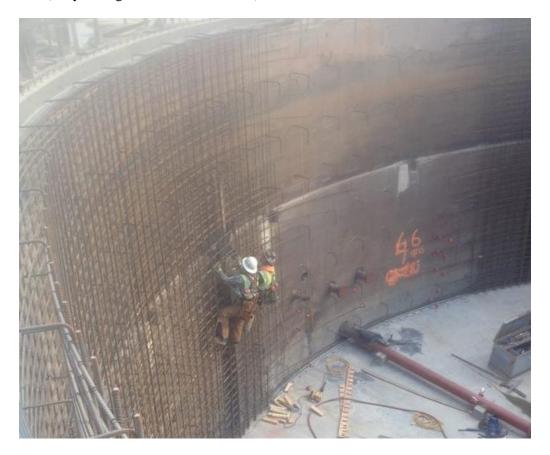
University Lake

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 343 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).



Construction to rehabilitate facilities at the Mason Farm Wastewater Treatment Plant

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 630,000 gallons per day during FY 2017.

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 2017, the unemployment rate in Orange County was 3.7 percent compared to the North Carolina average of 4.1 percent and US average of 4.3 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.



Kenan Stadium 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. Currently, about one-third are read using equipment that collects meter readings as staff members drive in close proximity to the meters. The other two-thirds of our meters are read manually by staff members walking throughout our service area. In contrast, through an AMI system, meters are 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.

**No Increase in Monthly Water and Sewer Rates** – For the sixth consecutive year, OWASA's Board of Directors approved a new Schedule of Rates and Fees that does not include an increase in monthly water and sewer rates. Fees for establishing a new connection to OWASA's system (Service Availability Fees) were adjusted based on an updated analysis of system assets. Based on our long-range financial planning, we estimate that no rate increase will be necessary for the FY 2019 budget.

**Water Emergency Event** – In February 2017, we experienced a water emergency that led to issuing *do not use* and *do not drink* water notifications to our service area. On February 2, 2017, OWASA's water supply was disrupted by an over-feed of fluoride at its water treatment plant. The contaminated water was contained within an onsite storage facility and was not introduced to the public water distribution system. Water was supplied by the City of Durham and Chatham County interconnections to meet demand and maintain adequate storage volumes while the water treatment plant was out of service.

On February 3, 2017, in a separate but compounding event, a 12-inch water distribution main break occurred spilling more than a million gallons of water. Although, the break was quickly isolated, we promptly issued the directives on water-use due to concerns about the ability to maintain system pressures for water quality and firefighting needs. On February 4, 2017, after tank levels rebounded and test results confirmed that the water was safe to drink, the water-use restrictions were lifted.

Direct costs related to the incident totaled approximately \$125,000 and we are investing an additional \$150,000 in a capital improvement project to upgrade our fluoride feed system.

#### **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 2017 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 17<sup>th</sup> Distinguished Budget Presentation Award from the GFOA for our FY 2017 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 2018 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

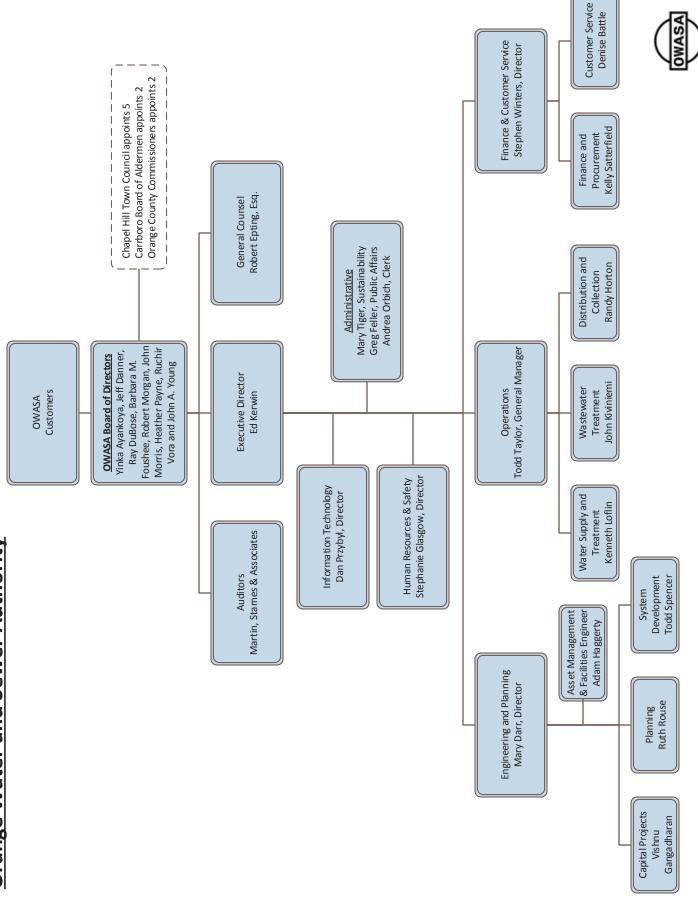
# Orange Water and Sewer Authority North Carolina

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO

# **Orange Water and Sewer Authority**



07-01-2017

#### ORANGE WATER AND SEWER AUTHORITY BOARD OF DIRECTORS

#### **CHAIR**

Robert Morgan 16 Kendall Drive Carrboro, NC 27510 Appointed by Orange County: Term Expires 6/30/18

#### **VICE CHAIR**

Heather Payne 1300 Mason Farm Road Chapel Hill, NC 27514 Appointed by Chapel Hill; Term Expires 6/30/19

#### **SECRETARY**

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

#### **MEMBERS**

Jeff Danner
423 New Parkside Drive
Chapel Hill, NC 27516
Appointed by Chapel Hill; Term Expires 6/30/18

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

Barbara Middleton-Foushee 100 Williams Road Carrboro, NC 27510 Appointed by Carrboro; Term Expires 6/30/18

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 Greg Feller, Public Affairs Administrator 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 John Kiviniemi, Wastewater Treatment and Biosolids Recycling Manager Kenneth Loflin, Water Supply and Treatment Manager 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 Orange Water and Sewer Authority (A Component Unit of the Town of Chapel Hill, North Carolina), as of and for the years ended June 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

#### **Management's Responsibility for the Financial Statements**

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

#### **Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free 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 Orange Water and Sewer Authority as of June 30, 2017 and 2016, 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.

#### 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 Funding Progress and Employer Contributions, 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 Orange Water and Sewer Authority's basic financial statements. The introductory information, budgetary schedules, and the statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The budgetary schedules 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 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory information and the statistical sections 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 21, 2017 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 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 & associated, CPas, P.a.

Hickory, North Carolina September 21, 2017

#### **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, 2017 and 2016. 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, 2017, OWASA's assets and deferred outflows of resources exceeded its liabilities and deferred inflows of resources by \$264 million.
- OWASA's total net position increased by \$9.1 million, primarily resulting from income realized from operating activities.
- Due to the condition and capacity of OWASA's system, about 72% of the organization's \$9.7 million capital expenditures for Fiscal Year (FY) 2017 were invested in replacing and rehabilitating existing infrastructure.
- Non-current liabilities decreased by about \$3.6 million due to principal payments on long-term debt
- OWASA's credit ratings from Standard and Poor's and Fitch of AA+, and Aa1 from Moody's, remain unchanged.

#### **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 *Statement of Net Position*, a *Statement of Revenues, Expenses, and Changes in Net Position* and a *Statement 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 *Statement 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 Statement 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 Statement of Net Position.

The Statement 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 Statement 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 Statement 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 I	Percentage of Change		
	<u>2017</u>	<u>2016</u>	<u>2015</u>	(2016 to 2017)	
Current assets Capital and other long-term assets Total assets	\$39.4 306.0 345.4	\$40.9 <u>301.2</u> 342.1	\$38.6 <u>300.9</u> 339.5	(3.7%) 1.6 1.0	
Total deferred outflows of resources	4.1	2.5	3.1	64.0	
Current liabilities Non-current liabilities Total liabilities	11.2 <u>74.6</u> 85.8	11.5 <u>78.2</u> 89.7	12.1 83.3 95.4	(2.6) (4.6) (4.3)	
Total deferred inflows of resources	0.1	0.3	1.7	(66.7)	
Net position Invested in capital assets, net of related debt Restricted Unrestricted	236.8 0.2 <u>26.6</u>	224.9 0.3 29.3	218.4 0.2 26.9	5.3 (33.3) (9.2)	
Total net position	<u>\$263.6</u>	<u>\$254.5</u>	<u>\$245.5</u>	3.6	

OWASA's assets exceeded liabilities by \$264 million at June 30, 2017, compared to \$255 million and \$246 million at June 30, 2016 and 2015, respectively. OWASA's overall financial position strengthened between FY 2015 and 2017 as net position increased by \$18.1 million. Total assets increased during the same period by \$5.9 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 88% of total assets for the comparative years of 2015 through 2017. 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, 2017, these other unrestricted resources totaled \$26.6 million and may be used for any lawful purpose.

