



Strategic Plan

Orange Water and Sewer Authority
Carrboro, North Carolina



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

Adopted June 9, 2016



Our Mission

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

Our Vision

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

Our Values

◆ Quality Drinking Water

We provide high quality drinking water through effective management and operation of our water supply, treatment, and distribution system.

◆ Environmental Responsibility

We protect the environment through effective management and operation of our wastewater collection, treatment, water reuse, and resource recovery systems. We manage our resources in an environmentally responsible manner.

◆ Excellence in Serving Customers

We provide excellent service to our customers. We are leaders in engaging our customers and stakeholders and provide them meaningful opportunities to participate in decisions that are important to them.

◆ Employees

We value our employees as our most important resource and we provide them competitive compensation and a safe and rewarding work environment which promotes diversity and equal opportunity for all.

◆ Affordability and Value

We provide affordable and high-value services and we are committed to continuous improvement.

◆ Sustainability

We embrace the principles of environmental, social, and economic sustainability. We strive to make the highest and best use of our local water resources and to promote conservation of water, energy, and other natural resources.

◆ Support for the Communities We Serve

We provide services consistent with the growth management and land use plans of the Town of Carrboro, the Town of Chapel Hill, and Orange County. We maintain open and positive communications with our governments and neighboring water utilities and cooperate in regional initiatives where appropriate and consistent with OWASA's commitment to our member governments.

◆ Innovation and Creativity

We seek innovation and creativity in accomplishing our mission and enhancing our services.

Introduction

OWASA's Strategic Plan (Plan) identifies the strategic initiatives and corresponding actions we will take to address the key themes and opportunities we believe are important for the Carrboro-Chapel Hill community we serve.

The Plan was originally adopted by the OWASA Board of Directors (Board) on March 13, 2014 following a public engagement process to solicit and carefully consider feedback from customers and stakeholders.

On April 14, 2016, the Board agreed to consider a staff proposed update to the Plan in light of new information to include feedback from the 2015 Customer Survey.

The Board discussed staff's proposed update to the Plan at its May 26, 2016 meeting and formally adopted the revised Plan at its June 9, 2016 meeting.

Strategic Themes

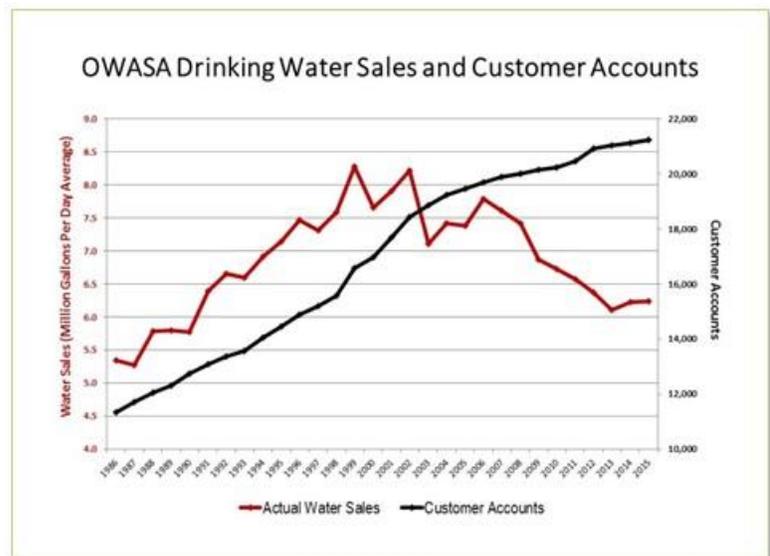
An early task in our planning process was to identify the key strategic themes we want addressed by future strategic initiatives. Our Strategic Themes are:

- ✓ Affordability and Cost Management
- ✓ Environmental Stewardship and Conservation
- ✓ Role in the Community
- ✓ Infrastructure Sustainability and Resource Management
- ✓ Technology

A summary of the current status, challenges, and opportunities for continuous improvement regarding each Strategic Theme is provided.

