

ANNUAL BUDGET

Fiscal Year 2017

Orange Water and Sewer Authority

Carrboro - Chapel Hill, North Carolina



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



ORANGE WATER AND SEWER AUTHORITY

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GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Orange Water & Sewer Authority
North Carolina**

For the Fiscal Year Beginning

July 1, 2015

Executive Director

BUDGET MESSAGE

**To the
Board of Directors**

The Annual Budget for the fiscal year beginning July 1, 2016 and ending June 30, 2017 has been prepared in accordance with OWASA's *Financial Management Policy*, our *Amended and Restated Bond Order* adopted on September 13, 2001, and *The Local Government Budget and Fiscal Control Act*.

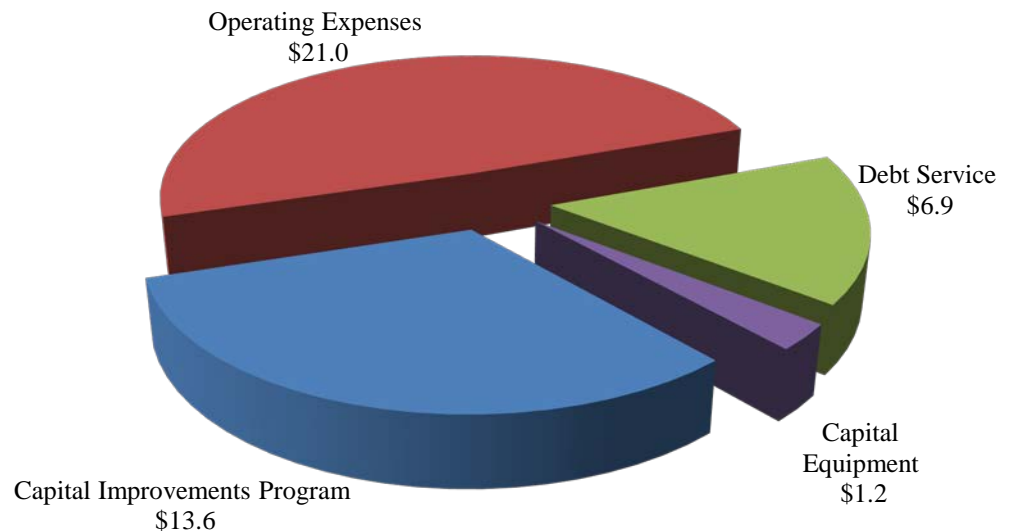
The primary drivers of this budget include the capital improvements project needs identified in OWASA's five-year Capital Improvements Program (CIP); projected drinking and reclaimed water demands; operating expenses required to sustain service levels; debt obligations; and reserve funding.

Projected operating revenues for Fiscal Year (FY) 2017 reflect no increase in monthly rates. This was made possible by prior year rate increases, the stabilization of water sales, cost reduction efforts, and reserve levels.

The operating expense budget is about 1% greater than the FY 2016 budget. Consistent with our strategic objectives, the FY 2017 operating expense budget meets the needs and priorities of the organization. However, it has few provisions for contingencies.

The budget consists of projected revenues and other receipts of \$37 million, capital project costs of \$13.6 million, operating expenses of \$21 million, debt service payments of \$6.9 million, and capital equipment purchases of \$1.2 million.

FY 2017 Expenditures (millions)



**Highlights of the
Budget**

Key elements of this budget include:

- No increases in monthly water, sewer and reclaimed water rates.
- Continuation of the seasonal water conservation rate structure for all customers other than individually-metered residential and irrigation-only customers. Under the seasonal water conservation rates, the water commodity charge will remain \$7.91 per thousand gallons of water consumed during the warmer peak water demand months of May through September 2017. The water commodity charge for the cooler, lower demand months of October 2016 through April 2017 will remain \$4.16 per thousand gallons.

- Continuation of the five-tiered increasing block water rate structure for individually-metered residential customers. The block rate structure is designed under cost-of-service principles to promote water conservation.

	<u>Monthly Volume of Use in Gallons</u>	<u>Rate per 1,000 Gallons</u>
Block 1	1,000 to 2,000	\$2.63
Block 2	3,000 to 5,000	\$6.39
Block 3	6,000 to 10,000	\$7.83
Block 4	11,000 to 15,000	\$10.94
Block 5	All use 16,000 and up	\$19.79

For an individually-metered residential customer using 4,000 gallons of water per month, the monthly water and sewer bill remains \$70.66.

- An annual operating budget of \$21 million, reflecting an increase of 1% from the FY 2016 budget. The FY 2017 budget includes funding for 132.5 personnel positions.
- On June 9, 2016, the Board of Directors approved a cost of labor adjustment of 1.5% for eligible employees; additionally, the Board approved merit increases of 1.5% and 3% for employees earning a performance rating of Successful and Exceptional, respectively. Merit increases are scheduled take effect in November 2016.
- Capital improvement spending of \$13.6 million for FY 2017, as identified in the five-year CIP. Approximately 80% of capital spending is planned for water and sewer system rehabilitation and replacement projects.
- No new debt. Capital improvements will be funded through cash.

Strategic Planning

OWASA’s Strategic Plan establishes the key goals and objectives for the next three to five years. It guides the organization’s work and funding priorities. The Board of Directors approved an updated Strategic Plan in June 2016; highlights are summarized below.

Initiative	Goals	Status
Provide reliable and high quality supply of water for the next 50 years	<ul style="list-style-type: none"> • Optimum mix of technically, environmentally, economically, and socially feasible water supply and demand management alternatives that meet projected demands and level-of-service objectives under a range of future conditions and uncertainties. • Enhanced water supply reliability, reduced energy use, and reduced long-term life-cycle costs of water and sewer service through cost-effective water use efficiency, conservation, and RCW strategies. 	<ul style="list-style-type: none"> • We have begun the process of updating our long-range water supply plan and expect for it to be completed in FY 2017. It is expected that our water supply will be sufficient to meet the community’s needs for the next 50 years in most scenarios.
	<ul style="list-style-type: none"> • Maintain our Jordan Lake water supply allocation. • New or amended water transfer agreements with Town of Cary and City of Durham for OWASA to access our Jordan Lake water supply allocation through those entities when needed. 	<ul style="list-style-type: none"> • We have submitted our allocation application to the state of North Carolina and await the next round of Jordan Lake water supply allocations.

Initiative	Goals	Status
Engage the Community	<ul style="list-style-type: none"> Engage stakeholders to understand their perceptions and expectations so that we make well-informed decisions about our services and maintain their trust. Empower stakeholders with information so they use water wisely and protect water quality through proper use of our wastewater system. Provide stakeholders with timely information about projects, programs, and policies that are important to them and offer them meaningful opportunities to give feedback so that we can continue to improve. 	<ul style="list-style-type: none"> We have implemented a formalized community engagement process for use in conjunction with all of our major initiatives. In FY 2016, we conducted a customer satisfaction survey, receiving over 800 responses. The feedback provided valuable information that has led to process and policy changes that we believe will improve customer satisfaction.
Adopt financial management policies and budget decision processes to ensure affordable services and fiscal sustainability	<ul style="list-style-type: none"> Financial reserve funds set at appropriate level. Efficient process which provides opportunities for stakeholder input and allows the Board of Directors to make well-informed budget and rate decisions. Affordability target set at appropriate level. The right investments at the right time to sustain the community's essential water, wastewater, and reclaimed water assets. 	<ul style="list-style-type: none"> The Board of Directors reviewed our financial management policies in FY 2016, making no modifications. The Board plans to further consider our policies regarding reserves and capital investments in FY 2017.
Implement an Energy Management Plan	<ul style="list-style-type: none"> Cost-effective measures to reduce our use of energy, related energy costs, and associated greenhouse gas (GHG) emissions. 	<ul style="list-style-type: none"> We have begun the process of drafting an Energy Management Plan and expect it to be completed in FY 2017.
Implement Advanced Metering Infrastructure (AMI)	<ul style="list-style-type: none"> Cost-effective, accurate, reliable and timely water metering information for enhanced customer service. 	<ul style="list-style-type: none"> The Board approved implementing an AMI system. We expect to issue a request for proposals, execute a contract, and begin system installation in FY 2017. We estimate that the project will be completed in FY 2018.
Develop a plan and policy framework for long-term management and disposition of OWASA lands	<ul style="list-style-type: none"> Land assets provide the expected value to fulfill OWASA's mission and the assets are effectively managed. 	<ul style="list-style-type: none"> A time-frame for this initiative has not been determined.

OWASA's Budget Process

The budget for OWASA's operating services and capital projects is developed in accord with:

- OWASA's *Mission Statement*. The Board's adopted *Mission and Values Statement* establishes priorities for serving the community. These priorities focus on service excellence, environmental responsibility, employee development and well-being, fiscal and operational efficiencies, relationships with local governments, and sustainable operations. These priorities must be met within the constraints set by various statutory, regulatory, and contractual obligations and agreements.

- OWASA's *Strategic Plan* which identifies the organization's high-priority goals and objectives.
- OWASA's *Financial Management Policy*, strategic financial planning, related policy decisions, and measurements of financial performance.
- A regularly updated water and sewer master plan which includes reports and analyses of system needs.
- North Carolina General Statute Chapter 159: *The Local Government Budget and Fiscal Control Act*.
- A 15-year financial plan that takes into account economic assumptions, growth trends, operating and capital project costs, desired ratio of net income to debt service, projected water sales, growth in customer accounts, inflation factors, and the cost of borrowing.
- Strategic issues and policies as identified by the Board of Directors and staff.
- The five-year Capital Improvements Program.

The annual budget process begins early in each fiscal year and concludes with the adoption of an annual budget in June. Throughout the process, OWASA staff works closely with the Board of Directors in developing and refining information to submit for approval.

Public hearings on the proposed budget, CIP, and the schedule of rates and fees were held at the OWASA Board of Directors' regular meeting on May 26, 2016, and the budget and rate schedule was adopted by the Board on June 9, 2016.

In accord with State law, the adopted budget may be amended at any time to reflect changes in services, projects and costs. Such amendments can be made in any form by the Board of Directors' action, but the budget must remain balanced. A budget is considered balanced when the sum of net revenues and appropriated fund balance is equal to appropriations. In the State of North Carolina, the minimum legal budgetary level of control is at the departmental level. In addition to the departmental information presented in this document, compliance at this level is disclosed in OWASA's Comprehensive Annual Financial Report.

Priorities and Assumptions

Legal/Regulatory Assumptions

Federal, State, Local and Judicial

- OWASA must prepare and adopt a balanced budget in accord with the North Carolina Budget and Fiscal Control Act.
- Statutes governing purchasing and contracting require the development of and adherence to a Minority and Women-Owned Business Enterprise Program in soliciting and accepting bids for certain construction work.
- OWASA's primary source of income is customer rates and fees. The OWASA Board has sole authority to set and revise rates, fees and other charges for services. Rates, fees and charges are not subject to supervision or regulation by any bureau, board, commission, or other agency of the State, or by any political subdivision (N.C. General Statute 162A-9). Rates, fees and charges shall be set so that revenues, together with any other available funds, shall be sufficient at all times to pay (1) the cost of maintaining, repairing, and operating the water and sewer systems including reserves for such purposes, and (2) all of the principal and interest on bonds (N.C. General Statute 162A-9).

- Fees are applicable throughout the service area, and fees and charges may vary by customer class when discernable cost factors can be attributed to the varying classes.
- The Governmental Accounting Standards Board requires that the cost of post-employment benefits be recognized and recorded in OWASA's annual financial statements.

Intergovernmental Sale and Purchase Agreements

Agreements of Sale and Purchase with the University of North Carolina at Chapel Hill (UNC) and the Towns of Chapel Hill and Carrboro state:

- OWASA shall charge reasonable rates, based on cost of service, to all classes of users, serving all users within each class impartially and without unjust discrimination, with no differential in rates based on the location of a customer.
- OWASA shall operate the water and sewer system at the lowest rates possible consistent with its obligation to provide proper and efficient service.
- OWASA will furnish, for as long as UNC shall desire, drinking water, meeting acceptable purity standards, in such quantity as may be required to meet UNC's needs.
- UNC will purchase all its drinking water requirements from OWASA unless OWASA is unable to supply sufficient water.
- UNC will be provided, now and hereafter, reliable and adequate sewer services to meet its needs.
- If five-year cumulative rate revisions exceed 20%, UNC may request that a rate study be performed by a qualified consultant and its results shared.
- OWASA agrees to meet the reasonable water and sewer needs of the Towns of Carrboro and Chapel Hill.

Additionally, Chapel Hill, Carrboro, and Orange County have adopted local water conservation ordinances as recommended by OWASA. The requirements of those ordinances have short- and long-term demand and revenue implications.

Bond Order (Series 2001 as amended and restated)

- Interest earnings on bond proceeds and related accounts are included in the debt service ratio calculation.
- OWASA shall not provide free service, and shall charge all users including public bodies based on established rates, except for water used in fire protection, washing and flushing streets, and testing water lines. The cost of these public benefit uses is recovered from all customers.
- The Bond Order requires a minimum debt service coverage ratio of 1.2. OWASA's *Financial Management Policy* sets the desired performance target as 2.0.
- In order to issue new debt, rate adjustments in any fiscal year must be sufficient to provide for debt service payments in the immediately succeeding fiscal year.

Organizational Assumptions

Financial Goals and Objectives

- The FY 2017 Budget assumes no changes in the levels of service delivered to customers.
- OWASA's *Financial Management Policy* requires maintaining a working capital reserve balance at least equal to the greater of four months of the annual operating expense budget or

20% of the total estimated cost of capital improvements projects identified for the succeeding three years.

- Four months of estimated operating costs based on the FY 2017 budget is \$7 million.
- 20% of planned capital improvements for FY 2018 through FY 2020 equals \$11.1 million.
- The General Fund ending balance for FY 2017 is projected to be \$19.2 million.
- The *Financial Management Policy* calls for funding a Capital Improvements Reserve fund and a Rate/Revenue Stabilization Reserve fund. The minimum balance in the Capital Improvements Reserve fund is 2% of net capital assets. The minimum balance in the Rate/Revenue Stabilization Reserve fund is 5% of projected water and sewer revenue.
- The *Financial Management Policy* specifies at least 30% cash funding of capital improvements. Our five-year financial plan reflects approximately 54% cash funding of capital projects during fiscal years 2017 through 2021.

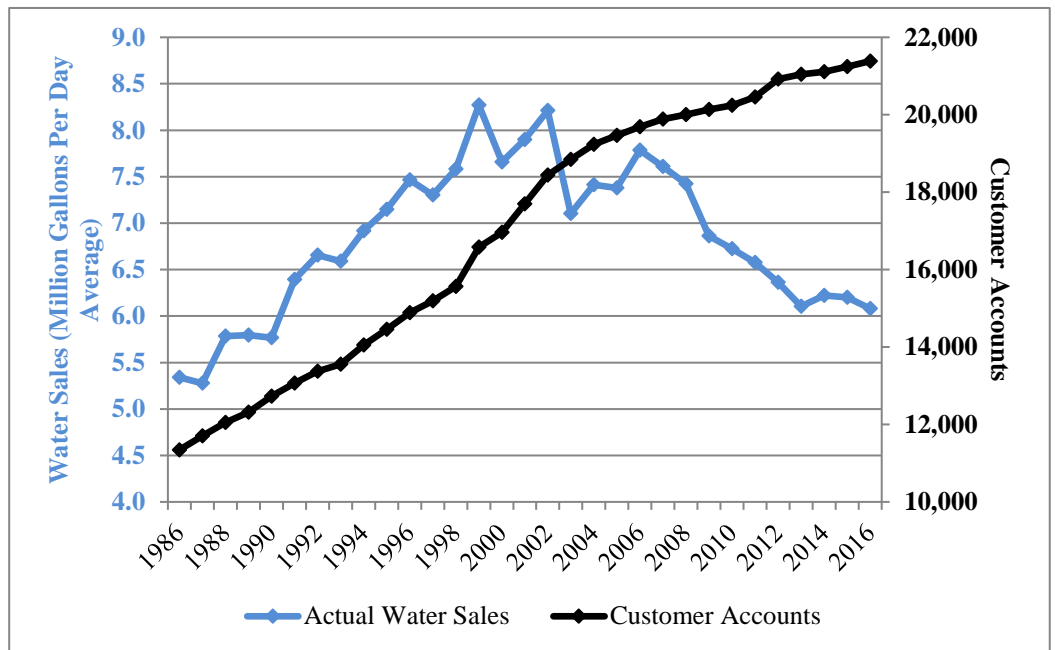
The debt service coverage ratio for FY 2017 is projected to be 2.3, and OWASA’s financial plan indicates the following subsequent annual rate increases may be required in order to meet our financial obligations and maintain our financial measurement goals:

<u>Projected Rate Increases</u>		
FY 2018	3% Water	3% Sewer
FY 2019	3% Water	3% Sewer

These projected rate adjustments are preliminary and will be further analyzed as part of each subsequent year’s budgeting process.

Customer Demand and Service Levels

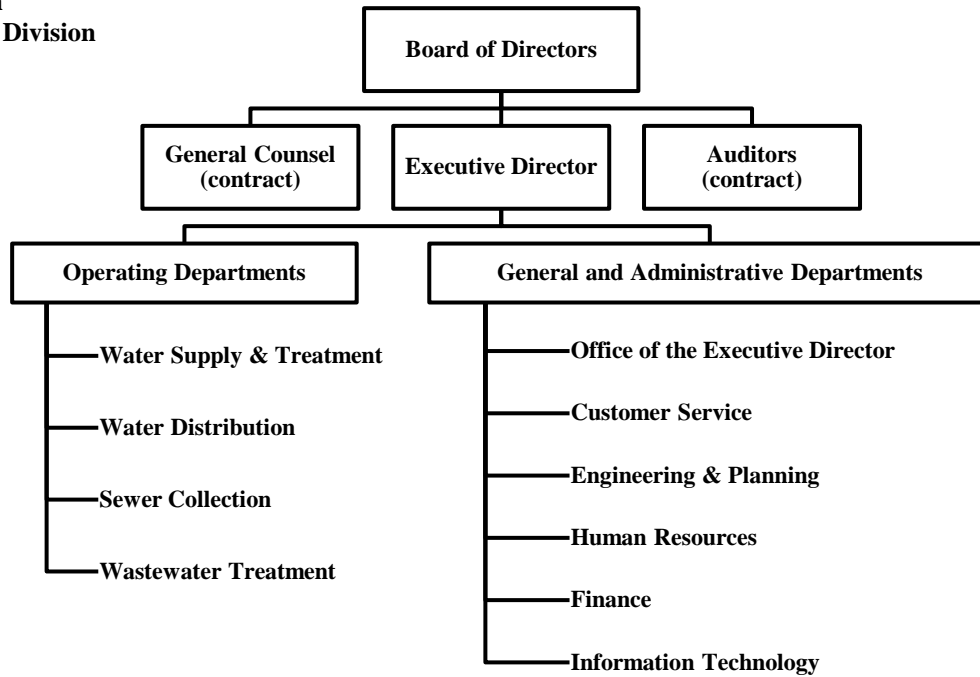
Over the last 15 years, drinking water demand in OWASA’s service area has declined substantially even as the number of customers served has increased (see chart below). Projected water demand for FY 2017 is about the same as it was in the early 1990s while the number of customers served has increased over 65% during that time period. Two droughts of record in the 2000s, the implementation of conservation rates in 2001 and 2007, and the completion of our reclaimed water system in 2009 contributed to the reduction in drinking water demand.



The following projections are based on historical trends.

- FY 2017 projections for drinking water demand and new connections are affected by several factors including:
 - Drinking water and reclaimed water (RCW) sales in FY 2017 are expected to be only slightly higher than FY 2016.
 - Estimated RCW use during FY 2017 is 0.69 million gallons per day (MGD).
 - Average daily drinking water demand in FY 2017 is projected to be approximately 6.13 MGD.
- Based on the development plans in OWASA’s service area, we expect to install 160 new meter equivalents for the year.
- A construction cost inflation rate of 5.0% is assumed for FY 2018 and beyond.

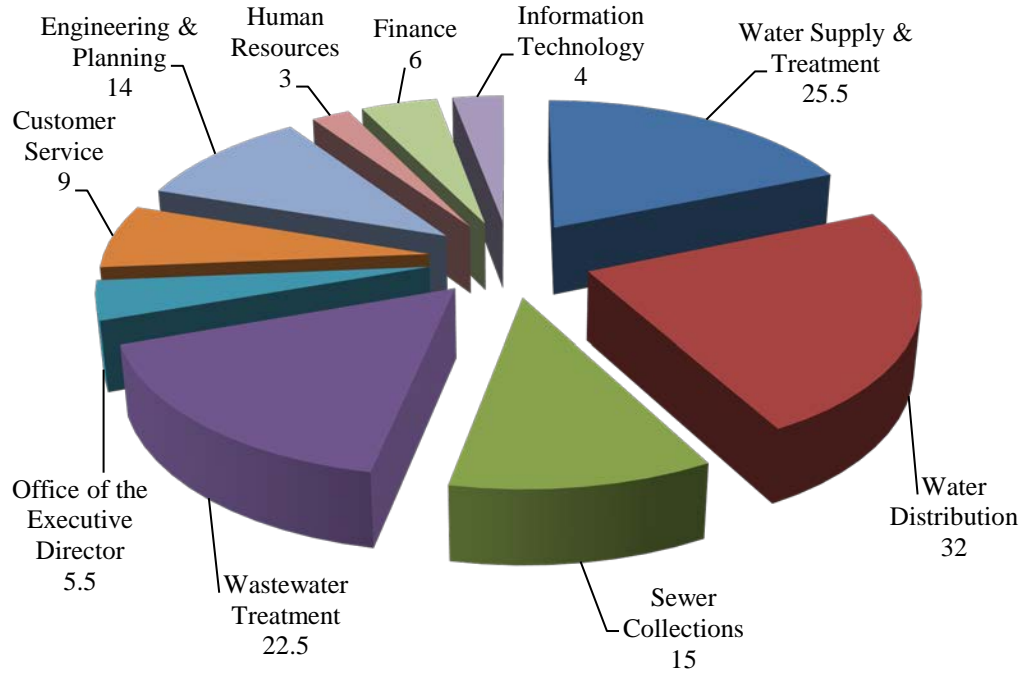
**Organization
Overview by Division**



**Staffing
Summary**

The OWASA Board has authorized a total of 136.5 positions; 132.5 are funded for FY 2017. Authorized staffing levels (full-time equivalents) are allocated by department as follows:

Number of Authorized Positions by Department



Summarized Annual Income and Expenses (Revenue Fund)

Description	<u>Resources</u>	<u>Expenses</u>	<u>Balance</u>
Total Operating Revenue	\$35,853,770		
Operating Expenses			
Net Expenses, General and Administrative		\$6,924,545	
Net Expenses, Operating		<u>14,083,038</u>	
Net Total Operating Expenses		21,007,583	
Net Operating Income			\$14,846,187
Availability Fees and Interest Earned	1,010,658		
Total Net Income			15,856,845
Total Debt Service		6,932,059	
Debt Coverage Ratio			2.3

Summarized Annual Capital/Non-operating Income and Expenses (General Fund)

Description	<u>Resources</u>	<u>Expenses</u>	<u>Balance</u>
General Fund Beginning Balance (7/1/16)			\$25,108,579
Transfer From Revenue	\$8,924,786		
Loan proceeds	0		
Funds Available for Expenditures			32,930,582
Total Estimated Capital Expenditures		\$14,875,000	
General Fund Ending Balance (6/30/2017)			<u>\$19,158,365</u>

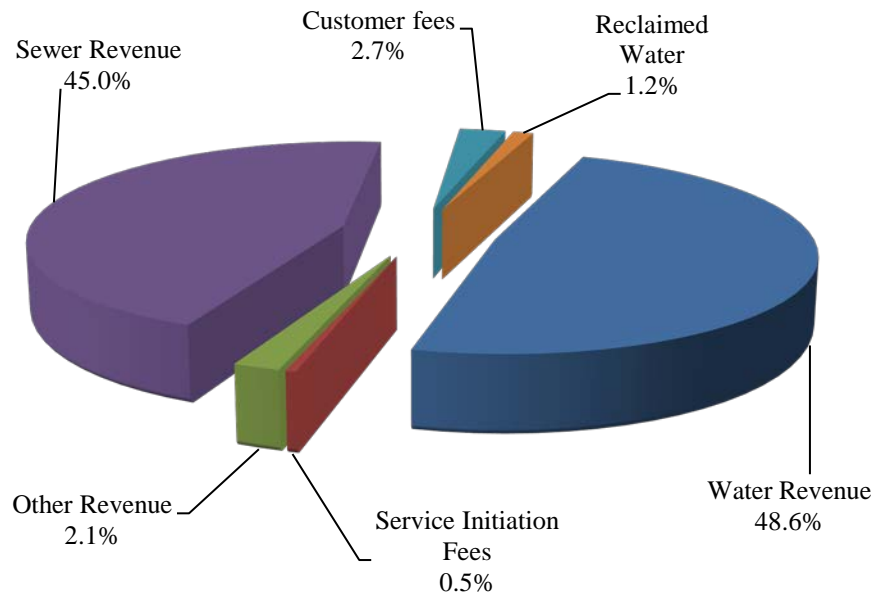
Revenue Summary

In providing essential public water, wastewater (sewer) and reclaimed water services to Carrboro, Chapel Hill and portions of southern Orange County and southwest Durham County, OWASA incurs substantial operating and capital costs. OWASA operates as a nonprofit enterprise fund and has no legislative authority to levy taxes nor does it receive tax revenues from local governments. Ongoing water, sewer and reclaimed water operations and capital improvements are financed almost entirely through customer fees and charges with occasional grants from state or federal governments. OWASA establishes rates sufficient to generate revenue to meet operating costs, pay debt service, and provide at least 30% cash funding for the CIP. Rates and fees are periodically adjusted in response to resource needs as determined in OWASA's financial planning process.