Non-current liabilities decreased by approximately 10.4%, or \$8.7 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>Fiscal Year Ended</u> <u>2017</u> <u>2016</u> <u>2015</u>					
Operating revenues						
Water, wastewater, reclaimed water	\$34.5	\$34.9	\$35.4	(1.1%)		
Other	<u>1.2</u>	<u>1.5</u>	<u>1.5</u>	(20.0)		
Total operating revenues	35.7	36.4	36.9	(1.9)		
Operating expenses	<u>30.5</u>	<u>29.0</u>	<u>28.8</u>	5.2		
Operating income	5.2	7.4	8.1	(29.7)		
Non-operating revenues (expenses)	<u>1.5</u>	(0.2)	<u>(1.5)</u>			
Income before contributions	6.7	7.2	6.6	(6.9)		
Capital contributions	2.4	1.8	<u>1.4</u>	33.3		
Increase (decrease) in net position	<u>2.4</u> 9.1	$\frac{1.8}{9.0}$	$\overline{8.0}$	1.1		
Net position, July 1	254.5	245.5	238.4	3.7		
Change in accounting principles /						
restatement (see Note 7)	0.0	0.0	(0.9)			
Net position, June 30	$$26\overline{3.6}$	$$25\overline{4.5}$	\$245.5	3.6		

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 2017 and 2016, drinking water volume sales were 6.0 average million gallons per day each year; in FY 2015, drinking water volume sales were 6.2. Drinking water demand remains much lower than 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 commercial customers, respectively, and the use of reclaimed water by the University. With no rate increase during the year and slightly lower water volume sales, operating revenues for FY 2017 were about 1.1% lower than the previous year or \$35.7 million.

- Operating Expenses: Operating expenses were \$30.5 million or about 5.2% more than FY 2016 and approximately 5.9% greater than FY 2015. OWASA's department managers expended almost exactly the amount budgeted for FY 2017. Operating expenses includes an \$8.9 million charge for depreciation and a \$493,000 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 customer (service availability) fees, interest earnings, and gains (or losses) from the sale of surplus property. Customer 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.

Customer fees in FY 2016 and FY 2015 were about \$1.4 million each year. Customer fees in FY 2017 were \$2.2 million or an increase of about 57% from FY 2016 and FY 2015 levels. Interest earnings in FY 2017 totaling about \$33,000. Investments remained in safe and liquid secured deposits.

Capital Contributions: Capital contributions totaled approximately \$2.4 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 increased by about 1.6% in FY 2017. The net increase consisted of additions totaling \$13.8 million and a reduction due to deprecation of \$8.9 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.

Orang	ge Water and Sew Capital Asse (\$ Millions)	ts		
	<u>I</u>	iscal Year End	<u>led</u>	Percentage of Change
	<u>2017</u>	<u>2016</u>	<u>2015</u>	(2016 to 2017)
Land	\$17.6	\$17.6	\$17.6	0.0%
Construction in progress	28.1	32.5	26.0	(13.5)
Water treatment and distribution	99.3	101.4	103.7	(2.1)
Sewer collection and treatment	148.0	138.0	140.7	7.2
Fixtures and equipment	<u>12.8</u>	<u>11.4</u>	<u>12.0</u>	12.3
Total	<u>\$305.8</u>	<u>\$300.9</u>	<u>\$300.0</u>	1.6

#### **Debt Administration**

OWASA policy stipulates that at least 30% of capital improvements projects be funded with cash from operations. At June 30, 2017, 2016 and 2015, OWASA's outstanding debt totaled \$67.4 million, \$73.6 million, and \$79.1 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 and refunding bonds issued in fiscal years 2004, 2010, 2014, and 2015. At year end, OWASA owed an accrued debt service liability of approximately \$5.3 million. This amount was credited in full to the trustee restricted bond service account as of June 30, 2017.

OWASA's credit ratings for its bonds are Aa1 by the Moody's rating agency. Standard & Poor's and Fitch rate OWASA's creditworthiness as AA+. These "double A" 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 21% 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 2018 Budget Highlights**

For the sixth consecutive year, OWASA's Board of Directors approved a budget that includes no increase in the monthly rates charged for water, sewer and reclaimed water services. The FY 2018 budget for operating expenses is about 4.3% greater than the FY 2017 budget. Capital improvement expenditures are budgeted to be approximately \$15.1 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, 2017 AND 2016

	 2017	 2016
Assets:		
Current assets:		
Cash and cash equivalents	\$ 25,782,665	\$ 26,578,064
Receivables:		
Trade accounts (net of allowances for uncollectible		
accounts of approximately \$85,000 for 2017 and 2016)	4,133,233	3,560,101
Other	1,050,244	1,298,055
Inventory, materials, and supplies	1,046,669	892,145
Prepaid expenses	249,466	298,684
Restricted cash and cash equivalents:		
Cash and cash equivalents	1,505,011	1,294,633
Cash and cash equivalents, trustee	 5,671,864	 6,932,067
Total current assets	 39,439,152	 40,853,749
Non-current assets:		
Restricted cash and cash equivalents	 171,013	 260,978
Capital assets:		
Non-depreciable	45,668,275	50,206,880
Depreciable	 260,126,247	 250,756,206
Total capital assets, net of accumulated depreciation	 305,794,522	 300,963,086
Total non-current assets, net	 305,965,535	 301,224,064
Total assets	 345,404,687	 342,077,813
Deferred Outflows of Resources:		
Contributions to pension plan in current fiscal year	598,984	510,262
Pension deferrals	1,817,261	55,837
Deferred charge on refunding	 1,710,448	 1,902,066
Total deferred outflows of resources	 4,126,693	 2,468,165

#### STATEMENTS OF NET POSITION PROPRIETARY FUND JUNE 30, 2017 AND 2016

	2017	2016
Liabilities:		
Current liabilities:		
Payable from current assets:		
Trade and construction contracts payable	2,480,222	1,752,268
Accrued expenses	261,691	378,751
Payable from restricted cash and cash equivalents:		
Accrued interest	873,738	1,007,975
Customer deposits and advances	1,505,011	1,294,633
Current maturity of note payable	328,000	328,000
Current maturities of bonds payable	5,289,894	6,266,841
Current portion of compensated absences	495,019	500,000
Total current liabilities	11,233,575	11,528,468
Non-current liabilities:		
Note payable	5,248,000	5,576,000
Bonds payable	59,710,364	65,724,727
Compensated absences	60,640	44,683
Net pension liability	2,733,991	538,330
OPEB liability	6,788,961	6,295,768
Total non-current liabilities	74,541,956	78,179,508
Total liabilities	85,775,531	89,707,976
Deferred Inflows of Resources:		
Pension deferrals	95,802	279,798
Net Position:		
Net investment in capital assets	236,928,712	224,969,584
Restricted for capital reserve	171,013	260,978
Unrestricted	26,560,322	29,327,642
Total net position	\$ 263,660,047	\$ 254,558,204

# STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	 2017	 2016
Operating Revenues:		
Water	\$ 17,540,247	\$ 17,894,907
Sewer	16,561,076	16,514,394
Service initiation fees	169,965	169,660
Reclaimed water	431,185	442,785
Other	 1,037,921	 1,347,624
Total operating revenues	 35,740,394	 36,369,370
Operating Expenses:		
Water supply and treatment	5,145,181	4,692,599
Water distribution	3,554,221	2,781,136
Sewer treatment	4,813,684	4,561,981
Sewer collections	1,329,131	1,185,549
General and administrative	6,331,018	6,403,637
Depreciation and amortization	8,909,129	8,919,124
Other post-employment benefits	 493,193	 466,573
Total operating expenses	 30,575,557	 29,010,599
Operating income (loss)	 5,164,837	 7,358,771
Non-Operating Revenues (Expenses):		
Customer fees	2,219,227	1,397,652
Investment income, net of fair value of investments adjustment	32,802	20,663
Interest expense	(1,668,138)	(1,729,871)
Amortization of bond and lease expense	914,691	120,781
Gain (Loss) on disposal of capital assets	 75,348	 
Total non-operating revenues (expenses)	1,573,930	 (190,775)

