OWASA

Strategic Plan 2025 Update







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FOREWARD

Dear OWASA Community,

In 2022, OWASA published its 2023-2027 strategic plan. The plan was the result of a long-term and comprehensive review of the opportunities and challenges we faced as an organization and community, and a collaborative approach of prioritizing how best to prepare for that future. And while some things have changed and some priorities have shifted, the need for strategic preparation for the future has not. It is now more important than ever to make sound investments in our long-term success.

It may not be obvious to everyone in the community, but the services that OWASA provides our community are highly regulated by the Environmental Protection Agency and N.C. Department of Environmental Quality. Based in scientific evidence and policy, those regulations can and do evolve to ensure that all utilities across the country are protecting public health and the environment to the best of our known ability. Over the past three years, we have seen some remarkable advancements in drinking water regulation: including updates to the Lead and Copper Rule and new limits for "forever chemicals", known as PFAS. Despite the effort or cost, meeting these new regulations is a given. However, we know that in order to continue to be our community's trusted partner for clean water and environmental protection, we must be thinking and acting beyond the baseline. Our strategic plan helps us do just that.

We are now halfway through the pursuit of that plan, and I am proud of the work that has been accomplished so far. OWASA is more competitive in recruiting and retaining a diverse, qualified, and dedicated Team in part due to significant work on two strategic initiatives: a pay and class update for all employees and a highly competitive engineering internship and operator apprenticeship program. Additionally, we are steadily increasing the reliability and resilience of our services by more effectively implementing our capital improvement program; improving the collection, use, and security of real-time data for our operations; and reducing the downtime of our critical infrastructure and equipment.

As we look ahead, I am excited to see significant progress on some of our more ambitious initiatives, such as providing more equitable services through a sustained water bill assistance program and the development of a climate and land use action plan.

Strategic initiatives are not implemented over night or even over the course of one fiscal year. By their very nature, they are complex and integrated efforts that require the input and partnership of multiple stakeholders. As the Executive Director of OWASA, I am grateful for a roadmap that I know the community, our stakeholders, our staff, and Board of Directors have come together to inform, support, and advance.

I celebrate the progress we have made and support the work ahead to continue to advance our strategic plan.

In partnership,
Todd Taylor

Mission, Vision, 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

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

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

ONE WATER

Water connects us: past, present, future. We take and integrate approach to our management of surface water, drinking water, wastewater, and reclaimed water. It is our responsibility to treat it well for downstream uses, while at the same time respecting upstream power.



Strategic Achievements

Strategic Priority: Employee Recruitment, Retention, and Development

Goal: Increase awareness of OWASA as a desirable workplace and improve visibility of our job opportunities

Initiative: Develop a recruitment strategy for entry-level and high-turnover positions

During the creation of the Strategic Plan, recruiting was noted as a challenge due to the labor market. OWASA has a dedicated team, filled with extremely talented staff members, who are our most valuable resource. Ensuring we develop and deploy effective recruitment strategies to attract a high volume of diverse and qualified applicants is extremely important. To support the original goal of increasing the number of applications for entry-level and high-turnover positions, three positions, Utility Technician I/II, Treatment Plant Operator, and Utilities Engineer, were identified as the focus due to the high turnover or frequent need to fill. However, improved recruitment efforts will positively impact the recruitment for all positions. To better reflect the breadth of our recruitment efforts, we updated the goal, which is to increase awareness and improve visibility of all opportunities.

We are continuing to explore technology, policy, events, and collaborations that will improve recognition of OWASA as a desirable workplace. Among these are novel strategies as well as revamped uses of previous strategies.

