



Orange Water and Sewer Authority

OWASA is Carrboro-Chapel Hill’s not-for-profit public service agency delivering high quality water, wastewater, and reclaimed water services.

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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 01, 2021

Christopher P. Morill

Executive Director

BUDGET MESSAGE

**To the
Board of Directors**

The Annual Budget for the fiscal year beginning July 1, 2022 and ending June 30, 2023 has been prepared in accordance with OWASA's *Financial Management Policy*, our *Amended and Restated Bond Order* adopted on September 13, 2001, and North Carolina's *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; wastewater management needs; operating expenses required to sustain service levels; debt obligations; and reserve funding.

Drinking water sales for the FY 2023 is projected to average 5.91 million gallons per day (MGD). The budget also includes a 16% increase in the rates charged for monthly water and sewer services.

Last year, we projected that we would need to implement a 7% rate increase in FY 2023. Several factors led to the need for a larger rate increase to fund the FY 2023 budget.

- Drinking water sales remain flat.
- The rate of inflation for the last year was 9%.
- The economic impact of the pandemic led to deferring projects and expenditures that now need to be addressed.
- Through the development of a new strategic plan, key initiatives have been identified which require funding.

We are projecting that drinking water sales volume for FY 2023 and the next few years will average approximately 5.9 million gallons per day (mgd). This is the same volume of drinking water used by the community in the late 1980s, over 30 years ago. Drinking water sales volume peaked in the early 2000s at around 8.5 mgd. The community has done a tremendous job of conserving water. Conservation provides many benefits to OWASA and, thereby, the community. Among other things, it delays the need for additional sources of water and for expanding the capacity of our treatment plants and distribution and collection systems: all costly investments. However, lower sales volume also results in lower revenue which means less funds are available to cover costs.

Inflation over the last year has been about 9% and is having a large impact on our operations and capital improvements. Costs including those for construction projects, chemicals, electricity, and employee wages are increasing significantly: greater than was projected last year.

During the height of the pandemic, water sales were less than would be expected during normal times. In FY 2021 a planned rate increase was eliminated, as were employee compensation increases, and numerous capital and other improvements projects were deferred. Many of the deferred projects and needs have been included in the draft FY 2023 budget. Others have been programmed to be addressed over the next few years.

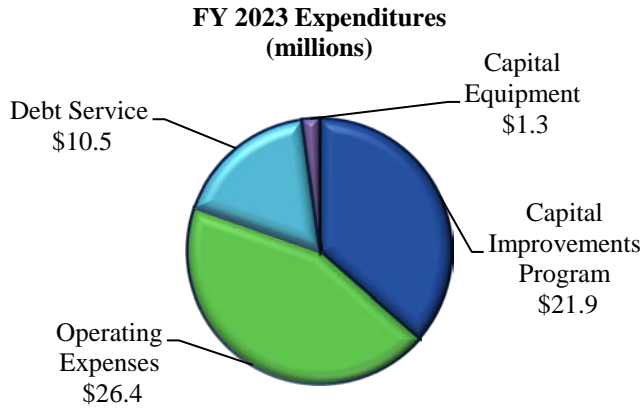
The FY 2023 budget includes funding for strategic initiatives such as our diversity and inclusion program, ensuring we recruit and retain a high-performing workforce, and updating technology.

In summary, a larger than projected rate increase is needed because drinking water sales volume is not increasing, costs continue to rise, and funds are needed for strategic initiatives and prior year deferrals.

OWASA's Finance Management Policy identifies nine financial management objectives for the organization. The FY 2023 budget is designed to achieve all of these objectives except the goal of achieving a debt service coverage ratio of at least 2.0. Since our financial management policy objectives for reserve balances, sufficiency of revenues above debt requirements, and cash financing of capital are all projected to be met, we decided not to further burden rate payers with

an even higher rate increase simply to meet the debt service coverage ratio performance target. We are projecting to meet the debt service coverage ratio target in future years.

The budget consists of projected operating revenues of \$42.1 million, capital project costs of \$21.9 million, operating expenses of \$26.4 million, debt service payments of \$10.5 million, and capital equipment purchases of \$1.3 million. The operating expense budget is about 12% greater than the FY 2022 budget.



Highlights of the Budget

Key elements of this budget include:

- 16% increase in monthly water and wastewater rates.
- Continuation of the seasonal water conservation rate structure for customers other than individually metered residential, multi-family master-metered, and irrigation-only customers. Under the seasonal water conservation rates, the water commodity charge will be \$10.32 per thousand gallons of water consumed during the warmer peak water demand months of May through September 2023. The water commodity charge during the cooler, lower demand months of October 2022 through April 2023 will be \$5.43 per thousand gallons.
- Irrigation-only meters are charged a year-round water commodity rate of \$11.10 per thousand gallons.
- Multi-family master-metered customers are charged a uniform year-round water commodity rate of \$7.39 per thousand gallons. Multi-family master-metered customers are properties served by one (or in some cases, more than one) OWASA meter which provides water service to more than one residential unit.
- 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	\$3.43
Block 2	3,000 to 5,000	\$8.33
Block 3	6,000 to 10,000	\$10.22
Block 4	11,000 to 15,000	\$14.27
Block 5	All use 16,000 and up	\$25.82

For an individually metered residential customer using 4,000 gallons of water per month, the monthly water and wastewater bill will be \$92.18. (Average monthly use for customers in this class is a little less than 4,000 gallons.)

- An annual operating budget of \$26.4 million, which is an increase of 12% from the FY 2021 budget. The FY 2023 budget includes funding for 139 personnel positions.
- The budget includes an average combined cost of labor and merit increase of 6.9% for employees. The Board bases cost of labor adjustments on market data and merit adjustments on market data and employee performance. These adjustments are scheduled to go into effect in July 2022.
- Capital improvement spending of \$21.9 million for FY 2023, as identified in the five-year CIP. For the five-year period FY 2023-27, approximately 73% of the \$111.3 million capital spending is planned for water and wastewater system rehabilitation and replacement projects.
- Capital improvements will be funded through a combination of debt and cash.

Strategic Planning

After completing virtually all of the initiatives in our last strategic plan, in FY 2022 OWASA’s Board of Directors and staff developed a draft of a new plan.

Staff engagement was critical to the plan development process. A Strategic Planning Advisory and Resource Council (SPARC) was formed of staff from across the organization. The SPARC provided feedback on individual steps of the plan’s development and served as members of task forces to have challenging conversations about what is needed to advance OWASA’s strategic priorities.

OWASA undertook a multi-faceted scan to help assess the current organization and environment in which we are working. This scan included:

- Departmental assessments of OWASA’s strengths, opportunities, aspirations, and (desired) results (SOAR)
- Survey of OWASA employees
- Survey of community members
- Sessions with representatives from institutions that OWASA serves and works with, businesses, and other important stakeholders
- Survey of current and past Board members
- Literature review of the strategic plans of leading utilities and businesses across the country, community partners, and utility industry organizations



We approached the scan with the following questions.

- Who is OWASA?
- What are our strengths?
- What values and priorities do various groups hold for OWASA to consider in our strategic plan?
- What is currently happening or emerging that presents opportunities for OWASA?

The OWASA Board of Directors and staff Leadership used the results of this scan as a foundation for their revisions to OWASA’s vision, mission, and values, and the identification of the top strategic priorities for the organization over the next five years.

Task forces of OWASA staff, organized around each of the strategic priorities, identified and prioritized goals for each priority and the initiatives required to achieve them. The Board of Directors provided input on the recommendations made by staff in order to finalize a draft strategic plan. Before finalizing the plan, the draft will be put forward to OWASA staff and the community for feedback and input.

The following summarizes the draft strategic plan.

Strategic Priorities

- Employee recruitment, retention, and development
- Equitable services
- Climate and land use change adaptation
- Community engagement
- Emergency management and cybersecurity
- Service reliability and resiliency

Employee recruitment, retention, and development

OWASA’s mission requires a dedicated team. The following initiatives make advancements beyond the myriad of important human resources efforts underway. This priority has a high-level of overlap with OWASA’s organizational value of Diversity and Inclusion.

Goals	Initiatives
Increase the number of applicants for entry-level and/or high-turnover positions	Develop a recruitment strategy for entry-level and high-turnover positions
Achieve and maintain competitive compensation	Conduct and implement a Pay and Class Study
Ensure staff are prepared, informed, and engaged to lead OWASA into the future	Develop and institute an Employee Development Plan

Equitable Services

This priority focuses on assisting those in our community who face challenges with obtaining and paying for our services. The following goals and initiatives were identified as near-term opportunities to increase the equity of OWASA’s life-critical services.

Goals	Initiatives
Decrease the number of disadvantaged/underserved households not connected to OWASA’s services	Identify affected households and pursue outside funding to connect them
Increase adequacy and accessibility of customer assistance funding	Evaluate and update our customer assistance program (Care to Share)

Climate and Land Use Change Adaptation

Climate change readiness/adaptation was identified as a high priority by OWASA staff, Board, community, and stakeholders. In the strategic priority-setting workshop, climate change mitigation was differentiated from adaptation; adaptation was rated as a high priority to address, mitigation was not. Additionally, recognizing the interplay between climate change and land use change (particularly on hydrology), adaptation to land use change is included in this strategic priority.

Goals	Initiatives
Increase drought resilience	Implement most viable Jordan Lake alternative (OWASA owns a 5% allocation of water from B. Everett Jordan Lake and is seeking to participate in a regional project to construct intake, treatment, and distribution infrastructure on the reservoir's western shore.)
Prepare for organizational impacts of climate and land use change	Develop a Climate Action Plan

Community Engagement

Achieving and maintaining the trust of our community requires that we effectively engage with them and respond to their needs. The community survey identified informational gaps regarding OWASA's commitment to environmental protection, sustainability, and infrastructure construction. In addition to continuing to pursue and refine OWASA's Communications and Community Engagement Program, the following goals and initiatives were prioritized to further enhance our community engagement.

Goals	Initiatives
Increase the quality and use of community feedback	Develop and implement regular community survey
Streamline customer account experience	Integrate online billing and water use portals

Emergency Management and Cybersecurity

Past and present OWASA Board members, stakeholders, and community members all ranked "preparing for emergencies and cybersecurity threats" as one of the top three priorities for OWASA to address. Preparation is only one aspect of emergency management. It is equally important to focus on the prevention of, protection against, response to, and recovery from emergencies and cybersecurity threats. OWASA has a robust emergency management and cybersecurity program. The following initiatives will enhance existing efforts and help to increase our capacity to manage emergencies.

Goals	Initiatives
Ensure staff are prepared and ready for emergencies of all types	Develop and institute a Continuous Emergency Preparedness Model
Reduce risk exposure	Assess risk on collection and wastewater system and implement high priority risk mitigation actions for entire system

The updated strategic plan will guide the investment of OWASA's time and resources over the next five years and help ensure that we are advancing the priorities of our community and preparing for the future that the community wants for its water and sewer utility.

OWASA's Budget Process

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

- OWASA's *Mission Statement*. The Board's adopted *Mission and Values Statement* establishes priorities for serving the community. These priorities focus on integrity, reliability, teamwork and partnership, diversity and inclusion, innovation, stewardship, and equity.
- 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 wastewater 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 work 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' meeting on May 12, 2022, and the budget and rate schedule were adopted by the Board on June 9, 2022.

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.

In accordance 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 *Annual Comprehensive 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 wastewater 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 discrimination, with no differential in rates based on the location of a customer.
- OWASA shall operate the water and wastewater 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 reliable and adequate wastewater 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.
- OWASA agrees to meet the reasonable water and wastewater 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 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 at 2.0.
- In order to issue new debt, rates 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 2023 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 2023 budget is \$8.8 million.

- 20% of planned capital improvements for FY 2023 through FY 2025 is \$15.3 million.
- The General Fund ending balance for FY 2023 is projected to be \$18.8 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 wastewater revenue.
- The *Financial Management Policy* specifies at least 30% cash funding of capital improvements. Our five-year financial plan reflects approximately 33% cash funding of capital projects during fiscal years 2023 through 2027.
- Debt service coverage ratio of 1.6. OWASA’s Financial Management Policy stipulates that our debt service coverage ratio goal is 2.0. Since our financial management policy objectives for reserve balances, sufficiency of revenues above debt requirements, and cash financing of capital are all projected to be met, we decided not to further burden rate payers with an even higher rate increase simply to meet the debt service coverage ratio performance target. We are projecting to meet the debt service coverage ratio target in future years.

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 2024	7% Water	7% Wastewater
FY 2025	7% Water	7% Wastewater
FY 2026	6% Water	6% Wastewater

Projected rate adjustments are estimates and will be analyzed during each year’s budget process.

The Need for Future Rate Increases

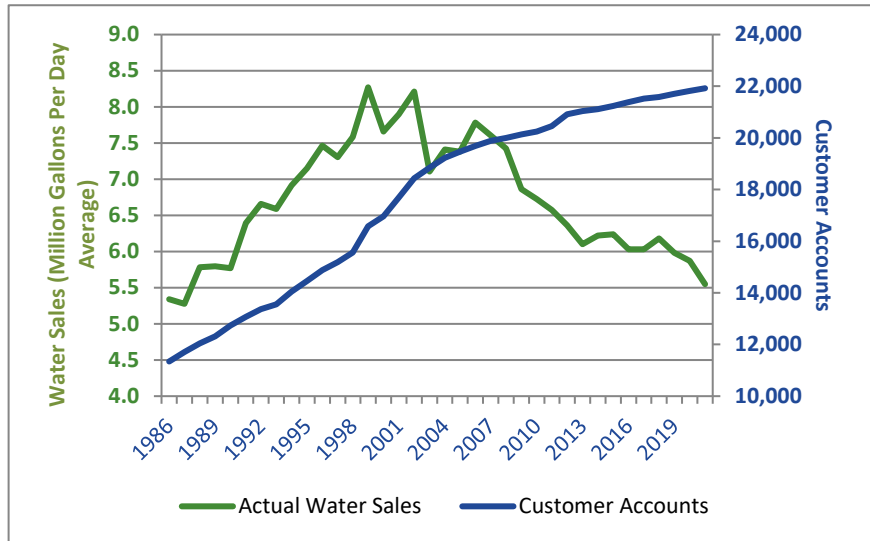
The projected rate increases are necessary for providing the funding required to meet the community’s water and wastewater needs.

- As the community’s provider of drinking water and wastewater management services, funding the programs needed to efficiently provide high-quality and reliable services around the clock is essential.
- On average, about half of the fees customers pay for services is invested in renewing and replacing the pipes, equipment and facilities necessary for delivering services.

Drivers for increased investments in our operating and capital budgets include supporting our commitment to the community to improve the reliability and resiliency of our services and rising construction costs.

Customer Demand and Service Levels

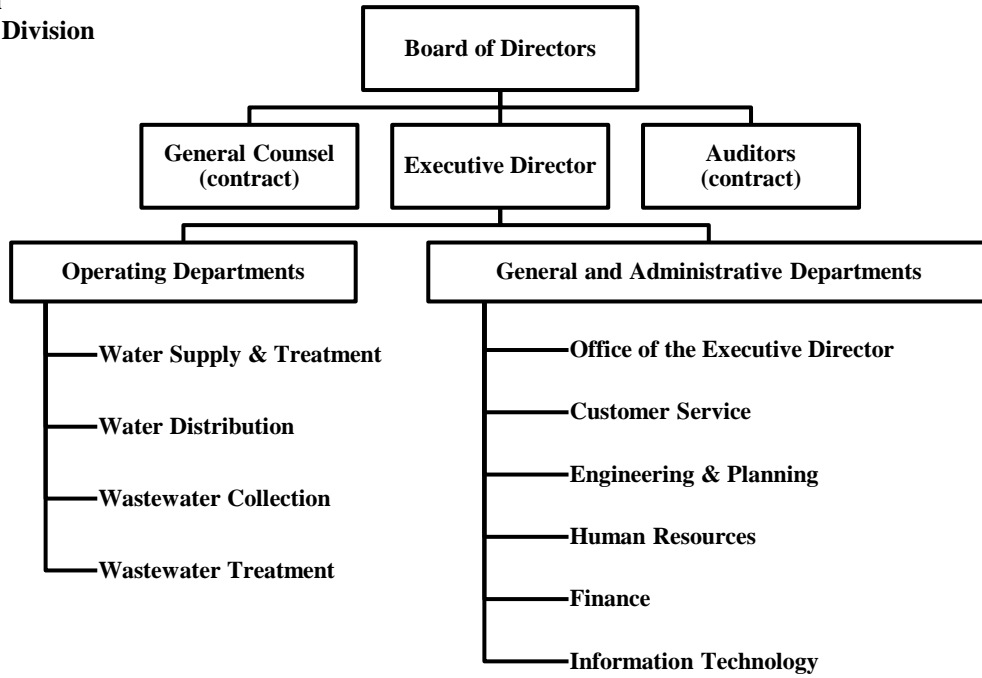
Over the last 30 years, drinking water demand in OWASA’s service area has declined substantially even as the number of customers served has increased (see chart below). Projected water demand for FY 2023 is about the same as it was in the late 1980s while the number of customers served has increased by over 80% during that time. Two droughts in the 2000s, the implementation of conservation rates in 2001 and 2007, and the completion of our reclaimed water (RCW) system in 2009 contributed to the reduction in drinking water demand.



The following projections are based on historical trends.

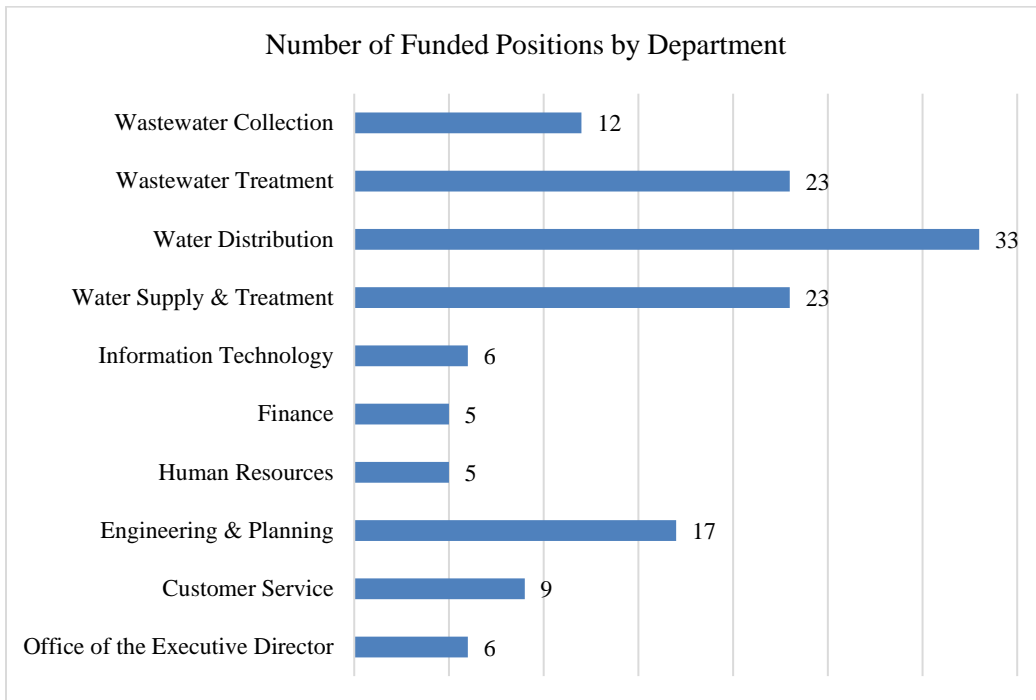
- FY 2023 projections for drinking water demand and new connections are affected by several factors.
 - We are projecting average daily drinking water demand in FY 2023 to be approximately 5.9 million gallons per day (MGD).
 - Reclaimed water (RCW) sales are budgeted to be approximately the same as recent years. Estimated RCW use during FY 2023 is 0.8 MGD.
- Based on the development plans in OWASA’s service area, we expect to install 167 new 5/8” meter equivalents for the year.
- A construction cost inflation rate of 5.0% is assumed for FY 2024 and beyond.