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	2017	2016
Income (loss) before capital contributions	6,738,767	7,167,996
Capital Contributions:		
Capital grants and contributions	-	18,170
Contributions in aid of construction	2,363,076	1,828,305
Total capital contributions	2,363,076	1,846,475
Change in net position	9,101,843	9,014,471
Net Position:		
Beginning of year - July 1	254,558,204	245,543,733
End of year - June 30	\$ 263,660,047	\$ 254,558,204

#### STATEMENTS OF CASH FLOWS PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	2017		2016
Cash Flows from Operating Activities:			
Receipts from customers	\$ 34,377,152	\$	35,386,202
Payments to suppliers	(10,246,305)		(8,233,889)
Payments to employees	(11,163,539)		(11,525,600)
Other receipts	1,248,299		1,096,531
Net cash provided (used) by operating activities	14,215,607		16,723,244
Cash Flows from Capital and Related Financing Activities:			
Acquisition and construction of capital assets	(11,394,323)		(8,049,438)
Proceeds from sale of property, plant, and equipment	92,182		-
Principal paid on bond maturities and other long-term debt	(6,213,000)		(14,513,000)
Interest paid on bond maturities and other long-term debt	(1,802,375)		(2,365,810)
Customer fees received	3,133,918		1,518,433
Proceeds from issuance of debt	-		8,995,000
Capital grants and contributions	 <u> </u>		18,170
Net cash provided (used) by capital and related financing activities	 (16,183,598)		(14,396,645)
Cash Flows from Investing Activities:			
Interest and dividends on investments	 32,802		20,663
Net increase (decrease) in cash and cash equivalents	(1,935,189)		2,347,262
Cash and Cash Equivalents:			
Beginning of year - July 1	 35,065,742	_	32,718,480
End of year - June 30	\$ 33,130,553	\$	35,065,742

#### STATEMENTS OF CASH FLOWS PROPRIETARY FUND FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	 2017	2016
Reconciliation of Operating Income (Loss) to	 	_
Net Cash Provided (Used) by Operating Activities:		
Operating income (loss)	\$ 5,164,837 \$	7,358,771
Adjustments to reconcile operating income (loss) to		
net cash provided (used) by operating activities:		
Depreciation	8,909,129	8,919,124
Changes in assets and liabilities:		
(Increase) decrease in trade accounts receivable	(573,132)	703,226
(Increase) decrease in other receivables	247,811	(338,770)
(Increase) decrease in net pension asset	-	709,819
(Increase) decrease in deferred outflows	(1,761,424)	(8,591)
(Increase) decrease in inventory	(154,524)	10,143
(Increase) decrease in prepaid expenses	49,218	(280,262)
(Increase) decrease in deferred outflows of resources for pensions	(183,996)	(1,450,204)
(Increase) decrease in deferred outflows of resources for deferred refunding costs	(914,692)	(71,209)
Increase (decrease) in trade and construction contracts payable	727,954	442,391
Increase (decrease) in customer deposits	210,378	(251,093)
Increase (decrease) accrued expenses	(117,060)	(62,450)
Increase (decrease) compensated absences	10,976	27,820
Increase (decrease) in net pension liability	2,195,661	538,330
Increase (decrease) in deferred inflows of resources for pensions	(88,722)	9,626
Increase (decrease) in other post-employment benefits	 493,193	466,573
Net cash provided (used) by operating activities	\$ 14,215,607 \$	16,723,244
Non-Cash Capital and Related Financing Activities:		
Property, plant, and equipment contributed by private developers	\$ 2,363,076 \$	1,828,305

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### 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, 2017.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### 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, 2017 AND 2016

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 external investment pool, 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 Authority Restricted Cash	
<b>Business-Type Activities:</b>	
Bond service	\$ 5,671,864
Capital reserve	171,013
Customer deposits	1,505,011
Total business-type activities	\$7,347,888

#### **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, 2017 and June 30, 2016.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### **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, and contributions made to the pension plan in the current fiscal year. In

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

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 one item that meets this criterion in the current year – pension 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, 2017 and 2016, the Authority had recorded a liability for accrued vacation and the salary-related payments of \$555,659 and \$544,683, 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, 2017 AND 2016

#### **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 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, 2017 AND 2016

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 deposits was covered by collateral held under the Pooling Method. The Authority had cash on hand of \$2,700 at June 30, 2017.

At June 30, 2016, the Authority's deposits had a carrying amount of \$28,078,156 and a bank balance of \$18,406,716. Of the bank balance, \$2,284,237 was covered by federal depository insurance, and \$16,122,479 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, 2016.

#### **Cash Equivalents**

At June 30, 2017 and 2016, the Authority's cash equivalents balances were as follows:

	2017	2016
The North Carolina Capital Management Trust,		
government portfolio	\$ 5,728,388	\$ 6,984,886

*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, 2017 and 2016.

#### Receivables

Receivables, net of allowances for uncollectible accounts, at June 30, 2017 and 2016 were as follows:

	2017	2016
Utility accounts receivable	\$ 4,133,233	\$ 3,560,101
Other receivable	1,050,244	1,298,055
Total receivables, net	\$ 5,183,477	\$ 4,858,156

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### **Capital Assets**

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

	Balance				Balance
	<b>July 1, 2016</b>	Increases	<b>Decreases</b>	Transfers	<b>June 30, 2017</b>
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	<u>\$ (256,283)</u>	<u> </u>	165,286,614
Total depreciable assets	250,756,206				260,126,247
Capital assets, net	\$ 300,963,086				\$ 305,794,522

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	Balance July 1, 2015	Increases Decreases		Transfers	Balance June 30, 2016
Non-Depreciable Assets:					
Land	\$ 17,605,354	\$ -	\$ -	\$ -	\$ 17,605,354
Construction in progress	26,015,137	8,366,893		(1,780,504)	32,601,526
Total non-depreciable assets	43,620,491	8,366,893		(1,780,504)	50,206,880
Depreciable Assets:					
Water treatment and distribution	160,751,096	707,678	-	746,231	162,205,005
Sewer collection and treatment	200,258,937	470,920	-	896,507	201,626,364
Fixtures and equipment	43,088,587	332,252		137,766	43,558,605
Total depreciable assets	404,098,620	1,510,850		1,780,504	407,389,974
Less Accumulated Depreciation:					
Water treatment and distribution	57,084,167	3,690,035	-	-	60,774,202
Sewer collection and treatment	59,570,208	4,061,746	-	-	63,631,954
Fixtures and equipment	31,060,269	1,167,343			32,227,612
Total accumulated depreciation	147,714,644	\$8,919,124	\$ -	\$ -	156,633,768
Total depreciable assets	256,383,976				250,756,206
Capital assets, net	\$ 300,004,467				\$ 300,963,086

#### **Net Investment in Capital Assets**

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

	2017	2016		
Capital assets	\$ 305,794,522	\$ 300,963,086		
Total debt, gross	(70,576,258)	(77,895,568)		
Deferred charge	1 710 449	1 000 066		
related to debt	1,710,448	1,902,066		
Net investment	<b>* **</b> * * * * * * * * * * * * * * * * *	<b></b>		
in capital assets	\$ 236,928,712	\$ 224,969,584		

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### **Long-Term Debt**

Long-term debt as of June 30, 2017 and 2016 consists of the following:

	2017	2016
Revenue Bonds:		
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 \$41,278 at June 30, 2017	\$ 8,915,000	\$ 8,995,000
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 \$1,085,777 at June 30, 2017	15,695,000	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 \$410,311 at June 30, 2017	17,225,000	18,745,000
Revenue bonds payable, Series 2006 Revenue Serial Bonds, in the		
amount of \$15,500,000, issued October 26, 2006, with coupon		
rates of 4.0% and 5.0%, final maturity July 2026, net of unamortized		
premium of \$417,587 at June 30, 2015; revenue bonds payable,		
Series 2006 Revenue Term Bonds, in the amount of \$6,785,000,		
issued October 26, 2006, with an interest rate of 5.0%, due in		
full July 2031	-	755,000
Revenue and revenue refunding bonds payable, Series 2005, issued		
June 9, 2005, with coupon rates of 3.5% to 5.0%, final maturity		
in July 2020	-	2,275,000

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

	2017	2016
Revenue Bonds (continued):		
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	20,000,000	20,000,000
Revenue and revenue refunding bonds payable, Series 2003, issued April 9, 2003, with coupon rates of 2.5% to 5.0%, final maturity in July 2016		1,255,000
	\$ 61,835,000	\$ 67,720,000
Note Payable: Note payable to NCDENR 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	e 5.57(.000	Ф 5 004 coo
payment due in May 2034	\$ 5,576,000	\$ 5,904,000