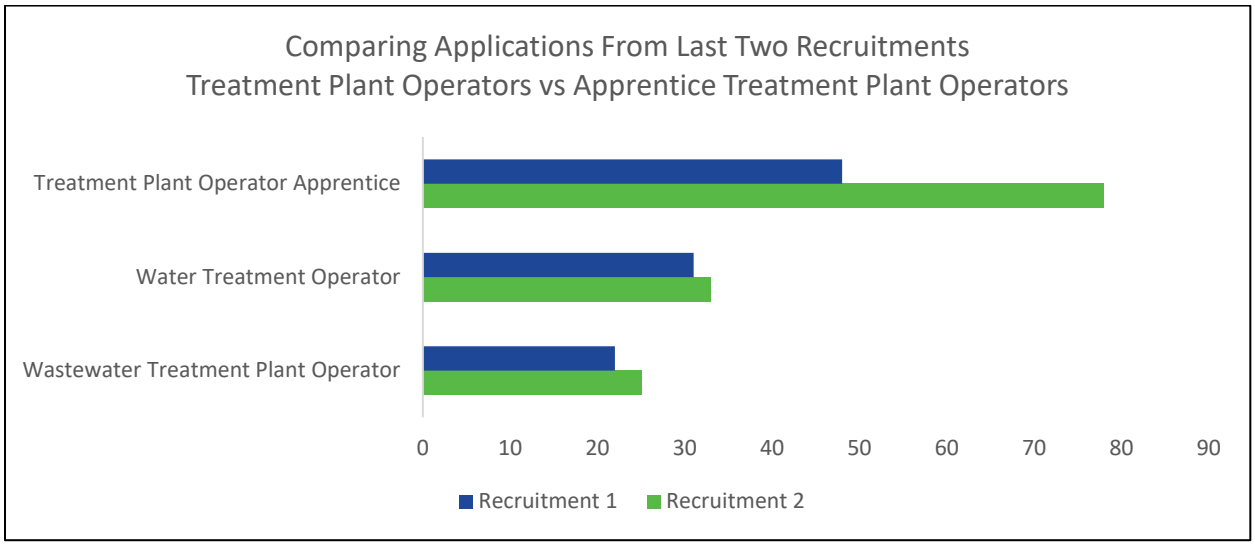
Actions:

- Hosted our first Hope Renovations Intern in the Maintenance department. Hope Renovations is an organization that prepares underemployed women and gender expansive individuals for construction careers in Chapel Hill/Carrboro. We plan to continue hosting interns. To date, $3,800 has been spent on wages.
- Participated in the Summer Career Academy's Internship program and employed a Cedar Ridge High School student for the summer of 2024 in the Distribution and Collection Department. We have also attended the planning meeting for the 2025 Summer Internship Program and plan to continue this partnership. There was $3,300 spent in the summer of 2024.
- Created an ongoing Internship Role in Engineering Department and hosted our first Engineering Intern over the last year. Approximately $23,000 was spent on wages.
- Continued efforts in attending career fairs, STEAM events, and local recruitment events to broaden the pool of applicants we receive in all positions and improve awareness of OWASA careers.

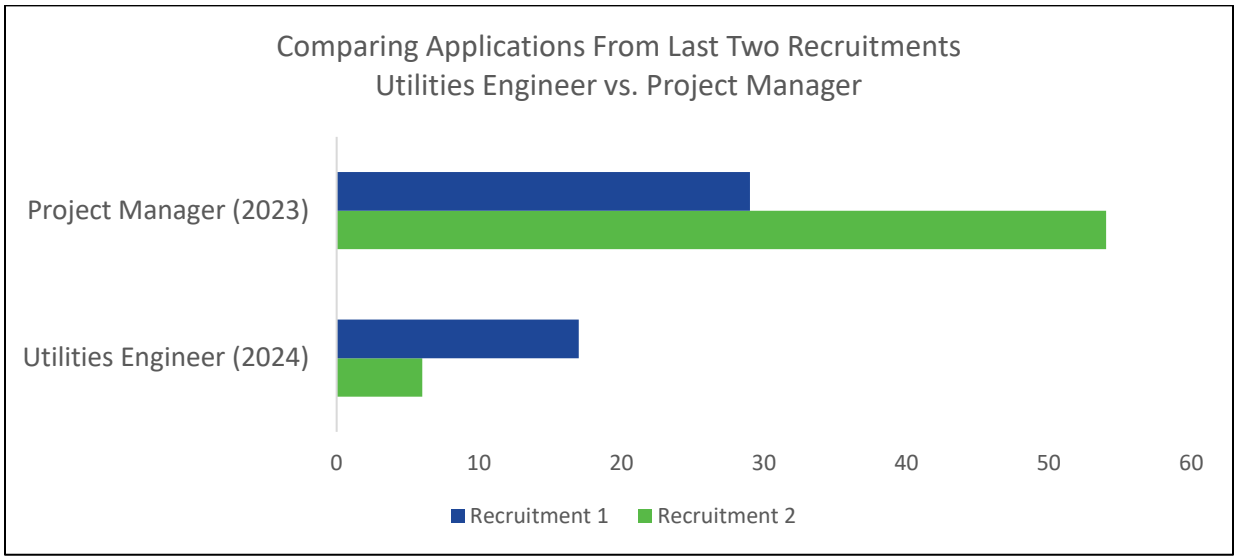


Director of Wastewater Treatment Wil Lawson and Wastewaterw Treatment Plant Operator Janet Frost at Career Fair