OWASA's gross receipts, with minor exceptions, are restricted by bond indenture. All revenues except grants, reimbursements and assessments must be deposited to the credit of the Revenue Fund. Monies in the Revenue Fund are pledged to the repayment of outstanding debt and must be expended first for current expenses and then debt service. Any funds remaining after current expenses and debt payments may be transferred to the General Fund and may be used for any lawful purpose: generally for capital improvements and reserves.

The majority of OWASA's revenues are generated by the sale of drinking water and the collection and treatment of wastewater, and related services. Fees for water and sewer services include charges for service initiation, line tapping, meter installation, monthly service charges, and a commodity charge for each 1,000 gallons of drinking water or reclaimed water used or wastewater processed. For accounts other than individually-metered residential customers and irrigation-only customers, a higher water commodity charge applies during the peak consumption season from May through September and a lower commodity rate applies from October through April. This seasonal approach has been successful in reducing customer demand: peak-day demand in particular. As depicted in the following graph, in FY 2017, 48.6% of total budgeted revenue is anticipated from water and reclaimed water services while wastewater services are expected to generate 45.0%. Service availability (new connection) fees, plan review and construction observation fees, rents, royalties, administrative fees, and interest income contribute the remaining 6.4% of total projected revenues.

FY 2017 Sources of Revenue



Commodity fees for individually-metered residential accounts are billed under an increasing block rate structure. The block rate structure is designed to fairly allocate the true cost of service among low volume and high demand water customers, thereby further promoting water conservation.

OWASA collects fees for delivery of reclaimed water services through a reclaimed water utility that became operational in 2009. The system primarily serves UNC for non-drinking purposes such as irrigation and cooling tower make-up water on campus.

OWASA's primary revenue-generating fees are summarized below.

Fixed monthly Charge	Calculated to recover costs related to certain direct and indirect customer service efforts, meter and lateral maintenance, and capital costs associated with supplying drinking and reclaimed water to, and collecting sewage from a customer's property. Charges are based on meter size.
Commodity charge	Calculated to recover the remaining direct and indirect costs of water supply and treatment, water distribution, sewage collection and treatment, general administration, and water and sewer capital costs not recovered by the monthly service charge. This charge is applicable to all water, sewer and reclaimed water accounts based on meter readings in thousand gallon increments of water use.
Water and sewer availability fees	Calculated to recover a portion of the capital costs of providing water and sewer system capacity. The availability fee applies to each new connection to a drinking or reclaimed water main or sewer main, regardless of who may have paid for the installation of the main to which the connection is to be made. For the purpose of availability fees, customer accounts are divided into four categories: (1) single-family residential, (2) multi-family, individually-metered residential, (3) non-residential (including multi-family master-metered apartment complexes and all commercial, UNC, and institutional accounts) and (4) RCW service to UNC and non-UNC customers. The use of these categories is justified by distinct patterns of water and sewer consumption.

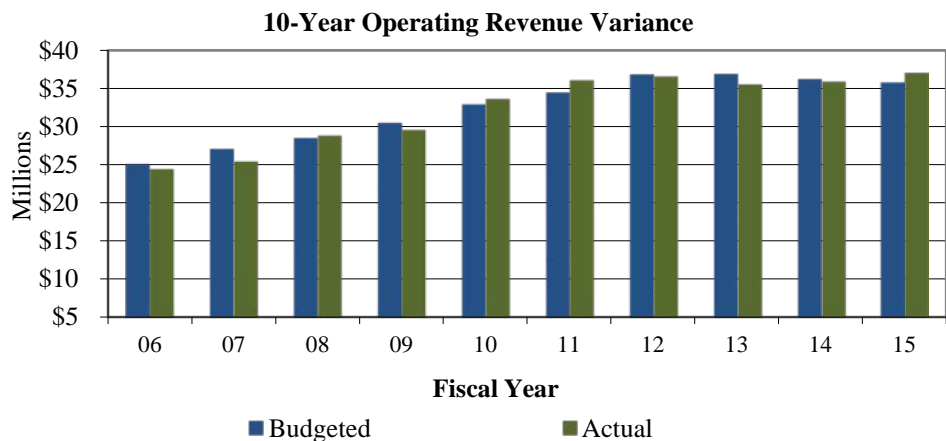
A key assumption in developing the budget is the amount of expected growth. Revenue projections are calculated combining this assumption with the number of customer accounts,

and applying the various rates to the assumed demand levels. The growth projection for FY 2017 is approximately 160 “meter equivalent” residential units.

Service initiation fees	The purpose of this charge is to defray the labor and administrative costs associated with establishing a water, sewer or reclaimed water account. This includes establishing service and account records for billing. The fee is applicable to all accounts requiring work to set a meter, reconnect service or read a meter.
Tapping fees	This charge is for making a tap into a water main and/or a sewer main or manhole. The charge recovers the cost for time and equipment plus an allowance for overhead.
Service installation	This charge is to recover costs of installing a service connection from a water or reclaimed water main to the curb or property line and setting a meter.
Plan review and construction observation fees	This charge is to recover the cost of reviewing plans for the extension of water and sewer facilities, and for field observation of the installation of these facilities. The plan review and construction observation fees apply to all extensions of the public water and/or sewer system regardless of the party which undertakes the improvements. The fees apply separately to water and sewer main extensions.
Operating revenue	In addition to recovering the cost of operations, rates and fees must be set at a level sufficient to fund future capital improvements costs and debt. Debt is issued to spread capital costs to future customers who will benefit from infrastructure improvements that have long useful lives.

As shown in the graph on page viii, beginning with a drought in 2001-2002, water demand began to decline in OWASA’s service area. A second drought in 2007-2008 put further downward pressure on the demand for water. In 2009, our reclaimed water system came online and the University of North Carolina at Chapel Hill, OWASA’s largest customer, began using less expensive reclaimed water for about 30% of its needs. Rate increases during these years helped offset the declines in water and sewer service revenue.

The following graph summarizes the historical trend of OWASA’s primary revenue stream compared to our budget for those revenues.



Debt and Debt Policy

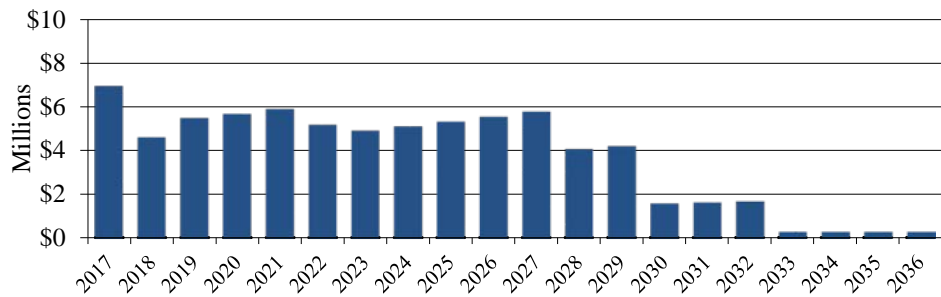
Revenue Bonds have been used to finance a significant portion of OWASA's capital improvements. The remainder has been funded with annual revenues, grants and fund balance.

On July 1, 2015, OWASA issued Series 2015 refunding bonds to redeem approximately \$9 million of the outstanding Series 2005 refunding bonds resulting in a savings of about \$600,000 over the remaining life of the bonds. The net present value of the savings from this refunding is approximately 6.4%.

Outstanding debt is \$73.6 million as of June 30, 2016. The debt outstanding for each bond issue or loan is: Series 2003 refunding issue - \$1.2 million, Series 2004B - \$20 million, Series 2005 refunding bonds - \$2.2 million, Series 2006 - \$0.8 million, Series 2010 refunding bonds - \$18.8 million, Series 2014 refunding bonds - \$15.7 million, Series 2015 refunding bonds - \$9 million, and an interest-free loan from the state of North Carolina - \$5.9 million. Principal and interest payments will be approximately \$6.9 million in FY 2017. The graph of debt service payments below reflects future annual debt service for these outstanding issues. Because OWASA issues revenue bonds, there is no statutory limit on the amount of debt.

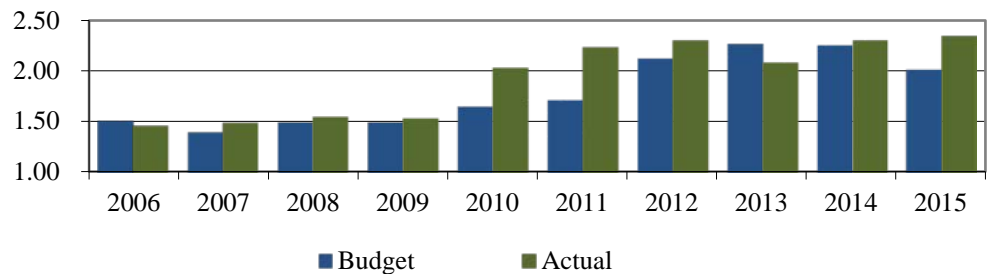
The following schedule of debt service for existing debt shows a decline in the amount of debt principal and interest payments.

Annual Debt Service (Existing Debt) FY 2017-2036



The ratio of net income to debt payments is an important measure of OWASA's financial performance. OWASA's Bond Order sets the minimum required debt coverage ratio at 1.2. The OWASA Board of Directors has set a goal of 2.0.

10 Year Debt Service Coverage Ratio - Budget to Actual



**Planned
Operating
Expenses
Summary**

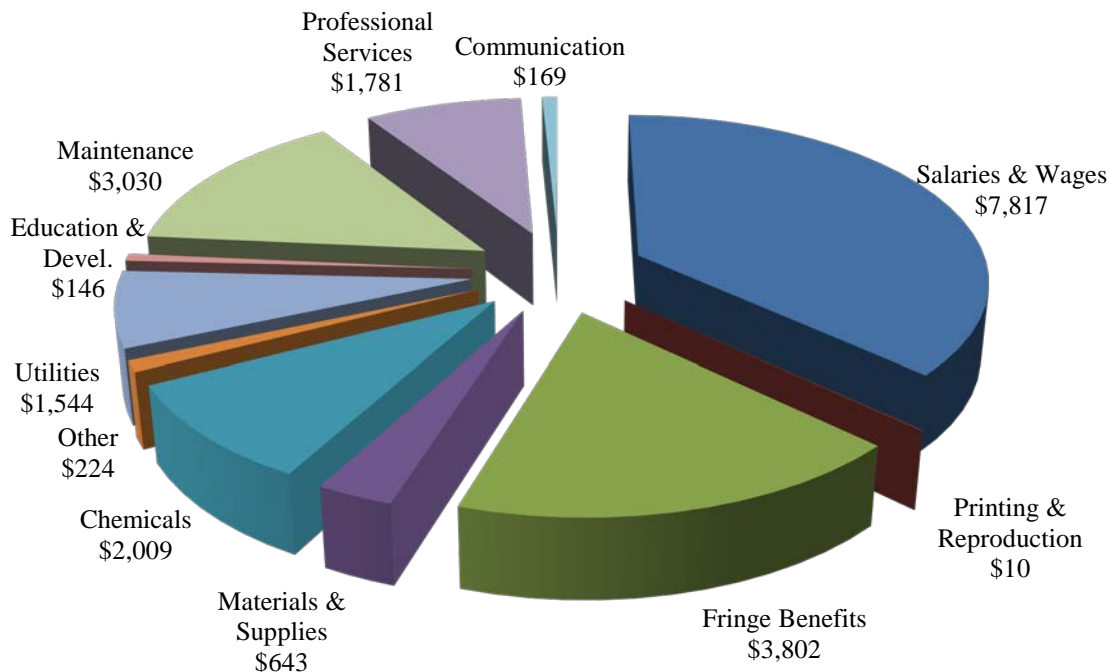
The chart below shows the planned operating expenses for FY 2017. The graph illustrates the relative proportions of the total costs by each category of expense.

**Orange Water and Sewer Authority
Operating Expenses by Division/by Category
Fiscal Year 2017**

	General and Administrative	Operating Departments	Total Budget
Salaries & Wages	\$3,127,108	\$4,689,657	\$7,816,765
Fringe Benefits	1,454,466	2,347,303	3,801,769
Materials & Supplies	141,685	501,670	643,355
Chemicals	-	2,009,458	2,009,458
Utilities	190,660	1,353,550	1,544,210
Maintenance	313,295	2,511,128	3,030,431
Professional Services	1,368,729	412,550	1,781,279
Communication	153,612	15,435	169,047
Printing & Reproduction	7,500	2,500	10,000
Education & Development	78,865	66,665	145,520
Other	<u>162,125</u>	<u>60,624</u>	<u>222,479</u>
Total	<u>\$6,998,045</u>	<u>\$14,176,358</u>	<u>\$21,174,583</u>
Construction Credits	(73,500)	(93,500)	(167,000)
Total After Construction Credits	<u>\$6,924,545</u>	<u>\$14,083,038</u>	<u>\$21,007,583</u>

Operating Expenses

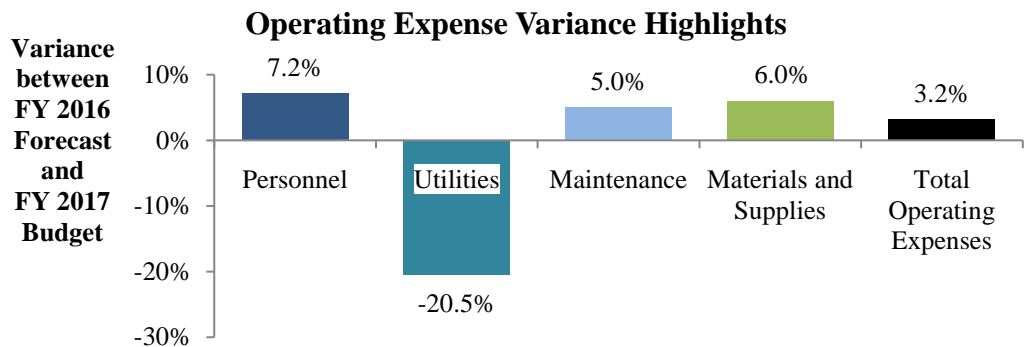
\$21,175 before construction credits
(numbers in thousands)



Construction credits are offsets against operating expenses for capital improvement projects performed by OWASA operations personnel. The amount of capitalized labor, equipment, and overhead costs for these in-house projects is credited to the appropriate departmental budget in the form of construction credits. Material costs are charged directly to each project from an inventory account and are not included in the construction credit amount

Operating Expense Variances

The chart below highlights Operating Expenses that represent some of the more significant variances between the FY 2017 Budget and FY 2016 forecast.



Personnel

The budget for Personnel costs, which includes employee health insurance, payroll taxes, uniforms, etc. is approximately 7.2% higher than the amount forecast for FY 2016. The FY 2017 budget includes an increase of about 15% in health insurance costs and a 3% merit increase for eligible employees.

Utilities

The FY 2017 budget includes a decrease in the cost of utilities of about 20.5%. Waste disposal costs are included in this line and this expense is decreasing significantly due to a change in the way we manage our biosolids recycling program. For FY 2016, we outsourced a majority of the transportation of biosolids; in FY 2017, this function will be performed by OWASA staff.

Maintenance

The budget for maintenance is about 5% higher than the forecast for FY 2016 and is based on anticipated preventive and corrective maintenance measures.

Materials and Supplies

The FY 2017 budget is about 6% greater than the forecast for FY 2016. Expenses related to biosolids transportation account for a significant portion of the increase.

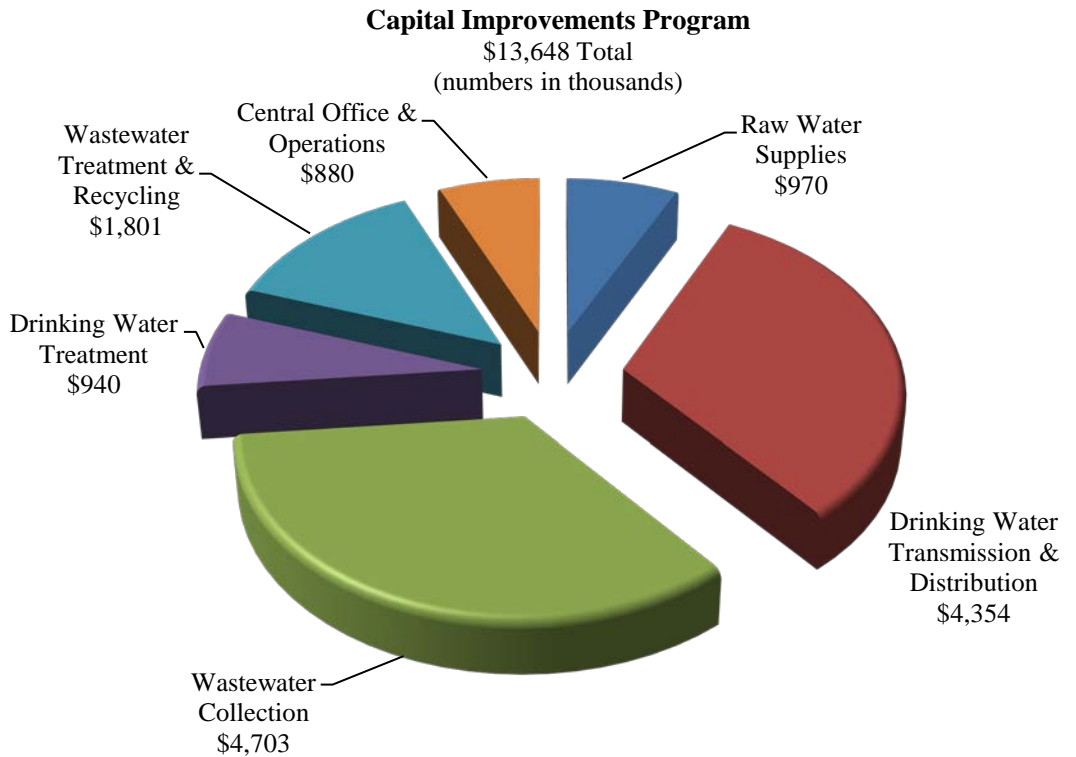
Capital Equipment

Each year OWASA replaces capital equipment items that have exceeded their useful lives and purchases equipment to meet operational needs. Purchases planned for FY 2017 total \$1.2 million (see schedule on page 17).

Capital Improvements Program Summary

Capital improvements are necessary to renew, replace, and improve infrastructure, and to provide safe, reliable, high-quality water, sewer and reclaimed water services to current and future customers. Capital expenditures are recorded as capital assets and are depreciated over the economic useful lives of the assets.

A five-year planning period is used to develop the CIP. Only the first year of the CIP is included in each fiscal year's budget ordinance. For FY 2017, capital improvements projects total \$13.6 million, as shown below.



**Strategic
Issues and
Policies**

OWASA must maintain a budget that continues to ensure high-quality and reliable services to our customers while minimizing rate increases.

Some of the more significant budget issues include:

1. Drinking water sales in FY 2017 are expected to be 6.13 MGD, which is slightly more than projected for FY 2016. UNC's use of reclaimed water to meet certain non-drinking needs on the campus is expected to be approximately 0.69 MGD.
2. FY 2017 forecast for new construction and system growth is about 160 meter equivalents.
3. The existing seasonal and increasing block rate fee structures will remain in place for FY 2017. (However, as mentioned above, the Board of Directors may choose to change the rate structure applicable to multi-family, master-metered properties.) We have seen a decline in demand of about 20% since the inception of the block rate structure in 2007 and an overall total demand reduction of 25% since the seasonal structure was put into place in 2001.
4. The CIP budget for FY 2017 is adequate to meet the needs of OWASA's customers today and in the future.
5. OWASA is required to record its annual expected post-employment benefit costs. Actuarially determined costs associated with providing this employee benefit range from about \$600,000 to \$900,000 per year, depending on contributions and interest rates.
6. For FY 2017, the required employer contribution to the Local Government Employees Retirement System is 7.25% of wages.

The organization's strategic plan and the financial management objectives set forth in OWASA's *Financial Management Policy* help us remain focused on mission-critical services, greater operational efficiency, accurate and sustainable asset management and capital improvements priorities, and opportunities for further reductions in operating expenses. We must accomplish this while balancing service levels with operating risks associated with different levels of service.

Conclusion

This budget reflects OWASA's continuing commitment to maintain, replace and renew water, wastewater, and reclaimed water system components to ensure high-quality and reliable services to our customers.

We believe the FY 2017 Budget reflects the OWASA Board of Directors' guidance and priorities, provides the appropriate level of funding for strategic initiatives, is responsive to community needs, and meets OWASA's contractual responsibilities and regulatory requirements.



Ed Kerwin
Executive Director



Stephen Winters, CPA
Director of Finance and Customer Service

SECTION I

ORANGE WATER AND SEWER AUTHORITY OVERVIEW

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ORANGE WATER AND SEWER AUTHORITY MISSION AND VISION

We are a community-owned utility providing our customers high quality and reliable water, wastewater, and reclaimed water services through responsible and creative stewardship of the resources we manage.

We provide excellent service so that if our customers could choose their water utility, they would always select OWASA. We are a trusted steward of the community, environmental, and financial resources we manage.

OUR VALUES

- **Quality Drinking Water**
We provide high quality drinking water through effective management and operation of our water supply, treatment, and distribution system.
- **Environmental Responsibility**
We protect the environment through effective management and operation of our wastewater collection, treatment, water reuse, and resource recovery systems. We manage our resources in an environmentally responsible manner.
- **Excellence in Customer Service**
We provide excellent service to our customers. We are leaders in engaging our customers and stakeholders and provide them meaningful opportunities to participate in decisions that are important to them.
- **Employees**
We value our employees as our most important resource and we provide them competitive compensation and a safe and rewarding work environment which promotes diversity and equal opportunity for all.
- **Affordability and Value**
We provide affordable and high-value services and we are committed to continuous improvement.
- **Sustainability**
We embrace the principles of environmental, social, and economic sustainability. We strive to make the highest and best use of our local water resources and to promote conservation of water, energy, and other natural resources.
- **Support for the Community We Serve**
We provide services consistent with the growth management and land use plans of the Town of Carrboro, the Town of Chapel Hill, and Orange County. We maintain open and positive communications with our governments and neighboring water utilities and cooperate in regional initiatives where appropriate and consistent with OWASA's commitment to our member governments.
- **Innovation and Creativity**
We seek innovation and creativity in accomplishing our mission and enhancing our services.

ORANGE WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS

CHAIR

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

VICE CHAIR

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

SECRETARY

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

MEMBERS

Terri Buckner
306 Yorktown Drive
Chapel Hill, NC 27516
Appointed by Orange County; Term Expires 6/30/17

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

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

Quinton Harper
501 Jones Ferry Road #U7
Carrboro, NC 27510
Appointed by Carrboro; Term Expires 6/30/16

Dave Moreau
16 Kendall Drive
Chapel Hill, NC 27517
Appointed by Chapel Hill; Term Expires 6/30/17

Ruchir Vora
522 Dogwood Drive
Chapel Hill, NC 27516
Appointed by Chapel Hill; Term Expires 6/30/17

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
Kevin M. Ray, Finance and Procurement Manager
Ruth Rouse, A.I.C.P., Planning and Development 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

BUDGET PREPARATION AND CALENDAR FOR FY 2017

OWASA's budget process begins in the fall of each year. Many key elements are prescribed in the *Financial Management Policy* and major milestones are published in a budget calendar. The operating expense and capital improvements program budgets are prepared by the staff with guidance and review by the Board of Directors.

OWASA maintains its financial records and presents its financial reports as an *enterprise fund* and uses the *accrual method* for financial reporting; generally, revenue is recognized when earned and expenses are recognized when incurred. The annual budget is prepared using the *modified accrual method*. The primary differences between the two accounting methods are shown below.