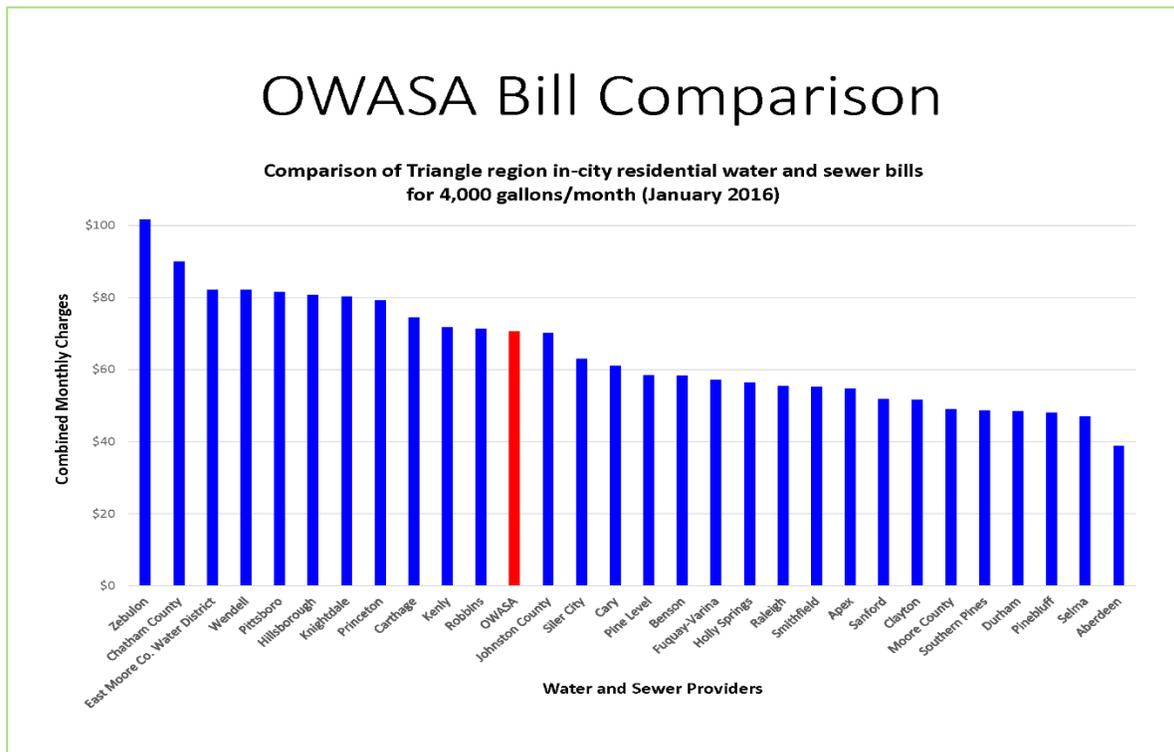
Affordability and Cost Management

Management – Together, OWASA and our customers have reduced drinking water sales by about 24 percent since 2002, despite a 16 percent increase in the number of customer accounts over the same period. As a result of this significant reduction in drinking water demand by our customers, we are especially well-positioned to reliably and cost-effectively meet the near and long-term drinking water needs of our community for the next 50 years under most circumstances.



The large reduction in water sales over the past decade or so, coupled with the need to replace, renew and improve aging water and wastewater facilities, required substantial rate increases. As a result, many of our customers have told us that our rates are high. Policy, planning and decision-making at all levels of the organization reflect our commitment to operate our utility at the lowest rates consistent with our responsibility to provide proper and efficient services, now and in the future. We are very pleased that due to efficiency and cost control actions, the Board has approved five consecutive annual budgets without an increase in monthly rates.

From our 2012 and 2015 customer surveys, we understand that there is growing interest among our conservation-minded customers in being billed in smaller increments than the current 1,000 gallons, and we are actively considering this possibility.



How OWASA's monthly water and sewer bills for individually-metered residences compare to others in the region.