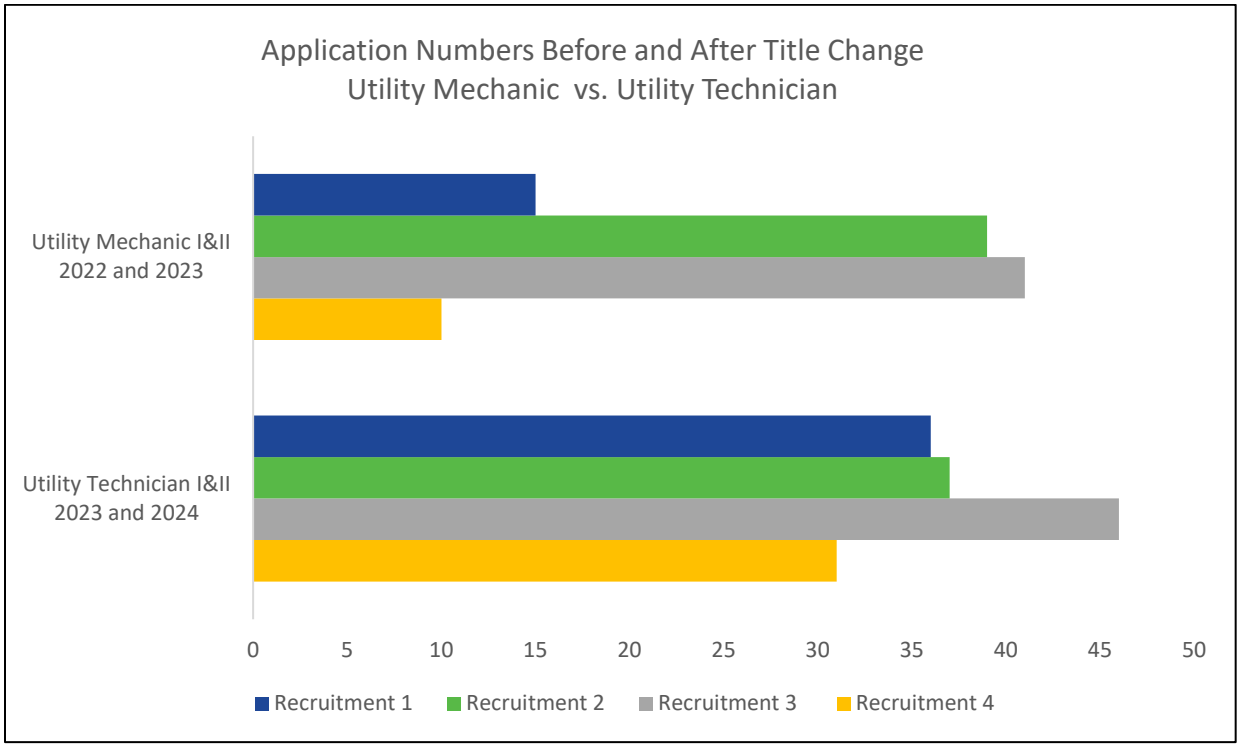
- Developed Treatment Plant Operator Apprentice Program. To benefit our organization as well as the water and wastewater industry, in 2023 we developed this program and employed our first Apprentice to train with the Wastewater Management Team then followed by adding an Apprentice to the Water Resources Team. Since implementation, we have filled three full-time Treatment Plant Operator positions with an Apprentice. To date, approximately $110,000 has been spent on wages and benefits. Incidentally, we discovered that more people were willing to apply to the apprentice role because it is clearly a learning role. Below you will find a comparison of application numbers between our apprentice recruitment and the recruitments for water and wastewater treatment plant operators.



- Utilities Engineer (UE) positions have been historically hard to fill. To address this issue, the positions were reviewed, and two UE positions were reclassified to Project Manager (PM). This resulted in increased application rates for the two PM positions and a reduced burden on the Engineering department, given that there are now two fewer positions that are considered hard to fill.



- We theorized that the name "Utility Mechanic" gave some applicants the impression that specialized training was needed, and potentially reducing applications for this entry-level position. Comparing application numbers since changing Utility Mechanic to Utility Technician shows a higher application rate for these recruitments.