**Organization
Overview by Division**



**Staffing
Summary**

The OWASA Board has authorized a total of 145 positions; 139 are funded for FY 2023. Funded staffing levels (full-time equivalents) are allocated by department as follows:



Summarized Annual Income and Expenses (Revenue Fund)

Description	Resources	Expenses	Balance
Total Operating Revenue	\$42,122,077		
Operating Expenses			
Net Expenses, General and Administrative		\$9,219,707	
Net Expenses, Operating		<u>17,206,487</u>	
Net Total Operating Expenses		26,426,194	
Net Operating Income			\$15,695,883
System Development Fees and Interest Earned	1,354,759		
Total Net Income			17,050,642
Total Debt Service		10,450,040	
Debt Coverage Ratio			1.6

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

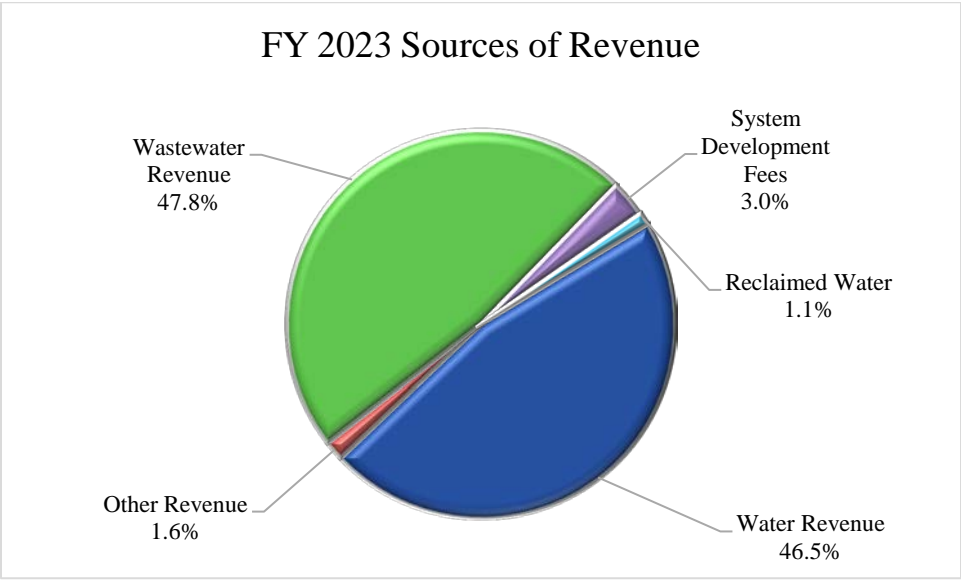
Description	Resources	Expenses	Balance
General Fund Beginning Balance (7/1/22)			\$25,085,587
Transfer from Revenue	6,600,602		
Loan proceeds	15,329,398		
Funds Available for Expenditures			47,015,587
Total Estimated Capital Expenditures		\$23,245,374	
General Fund Ending Balance (6/30/2023)			<u>\$23,770,213</u>

Revenue Summary

In providing essential public water, wastewater 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, wastewater 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 wastewater 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. As depicted in the following graph, in FY 2023, 47.6% of total budgeted revenue is anticipated from water and reclaimed water services while wastewater services are expected to generate 47.8%. System development (new connection) fees, plan review and construction observation fees, rents, royalties, administrative fees, and interest income contribute the remaining 4.6% of total projected revenues.



OWASA collects fees for delivery of reclaimed water services through a reclaimed water utility. 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 wastewater capital costs not recovered by the monthly service charge. This charge is applicable to all water, wastewater and reclaimed water accounts based on meter readings and is billed in thousand-gallon increments of water use.
- Water and sewer system development fees** Calculated to recover a portion of the capital costs of providing water and wastewater system capacity. The system development fee applies to each new connection to a drinking or reclaimed water main or wastewater 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 system development 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 wastewater 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 2023 is approximately 167, 5/8” 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, wastewater 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.

With the implementation of the Agua Vista advanced metering infrastructure system, in most circumstances we no longer need to visit a customer’s property to turn meters on or off. Since we do not have to travel to a customer’s location, there are no associated costs to be recovered. Therefore, annual revenue from these fees is significantly lower than in years prior to implementing Agua Vista.

Tapping fees This charge is for making a tap into a water main and/or a wastewater main or manhole. The charge recovers the cost for time and equipment plus an allowance for overhead.

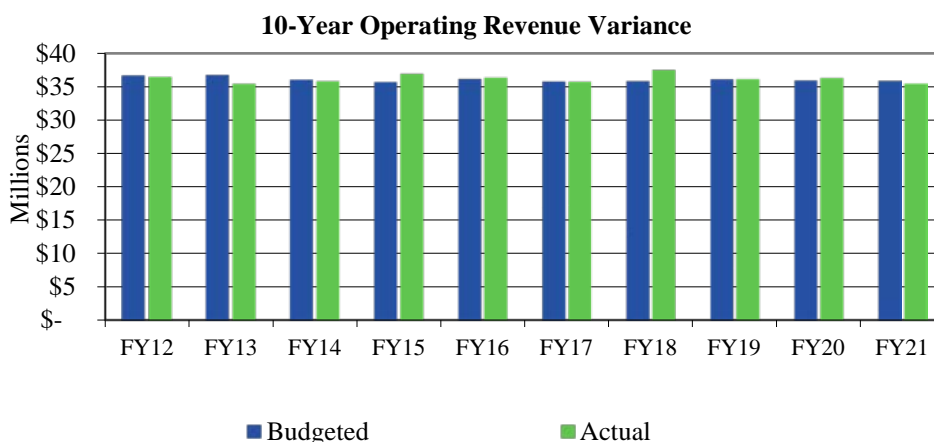
Service installation This charge is to recover costs of installing a service connection from a water or reclaimed water main to the curb or property line and setting a meter.

Plan review and construction observation fees This charge is to recover the cost of reviewing plans for the extension of water and wastewater 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 wastewater system regardless of the party which undertakes the improvements. The fees apply separately to water and wastewater 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 xi, 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 (UNC), 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 wastewater 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 and low-interest loans from the State of North Carolina 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.

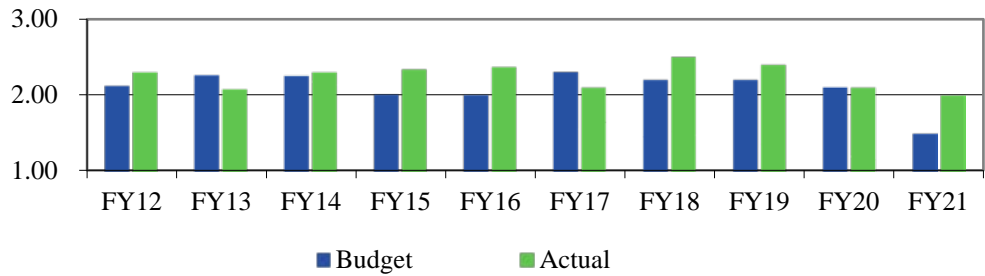
As a stand-alone enterprise fund that does not have taxing authority or issue general obligation bonds, OWASA has no legal debt limit. OWASA's financial management policy specifies that the organization's debt should be no more than 50% of asset value. As of the end of FY 2021, OWASA's debt burden to asset value was 24%.

OWASA's bond ratings are AAA, AA+, and Aa1 from Standard & Poor's, Fitch, and Moody's, respectively.

Outstanding debt was \$87.9 million as of June 30, 2022. The debt outstanding for each bond issue or loan is: Series 2014 refunding bonds - \$10.7 million, Series 2018 refunding bonds - \$17.0 million, Series 2019 revenue bonds - \$16.2 million, Series 2020 refunding bonds - \$7.7 million, Series 2021 revenue bonds - \$18.9 and low-interest and interest-free loans from the state of North Carolina - \$17.4 million. Principal and interest payments on these balances will be approximately \$10.5 million in FY 2023.

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

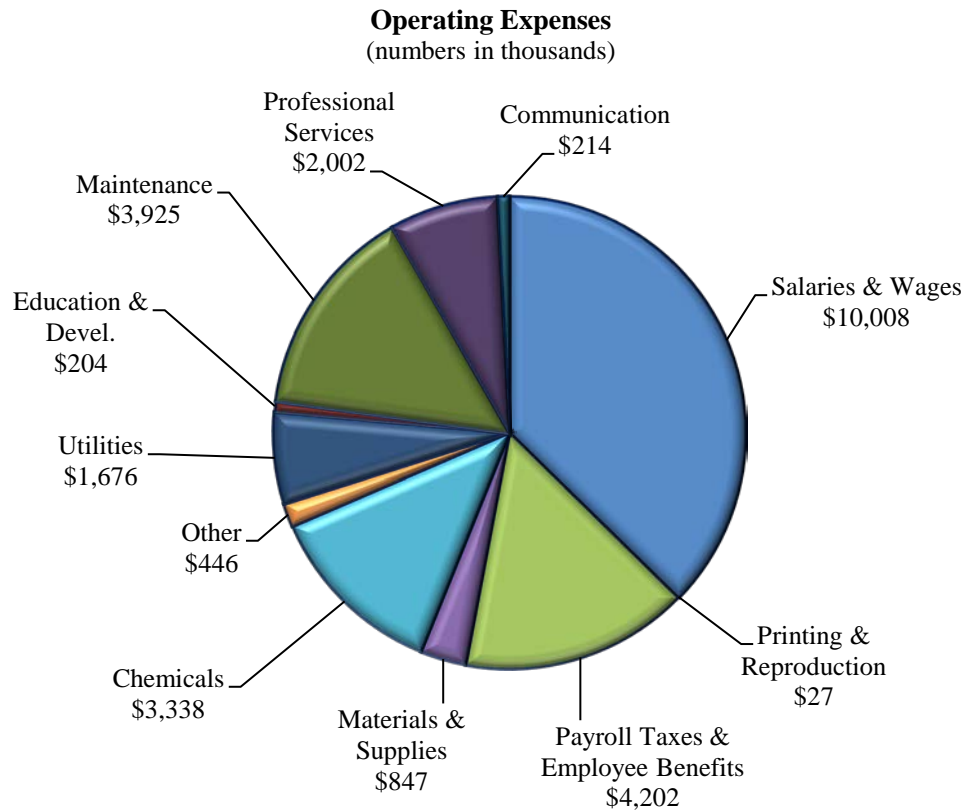


**Planned
Operating
Expenses
Summary**

The chart below shows the planned operating expenses for FY 2023. 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 2023**

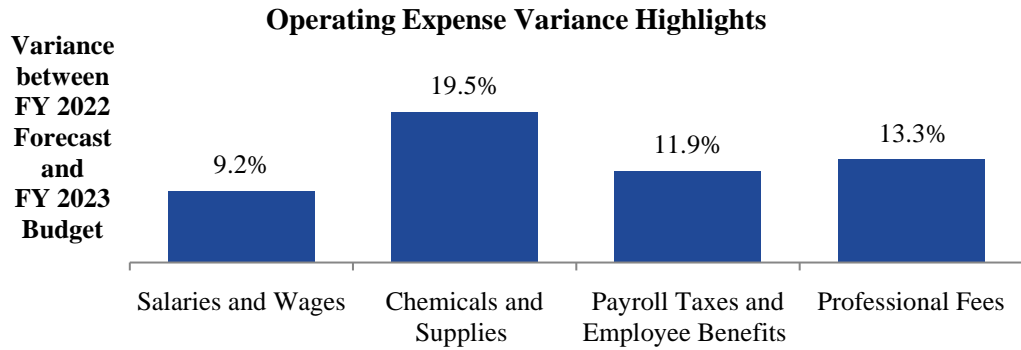
	General and Administrative	Operating Departments	Total Budget
Salaries & Wages	\$4,265,486	\$5,742,243	\$10,007,729
Payroll Taxes & Employee Benefits	1,779,534	2,422,886	4,202,420
Materials & Supplies	188,103	659,395	847,498
Chemicals	-	3,337,617	3,337,617
Utilities	173,340	1,502,385	1,675,725
Maintenance	670,264	3,254,301	3,924,565
Professional Services	1,813,470	188,125	2,001,595
Communication	207,171	7,240	214,411
Printing & Reproduction	24,400	3,000	27,400
Education & Development	101,295	102,635	203,930
Other	<u>200,284</u>	<u>245,743</u>	<u>446,027</u>
Total	<u>\$9,423,347</u>	<u>\$17,465,570</u>	<u>\$26,888,917</u>
Construction Credits	(203,640)	(259,083)	(462,723)
Total After Construction Credits	<u>\$9,219,707</u>	<u>\$17,206,487</u>	<u>\$26,426,194</u>



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 2023 Budget and FY 2022 Forecast.



Salaries and Wages

The budget for salaries and wages is approximately \$845,000 or 9.2% higher than the amount forecasted for FY 2022. The increase in salaries and wages expense is due to a projected average combined cost of labor and merit increase of 6.9% for employees and the addition of four funded positions for FY 2023.

Chemicals and Supplies

The FY 2023 budget for chemicals to treat drinking water and wastewater is approximately \$545,000 or 19.5% greater than the FY 2022 forecast. The increase is due to expected price increases which have been impacted by supply chain delays and inflation.

Payroll Taxes and Employee Benefits

The FY 2023 budget for payroll taxes and employee benefits expense is approximately \$446,000 or 11.9% greater than the FY 2022 forecast. The cost of employee health insurance will increase by 7.5% and other expenses based on a percentage of wages have increased due to the increase in employee compensation.

Professional Fees

The budget for professional services is approximately \$236,000 or 13.3% greater than the forecast for FY 2022. Several projects requiring consultant assistance which were deferred in recent years due to the impact of the COVID-19 pandemic are being addressed in FY 2023.

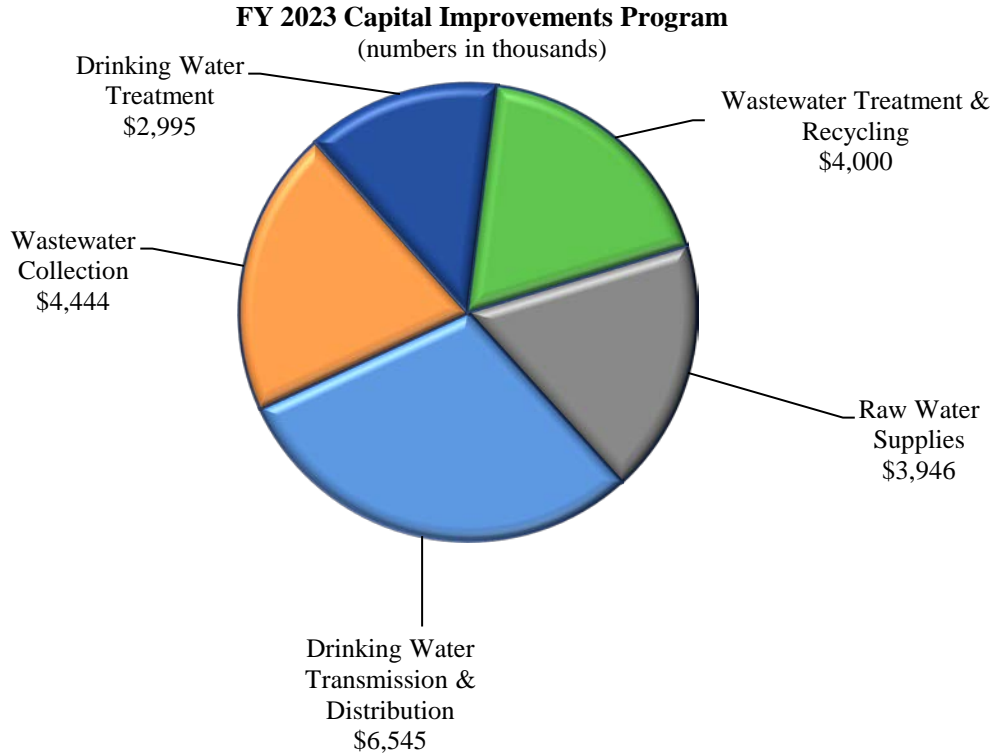
Capital Equipment

OWASA replaces capital equipment items that have exceeded their useful lives and purchases equipment to meet operational needs. Purchases planned for FY 2023 total \$1.3 million (see schedule on page 22).

Capital Improvements Program Summary

Capital improvements are necessary to renew, replace, and improve infrastructure, and to provide safe, reliable, high-quality water, wastewater 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 2023, capital improvements projects total \$21.9 million, as shown below. The improvements planned for FY 2023-2027 are approximately \$111.3 million.



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.

A summary of some of the more significant budget issues include:

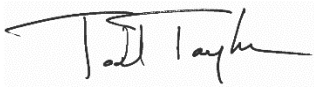
1. We project that drinking water and reclaimed water sales in FY 2023 will be about the same as in FY 2022.
2. FY 2023 forecast for new construction and system growth is about 167 meter equivalents.
3. The existing seasonal rate fee structure remains in place for non-residential customers, the increasing block rate structure remains in place for individually metered residential customers, as does the year-round water commodity rate for master-metered multi-family customers.
4. The CIP budget for FY 2023 is sufficient to meet the needs of OWASA’s customers today and in the future.

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 distinct 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 2023 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.



Todd Taylor, P.E.
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
System Information
For the Fiscal Year Ended June 30, 2022

Year Incorporated	1975
Size of Service Area:	
Square miles	31
Miles of Water Pipe (includes 14 miles of raw water and 5 miles of reclaimed water pipe)	404
Miles of Wastewater Collection Pipe (includes 14 miles of force main)	349
Customer Accounts	21,987
Full-time Equivalent Employees:	
Approved Positions	145
Budgeted Positions	139
Water Treatment Plant Capacity (millions of gallons per day (MGD)):	
Capacity	20.0
Production Average Day	6.6
Production Peak Day	8.6
Wastewater Treatment Plant Capacity (MGD):	
Capacity	14.5
Average Daily Flow	7.8
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, wastewater and reclaimed water services to the residents, businesses and institutions in the Chapel Hill-Carrboro community. 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 wastewater system in the future. The present service area lies almost wholly within Chapel Hill and Carrboro in Orange County with contiguous extensions of the water and wastewater 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- and multi-family residences. Most of the development in the service area consists 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.

Relative Location and Features of the Service Area. The area served by OWASA’s water and wastewater 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 and includes four incorporated towns. 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 the county, are located in the southeast corner of Orange County; Mebane is located on the western boundary. The remainder of Orange County is rural and largely agricultural.