Environmental Stewardship and Conservation – OWASA is a community-owned utility that embodies our community's commitment to environmental protection and sustainable management of our natural resources. We protect the environment through effective management and operation of our wastewater collection system, treatment, water reuse and resource recovery systems at our Mason Farm Wastewater Treatment Plant (WWTP). Since



OWASA Operator checks RCW Pumps at the WWTP

2009, OWASA has provided the University of North Carolina at Chapel Hill (University) highly treated reclaimed water (RCW) instead of drinking water to meet certain non-drinking water demands on campus (cooling tower water at chilled water plants, irrigation of landscaping and athletic fields, toilet flushing in new facilities, etc.). RCW is the clean water produced from the advanced treatment of wastewater at OWASA's WWTP. Water conservation by all customers and the University's continued use of RCW are key strategies to sustain an adequate water

supply. Partnerships with local governments and other communities are significant factors in fulfilling our responsibilities.

We use a significant amount of energy to operate our utility, and we are aware of the important relationships between water consumption, energy consumption, and greenhouse gas (GHG) emissions. We are committed to seeking cost-effective and practical ways to reduce our use of energy and use renewable energy sources in order to reduce our energy costs and lower our GHG emissions. In September 2014, work was completed to install more energy efficient treatment equipment, which helped to reduce electricity use at the WWTP by about 35 percent.

Role in the Community – Engaging the community (customers and other stakeholders) is strategically important to accomplishing our mission. We will continue to engage stakeholders to understand their perceptions and expectations so that we maintain their trust and make well-informed decisions about our services. We want to empower our stakeholders with information so they continue to use our water wisely and protect water quality through the proper use of our wastewater system.

We believe it is very important to assist our customers with water conservation information to help them reduce their water consumption to lower their bills.

Infrastructure Sustainability and Resource Management – OWASA is responsible for large and complex systems of infrastructure, assets and resources including over 800 miles of pipe, three reservoirs, two treatment plants and support systems and equipment, along with land holdings in excess of 3,700 acres. Over the last decade, we invested about \$118 million to renew or replace aging infrastructure and to improve the quality and reliability of our services. Our continuing challenge is to develop, operate, maintain, and manage our infrastructure and resources to meet current and future customers’ demands for high quality, reliable, and cost-effective services under a range of future conditions – including natural and man-made disasters – while protecting the environment, meeting or surpassing all regulatory requirements, and making efficient use of our natural resources. To meet this challenge, we apply asset management best practices and implement solutions that appropriately balance our triple bottom line of environmental, social, and economic performance.



OWASA Employees replacing old water line

Our 3,700 acres of land help protect our watersheds and support other parts of our operations. We manage our landholdings to ensure they meet our long-term goals and objectives. In 2010 and 2014, we implemented a Forest Management Plan for our 490-acre Cane Creek Mitigation Tract in accordance with federal requirements for the Cane Creek Reservoir. We need to develop a plan for sustainable management of our remaining forest lands. To ensure cost-effective management of our land assets, we will periodically evaluate the need for and benefit of alternative management strategies for those assets.

Technology – OWASA will continue to use cost-effective and proven technology to improve services and save our customers’ money. We will seek to incorporate best practices in all that we do – from construction technology, to water and wastewater treatment technologies, to information management and processing technologies.

For example, advancement in technology has made available Advanced Metering Infrastructure (AMI) systems that can be used to provide customers detailed information about their water use including apparent leaks. Procurement and implementation planning for AMI are underway in accord with action by the Board of Directors on March 24, 2016.

Strategic Initiatives

We identified six strategic initiatives with accompanying goals, actions, and measures of success. We believe that these initiatives and actions address each of our strategic themes and will result in positive change.