Next Steps

Q3 and Q4 of FY2025:

- **Job Postings**: Revise recruitment materials, with a focus on Utility Technician I/II, to ensure applicants are aware of the entry level nature of the position, and the ability to receive training after employment.
- **Website Career Page Update**: To improve awareness of job opportunities, with assistance from the Community Relations Team, we will update the website to reduce the number of clicks to access open job opportunities and create a more appealing site for potential candidates.
- **NeoGov (Job Application Software) Enhancement:** HR will implement a new candidate relationship management module, called Attract. This feature will give us access to more job seekers on governmentjobs.com, allowing us to reach qualified candidates, and market our job openings.
- **Exploring Community Events for Recruitment:** HR has been exploring community events that would increase awareness of OWASA as an employer and how we can participate. These events include Farmers' Markets, Pride Events, Job Fairs, Summer Programs and more. We are developing a community event schedule and have a goal to attend four events a year.
- **Create Graphic on Utilities Engineering:** Met with NCSU Engineering Place (K-12 Engineering Education and Programs) to discuss ways to improve awareness of Utilities Engineering among students interested in STEAM and Engineering. One area of improvement identified in speaking with NCSU is a lack of information on Engineering within Water and Wastewater utilities included in their materials for K-12 students. We plan to create a graphic so that they can increase recognition of Utilities Engineering in their public outreach programs, to improve our ability to recruit for Utilities Engineers into the future. We are also looking into participating in NCSU Engineering summer programs for Highschool students.
- **Add Recruitment and Jobs Messaging to Existing Literature Sent to Customers:** Work with Community Relations Team to develop graphics and language to add to billing statements and annual water quality report.
- **Add Internship Program for Laboratory Analysis:** Plan to expand formal internship program to the Water Resources and Wastewater Management Laboratory Analyst roles.

Q1 of FY2026:

- **Add Apprentice Program to Distribution and Collection:** Plan to expand the Apprentice Program to the Utility Technician I role.
- **Record Employee Experience Videos:** Goal is to share employee experiences and why they love working at OWASA on the website and through social media to improve recruitment efforts.

Strategic Priority: Employee Recruitment, Retention, and Development

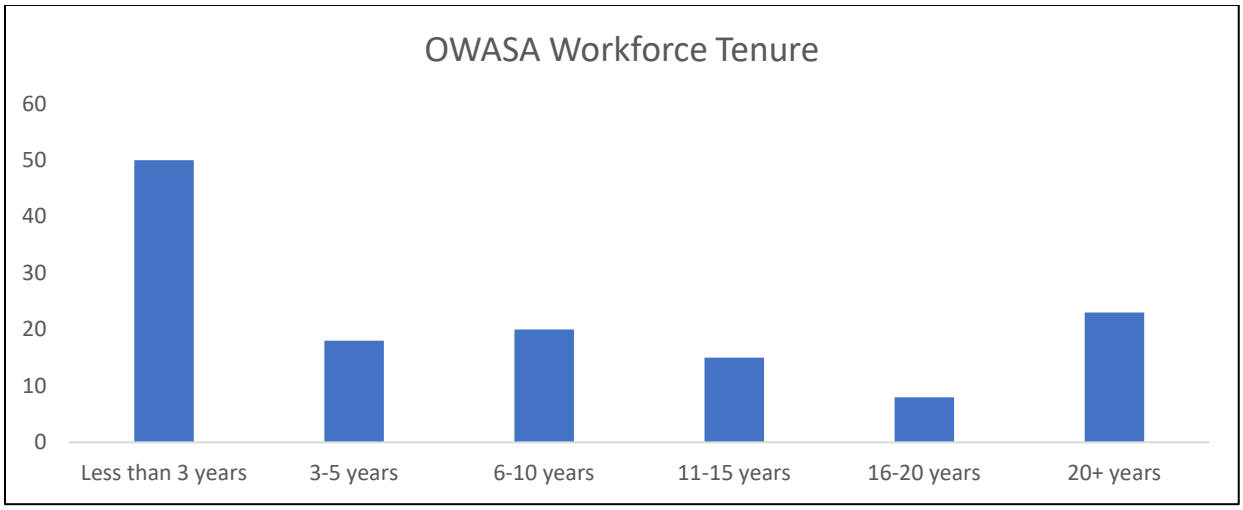
Goal: Achieve and maintain competitive compensation and benefits

Initiative: Conduct and implement a Pay and Classification Study

Employees are our most important resource, and we strive to provide a competitive compensation package and a rewarding work environment that promotes diversity and equal opportunity for all. To retain highly engaged employees, we desire to maintain competitive wages and benefits. It is often more efficient to retain a quality employee than to recruit, train and orient a replacement employee of the same quality.