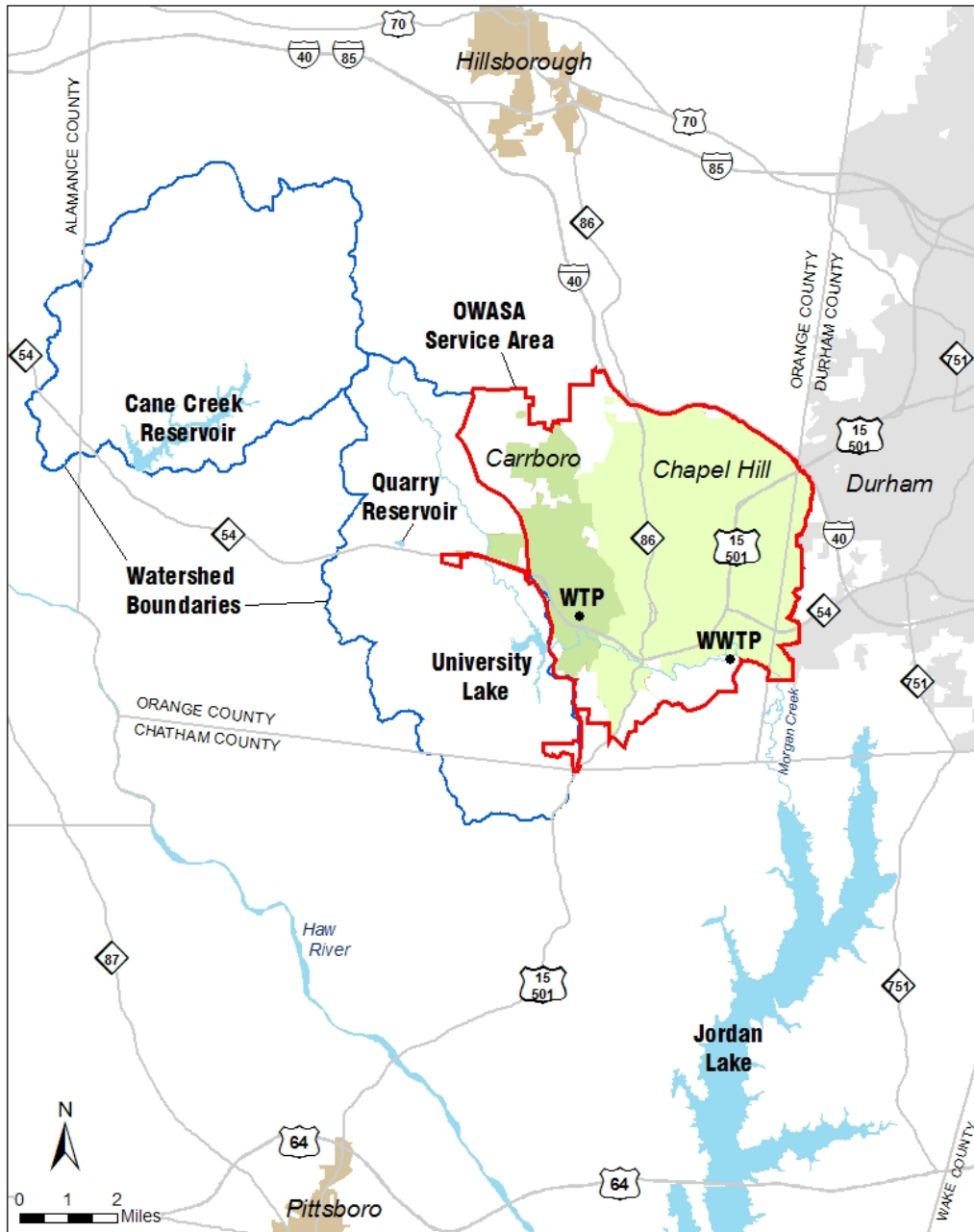
Located on a plateau approximately 500 feet above sea level, the Chapel Hill-Carrboro area is surrounded by gently rolling land. The climate is mild, with an average January temperature of approximately 39 degrees and an average temperature in July of approximately 78 degrees. The area receives an average 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 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, 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 many 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.

MAP OF OWASA'S SERVICE AREA



Service area is indicated in red. The watersheds for Cane Creek Reservoir and University Lake are outlined in blue.

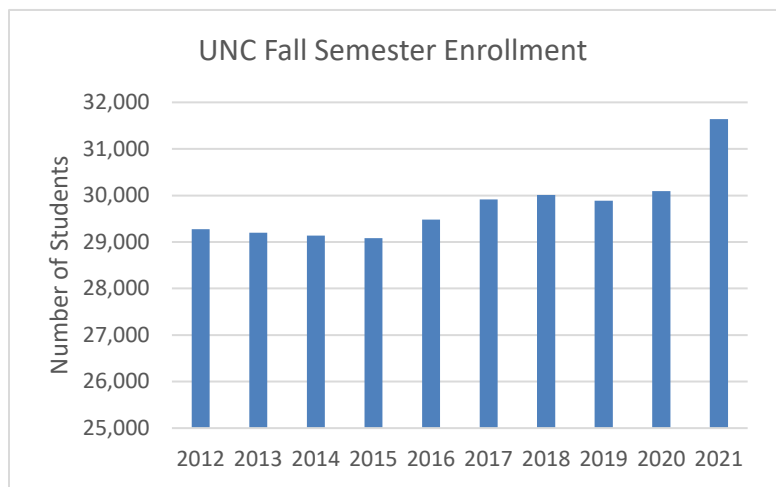
Demographic Characteristics. The United States Department of Commerce, Bureau of the Census has recorded the populations of the Town of Chapel Hill, the Town of Carrboro and Orange County to be as follows:

Year	Chapel Hill	Carrboro	Orange County
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
2020	63,705	21,239	149,077

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:

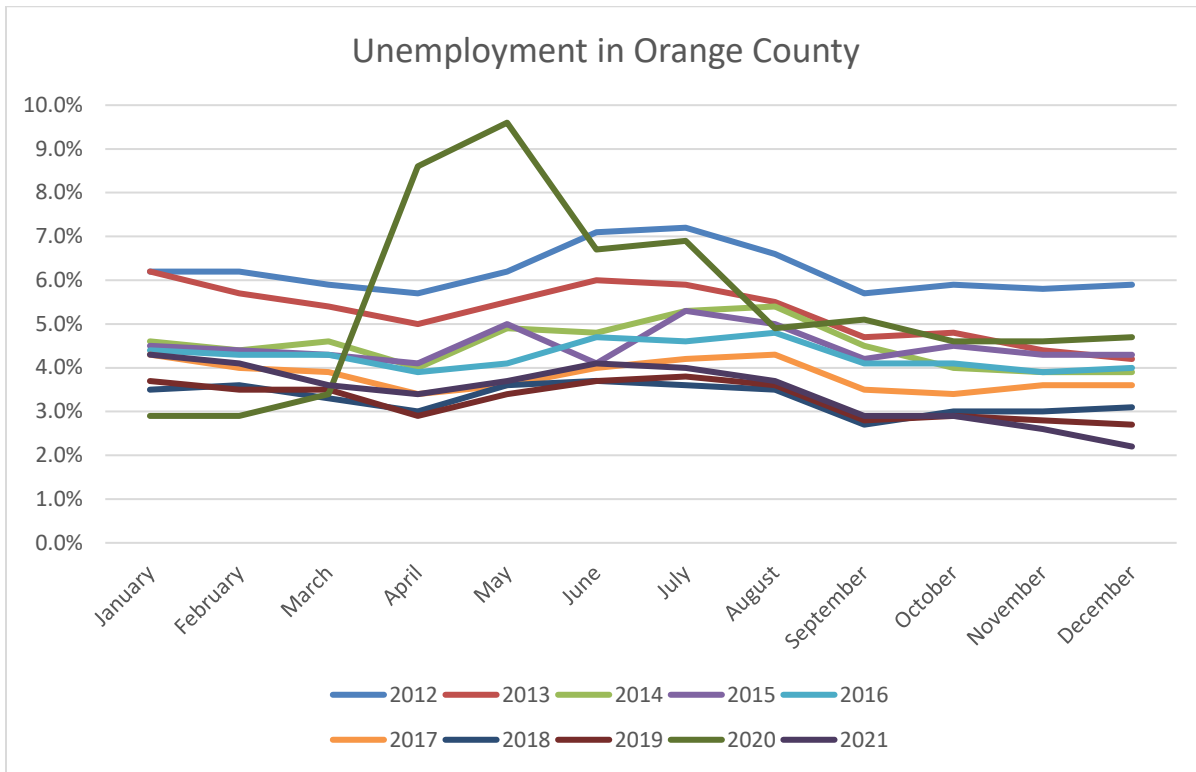
Fall	UNC Enrollment
2012	29,278
2013	29,197
2014	29,135
2015	29,084
2016	29,479
2017	29,912
2018	30,011
2019	29,887
2020	30,092
2021	31,641



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 chart and graph below show the U.S. Bureau of Labor Statistics unemployment estimates for Orange County:

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
January	6.2%	5.7%	4.4%	4.4%	4.3%	4.0%	3.6%	3.5%	2.9%	4.3%
February	5.9	5.4	4.6	4.3	4.3	3.9	3.3	3.5	3.4	4.1
March	5.7	5.0	4.0	4.1	3.9	3.4	3.0	2.9	8.6	3.6
April	6.2	5.5	4.9	5.0	4.1	3.6	3.6	3.4	9.6	3.4
May	7.1	6.0	4.8	5.1	4.7	4.0	3.7	3.7	6.7	3.7
June	7.2	5.9	5.3	5.3	4.6	4.2	3.6	3.8	6.9	4.1
July	6.6	5.5	5.4	5.0	4.8	4.3	3.5	3.6	4.9	4.0
August	5.7	4.7	4.5	4.2	4.1	3.5	2.7	2.8	5.1	3.7
September	5.9	4.8	4.0	4.5	4.1	3.4	3.0	2.9	4.6	2.9
October	5.8	4.4	3.9	4.3	3.9	3.6	3.0	2.8	4.6	2.9
November	5.9	4.2	3.9	4.3	4.0	3.6	3.1	2.7	4.7	2.6
December	6.2	6.2	4.6	4.5	4.4	4.3	3.5	3.7	2.9	2.2



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 2021 and 10 years prior:

Company or Institution	Service or Product	Number of Employees 2021	Number of Employees 2012
UNC	Educational Services	1,000+	1,000+
UNC Healthcare System	Health Care and Social Assistance	1,000+	1,000+
NC Health	Health Care and Social Assistance	1,000+	
Chapel Hill/Carrboro City Schools	Educational Services	1,000+	1,000+
Orange County Schools	Education and Health Services	1,000+	1,000+
Orange County Government	Public Administration	1,000+	500-999
Town of Chapel Hill	Public Administration	500-999	500-999
Eurosport	Trade	500-999	500-900
Wal-Mart	Trade	500-999	
United Parcel Service	Transportation and Warehousing	250-499	
Harris Teeter	Retail Food		500-999
Blue Cross Blue Shield	Health/Medical Insurer		1,000+
Employer Resource	Professional and Business Services		500-999

Source: North Carolina Department of Commerce.

ORANGE WATER AND SEWER AUTHORITY VISION, MISSION AND VALUES

VISION

To be our community's trusted partner for clean water and environmental protection.

MISSION

Our dedicated Team delivers valuable water and sewer services that are essential to our community's health, environment, and economy through the stewardship of infrastructure and natural resources.

VALUES

- **Integrity**
We can be counted on to use sound judgement and follow-through on our promises.
- **Reliability**
We are committed to consistently providing high-quality products and services.
- **Teamwork and Partnership**
We work together to achieve shared goals.
- **Diversity and Inclusion**
We are committed to creating an inclusive workplace that promotes and values diversity.
- **Innovation**
We take a creative approach and adapt to changing circumstances.
- **Stewardship**
We make wise and efficient use of the financial and natural resources with which we are entrusted.
- **Equity**
We work to ensure fair access to and delivery of our essential services.

ORANGE WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS

CHAIR

Bruce Boehm
1921 South Lakeshore Drive
Chapel Hill, NC 27514
Appointed by Chapel Hill; Term Expires 6/30/25

VICE CHAIR

Todd BenDor
904 Coker Drive
Chapel Hill, NC 27517
Appointed by Chapel Hill; Term Expires 6/30/24

SECRETARY

Ray DuBose
103 Easy Street
Chapel Hill, NC 27516
Appointed by Orange County; Term Expires 6/30/23

MEMBERS

Jody Eimers
3120 Landeau Dr.
Hillsborough, NC 27278
Appointed by Orange County; Term Expires 6/30/24

Pedro Garcia
319 Sonoma Way
Chapel Hill, NC 27516
Appointed by Chapel Hill; Term Expires 6/30/25

David Gorelick
1002 Willow Drive, Apt.34
Chapel Hill, NC 27514
Appointed by Orange County; Term Expires 6/30/25

Melody Kramer
103 Richard Dixon Court
Carrboro, NC 27510
Appointed by Carrboro, Term Expires 6/30/25

Kevin Leibel
105 Saint Andres Pl
Chapel Hill, NC 27517
Appointed by Chapel Hill; Term Expires 6/30/23

Elmira Mangum
102 Rivercreek Place
Carrboro, NC 27510
Appointed by Carrboro; Term Expires 6/30/25

ORANGE WATER AND SEWER AUTHORITY
MANAGEMENT TEAM

Denise Battle, Customer Service Manager
Mary Darr, P.E., General Manager of Operations
Monica Dodson, Water Supply and Treatment Manager
Jesse DuClau, Water Distribution and Wastewater Collection Systems Manager
Vishnu Gangadharan, P.E., Director of Engineering and Planning
Stephanie Glasgow, M.E.S.H., MPM, P.H.R., SHRM-CP, Director of Human Resources and Safety
Jessica Godreau, P.E., BCEE, Engineering Manager (Development Services)
Wil Lawson, Water Treatment and Biosolids Recycling Manager
Andrea Orbich, Executive Assistant
Daniel Przybyl, CGCIO, Director of Information Technology
Ruth Rouse, A.I.C.P., Planning and Development Manager
Kelly Satterfield, CPA, Finance and Procurement Manager
Todd Taylor, P.E., Executive Director
Mary Tiger, Strategic Initiatives Manager
Allison Spinelli, P.E., Engineering Manager (Capital Projects)
Stephen Winters, CPA, Director of Finance and Customer Service

GENERAL COUNSEL

Robert Epting, Esquire
Epting and Hackney, Attorneys at Law

FINANCIAL MANAGEMENT POLICY

OWASA's Board-approved Financial Management Policy begins on page 68 of this budget document. The policy provides guidance to staff about OWASA's financial management objectives. To ensure the organizational fiscal objectives are appropriate, the policy is reviewed no less frequently than every five years.

BUDGET PREPARATION AND CALENDAR

Basis of Accounting

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

Budget Process

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.

In January, before the budget development process begins, staff presents assumptions and goals for fiscal year budget to the Board of Directors. The budget development process then 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.

Budget Calendar

December 2021	Distributed templates for the preparation of operating expense appropriations, capital equipment requests and departmental budget narratives.
January 27, 2022	Board of Directors Meeting – reviewed FY 2023 Budget Calendar, Assumptions and Goals
January 28, 2022	Submission of Capital Equipment Request Forms, Budget Narratives and Departmental Operating Budget Requests to Budget Officer.
February 10, 2022	Board of Directors Work Session – managers of the Water Supply and Treatment, Water Distribution and Wastewater Collection, and Wastewater Treatment and Biosolids Recycling departments presented information about key drivers, opportunities and challenges of their departments' preliminary budgets.
March 10, 2022	Board of Directors Meeting - set the date for public hearings and discuss FY 2023 Draft Budget.
April 28, 2022	Board of Directors Meeting – discuss FY 2023 Draft Budget and rate adjustment alternatives and authorize staff to publicize budget and rates information.
May 12, 2022	Board of Directors Meeting – Public Hearing on the Draft Annual Budget, Capital Improvements Budget and proposed adjustments to rates, fees, and charges.
June 9, 2022	Board of Directors Work Session – adopt FY 2023 Annual Budget and Schedule of Rates, Fees and Charges.
July 2022	Distribute FY 2023 Annual Budget.

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 between 2% and 7%. However, because conditions change, OWASA updates its financial plan each year and actual rate increases could vary from the projection.

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 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Rate increase	7%	7%	6%	6%	6%	6%	2%	2%	2%	2%
	(numbers below in thousands)									
Operating revenue	\$46,039	\$49,460	\$52,773	\$56,191	\$59,838	\$63,724	\$65,961	\$67,648	\$69,381	\$71,160
Operating expenses	27,696	29,024	30,192	31,412	32,669	34,023	35,419	36,880	38,407	40,006
Capital Improvements Projects	21,708	28,530	20,942	12,348	21,748	25,815	37,326	37,126	20,688	19,606
Debt service coverage ratio	2.0	1.7	1.8	2.0	2.2	2.0	2.4	2.2	2.5	2.4

OWASA’s service area is determined by the municipalities and is unlikely to change in the planning period covered by these projections. Because there is little undeveloped land in the service area, increases in the number of customers served and the volume of water used by the community is likely to be minimal. Since costs are expected to continue to increase, rate increases will be necessary to be able to operate and invest in the system and maintain financial stability and sustainability.

STATEMENT OF INCOME, EXPENSE AND DEBT SERVICE (OPERATING)

	FY 2021 Actual	FY 2022 Budget	FY 2022 Forecast	FY 2022 Forecast to FY 2022 Budget	FY 2023 Budget	FY 2023 Budget to FY 2022 Forecast
Operating Revenue						
Water	\$17,608,186	\$18,194,238	\$18,526,821	1.83%	\$20,206,147	9.06%
Sewer	16,746,387	18,856,847	18,247,405	-3.23%	20,776,916	13.86%
Reclaimed Water	454,180	463,200	470,919	1.67%	465,390	-1.17%
Service Initiation Fee	15,810	16,510	14,893	-9.79%	16,510	10.86%
Other	815,983	898,581	840,581	-6.45%	764,215	-9.08%
Refunds and Adjustments	<u>(125,725)</u>	<u>(107,101)</u>	<u>(109,170)</u>	1.93%	<u>(107,101)</u>	-1.90%
Total Operating Revenue	<u>35,514,821</u>	<u>38,322,275</u>	<u>37,991,449</u>	-0.86%	<u>42,122,077</u>	10.87%
Operating Expense						
General and Administrative	7,493,386	7,994,126	8,186,054	2.40%	9,219,707	12.63%
Operations	<u>14,040,919</u>	<u>15,675,466</u>	<u>15,559,069</u>	-0.74%	<u>17,206,487</u>	10.59%
Total Operating Expense	<u>21,534,305</u>	<u>23,669,592</u>	<u>23,745,123</u>	0.32%	<u>26,426,194</u>	11.29%
Net Operating Income	13,980,516	14,652,683	14,246,326	-2.77%	15,695,883	10.17%
Non-operating Revenue						
System Development Fees	1,860,926	1,249,897	1,011,962	-19.04%	1,351,674	33.57%
Interest and Other	<u>2,023</u>	<u>97,759</u>	<u>116,020</u>	18.68%	<u>3,085</u>	-97.34%
Total Net Income	<u>15,843,465</u>	<u>16,000,339</u>	<u>15,374,308</u>	-3.91%	<u>17,050,642</u>	10.90%
Debt Service						
Existing	7,933,465	8,623,186	8,559,952	7.73%	9,010,243	5.26%
New	<u> </u>	<u> </u>	<u> </u>		<u>1,439,797</u>	
Total Debt Service	<u>7,933,465</u>	<u>8,623,186</u>	<u>8,559,952</u>	-0.73%	<u>10,450,040</u>	22.08%
Net Income Less Debt Service	<u>\$7,910,000</u>	<u>\$7,377,153</u>	<u>\$6,814,356</u>	-7.63%	<u>\$6,600,602</u>	-3.14%
Debt Coverage Ratio	2.0	1.9	1.8		1.6	

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 2021 Actual	FY 2022 Budget	FY 2022 Forecast	FY 2022 Forecast to FY 2022 Budget	FY 2023 Budget	FY 2023 Budget to FY 2022 Forecast
General Fund						
Resources						
Transfer from Revenue	\$7,910,000	\$7,377,153	\$6,814,356	-7.63%	\$6,600,602	-3.14%
Assessments	-	-	-		-	0.00%
Grants and Contributions	-	-	-		-	0.00%
Annual Income Available for Capital	7,910,000	7,377,153	6,814,356	-7.63%	6,600,602	-3.14%
Transfer from Construction Fund (Bond/Loan Proceeds)	22,888,598	887,073	11,628,174	0.00%	11,451,350	0.00%
Total Available for Capital	30,798,598	8,264,226	18,442,530	123.16%	18,051,952	-2.12%
Capital Expenditures						
Project Ordinances						
General Fund Contribution		11,185,000		-100.00%		
Funded by Bond/Loan Proceeds	15,809,264	6,444,000	9,217,303	0.00%	16,994,702	84.38%
Total Project Resolutions	15,809,264	17,629,000	9,217,303	-47.72%	16,994,702	84.38%
Capital Equipment	1,069,588	1,057,250	1,147,250	8.51%	1,057,250	-7.84%
Total Capital Outlay	16,878,852	18,686,250	10,364,553	-44.53%	18,051,952	74.17%
Annual General Fund Balance	\$13,919,746	(\$10,422,024)	\$8,077,977	-177.51%	\$0	100.00%
General Fund Beginning Balance		29,191,743	18,432,781	-36.86%	26,510,758	43.82%
General Fund Ending Balance	29,191,743	18,769,719	26,510,758	41.24%	18,834,915	-28.95%
Project Funding	10,758,962	1,143,165	8,884,204	677.16%	-4,062,334	145.73%
Reserves						
Rate/Revenue Stabilization	1,865,102	1,852,554	1,852,554	0.00%	2,047,049	10.50%
Capital Improvements	4,400,000	5,200,000	5,200,000	0.00%	5,600,000	7.69%
Working Capital	12,167,679	10,574,000	10,574,000	0.00%	15,250,200	44.22%
Unallocated General Fund Balance	-	-	-		-	