Bond payable maturities are as follows:

Year Ending June 30	Maturities	of Premiums and Deferred Refunding Losses	Total	Interest
2018	\$ 4,785,000	\$ 313,275	\$ 5,098,275	\$ 7,629,241
2019	4,940,000	271,946	5,211,946	7,371,002
2020	5,130,000	244,198	5,374,198	7,111,487
2021	4,105,000	209,318	4,314,318	6,846,285
2022	4,250,000	156,755	4,406,755	6,611,097
2023-2027	24,575,000	259,318	24,834,318	23,274,885
2028-2032	14,050,000	<del>_</del>	14,050,000	5,356,988
Total	\$ 61,835,000	\$ 1,454,810	\$ 63,289,810	\$ 64,200,985

Amortization

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

Note payable maturities are as follows:

Year	En	ding
1 Cai	141	umz

June 30	Maturities	Interest	Total
2018	\$ 328,000	\$ -	\$ 328,000
2019	328,000	-	328,000
2020	328,000	-	328,000
2021	328,000	-	328,000
2022	328,000	-	328,000
2023-2027	1,640,000	-	1,640,000
2028-2032	1,640,000	-	1,640,000
2033-2034	656,000		656,000
Total	\$5,576,000	\$ -	\$ 5,576,000

#### **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, 2017, \$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, 2017, \$8,930,000 of bonds outstanding is considered defeased.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

Long-term liability activity for the years ended June 30, 2017 and 2016 is as follows:

	Balance July 1, 2016	Additions	Retirements	Balance June 30, 2017	Due Within 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	-
OPEB	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
	Balance July 1, 2015	Additions	Retirements	Balance June 30, 2016	Due Within One Year
Notes Payable	\$ 6,232,000	\$ -	\$ 328,000	\$ 5,904,000	\$ 328,000
Bonds Payable:					
Revenue bonds	72,910,000	8,995,000	14,185,000	67,720,000	5,885,000
For issuance premiums	4,937,175	-	665,607	4,271,568	381,841
Compensated absences	516,863	537,023	509,203	544,683	500,000
Net pension liability (LGERS)	-	538,330	-	538,330	-
OPEB	5,829,195	739,324	272,751	6,295,768	
Total	\$ 90,425,233	\$ 10,809,677	\$ 15,960,561	\$ 85,274,349	\$ 7,094,841

The Authority has pledged future water and sewer customer revenues, net of specified operating expenses, to repay \$61,835,000 in revenue bonds issued in 2003, 2004A, 2005, 2006, 2010, 2014, and 2015. 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 2032, solely from the water and sewer customer net revenues. The total principal and interest remaining to be paid on the bonds is \$126,035,985. Principal and interest paid in the years ended June 30, 2017 and 2016 were \$7,930,519 and \$7,312,093, respectively and total customer net revenues for the years ended June 30, 2017 and 2016 were \$35,740,394 and \$36,369,370, 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 2003, 2004A, 2005, 2006, 2010, 2014, and 2015. The Bond Order requires the debt service coverage ratio to be no less than 120% of the debt service requirements for parity indebtedness.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

The debt service coverage ratio calculation for the year ended June 30, 2017, is as follows:

Operating revenues and charges for services \$ 37,992,423
Operating expenses\* 21,173,235
Income available for debt service \$ 16,819,188

Debt service, principal and interest paid \$ 7,930,519

Debt service coverage ratio for parity debt  $\underline{212.08\%}$ 

#### 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.

<sup>\*</sup>Per rate covenants, this does not include depreciation, amortization, interest expense, or OPEB.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

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.

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, 2017, was 7.31% 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 \$598,984, for the year ended June 30, 2017.

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, 2017, the Authority reported a liability of \$2,733,991 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2015. The total pension liability was then rolled forward to the measurement date of June 30, 2016 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, 2016, the Authority's proportion was 0.12882%, which was an increase of 0.00887% from its proportion measured as of June 30, 2015.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

For the year ended June 30, 2017, the Authority recognized pension expense of \$760,503. At June 30, 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources		D	e fe rre d
			Inflows of	
			Resources	
Differences between expected and actual experience	\$	51,367	\$	95,802
Changes of assumptions		187,254		-
Net difference between projected and actual earnings				
on pension plan investments		1,511,553		-
Changes in proportion and differences between employer				
contributions and proportionate share of contributions		67,087		-
Employer contributions subsequent to the measurement date		598,984		
Total	\$	2,416,245	\$	95,802

\$598,984 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, 2018. 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	 Mount
2018	\$ 275,712
2019	275,802
2020	729,333
2021	440,612
Total	\$ 1,721,459

Actuarial Assumptions. The total pension liability in the December 31, 2015 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	7.25 percent, net of pension plan
	investment expense, including inflation

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

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, 2015 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. 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, 2016 are summarized in the following table:

		Long-Term
	Target	<b>Expected Real</b>
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.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

Discount Rate. The discount rate used to measure the total pension liability was 7.25%. 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 7.25 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 (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	Current					
	1% Decrease (6.25%)		Discount Rate (7.25%)		1% Increase (8.25%)	
Authority's proportionate share of the net pension liability (asset)	\$	6,489,038	\$	2,733,991	\$	(402,502)

*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. 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 December 31, 2014, the plan membership consisted of:

Members	<u>-</u> .
Inactive	31
Active	126
Total	157

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

Funding Policy. The Authority plan members pay their share of the cost of coverage (premiums) for healthcare benefits provided to qualified retirees. The Authority has chosen to fund the plan benefits on a pay-as-you-go basis. The Authority contributed \$268,832 or 3.7% and \$272,751 or 3.8% of the annual covered payroll during the years ending June 30, 2017 and 2016, respectively.

The current annual required contribution (ARC) rate is 9.65% of annual covered payroll. For the current year, the Authority contributed \$272,751 or 3.7% of annual covered payroll. The Authority obtains healthcare coverage through private insurers. There were no contributions made by employees. The Authority's obligation to contribute to the OPEB Plan is established and may be amended by the Board of Directors.

Summary of Significant Accounting Policies. Post-employment expenses are made from the Enterprise Fund, which is maintained on the accrual basis of accounting. No funds are set aside to pay benefits and administration costs. These expenses are paid as they come due.

#### **Annual OPEB Cost and Net OPEB Obligation**

The Authority's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years. The following table shows the components of the Authority's annual OPEB cost for the year, the amount actually contributed to the plan, and changes in the Authority's net OPEB obligation:

	2017	2016
Employer annual required contribution	\$ 750,771	\$ 728,904
Interest paid on OPEB obligation	251,831	233,168
Adjustment to annual required contribution	(240,577)	(222,748)
Annual OPEB cost	762,025	739,324
Employer contributions made		
for current fiscal year	268,832	272,751
Increase in net OPEB obligation	493,193	466,573
Net OPEB obligation:		
Beginning of year - July 1	6,295,768	5,829,195
End of year - June 30	\$ 6,788,961	\$ 6,295,768

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

The Authority's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for 2017 were as follows:

			Percentage	N	let OPEB
Year Ended	An	nual Plan	of APC	•	Obligation
June 30	Co	st (APC)	Contributed	$\mathbf{E}$	nd of Year
2015	\$	594,245	37.23%	\$	5,829,195
2016		739,324	36.89%		6,295,768
2017		762,025	35.28%		6,788,961

Funded Status and Funding Progress. As of December 31, 2014, the most recent actuarial valuation date, the plan was not funded. The actuarial accrued liability for benefits and, thus, the unfunded actuarial accrued liability (UAAL) was \$9,341,682. The covered payroll (annual payroll of active employees covered by the plan) was \$7,247,100, and the ratio of UAAL to the covered payroll was 128.9% percent. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and healthcare trends.

Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Funding Progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Methods and Assumptions. Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing the benefit costs between the employer and the plan members at that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations

In the December 31, 2014 actuarial valuation, the Projected Unit Credit cost method was used. The actuarial assumptions included a 4% investment rate of return which is the expected long-term investment returns on the employer's own investments calculated based on the funded level of the plan at the valuation date, and an annual medical cost trend increase of 7.5% to 5% annually. Both rates included a 3% inflation assumption. There are no assets set aside for these benefits. The plan is funded on a pay-as-you-go basis. The actuarial value of assets, if any, was determined using techniques that spread the efforts of short-term volatility in the market value of investments over a five-year period. The UAAL is being amortized as a level percentage of projected payroll on an open basis. The remaining amortization period at December 31, 2014 was 30 years.