Transaction Type	Financial Reporting (Accrual)	Budgetary (Modified Accrual)
Depreciation expense	<i>Included</i> as an expense	<i>Excluded</i> as an expense
Principal portion of debt payments	<i>Excluded</i> as an expense	<i>Included</i> as an expense
Vacation accrual expense	<i>Included</i> as an expense	<i>Excluded</i> as an expense
Assessment income	Recognized in year assessed	Recognized in year collected

The budget development process begins with preparation of line-item budget requests by each of OWASA's departments and includes estimates for any new initiatives or cost reduction strategies. A 15-year financial plan is used to develop alternatives including possible rate adjustments and debt financing arrangements to achieve full cost recovery and meet OWASA's financial obligations. The following calendar reflects the timeframe for the preparation of this budget.

FY 2017 Budget Calendar

December, 2015	Distribute templates for the preparation of operating expense appropriations, capital equipment requests and departmental budget narratives.
January 25, 2016	Submission of Capital Equipment Request Forms, Budget Narratives and Departmental Operating Budget Requests to Budget Officer.
January 28, 2016	Board of Directors Work Session – review FY 2016 financial report for the six month period ended December 31, 2015.
March 10, 2016	Board of Directors Work Session – discussion of <i>Draft Annual Budget</i> and approve date of public hearings on the FY 2017 budget and rates.
March 24, 2016	Board of Directors Meeting - discussion of <i>Draft Annual Budget</i> and staff recommendation of rate adjustment and authorize staff to publicize proposal of no increase in monthly drinking water, reclaimed water and sewer rates.
April 14, 2016	Board of Directors Work Session – Board of Directors Meeting - discussion of <i>Draft Annual Budget</i> and staff recommendation of rate adjustment.
May 26, 2016	Board of Directors Meeting – Public Hearing on the <i>Draft Final Annual Budget, Capital Improvements Budget</i> and Public Hearing on the proposed adjustments to rates, fees, and charges.
June 9, 2016	Board of Directors Work Session – adoption of <i>FY 2017 Annual Budget</i> and adoption of <i>Schedule of Rates, Fees and Other Charges</i> .
July 2016	Distribution of <i>FY 2017 Annual Budget</i> .

Rate Projections and Budgetary Forecast

OWASA’s annual financial planning and budget development process includes a 15-year projection of revenues, expenditures, borrowing needs, and rate adjustments. Revenue projections are based on estimates of customer water demand and service area growth. Operating expenses are projected to increase based on a combination of anticipated inflation rates and specific expected cost increases or decreases.

Annual rate increases over the 15-year planning horizon are expected to be approximately 3%. However, because conditions change, OWASA updates its financial plan each year and future rate increases could be different than projected.

The following summarizes projections for the next ten years. Revenue is projected based on assumptions of per customer water use and estimates of system growth. Operating expense projections are based on assumptions about the rate of inflation and specific anticipated expense increases or decreases. Future capital improvement investment projections are based on system growth expectations and our ongoing processes for identifying assets that are nearing the end of their useful lives.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Rate increase	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
	(numbers below in thousands)									
Revenue	\$37,950	\$39,350	\$40,839	\$42,404	\$44,037	\$45,528	\$47,298	\$49,130	\$51,038	\$53,005
Operating expenses	21,905	22,676	23,478	24,813	25,701	26,625	27,856	28,587	29,629	30,714
Capital Improvements Projects	22,506	15,643	17,461	17,852	20,294	21,756	22,172	20,314	24,084	27,123
Debt service coverage ratio	2.4	2.5	2.2	2.6	2.2	2.2	2.0	2.0	2.0	2.0

STATEMENT OF INCOME, EXPENSE AND DEBT SERVICE (OPERATING)

	FY 2015 Actual	FY 2016 Budget	FY 2016 Forecast	FY 2016 Forecast to FY 2016 Budget	FY 2017 Budget	FY 2017 Budget to FY 2016 Forecast
Operating Revenue						
Water	\$18,291,452	\$17,990,169	\$18,137,502	0.82%	\$17,923,072	-1.18%
Sewer	17,003,055	16,794,115	16,818,741	0.15%	16,578,878	-1.43%
Reclaimed Water	411,122	452,250	464,357	2.68%	439,110	-5.44%
Service Initiation Fee	167,410	158,421	153,735	-2.96%	168,898	9.86%
Other	1,351,138	1,048,487	1,043,638	-0.46%	1,069,578	2.49%
Refunds and Adjustments	<u>(263,337)</u>	<u>(232,207)</u>	<u>(252,966)</u>	8.94%	<u>(325,766)</u>	28.78%
Total Operating Revenue	<u>36,960,840</u>	<u>36,211,235</u>	<u>36,365,007</u>	0.42%	<u>35,853,770</u>	-1.41%
Operating Expense						
General and Administrative	6,162,029	6,805,436	6,636,903	-2.48%	6,924,545	4.33%
Operations	<u>13,301,157</u>	<u>13,983,021</u>	<u>13,721,385</u>	-1.87%	<u>14,083,038</u>	2.64%
Total Operating Expense	<u>19,463,186</u>	<u>20,788,457</u>	<u>20,358,288</u>	-2.07%	<u>21,007,583</u>	3.19%
Net Operating Income	17,497,654	15,422,778	16,006,719	3.79%	14,846,187	-7.25%
Non-operating Revenue						
Customer Fees	1,429,242	959,582	1,520,846	58.49%	995,950	-34.51%
Interest	15,133	34,571	35,623	3.04%	14,708	-58.71%
Gain (loss) on sale of assets	<u>(147,356)</u>	<u>-</u>	<u>-</u>		<u>-</u>	
Total Net Income	<u>18,794,673</u>	<u>16,416,931</u>	<u>17,563,188</u>	6.98%	<u>15,856,845</u>	-9.72%
Debt Service						
Existing	8,110,714	8,316,327	8,226,327	-1.08%	6,932,059	-15.73%
New	<u>-</u>	<u>-</u>	<u>-</u>		<u>-</u>	
Total Debt Service	<u>8,110,714</u>	<u>8,316,327</u>	<u>8,226,327</u>	-1.08%	<u>6,932,059</u>	-15.73%
Net Income Less Debt Service	<u>\$10,683,959</u>	<u>\$8,100,604</u>	<u>\$9,336,861</u>	15.26%	<u>\$8,924,786</u>	-4.41%
Debt Coverage Ratio	2.3	2.0	2.1		2.3	

This income statement discloses the source and application of OWASA's revenues and reflects the adequacy of operating revenues to meet the costs of operations and to satisfy debt service requirements. As presented in the Statement of Income and Expense (Capital/Non-Operating), excess revenues are available for transfer to the General Fund, the established funding mechanism for capital expenditures.

STATEMENT OF INCOME AND EXPENSE (CAPITAL/NON-OPERATING)

	FY 2015 Actual	FY 2016 Budget	FY 2016 Forecast	FY 2016 Forecast to FY 2016 Budget	FY 2017 Budget	FY 2017 Budget to FY 2016 Forecast
General Fund						
Resources						
Transfer From Revenue	\$10,683,959	\$8,100,604	\$9,336,861	15.26%	\$8,924,786	-4.41%
Assessments	-	-	-		-	0.00%
Grants and Contributions	-	-	-		-	0.00%
Annual Income Available for Capital	10,683,959	8,100,604	9,336,861	15.26%	8,924,786	-4.41%
Transfer from Construction Fund (Loan Proceeds)	-	-	-	0.00%	-	0.00%
Total Available for Capital	10,683,959	8,100,604	9,336,861	15.26%	8,924,786	-4.41%
Capital Expenditures						
Project Ordinances						
General Fund Contribution	764,616	10,615,000	9,321,000	-12.19%	13,648,000	46.42%
Funded by Bond Proceeds	6,560,000	0	0	0.00%	-	0.00%
Total Project Resolutions	7,324,616	10,615,000	9,321,000	-12.19%	13,648,000	46.42%
Capital Equipment	752,817	875,000	875,000	0.00%	1,227,000	40.23%
Total Capital Outlay	8,077,433	11,490,000	10,196,000	-11.26%	14,875,000	45.89%
Annual General Fund Balance	\$2,606,526	(\$3,389,396)	(\$859,139)	-74.65%	(\$5,950,214)	592.58%
General Fund Beginning Balance		24,829,980	25,967,718	4.58%	25,108,579	-3.31%
General Fund Ending Balance	25,967,718	21,440,584	25,108,579	17.11%	19,158,365	-23.70%
Project Funding	13,425,118	6,682,384	10,350,379	54.89%	3,111,268	-69.94%
Reserves						
Rate/Revenue Stabilization	1,500,000	1,750,000	1,750,000	0.00%	1,725,097	-1.42%
Capital Improvements	2,400,000	2,800,000	2,800,000	0.00%	3,200,000	14.29%
Working Capital	8,642,600	10,208,200	10,208,200	0.00%	11,122,000	8.95%
Unallocated General Fund Balance	-	-	-		-	

FUND BALANCE STATEMENTS

CONSOLIDATED SUMMARY - INTRAGOVERNMENTAL SERVICE FUNDS

	Beginning Balance	Revenues	Expenditures	Ending Balance	Change in Balance
Revenue Fund	-	\$36,864,428	(\$36,864,428)	-	-
Bond Service Fund	0	6,932,059	(6,932,059)	0	-
General Fund	<u>25,108,579</u>	<u>8,924,786</u>	<u>(14,875,000)</u>	<u>19,158,365</u>	<u>(5,950,214)</u>
Total	<u>\$25,108,579</u>	<u>\$52,721,272</u>	<u>(\$58,671,487)</u>	<u>\$19,158,365</u>	<u>(\$5,950,214)</u>

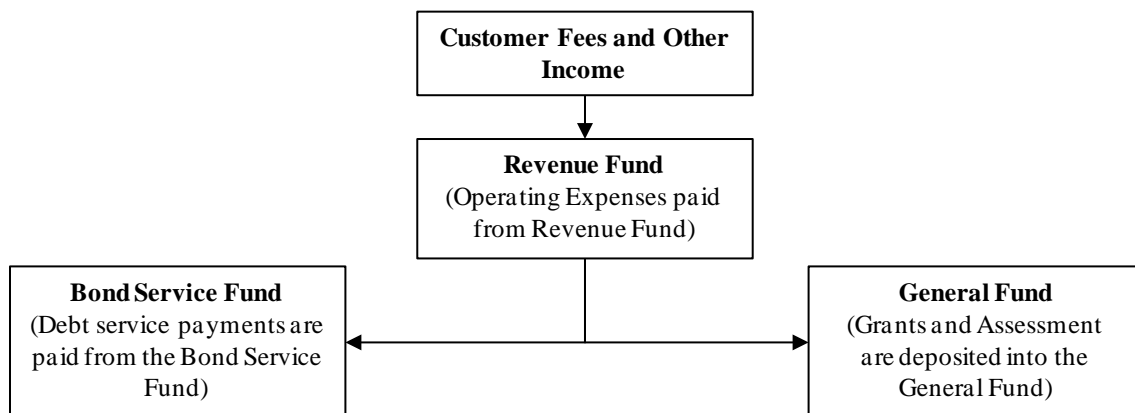
OWASA's Fund Accounting Structure

The Budget Ordinance reflects inflows and outflows of economic resources that represent activities related to the General Fund. Other funds presented here are either required contractually or are sub-accounts of the General Fund. Because of the close relationship of these funds to the General Fund, the following Fund Statements are included as attachments to the Budget Ordinance and are adopted as such. All of these funds, unrestricted and restricted, are treated as a part of the General Fund in OWASA's audited financial statements.

In accordance with OWASA's Amended and Restated Bond Order, Series 2001, all revenues from the operation of the water and sewer system are deposited into the Revenue Fund with the exception of grants and assessment proceeds which are earmarked for other purposes. Revenues are first applied to the payment of current expenses and then to the repayment of outstanding debt. Any excess amounts above the cost of current operations and debt service are available for capital improvements and may be transferred, upon certification to the Trustee, to the General Fund. The Revenue Fund is administered by OWASA.

The Bond Service Fund is established by the Amended and Restated Bond Order, Series 2001 and serves as the mechanism for repaying the current portion of long-term debt. The Bond Order requires that the total of any principal and interest payments on long-term debt be transferred to the Bond Service Fund no later than 45 working days prior to the due date of such payments. This Fund is comprised of restricted assets and is administered by the Bond Trustee.

Establishment of the General Fund is required by statute and is administered by OWASA. Monies in the General Fund may be used for any lawful purpose and, in addition to bond proceeds, are OWASA's primary source to pay for capital improvements. Interest earnings in the General Fund are considered debt-pledged revenue and are to be transferred to the credit of the Revenue Fund. The following flowchart shows the interrelationship of the funds.



Financial Reserves

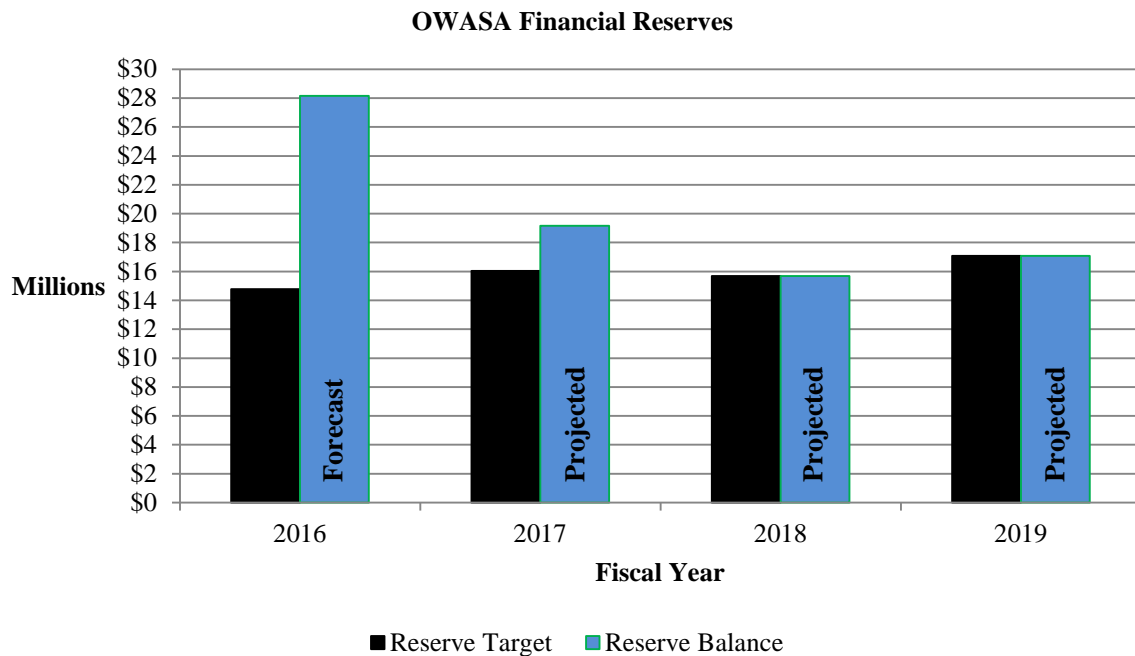
OWASA's Financial Management Policy (see Section III) includes certain financial performance objectives which are intended to help management and other stakeholders monitor the organization's financial condition. One of the objectives is to maintain adequate financial reserves and OWASA has established a minimum financial reserve target consisting of the following:

Working Capital Reserve – The greater of four months of Operating Expenses or 20% of the succeeding three years CIP budget.

Capital Improvements Reserve – At least 2% of depreciated capital assets. As of the end of FY 2016, 2% of depreciated capital assets was about \$5.3 million. We are contributing \$400,000 per year to this reserve until the target is met. This fund was established in FY 2009 and is projected to have a balance of \$3.2 million at the end of FY 2017.

Rate/Revenue Stabilization – At least 5% of projected water and sewer revenue. The balance in this reserve is projected to be about \$1.7 million at the end of FY 2017.

The graph below depicts the combined balance of the Working Capital, Capital Improvements, and Rate/Revenue Stabilization Reserve funds compared to the target.



OWASA implemented significant rate increases in fiscal years 2007 through 2010. These increases were necessary to fund expenditures in those years as well as to be in a better position to meet projected future years' funding requirements. Consistent with our plan, this strategy has resulted in a near-term balance in our reserves that is above our minimum target which we expect to draw down over the next few years. Future rate increases are projected to be at or near the rate of inflation.

FUND BALANCE STATEMENTS

REVENUE FUND

	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
Fund Balance July 1, 2016			\$0
Receipts			
Operating Revenue			
Customer Billings	17,923,072	16,578,878	34,501,950
Reclaimed Water	439,110	-	439,110
Service Initiation Fee	84,449	84,449	168,898
Other	534,789	534,789	1,069,578
Refunds and Adjustments	(162,883)	(162,883)	(325,766)
Total Operating Revenue	18,818,537	17,035,233	35,853,770
Non-operating Revenue			
Customer Fees	429,980	565,969	995,950
Interest Income	7,354	7,354	14,708
Total Non-operating Revenue	437,334	573,323	1,010,658
Total Receipts	19,255,871	17,608,556	36,864,428
Expenditures			
Current Expense	(11,871,385)	(9,136,198)	(21,007,583)
Debt Service	(5,405,266)	(1,526,793)	(6,932,059)
Total Expenditures	(17,276,651)	(10,662,991)	(27,939,642)
Net Revenue			8,924,786
To General Fund			(8,924,786)
Fund Balance June 30, 2017			-
Change in Available Balance			<u>\$0</u>

FUND BALANCE STATEMENTS

BOND SERVICE FUND

Fund Balance July 1, 2016		\$0
Receipts		
Transfers from Revenue Fund	6,932,059	
Interest	<u> </u>	
Total Receipts		6,932,059
Expenditures		
Debt Service	<u>6,932,059</u>	
Total Expenditures		<u>(6,932,059)</u>
Fund Balance June 30, 2017		<u>-</u>
Change in Available Balance		<u><u>\$0</u></u>

FUND BALANCE STATEMENTS

GENERAL FUND

Fund Balance July 1, 2016		\$25,108,579
Receipts		
Transfer From Revenue fund	8,924,786	
Transfer From Construction Fund (Loan Proceeds)	-	
Interest	-	
Assessments	-	
Grants and contributions	-	
Total Receipts		<u>8,924,786</u>
Total Balance Before Expenditures		34,033,365
Expenditures		
Capital Equipment/Leases	1,227,000	
Project Resolutions	13,648,000	
Transfer to Revenue Fund	0	
Total Expenditures		<u>(14,875,000)</u>
Fund Balance June 30, 2017		<u><u>\$19,158,365</u></u>
Allocation of Fund Balance June 30, 2017		
Project Funding	3,111,268	
Capital Reserves	16,047,097	
Total Allocation		<u><u>\$19,158,365</u></u>
Unallocated General Fund Balance June 30, 2017		<u>-</u>
Change in Available Balance		<u><u>(\$5,950,214)</u></u>

The Fund is projected to decrease by approximately \$6 million in FY 2017 as a result of a planned draw-down of reserves.

FUNDS FLOW STATEMENT

Revenue Fund

Operating Revenue	\$35,853,770	
Customer Fees	995,950	
Interest Income	14,708	
Total Revenues		36,864,428
Operating and Maintenance Expense	(21,007,583)	
Bond Service Fund (transfers to)	(6,932,059)	
Total Expenditures		(27,939,642)
Excess operating revenue (to be transferred to the General Fund)		8,924,786

General Fund

Beginning Balance July 1, 2016	25,108,579	
Transfer from Revenue Fund	8,924,786	
Assessments	-	
Grants and Contributions	-	
Total General Fund Balance (available for allocation)		34,033,365
Construction Fund - Loan Proceeds		-
Total General Fund and Loan Proceeds		34,033,365
Project Resolutions	13,648,000	
Capital Equipment and Leases	1,227,000	
Total General Fund Expenditures		14,875,000
General Fund Ending Balance June 30, 2017		\$19,158,365
Project Resolutions	3,111,268	
Reserves	16,047,097	
Total Allocation of General Fund Balance		\$19,158,365

PLANNED OPERATING EXPENDITURES

EXPENDITURES BY CATEGORY

Category	FY 15 Actual	FY16 Budget	FY16 Forecast	FY16 Forecast to FY16 Budget Variance	FY17 Budget	FY17 Budget to FY16 Forecast Variance
Personnel	\$10,584,737	\$11,035,537	\$10,841,996	-1.8%	\$11,618,534	7.2%
Chemicals	2,010,387	1,931,608	1,939,450	0.4%	2,009,458	3.6%
Materials & Supplies	524,220	644,002	562,884	-12.6%	643,355	14.3%
Utilities	1,791,593	2,005,013	1,942,723	-3.1%	1,544,210	-20.5%
Maintenance	2,745,950	2,907,947	2,885,791	-0.8%	3,030,431	5.0%
Professional Services	1,378,967	1,826,512	1,736,627	-4.9%	1,781,279	2.6%
Communication	160,202	159,000	158,980	0.0%	169,047	6.3%
Printing & Reproduction	4,659	8,900	9,353	5.1%	10,000	6.9%
Education and Development	126,215	137,185	120,596	-12.1%	145,520	20.7%
Other	261,167	227,410	263,393	15.8%	222,749	-15.4%
Total	19,588,097	20,883,114	20,461,793	-2.0%	21,174,583	3.5%
Construction Credits	(124,912)	(94,658)	(103,505)	9.3%	(167,000)	61.3%
Net Expense	\$19,463,185	\$20,788,456	\$20,358,288	-2.1%	\$21,007,583	3.2%

**EXPENDITURES BY DIVISION
FISCAL YEAR 2017**

	General and Administrative	Operating Departments	Total Budget
Personnel	\$4,581,574	\$7,036,960	\$11,618,534
Chemicals		2,009,458	2,009,458
Materials & Supplies	141,685	501,670	643,355
Utilities	190,660	1,353,550	1,544,210
Maintenance	313,295	2,717,136	3,030,431
Professional Services	1,368,729	412,550	1,781,279
Communication	153,612	15,435	169,047
Printing & Reproduction	7,500	2,500	10,000
Education and Development	78,865	66,655	145,520
Other	162,125	60,624	222,749
Total	\$6,998,045	\$14,176,538	\$21,174,583
Construction Credits	(73,500)	(93,500)	(167,000)
Net Expense	\$6,924,545	\$14,083,038	\$21,007,583

PLANNED OPERATING EXPENDITURES

GENERAL AND ADMINISTRATIVE

Category	FY 15 Actual	FY16 Budget	FY16 Forecast	FY16 Forecast to FY16 Budget Variance	FY17 Budget	FY17 Budget to FY16 Forecast Variance
Executive Director						
Personnel Costs	\$748,055	\$749,521	\$757,637	1.1%	\$791,523	4.5%
Operating Expenditures	434,640	505,774	462,366	-8.6%	476,021	3.0%
Total Expenditures	1,182,695	1,255,295	1,220,003	-2.8%	1,267,544	3.9%
Customer Service						
Personnel Costs	532,779	585,286	564,062	-3.6%	607,729	7.7%
Operating Expenditures	187,240	161,500	180,874	12.0%	161,000	-11.0%
Total Expenditures	720,019	746,786	744,936	-0.2%	768,729	3.2%
Engineering						
Personnel Costs	1,422,420	1,520,210	1,430,101	-5.9%	1,503,570	5.1%
Operating Expenditures	198,009	194,525	168,192	-13.5%	200,328	19.1%
Total Expenditures	1,620,429	1,714,735	1,598,293	-6.8%	1,703,898	6.6%
Human Resources						
Personnel Costs	490,293	530,292	516,499	-2.6%	576,121	11.5%
Operating Expenditures	178,097	432,550	407,046	-5.9%	421,750	3.6%
Total Expenditures	668,390	962,842	923,546	-4.1%	997,871	8.0%
Finance						
Personnel Costs	621,304	632,778	626,739	-1.0%	647,575	3.3%
Operating Expenditures	376,702	414,030	446,115	7.7%	444,750	-0.3%
Total Expenditures	998,006	1,046,808	1,072,854	2.5%	1,092,325	1.8%
Information Technology						
Personnel Costs	419,397	435,037	432,485	-0.6%	455,055	5.2%
Operating Expenditures	603,239	685,590	686,444	0.1%	712,622	3.8%
Total Expenditures	1,022,636	1,120,627	1,118,929	-0.2%	1,167,677	4.4%
Total G&A	6,212,175	6,847,094	6,678,561	-2.5%	6,998,045	4.8%
Construction Credit	(\$50,147)	(\$41,658)	(\$41,658)	0.0%	(\$73,500)	76.4%
Net Expense	\$6,162,028	\$6,805,436	\$6,636,903	-2.5%	\$6,924,545	4.3%