FUND BALANCE STATEMENTS

**CONSOLIDATED SUMMARY - INTRAGOVERNMENTAL SERVICE FUNDS
FY 2023**

	Beginning Balance	Revenues	Expenditures	Ending Balance	Change in Balance
Revenue Fund	-	\$43,476,836	(\$43,476,836)	-	-
Bond Service Fund	-	10,450,040	(10,450,040)	-	-
General Fund	<u>26,510,758</u>	<u>15,311,407</u>	<u>(22,987,250)</u>	<u>18,834,915</u>	<u>(7,675,843)</u>
Total	<u>\$26,510,758</u>	<u>\$69,238,283</u>	<u>(\$76,914,126)</u>	<u>\$18,834,915</u>	<u>(\$7,675,843)</u>

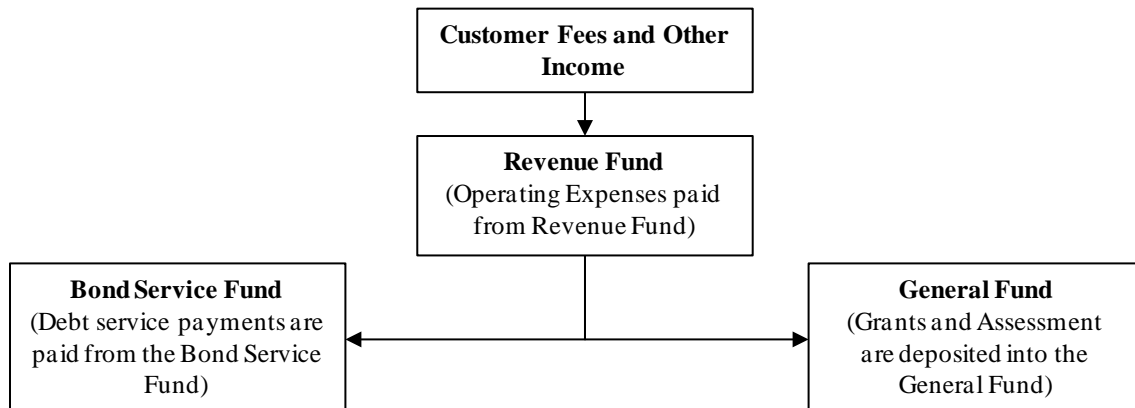
OWASA's Fund Accounting Structure

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 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 wastewater system are deposited into the Revenue Fund except for 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

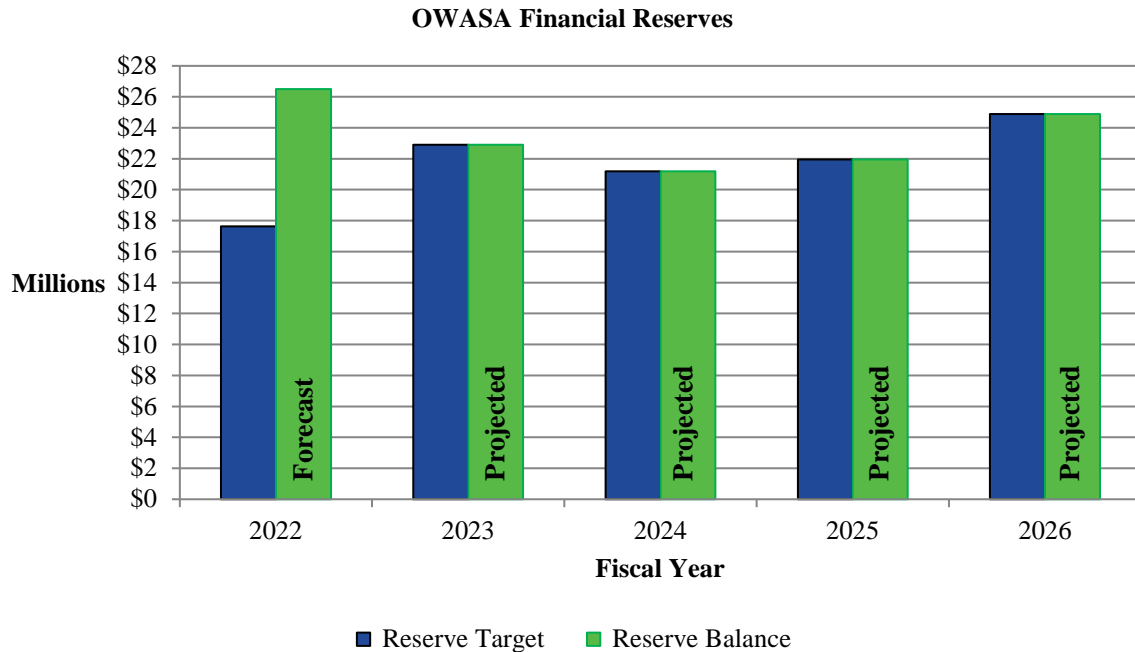
OWASA’s *Financial Management Policy* (see Section III) includes certain financial performance objectives which are intended to help management and other stakeholders monitor the organization’s financial condition. One of the objectives is to maintain adequate financial reserves and OWASA has established 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 2022, 2% of depreciated capital assets was about \$5.8 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 \$5.6 million at the end of FY 2023.

Rate/Revenue Stabilization – At least 5% of projected water and wastewater revenue. The balance in this reserve is projected to be about \$2.0 million at the end of FY 2023.

The graph below depicts the combined balance of the Working Capital, Capital Improvements, and Rate/Revenue Stabilization Reserve funds compared to the target. The forecasted balance for the end of FY 2022 includes bond proceeds that will be used to fund capital improvements projects in FY 2023.



FUND BALANCE STATEMENTS

REVENUE FUND

	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
Fund Balance July 1, 2022			-
Receipts			
Operating Revenue			
Customer Billings	\$20,206,147	\$20,776,916	\$40,983,063
Reclaimed Water	465,390	-	465,390
Service Initiation Fee	8,255	8,255	16,510
Other	382,108	382,107	764,215
Refunds and Adjustments	(53,551)	(53,550)	(107,101)
Total Operating Revenue	21,008,349	21,113,728	42,122,077
Non-operating Revenue			
System Development Fees	564,727	786,947	1,351,674
Interest Income	1,543	1,542	3,085
Total Non-operating Revenue	566,270	788,489	1,354,759
Total Receipts	21,574,619	21,902,217	43,476,836
Expenditures			
Current Expense	(14,201,998)	(12,224,196)	(26,426,194)
Debt Service	(5,346,060)	(5,103,980)	(10,450,040)
Total Expenditures	(19,548,058)	(17,328,176)	(36,876,234)
Net Revenue			6,600,602
To General Fund			(6,600,602)
Fund Balance June 30, 2023			-
Change in Available Balance			-

FUND BALANCE STATEMENTS

GENERAL FUND

Fund Balance July 1, 2022		\$26,510,758
Receipts		
Transfer from Revenue fund	6,600,602	
Transfer from Construction Fund (Loan Proceeds)	8,968,929	
Interest	-	
Assessments	-	
Grants and contributions	-	
	<hr/>	
Total Receipts		<u>15,569,531</u>
Total Balance Before Expenditures		42,080,289
Expenditures		
Capital Equipment/Leases	1,315,374	
Project Resolutions	21,930,000	
Transfer to Revenue Fund	-	
	<hr/>	
Total Expenditures		<u>(23,245,374)</u>
Fund Balance June 30, 2023		<u><u>\$18,834,915</u></u>
Allocation of Fund Balance June 30, 2023		
Project Funding		
Capital Reserves	18,834,915	
	<hr/>	
Total Allocation		<u><u>\$18,834,915</u></u>
Unallocated General Fund Balance June 30, 2023		<hr/> -
Change in Available Balance		<u><u>(\$7,675,843)</u></u>

FUNDS FLOW STATEMENT

Revenue Fund

Operating Revenue	\$42,122,077	
System Development Fees	1,351,674	
Interest Income	3,085	
Total Revenues		43,476,836
Operating and Maintenance Expense	(26,426,194)	
Bond Service Fund (transfers to)	(10,450,040)	
Total Expenditures		(36,876,234)
Excess operating revenue (to be transferred to the General Fund)		6,600,602

General Fund

Beginning Balance July 1, 2022	26,510,758	
Transfer from Revenue Fund	6,600,602	
Assessments	-	
Grants and Contributions	-	
Total General Fund Balance (available for allocation)		33,111,360
Construction Fund - Loan Proceeds		8,968,929
Total General Fund and Loan Proceeds		42,080,289
Project Resolutions	21,930,000	
Capital Equipment and Leases	1,315,374	
Total General Fund Expenditures		22,987,250
General Fund Ending Balance June 30, 2023		<u>\$18,834,915</u>
Project Resolutions	-	
Reserves	18,834,915	
Total Allocation of General Fund Balance		<u>\$18,834,915</u>

PLANNED OPERATING EXPENDITURES

EXPENDITURES BY CATEGORY

Category	FY21 Actual	FY22 Budget	FY22 Forecast	FY22 Forecast to FY22 Budget Variance	FY23 Budget	FY23 Budget to FY22 Forecast Variance
Personnel	\$12,818,400	\$12,987,425	\$12,919,443	-0.5%	\$14,210,149	10.0%
Chemicals	2,305,396	2,607,254	2,793,113	7.1%	3,337,617	19.5%
Materials & Supplies	593,020	811,350	749,685	-7.6%	847,498	13.0%
Utilities	1,324,198	1,749,964	1,635,862	-6.5%	1,675,725	2.4%
Maintenance	2,825,355	3,703,860	3,596,934	-2.9%	3,924,565	9.1%
Professional Services	1,327,209	1,628,394	1,765,981	8.4%	2,001,595	13.3%
Communication	224,771	202,446	188,569	-6.9%	214,411	13.7%
Printing & Reproduction	10,360	29,400	19,897	-32.3%	27,400	37.7%
Education and Development	45,018	184,970	161,447	-12.7%	203,930	26.3%
Other	380,417	456,604	405,333	-11.2%	446,027	10.0%
Total	21,854,144	24,361,667	24,236,264	-0.5%	26,888,917	10.9%
Construction Credits	(319,839)	(692,075)	(291,598)	-57.9%	(462,723)	58.7%
Net Expense	\$21,534,305	\$23,669,592	\$23,944,666	1.2%	\$26,426,194	10.4%

**EXPENDITURES BY DIVISION
FISCAL YEAR 2023**

	General and Administrative	Operating Departments	Total Budget
Personnel	\$4,265,486	\$5,742,243	\$10,007,729
Payroll Taxes & Employee Benefits	1,779,534	2,422,886	4,202,420
Chemicals		3,337,617	3,337,617
Materials & Supplies	188,103	659,395	847,498
Utilities	173,340	1,502,385	1,675,725
Maintenance	670,264	3,254,301	3,924,565
Professional Services	1,813,470	188,125	2,001,595
Communication	207,171	7,240	214,411
Printing & Reproduction	24,400	3,000	27,400
Education and Development	101,295	102,635	203,930
Other	200,284	245,743	446,027
Total	\$9,423,347	\$17,465,570	\$26,888,917
Construction Credits	(203,640)	(259,083)	(462,723)
Net Expense	\$9,219,707	\$17,206,487	\$26,426,194

PLANNED OPERATING EXPENDITURES

GENERAL AND ADMINISTRATIVE

Category	FY21 Actual	FY22 Budget	FY22 Forecast	FY22 Forecast to FY22 Budget Variance	FY23 Budget	FY23 Budget to FY22 Forecast Variance
Executive Director						
Personnel Costs	\$793,453	\$904,637	\$875,898	-3.2%	\$1,022,064	16.7%
Operating Expenditures	548,199	688,246	657,626	-4.4%	737,568	12.2%
Total Expenditures	1,341,652	1,592,883	1,533,524	-3.7%	1,759,632	14.7%
Customer Service						
Personnel Costs	681,599	679,664	665,760	-2.0%	729,546	9.6%
Operating Expenditures	138,153	151,320	144,878	-4.3%	162,820	12.4%
Total Expenditures	819,752	830,984	810,638	-2.4%	892,366	10.1%
Engineering						
Personnel Costs	1,930,056	1,992,675	1,953,399	-2.0%	2,178,112	11.5%
Operating Expenditures	83,393	170,710	189,877	11.2%	365,893	92.7%
Total Expenditures	2,013,449	2,163,385	2,143,276	-0.9%	2,544,005	18.7%
Human Resources						
Personnel Costs	695,078	658,930	658,930	0.0%	794,651	20.6%
Operating Expenditures	254,363	454,275	454,275	0.0%	526,700	15.9%
Total Expenditures	949,441	1,113,205	1,113,205	0.0%	1,321,351	18.7%
Finance						
Personnel Costs	585,282	572,057	579,415	1.3%	619,267	6.9%
Operating Expenditures	391,232	322,815	402,123	24.6%	373,151	-7.2%
Total Expenditures	976,514	894,872	981,538	9.7%	992,418	1.1%
Information Technology						
Personnel Costs	623,387	616,656	624,444	1.3%	701,381	12.3%
Operating Expenditures	896,974	1,086,715	1,086,601	0.0%	1,212,194	11.6%
Total Expenditures	1,520,361	1,703,371	1,711,045	0.5%	1,913,575	11.8%
Total G&A	7,621,169	8,298,700	8,293,226	-0.1%	9,423,347	13.6%
Construction Credit	(\$127,783)	(\$304,575)	(\$100,000)	-67.2%	(\$203,640)	103.6%
Net Expense	\$7,493,386	\$7,994,125	\$8,193,226	2.5%	\$9,219,707	12.5%

PLANNED OPERATING EXPENDITURES

OPERATING DEPARTMENTS

Category	FY21 Actual	FY22 Budget	FY22 Forecast	FY22 Forecast to FY22 Budget Variance	FY23 Budget	FY23 Budget to FY22 Forecast Variance
Water Supply & Treatment						
Personnel Costs	\$2,045,343	\$2,072,751	\$2,048,304	-1.2%	\$2,282,464	11.4%
Operating Expenditures	2,672,449	3,355,506	3,418,927	1.9%	3,774,739	10.4%
Total Expenditures	4,717,792	5,428,257	5,467,231	0.7%	6,057,203	10.8%
Water Distribution						
Personnel Costs	2,379,382	2,542,946	2,550,611	0.3%	2,717,293	6.5%
Operating Expenditures	745,166	1,024,403	891,401	-13.0%	1,138,112	27.7%
Total Expenditures	3,124,548	3,567,349	3,442,012	-3.5%	3,855,405	12.0%
Wastewater Treatment						
Personnel Costs	2,309,388	2,111,698	2,180,647	3.3%	2,291,288	5.1%
Operating Expenditures	2,763,324	3,408,372	3,398,365	-0.3%	3,726,586	9.7%
Total Expenditures	5,072,712	5,520,070	5,579,012	1.1%	6,017,874	7.9%
Wastewater Collection						
Personnel Costs	775,432	835,410	779,829	-6.7%	874,085	12.1%
Operating Expenditures	542,491	711,880	671,243	-5.7%	661,003	-1.5%
Total Expenditures	1,317,923	1,547,290	1,451,072	-6.2%	1,535,088	5.8%
Total Operating Departments						
	14,232,975	16,062,966	15,939,327	-0.8%	17,465,570	9.6%
Construction Credit	(192,055)	(387,500)	(191,599)	-50.6%	(259,083)	35.2%
Net Expense	\$14,040,920	\$15,675,466	\$15,747,728	0.5%	\$17,206,487	9.3%

PLANNED CAPITAL EQUIPMENT EXPENDITURES

FISCAL YEAR 2023

Capital Equipment Summary

Vehicles and heavy equipment	\$561,500
Computer equipment	385,000
Water testing equipment	114,907
Grounds maintenance equipment	8,967
Online monitoring equipment	25,000
Storage tanks	20,000
Laboratory equipment	51,000
Wastewater pipe camera equipment	<u>149,000</u>
Total	<u><u>\$1,315,374</u></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 2023-2042

Schedule of Existing Long-term Bonds and Loans

	Issue Dates	Interest Rates (Avg. Coupon)	Outstanding at 06/30/22
Series 2014 Revenue Refunding Bonds	12/18/2014	4.488%	10,690,000
Series 2018 Revenue Refunding Bonds	5/1/2018	3.746%	17,000,000
Series 2019 Revenue Bonds	11/15/2019	4.265%	16,250,000
Series 2020 Revenue Refunding Bonds	4/7/2020	5.000%	7,720,000
Series 2021 Revenue Refunding Bonds	4/7/2020	3.611%	18,840,000
Total Bonded Debt			\$70,500,000
Loan from the State of North Carolina	Various	0% to 1.53	\$17,402,000

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
2023	\$9,023,814	\$1,439,797	\$10,463,611
2024	9,073,184	1,439,797	10,512,981
2025	9,111,554	4,158,294	13,269,848
2026	9,118,675	4,158,294	13,276,969
2027	7,316,870	6,269,237	13,586,107
2028	7,314,615	6,269,237	13,583,852
2029	7,310,786	9,897,155	17,207,941
2030	4,703,256	9,897,155	14,600,411
2031	4,689,226	13,127,670	17,816,896
2032	3,234,947	13,127,670	16,362,617
2033	3,230,417	15,233,037	18,463,454
2034	3,218,637	15,233,037	18,451,674
2035	2,876,808	19,446,510	22,323,318
2036	2,868,628	19,446,510	22,315,138
2037	2,858,748	19,446,510	22,305,258
2038	2,845,618	19,446,510	22,292,128
2039	2,787,011	19,446,510	22,233,521
2040	2,452,458	19,446,510	21,898,968
2041	2,107,638	19,446,510	21,554,148
2042	2,110,838	19,446,510	21,557,348
Total	\$98,253,727	\$255,822,460	\$354,076,187

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 need.

Debt Coverage

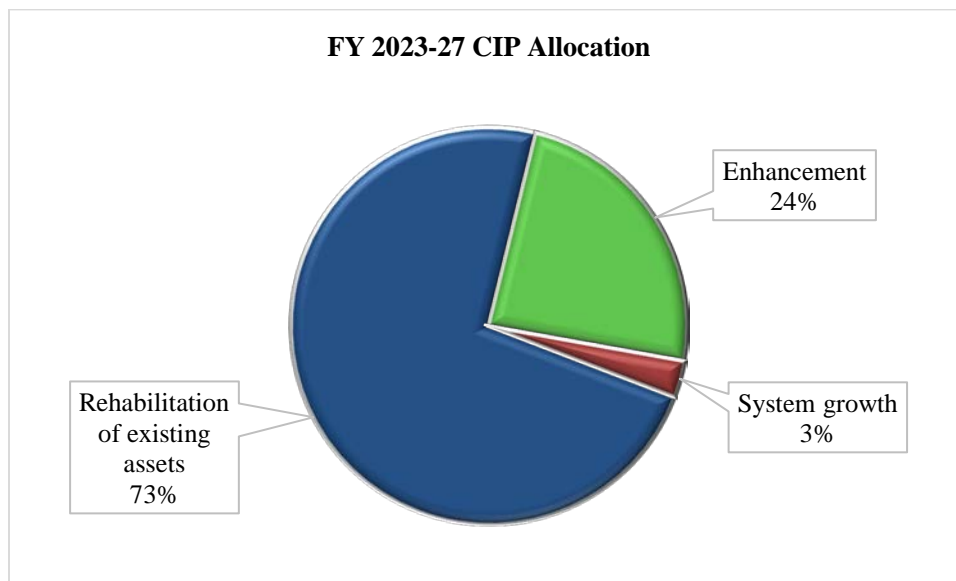
OWASA’s Bond Order requires a minimum annual required Debt Service Coverage Ratio of 1.2. OWASA’s Financial Management Policy states that the minimum annual debt service coverage ratio shall be 2.0; provided, however, that the minimum coverage ratio for any single year when severe weather anomalies or other unforeseen circumstances occur which negatively impact revenues and/or expenses shall not be less than 1.5 during the Fiscal Year. The FY 2023 budget is designed achieve a debt service coverage ratio of 1.6. Since our financial management policy objectives for reserve balances, sufficiency of revenues above debt requirements, and cash financing of capital are all projected to be met, we decided not to burden rate payers with a higher rate increase simply to meet the debt service coverage ratio performance target. We are projecting to meet the debt service coverage ratio target in future years.