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### 4. Deferred Outflows and Inflows of Resources

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

#### Deferred Outflows:

Contributions to pension plan in current fiscal year	\$ 598,984
Pension deferrals	1,817,261
Charge on refunding	1,710,448
Total	\$ 4,126,693
Deferred Inflows:	
Pension deferrals	\$ 95,802

#### 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, 2017.

#### 6. Net Position

At June 30, 2017 and 2016, the Board of Directors had approved the use of the unrestricted net position for the following purposes:

	 2017	2016
Operating reserve	\$ 8,303,415	\$ 11,070,735
Other reserves	7,766,315	4,550,000
Capital projects	 10,490,592	13,706,907
Total	\$ 26,560,322	\$ 29,327,642

#### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

#### 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.

#### OTHER POST-EMPLOYMENT BENEFITS REQUIRED SUPPLEMENTARY INFORMATION FOR THE YEAR ENDED JUNE 30, 2017

#### **Schedule of Funding Progress**

Actual Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued bility (AAL) - rojected Unit Credit (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll ( c)	UAAL as a Percentage of Covered Payroll ((b)-(a))/( c)
07/01/2007	\$ -	\$ 9,918,000	\$ 9,918,000	0.00%	\$ 6,375,000	155.60%
07/01/2009	-	12,597,000	12,597,000	0.00%	5,924,000	212.60%
12/31/2011	-	6,741,739	6,741,739	0.00%	7,074,967	95.29%
12/31/2014	-	9,341,682	9,341,682	0.00%	7,247,100	128.90%

#### **Schedule of Employer Contributions**

Year Ended	Annual Required ontribution (ARC)	Percentage of ARC Contributed
06/30/2011	\$ 944,000	6.00%
06/30/2012	1,124,000	17.00%
06/30/2013	1,163,000	11.00%
06/30/2014	1,163,000	11.60%
06/30/2015	584,492	37.85%
06/30/2016	728,904	37.42%
06/30/2017	750,771	35.81%

#### **Notes to the Required Schedules:**

The information presented above was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest valuation follows:

Valuation date	12/31/2014				
Actuarial cost method	Projected unit	credit			
Amortization method	Level percentage of pay, open				
Remaining amortization period	30 years				
Asset valuation method	Market value of assets				
Actuarial assumptions:					
Investment rate of return *	4.00%	* Includes inflation at 3%			
Medical cost trend rate	7.50-5.00%				
Year of Ultimate trend rate	2020				

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

**Local Government Employees' Retirement System** 

	2017	2016	2015	2014
Authority's proportion of the net pension liability (asset) (%)	0.12882%	0.11995%	0.12040%	11.89000%
Authority's proportion of the net pension liability (asset) (\$)	\$ 2,733,991	\$ 538,330	\$ (709,819)	\$ 1,433,202
Authority's covered-employee payroll	\$ 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	39.17%	7.32%	( 9.73%)	20.74%
Plan fiduciary net position as a percentage of the total pension liability	91.47%	98.09%	102.64%	94.35%

<sup>\*</sup> 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 FOUR FISCAL YEARS

**Local Government Employees' Retirement System** 

	2017		2016	2015		2014
Contractually required contribution	\$ 598,9	84 \$	510,262	\$ 519,888	\$	516,608
Contributions in relation to the contractually required contribution	598,9	<u> </u>	510,262	 519,888	_	516,608
Contribution deficiency (excess)	\$	- \$		\$ 	\$	
Covered-employee payroll	\$ 8,194,0	45 \$	6,980,328	\$ 7,352,374	\$	7,297,821
Contributions as a percentage of covered-employee payroll	7.3	1%	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	\$	17,923,072	\$ 17,540,247	\$ (382,825)
Sewer		16,578,878	16,561,076	(17,802)
Reclaimed water		439,110	431,185	(7,925)
Service initiation fees		168,898	169,965	1,067
Other		743,812	1,037,921	294,109
Total operating revenues		35,853,770	 35,740,394	 (113,376)
Non-operating revenues:				
Interest income		14,708	32,802	18,094
Customer fees		995,950	 2,219,227	 1,223,277
Total non-operating revenues		1,010,658	2,252,029	 1,241,371
Total revenues		36,864,428	 37,992,423	 1,127,995
Expenditures:				
Water supply and treatment:				
Salaries and wages		1,377,064	712,223	664,841
Fringe benefits		650,490	574,422	76,068
Materials and supplies		1,262,043	182,057	1,079,986
Chemicals		-	1,330,413	(1,330,413)
Utilities		346,927	377,087	(30,160)
Maintenance		1,050,173	1,056,884	(6,711)
Professional services		152,287	66,185	86,102
Insurance		-	80,386	(80,386)
Communication		4,000	1,094	2,906
Education and development		17,900	9,999	7,901
Miscellaneous	_	13,075	 7,939	 5,136
Total water supply and treatment		4,873,959	 4,398,689	 475,270

	Final Budget	Actual	Variance Over/Under
Water distribution:	<u> Duuger</u>	1100001	<u> </u>
Salaries and wages	1,421,839	1,468,401	(46,562)
Fringe benefits	761,829	1,367,270	(605,441)
Materials and supplies	82,979	69,328	13,651
Utilities	196,586	200,051	(3,465)
Maintenance	550,087	578,396	(28,309)
Professional services	8,019	-	8,019
Insurance	-	9,775	(9,775)
Communication	1,500	1,591	(91)
Printing and reproduction	2,000	359	1,641
Education and development	17,595	11,198	6,397
Miscellaneous	1,900	3,629	(1,729)
Total water distribution	3,044,334	3,709,998	(665,664)
Construction credits	(93,500)	(155,777)	62,277
Wastewater treatment:			
Salaries and wages	1,341,954	1,386,416	(44,462)
Fringe benefits	633,159	504,814	128,345
Materials and supplies	916,470	185,130	731,340
Chemicals	-	713,841	(713,841)
Utilities	682,850	773,154	(90,304)
Maintenance	935,876	951,600	(15,724)
Professional services	244,225	132,282	111,943
Insurance	-	98,652	(98,652)
Communication	8,935	7,825	1,110
Education and development	20,000	12,452	7,548
Miscellaneous	41,625	47,518	(5,893)
Total wastewater treatment	4,825,094	4,813,684	11,410

	Final Budget	Actual	Variance Over/Under
Sewer collections:			
Salaries and wages	548,800	535,957	12,843
Fringe benefits	301,824	236,369	65,455
Materials and supplies	249,636	29,206	220,430
Chemicals	-	200,229	(200,229)
Utilities	127,188	130,722	(3,534)
Maintenance	181,000	191,417	(10,417)
Professional services	8,019	-	8,019
Insurance	-	6,146	(6,146)
Communication	1,000	483	517
Printing and distribution	500	2,238	(1,738)
Education and development	11,160	7,093	4,067
Miscellaneous	4,024	1,697	2,327
Total sewer collections	1,433,151	1,341,557	91,594
Construction credits		(12,426)	12,426
General and administrative:			
Salaries and wages	3,127,108	3,272,719	(145,611)
Fringe benefits	1,454,466	1,160,383	294,083
Materials and supplies	141,685	135,314	6,371
Utilities	190,660	190,052	608
Maintenance	313,295	243,425	69,870
Professional services	1,368,729	1,051,211	317,518
Insurance	-	35,829	(35,829)
Communication	153,612	152,096	1,516
Printing and reproduction	27,905	5,383	22,522
Education and development	58,460	62,939	(4,479)
Miscellaneous	162,125	146,713	15,412
Total general and administrative	6,998,045	6,456,064	541,981
Construction credits	(73,500)	(114,070)	40,570

	Final Budget	Actual	Variance Over/Under
Debt Service:			
Principal		6,213,000	
Interest		1,717,519	
Total debt service	6,932,059	7,930,519	(998,460)
Capital outlay	14,875,000	11,210,705	3,664,295
Total expenditures	42,814,642	39,578,943	3,235,699
Revenues over (under) expenditures	(5,950,214)	(1,586,520)	4,363,694
Other Financing Sources (Uses):			
Appropriated fund balance	5,950,214		5,950,214
Net change in fund balance	\$ -	(1,586,520)	\$ (1,586,520)
Reconciliation from Budgetary Basis			
(Modified Accrual) to Full Accrual Basis:			
Principal payments debt		6,213,000	
Capital interest		183,618	
Change in interest accrual for bonded debt		(134,237)	
Depreciation and amortization		(8,909,129)	
Change in deferred outflows of resources - pensions		(1,035)	
Change in net pension liability		(2,195,661)	
Change in deferred inflows of resources - pensions		1,450,204	
Change in compensated absences		10,976	
Other post-employment benefits		(493,193)	
Amortization of bond expense and patent		914,691	
Capital outlay		11,210,705	
Gain on disposal of capital asset		75,348	
Capital contributions		2,363,076	
Change in net position		\$ 9,101,843	