PLANNED OPERATING EXPENDITURES

OPERATING DEPARTMENTS

Category	FY 15 Actual	FY16 Budget	FY16 Forecast	FY16 Forecast to FY16 Budget Variance	FY17 Budget	FY17 Budget to FY16 Forecast Variance
Water Supply & Treatment						
Personnel Costs	\$1,816,631	\$1,932,786	\$1,938,559	0.3%	\$2,027,554	4.6%
Operating Expenditures	2,814,110	2,768,807	2,725,850	-1.6%	2,846,404	4.4%
Total Expenditures	4,630,741	4,701,593	4,664,408	-0.8%	4,873,958	4.5%
Water Distribution						
Personnel Costs	2,007,576	2,097,919	2,044,866	-2.5%	2,183,668	6.8%
Operating Expenditures	891,455	803,330	777,113	-3.3%	860,666	10.8%
Total Expenditures	2,899,031	2,901,248	2,821,979	-2.7%	3,044,334	7.9%
Wastewater Treatment						
Personnel Costs	1,811,112	1,807,388	1,807,762	0.0%	1,975,113	9.3%
Operating Expenditures	2,736,351	3,298,737	3,183,689	-3.5%	2,849,981	-10.5%
Total Expenditures	4,547,463	5,106,125	4,991,451	-2.2%	4,825,094	-3.3%
Sewer Collection						
Personnel Costs	715,170	744,320	744,320	0.0%	850,624	14.3%
Operating Expenditures	583,517	582,735	582,735	0.0%	582,527	0.0%
Total Expenditures	1,298,687	1,327,055	1,327,055	0.0%	1,433,151	8.0%
Total Operating Departments	13,375,922	14,036,022	13,804,893	-1.6%	14,176,538	2.7%
Construction Credit	(74,765)	(53,000)	(53,000)	0.0%	(93,500)	76.4%
Net Expense	\$13,301,157	\$13,983,022	\$13,751,893	-1.7%	\$14,083,038	2.4%

PLANNED CAPITAL EQUIPMENT EXPENDITURES

FISCAL YEAR 2017

Capital Equipment Summary

Computer Equipment and Network Infrastructure	\$164,000
Spectrophotometer	12,000
Backhoe	109,000
Excavator	106,000
Distribution System Water Tester	11,500
Boom Truck	150,000
Vehicles	76,500
Process Control Nutrient Analyzers	25,000
Roll-off Container Truck	200,000
Flush Truck	120,000
Cat Compact Track Loader	70,000
Sewer Inspection Van	<u>183,000</u>
 Total	 <u>\$1,227,000</u>

Definition of Capital Equipment Expenditures

Expenditures budgeted to purchase or add to fixed assets with an estimated useful life greater than one year and costing \$5,000 or more

DEBT SERVICE FOR FISCAL YEARS 2017-2036

Schedule of Existing Long-term Bonds and Loans

	Issue Dates	Interest Rates (Coupon)	Outstanding at 06/30/16
Series 2003 Revenue Refunding Bonds	4/9/2003	2.5% to 5.0%	\$1,255,000
Series 2004B Revenue Bonds	6/17/2004	Variable	20,000,000
Series 2005 Revenue Refunding Bonds	6/9/2005	3.5% to 5.0%	2,275,000
Series 2006 Revenue Bonds	10/26/2006	3.5% to 4.5%	755,000
Series 2010 Revenue Refunding Bonds	9/30/2010	3.0% to 5.0%	18,745,000
Series 2014 Revenue Refunding Bonds	12/18/2014	3.0% to 5.0%	15,695,000
Series 2015 Revenue Refunding Bonds	7/1/2015	1.96%	8,995,000
Total Bonded Debt			\$67,720,000
Loan from the State of North Carolina	10/4/2014	0%	\$5,904,000

Schedule of Existing and Potential Annual Debt Service

Fiscal Year	Ending June 30	Existing Debt Service	Potential Debt Service (Estimated)	Total Existing and Potential Debt Service
2017		\$6,932,059	\$0	\$6,932,059
2018		4,593,941	1,080,202	5,674,143
2019		5,468,000	1,080,202	6,548,202
2020		5,658,000	2,743,859	8,401,859
2021		5,883,000	2,743,859	8,626,859
2022		5,158,000	4,892,958	10,050,958
2023		4,898,000	4,892,958	9,790,958
2024		5,098,000	7,688,124	12,786,124
2025		5,318,000	7,688,124	13,006,124
2026		5,538,000	10,894,391	16,432,391
2027		5,773,000	10,894,391	16,667,391
2028		4,058,000	10,894,391	14,952,391
2029		4,203,000	10,894,391	15,097,391
2030		1,613,000	10,894,391	12,507,391
2031		1,663,000	10,894,391	12,557,391
2032		1,713,000	10,894,391	12,607,391
2033		328,000	10,894,391	11,222,391
2034		328,000	10,894,391	11,222,391
2035		328,000	10,894,391	11,222,391
2036		328,000	10,894,391	11,222,391
Total		\$74,880,000	\$152,648,587	\$227,528,587

Potential Debt

Based on OWASA's long-range financial plan, there is a potential need for bond financing of capital improvements in future years. The "potential debt service" shown above relates to this potential need.

CAPITAL IMPROVEMENTS PROGRAM BUDGET

Capital Improvements Program (CIP) expenditures are defined as those that pay for the addition, rehabilitation, and replacement of OWASA-owned water, sewer, and reclaimed water system infrastructure and other depreciable assets. In general, CIP projects are identified as those projects that exceed \$10,000 in value and provide a system component that has an expected service life of at least five years. The five-year CIP is reviewed and updated annually.

The FY 2017-2021 CIP budget totals approximately \$87 million. In FY 2017, we plan to issue a request for proposals to implement an Advanced Meter Infrastructure (AMI) system; installation is expected to begin in late FY 2017. The project is expected to provide more detailed water use information that will enhance our ability to deliver customer service. It will also improve our operations, maintenance, and planning efforts.

The Board has approved a CIP budget for FY 2017 for 44 projects, including design of sanitary sewer infrastructure to serve the Historic Rogers Road Area (HRRA) for which OWASA will be reimbursed by the Towns of Carrboro and Chapel Hill, and Orange County. The total FY 2017 budget, not including the HRRA project, is \$13,648,000.

This CIP includes no funding or investments that may be necessary to obtain improved agreements with neighboring utilities for water purchases during extreme droughts or operational emergencies. It also assumes that the regulatory environment for water and wastewater treatment will remain substantially as it is today.

We are confident that the level of investment presented in this CIP leaves OWASA well-positioned to remain the sustainable, responsible, and environmentally focused organization that our community expects.

The projects listed on the following pages have been identified for funding in FY 2017.

CAPITAL IMPROVEMENTS PROJECTS FUNDED IN FY 2017

Project Description	Purpose of Project	Amount
Raw Water Supplies		
Annual payment to preserve OWASA's Level I Jordan Lake storage allocation	Our Jordan Lake storage allocation serves as insurance against future water shortages	\$5,000
Quarry Reservoir Development – annual contribution to a no-fault well repair fund	Required by Special Use Permit	15,000
Cane Creek sodium permanganate feed systems	Replace aging assets and reduce operational and safety risk	900,000
University Lake pump station improvements	Replacement of system due to age and condition	50,000
Water Transmission and Distribution		
Water main road improvement projects	Various water main projects to be achieved in conjunction with planned Town or NC Department of Transportation road projects	110,000
Water line rehabilitation/replacement projects	Replacement or rehabilitation of water distribution lines due to age and condition	531,000
Water main replacement	Replacement of water mains in Rosemary, Henderson and Hillsborough Streets due to age and condition	2,110,000
Advanced Meter Infrastructure (AMI) System	A request for proposals will be issued in FY 2017 for the implementation of a fixed data collection network that will replace/retrofit all drinking water meters (approximately 21,000 meters). Construction is tentatively scheduled to begin in late FY 2017	1,005,000
Galvanized water main replacements	Programmatic replacement of most of the galvanized water mains in our system due to frequent breaks	300,000
Dobbins Drive water main replacement	Design to increase pipe size from 12” to 16” to meet capacity requirements	68,000
Hillsborough Street water main replacement and Martin Luther King Blvd. abandonment	Replacement due to age and condition	200,000
Water distribution system hydraulic model	Analysis of the water distribution system	30,000
Water Treatment and Supply		
WTP generator building louvers replacement	Selection and installation of new louvers to replace existing inoperable equipment	80,000
WTP facility security upgrades	Improve the security of the WTP	200,000
WTP rehabilitation projects	Various small projects to rehabilitate facilities due to age and condition	75,000

Project Description	Purpose of Project	Amount
WTP switchgear upgrade	Reduce safety risk and increase operational efficiency, reliability, and flexibility	85,000
WTP lighting improvements	Upgrade lighting at the WTP to improve security and energy-efficiency	50,000
WTP sedimentation basin rehabilitation	Rehabilitation due to age and condition	100,000
WTP concrete condition assessment	Comprehensive and prioritized evaluation of concrete facilities	100,000
WTP filter media and backwash pump replacement	Replacement due to age and condition	250,000
Wastewater Collection		
Sanitary sewer rehabilitation	Design and rehabilitation of deteriorated sewer mains and manholes	1,324,000
Sanitary sewer condition assessment	Inspection and analysis of the wastewater collection system	1,474,000
Replacement of Bolinwood Drive sewer interceptor	Replacement due to age and condition	450,000
Replacement of the Little Creek interceptor	Replacement due to age, condition, and capacity limitations	550,000
Sanitary sewer easement creek crossings upgrades	Design and construction of upgraded crossings to limit damage to creek banks	50,000
Rogers Road sanitary sewer extension	Gravity sanitary sewer system for an area not previously served. Project is part of an effort by the county and local towns to provide sewer service to this area.	946,000
Rogers Road sanitary sewer extension reimbursement	Project costs will be reimbursed by the county and towns	(946,000)
Eastowne, Eubanks and Meadowmont I pump stations rehabilitation	Rehabilitation due to age and condition	125,000
Rogerson Drive pump station rehabilitation	Rehabilitation due to age and condition	250,000
Knolls pump station rehabilitation	Rehabilitation due to age and condition	80,000
Dobbins Drive interceptor replacement	Replacement due to age, condition, and capacity limitations	200,000
Sanitary sewer hydraulic model	Analysis of the wastewater collection system	150,000
Rogerson Drive force main redundancy evaluation	Analysis of redundancy in the system	50,000
Wastewater Treatment and Disposal		
Coatings program	Corrosion control of key facility components and structures	300,000
WWTP digester rehabilitation	Rehabilitation due to age and condition	400,000

Project Description	Purpose of Project	Amount
WWTP intermediate pump stations rehabilitation/replacement	Rehabilitation due to age and condition	91,000
WWTP secondary clarifier rehabilitation	Evaluation of the condition of aging assets	50,000
WWTP stormwater pump station electrical system rehabilitation	To improve safety, operability, and control of the system	50,000
WWTP non-drinking water pump replacements	Replace three pumps at the end of their useful lives	275,000
WWTP gravity belt thickener replacements	Replacement of equipment due to age and condition	180,000
WWTP main potable water line backflow preventer installation	Protect public water system	80,000
WWTP supervisory control and data acquisition system (SCADA) upgrade	Increase operational efficiency	150,000
WWTP critical spare pumps	Increase operational efficiency	125,000
Building envelope rehabilitation	Extend the useful life of aging assets and reduce energy use	100,000
Central Office and Administration		
Administration building HVAC system	Replacement of HVAC system due to age and condition	880,000
Total Capital Improvements Projects Funded in FY 2017		
		\$13,648,000

REHABILITATION/REPLACEMENT PROJECTS (IN-HOUSE)

These projects are performed by OWASA staff to rehabilitate or replace portions of deteriorated water mains. These investments extend the useful life of these systems and are therefore recorded as capital expenditures.

The amount of capitalized labor, equipment and overhead costs for these in-house projects is credited to the appropriate departmental budget in the form of construction credits. Materials costs are charged directly to each project from an inventory account and are not included in the construction credit amount.

Below is a list of rehabilitation projects scheduled to be completed by OWASA's construction crew in FY 2017.

In-house Rehabilitation / Replacement Projects FY 2017

Project Name	Size (in.)	Length (ft.)	Material	Equipment	Labor	Overhead	Total
Emory Drive	8	750	\$57,564	\$10,400	\$15,600	\$20,436	\$104,000
Chase Avenue	2	725	32,103	5,800	8,700	11,397	58,000
Chase Park Road	2	350	14,391	2,600	3,900	5,109	26,000
Hilltop Street	8	530	34,870	6,300	9,450	12,380	63,000
Fordham Service Road	8	900	68,080	12,300	18,450	24,170	123,000
Totals		3,255	\$207,008	\$37,400	\$56,100	\$73,492	\$374,000

OWASA CAPITAL IMPROVEMENTS PROGRAM FIVE-YEAR OVERVIEW FOR FY 2017-2021¹

Project Category:	Annual Totals					5-Year Total
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2017-21
Raw Water Supply Sources	\$970,000	\$150,000	\$1,520,000	\$1,120,000	\$20,000	\$3,780,000
Raw Water Transmission	0	0	28,000	0	0	28,000
Water Treatment Facilities	940,000	1,675,000	855,000	2,482,000	2,606,000	8,558,000
Finished Water Pumping	0	0	0	0	0	0
Finished Water Storage	0	0	0	0	0	0
Water Transmission and Distribution	4,354,000	9,053,000	7,094,000	4,917,000	5,105,000	30,523,000
Wastewater Collection Lines	4,198,000	4,346,000	3,631,000	2,570,000	4,247,000	18,992,000
Wastewater Pump Stations	505,000	4,009,000	105,000	946,000	326,000	5,891,000
Wastewater Treatment and Disposal	1,801,000	2,468,000	2,410,000	4,974,000	5,074,000	16,727,000
Reclaimed Water Facility Rehabilitation	0	0	0	0	0	0
Central Office and Operations	880,000	805,000	0	275,000	288,000	2,248,000
FY 2017 - 2021 CIP	\$13,648,000	\$22,506,000	\$15,643,000	\$17,284,000	\$17,666,000	\$86,747,000

¹ Budget amounts are escalated at 5% annually (with some exceptions)

SECTION II

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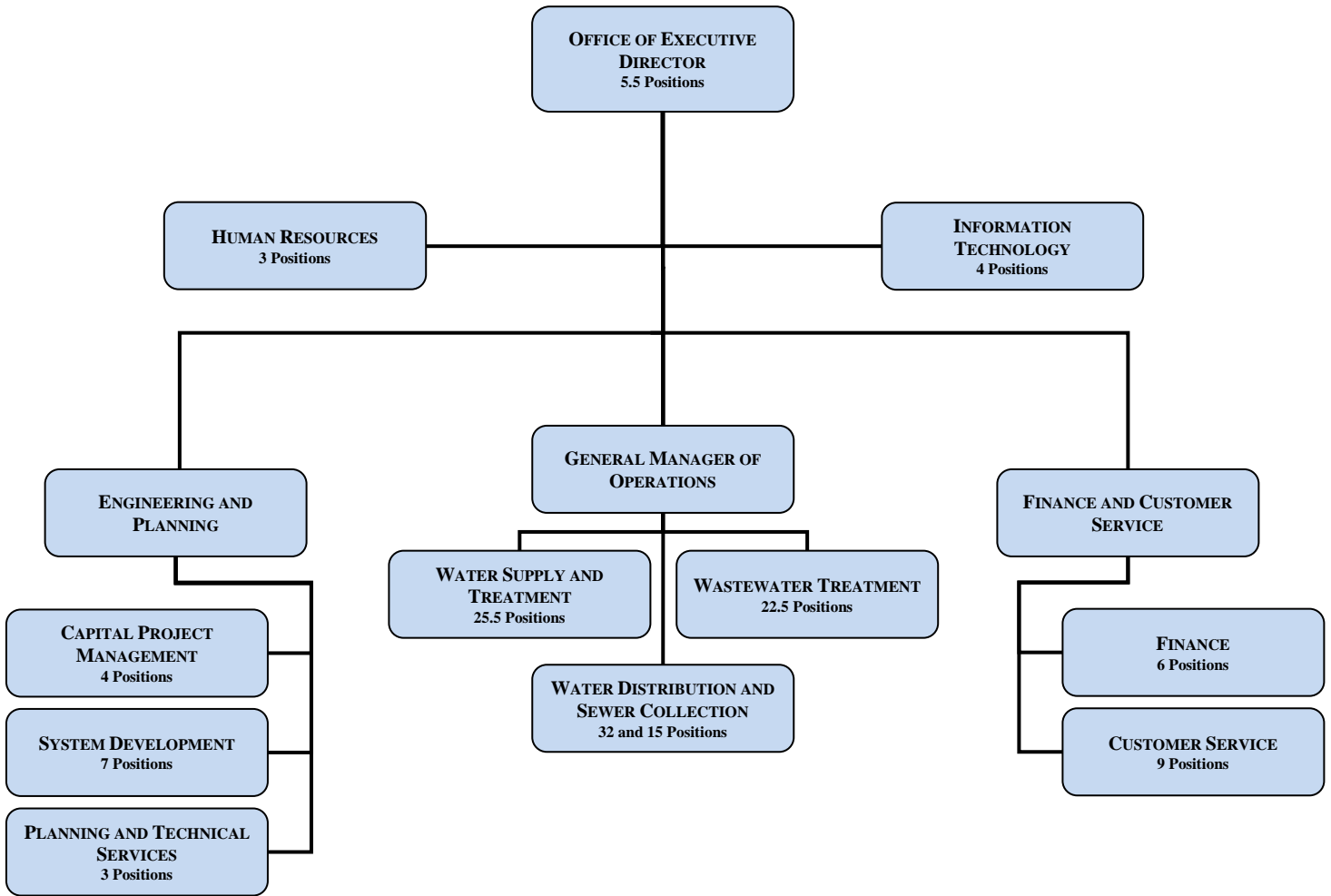
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ORANGE WATER AND SEWER AUTHORITY STAFF / DEPARTMENT STRUCTURE



OFFICE OF EXECUTIVE DIRECTOR

(General and Administrative)

MISSION

Administrative functions include the Board of Directors, Executive Director, and support personnel involved in the general management of OWASA.

The Board of Directors is responsible for managing and operating OWASA in accordance with authority derived from the North Carolina General Statutes, OWASA's Bond Order, OWASA's Bylaws, the 1976 Agreements of Sale and Purchase with the University of North Carolina at Chapel Hill, the Town of Carrboro, and the Town of Chapel Hill, and other legal and organizational documents. The Board sets the overall mission and policies of the organization, appoints the Executive Director, General Counsel, and auditors, and provides oversight and monitoring of OWASA's activities.

The Executive Director is the Chief Administrative Officer responsible for the overall management and supervision of OWASA's services. The Executive Director employs and organizes the staff, assigns responsibilities, and is responsible for carrying out the policies and directives of OWASA. A small support staff provides direct assistance to the Executive Director, including Public Affairs, Sustainability and Administrative Support.

SUMMARY OF ACTIVITIES

- Provide leadership to ensure that the organization's overall mission is accomplished.
- Promote and maintain outstanding service and communications with OWASA's customers.
- Provide the Board of Directors timely support and information.
- Ensure that all water, wastewater, and reclaimed water facilities and programs are operated in compliance with all applicable standards.
- Develop, implement, and maintain effective long-term financial, operational and environmental sustainability plans.
- Implement sound fiscal policies, budgets, and controls.
- Provide high-level technical and administrative direction and support for the sustainability and resource management activities throughout the organization.
- Maintain effective coordination, cooperation, and communication with local governments, the University of North Carolina at Chapel Hill, State and Federal agencies, and continue involvement in civic, professional, and community affairs activities.
- Promote continued innovation and creativity in providing services in a more effective, cost-efficient and sustainable manner.
- Promote training and development of all employees in order to improve OWASA's services.
- Motivate employees and encourage teamwork throughout the organization.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Implement an Energy Management Plan (EMP)	<ul style="list-style-type: none">• Evaluate alternative management strategies• Prepare plan in accord with board-approved project charter• Engage stakeholders in the development of the plan in accord with project-specific community engagement plan approved by board
Implement Advanced Metering Infrastructure	<ul style="list-style-type: none">• Issue request for proposals• Begin system installation

OFFICE OF THE EXECUTIVE DIRECTOR

**Three-year Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$555,730	\$564,968		\$572,429		\$605,426	
Fringe Benefits	<u>192,325</u>	<u>184,553</u>		<u>185,208</u>		<u>186,098</u>	
Total Personnel Costs	748,055	749,521	0%	757,637	1%	791,523	4%
Other Operating Expense							
Materials and Supplies	4,598	17,260		12,191		11,440	
Utilities	67,208	62,000		59,573		56,750	
Maintenance	0	0		0		0	
Professional Services	285,755	317,109		299,481		314,329	
Communication	27,389	42,245		42,752		50,212	
Printing and Reproduction	226	1,000		1,032		1,100	
Education and Development	26,880	17,580		11,971		14,880	
Other	<u>22,584</u>	<u>48,580</u>		<u>35,366</u>		<u>27,310</u>	
Total Operating Expenditures	434,640	505,774	16%	462,366	-9%	476,021	3%
Total Expenditures	<u>1,182,695</u>	<u>1,255,295</u>	6%	<u>1,220,003</u>	-3%	<u>1,267,544</u>	4%
Construction Credit	(50,147)	(41,658)		(41,658)		(73,500)	
Net Expense	<u>\$1,132,548</u>	<u>\$1,213,637</u>	7%	<u>\$1,178,345</u>	-3%	<u>\$1,194,044</u>	1%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	5.5	5.5	5.5

CUSTOMER SERVICE
(General and Administrative)

MISSION

The Customer Service Department is responsible for establishing and promoting quality service for OWASA customers. Areas of responsibility include greeting callers and visitors; billing and collecting water and sewer accounts, septage accounts, and special assessments; accounting for accounts receivable; investigating water theft; responding to inquiries and requests from customers and others; investigating special circumstances that might account for high consumption or billing irregularities; and support of other departments with analyses and information.

SUMMARY OF ACTIVITIES

- Courteously greet all callers and visitors to OWASA, identifying their needs and providing service.
- Operate and maintain the customer billing system to produce accurate and timely bills.
- Collect payments and deposit revenues.
- Develop, interpret and administer OWASA policies relating to customer service and billing and collecting accounts.
- Provide reports and technical assistance to the organization regarding sales, collections, accounts and other customer service information.
- Develop the knowledge and skills of employees by providing training in computer software, telephone etiquette and workshops in customer service techniques.
- Enforce OWASA policies concerning customer service related matters.
- Oversee OWASA's participation in the North Carolina Debt Setoff Program.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Engage the community	• Support community engagement initiatives
Implement Advanced Metering Infrastructure	• Provide key support for implementing system

CUSTOMER SERVICE

**Three-year Budget Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$372,616	\$395,920		\$384,573		\$410,698	
Fringe Benefits	<u>160,163</u>	<u>189,365</u>		<u>179,489</u>		<u>197,031</u>	
Total Personnel Costs	532,779	585,286	10%	564,062	-4%	607,729	-1%
Other Operating Expense							
Materials and Supplies	3,211	4,000		3,866		3,500	
Utilities	1,750	1,500		1,500		1,500	
Maintenance	0	0		0		0	
Professional Services	70,861	45,000		66,414		45,000	
Communication	78,750	75,000		75,078		75,000	
Printing and Reproduction	432	1,000		1,014		1,000	
Education and Development	1,149	5,000		2,477		5,000	
Other	<u>31,087</u>	<u>30,000</u>		<u>30,526</u>		<u>30,000</u>	
Total Operating Expenditures	187,240	161,500	-14%	180,874	12%	161,000	-4%
Total Expenditures	<u>720,019</u>	<u>746,786</u>	4%	<u>744,936</u>	0%	<u>768,729</u>	-2%
Construction Credit	0	0		0		0	
Net Expense	<u>\$720,019</u>	<u>\$746,786</u>	4%	<u>\$744,936</u>	0%	<u>\$768,729</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	8.5	9	9

Key Performance Measurements				
	Goal	FY 2014	FY 2015	FY 2016
Workload				
Customer accounts	N/A	21,113	21,239	21,385
Number of calls received	N/A	27,725	29,423	29,210
Effectiveness				
Percentage of bills issued on time	100%	100%	100%	100%
Average length of call (minutes)	<2.0	2.0	2.3	2.3

ENGINEERING AND PLANNING

(General and Administrative)

MISSION

The Engineering and Planning Department is responsible for four primary functions: Management of system development projects, which includes the review of construction plans and inspection of construction to ensure that water and sewer work accomplished by outside entities (private developers, etc.) is accomplished in accordance with OWASA's Standards and Specifications prior to OWASA taking ownership and assuming operations/maintenance responsibility for these systems; Management of the Capital Improvement Program, which includes execution of design and construction for large-scale repair, renovation, replacement and upgrade projects as necessary to maintain the reliability and efficient operations of OWASA's water, sewer and reclaimed water infrastructure; Asset management, which includes assessing and prioritizing infrastructure improvements needed to achieve desired customer and environmental service levels, minimizing asset failure, and ensuring long-term viability of water, sewer and reclaimed water facilities and systems; and Planning, which includes long-range and strategic master planning functions such as demand forecasting, land management and the use of various modeling tools that guide policy and capital investment decisions to ensure OWASA remains capable of meeting the community's current and future utility needs. Planning functions also include the ongoing management and improvement of OWASA's Geographic Information System (GIS) data, especially the location and attribute details of underground water, sewer and reclaimed water infrastructure.