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, wastewater, 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.

CIP needs are identified by hydraulic models, risk/prioritization models, OWASA’s Energy Management Program, master planning studies, condition assessment, staff observations, regulatory or contractual requirements, repair and maintenance work order evaluation, community feedback, and strategic planning. After CIP projects are identified, a staff team prioritizes projects using a weighted criteria model. In addition to the results of this project prioritization, staff accounts for project interrelationships, coordination with other entities (Towns, Department of Transportation, etc.), project urgency, implementation considerations, and other external schedule constraints.

The FY 2023-2027 CIP budget totals about \$111.3 million. Most of the 5-year investments will be spent rehabilitating existing assets.



The Board has approved a CIP budget for FY 2023 for over 30 projects totaling \$21,930,000.

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 below have been identified for funding in FY 2023.

CAPITAL IMPROVEMENTS PROJECTS FUNDED IN FY 2023

Project Description	Purpose of Project	Amount
Raw Water Supplies		
Annual payment to preserve OWASA's Level II Jordan Lake storage allocation	Our Jordan Lake storage allocation serves as insurance against future water shortages	\$10,000
Quarry Reservoir Development – annual contribution to a no-fault well repair fund	Required by Special Use Permit	15,000
University Lake Permanganate Facility	New chemical storage and feed facility to improve water treatment	3,000,000
Cane Creek dam rehabilitation	Spillway rehabilitation recommended by recent inspection	200,000
Cane Creek Resurfacing	Resurface pathways to improve safety	70,000
Western Intake Partnership Projects	Planning for intake, treatment and distribution facilities to ensure access to Jordan Lake storage allocation	651,000
Water Transmission and Distribution		
Reimbursement for distribution system improvements	Reimbursements for water main upgrades constructed as part of external projects	250,000
Water distribution system rehabilitation	Water main replacement projects constructed by OWASA crews.	1,000,000
Water main replacement program	Rehabilitation due to age and condition	1,215,000
West Cameron Avenue water main replacement	Planning, design, and construction	3,500,000
Water distribution system hydraulic model	Analysis of the water distribution system hydraulic capacity	100,000
Distribution system condition assessment management	Opportunistic and proactive condition assessment program: leak detection and pressure monitors	30,000
Jones Ferry Road water main replacements	Replacement due to age, condition and design	100,000
Lead and copper rule revisions compliance	Research to identify lead and copper services lines in the service area in compliance with rules issued by EPA	200,000
Legion Road water main	Replacement due to age and condition	50,000
West Rosemary 12” asbestos cement water main replacement	Replacement due to age and condition	50,000
Group 2 water main replacements (W. Manning Dr. and South Rd.)	Replacement due to age and condition	50,000

Project Description	Purpose of Project	Amount
Water Treatment and Supply		
WTP electrical distribution improvements	Convert the remainder of plant electrical distribution system to an updated voltage standard (a majority of the system already uses the updated standard) and to provide closed transition transfer capabilities for generators	20,000
WTP clearwell rehabilitation	Concrete repairs as recommended by a comprehensive inspection	180,000
WTP belt filter press replacement	Replacement due to age and condition	2,000,000
WTP finished water pump #4 motor and pump replacement	Improvements to pumps, motors and electrical components	75,000
Supervisory Control and Data Acquisition (SCADA) master plan recommendations	Replacement of critical process control equipment	520,000
WTP pulsator and operator building roof and Cane Creek pump station roof replacements	Replace roofs on facilities due to condition	100,000
Storage tank programmable logic controller upgrades	Improvements to enhance capabilities	100,000
Wastewater Collection, Treatment and Disposal		
Gravity sewer rehabilitation program	Design and rehabilitation of deteriorated wastewater mains and manholes	1,000,000
Bolinwood interceptor replacement	Replacement due to age and condition	2,240,000
Rogerson Drive force main and pump station rehabilitation	Rehabilitation due to age and condition	100,000
North Lakeshore and Clayton Road generator design and installation	Design and installation of backup power equipment	200,000
Morgan Creek interceptor replacement	Rehabilitation due to age and condition	234,000
East Main Street Sewer Rehabilitation	Rehabilitation due to age and condition	1,000,000
Collection system asset management	Temporary flow monitoring to further assess inflow/infiltration sources	50,000
Collection system on-call modeling	To improve the reliability of model used to analyze the collection system	20,000
Chapel Hill North pump station rehabilitation	Replacement and conversion to submersible pump station	600,000
WWTP fermenter improvements	Completion of construction for mixing improvements identified by FY 2019 inspection	1,350,000
WWTP facilities planning	Assess long-term needs	150,000
WWTP clarifier No. 4 conversion	Improvements to the clarifier's effluent troughs to alleviate operational and maintenance concerns and increase its useful life	200,000

Project Description	Purpose of Project	Amount
WWTP digester #3 and #4 condition assessments	Assess condition of assets to determine future rehabilitation and replacement requirements	300,000
WWTP digester #3 and #4 stairwell safety improvements	Improve safety of accessing facilities	50,000
WWTP and pump station programmable logic controller replacement	Replace equipment due to age and condition	100,000
Heat exchanger for rotary drum thickener	Replace equipment due to age and condition	60,000
Biogas removal system improvements	Replacement of aging components	250,000
Biosolids tank mixing system equipment	Rehabilitation due to age and condition	50,000
Reclaimed water valve/coupling rehabilitation	Rehabilitation due to age and condition	490,000
Total Capital Improvements Projects Funded in FY 2023		
		\$21,930,000

OWASA CAPITAL IMPROVEMENTS PROGRAM FIVE-YEAR OVERVIEW FOR FY 2023-2027

Project Category:	Annual Totals					5-Year Total
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2023-27
Raw Water Supply Sources	\$3,946,000	\$1,536,000	\$1,145,000	\$2,886,000	\$845,000	\$10,358,000
Raw Water Transmission		75,000				75,000
Water Treatment Facilities	2,895,000	6,688,000	9,311,000	2,555,000	2,555,000	24,004,000
Finished Water Pumping						
Finished Water Storage	100,000				100,000	200,000
Water Transmission and Distribution	6,545,000	4,440,000	12,394,000	7,759,000	4,113,000	35,251,000
Wastewater Collection Lines	4,544,000	4,250,000	2,770,000	3,570,000	1,470,000	16,604,000
Wastewater Pump Stations	900,000	150,000	190,000	560,000	425,000	2,255,000
Wastewater Treatment and Disposal	2,510,000	5,000,000	6,565,000	4,252,000	3,495,000	21,822,000
Reclaimed Water Facility Rehabilitation	490,000	75,000		80,000	80,000	725,000
Central Office and Operations						
Totals	\$21,930,000	\$22,214,000	\$32,375,000	\$21,662,000	\$13,083,000	\$111,264,000

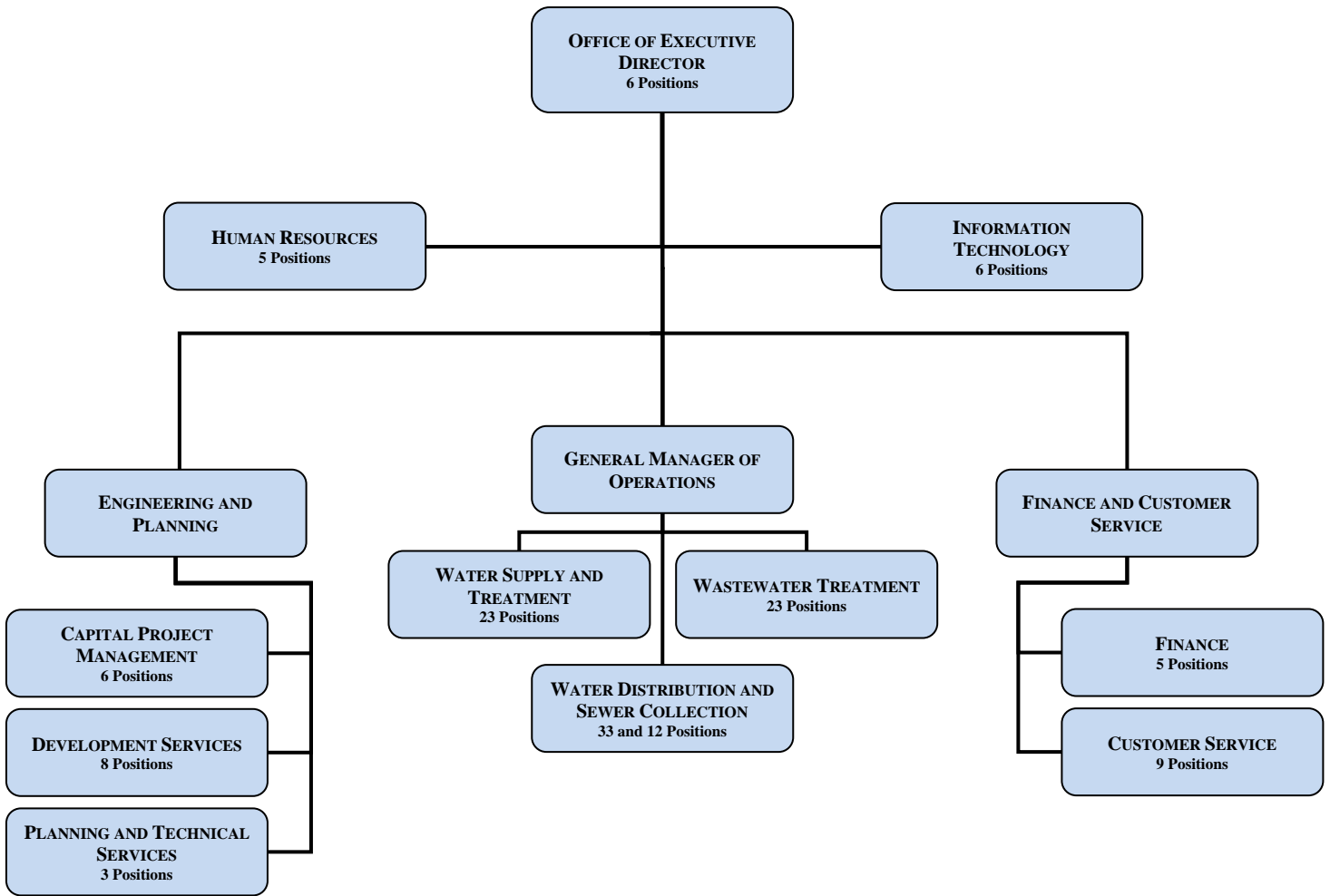
SECTION II

OVERVIEW OF OWASA DEPARTMENTS

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ORANGE WATER AND SEWER AUTHORITY STAFF - DEPARTMENT STRUCTURE

(Number of Positions Funded for FY 2023 Shown)



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 policies relating to the management and operations of 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 Strategy, Communications and Community Relations, Sustainability, and Administrative Support.

SUMMARY OF ACTIVITIES

- Provide leadership to ensure that the organization's 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 activities.
- Promote continued innovation and creativity in providing services effectively, efficiently and sustainably.
- Promote training and development of employees to improve OWASA's services.
- Motivate employees and encourage teamwork throughout the organization.

KEY FOCUS AREAS FOR FY 2023

Strategic Initiative	Objective
Provide High Quality Services	<ul style="list-style-type: none">• Develop PFAS Management Strategy
Equitable Services	<ul style="list-style-type: none">• Identify unserved households and pursue outside funding strategies to connect disadvantaged/underserved households• Evaluate the effectiveness of the customer assistance program and explore alternatives
Climate and Land Use Change Adaptation	<ul style="list-style-type: none">• Finalize Cane Creek Solar PV Project• Achieve Energy Management Program goals• Join the Jordan Lake Western Intake Partnership• Begin development of Climate Action Plan
Community Engagement	<ul style="list-style-type: none">• Execute an active strategic communications program, including the launch of a regularly conducted community survey

Strategic Initiative	Objective
Emergency Management and Cybersecurity	<ul style="list-style-type: none"> Support the development of a Continuous Emergency Preparedness Model Begin assessment of risk on wastewater collection and treatment system
Service Reliability and Resiliency	<ul style="list-style-type: none"> Support the development of a Project Delivery Optimization Plan

OFFICE OF THE EXECUTIVE DIRECTOR

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$593,996	\$682,953		\$660,420		\$776,501	
Taxes and Benefits	<u>199,457</u>	<u>221,684</u>		<u>215,478</u>		<u>245,563</u>	
Total Personnel Costs	793,453	904,637	14%	875,898	-3%	1,022,064	17%
Other Operating Expense							
Materials and Supplies	2,941	3,348		4,360		4,210	
Utilities	28,252	35,180		34,704		35,180	
Maintenance	0	0		0		0	
Professional Services	457,753	490,392		531,361		584,758	
Communication	20,658	35,956		23,974		28,671	
Printing and Reproduction	9,152	21,600		14,914		20,600	
Education and Development	3,521	21,500		21,434		25,500	
Other	<u>25,922</u>	<u>80,270</u>		<u>26,879</u>		<u>38,649</u>	
Total Operating Expenditures	548,199	688,246	26%	657,626	-4%	737,568	12%
Total Expenditures	<u>1,341,652</u>	<u>1,592,883</u>	19%	<u>1,533,524</u>	-4%	<u>1,759,632</u>	15%
Construction Credit	(127,783)	(304,575)		(100,000)		(203,640)	
Net Expense	<u>\$1,213,869</u>	<u>\$1,288,308</u>	6%	<u>\$1,433,524</u>	11%	<u>\$1,555,992</u>	9%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	6	6	6

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, wastewater and reclaimed water 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 and deposit customer and other payments.
- 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.
- Enforce OWASA policies concerning customer service matters.
- Oversee OWASA’s participation in the North Carolina Debt Setoff Program.
- Promote the use of OWASA’s Agua Vista customer water use tracking portal.

KEY FOCUS AREAS FOR FY 2023

Strategic Initiative	Objective
Continue to promote use of Agua Vista’s (OWASA’s automated metering infrastructure system) web portal	<ul style="list-style-type: none"> • Educate customers about useful website features • Solicit customer feedback to enhance customer service and increase customer satisfaction. • Encourage customers to register on the portal, update contact details, and complete survey about household water use to improve accuracy of leak alerts.
Support the Diversity and Inclusion Program	<ul style="list-style-type: none"> • Provide strategic support toward achieving a diverse workforce and inclusive environment.
Help customers arrange a plan to pay past due balances that built-up during the COVID-19 pandemic moratorium on service terminations for nonpayment	<ul style="list-style-type: none"> • Support development and execution of communications strategy. • Work with customers to establish payment arrangements in compliance with NC Governor’s directives.
Participate in the evaluation and implementation of a new utility billing system	<ul style="list-style-type: none"> • Evaluate proposals and select provider. • Implement system.

CUSTOMER SERVICE

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$481,130	\$485,731		\$478,971		\$525,140	
Taxes and Benefits	<u>200,469</u>	<u>193,933</u>		<u>186,789</u>		<u>204,406</u>	
Total Personnel Costs	681,599	679,664	0%	665,760	-2%	729,546	10%
Other Operating Expense							
Materials and Supplies	712	2,000		1,472		4,000	
Utilities	4,555	4,320		4,120		4,320	
Maintenance	1,507	0		0		0	
Professional Services	27,108	40,000		48,546		48,500	
Communication	56,042	70,000		71,510		72,000	
Printing and Reproduction	0	0		0		0	
Education and Development	73	5,000		2,977		4,000	
Other	<u>48,156</u>	<u>30,000</u>		<u>16,253</u>		<u>30,000</u>	
Total Operating Expenditures	138,153	151,320	10%	144,878	-4%	162,820	12%
Total Expenditures	<u>819,752</u>	<u>830,984</u>	1%	<u>810,638</u>	-2%	<u>892,366</u>	10%
Construction Credit	0	0		0		0	
Net Expense	<u>\$819,752</u>	<u>\$830,984</u>	1%	<u>\$810,638</u>	-2%	<u>\$892,366</u>	10%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	9	9	9

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Workload				
Customer accounts	N/A	21,823	21,921	21,987
Number of calls received	N/A	25,373	21,944	19,390
Effectiveness				
Bill accuracy	100%	99.9%	99.9%	99.8%
Call handle ratio (calls answered vs. calls received)	90%	94%	96%	96%

ENGINEERING AND PLANNING

(General and Administrative)

MISSION

The Engineering and Planning Department is responsible for four primary functions:

1. Management of system development projects, which includes the review of construction plans and inspection of construction to ensure that water and wastewater 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;
2. Management of the Capital Improvements 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, wastewater and reclaimed water infrastructure;
3. 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, wastewater and reclaimed water facilities and systems; and
4. 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, including the location and attribute details of underground water, wastewater 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 water, wastewater and reclaimed water facilities, support facilities, and utility work accomplished in the service area.
- Produce small-scale in-house designs.
- Complete studies and modeling efforts to determine the engineering and economic feasibility of various approaches to repairing and upgrading 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 utility easements, forestry management and watershed protection.
- Provide engineering support for the operation and maintenance of system 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 2023

Strategic Initiative	Objective
Provide reliable and high-quality supply of water for the next 50 years	<ul style="list-style-type: none">• Implement the selected Jordan Lake alternative from the adopted Long-Range Water Supply Plan
Maintain water, wastewater, and reclaimed water systems to ensure service levels are sustained	<ul style="list-style-type: none">• Execute capital improvements program
Service Reliability and Resiliency	<ul style="list-style-type: none">• Update of the Asset Management Plan• Support the execution of the SCADA Master Plan• Development a Capital Investment Strategy

ENGINEERING AND PLANNING

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021	FY 2022	FY22 Budget to FY21	FY 2022	FY22 Forecast to FY22	FY 2023	FY23 Budget to FY22 Forecast
	Actual	Budget	Actual	Forecast	Budget	Budget	Forecast
Personnel Costs							
Salaries and Wages	\$1,460,541	\$1,508,703		\$1,475,043		\$1,614,708	
Taxes and Benefits	<u>469,515</u>	<u>483,972</u>		<u>478,356</u>		<u>563,404</u>	
Total Personnel Costs	1,930,056	1,992,675	3%	1,953,399	-2%	2,178,112	12%
Other Operating Expense							
Materials and Supplies	7,506	15,565		11,026		17,693	
Utilities	7,965	7,680		7,480		8,160	
Maintenance	768	2,000		1,516		2,000	
Professional Services	39,501	105,000		119,200		298,000	
Communication	454	750		330		500	
Printing and Reproduction	0	1,300		934		1,200	
Education and Development	3,734	27,015		31,970		25,175	
Other	<u>23,465</u>	<u>11,400</u>		<u>17,420</u>		<u>13,165</u>	
Total Operating Expenditures	83,393	170,710	105%	189,876	11%	365,893	93%
Total Expenditures	<u>2,013,449</u>	<u>2,163,385</u>	7%	<u>2,143,275</u>	-1%	<u>2,544,005</u>	19%
Construction Credit	0	0		0		0	
Net Expense	<u>\$2,013,449</u>	<u>\$2,163,385</u>	7%	<u>\$2,143,275</u>	-1%	<u>\$2,544,005</u>	19%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	16	16	17

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Actual capital project expenditures as a percentage of budget	>90%	97%	78%	53%
Average plan review time (working days)	<15.0	7.1	5.2	9.1
Capital projects communication plans' effectiveness rating (on a scale of 1 to 5 with 5 the highest)	>4.0	3.8	3.8	4.4

HUMAN RESOURCES
(General and Administrative)

MISSION

The Human Resources Department is responsible for managing, creating and administering human resources and safety initiatives. This includes recruiting and selecting new hires; policy compliance and development; benefits administration; compensation and classification policies; employee discipline and rewards; workers' 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 Department reviews and proposes revisions to employee benefits, classification and pay plans to assure that OWASA remains competitive in the labor market.