## SCHEDULE OF REVENUE AND EXPENDITURES - PROJECT FUNDS FROM INCEPTION THROUGH JUNE 30, 2017

		Project Budget		Cumulative Total to une 30, 2017	Ba	nexpended lance as of ne 30, 2017
Raw Water Supply Sources:						
Revenues:					_	
General Fund	\$	1,629,103	\$	1,315,424	\$	313,679
Expenditures:						
Jordan Lake raw water supply intake and pumping facility	\$	327,558	\$	334,794	\$	(7,236)
Stone quarry acquisition		351,545		132,872		218,673
University Lake pump station improvements		50,000		46,558		3,442
Cane Creek sodium permanganate feed systems		900,000		801,200		98,800
Total expenditures	\$	1,629,103	\$	1,315,424	\$	313,679
Water Treatment:						
Revenues:						
General Fund	\$	1,869,500	\$	1,900,631	\$	(31,131)
Expenditures:						
Water treatment plant rehabilitation projects	\$	710,500	\$	968,518	\$	(258,019)
Jones Ferry Road security improvements		200,000		392,504		(192,504)
Water treatment plant switchgear upgrade		85,000		35,495		49,505
OWASA facilities pavement improvements		89,000		73,167		15,833
Water treatment plant secondary containment		127,000		136,273		(9,273)
Water treatment plant pulsator controls electrical upgrade		70,000		50,873		19,127
Water treatment plant generator building louver replacement		88,000		17,314		70,686
Water treatment plant lighting improvements		50,000		41,786		8,214
Water treatment plant sedimentation basin rehabilitation		100,000		16,711		83,289
Facilities concrete condition assessment		100,000		18,447		81,553
Water treatment plant filter media and backwash pump replacement		250,000		92,130		157,870
Water treatment plant fluoride system review		<u> </u>		57,413		(57,413)
Total expenditures	\$	1,869,500	\$	1,900,631	\$	(31,131)
Drinking Water Storage:						
Revenues:						
General Fund	\$	58,000	\$	53,301	\$	4,699
	<u>-</u>		<u>-</u>	,	-	,,,,,
Expenditures:						
Nunn Mountain pump station evaluation	\$	58,000	\$	53,301	\$	4,699
Water Transmission and Distribution:						
Revenues:						
General Fund	\$	12,417,547	\$	8,023,488	\$	4,182,787

## SCHEDULE OF REVENUE AND EXPENDITURES - PROJECT FUNDS FROM INCEPTION THROUGH JUNE 30, 2017

	_	Project Budget		Cumulative Total to une 30, 2017	В	Unexpended salance as of une 30, 2017
Expenditures:	e.		Ф	410.050	¢.	(410.050)
Force account water line rehabilitation	\$	260,000	\$	410,058	\$	(410,058)
Water main - road improvement projects		360,000		102,331		257,669
Water line rehabilitation, replacement projects		5,416,547		4,351,099		1,065,448
Dobbins Drive - Erwin to Estes water main		134,000		86,238		47,762
Cameron Avenue water line replacement		984,000		723,600		260,400
Water distribution system hydraulic model		30,000		41,899		-
Rosemary, Henderson, Hillsborough Streets water mains		2,110,000		1,886,829		24.229
Distribution system pressure monitoring		32,000		7,772		24,228
Advanced meter infrastructure		2,430,000		319,641		2,110,359
Galvanized water main replacement		687,000		91,979		595,021
Hillsborough Street water main replacement and MLK Boulevard abandonment		200,000		2,044		197,956
Barnes Street valve evaluation	_	34,000				34,000
Total expenditures	\$	12,417,547	\$	8,023,488	\$	4,182,787
Wastewater Collection Lines:						
Revenues:						
General Fund	\$	15,311,000	\$	8,933,051	\$	3,917,968
Expenditures:						
Force account sewer line rehabilitation	\$	-	\$	11,372	\$	(11,372)
Sanitary sewer condition evaluation		3,094,000		1,846,605		
Service area sewer line rehabilitation and replacement projects		6,167,000		4,865,084		1,301,916
Bolinwood Drive interceptor		754,000		67,647		686,353
Little Creek interceptor		2,507,000		1,162,415		1,344,585
Dobbins Drive interceptor		200,000		-		200,000
Tom's Creek/Morgan Creek aerial crossings		1,609,000		732,790		876,210
Gravity sewer creek crossings		601,000		116,289		-
Rogers Road sanitary sewer		1,446,000		718,125		-
Credit (Orange County reimbursement) Rogers Road sewer		(1,316,000)		(619,124)		(696,876)
Easement acquisition program		99,000		31,848		67,152
Gravity sewer hydraulic model	_	150,000	_			150,000
Total expenditures	\$	15,311,000	\$	8,933,051	\$	3,917,968
Wastewater Pumping Stations and Force Mains:						
Revenues:	¢.	2 280 000	¢.	2 420 702	¢.	244 709
General Fund	\$	3,389,000	\$	2,439,793	\$	344,798
Expenditures:						
Pump station improvements	\$	312,000	\$	251,945	\$	60,055
Force main condition evaluation		1,102,000		436,339		665,661
Eastowne pump station rehabilitation		157,000		161,710		(4,710)
Oaks 3 and Tinkerbell pump station		719,000		635,547		-
Rogerson Drive force main redundancy evaluation		50,000		-		-
Rogerson Drive pump station rehabilitation		694,000		223,044		-
Piney Mountain pump station rehabilitation		105,000		129,098		(24,098)

## SCHEDULE OF REVENUE AND EXPENDITURES - PROJECT FUNDS FROM INCEPTION THROUGH JUNE 30, 2017

		Project Budget	Cumulative Total to une 30, 2017	В	nexpended alance as of one 30, 2017
Manning Drive pump station rehabilitation		139,000	27,333		111,667
Heritage Hills and Eubanks pump station rehabilitation		31,000	15,975		15,025
Knolls pump station rehabilitation		80,000	27,237		52,763
Rogerson Drive emergency repair		-	531,565		(531,565)
Rogerson Drive emergency repair	_		 331,303		(331,303)
Total expenditures	\$	3,389,000	\$ 2,439,793	\$	344,798
Wastewater Treatment and Disposal:					
Revenues:					
General Fund	\$	19,024,000	\$ 18,993,609	\$	30,391
Expenditures:					
Mason Farm waste water treatment plant rehabilitation and improvement project	\$	1,597,000	\$ 1,926,920	\$	(329,920)
Mason Farm waste water treatment plant odor control and aeration		10,526,000	11,701,448		(1,175,448)
Mason Farm waste water treatment plant comprehensive coatings program		1,029,000	1,422,477		(393,477)
Mason Farm waste water treatment plant digesters #1 and #2		2,919,000	2,805,929		113,071
Mason Farm waste water treatment plant IPS rehabilitation and replacement		231,000	130,540		100,460
Mason Farm waste water treatment plant digester pumps #3 and #4		-	76		(76)
Mason Farm stormwater pump station electrical rehabilitation		551,000	157,799		393,201
Mason Farm waste water treatment plant polymer feed/gravity belt thickener		410,000	215,465		194,535
Mason Farm waste water treatment plant nondrinking water pump replacement		384,000	30,861		353,139
Mason Farm waste water treatment plant pump station LED upgrades		74,000	121,805		(47,805)
Mason Farm waste water treatment plant pavement improvements		113,000	14,009		98,991
Mason Farm waste water treatment plant administration building improvements		43,000	30,314		12,686
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
Mason Farm waste water treatment plant roof replacement		364,000	47,977		316,023
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		80,000	75,824		4,176
Mason Farm waste water treatment plant secondary clarifier rehabilitation		50,000	39,520		10,480
Mason Farm waste water treatment plant SCADA system upgrade		150,000	141,550		8,450
Mason Farm waste water treatment plant critical spare pumps		125,000	59,191		65,809
Mason Farm waste water treatment plant remote storage facility electrical upgrade	_		 71,905		(71,905)
Total expenditures	\$	19,024,000	\$ 18,993,609	\$	30,391
Facility Improvements:					
Revenues:					
General Fund	\$	1,049,000	\$ 271,890	\$	777,110
Expenditures:					
Information Services	\$	-	\$ 22,998	\$	(22,998)
Administration building chiller replacement		169,000	55,640		113,360
Asset management development		880,000	 193,252		686,748
Total expenditures	\$	1,049,000	\$ 271,890	\$	777,110