A Pay and Classification Study was completed in FY2023 that benchmarked public and private sector organizations to determine if our benefits and wages are competitive. At that time, OWASA's pay ranges were found to be about 3.7% below the market average (~$360,000 per year gap). Pay increases and range movements effective July 2023 addressed these findings. An important part of the study was gathering feedback from employees throughout the process. Several new benefits or changes to existing benefits were suggested by employees and addressed in FY2024. Considering the additional benefit enhancements (vision reimbursement increase, dental benefit annual limit increase, and life/dependent/long-term disability increases) included in the FY2025 budget (~$44,000 annually), we have addressed all the feedback and findings identified in the study. To ensure retention of our workforce by maintaining competitive wages and staying within the market average, it is critical to continue to follow the Board's approved Pay Administration Guidelines, established December 14, 2017, which includes merit increases based on performance and cost of labor increases that also move the pay ranges by the same percentage.

OWASA, like much of the Water and Wastewater industry, is anticipating many retirements in the next several years. Competitive compensation and benefits help keep other causes of attrition lower and reduce the impact of retirements. As you can see below, 17% of our workforce has 20+ years of service, and an additional 6% have 15+ years of service, meaning that nearly a quarter of the workforce could retire in the next five years. In addition to the large number of potential retirements within our workforce, 37% of OWASA employees have fewer than three years of service.



To assess the effectiveness of our updates to compensation and benefits on employee retention, we are tracking employee resignations.

Employee Attrition FY 2022-2025		
	Resignations	Percent
FY2022	11	7.7%
FY2023	14*	9.6%
FY2024	11**	7.4%
FY2025 (Q1 & Q2)	5	3.3%
* 3 individuals returned to OWASA **1 individual returned to OWASA		

Next Steps

FY2026: Maintain competitive benefits and wages and stay within the market average by following the Board's approved Pay Administration Guidelines that include merit increases based on performance and cost of labor increases that also move the pay ranges by the same percentage.

FY2027: The next Pay and Classification Study is expected to take place in FY2027. To ensure the overall effectiveness of OWASA's compensation system and pay administration guidelines, periodic studies should be completed to ensure alignment with the market and organization needs.

Strategic Priority: Service Reliability and Resiliency

Goal: Increase capital project execution

Initiative: Develop and pursue Project Delivery Optimization Plan

OWASA's capital project prioritization process is designed to identify and propose a capital program that increases the reliability and resiliency of our services. However, historically, it has been difficult to fully execute the adopted capital program due to a range of challenges. Identifying and pursuing strategies to increase capital project execution would help to increase OWASA's service reliability and resiliency.
In FY2023, the CIP team, in consultation with key program stakeholders, drafted and prioritized a suite of approaches and ideas to improve project delivery. Pursuit of these strategies has been a focus for the team even as the team's membership has changed dramatically since that time. As reported in prior Semiannual CIP Reports, several parts of the Project Delivery Optimization Plan (PDOP) are already complete or ongoing, including:

- **Collaborative Project Delivery**: During FY2024, staff engaged a consultant to prepare the organization for Collaborative Delivery through trainings, workshops, development of Collaborative Delivery contract documents, and Board engagement. Collaborative Delivery methods such as Progressive Design Build (PDB) and Construction Manager at Risk (CMAR) have the potential to expedite construction schedules and generate additional bidder interest. The first two PDB projects are currently underway. Approximately $58,000 was spent on the Collaborative Delivery effort (these are the only funds spend on the PDOP initiative.)
- **On-Call Consulting Services and Surveying Services**: Staff solicited qualified consultants and surveyors to be part of an "on-call" list for FY2024 and FY2025. In comparison to typical procurements, the on-call services list has dramatically reduced the time needed to get projects started. Projects that utilized the on-call were able to be started in an average of 44 days (or about one and a half months), whereas conventional solicitation projects started in an average of 141 days (or about four and a half months), providing a savings of about 3 months (or a quarter of a fiscal year) per project. OWASA plans to resolicit for the on-call services, with a few changes, at the end of FY2025 to continue to support project delivery optimization goals in the upcoming years.
- **Temporary Project Management Assistance**: Filling vacancies in the Utilities Engineer position in particular has historically been challenging. In FY2024 the CIP team utilized a temporary project manager from an engineering consultant to augment the current staff. Contracted project management services are expected to be utilized again in FY2025 starting this month, following another challenging recruitment for an ongoing Utilities Engineer vacancy.
- **Creation of Two Project Manager Positions**: Due to the difficulty in recruiting Utilities Engineers, one of the former Utilities Engineers positions was reclassified in FY2024 to a Project Manager (PM) position, which does not require an engineering degree or professional engineering license. With this change, the current makeup of the CIP team is two Utilities Engineer (UE) positions, two PM positions, and one Engineering Associate, all of whom report to the Engineering Manager for Capital Projects. PM recruitments have been well received, with eight times the number of applicants submitting on PM recruitments compared to UE recruitments.
- **Other completed PDOP strategies included:** Streamlining of CIP paperwork, use of Project Scope Checklists, engaging in contractor outreach, and utilization of the Omnia Partnership (a program for public sector and non-profit companies to streamline competitive procurement).