Strategic Initiative 1

Provide reliable and high quality supply of water for the next 50 years

GOALS	ACTIONS	MEASURES OF SUCCESS
<p>Optimum mix of technically, environmentally, economically, and socially feasible water supply and demand management alternatives that meet projected demands and level-of-service objectives under a range of future conditions and uncertainties.</p>	<p>Update Long-Range Water Supply Plan to include:</p> <ul style="list-style-type: none"> > desired level of service and water supply resiliency. > supply and demand projections to incorporate best information from land use /growth management plans, University plans, climate change impact information, etc. > evaluation of potential supply and demand management alternatives, including but not limited to: Jordan Lake as emergency supply; conservation and water use efficiency; expanded use of reclaimed water (including direct and indirect); quarry reservoir; etc. > preferred mix of supply and demand management alternatives required to meet level-of-service objectives. 	<p>Updated plan provides a clear and responsible path forward to ensure a reliable and high quality supply of water for the next 50 years that is supported by stakeholders.</p>
<p>Enhanced water supply reliability, reduced energy use, and reduced long-term life-cycle costs of water and sewer service through cost-effective water use efficiency (WUE), conservation, and RCW strategies.</p>	<p>Adopt Long-Range Water Supply Plan and begin implementation.</p> <p>Prepare Water Conservation Plan that includes a program to educate customers on the value and importance of water, best practices for reducing water use and monthly bills through conservation, WUE practices, and collaboration with Towns, County and others on conservation and WUE standards.</p>	<p>Adequate supply of high-quality water which meets customer needs for next 50 years across the range of assumptions and scenarios included in the Plan.</p> <p>Reduce residential water use by X% (currently 4,000 gallons/month for individually-metered single-family residential accounts). (Target to be established)</p> <p>Establish targets for other customer classes.</p>
<p>Maintain our Jordan Lake water supply allocation.</p>	<p>Application for Jordan Lake water supply allocation (Round 4) was submitted in November 2014.</p>	<p>Allocation request granted to OWASA by Environmental Management Commission (EMC). (Note: Latest information from NC Division of Water Resources indicates the EMC may make decisions in January 2017.)</p>
<p>New or amended water transfer agreements with Town of Cary and City of Durham for OWASA to access our Jordan Lake water supply allocation through those entities when needed.</p>	<p>Coordinate with staff from the Town of Cary and City of Durham to determine terms and conditions for ensuring cost-effective access to our Jordan Lake allocation.</p>	<p>Successful adoption of new or amended water transfer agreements for OWASA to reliably and cost-effectively access our Jordan Lake water supply allocation when needed.</p>



Strategic Initiative 2
Engage the Community

GOALS

Engage stakeholders to understand their perceptions and expectations so that we make well-informed decisions about our services and so that we maintain their trust; and empower stakeholders with information so they use water wisely and protect water quality through proper use of our wastewater system; and provide stakeholders with timely information about projects, programs, and policies that are important to them and offer them meaningful opportunities to give their feedback so that we can continue to improve.

ACTIONS

Prepare and implement Community Engagement Plans (CEPs) for all capital improvement projects and key initiatives.

MEASURES OF SUCCESS

Stakeholders trust OWASA to make informed decisions about our services.

Positive feedback from customers and stakeholders about effectiveness of engagement work.

Stakeholders have the information they need regarding projects, programs and policies and they have opportunities to provide feedback on matters of importance to them.



Strategic Initiative 3
Adopt financial management policies and budget decision processes to ensure affordable services and fiscal sustainability

GOALS

Financial reserve funds set at appropriate level.

Efficient process which provides opportunities for stakeholder input and allows the Board of Directors to make well-informed budget and rate decisions.

The right investments at the right time to sustain the community's essential water, wastewater and reclaimed water assets.

Rates, fees and charges that meet objectives.

ACTIONS

Review reserve policies during the annual budget development process to determine the desired level of reserve funds.

During the annual budget development process, review Capital Improvement Program (CIP) investment practices.

Comprehensive asset management report was completed in March 2016.

Evaluate possible rate structure changes for customer classes to include possible update to Service Availability Fees.

MEASURES OF SUCCESS

New or revised policies adopted, if appropriate.

New or revised CIP investment practices are adopted, if appropriate.

Service levels are part of the asset management program report.

A rate structure that fairly and fully recovers revenues, promotes water conservation, promotes affordability, and is understood by customers.