Net Position by Components
Last Ten Fiscal Years
(Accrual Basis of Accounting)
(Unaudited)

					Fisca	Fiscal Year				
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Net investment in capital assets	\$ 236,928,712	336,928,712 \$ 224,969,584	\$ 218,421,756	\$ 219,522,714	\$ 206,109,733	\$ 218,421,756 \$ 219,522,714 \$ 206,109,733 \$ 200,603,988 \$ 190,756,445 \$ 188,106,716 \$ 184,466,042 \$ 177,287,377	\$ 190,756,445	\$ 188,106,716	\$ 184,466,042	\$ 177,287,377
Restricted for capital reserve	171,013	260,978	222,470	187,910	151,600	125,721	98,616	1,252,498	1,226,604	1,168,081
Restricted for future capital projects	•	•	•	•	14,116,382	•	•	•	•	•
Restricted for debt service	•	•	•	1	1	•	•	1,116	6,114	154,388
Umestricted	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	5,993,719
Total	\$ 263,660,047	\$ 263,660,047 \$ 254,558,204	\$ 245,543,733	\$ 238,397,316	\$ 232,137,515	<u>\$ 238,397,316</u> <u>\$ 232,137,515</u> <u>\$ 226,812,353</u>	\$ 217,720,375	\$ 210,473,463	<u>\$ 210,473,463</u> <u>\$ 200,839,735</u> <u>\$ 184,603,565</u>	\$ 184,603,565

Changes in Net Position

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

					Fisca	Fiscal Year				
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Operating Revenues:										
Water	17,540,247	17,894,907	\$ 18,291,453	610,696,71	17,819,790		18,534,150	14 848 336	15,364,026	11,047,427
Sewer	16,261,076	10,514,594	10,/39,/18	10,289,012	10,515,731	060,000,01	15,962,181	14,848,339	12,798,394	11,046,437
Other	169,963	169,660	1 762 261	10,/91	163,013	170,270	147,013	1 618 087	1233 515	169,603
	35 740 394	36 369 370	36 960 847	35 8/3 032	35 157 613	36.480.140	36 003 830	33 558 777	29 537 290	28 794 093
i otal operating revenues	55,740,554	0/5,805,05	30,900,042	22,043,032	52,457,013	30,409,149	20,000,000	27,700,717	0,435,155,430	20,194,093
Operating Expenses:										
Water supply and treatment	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	2,441,028
Water distribution	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	2,275,756
Sewer treatment	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	2,981,891
Sewer collections	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	1,134,682
General and administrative	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	4,467,944
Customer relations	•	•	1	•	'	•	•	540,582	598,092	672,147
Maintenance	•	•	ı	•	1	•	•	2,128,731	2,135,038	1,881,395
Lab	•	•	1	•	•	•	•	732,563	837,770	788,628
Depreciation and amortization	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	7,215,175
Other post-employment benefits	493,193	466,573	372,993	1,012,532	1,033,149	1,038,521	750,503	883,497	738,000	•
Total operating expenses	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	23,858,646
Operating income (loss)	5,164,837	7,358,771	8,203,897	860'6889	6,128,132	7,197,699	8,106,362	6,972,143	2,546,224	4,935,447
Non-Operating Revenues (Expenses):										
Customer fees	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	1,995,415
Investment adjustment	32,802	20,663	15,133	14,755	15,664	17,964	29,261	29,169	80,343	584,031
Interest expense	(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)	(3,832,320)
Amortization of bond expense and patent	914,691	120,781	(177,021)	107,636	111,529	19,139	71,676	(73,283)	(83,338)	(69,940)
Other	75.548	1 000	(145,273)	186,62	4,228	(255,552)	(1,320,136)	(92,613)	7,0,0	2,505
Income (loss) before contributions	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	3,615,498
Capital Contributions:										
Capital grants and contributions	•	18,170	2,320	•	•	142,329	14,354	101,451	1,577,049	926,504
Contributions in aid of construction	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	2,390,159
Total capital contributions	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	3,316,663
Increase in net position	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	6,932,161
Net Position:										
Beginning of year, previously reported - July 1	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	177,671,404
Document of the marketed	254 558 204	245 543 733	237.480.723	232 137 515	776 000 300	217 770 375	210 473 463	200 839 735	184 603 565	177 671 404
Degining of year, restated	407,000,407	640,040,100	621,460,162	010,101,707	240,044,114	616,021,112	710,47,7,403	200,003,133	104,000,000	177,071,404
End of year - June 30	\$ 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

#### 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
2008	3,002,669	2,701,000
2009	2,915,405	2,889,705
2010	2,863,425	2,933,870
2011	2,741,182	2,673,448
2012	2,515,000	2,784,000
2013	2,413,000	2,942,000
2014	2,477,000	3,028,000
2015	2,521,096	2,954,345
2016	2,440,937	2,956,000
2017	2,397,093	3,094,963

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
2008	19,998	14,732,933	9,535,182	110,880,000	1.55	5,545.00
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

#### **Principal Water and Sewer Customers**

Year Ended June 30, 2017 and 2008 (Unaudited)

	Percent of Water Sales	Percent of Water Sales
	<u>2017</u>	<u>2008</u>
University of North Carolina at Chapel Hill	21%	26%
Chapel Hill - Carrboro City Schools	2%	1%
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

ORANGE WATER AND SEWER AUTHORITY

Town of Chapel Hill NC, Property Tax Levies and Collections Last Ten Fiscal Years

(Unaudited)

Subsequent         Amount           Years         Amount           \$ 145,619         \$ 30,386,401           139,190         33,918,874	99.44% \$ 145,619 \$ 99.43% 139,190
139,190 254,454	99.43%
258,936	99.10%
	35,604,067 99.21%
	99.59%
	19,638,269 99.62%
	39,314,757 99.60%

<sup>\*</sup>Data not available. The Town contracts with the counties to maintain the tax records and must rely on the records provided.

Notes: (1) This represents the total delinquent taxes for years 2008 and prior.

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

Ratio of Assessed Value to Estimated Actual Value (6)	83.14%	%26.86	%59.86	99.11%	99.11%	103.82%	96.32%	%06'26	99.01%	100.00%
Estimated Actual Taxable Value (5)	\$ 6,807,501,064	5,896,329,583	7,141,991,207	7,477,610,120	7,200,106,033	7,583,529,271	7,188,606,161	7,290,629,965	7,594,665,291	7,532,719,242
Total Direct Tax Rate (4)	\$ 0.522	0.581	0.494	0.494	0.494	0.494	0.514	0.524	0.524	0.524
Total Taxable Assessed Value	\$ 5,659,756,385	5,835,597,388	7,045,574,326	7,411,059,390	7,264,762,419	7,304,497,468	7,463,253,905	7,447,017,329	7,519,606,147	7,532,719,242
Public Service Companies (3)	\$ 60,142,623	63,678,158	67,647,776	62,491,249	63,232,013	66,253,143	66,762,306	65,246,662	85,443,691	83,768,622
Personal Property	\$ 460,567,284	471,708,077	455,030,840	452,486,487	471,001,413	536,958,587	573,309,679	519,383,543	541,047,846	546,117,755
Combined Real Property	\$ 5,139,046,478	5,300,211,153	6,522,895,710	6,896,081,654	6,730,528,993	6,701,285,738	6,823,181,920	6,862,387,124	6,893,114,610	6,902,832,865
Commercial Property	\$ 1,313,540,280	1,354,733,971	1,667,252,143	1,762,638,471	*	*	*	*	*	*
Residential Property	\$ 3,825,506,198	3,945,477,182	1) 4,855,643,567	5,133,443,183	*	*	*	*	*	*
Fiscal Year Ended June 30	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017

<sup>\*</sup>The Breakdown between residential and commercial property is not available for fiscal years after 2011.

Notes:

(1) Revaluation year.

<sup>(2)</sup> Increase due to revaluation and the addition of \$200 million from a major annexation.

<sup>(3)</sup> Public service companies valuations are provided by the North Carolina Department of Revenue.

These amounts include both real and personal property.

<sup>(4)</sup> Per \$100 of value. Includes taxes for General Fund, Debt Service Fund, and Transit Fund.

<sup>(5)</sup> 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.