The role of the Department is to assure both management and employees that human resource matters are being handled both fairly, equitably, and without discrimination in accordance with good human resource practices and 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.
- Provide a safety program to enhance safety awareness, prevent worker injuries, and promote safe work practices. Manage the workers' 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 needs assistance, and advice to employees and managers through available resources.
- Ensure that job applicants are evaluated in accordance with equal opportunity laws and the Americans with Disabilities Act.

KEY FOCUS AREAS FOR FY 2023

Strategic Initiative	Objective
Assure compliance with Human Resource and Safety applicable federal, state and local laws and ordinances.	<ul style="list-style-type: none"> • Maintain written policies, procedures and files.
Conduct pay and classification study	<ul style="list-style-type: none"> • Evaluate employee compensation, benefits, reward and performance evaluation systems
Apprenticeship Program	<ul style="list-style-type: none"> • Explore opportunities for an apprenticeship program with emphasis on expanding career paths for underrepresented groups
Lead Diversity and Inclusion program	<ul style="list-style-type: none"> • Develop action plan for Diversity and Inclusion Program • Recruit and hire Diversity and Inclusion Specialist
Workforce Development	<ul style="list-style-type: none"> • Evaluate workforce development opportunities for staff • Support the development of a recruitment strategy for entry-level and high-turnover positions

HUMAN RESOURCES

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$321,922	\$309,770		\$299,833		\$367,589	
Taxes and Benefits	<u>373,156</u>	<u>349,160</u>		<u>361,303</u>		<u>427,061</u>	
Total Personnel Costs	695,078	658,930	-5%	661,136	0%	794,650	20%
Other Operating Expense							
Materials and Supplies	2,792	10,000		10,544		17,801	
Utilities	2,060	1,920		1,760		2,400	
Maintenance	98	400		397		400	
Professional Services	88,174	294,500		294,500		332,000	
Communication	140,089	84,000		84,000		104,000	
Printing and Reproduction	0	1,000		1,000		1,000	
Education and Development	1,431	13,600		13,600		16,600	
Other	<u>19,719</u>	<u>48,855</u>		<u>49,981</u>		<u>52,500</u>	
Total Operating Expenditures	254,363	454,275	79%	455,782	0%	526,701	16%
Total Expenditures	<u>949,441</u>	<u>1,113,205</u>	17%	<u>1,116,918</u>	0%	<u>1,321,351</u>	18%
Construction Credit	0	0		0		0	
Net Expense	<u>\$949,441</u>	<u>\$1,113,205</u>	17%	<u>\$1,116,918</u>	0%	<u>\$1,321,351</u>	18%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	4	4	5

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Vacancies as a percentage of total authorized positions	<8.0%	8.4%	11.9%	12.6%
At fault EEOC complaints	0	0	0	0
Diversity percentages				
Racial minorities	25-30%	25%	26%	28%
Female	25-30%	23%	25%	23%
Number of injuries, illnesses or lost workdays compared to a common exposure base of 100 full-time workers	<3.5	3.85	2.28	2.27

FINANCE

(General and Administrative)

MISSION

The Finance Department is responsible for maintaining the fiscal affairs of OWASA consistent with generally accepted accounting principles and statutory requirements. Areas of responsibility include accounts payable, accounts receivable, general ledger, asset records, investments, 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 pay expenditures timely.
- 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.
- Maintain OWASA’s 15-year financial plan.
- Develop annual budget.
- Monitor budget performance.
- 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 2023

Strategic Initiative	Objective
Issue revenue and/or secure low-interest loans from the state of North Carolina	<ul style="list-style-type: none">• Fund capital improvements program
Financial Management	<ul style="list-style-type: none">• Ensure the organization meets financial management goals as budgeted
Support the Diversity and Inclusion Program	<ul style="list-style-type: none">• Make improvements in service excellence, achieving a diverse workforce and providing an inclusive environment
Service Reliability and Resiliency	<ul style="list-style-type: none">• Support the development of a Capital Investment Strategy

FINANCE

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021	FY 2022	FY22 Budget to FY21	FY 2022	FY22 Forecast to FY22	FY 2023	FY23 Budget to FY22	Forecast
	Actual	Budget	Actual	Forecast	Budget	Budget		
Personnel Costs								
Salaries and Wages	\$444,146	\$430,955		\$437,578		\$460,958		
Taxes and Benefits	<u>141,136</u>	<u>141,102</u>		<u>141,838</u>		<u>158,309</u>		
Total Personnel Costs	585,282	572,057	-2%	579,416	1%	619,267		7%
Other Operating Expense								
Materials and Supplies	2,114	6,000		4,692		5,000		
Utilities	4,072	4,900		4,897		4,900		
Maintenance	0	0		0		0		
Professional Services	373,067	296,375		378,222		348,811		
Communication	2,050	2,500		2,038		2,000		
Printing and Reproduction	1,208	2,000		1,549		1,600		
Education and Development	3,211	4,770		4,734		5,070		
Other	<u>5,510</u>	<u>6,270</u>		<u>5,992</u>		<u>5,770</u>		
Total Operating Expenditures	391,232	322,815	-17%	402,124	25%	373,151		-7%
Total Expenditures	<u>976,514</u>	<u>894,872</u>	-8%	<u>981,540</u>	10%	<u>992,418</u>		1%
Construction Credit	0	0		0		0		
Net Expense	<u>\$976,514</u>	<u>\$894,872</u>	-8%	<u>\$981,540</u>	10%	<u>\$992,418</u>		1%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	5	5	5

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Working capital reserve	\$13.6M (FY20)	\$12.1M	\$22.7M	\$26.5M
Debt service coverage ratio	2.0	2.1	2.0	2.0
Debt to asset value	≤50%	26%	29%	28%
Service affordability	1.5	1.3	1.3	1.3

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 2023

Strategic Initiative	Objective
Business process improvement	<ul style="list-style-type: none">• Begin effort to replace Customer Information System and Utility Billing Software• Implement cloud-based agenda management solution
Cybersecurity	<ul style="list-style-type: none">• Implement Multifactor Authentication• Implement additional Microsoft cybersecurity tools• Conduct SCADA and Payment Card Industry security assessments
IT Infrastructure Updates	<ul style="list-style-type: none">• Replace wireless network infrastructure• Upgrade main internet connection for speed and reliability• Replace our physical access control system and selected cameras
Cloud-based storage	<ul style="list-style-type: none">• Implement Azure SQL

INFORMATION TECHNOLOGY

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$470,398	\$459,370		\$467,380		\$520,589	
Taxes and Benefits	<u>152,989</u>	<u>157,286</u>		<u>157,064</u>		<u>180,792</u>	
Total Personnel Costs	623,387	616,656	-1%	624,444	1%	701,381	12%
Other Operating Expense							
Materials and Supplies	93,499	131,590		122,851		139,400	
Utilities	114,124	124,820		121,471		118,380	
Maintenance	477,883	534,355		546,157		667,864	
Professional Services	153,060	208,000		208,002		201,400	
Communication	0	0		0		0	
Printing and Reproduction	0	0		0		0	
Education and Development	7,157	24,950		10,349		24,950	
Other	<u>51,251</u>	<u>63,000</u>		<u>77,771</u>		<u>60,200</u>	
Total Operating Expenditures	896,974	1,086,715	21%	1,086,601	0%	1,212,194	12%
Total Expenditures	<u>1,520,361</u>	<u>1,703,371</u>	12%	<u>1,711,045</u>	0%	<u>1,913,575</u>	12%
Construction Credit	0	0		0		0	
Net Expense	<u>\$1,520,361</u>	<u>\$1,703,371</u>	12%	<u>\$1,711,045</u>	0%	<u>\$1,913,575</u>	12%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	5	5	6

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 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 equipment to support asset management.
- Respond to weekend and after-hours water and wastewater emergency calls from OWASA customers courteously and timely 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.
- Reinforce the teamwork approach required 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 2023

Strategic Initiative	Objective
Provide High Quality Services	<ul style="list-style-type: none">• Maintain Partnership for Safe Water Phase IV objectives• Continue emphasis on the development and training of employees to improve knowledge, skills, and abilities• Maintain continuous compliance with state and federal drinking water standards• Continue execution of the SCADA Master Plan• Assist in the search and implementation of a new Computerized Maintenance Management System
Forest Management	<ul style="list-style-type: none">• Effectively manage forest assets to fulfill OWASA's mission
Support the Diversity and Inclusion Program	<ul style="list-style-type: none">• Continue to improve the diversity, foster inclusion, and ensuring a sense of belonging in our workforce

WATER SUPPLY AND TREATMENT

Three-year Comparison

Fiscal Years 2021 - 2023

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$1,395,259	\$1,474,731		\$1,456,391		\$1,614,444	
Taxes and Benefits	<u>650,084</u>	<u>598,020</u>		<u>591,913</u>		<u>668,020</u>	
Total Personnel Costs	2,045,343	2,072,751	1%	2,048,304	-1%	2,282,464	11%
Other Operating Expense							
Materials and Supplies	139,528	191,491		165,925		187,714	
Chemicals	1,345,999	1,466,645		1,651,566		1,893,797	
Utilities	283,204	433,234		412,746		450,948	
Maintenance	713,580	1,039,578		985,217		1,022,547	
Professional Services	88,318	92,639		85,101		81,055	
Communication	542	3,000		1,210		1,000	
Printing and Reproduction	0	0		0		0	
Education and Development	4,125	11,960		7,811		11,660	
Other	<u>97,153</u>	<u>116,960</u>		<u>109,352</u>		<u>126,018</u>	
Total Operating Expenditures	2,672,449	3,355,507	26%	3,418,928	2%	3,774,739	10%
Total Expenditures	<u>4,717,792</u>	<u>5,428,258</u>	15%	<u>5,467,232</u>	1%	<u>6,057,203</u>	11%
Construction Credits	0	0		0		0	
Net Expense	<u>\$4,717,792</u>	<u>\$5,428,258</u>	15%	<u>\$5,467,232</u>	1%	<u>\$6,057,203</u>	11%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	23	23	23

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Workload				
Finished water pumped to the distribution system	N/A	2.4B	2.3B	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	0.03	0.02	0.02

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 the exception of the system's storage tanks and booster pumping stations. The Department also develops and implements efficient and effective measures for maintaining and repairing 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 repairing and replacing water meters.
- Maintain integrity of water distribution lines by continuing rehabilitation program.
- Install service connections.
- Repair and replace water mains and appurtenances.

KEY FOCUS AREAS FOR FY 2023

Strategic Initiative	Objective
Promote education and training	<ul style="list-style-type: none">• Ensure proper employee training and development in new methods of maintenance of water lines and use of related equipment• Implement and promote hands on training for trenching, excavation, and confined space
Valve Maintenance	<ul style="list-style-type: none">• Inspect and operate/exercise critical valve infrastructure• Continue to inspect and maintain 25% of the non-critical valve infrastructure• Repair and replace damaged/inoperable valve materials
Conduct routine flushing and sampling	<ul style="list-style-type: none">• Maintain high quality drinking water throughout the system• Install new sampling stations
Implement Backflow/Cross-Connection Program	<ul style="list-style-type: none">• Identify all backflows throughout the system• Ensure that devices are in compliance and tested annually• Identify, track, and organize compliance
Maintain standards to continue to qualify for the President's Award for Distribution System Operation from the Partnership for Safe Water	<ul style="list-style-type: none">• Continue to meet or exceed the requirements to achieve the President's Award• Work towards achieving the award's next level• Update, analyze, and maintain system pressure data quarterly
Support the Diversity and Inclusion Program	<ul style="list-style-type: none">• Make improvements in service excellence, achieving a diverse workforce and providing an inclusive environment

WATER DISTRIBUTION

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$1,635,937	\$1,765,422		\$1,774,353		\$1,873,127	
Taxes and Benefits	<u>743,445</u>	<u>777,524</u>		<u>776,258</u>		<u>844,166</u>	
Total Personnel Costs	2,379,382	2,542,946	7%	2,550,611	0%	2,717,293	7%
Other Operating Expense							
Materials and Supplies	89,431	117,241		109,378		103,499	
Utilities	155,929	244,015		222,964		244,475	
Maintenance	476,483	629,443		532,965		752,634	
Professional Services	8,525	6,403		4,927		6,404	
Communication	3,828	5,000		4,474		5,000	
Printing and Reproduction	0	1,500		500		1,500	
Education and Development	7,611	18,300		13,209		21,100	
Other	<u>3,359</u>	<u>2,500</u>		<u>2,984</u>		<u>3,500</u>	
Total Operating Expenditures	745,166	1,024,402	37%	891,401	-13%	1,138,112	28%
Total Expenditures	<u>3,124,548</u>	<u>3,567,348</u>	14%	<u>3,442,012</u>	-4%	<u>3,855,405</u>	12%
Construction Credits	(157,677)	(387,500)		(186,953)		(259,083)	
Net Expense	<u>\$2,966,871</u>	<u>\$3,179,848</u>	7%	<u>\$3,255,059</u>	2%	<u>\$3,596,322</u>	10%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	35	35	35

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Workload				
Miles of finished water pipe maintained	N/A	384	384	385
Effectiveness				
Volume of water billed vs. volume pumped to the system	90.0%	89.3%	90.1%	91.8%
Number of main breaks per 100 miles of pipe	<7.00	11.2	9.4	6.5

WASTEWATER TREATMENT AND BIOSOLIDS RECYCLING

(Operating)

MISSION

The Mason Farm Wastewater Treatment Plant (WWTP) 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 discharges from OWASA's facilities, plus the general operation requirements to meet applicable standards. These include National Pollutant Discharge Elimination System (NPDES) Permit, Land Application Permit (Water Quality, Non-Discharge), 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 discharges are in compliance with their operating permits.
- Operate plant, laboratory, and maintenance areas in compliance with 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 equipment to support asset management.
- Manage all programs in an environmentally and operationally sound manner.

KEY FOCUS AREAS FOR FY 2023

Strategic Initiative	Objective
Continue work on action items identified in the Phase 3 Assessment of American Water Works Association's Partnership for Clean Water program for Mason Farm WWTP	<ul style="list-style-type: none">• Improve water quality, operational efficiency, reliability, and resiliency
Complete key preventative maintenance projects at Mason Farm WWTP	<ul style="list-style-type: none">• The purpose of these projects is to assess the condition of some of our critical equipment/systems to be able to make more informed decisions regarding our operation and maintenance practices and investments in our equipment/infrastructure
Continue to improve denitrification performance at the Mason Farm WWTP	<ul style="list-style-type: none">• With the new Jordan Lake Nutrient rules in-place, staff will continue to work to optimize the wastewater treatment process to improve total nitrogen removal
Continued focus on training and development of employees	<ul style="list-style-type: none">• Provide training opportunities to enhance staff knowledge of job-specific skills to improve performance in current roles and focus on developing skills for employee growth and increase operational reliability
Continue to support the Diversity and Inclusion Program	<ul style="list-style-type: none">• Make improvements in service excellence, achieving a diverse workforce and providing an inclusive environment

WASTEWATER TREATMENT

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$1,653,858	\$1,533,682		\$1,583,142		\$1,667,124	
Taxes and Benefits	<u>655,530</u>	<u>578,016</u>		<u>597,506</u>		<u>624,165</u>	
Total Personnel Costs	2,309,388	2,111,698	-9%	2,180,648	3%	2,291,289	5%
Other Operating Expense							
Materials and Supplies	228,396	270,964		270,952		300,123	
Chemicals	728,095	910,608		910,608		1,213,821	
Utilities	616,140	750,034		701,450		670,218	
Maintenance	997,831	1,248,920		1,281,310		1,281,120	
Professional Services	83,800	88,681		90,418		94,263	
Communication	960	740		524		740	
Printing and Reproduction	0	0		0		0	
Education and Development	4,853	47,075		47,075		56,075	
Other	<u>103,249</u>	<u>91,350</u>		<u>96,028</u>		<u>110,225</u>	
Total Operating Expenditures	2,763,324	3,408,372	23%	3,398,365	0%	3,726,585	10%
Total Expenditures	<u>5,072,712</u>	<u>5,520,070</u>	9%	<u>5,579,013</u>	1%	<u>6,017,874</u>	8%
Construction Credits	0	0		0		0	
Net Expense	<u>\$5,072,712</u>	<u>\$5,520,070</u>	9%	<u>\$5,579,013</u>	1%	<u>\$6,017,874</u>	8%

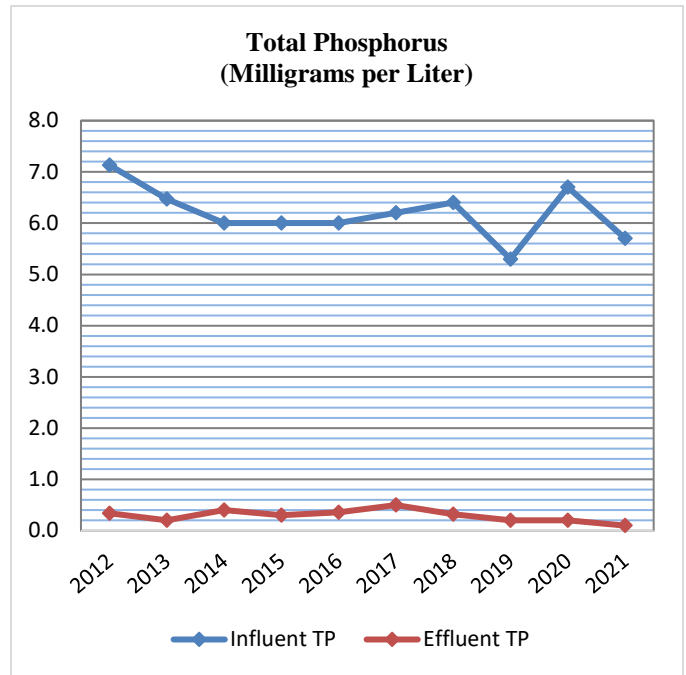
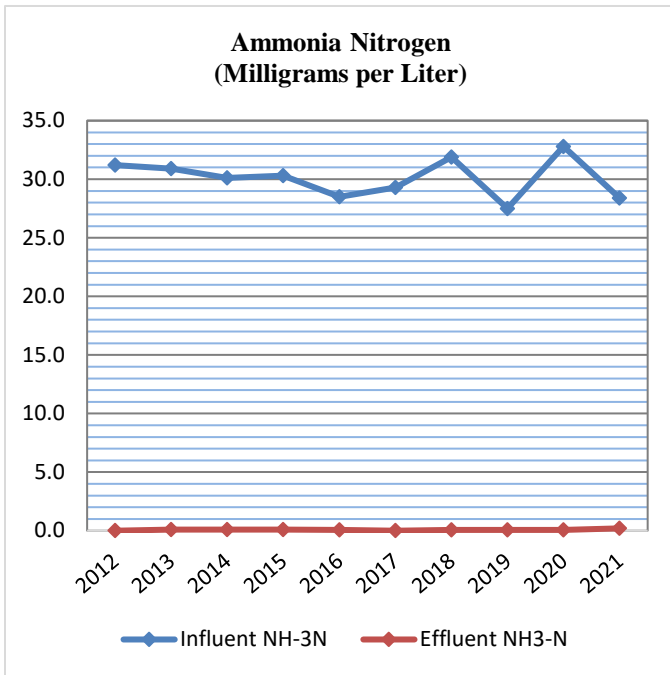
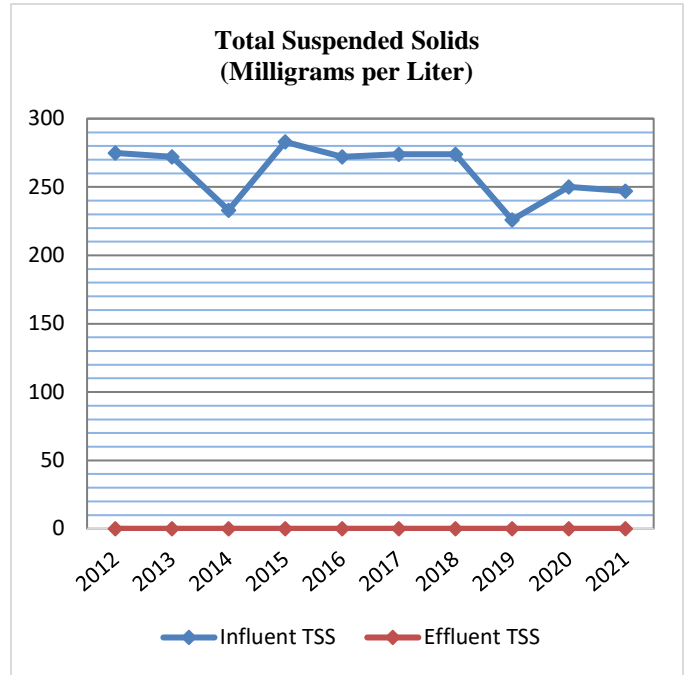
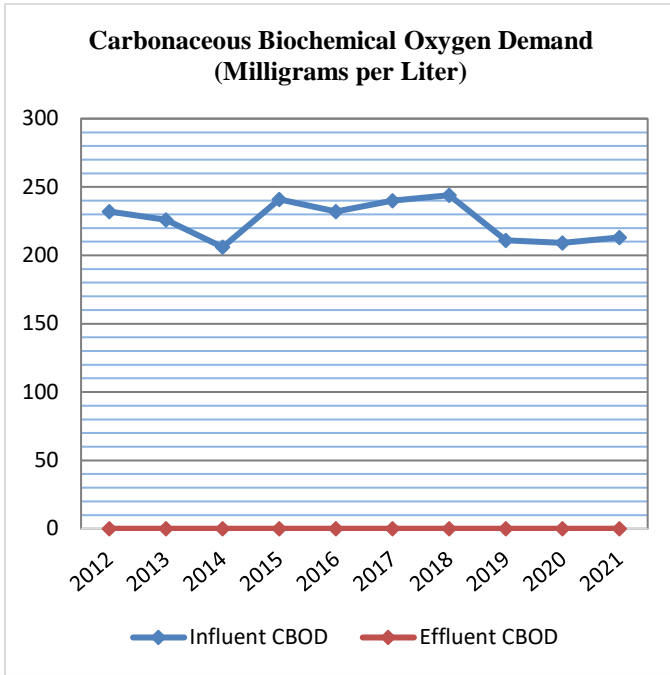
Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	23	23	23