SUMMARY OF ACTIVITIES

- Review construction drawings and inspect construction work performed by third party entities.
- Provide regular updates and revisions of OWASA's standard engineering specifications and procedures.
- Maintain as-built and record drawings for all water, sewer and reclaimed water facilities, support facilities, and utility work accomplished in the service area.
- Produce small-scale in-house designs, primarily for use by OWASA crews.
- Complete studies and modeling efforts to determine the engineering and economic feasibility of various approaches to the repair and upgrade of OWASA's infrastructure.
- Manage and direct consultant efforts for developing project designs and biddable contract documents and management of contract administrative requirements.
- Develop the five-year Capital Improvements Program.
- Maintain and update the Long-Range Water Supply Plan to ensure a reliable and high quality supply of water for the community for the next 50 years.
- Direct land management issues including acquisition of necessary utility easements, forestry management and efforts to protect OWASA watersheds.
- Provide engineering support for the operation and maintenance of water, wastewater and reclaimed water facilities and infrastructure.
- Maintain the Asset Management Program to assess and prioritize water, wastewater, reclaimed water and support facility infrastructure improvements using system models, renewal/replacement model and prioritization tools.
- Manage and maintain OWASA's GIS that integrates GIS technology with the many operating and business functions of the organization.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Provide reliable and high quality supply of water for the next 50 years	<ul style="list-style-type: none">• Update Long-Range Water Supply Plan
Maintain water, wastewater, and reclaimed water system to ensure service levels are sustained	<ul style="list-style-type: none">• Execute capital improvements program
Implement Advanced Metering Infrastructure	<ul style="list-style-type: none">• Provide key support for implementing system

ENGINEERING AND PLANNING

**Three-year Budget Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$1,050,608	\$1,134,949		\$1,054,454		\$1,098,057	
Fringe Benefits	<u>371,812</u>	<u>385,262</u>		<u>375,647</u>		<u>405,513</u>	
Total Personnel Costs	1,422,420	1,520,210	7%	1,430,101	-6%	1,503,570	-2%
Other Operating Expense							
Materials and Supplies	9,582	17,200		14,195		17,365	
Utilities	7,515	9,200		9,200		8,900	
Maintenance	1,990	2,500		2,500		2,500	
Professional Services	74,245	127,500		62,750		135,700	
Communication	300	400		400		400	
Printing and Reproduction	14,010	24,390		15,777		22,005	
Education and Development	0	0		0		0	
Other	<u>90,367</u>	<u>13,335</u>		<u>63,370</u>		<u>13,458</u>	
Total Operating Expenditures	198,009	194,525	-2%	168,192	-14%	200,328	-2%
Total Expenditures	<u>1,620,429</u>	<u>1,714,735</u>	6%	<u>1,598,293</u>	-7%	<u>1,703,898</u>	-2%
Construction Credit	0	0		0		0	
Net Expense	<u>\$1,620,429</u>	<u>\$1,714,735</u>	6%	<u>\$1,598,293</u>	-7%	<u>\$1,703,898</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	13	14	14

Key Performance Measurements				
	Goal	FY 2014	FY 2015	FY 2016
Actual capital project expenditures as a percentage of budget	>90%	100%	76%	71%
Average plan review time (working days)	<15.0	5.7	7.0	6.5
Capital projects communication plans' effectiveness rating (on a scale of 1 to 5 with 5 the highest)	>4.0	3.6	4.0	4.2

HUMAN RESOURCES
(General and Administrative)

MISSION

The Human Resources Department is responsible for the management, creation and administration of Human Resources and Safety initiatives. This includes recruitment and selection of new hires; policy compliance and development; benefits administration; compensation and classification policies; employee discipline and rewards; worker's compensation; employee insurance management; and employee records management.

The Human Resources Department monitors changes in state and federal human resource and safety regulations and laws to assure the timely updates and compliance of OWASA's Human Resource and Safety policies and practices.

The Human Resources Department reviews and proposes revisions to employee benefits, classification and pay plans to assure that OWASA remains in a competitive compensation relationship with the labor market.

The role of the Department is to assure both management and employees that human resources matters are being handled both fairly, equitably, and without discrimination in accordance with good human resource practices and in compliance with applicable policies, regulations, and laws.

SUMMARY OF ACTIVITIES

- Promote responsive and courteous customer service in all activities.
- Administer the Compensation and Classification Plan for the organization and ensure the compensation and benefits package is competitive in the market place.
- Provide a safety program to enhance safety awareness, prevent worker injuries, and promote safe work practices. Manage the worker's compensation and return to work programs.
- Manage the recruitment and selection process to ensure capable candidates for vacant positions.
- Process employee benefit and insurance plans tasks in a timely and appropriate manner.
- Review employee training and development programs.
- Review human resource policies and practices and make recommendations for revisions.
- Encourage uniformity and timeliness in processing performance appraisals.
- Actively promote equal employment/affirmative action objectives.
- Promote good employee relations and a positive working environment.
- Promote the general well-being of the work force through counseling, special personal need assistance, and advice to employees and managers through available resources.
- Ensure that job applicants are evaluated in accordance with the Americans with Disabilities Act.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Evaluate employee compensation, benefits, and performance evaluation systems and implement improvements	<ul style="list-style-type: none">• Enhance OWASA's pay for performance system
Implement Advanced Metering Infrastructure	<ul style="list-style-type: none">• Provide key human resource support for implementing of system

HUMAN RESOURCES

**Three-year Budget Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$193,369	\$196,167		\$193,270		\$201,758	
Fringe Benefits	<u>296,924</u>	<u>334,125</u>		<u>323,229</u>		<u>374,363</u>	
Total Personnel Costs	490,293	530,292	8%	516,499	-3%	576,121	-2%
Other Operating Expense							
Materials and Supplies	768	5,700		5,696		5,700	
Utilities	1,609	1,750		1,750		1,750	
Maintenance	0	0		0		0	
Professional Services	112,998	358,000		330,786		336,500	
Communication	36,749	23,500		24,346		24,000	
Printing and Reproduction	413	800		807		800	
Education and Development	6,031	8,800		9,421		9,000	
Other	<u>19,529</u>	<u>34,000</u>		<u>34,240</u>		<u>44,000</u>	
Total Operating Expenditures	178,097	432,550	143%	407,046	-6%	421,750	-2%
Total Expenditures	<u>668,390</u>	<u>962,842</u>	44%	<u>923,546</u>	-4%	<u>997,871</u>	-2%
Construction Credit	0	0		0		0	
Net Expense	<u>\$668,390</u>	<u>\$962,842</u>	44%	<u>\$923,546</u>	-4%	<u>\$997,871</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	3	3	3

Key Performance Measurements				
	Goal	FY 2014	FY 2015	FY 2016
Vacancies as a percentage of total authorized positions	<8.0%	13.3%	5.9%	7.3%
At fault EEOC complaints	0	0	0	0
Diversity percentages				
Racial minorities	25-30%	21%	20%	21%
Female gender	25-30%	20%	21%	23%
Number of injuries, illnesses or lost workdays compared to a common exposure base of 100 full-time workers	<3.0	0.8	2.3	2.3

FINANCE
(General and Administrative)

MISSION

The Finance Department is responsible for maintaining the fiscal affairs of OWASA in a professional manner and consistent with generally accepted accounting principles and statutory requirements. Areas of responsibility include accounts payable, accounts receivable, general ledger, asset records, cash investment, payroll, cost accounting, purchasing, budget development, revenue and expenditure forecasting, grants management, and financial reporting. The Finance Department is also responsible for oversight and coordination of studies of rates and fees, and the issuance of revenue bonds.

Data recorded and maintained by the Finance Department provides decision-support for the Board of Directors, Executive Director, and department managers.

SUMMARY OF ACTIVITIES

- Promote responsive and courteous customer service in all activities.
- Manage OWASA’s cash and investments to optimize return while maintaining adequate liquidity to meet expenditures in a timely manner.
- Process invoices timely and accurately taking advantage of discounts for payments and maintaining effective relationships with vendors.
- Process payroll accurately and timely.
- Provide prompt and accurate management reports.
- Monitor budget performance.
- Develop budget for subsequent fiscal year.
- Maintain general ledger and related subsidiary ledgers.
- Maintain a reliable and timely cost accounting system.
- Administer the Financial Management Policy.
- Review adequacy of rates and fees to generate necessary revenues to support a fiscally sound organization.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Evaluate the manner in which we bill multi-family, master-metered customers for services to ensure our rate structure continues to meet our goals	<ul style="list-style-type: none"> • Complete study of OWASA’s rates and fees and work with Board of Directors to reach a decision
Implement Advanced Metering Infrastructure	<ul style="list-style-type: none"> • Provide key support for implementing system
Evaluate our financial management policies related to financial reserves and capital improvements investments	<ul style="list-style-type: none"> • Determine whether current policies continue to meet our objectives

FINANCE

**Three-year Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$465,482	\$467,350		\$463,670		\$477,517	
Fringe Benefits	<u>155,822</u>	<u>165,428</u>		<u>163,069</u>		<u>170,057</u>	
Total Personnel Costs	621,304	632,778	2%	626,739	-1%	647,575	-2%
Other Operating Expense							
Materials and Supplies	12,387	12,000		11,740		12,000	
Utilities	5,568	5,250		5,750		5,500	
Maintenance	350	0		0		0	
Professional Services	339,362	374,950		407,070		402,200	
Communication	4,190	4,000		4,008		4,000	
Printing and Reproduction	1,073	3,000		2,940		3,000	
Education and Development	8,357	9,025		8,738		11,895	
Other	<u>5,415</u>	<u>5,805</u>		<u>5,869</u>		<u>6,155</u>	
Total Operating Expenditures	376,702	414,030	10%	446,115	8%	444,750	-2%
Total Expenditures	<u>998,006</u>	<u>1,046,808</u>	5%	<u>1,072,854</u>	2%	<u>1,092,325</u>	-2%
Construction Credit	0	0		0		0	
Net Expense	<u>\$998,006</u>	<u>\$1,046,808</u>	5%	<u>\$1,072,854</u>	2%	<u>\$1,092,325</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	6	6	6

Key Performance Measurements				
	Goal	FY 2014	FY 2015	FY 2016
Working capital reserve	\$10.2M (FY16)	\$16.0M	\$21.0M	\$21.0M
Debt service coverage ratio	2.0	2.3	2.0	2.1
Debt to asset value	≤50	27	26	25
Service affordability	1.5	1.5	1.4	1.4

M = million

INFORMATION TECHNOLOGY

(General and Administrative)

MISSION

The Information Technology (IT) Department is responsible for developing and supporting OWASA's computer, telecommunications, and office systems through high quality service to internal and external customers; improved coordination, productivity, and efficiency among OWASA departments and work groups; and reliable access to high quality information that supports decision-making at all levels of the organization.

SUMMARY OF ACTIVITIES

- Promote responsive and courteous customer service in all activities.
- IT functions are carried out through planning, procurement, installation, maintenance, and staff training in the following areas: Local Area Network (LAN) management, office and business process automation, personal computing, data transmission, radio communication, telephone, voicemail, mobile phones, office equipment (fax, copiers, and printers).
- Develop, maintain, and implement a long-range plan for the effective and efficient use of technology for information systems throughout the organization.
- IT serves as OWASA's clearinghouse for assessing organization-wide information service needs and priorities, and allocates technology resources accordingly through the acquisition, modification, and / or re-assignment of hardware and software, and through recommendations for staff training. IT establishes appropriate technology standards, specifications, security levels, and procedures for OWASA's information system.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Implement Advanced Metering Infrastructure	• Provide key support for implementing system
Reduce Complexity	• Replace Citrix software and tools by migrating to Microsoft-based technologies
Everything-as-a-Service	• Implement Disaster-Recovery-as-a-Service solutions for critical functions
Security	• Conduct a network security assessment and remediation

INFORMATION TECHNOLOGY

**Three-year Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$319,842	\$320,443		\$319,462		\$333,652	
Fringe Benefits	<u>99,555</u>	<u>114,594</u>		<u>113,023</u>		<u>121,404</u>	
Total Personnel Costs	419,397	435,037	4%	432,485	-1%	455,056	-2%
Other Operating Expense							
Materials and Supplies	80,539	82,180		81,654		91,680	
Utilities	115,638	112,960		115,308		116,260	
Maintenance	278,182	307,870		307,299		310,795	
Professional Services	72,268	125,000		124,922		135,000	
Communication	0	0		0		0	
Printing and Reproduction	0	0		0		0	
Education and Development	18,014	17,180		17,180		17,685	
Other	<u>38,598</u>	<u>40,400</u>		<u>40,081</u>		<u>41,202</u>	
Total Operating Expenditures	603,239	685,590	14%	686,444	0%	712,622	-2%
Total Expenditures	<u>1,022,636</u>	<u>1,120,627</u>	10%	<u>1,118,929</u>	0%	<u>1,167,678</u>	-2%
Construction Credit	0	0		0		0	
Net Expense	<u>\$1,022,636</u>	<u>\$1,120,627</u>	10%	<u>\$1,118,929</u>	0%	<u>\$1,167,678</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	4	4	4

WATER SUPPLY AND TREATMENT

(Operating)

MISSION

The Water Supply and Treatment Department is responsible for providing high quality drinking water to OWASA customers. Departmental functions include operation and maintenance of three water supply reservoirs, public recreation facilities at two lakes, the Jones Ferry Road Water Treatment Plant, water treatment solids processing and recycling facilities, and five elevated storage tanks. The department also administers watershed protection programs.

SUMMARY OF ACTIVITIES

- Efficiently and effectively operate the water treatment, laboratory, and maintenance programs in compliance with all federal and state regulations and requirements while providing high quality drinking water to OWASA customers.
- Provide timely analytical monitoring data for process control and regulatory reporting.
- Maintain a computerized maintenance management program to facilitate work scheduling, track equipment history and reliability, and maintain a database of suppliers and parts for installed equipment to support asset management.
- Respond to weekend and after-hours water and sewer emergency calls from OWASA customers in a courteous and timely fashion and dispatch appropriate personnel to resolve customer problems.
- Provide responsive and courteous service to address water quality concerns raised by customers.
- Enhance customer awareness of watershed protection and water treatment by conducting facility tours and providing general information relating to water quality and treatment.
- Operate and maintain the recreational facilities at University Lake and Cane Creek Reservoir in a courteous and friendly manner.
- Continue strong emphasis on the development and training of employees to improve their knowledge, skills, and abilities, including professional certifications and safety requirements.
- Reinforce the teamwork approach required by department employees to accomplish the Department's objectives.
- Oversee and manage OWASA-owned land and conservation easements in the University Lake and Cane Creek watersheds.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Provide reliable and high quality supply of water for the next 50 years	<ul style="list-style-type: none">• Maintain Partnership for Safe Water Phase IV objectives• Continue strong emphasis on the development and training of employees to improve their knowledge, skills, and abilities• Maintain continuous compliance with state and federal drinking water standards

WATER SUPPLY AND TREATMENT

**Three-year Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$1,271,399	\$1,342,008		\$1,337,789		\$1,377,064	
Fringe Benefits	<u>545,232</u>	<u>590,778</u>		<u>600,769</u>		<u>650,490</u>	
Total Personnel Costs	1,816,631	1,932,786	6%	1,938,559	0%	2,027,554	-2%
Other Operating Expense							
Materials and Supplies	1,208,215	1,177,325		1,149,054		1,262,043	
Chemicals	0	0		0		0	
Utilities	372,716	340,923		331,331		346,927	
Maintenance	952,382	1,029,664		1,022,892		1,050,173	
Professional Services	246,956	186,306		191,232		152,287	
Communication	2,011	4,000		2,705		4,000	
Printing and Reproduction	0	0		0		0	
Education and Development	19,672	16,000		16,339		17,900	
Other	<u>12,158</u>	<u>14,590</u>		<u>12,297</u>		<u>13,075</u>	
Total Operating Expenditures	2,814,110	2,768,807	-2%	2,725,850	-2%	2,846,404	-2%
Total Expenditures	<u>4,630,741</u>	<u>4,701,593</u>	2%	<u>4,664,408</u>	-1%	<u>4,873,958</u>	-2%
Construction Credits	0	0		0		0	
Net Expense	<u>\$4,630,741</u>	<u>\$4,701,593</u>	2%	<u>\$4,664,408</u>	-1%	<u>\$4,873,958</u>	-2%

Personnel Summary

	FY 2015	FY 2016	FY 2017
Positions	25.5	25.5	25.5

Key Performance Measurements

	Goal	FY 2014	FY 2015	FY 2016
Workload				
Finished water pumped to the distribution system	N/A	2.5B	2.5B	2.4B
Percent of solids removed from treatment process and recycled for beneficial use	100%	100%	100%	100%
Effectiveness				
Primary drinking water standards non-compliances	0	0	0	0
Secondary drinking water standards non-compliances	0	0	0	0
Average finished water turbidity (Nephelometric Turbidity Units)	<0.10	0.04	0.04	0.04

B = billion

WATER DISTRIBUTION

(Operating)

MISSION

The Water Distribution Department is responsible for maintaining the drinking water distribution system from the water treatment plant to the meters at customers' premises with exception of the system's storage tanks and the distribution pipes. The Department also develops and implements efficient and effective measures for the maintenance and repair of all components of the water distribution infrastructure and is responsible for accurately and efficiently reading meters and replacing certain water mains to maintain the integrity and capacity of the system.

SUMMARY OF ACTIVITIES

- Provide responsive and courteous customer service in all activities.
- Conduct regular flushing of water mains to ensure water quality throughout the distribution system.
- Maintain ongoing valve and fire hydrant maintenance and repair programs to help ensure reliable operation of the distribution system.
- Accurately and efficiently read water meters to ensure correct consumption is billed to customers.
- Investigate distribution system for sources of unaccounted water (water pumped to system but not metered or billed).
- Administer a backflow prevention program to ensure water quality.
- Coordinate the repair and replacement of customer water meters.
- Maintain integrity of water distribution lines by continuing rehabilitation program.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Affordability and Cost Management	<ul style="list-style-type: none">• Ensure that meters are read accurately and on time
Implement advanced metering infrastructure	<ul style="list-style-type: none">• Provide key support for implementing system

WATER DISTRIBUTION

**Three-year Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$1,381,692	\$1,384,219		\$1,344,599		\$1,421,839	
Fringe Benefits	<u>625,884</u>	<u>713,699</u>		<u>700,267</u>		<u>761,829</u>	
Total Personnel Costs	2,007,576	2,097,919	5%	2,044,866	-3%	2,183,668	-2%
Other Operating Expense							
Materials and Supplies	67,510	91,173		68,588		82,979	
Utilities	183,265	178,500		178,500		196,586	
Maintenance	619,295	504,280		504,280		550,087	
Professional Services	6,614	10,707		6,062		8,019	
Communication	2,720	1,500		1,500		1,500	
Printing and Reproduction	1,009	1,000		2,013		2,000	
Education and Development	9,040	12,070		12,070		17,595	
Other	<u>2,002</u>	<u>4,100</u>		<u>4,100</u>		<u>1,900</u>	
Total Operating Expenditures	891,455	803,330	-10%	777,113	-3%	860,666	-2%
Total Expenditures	<u>2,899,031</u>	<u>2,901,248</u>	0%	<u>2,821,979</u>	-3%	<u>3,044,334</u>	-2%
Construction Credits	(65,031)	(53,000)		(53,000)		(93,500)	
Net Expense	<u>\$2,834,000</u>	<u>\$2,848,248</u>	1%	<u>\$2,768,979</u>	-3%	<u>\$2,950,834</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	32	32	32

Key Performance Measurements				
	Goal	FY 2014	FY 2015	FY 2016
Workload				
Miles of finished water pipe maintained	N/A	380	379	380
Effectiveness				
Volume of water billed vs. volume pumped to the system	90.0%	91.7%	90.6%	90.7%
Number of main breaks per 100 miles of pipe	<15.00	5.79	6.34	5.02

WASTEWATER TREATMENT

(Operating)

MISSION

The Mason Farm Wastewater Treatment Plant is responsible for reliably providing efficient and effective treatment of wastewater, reclaimed water, and the resulting biosolids. The Department complies with various local, state, and federal regulations that pertain to all discharges from OWASA's facilities, plus the general operation requirements to meet all applicable standards. These include; National Pollutant Discharge Elimination System (NPDES) Permit, the Land Application Permit (Water Quality, Non-Discharge), the Stormwater Discharge Permit and Reclaimed Water Permit.

SUMMARY OF ACTIVITIES

- Provide responsive and courteous customer service in all activities.
- Maintain plant, maintenance, and laboratory programs to ensure that all discharges are in compliance with their operating permits.
- Operate plant, laboratory, and maintenance areas in compliance with all applicable state and federal requirements.
- Eliminate offsite odors and provide prompt response to public inquires.
- Maintain all equipment necessary to provide reliable pumping of wastewater without spillage or overflow.
- Provide timely analytical monitoring data for process control and regulatory reporting.
- Maintain a computerized maintenance management program to facilitate work scheduling, track equipment history and reliability, and maintain a database of suppliers and parts for installed equipment to support asset management.
- Manage all programs in an environmentally and operationally sound manner.
- Provide training and professional development to employees to improve their knowledge, skills and abilities related to their work area including professional certifications and safety requirements.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Launch program to meet requirements for American Water Works Association's Partnership for Clean Water program	<ul style="list-style-type: none">• Optimization and efficiency efforts will include assessments of energy use, capacity, process control, and administration to identify and prioritize factors limiting performance
Upgrade Supervisory Control and Data Acquisition (SCADA) systems	<ul style="list-style-type: none">• Conduct pilot program to evaluate transition to high performance SCADA which incorporates data trending to provide real-time situational awareness for process control and asset management
Develop in-house program to manage instrumentation maintenance and calibration	<ul style="list-style-type: none">• Maintenance staff to train WWTP staff to manage these tasks

WASTEWATER TREATMENT

Three-year Comparison

Fiscal Years 2015 - 2017

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$1,259,431	\$1,236,640		\$1,233,793		\$1,341,954	
Fringe Benefits	<u>551,681</u>	<u>570,748</u>		<u>573,969</u>		<u>633,159</u>	
Total Personnel Costs	1,811,112	1,807,388	0%	1,807,762	0%	1,975,113	-2%
Other Operating Expense							
Materials and Supplies	913,391	917,087		904,261		916,470	
Chemicals	0	0		0		0	
Utilities	908,012	1,163,621		1,110,501		682,850	
Maintenance	691,768	886,134		871,320		935,876	
Professional Services	162,125	273,140		239,142		244,225	
Communication	7,346	7,655		7,492		8,935	
Printing and Reproduction	0	0		0		0	
Education and Development	17,303	18,500		17,429		20,000	
Other	<u>36,406</u>	<u>32,600</u>		<u>33,544</u>		<u>41,625</u>	
Total Operating Expenditures	2,736,351	3,298,737	21%	3,183,689	-3%	2,849,981	-2%
Total Expenditures	<u>4,547,463</u>	<u>5,106,125</u>	12%	<u>4,991,451</u>	-2%	<u>4,825,094</u>	-2%
Construction Credits	0	0		0		0	
Net Expense	<u>\$4,547,463</u>	<u>\$5,106,125</u>	12%	<u>\$4,991,451</u>	-2%	<u>\$4,825,094</u>	-2%