Strategic Priority: Service Reliability and Resiliency

Goal: Reduce downtime of critical infrastructure and equipment

Upcoming Strategic Initiative: Assess and execute Asset Management Plan

OWASA is dedicated to ensuring that our infrastructure remains reliable to support the essential services we provide to the community. As our assets age and the demands on our infrastructure evolve, there is a need to update our asset management program. The goal of this initiative is to assess and refresh our strategies, ensuring that our assets are maintained, replaced, or upgraded as necessary. By focusing on risk reduction and long-term sustainability, we aim to minimize unexpected downtime, reduce operational costs, and ensure our infrastructure continues to meet service requirements well into the future.

To start, we'll perform a comprehensive evaluation of our current asset management program. This evaluation will inform the roadmap for a multi-year enhancement of this ongoing program. Key focus areas include program benchmarking, refinement of organizational levels of service (LOS) and key performance indicators (KPIs), asset-level and enterpreis-level risk mapping, and Capital Improvement Plan (CIP) prioritization optimization.

One key element of this plan is the integration of NexGen, our new Computerized maintenance Management System (CMMS) for vertical assets, which will go-live in spring of 2025. With NexGen, we can enhance preventive maintenance schedules and improve our risk assessment protocols. This updated approach will align with our short-term goals and long-term objectives, ensuring that our resources are effectively allocated to maintain and enhance our critical assets. Other key milestones for this initiative, to be completed in FY2025, include updating the collection system risk model and the distribution system model. These foundational elements are necessary for developing enterprise-level risk mapping, expected to occur in FY 2026-2027, which will require consulting assistance and coordination with the development of the Capital Investment Strategy.

We expect this initiative to significantly improve the reliability and efficiency of OWASA's operations. By systematically updating our asset management program, we anticipate fewer asset failures, quicker response times to maintenance needs, and better resource allocation for repairs and replacements. NexGen will streamline our workflows, improve inventory management, and provide data-driven insights that will help us make better decisions. This will enable OWASA to make more strategic investments in our infrastructure, supporting our broader goals of resilience, cost optimization, and continuous service delivery.

Our total expected investments during the strategic planning period include $449,692 for NexGen purchase, configuration and implementation costs, $150,000 for developing enterprise risk-level mapping, and one additional staff position (Asset Mgmt Analyst).

Our next steps are to finalize our assessment of the current program and develop a roadmap for implementing these improvements. This will involve collaboration with key stakeholders across departments, including operations, maintenance, and engineering, to ensure all perspectives are considered in the update process. Additionally, training for staff on the new asset management strategies and tools, such as NexGen, will be a crucial part of the rollout.

Strategic Priority: Service Reliability and Resiliency

Goal: Improve the collection and use of real-time data to inform and drive decision-making

Strategic Initiative: Execute SCADA Master Plan

In 2021, OWASA completed a Supervisory Control and Data Acquisition (SCADA) Master Plan. The objective of the master plan was to develop a phased approached to upgrading the SCADA systems based on best practices that will improve the operation, reliability and resiliency of OWASA systems. OWASA manages the SCADA systems for:

- Jones Ferry Road Water Treatment Plant (WTP) and associated sites (raw water pump stations, elevated storage tanks, booster pump stations, interconnections with neighboring utilities, etc.)
- Mason Farm Wastewater Treatment Plant (WWTP) and the network of wastewater pumping stations

The existing SCADA systems are outdated, resulting in security and reliability concerns. The WTP's software and hardware has stability issues, while the WWTP needs a series of programmable logic controllers (PLC) updates because of equipment obsolescence.