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Workload				
Number of gallons of wastewater treated	N/A	2.7B	2.7B	2.6B
Effectiveness				
Events of permit noncompliance	0	0	0	0
Wastewater overflows	0	1	1	1
Odor events	0	1	0	1

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 64.



WASTEWATER COLLECTION

(Operating)

MISSION

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

SUMMARY OF ACTIVITIES

- Provide 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 wastewater collections system.
- Regularly mow and clear easements and clean wastewater mains.
- Maintain a computerized maintenance management program for the Department's operation.
- Ensure proper employee training and development in new methods of maintaining wastewater 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 fats, oils and grease monitoring program.

KEY FOCUS AREAS FOR FY 2023

Strategic Initiative	Objective
Promote education and training	<ul style="list-style-type: none">• Ensure proper employee training and development in new methods of maintenance of water lines and use of related equipment• Implement and promote hands on training for trenching, excavation, and confined space
Reduce Sanitary Sewer Overflows	<ul style="list-style-type: none">• Perform preventative maintenance: sewer cleaning, CCTV inspections, and upgrade system through point repairs and push patching• Improve and update root treatment program to focus on problem areas and maintain warranty
Easements and Encroachments	<ul style="list-style-type: none">• Maintain and inspect easements and outfalls• Inspect manholes and aerial crossing infrastructure• Monitor and address easement encroachment issues in effort to minimize encroachments
Improve performance in cleaning and video inspections.	<ul style="list-style-type: none">• Video-inspect at least ten miles of wastewater lines• Clean at least 20% of wastewater system
Fats, oils and grease (FOG) Program	<ul style="list-style-type: none">• Inspect, maintain, and enforce grease interceptors throughout the collection system• Maintain and expand compliance tracking
Support the Diversity and Inclusion Program	<ul style="list-style-type: none">• Make improvements in service excellence, achieving a diverse workforce and providing an inclusive environment

WASTEWATER COLLECTION

**Three-year Comparison
Fiscal Years 2021 - 2023**

	FY 2021 Actual	FY 2022 Budget	FY22 Budget to FY21 Actual	FY 2022 Forecast	FY22 Forecast to FY22 Budget	FY 2023 Budget	FY23 Budget to FY22 Forecast
Personnel Costs							
Salaries and Wages	\$542,546	\$571,068		\$530,036		\$587,548	
Taxes and Benefits	<u>232,886</u>	<u>264,341</u>		<u>249,793</u>		<u>286,536</u>	
Total Personnel Costs	775,432	835,409	8%	779,829	-7%	874,084	12%
Other Operating Expense							
Materials and Supplies	26,101	63,153		48,486		68,055	
Chemicals	231,302	230,000		230,939		230,000	
Utilities	107,897	143,861		124,270		136,745	
Maintenance	157,205	249,164		249,373		198,000	
Professional Services	7,903	6,404		5,706		6,404	
Communication	148	500		510		500	
Printing and Reproduction	0	2,000		1,000		1,500	
Education and Development	9,302	10,800		8,287		13,800	
Other	<u>2,633</u>	<u>6,000</u>		<u>2,672</u>		<u>6,000</u>	
Total Operating Expenditures	542,491	711,882	31%	671,243	-6%	661,004	-2%
Total Expenditures	<u>1,317,923</u>	<u>1,547,291</u>	17%	<u>1,451,072</u>	-6%	<u>1,535,088</u>	6%
Construction Credits	(34,379)	0		(4,646)		0	
Net Expense	<u>\$1,283,544</u>	<u>\$1,547,291</u>	21%	<u>\$1,446,426</u>	-7%	<u>\$1,535,088</u>	6%

Personnel Summary			
	FY 2021	FY 2022	FY 2023
Positions funded	11	11	12

Key Performance Measurements				
	Goal	FY 2020	FY 2021	FY 2022
Workload				
Miles of gravity wastewater collection piping maintained	N/A	349	349	349
Effectiveness				
Number of reportable wastewater overflows	0	4	4	11
Total number of reportable overflows per 100 miles of wastewater pipe	0.0	1.2	0.9	2.0

Section III

SUPPLEMENTAL INFORMATION

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**Resolution Adopting the Annual Budget For
Orange Water and Sewer Authority (OWASA) for the Fiscal Year
July 1, 2022 Through June 30, 2023**

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

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; and

Whereas, during the preparation of the Fiscal Year (FY) 2023 Budget, and after holding public hearings on May 12, 2022, concerning the FY 2023 Budget, the Board of Directors determined that it is necessary to increase the rates OWASA charges for monthly water and sewer services by 16% in order to provide sufficient revenues to fund ongoing operations, debt service and the Capital Improvements Program; and;

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 for the Fiscal Year beginning July 1, 2022 through June 30, 2023.

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.

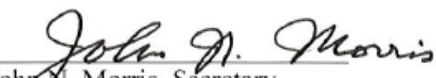
3. That the Executive Director shall administer the budget and is hereby authorized to expend the funds for the purposes set forth therein.

Adopted this 9th day of June 2022.



Jo Leslie Eimers, Chair

ATTEST:



John N. Morris, Secretary

BUDGET RESOLUTION AND ORDINANCE

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

	FY 2023
	<u>Annual Budget</u>
Operating Revenue	
Water	\$20,206,147
Sewer	20,776,916
Reclaimed Water	465,390
Service Initiation Fee	16,510
Other	764,215
Refunds and Adjustments	<u>(107,101)</u>
Total Operating Revenue	\$42,122,077
Operating Expense	
General and Administrative	9,219,707
Operations	<u>17,206,487</u>
Total Operating Expense	<u>26,426,194</u>
Net Operating Income	15,695,883
Non-operating Revenue	
System Development Fees	1,351,674
Interest	<u>3,085</u>
Total Net Income	<u><u>\$17,050,642</u></u>
Debt Service	
Existing	9,010,243
New	<u>1,439,797</u>
Total Debt Service	<u>10,450,040</u>
Net Income Less Debt Service	<u><u>\$6,600,602</u></u>
Debt Coverage Ratio	1.63

BUDGET RESOLUTION AND ORDINANCE

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

		<u>FY 2023 Annual Budget</u>
General Fund		
Resources		
Transfer From Revenue	<u>\$6,600,602</u>	
Annual Income Available for Capital		6,600,602
Transfer from Construction Fund (Bond Proceeds)		<u>15,329,398</u>
Total Available for Capital		<u>21,930,000</u>
Capital Expenditures		
Project ordinances		
General Fund Contribution	6,600,602	
Funded by Bond Proceeds	<u>15,329,398</u>	
Total Project Resolutions		21,930,000
Capital Equipment		<u>1,315,374</u>
Total Capital Outlay		<u>23,245,374</u>
Annual General Fund Balance		(1,315,374)
General Fund Beginning Balance		<u>25,085,587</u>
General Fund Ending Balance		23,770,213
Project Funding	872,964	
Reserves		
Rate/Revenue Stabilization	2,047,049	
Capital Improvements	5,600,000	
Working Capital	<u>15,250,200</u>	<u>23,770,213</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, 2022			-
Receipts			
Operating Revenue			
Customer Billings	20,206,147	20,776,916	40,983,063
Reclaimed Water	465,390	-	465,390
Service Initiation Fee	8,255	8,255	16,510
Other	382,108	382,107	764,215
Refunds and Adjustments	(53,551)	(53,550)	(107,101)
Total Operating Revenue	21,008,349	21,113,728	42,122,077
Non-operating Revenue			
System Development Fees	564,727	786,947	1,351,674
Interest Income	1,543	1,542	3,085
Total Non-operating Revenue	566,270	788,489	1,354,759
Total Receipts	21,574,619	21,902,217	43,476,836
Expenditures			
Current Expense	(14,201,998)	(12,224,196)	(26,426,194)
Debt Service	(5,103,980)	(5,346,060)	(10,450,040)
Total Expenditures	(19,305,978)	(17,570,256)	(36,876,234)
Net Revenue			6,600,602
To General Fund			(6,600,602)
Fund Balance June 30, 2023			-
Change in Available Balance			-

BUDGET RESOLUTION AND ORDINANCE

BOND SERVICE FUND

Fund Balance July 1, 2022		-
Receipts		
Transfers from Revenue Fund	10,450,040	
Interest	<u> </u>	
Total Receipts		10,450,040
Expenditures		
Debt Service	<u>10,450,040</u>	
Total Expenditures		<u>(10,450,040)</u>
Fund Balance June 30, 2023		<u>-</u>
Change in Available Balance		<u><u>-</u></u>

BUDGET RESOLUTION AND ORDINANCE

GENERAL FUND

Fund Balance July 1, 2022		\$25,085,587
Receipts		
Transfer from Revenue fund	6,600,602	
Transfer from Construction Fund (Loan Proceeds)	15,329,398	
Interest	-	
Assessments	-	
Grants and contributions	-	
	<hr/>	
Total Receipts		<hr/> 21,930,000
Total Balance Before Expenditures		47,015,587
Expenditures		
Capital Equipment/Leases	1,315,374	
Project Resolutions	21,930,000	
Transfer to Revenue Fund	0	
	<hr/>	
Total Expenditures		<hr/> (23,245,374)
Fund Balance June 30, 2023		<hr/> <hr/> \$23,770,213
Allocation of Fund Balance June 30, 2023		
Project Funding	872,964	
Capital Reserves	22,897,249	
	<hr/>	
Total Allocation		<hr/> <hr/> \$23,770,213
Unallocated General Fund Balance June 30, 2023		<hr/> -
Change in Available Balance		<hr/> <hr/> (\$1,315,374)

PERSONNEL AUTHORIZATIONS BY DEPARTMENT

Office of the Executive Director	FY 2021	FY 2022	FY 2023
Executive Director	1	1	1
General Manager of Operations	1	1	1
Strategic Initiatives Manager	1	1	1
Executive Assistant	1	1	1
Public Affairs Administrator	0	0	0
Communications and Community Relations Officer	1	1	1
Administrative Assistant	2	2	2
Communications Specialist	1	1	1
Totals	7	7	7

Customer Service

Customer Service Manager	1	1	1
Billing Supervisor	1	1	1
Senior Customer Service Representative	1	1	1
Customer Service Representative	5	5	5
Clerk/Cashier	0	0	0
Administrative Assistant/Reception	1	1	1
Totals	9	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	4	4	4
Geographic Information Systems Coordinator	1	1	1
Construction Inspector	2	2	2
Engineering Associate	2	2	3
Engineering Technician	2	2	2
Asset Management and Facilities Engineer	1	1	1
Totals	16	16	17

Human Resources

Director of Human Resources and Safety	1	1	1
Safety and Risk Manager	1	1	1
Human Resources Generalist	1	1	1
Diversity and Inclusion Specialist	0	0	1
Administrative Assistant	1	1	1
Totals	4	4	5

PERSONNEL AUTHORIZATIONS BY DEPARTMENT

Finance	FY 2021	FY 2022	FY 2023
Director of Finance and Customer Service	1	1	1
Finance and Procurement Manager	1	1	1
Financial Analyst	1	1	1
Accounting Technician II	2	2	2
Totals	5	5	5
Information Technology			
Director of Information Technology	1	1	1
Network/Database Administrator	2	2	2
Business Systems Analyst	1	1	1
Supervisory Control and Data Acquisition Manager	0	0	1
Information Services Technical Specialist	1	1	1
Totals	5	5	6
Water Supply and Treatment			
Water Supply and Treatment Manager	1	1	1
Operations Supervisor	1	1	1
Treatment Plant Operator	8	8	8
Lake Warden	1	1	1
Senior Lake Warden	0	0	0
Reservoir and Land Resources Supervisor	1	1	1
Assistant Lake Warden	2	2	2
Maintenance Supervisor	1	1	1
Senior Maintenance Mechanic	1	1	1
Maintenance Coordinator	1	1	1
Maintenance Mechanic	4	4	4
Laboratory Supervisor	1	1	1
Laboratory Analyst	3	3	3
Administrative Assistant	0	0	0
Totals	25	25	25
Water Distribution			
Distribution and Collection Systems Manager	1	1	1
Assistant Distribution and Collection System Manager	1	1	1
Crew Leader	4	4	4
Utility Mechanic I/II/III	25	25	25
Vehicle and Equipment Maintenance Mechanic	2	2	2
Administrative Assistant	0	0	0
Distribution and Collection System Coordinator	1	1	1
Warehouse-Cross Connection Coordinator	1	1	1
Totals	35	35	35

PERSONNEL AUTHORIZATIONS BY DEPARTMENT

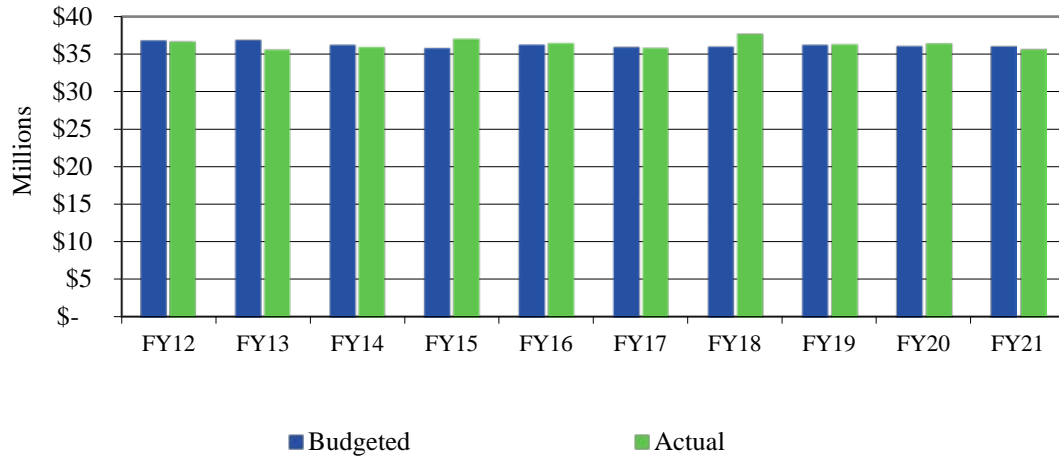
Wastewater Treatment	FY 2021	FY 2022	FY 2023
Wastewater Treatment and Biosolids Recycling Manager	1	1	1
Operations Supervisor	1	1	1
Treatment Plant Operator	8	8	8
Solids Handling Supervisor	1	1	1
Solids Handler	3	3	3
Maintenance Supervisor	1	1	1
Senior Maintenance Mechanic	4	4	4
Laboratory Supervisor	1	1	1
Laboratory Analyst	3	3	3
Administrative Assistant	0	0	0
Totals	23	23	23
Wastewater Collection			
Crew Leader	2	2	2
Utility Mechanic I/II/III	11	11	11
Totals	13	13	13
Total Positions	<u>139</u>	<u>142</u>	<u>145</u>

For FY 2023, the following personnel additions have been made:

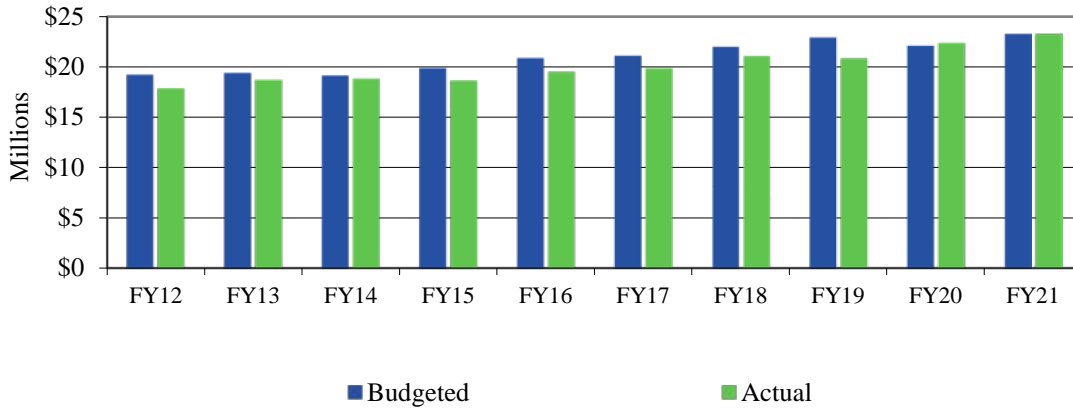
- Engineering Associate - Current demand for plan review and surveying services exceeds available resources. This new position will help ensure service quality to the development community will continue.
- SCADA Coordinator - A supervisory control and data acquisition (SCADA) master plan identified numerous improvements for the system and this position will help us achieve our goals.
- Diversity and Inclusion Coordinator – This position will help us continue progress towards meeting our diversity and inclusion goals.