Personnel Summary

	FY 2015	FY 2016	FY 2017
Positions	22.5	22.5	22.5

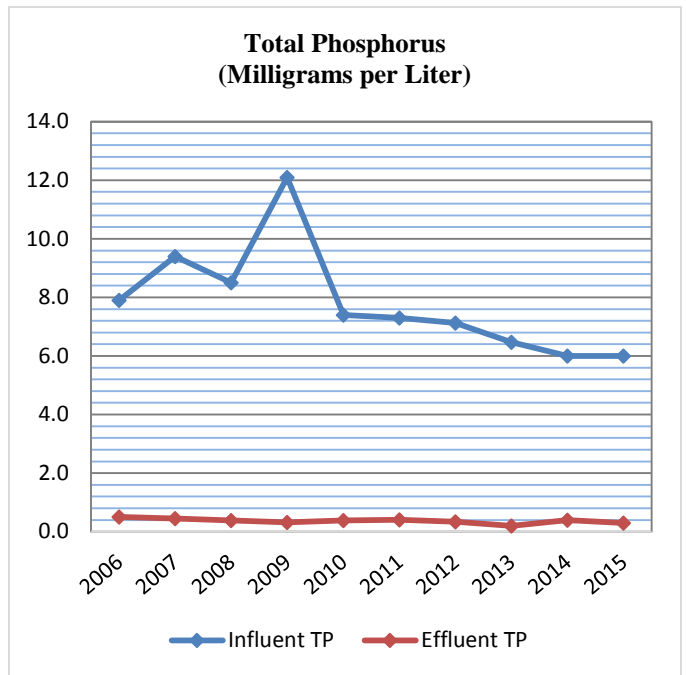
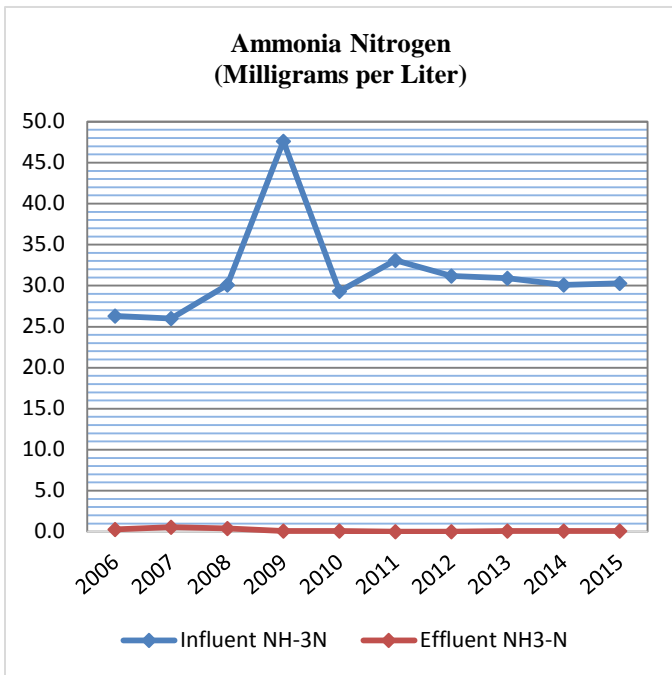
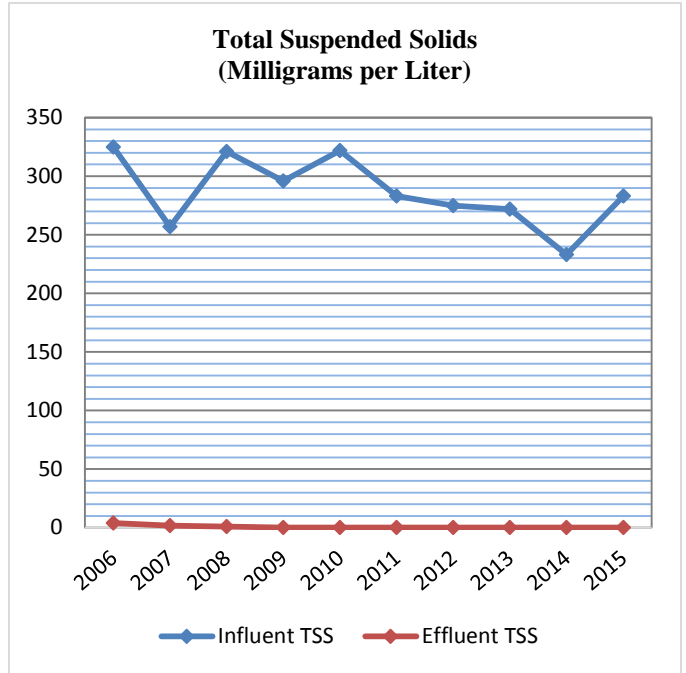
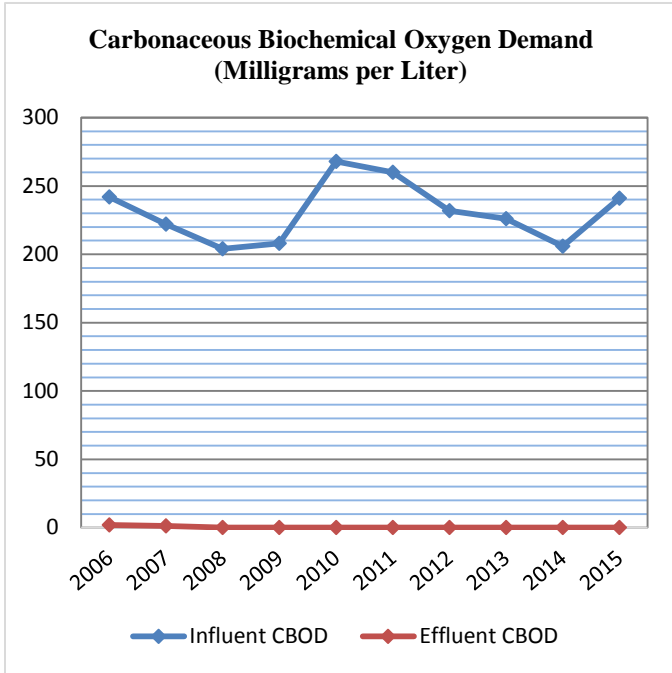
Key Performance Measurements

	Goal	FY 2014	FY 2015	FY 2016
Workload				
Number of gallons of wastewater treated	N/A	3.0B	3.0B	3.0B
Effectiveness				
Events of permit noncompliance	0	0	0	0
Wastewater overflows	0	0	0	0
Odor events	0	15	11	2

B = billion

Mason Farm Wastewater Treatment Plant Loading and Performance Last 10 Years

The following graphs show the loading and performance of the Mason Farm Wastewater Treatment Plant annually for the past ten years. This information is also shown in a table on page 60.



SEWER COLLECTION

(Operating)

MISSION

The Sewer Collection Department is responsible for maintaining the public sewer collection system which carries wastewater to the Mason Farm Wastewater Treatment Plant. The Department uses precise and systematic approaches to minimize and prevent overflows of sewage to local creeks and streams. The Department also operates ongoing programs to clear and mow easements and inspect and clean sewer mains.

SUMMARY OF ACTIVITIES

- Promote responsive and courteous customer service in all activities.
- Manage an efficient and effective predictive, preventive, and corrective maintenance program for the wastewater collection infrastructure.
- Maintain an ongoing program to reduce inflow / infiltration into the sewer collections system.
- Regularly mow and clear easements and clean sewer mains.
- Maintain a computerized maintenance management program for all aspects of the Department's operation.
- Ensure proper employee training and development in new methods of maintaining sewer lines and using related equipment. Enhance knowledge and skills of employees to increase proficiency through participation in education and training workshops and in-house programs.
- Administer grease monitoring program.

KEY FOCUS AREAS FOR FY 2017

Strategic Initiative	Objective
Maintain sewer collection system	<ul style="list-style-type: none">• Inspect at least ten miles of sewer lines with video equipment• Clean at least 20% of sewer system
Improve employee compensation and development programs to attract and retain a diverse and high-performing team	<ul style="list-style-type: none">• Further development of employee cross-training and skill acquisition, specifically in the areas of maintenance, instrumentation and process control. Implementation of skill-based compensation programs.

SEWER COLLECTIONS

**Three-year Comparison
Fiscal Years 2015 - 2017**

	FY2015 Actual	FY 2016 Budget	FY16 Budget to FY15 Actual	FY 2016 Forecast	FY16 Forecast to FY16 Budget	FY 2017 Budget	FY17 Budget to FY16 Forecast
Personnel Costs							
Salaries and Wages	\$482,938	\$486,689		\$472,417		\$548,800	
Fringe Benefits	<u>232,232</u>	<u>257,631</u>		<u>250,870</u>		<u>301,824</u>	
Total Personnel Costs	715,170	744,320	4%	723,287	-3%	850,624	-2%
Other Operating Expense							
Materials and Supplies	234,406	251,686		251,089		249,636	
Chemicals	0	0		0		0	
Utilities	128,312	129,309		129,309		127,188	
Maintenance	201,983	177,500		177,500		181,000	
Professional Services	7,783	8,800		8,769		8,019	
Communication	747	700		700		1,000	
Printing and Reproduction	0	500		500		500	
Education and Development	7,265	10,240		10,240		11,160	
Other	<u>3,021</u>	<u>4,000</u>		<u>4,000</u>		<u>4,024</u>	
Total Operating Expenditures	583,517	582,735	0%	582,107	0%	582,527	-2%
Total Expenditures	<u>1,298,687</u>	<u>1,327,055</u>	2%	<u>1,305,393</u>	-2%	<u>1,433,151</u>	-2%
Construction Credits	(9,734)	0		(8,847)		0	
Net Expense	<u>\$1,288,953</u>	<u>\$1,327,055</u>	3%	<u>\$1,296,547</u>	-2%	<u>\$1,433,151</u>	-2%

Personnel Summary			
	FY 2015	FY 2016	FY 2017
Positions	14	14	15

Key Performance Measurements				
	Goal	FY 2014	FY 2015	FY 2016
Workload				
Miles of gravity wastewater collection piping maintained	N/A	324	326	328
Effectiveness				
Number of reportable wastewater overflows	0	5	4	1
Total number of reportable overflows per 100 miles of sewer pipe	0.0	1.9	1.2	0.3

Section III

SUPPLEMENTAL INFORMATION

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BUDGET RESOLUTION AND ORDINANCE

**RESOLUTION ADOPTING THE ANNUAL BUDGET FOR
ORANGE WATER AND SEWER AUTHORITY FOR THE FISCAL YEAR
JULY 1, 2016 THROUGH JUNE 30, 2017**

WHEREAS, Section 7.05 of the Bond Order and North Carolina G.S. Chapter 159 require that on or before the first day of July in each fiscal year the Authority will adopt a Budget for the ensuing fiscal year; and

WHEREAS, such budget is to include estimates of revenues of the water, sewer and reclaimed water systems, current operations expenses, interest income, debt service costs, and disbursements from the general fund for capital improvements and equipment purchases.

NOW, THEREFORE, BE IT RESOLVED:

1. That pursuant to the provisions of North Carolina G.S. Chapter 159-13 the attached pages marked 2 through 6 be, and they hereby are, adopted as the official budget of Orange Water and Sewer Authority of the Fiscal Year beginning July 1, 2016 through June 30, 2017.
2. That the appropriations for departments, functions, and projects as shown in the attached budget for the respective purposes and in the respective amounts therein specified are hereby made.
3. That the Executive Director shall administer the budget, and is hereby authorized to expend the funds for the purposes set forth therein.

Adopted this 9th day of June 2016.

John Young, Chair

ATTEST:

Heather Payne, Secretary

BUDGET RESOLUTION AND ORDINANCE

**ORANGE WATER AND SEWER AUTHORITY
STATEMENT OF INCOME, EXPENSE AND DEBT SERVICE
(OPERATING)**

		FY 2017 <u>Annual Budget</u>
Operating Revenue		
Water	\$17,923,072	
Sewer	16,578,878	
Reclaimed Water	439,110	
Service Initiation Fee	168,898	
Other	1,069,578	
Refunds and Adjustments	<u>(325,766)</u>	
Total Operating Revenue		\$35,853,770
Operating Expense		
General and Administrative	6,924,545	
Operations	<u>14,083,038</u>	
Total Operating Expense		<u>21,007,583</u>
Net Operating Income		14,846,187
Non-operating Revenue		
Customer Fees		995,950
Interest		<u>14,708</u>
Total Net Income		<u><u>\$15,856,845</u></u>
Debt Service		
Existing		\$6,932,059
New		<u>0</u>
Total Debt Service		<u>6,932,059</u>
Net Income Less Debt Service		<u><u>\$8,924,786</u></u>

BUDGET RESOLUTION AND ORDINANCE

**ORANGE WATER AND SEWER AUTHORITY
STATEMENT OF INCOME AND EXPENSE
(CAPITAL/NON-OPERATING)**

		<u>FY 2017 Annual Budget</u>
General Fund		
Resources		
Transfer From Revenue	<u>\$8,924,786</u>	
Annual Income Available for Capital		\$8,924,786
Transfer from Construction Fund (Bond Proceeds)		<u>0</u>
Total Available for Capital		<u>8,924,786</u>
Capital Expenditures		
Project ordinances		
General Fund Contribution	13,648,000	
Funded by Bond Proceeds	<u>0</u>	
Total Project Resolutions		13,648,000
Capital Equipment		<u>1,227,000</u>
Total Capital Outlay		<u>14,875,000</u>
Annual General Fund Balance		(5,950,214)
General Fund Beginning Balance		<u>24,200,000</u>
General Fund Ending Balance		18,249,786
Project Funding	1,927,786	
Reserves		
Rate/Revenue Stabilization	2,000,000	
Capital Improvements	3,200,000	
Working Capital	<u>11,122,000</u>	<u>18,249,786</u>
Unallocated General Fund Balance		<u><u>\$0</u></u>

BUDGET RESOLUTION AND ORDINANCE

REVENUE FUND

	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
Fund Balance July 1, 2016			\$0
Receipts			
Operating Revenue			
Customer Billings	\$17,923,072	\$16,578,878	34,501,950
Reclaimed Water	439,110	-	439,110
Service Initiation Fee	84,449	84,449	168,898
Other	534,789	534,789	1,069,578
Refunds and Adjustments	(162,883)	(162,883)	(325,766)
Total Operating Revenue	18,818,537	17,035,233	35,853,770
Non-operating Revenue			
Customer Fees	429,980	565,970	995,950
Interest Income	7,354	7,354	14,708
Total Non-operating Revenue	437,334	573,324	1,010,658
Total Receipts	19,255,871	17,608,557	36,864,428
Expenditures			
Current Expense	(11,871,436)	(9,136,147)	(21,007,583)
Debt Service	(4,505,838)	(2,426,221)	(6,932,059)
Total Expenditures	(16,377,274)	(11,562,368)	(27,939,642)
Net Revenue			8,924,786
To General Fund			(8,924,786)
Fund Balance June 30, 2017			<u>0</u>
Change in Available Balance			<u><u>\$0</u></u>

BUDGET RESOLUTION AND ORDINANCE

BOND SERVICE FUND

Fund Balance July 1, 2016		\$0
Receipts		
Transfers from Revenue Fund	\$6,932,059	
Interest	<u> </u>	
Total Receipts		6,932,059
Expenditures		
Debt Service	<u>6,932,059</u>	
Total Expenditures		<u>(6,932,059)</u>
Fund Balance June 30, 2017		<u>0</u>
Change in Available Balance		<u><u>\$0</u></u>

BUDGET RESOLUTION AND ORDINANCE

GENERAL FUND

Fund Balance July 1, 2016		\$24,200,000
Receipts		
Transfer From Revenue fund	8,924,786	
Transfer From Construction Fund (Loan Proceeds)	0	
Interest	0	
Assessments	0	
Grants and contributions	0	
	<hr/>	
Total Receipts		<hr/> 8,924,786
Total Balance Before Expenditures		33,124,786
Expenditures		
Capital Equipment/Leases	1,227,000	
Project Resolutions	13,648,000	
Transfer to Revenue Fund	0	
	<hr/>	
Total Expenditures		<hr/> (14,875,000)
Fund Balance June 30, 2017		<hr/> <hr/> \$18,249,786
Allocation of Fund Balance June 30, 2017		
Project Funding	1,927,786	
Capital Reserves	16,322,000	
	<hr/>	
Total Allocation		<hr/> <hr/> \$18,249,786
Unallocated General Fund Balance June 30, 2017		<hr/> 0
Change in Available Balance		<hr/> <hr/> (\$5,950,214)

PERSONNEL AUTHORIZATIONS BY DEPARTMENT

Office of the Executive Director	FY 2015	FY 2016	FY 2017
Executive Director	1	1	1
General Manager of Operations	1	1	1
Sustainability Manager	1	1	1
Executive Assistant	1	1	1
Public Affairs Administrator	1	1	1
Administrative Assistant	0.5	0.5	0.5
Totals	5.5	5.5	5.5

Customer Service

Customer Service Manager	1	1	1
Billing Supervisor	0	1	1
Senior Customer Service Representative	1	1	1
Customer Service Representative	5	3	3
Clerk/Cashier	0	2	2
Administrative Assistant/Reception	1	1	1
Customer Service Specialist	0.5	0	0
Totals	8.5	9	9

Engineering and Planning

Director of Engineering and Planning	1	1	1
Planning and Development Manager	1	1	1
Engineering Manager	2	2	2
Utilities Engineer	2	2	2
Geographic Information Systems Coordinator	1	1	1
Construction Inspector	2	2	2
Engineering Associate	2	2	2
Engineering Technician	2	2	2
Asset Management and Facilities Engineer	0	1	1
Operations Engineer	1	0	0
Totals	14	14	14

Human Resources

Director of Human Resources and Safety	1	1	1
Human Resources Generalist	1	1	1
Administrative Assistant	1	1	1
Totals	3	3	3

PERSONNEL AUTHORIZATIONS BY DEPARTMENT

Finance	FY 2015	FY 2016	FY 2017
Director of Finance and Customer Service	1	1	1
Finance and Procurement Manager	1	1	1
Financial Analyst	1	1	1
Accounting Technician II	3	3	3
Administrative Assistant	0	0	0
Totals	6	6	6

Information Technology

Director of Information Technology	1	1	1
Network/Database Administrator	2	2	2
Information Services Technical Specialist	1	1	1
Totals	4	4	4

Water Supply and Treatment

Water Supply and Treatment Manager	1	1	1
Operations Supervisor	1	1	1
Treatment Plant Operator	7	8	8
Lake Warden	1	1	1
Senior Lake Warden	1	1	1
Assistant Lake Warden	2	2	2
Plant Maintenance Supervisor	1	1	1
Senior Maintenance Mechanic	0	2	2
Maintenance Coordinator	1	1	1
Maintenance Mechanic	6	4	4
Laboratory Supervisor	1	1	1
Laboratory Analyst	3	2	2
Administrative Assistant	0.5	0.5	0.5
Totals	25.5	25.5	25.5

Water Distribution

Distribution and Collections Systems Manager	1	1	1
Assistant Distribution & Collection System Manager	1	1	1
Crew Leader	3	3	3
Utility Mechanic I/II/III	25	25	25
Administrative Assistant	1	1	1
Warehouse-Cross Connection Coordinator	1	1	1
Totals	32	32	32

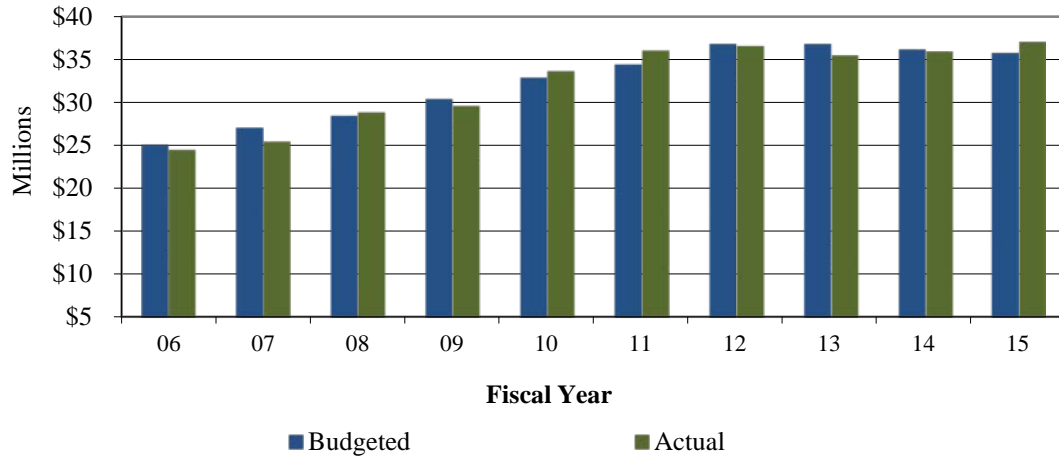
PERSONNEL AUTHORIZATIONS BY DEPARTMENT

Wastewater Treatment	FY 2015	FY 2016	FY 2017
Wastewater Treatment and Biosolids Recycling Manager	1	1	1
Operations Supervisor	1	1	1
Treatment Plant Operator	7	8	8
Solids Handling Supervisor	1	1	1
Solids Handler	3	3	3
Plants Maintenance Supervisor	1	1	1
Senior Maintenance Mechanic	4	4	4
Laboratory Supervisor	1	1	1
Laboratory Analyst	3	2	2
Administrative Assistant	0.5	0.5	0.5
Totals	22.5	22.5	22.5
Sewer Collections			
Crew Leader	3	3	3
Utility Mechanic I/II/III	11	11	12
Totals	14	14	15
Total Positions	<u>135</u>	<u>135.5</u>	<u>136.5</u>

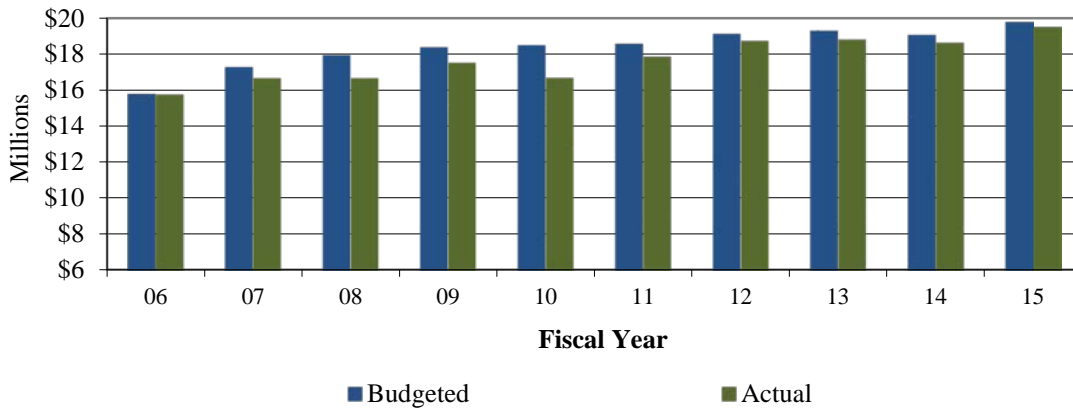
Authorized positions have been increased by one full-time equivalent in the Sewer Collections department. A Utility Mechanic position has been added to provide staffing for a grease trap maintenance program.