OWASA's proposed improvements are planned out over 15 years with an estimated cost of up to $13.5 million. The objectives are to enhance the operation, reliability, and resilience of OWASA's water and wastewater systems. Key areas include:

Operational Improvements

- **Control System Policies and Standards:** These include design, cybersecurity and appropriate use policies to maintain continuity and secure operations of the control system as it grows and develops.
- **Control System Maintenance**: Hiring new staff and training of internal staff improves system response times and confidence during routine operations and corrective maintenance work. This effort also directly replaces more expensive contractor provided labor.
- **Disaster Recovery**: The Disaster Recovery Plan and training is coordinated with the IT department's planning as well as organization wide efforts to increase redundancy on key systems. The goal is to build internal capacity and our ability to respond to disasters and disruptions of the Water and Wastewater SCADA systems.

System and Network Enhancements

- **SCADA Network Improvements**: Network improvements are important to replace obsolete and unstable communication systems within the treatment plants as well as at the remote sites.
- **Network Access Improvements**: The intent is to improve secure access to the operational data for OWASA users. Better data access and visualization can lead to improved decision making throughout the organization.
- **Control System Asset Rehabilitation and Replacement**: Many of the SCADA components are obsolete or approaching obsolescence. This requires us to proactively replace equipment before it becomes unreliable.