10-YEAR HISTORICAL PERFORMANCE

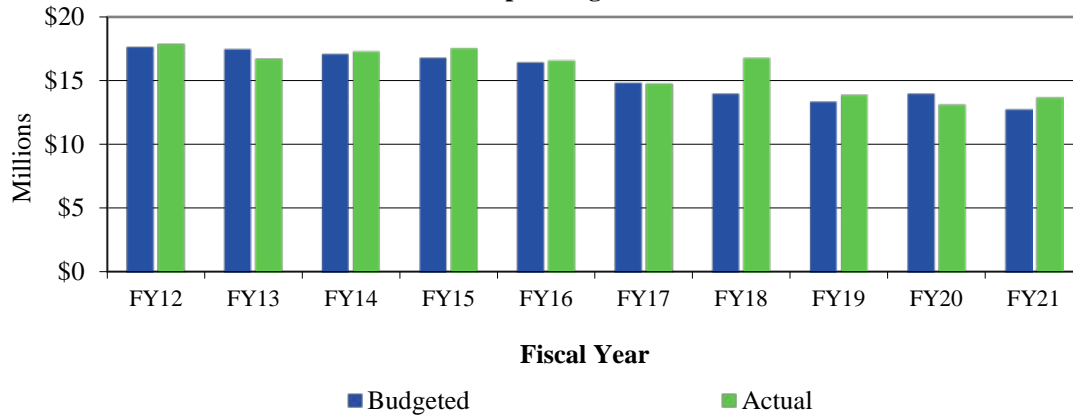
10-Year Operating Revenue Variance



10-Year Operating Expense Variance



10-Year Net Operating Income Variance

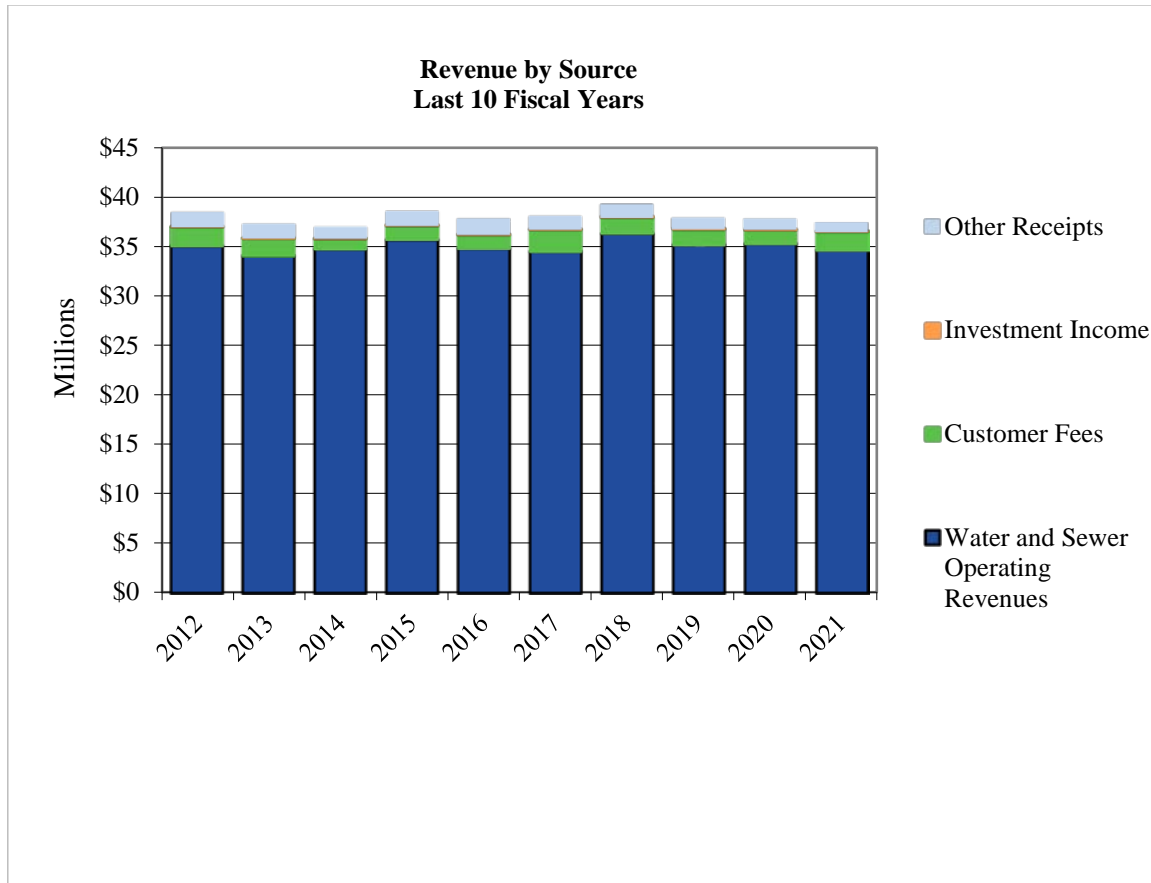


10-YEAR HISTORICAL PERFORMANCE

ORANGE WATER AND SEWER AUTHORITY

**Revenues by Source
Last 10 Fiscal Years**

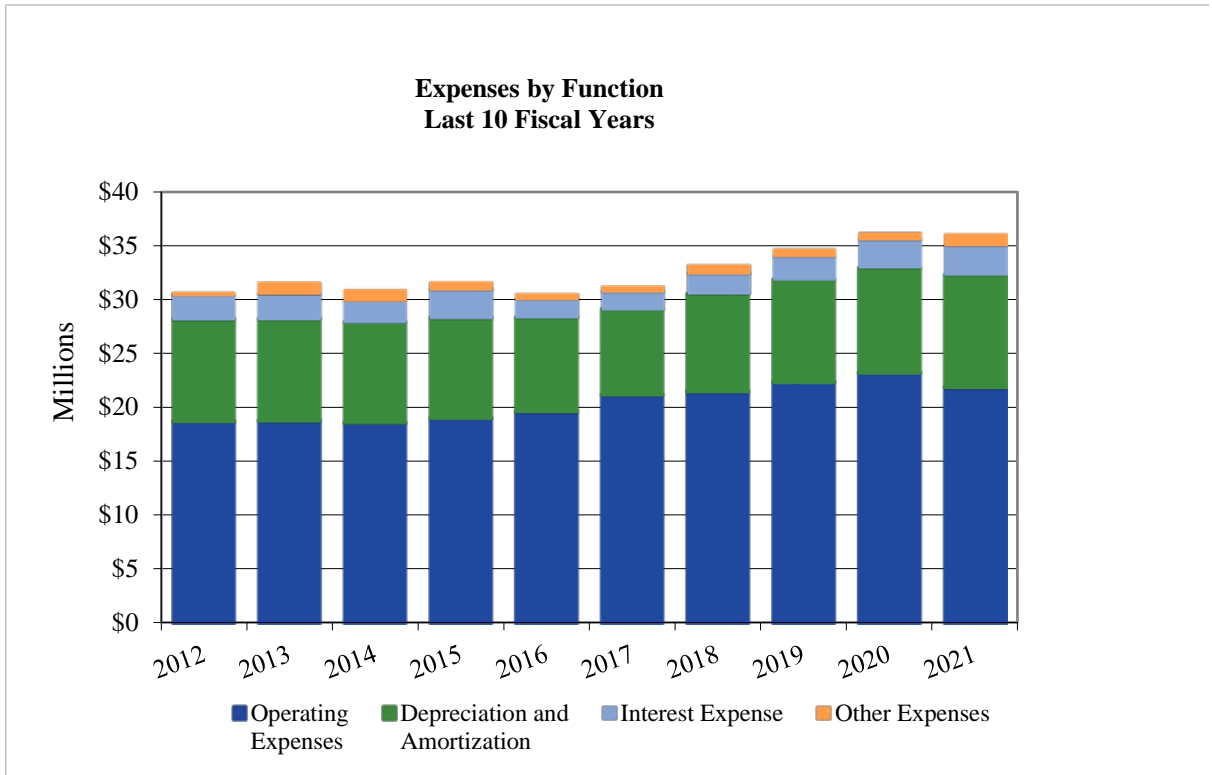
Fiscal Year	Water and Sewer Operating Revenues	System Development Fees	Investment Income	Other Receipts	Total
2012	35,107,350	1,899,056	17,964	1,381,799	38,406,169
2013	34,133,521	1,769,883	15,664	1,324,092	37,243,160
2014	34,789,219	1,069,551	14,756	1,076,285	36,949,811
2015	35,705,629	1,429,242	15,133	1,351,139	38,501,143
2016	34,852,086	1,397,652	20,663	1,517,284	37,787,685
2017	34,532,508	2,219,227	32,802	1,207,886	37,992,423
2018	36,323,113	1,599,382	56,524	1,220,130	39,199,149
2019	35,181,219	1,593,210	64,842	1,004,621	37,843,892
2020	35,323,134	1,393,871	63,207	983,060	37,763,272
2021	34,683,028	1,860,926	1,291	831,793	37,377,038



10-YEAR HISTORICAL PERFORMANCE

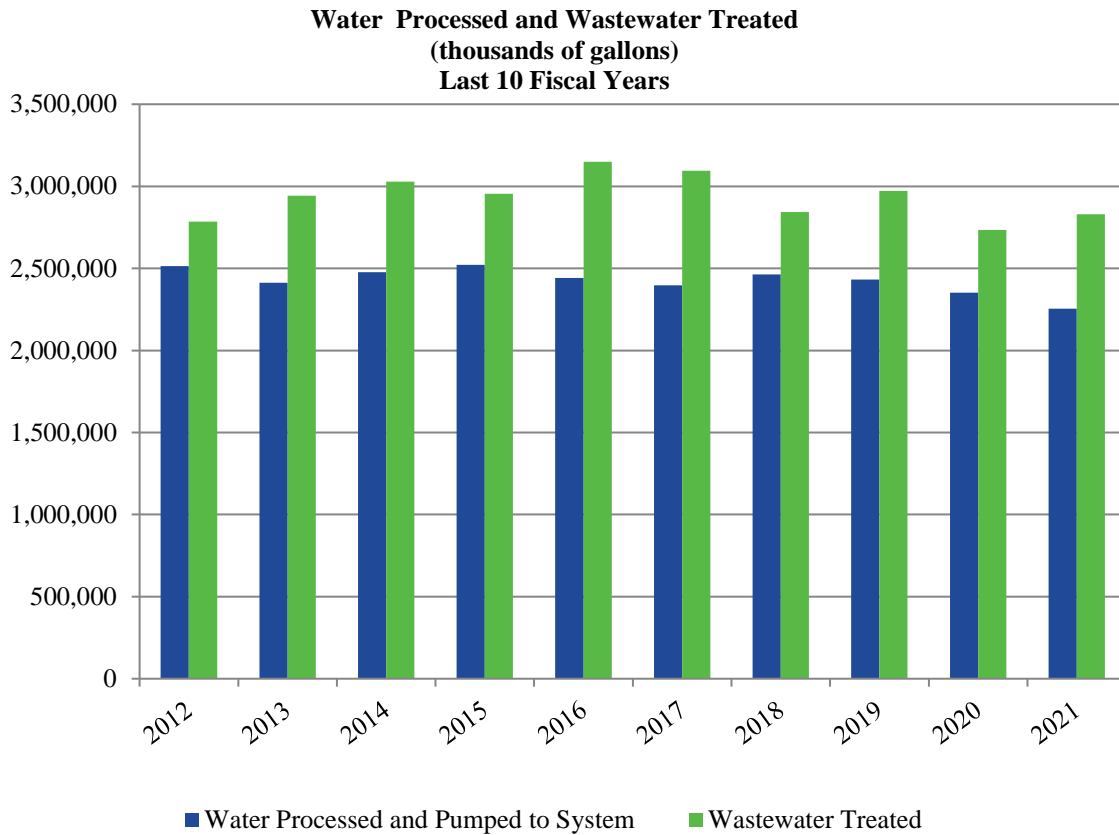
**ORANGE WATER AND SEWER AUTHORITY
Expenses by Function
Last 10 Fiscal Years**

Fiscal Year	Operating Expenses	Depreciation and Amortization	Interest Expense	Other Expenses	Total
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
2016	19,624,902	8,798,343	1,729,871	466,573	30,619,689
2017	21,173,235	7,994,438	1,668,138	493,193	31,329,004
2018	21,485,454	9,123,415	1,863,061	765,944	33,237,874
2019	22,339,711	9,558,087	2,161,022	613,772	34,672,592
2020	23,208,744	9,780,753	2,565,779	602,645	36,157,921
2021	21,858,958	10,476,244	2,708,475	986,707	36,030,384



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
2012	2,513,230	2,784,486
2013	2,412,966	2,942,331
2014	2,476,834	3,027,879
2015	2,522,099	2,954,345
2016	2,440,937	3,149,225
2017	2,397,093	3,094,963
2018	2,463,021	2,843,422
2019	2,432,215	2,971,517
2020	2,352,007	2,734,725
2021	2,254,895	2,830,202



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)			
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
2016	8.6	232	272	28.5	6.0	<2.0	<2.5	0.1	0.4
2017	8.5	240	274	29.3	6.2	<2.0	<2.5	0.0	0.5
2018	7.8	244	274	31.9	6.4	<2.0	<2.5	0.1	0.3
2019	8.2	211	226	27.5	5.3	<2.0	<2.5	0.1	0.2
2020	7.5	209	250	32.8	6.7	<2.0	<2.5	0.1	0.2
2021	7.8	213	247	28.4	5.7	<2.0	<2.5	0.2	0.1

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 43.

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		Collections in Subsequent Years	Total Collections to Date		Outstanding Delinquent Taxes
		Amount	Percentage of Original Levy		Amount	Percentage of Adjusted Levy	
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
2016	39,789,825	39,638,269	99.62%	-	39,638,269	99.62%	151,556
2017	39,471,449	39,314,757	99.60%	-	39,314,757	99.60%	156,692
2018	40,816,019	40,679,175	99.66%	-	40,679,175	99.66%	136,844
2019	43,418,983	43,206,984	99.51%	-	43,206,984	99.51%	211,999
2020	45,060,958	44,871,448	99.58%	-	44,871,448	99.58%	189,510
2021	46,050,771	45,882,304	99.63%	-	45,882,304	99.63%	168,467

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)
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%
2016	*	*	6,913,283,131	541,047,846	85,443,691	7,539,774,668	0.524	7,599,047,236	99.22%
2017	*	*	6,902,832,865	546,117,755	83,768,622	7,532,719,242	0.524	7,532,719,242	100.00%
2018 (1)	*	*	7,399,771,971	550,409,864	84,467,574	8,034,649,409	0.508	8,062,060,414	99.66%
2019	*	*	7,529,444,369	613,170,831	80,677,065	8,223,292,265	0.528	8,263,784,811	99.51%
2020	*	*	7,601,209,365	598,051,765	84,003,208	8,283,264,338	0.544	8,318,200,781	99.58%
2021	*	*	7,805,662,760	576,246,878	83,305,619	8,465,215,257	0.544	8,496,652,873	99.63%

* 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) Per \$100 of value. Includes taxes for general fund, debt service fund, and transit fund.
- (4) 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.
- (5) 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)
2012	57,757	6,268,886	46,713	25.6	15.82	41,059	5.6
2013	58,424	6,608,945	48,683	25.6	15.82	41,402	5.6
2014	59,271	7,131,776	51,702	25.3	15.82	41,242	4.4
2015	59,653	7,345,876	52,339	25.3	15.82	41,176	4.9
2016	59,753	7,440,708	52,989	25.8	15.82	41,490	5.2
2017	59,569	7,822,299	55,338	25.7	15.82	41,199	4.9
2018	59,903	8,286,315	58,438	26.2	15.82	42,038	4.3
2019	63,178	9,015,914	62,202	26.4	15.82	42,138	3.9
2020	64,051	9,840,004	67,385	26.2	15.82	42,295	4.5
2021	63,634	9,678,411	65,185	25.8	15.82	41,824	4.5

- (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 operating 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 Operating 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 Care to Share 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 (operating 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.
Operating Budget Review	February/March	The operating budget provides funding for properly operating and maintaining OWASA's services and programs. The Finance Committee and Board will review the draft operating budget to include cost containment and / or efficiency opportunities that may impact the operating and CIP budgets.
Financial Planning and Rate Review	April	Upon completion of CIP and operating 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 operating budget; CIP budget; and proposed rates, fees and charges for the coming year.
Adopt Budgets and Rates	June	The OWASA Board shall adopt the operating 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.

DEPRECIATION – The allocation of the cost of a tangible asset over its useful life.

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.

EXPENSE – Costs that occur as part of the organization's operating activities during a specified accounting period.

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 number 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).

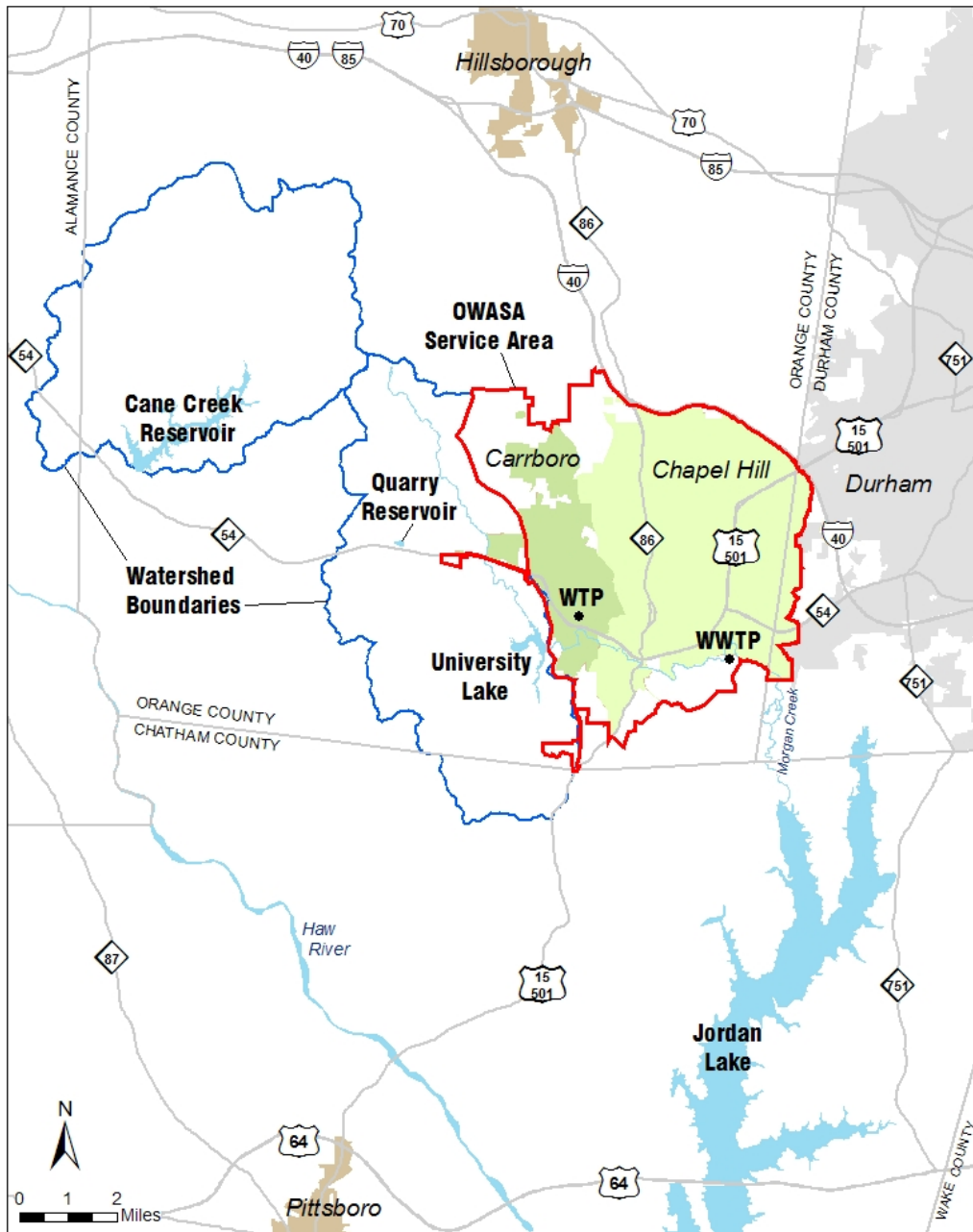
REVENUE BONDS – The primary method used by OWASA for long-term debt; they are repaid from user fees over the life of the assets. In general, these bonds have no claim on money derived from property taxes or special assessments.

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.

WORKING CAPITAL – The ratio of current assets to current liabilities. A measure of an organization's efficiency and short-term financial health.



ORANGE WATER AND SEWER AUTHORITY

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