10-YEAR HISTORICAL PERFORMANCE

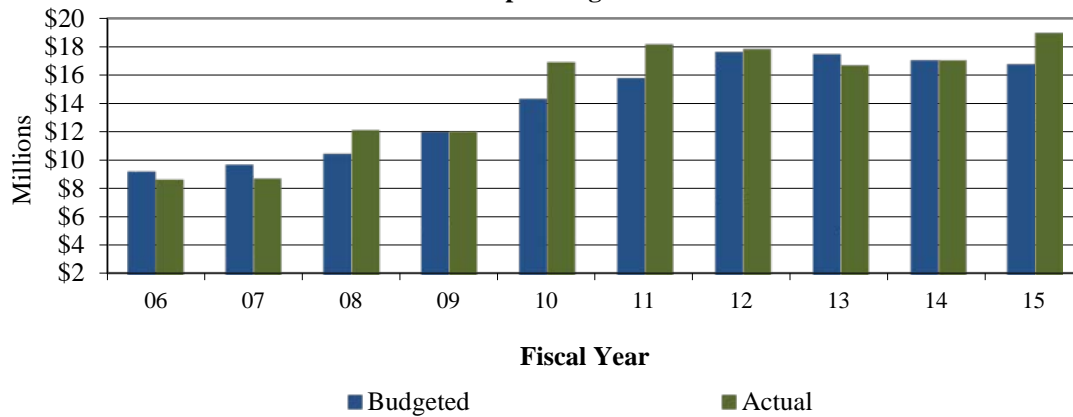
10-Year Operating Revenue Variance



10-Year Operating Expense Variance



10-Year Net Operating Income Variance

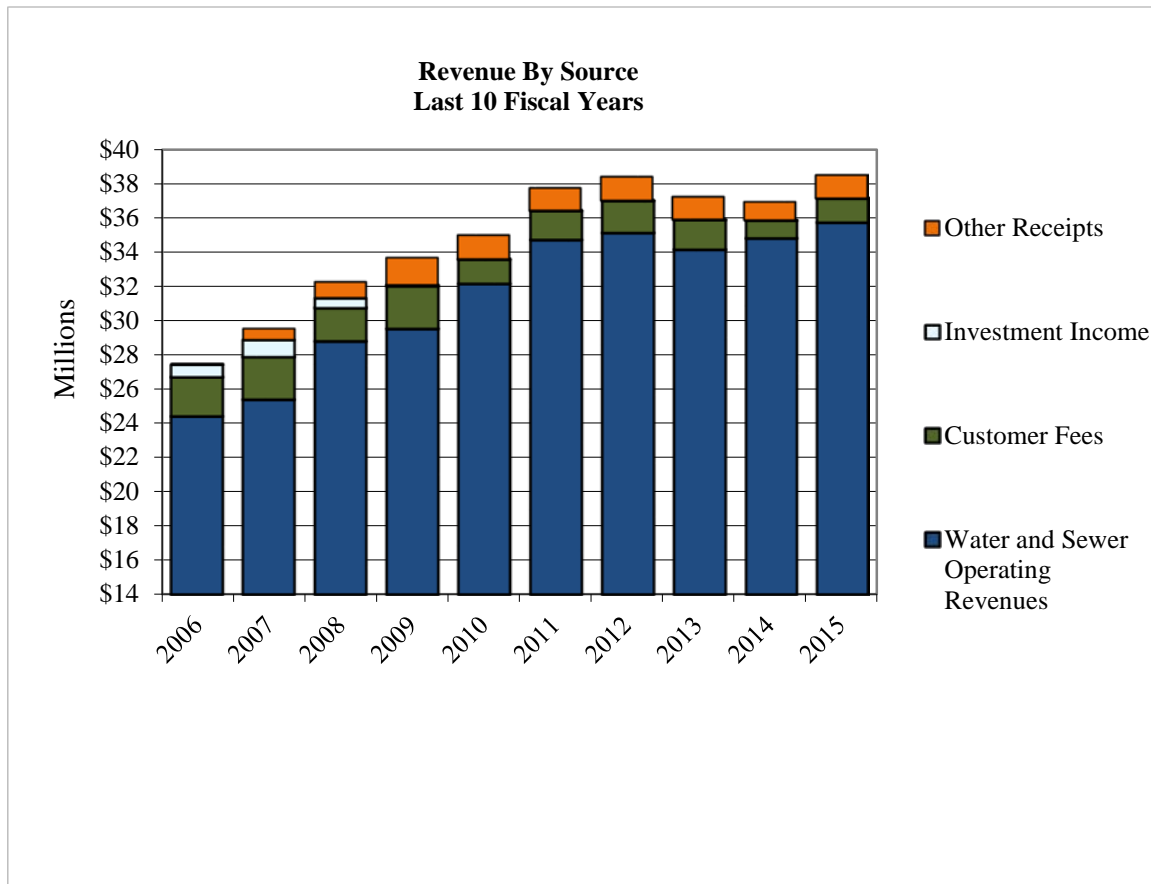


10-YEAR HISTORICAL PERFORMANCE

ORANGE WATER AND SEWER AUTHORITY

**Revenues By Source
Last 10 Fiscal Years**

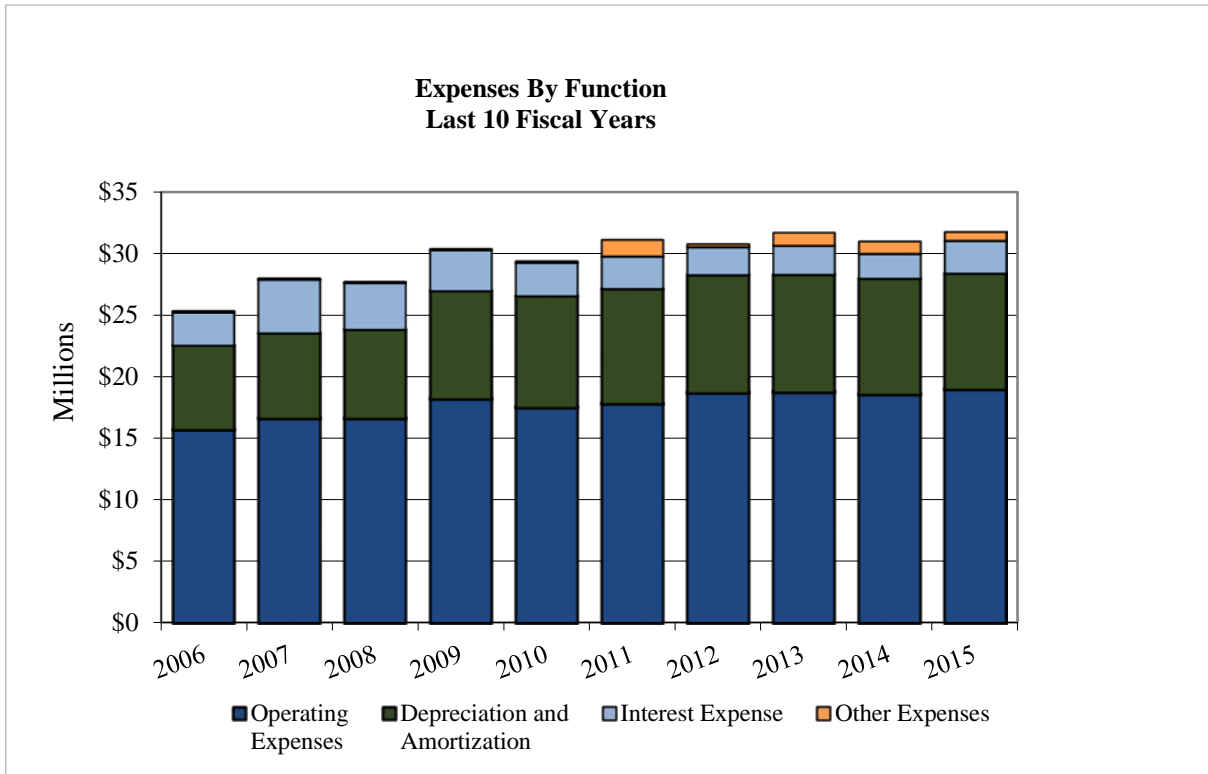
Fiscal Year	Water and Sewer Operating Revenues	Customer Fees	Investment Income	Other Receipts	Total
2006	24,431,382	2,308,651	742,010	58,846	27,540,889
2007	25,413,571	2,514,450	995,354	666,528	29,589,903
2008	28,794,093	1,995,415	584,031	929,369	32,302,908
2009	29,537,290	2,498,459	80,343	1,582,736	33,698,828
2010	32,153,848	1,436,564	29,169	1,404,924	35,024,505
2011	34,701,751	1,713,417	29,261	1,302,079	37,746,508
2012	35,107,350	1,899,056	17,964	1,381,799	38,406,169
2013	34,133,521	1,769,883	15,664	1,324,092	37,243,160
2014	34,789,219	1,069,551	14,756	1,076,285	36,949,811
2015	35,705,629	1,429,242	15,133	1,351,139	38,501,143



10-YEAR HISTORICAL PERFORMANCE

**ORANGE WATER AND SEWER AUTHORITY
Expenses By Function
Last 10 Fiscal Years**

Fiscal Year	Operating Expenses	Depreciation and Amortization	Interest Expense	Other Expenses	Total
2006	15,723,917	6,871,350	2,724,951	141,579	25,461,797
2007	16,635,917	6,950,774	4,361,911	96,898	28,045,500
2008	16,643,471	7,215,175	3,832,320	69,940	27,760,906
2009	18,225,142	8,765,924	3,305,193	83,338	30,379,597
2010	17,532,938	9,053,691	2,702,687	92,613	29,381,929
2011	17,836,397	9,310,159	2,623,208	1,320,156	31,089,920
2012	18,713,083	9,539,846	2,274,113	235,552	30,762,594
2013	18,781,423	9,514,909	2,334,944	1,033,149	31,664,425
2014	18,597,655	9,393,739	1,979,647	1,012,532	30,983,573
2015	18,999,642	9,384,310	2,637,681	695,287	31,716,920

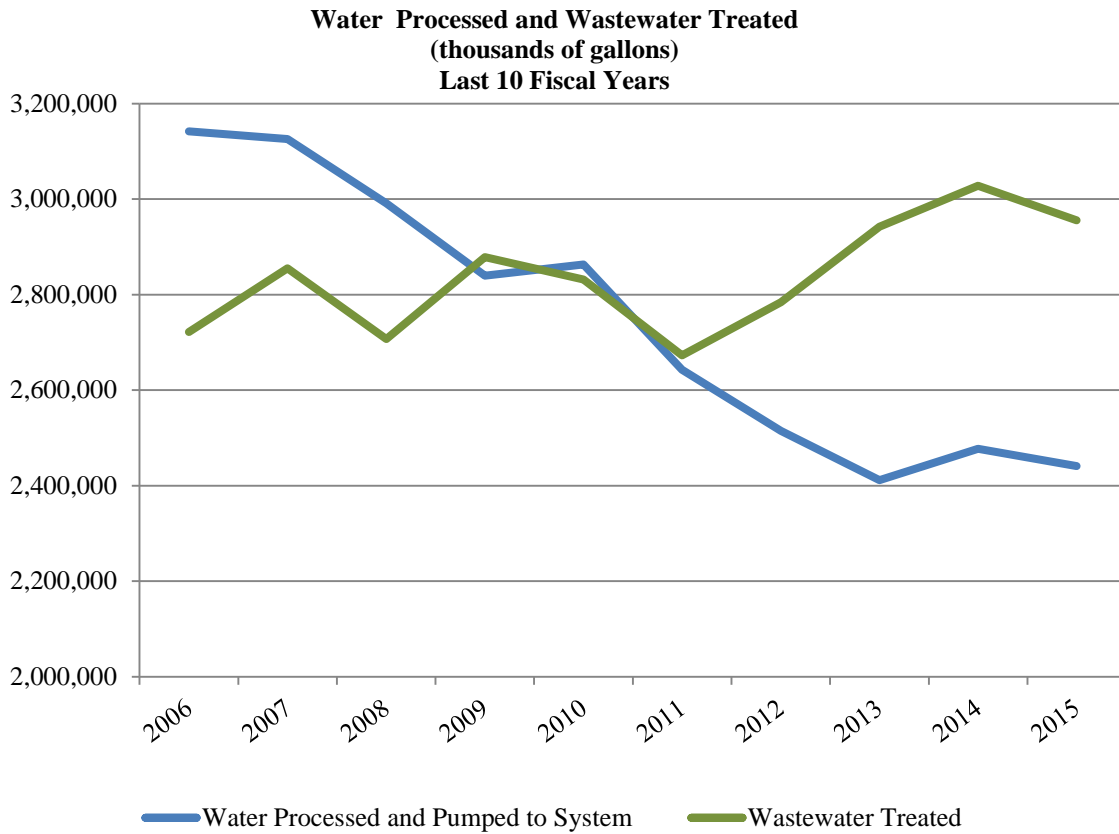


10-YEAR HISTORICAL PERFORMANCE

ORANGE WATER AND SEWER AUTHORITY

**Water Processed and Wastewater Treated
(thousands of gallons)
Last 10 Fiscal Years**

Fiscal Year	Water Processed and Pumped to System	Wastewater Treated
2006	3,142,000	2,722,000
2007	3,126,000	2,855,000
2008	2,991,000	2,707,000
2009	2,840,000	2,879,000
2010	2,863,000	2,832,000
2011	2,643,000	2,673,000
2012	2,515,000	2,784,000
2013	2,412,000	2,942,000
2014	2,477,079	3,028,000
2015	2,440,937	2,956,000



10-YEAR HISTORICAL PERFORMANCE

ORANGE WATER AND SEWER AUTHORITY

**Mason Farm Wastewater Treatment Plant
Plant Loading and Performance
Last 10 Years**

Fiscal Year	Average Daily Flow (million gallons)	Influent Measurements				Effluent Measurements			
		CBOD	TSS	NH3-N	TP	CBOD	TSS	NH3-N	TP
		(Milligram per Liter)				(Milligram per Liter)			
2006	7.5	242	325	26.3	7.9	1.9	4	0.3	0.5
2007	7.8	222	257	26.0	9.4	1.2	2	0.6	0.5
2008	7.4	204	321	30.1	8.5	<2.0	1	0.4	0.4
2009	7.9	208	296	47.6	12.1	<2.0	0	0.1	0.3
2010	7.8	268	322	29.3	7.4	<2.0	0	0.1	0.4
2011	7.2	260	283	33.1	7.3	<2.0	0	0.0	0.4
2012	7.6	232	275	31.2	7.1	<2.0	0	0.0	0.3
2013	8.1	226	272	30.9	6.5	<2.0	0	0.1	0.2
2014	8.3	206	233	30.1	6.0	<2.0	0	0.1	0.4
2015	8.1	241	283	30.3	6.0	<2.0	0	0.1	0.3

Effluent Maximum Limits Set in NPDES Permit

	Winter (Nov. - March)	Summer (April - Oct.)
CBOD5 (Carbonaceous Biochemical Oxygen Demand)	8 mg/l	4 mg/l
TSS (Total Suspended Solids)	30 mg/l	30 mg/l
NH3-N (Ammonia Nitrogen)	2.0 mg/l	1.0 mg/l
TP (Total Phosphorus - Mass Load Limit)	10,188 pounds per year	

mg/l=Milligrams per Liter

This information is shown in graphs on page 44.

MISCELLANEOUS STATISTICAL DATA

**ORANGE WATER AND SEWER AUTHORITY
For the Fiscal Year Ended June 30, 2016**

Year Incorporated	1975
Size of Service Area:	
Square miles	31
Miles of Water Pipe (includes 16 miles of raw water and 5 miles of reclaimed water pipe)	400
Miles of Wastewater Collection Pipe (includes 14 miles of force main)	341
Customer Accounts	21,385
Full-time Equivalent Employees:	
Approved Positions	136.5
Budgeted Positions	132.5
Water Treatment Plant Capacity (millions of gallons per day (MGD)):	
Capacity	20.0
Production Average Day	6.7
Production Peak Day	8.4
Wastewater Treatment Plant Capacity (MGD):	
Capacity	14.5
Average Daily Flow	8.1
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 Allocation (approximate MGD)	5 MGD

SERVICE AREA

General. OWASA provides water and sewer services to the residents, businesses and institutions in the Chapel Hill-Carrboro community and outlying areas. The term “service area” refers to the area presently being served and those proximate areas that may reasonably be served by extensions of the water and sewer system in the future (refer to back cover). The present service area lies almost wholly within Chapel Hill and Carrboro in Orange County; however, there are contiguous extensions of the water and sewer system into southwestern Durham County.

The developed portions of the service area are composed of the University of North Carolina at Chapel Hill (UNC) campus, UNC Healthcare, commercial downtown areas and shopping centers, and residential areas comprised of single family residences and apartment complexes. Most of the development in the service area to date has consisted of residential development, including single-family residences, townhouses, condominiums, apartments, and related commercial development, including office buildings, shopping facilities, restaurants and motels. Industrial development in the service area is limited in extent and is generally light manufacturing in nature.

Relative Location and Features of the Service Area. The area served by OWASA’s water and sewer system is located predominantly within the southeastern portion of Orange County. Orange County is located in the north central part of the state. Originally formed in 1752, Orange County covers an area of approximately 400 square miles. There are four incorporated towns in Orange County. Hillsborough, the county seat, is located near the center of the County; Chapel Hill and Carrboro, adjoining communities which comprise the major urbanized area of Orange County, are located in the southeast corner of Orange County; and Mebane is located on the western boundary. The remainder of Orange County is rural in nature and primarily agriculturally-oriented.

Located on a plateau approximately 500 feet above sea level, the Chapel Hill-Carrboro area is surrounded by gently rolling land. The climate is mild, with an average January temperature of approximately 41 degrees and an average temperature in July of approximately 79 degrees. The area receives an average of approximately 46 inches of rainfall per year.

The Towns of Chapel Hill and Carrboro are located southwest of Durham and approximately 25 miles northwest of Raleigh. The regional transportation system connects the area with the major North Carolina population centers of Charlotte, Durham, Raleigh, Greensboro, Winston-Salem and Wilmington. U.S. and state highways connect Chapel Hill-Carrboro with Durham, the Research Triangle Park (“RTP”), Cary, Raleigh and Raleigh-Durham International Airport. The region is served by Interstate 85 extending northeasterly from Durham to Petersburg, Virginia where it intersects Interstate 95, and southwesterly through Greensboro to Charlotte and Atlanta, Georgia. Interstate 40, which extends from Raleigh through Orange County, connects the region directly to both the Atlantic and Pacific coasts of the United States. Rail service is provided by a branch of the Norfolk Southern Railway which extends north from Carrboro to a connection with the railroad west of Durham. Amtrak passenger rail service is available in Durham. Commercial air service is provided by Raleigh-Durham International Airport, located 16 miles from Chapel Hill. The area is also served by Horace Williams Airport, which is owned and operated by UNC.

The Chapel Hill-Carrboro area comprises one portion of the metropolitan area which includes the City of Durham, Town of Cary, and the City of Raleigh and is commonly known as the “Research Triangle.” Major universities located in these communities include UNC, Duke University, and North Carolina Central University, and North Carolina State University. The proximity of these universities makes the RTP area suited for many types of academic research and advanced research-oriented industrial activities. There are numerous other colleges and universities in the area.

The dominant economic sectors in the Chapel Hill-Carrboro area are education and medical services, including research activities, primarily through UNC and UNC Healthcare. The RTP, located ten miles east of Chapel Hill, contains approximately 7,000 acres which have been reserved for research and research-oriented manufacturing. Since its inception in the 1950s, over 200 private and governmental organizations have located facilities in the RTP. The RTP is not served by OWASA; however, its impact on OWASA and the economy of the surrounding area is significant because of the companies and residents brought into the area directly and indirectly by the RTP.

Demographic Characteristics. The United States Department of Commerce, Bureau of the Census has recorded the populations of the Town of Chapel Hill, the Town of Carrboro and Orange County to be as follows:

<u>Year</u>	<u>Chapel Hill</u>	<u>Carrboro</u>	<u>Orange County</u>
1980	32,421	8,118	77,055
1990	38,711	12,134	93,622
2000	48,715	16,782	118,227
2010	57,233	19,891	132,951

The growth in population during this period reflects several factors, including the growth of student enrollment at UNC, increased economic activity in the area and the relocation of retirees attracted by the climate and amenities of the area.

Education. An important factor in the economy and growth characteristics of OWASA's service area and the immediately surrounding area is UNC. Fall enrollment at UNC is shown in the following table:

<u>Fall</u>	<u>UNC Enrollment</u>
2006	27,538
2007	28,136
2008	28,567
2009	28,916
2010	29,390
2011	29,137
2012	29,278
2013	29,197
2014	29,135
2015	29,084

UNC is among the most comprehensive educational institutions in the nation and belongs to the select group of research campuses that form the Association of American Universities. UNC offers more than 75 bachelor's, 113 master's, and 68 doctorate programs in 60 departments.

Together, UNC's health-related schools form one of the nation's major academic medical centers. Among the specialized medical programs are the Health Services Research Center, the Hand Rehabilitation Center, the Child Development and Mental Retardation Institute, and the North Carolina Jaycees Burn Center. The Schools of Government, Cancer Research, Environmental Studies, Urban Studies, Marine Sciences, and Social Sciences conduct multi-disciplinary research and public service programs.

Employment. The North Carolina Employment Security Commission has estimated the percentage of unemployment in Orange County to be as follows:

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
January	3.2%	3.2%	3.4%	5.8%	7.1%	6.4%	6.2%	6.2%	4.6%	4.5%
February	3.6	3.3	3.6	6.5	7.1	6.3	6.2	5.7	4.4	4.4
March	3.1	3.0	3.2	6.1	6.8	6.1	5.9	5.4	4.6	4.3
April	3.0	2.9	3.2	6.0	6.4	5.9	5.7	5.0	4.0	4.1
May	3.3	3.1	4.0	6.9	6.5	6.2	6.2	5.5	4.9	5.0
June	3.8	3.7	4.5	7.3	6.9	7.3	7.1	6.0	4.8	5.1
July	3.9	3.6	4.8	7.4	6.9	7.2	7.2	5.9	5.3	5.3
August	3.6	3.3	4.3	7.2	6.7	7.5	6.6	5.5	5.4	5.0
September	3.0	3.0	4.0	6.6	5.9	6.8	5.7	4.7	4.5	4.2
October	3.0	3.1	4.0	6.5	5.7	6.2	5.9	4.8	4.0	4.5
November	3.2	3.1	4.7	6.6	6.0	5.8	5.8	4.4	3.9	4.3
December	2.9	3.0	4.4	6.6	5.9	6.1	5.9	4.2	3.9	4.3

UNC is the largest employer in Orange County. UNC Healthcare System, a major medical facility located adjacent to UNC; and the Chapel Hill/Carrboro City Schools (both located in Chapel Hill) are the second and third

largest employers, respectively. The following table lists the ten largest employers in Orange County for 2015 and 10 years prior:

Company or Institution	Service or Product	Number of Employees 2015	Number of Employees 2006
UNC	Education and Health Services	1,000+	1,000+
UNC Healthcare System	Education and Health Services	1,000+	1,000+
Chapel Hill/Carrboro City Schools	Education and Health Services	1,000+	1,000+
Orange County Schools	Education and Health Services	1,000+	1,000+
Orange County Government	Public Administration	500-999	500-999
Blue Cross & Blue Shield of NC	Trade	500-999	1,000+
Town of Chapel Hill	Public Administration	500-999	500-999
Eurosport	Trade	500-999	250-499
UNC Physician's Network	Education and Health Services	250-499	
Wal-Mart Associates, Inc.	Trade	250-499	
General Electric	Trade		250-499
Harris Teeter	Trade		500-999

Source: Orange County Economic Development Commission.

Retail Sales. Total retail sales in Orange County for 2006 through 2015 are shown in the following table:

Fiscal Year	Total Retail Sales	Change from Previous Year (%)
2006	907,564,000	(36.8)
2007	948,303,000	4.5
2008	971,592,000	2.5
2009	926,654,000	(4.6)
2010	984,599,000	6.3
2011	1,017,355,000	3.2
2012	949,577,608	(6.6)
2013	1,175,757,132	23.8
2014	952,800,000	(19.0)
2015	1,476,943,491	55.0

Source: Orange County Economic Development Commission

CHAPEL HILL STATISTICAL DATA

**Town of Chapel Hill
Property Tax Levies and Collections
Last 10 Fiscal Years**

Fiscal Year	Taxes Levied for the Fiscal Year	Collected within the Fiscal Year of the Levy		Total Collections to Date			Outstanding Delinquent Taxes
		Amount	Percentage of Original Levy	Collections in Subsequent Years	Amount	Percentage of Adjusted Levy	
2006	27,718,753	27,578,410	99.49%	124,143	27,702,553	99.94%	*
2007	28,558,565	28,409,166	99.48%	111,769	28,520,935	99.87%	*
2008	30,412,485	30,240,782	99.44%	145,619	30,368,401	99.91%	115,177 (1)
2009	33,972,050	33,779,873	99.43%	139,190	33,918,874	99.84%	53,716
2010	35,119,150	34,836,717	99.20%	254,454	35,091,171	99.92%	27,979
2011	35,604,158	35,284,111	99.10%	258,936	35,543,047	99.83%	61,111
2012	35,887,926	35,604,067	99.21%	-	35,604,067	99.21%	283,859
2013	36,084,217	35,809,148	99.24%	-	35,809,148	99.24%	275,069
2014	38,361,125	38,115,148	99.36%	-	38,115,148	99.36%	245,977
2015	39,009,200	38,849,950	99.59%	-	38,849,550	99.59%	159,250

* Data not available. The Town contracts with the counties to maintain tax records and must rely on the information provided.

(1) Amount represents the cumulative delinquent taxes for years 2008 and prior.

CHAPEL HILL STATISTICAL DATA

**Town of Chapel Hill
Assessed Value and Actual Value of Taxable Property
Last 10 Fiscal Years**

Fiscal Year		Residential Property	Commercial Property	Combined Real Property	Personal Property	Public Service Companies	Total Taxable Assessed Value	Total Direct Tax Rate	Estimated Actual Taxable Value	Ratio of Assessed Value to Estimated Actual Value
						(2)	(3)	(4)	(5)	(6)
2006	(1)	3,956,681,069	783,355,893	4,740,036,962	498,524,879	60,840,533	5,299,402,374	0.522	5,905,284,571	89.74%
2007		3,640,445,489	1,249,997,134	4,890,442,623	520,961,320	61,554,945	5,472,958,888	0.522	6,582,822,815	83.14%
2008		3,825,506,198	1,313,540,280	5,139,046,478	460,567,284	60,142,623	5,659,756,385	0.522	6,807,501,064	83.14%
2009		3,945,477,182	1,354,733,971	5,300,211,153	471,708,077	63,678,158	5,835,597,388	0.581	5,896,329,583	98.97%
2010	(1)	4,855,643,567	1,667,252,143	6,522,895,710	455,030,840	67,647,776	7,045,574,326	0.494	7,141,991,207	98.65%
2011		5,133,443,183	1,762,638,471	6,896,081,654	452,486,487	62,491,249	7,411,059,390	0.494	7,477,610,120	99.11%
2012		*	*	6,730,528,993	471,001,413	63,232,013	7,264,762,419	0.049	7,200,106,033	99.11%
2013		*	*	6,701,285,738	536,958,587	66,253,143	7,304,497,468	0.494	7,583,529,271	103.82%
2014		*	*	6,823,181,920	573,309,679	66,762,306	7,463,253,905	0.514	7,188,606,161	96.32%
2015		*	*	6,862,387,124	519,383,543	65,246,662	7,447,017,329	0.524	7,290,629,965	97.90%

* The breakdown between residential and commercial property is not available for fiscal years after 2011.