ORANGE WATER AND SEWER AUTHORITY

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

Last Ten Fiscal Years

(Unaudited)

					Years Tax	<b>Years Taxes Payable</b>				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Chapel Hill within Orange County: Town direct rates:			*							
General Fund	\$ 0.474	\$ 0.423	\$ 0.360	\$ 0.360	\$ 0.378	\$ 0.378	\$ 0.388	\$ 0.388	\$ 0.388	\$ 0.388
Transportation	0.048	0.048	0.041	0.041	0.041	0.041	0.051	0.051	0.051	0.051
Debt Service**	1	0.110	0.093	0.093	0.075	0.075	0.075	0.085	0.085	0.085
Downtown Service District	0.090	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071
Overlapping rates:										
Orange County Chanel Hill - Carrboro School	0.950	866.0	0.858	0.858	0.858	0.858	0.858	0.878	0.878	0.878
District	0.204	0.230	0.188	0.188	0.188	0.188	0.208	0.208	0.208	0.208
Total	1.766	1.880	1.611	1.611	1.611	1.611	1.651	1.681	1.681	1.681
Chapel Hill within Durham County: Town direct rates:										
General Fund	0.474	0.423	0.360	0.360	0.378	0.378	0.388	0.388	0.388	0.388
Transportation	0.048	0.048	0.041	0.041	0.041	0.041	0.051	0.051	0.051	0.051
Debt Service	1	0.110	0.093	0.093	0.075	0.075	0.075	0.085	0.085	0.085
Overlapping rates:										
Durham County	0.834	0.708	069.0	0.746	0.746	0.744	0.744	0.744	0.793	0.740
Total	1.356	1.289	1.184	1.240	1.240	1.238	1.258	1.268	1.317	1.264

<sup>\*</sup>Revaluation Year

Source: North Carolina State Department of Revenue

<sup>\*\*</sup> For fiscal years 2007/2008 and prior, property tax revenues were allocated between the General Fund and the Transit Fund. Beginning with the 2008/2009 fiscal year, the allocation was changed to include an allocation to the Debt Service Fund.

Town of Chapel Hill, NC Demographic and Economic Statistics

Last Ten Fiscal Years

(Unaudited)

		Personal	onal	Per	Capita				
		Income	ome	Per	sonal	Median		School	Unemployment
ĺ	Population (1)	(in thousand	ands)(2)	Inco	me (2)	Age (3)	٦	Enrollment (4)	Rate % (5)
	54,903	\$	5,060,894	\$	41,435	24.2	15.82	39,864	3.1
	55,616		5,450,187		43,844	24.2		40,316	4.5
	56,778		5,976,341		47,063	25.6		39,428	5.6
	57,233		6,186,352		47,925	25.6		41,139	5.4
	57,757		6,268,886		46,713	25.6		41,059	5.6
	58,424		6,608,945		48,683	25.6		41,402	5.6
	59,271		7,131,776		51,702	25.3		41,242	4.4
	59,653		7,345,876		52,339	25.3		41,176	4.9
	59,753		7,440,708		52,989	25.8		41,490	5.2
	59.569		7.822.299		55.338	25.8		41,199	5.2

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, 2017	

(Unaudited)

Size of Service Area:  Square miles  31	
100	
Miles of water pipe 400	
Miles of wastewater collection pipe 343	
Customer accounts 21,526	
Budgeted Employee Positions 135.0	
Water Treatment Plant Capacity (in MGD):	
Capacity 20	
Production average, FY 2016 6.5	
Production peak, FY 2016 8.5	
Wastewater Treatment Plant Capacity (in MGD):	
Capacity 14.5	
Average daily flow, FY 2016 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
Last Ten Fiscal Years

(Unaudited)

Department	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
General and Administrative:										
Office of the Executive Director	5.50	5.50	5.50	6.50	7.00	00.9	7.00	7.00	7.00	9.00
Engineering	14.00	14.00	14.00	13.00	13.00	14.00	14.00	14.00	13.50	15.00
Human Resources	3.00	3.00	3.00	2.50	2.50	3.00	2.00	3.00	3.50	90.9
Finance	00.9	00.9	00.9	7.50	7.50	7.00	9.00	8.00	6.34	7.00
Purchasing		1	1	ı	ı	ı	ı	ı	1.33	2.00
Information Technology	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00
Operations:										
Customer Service	9.00	9.00		7.50	7.50	6.50	7.00		7.33	8.00
Water Supply and Treatment	25.50	25.50		26.50	25.00	25.00	24.00		13.50	13.00
Water Distribution	32.00	32.00		32.00	30.00	32.00	32.00		32.00	32.00
Plants Maintenance	,	,		ı	ı	1	ı		13.00	14.00
Laboratory		,			•	1	ı		8.00	10.00
Wastewater Treatment	22.50	22.50		21.50	23.00	23.00	24.00		13.50	15.00
Sewer Collection	15.00	14.00	14.00	14.00	16.00	15.00	15.00		15.00	15.00
Totals	136.50	135.50		135.00	135.50	135.50	139.00	139.00	138.00	150.00

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, 2017 and 2016 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 21, 2017.

#### **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 & associated, CPas, P.a.

Hickory, North Carolina September 21, 2017

## SCHEDULE OF FINDINGS AND RESPONSES FOR THE YEAR ENDED JUNE 30, 2017

#### 1. Summary of Auditor's Results

	<b>Financial Statements</b>				
	Type of auditor's report issued on whether the financial statements audited were prepared in accordance to GAAP:	Unmodif	ïed		
	Internal control over financial reporting:				
	• Material weakness(es) identified?		Yes	<u>X</u>	No
	• Significant deficiency(ies) identified?		Yes	X	None reported
	Non-compliance material to financial statements noted?		Yes	X	No
2.	Findings Related to the Audit of the Basic Finance	cial Stateme	nts		
	None				

#### SCHEDULE OF PRIOR YEAR AUDIT FINDINGS FOR THE YEAR ENDED JUNE 30, 2017

None reported



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

#### REPORT OF INDEPENDENT AUDITORS ON REVENUE BOND COVENANT COMPLIANCE

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

We have audited, in accordance with auditing standards generally accepted in the United States of America, the Statements of Net Position of the Orange Water and Sewer Authority (the "Authority"), a component unit of the Town of Chapel Hill, North Carolina, as of June 30, 2017 and 2016, and the related statements of revenues, expenses, and changes in net position and cash flows for the years then ended, 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 21, 2017.

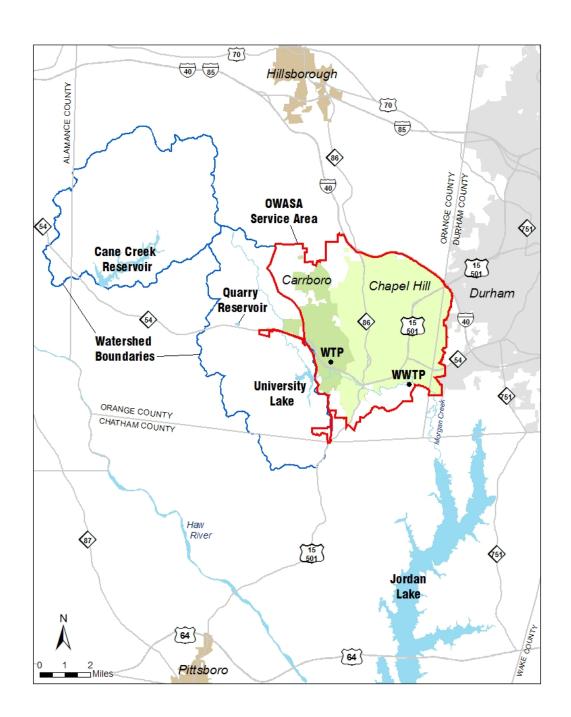
In connection with our audit, nothing came to our attention that caused us to believe that the Authority failed to comply with the terms, covenants, provisions, or conditions of Section 7.04 contained in the amended and restated bond order, dated September 13, 2001 with the Bank of New York and the North Carolina Local Government Commission, insofar as they relate to accounting matters. However, our audit was not directed primarily toward obtaining knowledge of such non-compliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding the Authority's non-compliance with the above referenced terms, covenants, provisions, or conditions of the bond order, in so far as they relate to accounting matters.

This report is intended solely for the information and use of the Board of Directors and management of the Authority, the Bank of New York, and the North Carolina Local Government Commission and is not intended to be, and should not be, used by anyone other than these specified parties.

Martin Starnes & Associates, CPAs, P.A.

Martin Starnes & associated, CPas, P.a.

Hickory, North Carolina





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