Strategic Initiative 4

Implement an Energy Management Program

GOALS	ACTIONS	MEASURES OF SUCCESS
<p>Cost-effective measures to reduce our use of energy, related energy costs, and associated greenhouse gas (GHG) emissions.</p>	<p>Develop an Energy Management Program that includes:</p> <ul style="list-style-type: none"> > Goals for energy reduction by 2030 against a 2010 baseline. > Ongoing assessment of energy use, costs, and GHGs. > Assessment of the energy performance of our equipment, operations, and buildings and identification of opportunities for energy savings and the associated return on investment. > Prioritized energy savings opportunities. > Implementation of selected energy management and energy efficiency projects as part of CIP and annual budget. > Evaluation and prioritization of potential renewable energy strategies. > Feedback from community stakeholders. 	<p>Program provides a clear and responsible path forward for effective energy management.</p> <p>Energy cost savings (costs avoided) achieved from energy management, energy efficiency measures and renewable energy measures. Amount of grants, rebates, incentives, etc. received to fund energy management efforts.</p> <p>Percent reduction in our GHGs compared to baseline year.</p>
	<p>Adopt Energy Management Plan and begin implementation of Energy Management Program.</p>	<p>Continued reduction in electricity use (kilowatt-hours) and natural gas use (therms).</p>



Strategic Initiative 5

Implement Advanced Metering Infrastructure

GOALS	ACTIONS	MEASURES OF SUCCESS
<p>Cost-effective, accurate, reliable and timely water metering information for enhanced customer service.</p>	<p>System procurement and implementation planning.</p> <p>Develop and implement Community Engagement Plan.</p>	<p>Procure a system within budget constraints that meets OWASA's needs.</p> <p>Develop implementation plans that will effectively mitigate risks identified in the AMI Feasibility Study and will fully inform and engage customers.</p>
	<p>System deployment.</p>	<p>Ensure the system delivers accurate, reliable and timely water use information for billing purposes.</p> <p>Processes are in place to ensure customers are provided accurate and timely information about their water use and prompt notifications about potential leaks.</p> <p>Reduce energy use and carbon footprint associated with meter reading and field service functions.</p> <p>Customer feedback on their experiences with the system installation, process changes, and use of the portal is mostly positive.</p>



Strategic Initiative 6

Develop a plan and policy framework for long-term management and disposition of OWASA lands

GOALS

Land assets provide the expected value to fulfill OWASA’s mission and the assets are effectively managed.

ACTIONS

Develop a long-term plan for sustainable management of OWASA forest lands (not including Cane Creek Mitigation Tract, which is already being managed). Management options range from “no active management” to comprehensive management that includes a variety of activities such as thinning, small seed tree cuts, small area clear-cuts, etc.

MEASURES OF SUCCESS

Forest lands are effectively managed to meet the goals provided in the Forest Stewardship Plan.

Evaluate land assets to determine if the asset is needed, what degree of ownership is needed, and if the asset should be sold.

Land assets provide expected value to meet OWASA’s current and future needs.

Administering Our Strategic Plan

We will provide regular updates on our progress towards achieving our Strategic Plan goals, including measures of success, which can be found on our [website](#). We welcome your questions or comments about our Strategic Plan or any of our services and programs. You may contact us by:

- Phone: 919-968-4421
- E-mail: info@owasa.org
- Fax: 919-968-4464
- Address: 400 Jones Ferry, Carrboro, NC 27510

There are other high priority tasks that we will address over the next couple of years that are not included in our Strategic Plan because they do not require strategic action at this time. However, these tasks may require action by the Board in the future.

1. Continue to increase community awareness of options to manage and reduce OWASA bills and empower low-income customers and the local agencies that serve them with information and tools to manage and reduce OWASA bills through the Affordability Outreach Program.
2. Evaluate alternative employee compensation strategies to encourage and reward high performance as part of a Total Compensation Study.
3. Develop and implement an Inclusion and Diversity Plan for the organization.

We provide an [Annual Review and Update of Strategic Trends and Utility Planning Issues](#) to the Board each October. This report will be modified as a companion document to this Strategic Plan for the Board's consideration in October 2016.

We will routinely update and amend our Strategic Plan as necessary, and we will keep our customers and stakeholders informed of significant changes.

Summary

As your community-owned water utility, we are committed to providing reliable, high quality water, wastewater and reclaimed water services for our customers, now and into the future. Our Strategic Plan is one of many tools we use to effectively manage our essential responsibilities to the Carrboro-Chapel Hill community. We will continue to work hard to provide excellent service so that if our customers could choose their water utility, they would always select OWASA.