- (1) Revaluation year.
- (2) Public service companies' valuations are provided by the North Carolina Department of Revenue. These amounts include both real and personal property.
- (3) Source is the State Department of Revenue final report of assessed valuations of NC Municipalities for the 2010-2011 fiscal year.
- (4) Per \$100 of value. Includes taxes for general fund, debt service fund, and transit fund.
- (5) The estimated market value is calculated by dividing the assessed value by an assessment-to-sales ratio determined by the NC 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.

CHAPEL HILL STATISTICAL DATA

**Town of Chapel Hill
NC Demographic and Economic Statistics
Last 10 Fiscal Years**

Calendar Year	Population (1)	Personal Income (in thousands) (2)	Per Capita Personal Income (3)	Median Age (3)	Education Level in Years of Schooling (4)	School Enrollment (4)	Unemployment Rate % (5)
2006	52,397	4,667,922	38,629	24.2	15.82	35,260	3.9
2007	53,416	5,060,894	41,435	24.2	15.82	38,718	2.9
2008	54,903	5,060,894	41,435	24.2	15.82	39,864	3.1
2009	55,616	5,450,187	43,844	24.2	15.82	40,316	4.5
2010	56,778	5,976,341	47,063	25.6	15.82	39,428	5.6
2011	57,233	6,186,352	47,925	25.6	15.82	41,139	5.4
2012	57,757	6,268,886	46,713	25.6	15.82	41,059	5.6
2013	58,424	6,608,945	48,683	25.6	15.82	41,402	5.6
2014	59,271	7,131,776	51,702	25.3	15.82	41,242	4.4
2015	59,653	7,345,876	52,339	25.3	15.82	41,176	4.9

- (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.

FINANCIAL MANAGEMENT POLICY

ORANGE WATER AND SEWER AUTHORITY

SUMMARY

The purpose of this document is to describe a comprehensive and systematic approach to strategic financial planning, related policy decisions, and measurements of financial performance that collectively guide Orange Water and Sewer Authority (OWASA) in its ongoing efforts to provide its customers with high quality water, wastewater and reclaimed water services through responsible, sustainable and creative stewardship of the resources and assets it manages.

The following excerpt from OWASA’s *Mission Statement* provides the framework for development of this approach and related policies.

- *Efficiency and Value - we will perform all services in a financially sound and responsible manner with sufficient revenues to properly operate and fully maintain the water and wastewater system. As OWASA relies solely on user fees, we will continue to be guided by cost-of-service principles with regards to our rates, fees, and charges, and operate the water and sewer system at the lowest rates consistent with our obligation to provide proper and efficient services, now and in the future. We remain committed to continuous improvement in all of our services and will provide high value to our customers.*
- *Sustainability - we will proactively plan, construct, operate, maintain, and finance the water and wastewater system in a manner consistent with the principles of environmental, social and economic sustainability.*

FINANCIAL PERFORMANCE OBJECTIVES		
Measurement	Objective	Section
Working Capital Reserves	The greater of 4 months of O&M budget or 20% of the succeeding 3 years of CIP budget	A.1
Capital Improvements Reserve Fund	Minimum fund balance target of 2% of annual depreciated capital costs	B.1
Debt Service Coverage Ratio	≥ 2.0	D.1
Debt Burden to Asset Value	≤ 50%	D.2
Sufficiency of Revenues Above Debt Requirements	Annual Debt service shall not exceed 35% of annual gross revenues	D.3
Credit Ratings	Aa2 – Moody’s; AA+ – Standard & Poor’s; AA+ – Fitch	D.4
Cash Financing of Capital	Annual revenues and cash reserves shall provide not less than 30% of CIP funding	E.1
Rate/Revenue Stabilization Fund	Minimum fund balance target of 5% of projected water and sewer revenue	E.2
Service Affordability	Average annual residential bill divided by real median household income shall be ≤ 1.5%.	F.2

In recognition of the dynamic environment in which OWASA operates, the desired results of policy decisions identified in the Financial Management Policy may not always be achievable within short-term operating cycles. These policy decisions should be viewed as guidance for long-term sustainable fiscal performance, with success measured against the entire planning horizon rather than to individual reporting periods.

Although not necessarily explicitly expressed in this document, the Financial Management Policy recognizes OWASA’s major legal requirements and obligations arising from State laws and regulations, contractual agreements with bondholders and other stakeholders and OWASA’s Sale and Purchase Agreements under which the organization was formed. If not specifically addressed herein, adherence to such requirements is mandated elsewhere.

This document categorizes policy considerations for sound, sustainable financial policies into the categories of general financial; asset management; investment management; debt management; rates, fees and charges; customer care; and annual budgeting process.

SECTION A. GENERAL FINANCIAL POLICIES

- A.1. ***Working Capital Reserves:*** OWASA shall maintain a fund balance at a level to sufficiently provide cash flow for daily financial needs in addition to adequate reserves to counter revenue instability and unanticipated expenses. The budgeted minimum reserve balance shall be equal to the larger of the following: a) 33% (four months) of the Operations & Maintenance (O&M) Budget, or b) 20% of the total estimated cost of the Capital Improvements Program (CIP) identified for the succeeding three years.
- A.2. OWASA shall make conservative, but reasonable estimates of revenues and costs.
- A.3. To the extent practical, the cost of system expansion shall be recovered from parties responsible for the expansion (“growth should pay for growth”).
- A.4. If the Executive Director deems it necessary at any time to submit any Budget or other proposal to the Board that does not comply with the parameters set forth in this document, he/she shall seek specific approval from the Board for such a proposal.

SECTION B. ASSET MANAGEMENT POLICIES

- B.1. ***Capital Improvements Reserve Fund:*** OWASA shall maintain a Capital Improvements Reserve Fund with a minimum fund balance target of 2% of the annual depreciated capital costs. The Capital Improvements Reserve Fund shall be an unrestricted reserve that is a component of the General Fund balance. The purpose of this reserve fund is to: ensure more sustainable funding for rehabilitation and replacement of the water and sewer systems and capital equipment; cover major unplanned increases in capital project costs; pay for previously unplanned capital needs; and provide funding flexibility needed in the Annual Budget to adjust for CIP costs carry-over adjustments.
- B.2. The annual budget shall provide 100% funding for maintenance activities required to ensure the operational integrity and safety of facilities and facility components.
- B.3. OWASA shall use a comprehensive approach to properly maintain all capital facilities, equipment, vehicles, etc.
- B.4. An amortization schedule shall be established for each physical asset to reflect the reasonable useful life of the asset.
- B.5. The costs of this comprehensive maintenance and rehabilitation program shall be reflected in OWASA’s annual budget and five-year CIP budget.

SECTION C. INVESTMENT MANAGEMENT POLICIES

- C.1. Cash management and treasury activities shall be managed in a manner that reflects efficient use of interest rates and maximizes fund performance balanced against investment risk and cash flow needs.
- C.2. OWASA shall attempt to reduce investment risk and maximize return on investments by participating in a variety of authorized investment instruments and financial institutions.
- C.3. Investment of OWASA funds shall not expose the assets to undue or unreasonable risk.

SECTION D. DEBT MANAGEMENT POLICIES

- D.1. ***Debt Service Coverage Ratio:*** OWASA’s Bond Order requires a minimum annual required Debt Service Coverage Ratio of 1.2. The minimum annual debt service coverage ratio shall be 2.0; provided, however, that the minimum coverage ratio for any single year when severe weather anomalies or other unforeseen

circumstances occur which negatively impact revenues and/or expenses shall not be less than 1.5 during the Fiscal Year.

- D.2. ***Debt Burden to Asset Value:*** The comparison of outstanding debt to infrastructure value is a reasonable indicator of debt capacity. OWASA's debt to plant ratio (outstanding debt divided by the book value of fixed assets) shall not exceed 0.5 (50%).
- D.3. ***Sufficiency of Revenues above Debt Requirements:*** OWASA shall maintain debt service as a percent of revenue at or below 35% of revenues.
- D.4. ***Credit Ratings:*** OWASA shall maintain Credit Ratings of at least Aa2, AA+ and AA+ from Moody's, Standard & Poor's and Fitch, respectively.
- D.5. Debt issuance shall be limited to financing the costs of capital asset project planning and design, land acquisition, buildings, permanent structures, attached fixtures and equipment, and the cost of debt issuance and capital reserves as may be required by creditors.
- D.6. The repayment of debt shall be structured in such a manner that the repayment period does not exceed the expected useful life of the assets acquired with the debt proceeds.

SECTION E. RATES, FEES AND CHARGES POLICIES

- E.1. ***Cash Financing of Capital:*** Annual revenues and cash reserves shall provide not less than 30% of the funds required for OWASA's CIP.
- E.2. ***Rate/Revenue Stabilization Fund:*** OWASA shall maintain a Rate/Revenue Stabilization Fund with a minimum fund balance target of 5% of the projected water and sewer revenue for the applicable year. The Rate/Revenue Stabilization Fund shall be an unrestricted reserve that is a component of the General Fund balance. The purpose of this reserve fund is to provide sufficient funding for the cost of maintaining, repairing and operating the water, wastewater and reclaimed water systems during extended periods when expenditures are higher and/or revenues are lower than budgeted while offsetting the need for rate increases and spending changes during the fiscal year.
- E.3. OWASA shall maintain a system of rates, fees and charges that effectively recovers allocated costs to customers and customer classes in reasonable proportion to their differing service requirements and their responsibility for the costs incurred by the utility. Adherence to the cost-of-service principle (benefiting party pays) as mandated by the Sale and Purchase Agreements and Bond Order shall be a primary guiding philosophy.
- E.4. OWASA's rates, fees, and charges shall be reviewed on an annual basis, and adjusted as necessary, to ensure that rate and revenue levels are adequately funding OWASA's financial, capital and operational goals, objectives and requirements.
- E.5. Rates shall be sufficient to generate income necessary to meet OWASA's revenue requirements. Revenue recovery from rates shall ensure financial stability as measured by adequate fund balance, operating reserves, debt service ratio, specified reserves and other measures established by OWASA.
- E.6. Rates should provide incentives for cost-effective use of facilities, conservation of water and efficient use and reuse of water resources, including rate surcharges during periods of water shortage.
- E.7. When OWASA determines that a rate increase is required, OWASA will strive to have such an increase be no higher than the general rate of inflation. However, OWASA shall set rates so that revenues will be sufficient at all times to provide for the cost of maintaining, repairing and operating the water, wastewater and reclaimed water systems, to pay the principal and interest on all issued or assumed debt, and to ensure the organization remains fiscally sound and financially sustainable.

- E.8. Although at times, operational or fiscal constraints may necessitate more aggressive or accelerated rate adjustments, rate levels and structures should be implemented through gradual programmed implementation of rate adjustments if possible.
- E.9. OWASA shall consider using the services of a qualified independent consultant to conduct a comprehensive rate study at approximately five year intervals.

SECTION F. CUSTOMER CARE

- F.1. OWASA shall operate the water and sewer system at the lowest rates consistent with its obligation to provide proper and efficient services, now and in the future.
- F.2. *Service Affordability* is an important consideration for OWASA. The target for average annual residential water and sewer bill divided by real median household income is $\leq 1.5\%$.
- F.3. When setting rates and evaluating rate structures, OWASA will carefully consider the impact such rates and rate structures will have on low income customers, while ensuring that cost-of-service principles are met.
- F.4. OWASA endorses and will promote the Taste of Hope customer assistance program. Donations made to the program by OWASA customers shall be provided to the Inter-Faith Council to help customers in need to pay their OWASA bill.
- F.5. Customers, citizens, and elected officials shall be provided timely, clear and understandable information and opportunities for constructive citizen participation in OWASA's rate decisions.

SECTION G. ANNUAL BUDGETING PROCESS

The preparation of the following documents on an annual basis is a key component of OWASA's annual budgeting and rate setting process. Those documents followed by an asterisk (*) shall be presented for Board of Directors adoption.

Budget Calendar: The budget calendar shall include the proposed dates of all Board meetings and work sessions at which budget matters are to be discussed, and shall list the dates by which major budget tasks have been or are to be completed by staff.

Statement of Strategic Issues and Policies (SIP): The SIP shall identify the major issues, policies, and concerns that should be addressed in the upcoming annual budget and capital improvements deliberations.

Financial Planning Assumptions and Background Information Document: This document lists the major assumptions upon which the financial plans and budgets are to be based.

Five-Year CIP*: The CIP provides for the orderly repair and replacement of existing facilities, helps identify lead time for project planning, regulatory approvals, land acquisition, design, and construction, and provides a framework for strategically analyzing a wider range of acceptable alternatives, and for identifying, ranking, and executing projects.

15-Year Financial Planning Report: The planning report provides a long-term perspective for assessing the adequacy of rates and fees and the timing and amount of anticipated debt financing. It also provides a means of evaluating the economic feasibility of implementing the long range CIP.

Annual Budget*: The annual budget provides the appropriation necessary to operate during the ensuing fiscal year.

The specific process and timeline for completing key components of OWASA's annual budgeting and rate setting process will vary from year-to-year; however, the following table sets forth guidelines to which OWASA should generally adhere.

Task	Time Frame	Rationale
Review strategic issues, policies and economic assumptions	November/December	Staff, the Finance Committee and Board shall review strategic issues, policies, and economic assumptions that are expected to impact and the preparation of budgets (O&M and CIP) and rates. The identification of these key issues will help shape the annual budgeting process.
Capital Improvements Program Review	February/March	The CIP provides for the orderly repair and replacement of existing facilities, lead time for project planning, regulatory approvals, land acquisition, design and construction, a framework for strategically analyzing a wider range of acceptable alternatives, and a framework for identifying, ranking, and executing projects. The Finance Committee and Board will review and comment on the draft CIP.
Operations and Maintenance Budget Review	March/April	The O&M budget provides funding for properly operating and maintaining OWASA's services and programs. The Finance Committee and Board will review the draft O&M budget to include cost containment and / or efficiency opportunities that may impact the O&M and CIP budgets.
Financial Planning and Rate Review	April	Upon completion of CIP and O&M budgets, this information and other planning assumptions shall inform OWASA's 15-year financial plan. Staff will review the financial plan with the Board and recommend increases or decreases in rates.
Conduct Public Hearings	May	The OWASA Board shall hold public hearings on the draft O&M budget; CIP budget; and proposed rates, fees and charges for the coming year.
Adopt Budgets and Rates	June	The OWASA Board shall adopt the O&M budget, CIP budget and rate schedule for the coming year.

GLOSSARY

ACCURAL BASIS OF ACCOUNTING – A basis of accounting under which increases and decreases in economic resources are recognized as soon as the underlying event or transaction occurs. Revenues are recognized when earned and expenses are recognized when incurred, regardless of the timing of related cash flows.

ALLOCATE - To set apart portions of budgeted expenditures which are specifically designated for special purposes.

ANNUAL BUDGET - A budget covering a single fiscal year (July 1 - June 30).

APPROPRIATION - A legal authorization to make expenditures and to incur obligations for specific purposes. An appropriation usually is limited in amount and the time it may be expended.

APPROPRIATION RESOLUTION - A resolution through which appropriations are given legal effect.

AUTHORITY – A public agency which performs a specified range of services that are usually financed from fees or service charges.

BALANCED BUDGET – A budget in which the sum of net revenues and appropriated fund balance is equal to appropriations.

BOND - A written promise to pay a specific amount of money with interest within a specific time period, usually long-term.

BUDGET - A financial plan containing projected expenditures and resources for a specified number of years.

BUDGET DOCUMENT - A formal document containing the organization's financial plan for a fiscal year. The budget document is divided into two major parts - the budget message and an operating budget. The operating budget section contains summaries of expenditures and resources. The budget document is presented in two phases, preliminary and final.

BUDGET MESSAGE – An overview of the proposed budget which discusses the major budget items and the organization's present and future financial condition.

BUDGETARY CONTROL - The control or management of a government or enterprise in accordance with an approved budget to keep expenditures within the limitations of available appropriations and available revenues.

CAPITAL IMPROVEMENT PROGRAM (CIP) - Capital projects that include construction, equipment purchases, major renovation of buildings, water and sewer lines, or other structures.

CAPITAL OUTLAYS - Expenditures budgeted to purchase or add to fixed assets with an estimated useful life greater than one year and costing \$5,000 or more.

CAPITAL PROJECT - A project expected to have a useful life of at least five years and an estimated total cost of \$10,000 or more. Capital projects include the construction, purchase, or major renovation of buildings, water and sewer lines, or other structures.

DEBT SERVICE - The payment of principal and interest on long-term debt.

DEBT SERVICE RATIO - A ratio that expresses the relationship of total net revenue to debt service.

DEFICIT - An excess of expenditures over revenues or expense over income.

ENTERPRISE FUND – An accounting entity for reporting financial activity where a fee is charged to external customers for goods and services. Reporting of activities through an enterprise fund is required when the reporting entity's debt is backed solely by fees, or if a legal or policy requirement exists to recover costs through fees.

FINANCIAL MANAGEMENT POLICY – A Board adopted policy document describing a comprehensive and systematic approach to strategic financial planning, related policy decisions, and measurements of financial performance.

FISCAL YEAR - A 12-month period (July 1 - June 30) to which the annual operating budget applies and at the end of which an assessment is made of the organization's financial condition and performance of its operations.

FUND - An accounting entity created to record the financial activity for a selected financial grouping. A fund is set up to carry out a special function or attain certain objectives in accordance with set laws and regulations.

FUND BALANCE - An amount of resources set aside within a fund to provide adequate cash flow and reserves.

FUND TYPE - Any one of seven categories into which all funds are classified in governmental accounting. The seven fund types include; general, special revenue, debt service, capital projects, enterprise, internal service, and trust and agency.

GENERAL FUND - A fund which provides for the accounting of all financial resources except those designated to other funds.

GRANTS - A contribution or gift in cash or other assets from another government to be used for a specified purpose.

LONG-TERM DEBT - Debt with a maturity of more than one year after the date of issuance.

MGD - Millions of gallons per day. Used in measuring volume of water and wastewater flow. One (1) MGD = 1.5 cubic feet per second.

MODIFIED ACCRUAL BASIS OF ACCOUNTING - A basis of accounting under which increases and decreases in financial resources are recognized only to the extent that they reflect near-term inflows and outflows of cash. Revenues are recognized only if available to finance expenditures during the accounting period, and expenses are recognized when due and paid.

NONOPERATING EXPENSES - Expenses which are not directly related to the organization's primary activities.

NPDES - National Pollution Discharge Elimination System. Regulations that protect effluent receiving water (e.g., Morgan Creek) for swimming and fishing by limiting the amount of oxygen-consuming pollutants, primarily carbon and nitrogen, which can be discharged into the stream.

PUMP STATION - Structure containing pumps and accessory piping, valves and other mechanical and electrical equipment for pumping water, wastewater or other liquids. A pump station is used to pump wastewater from a sewer of lower elevation to a sewer of higher elevation.

PURCHASE AND SALE AGREEMENT - An agreement between the State of North Carolina on behalf of the University of North Carolina and the Orange Water and Sewer Authority that conveyed the water and wastewater treatment facilities previously owned by UNC to OWASA as of February 15, 1977. Similar and separate agreements were also executed with the Towns of Chapel Hill and Carrboro.

OPERATING BUDGET - A budget that applies to all outlays other than capital outlays and debt service.

OPERATING EXPENSE - Expenses which are directly related to the organization's primary activities other than capital outlays and debt service.

PERFORMANCE MEASURE - A measurement unit produced as a result of the activities carried out by a program (i.e., miles of pipe inspected, feet of water and sewer lines rehabilitated).

PROGRAM BUDGET - A plan whereby expenditures are budgeted by programs of work and grouped into specific service areas.

PROGRAM PERFORMANCE MEASURE - An indicator that reflects how effectively and efficiently a program is being carried out.

PROGRAM OBJECTIVE - A specific statement about what is to be accomplished or achieved (result) for a particular program during the fiscal year.

RECLAIMED WATER - wastewater that has gone through advanced treatment, such as occurs at OWASA's Mason Farm Wastewater Treatment Plant (WWTP), so that the water can be recycled back into the natural environment or used for allowable non-drinking purposes.

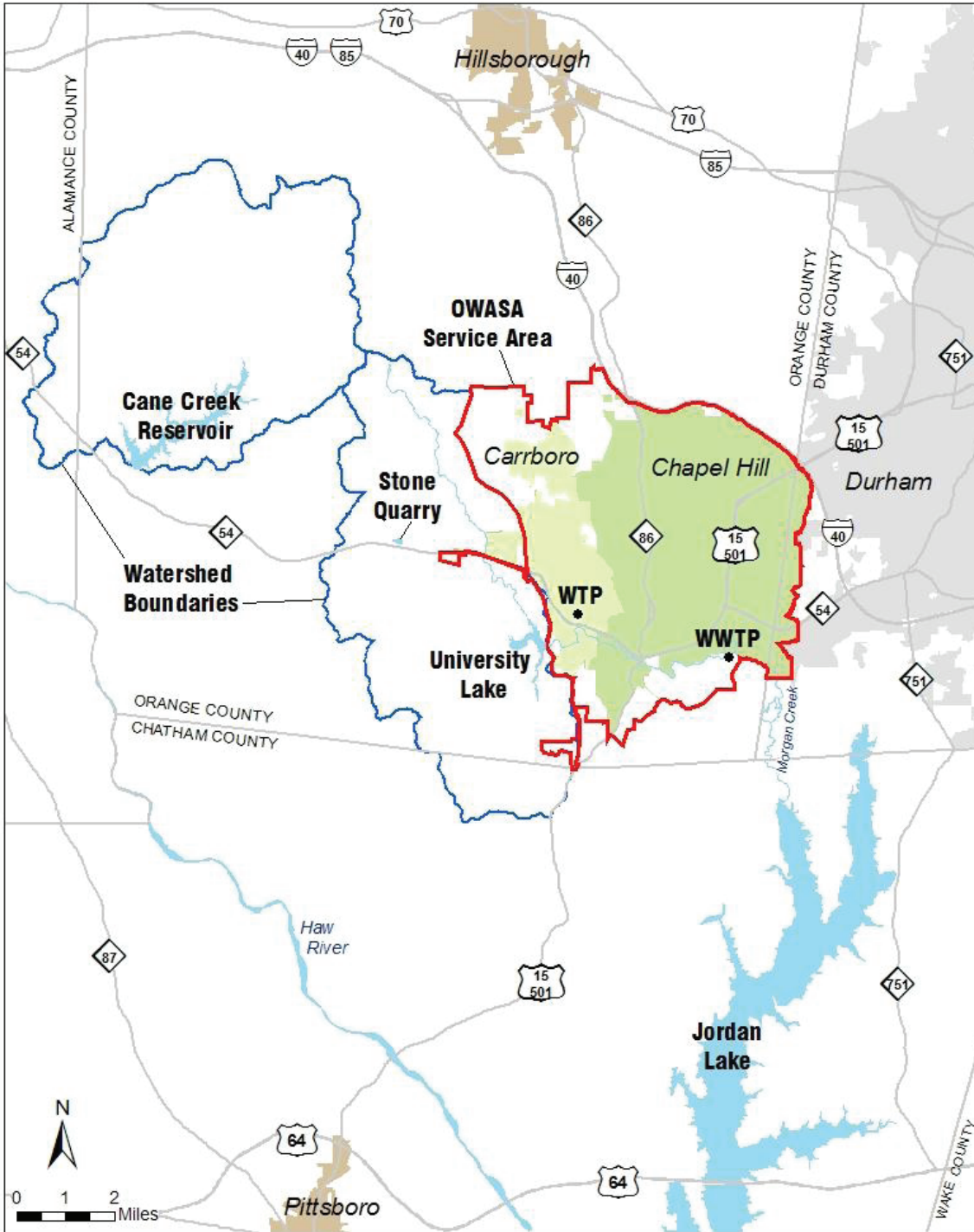
RESERVE - An account designated for a portion of the fund balance which is to be used for a specific purpose (e.g., maintenance reserve).

REVENUE BONDS – The primary method used by OWASA for long-term debt; they are repaid from user fees over the life of the assets. In general, these bonds have no claim on money derived from property taxes or special assessments.

REVENUES - Financial resources other than from bond issue proceeds.

SPECIAL ASSESSMENT - A levy on certain properties to defray part or all of the costs associated with improvements or services which will benefit those properties. For instance, a special assessment would be levied on property benefitting from the construction of water and sewer lines to serve a particular area.

SPECIAL REVENUE FUND - A fund used to account for the revenues from specific sources which are to be used for legally specified expenditures.



Orange Water and Sewer Authority

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