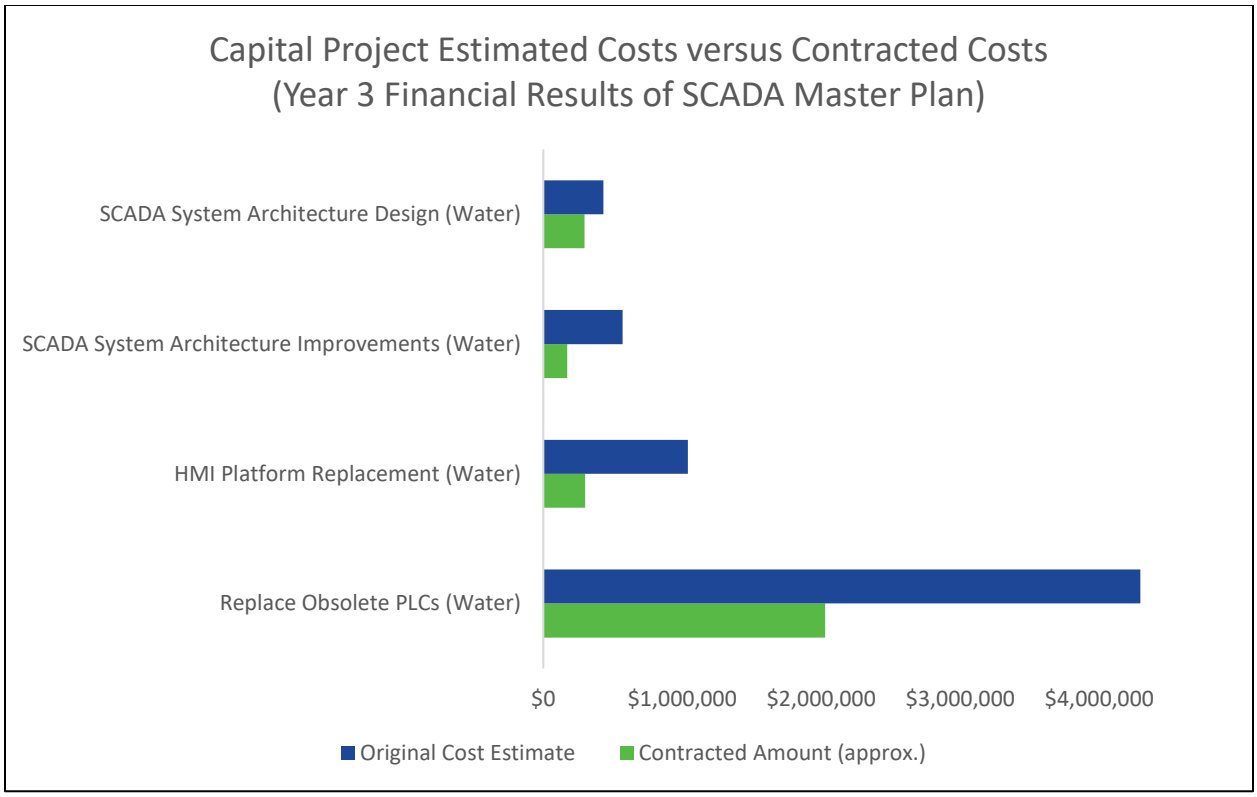
Integration and Upgrades

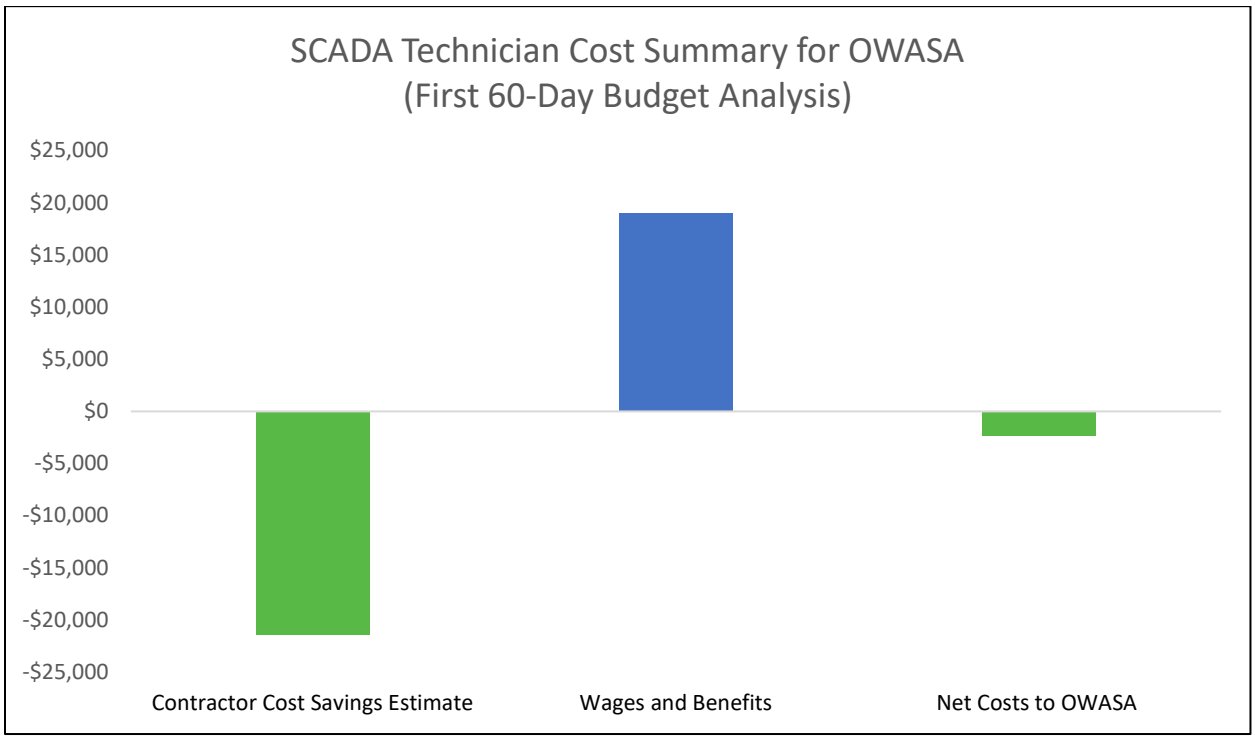
- **Enterprise Integration:** Integration with laboratory data, the CMMS system and GIS are key initiatives to improve access to information and automate many of the processes such as data reporting and monitoring KPI's at OWASA.
- **Instrumentation and Controls Improvements:** Staff is actively replacing obsolete or unreliable instrumentation such as level meters and analytical instruments. Executing the work with OWASA personnel has led to accelerated replacements, reduced implementation costs and valuable insights on ways to operate our systems.
- **SCADA interface and PLC System Improvements:** The replacement of the main user interface at the WTP and the related modifications to system architecture provides a more stable and state of the art system that can be supported long-term.

Phases Summary: Planned projects are divided into four phases, each impacting specific requirements.

- **Phase 1 – Water SCADA System Improvements:** Hiring staff and upgrading parts of the SCADA system at the Jones Ferry Road WTP, including SCADA Interface replacement, control system architecture modification, and replacing obsolete Programmable Logic Controllers (PLCs) and network equipment. Nearly all work is under contract or complete. The original cost estimate in the SCADA Master Plan was $6.3 Million. Current contracts and estimated remaining work to complete this phase are just over $3 Million.
- **Phase 2 – Wastewater Treatment SCADA System Improvements:** Replacing obsolete PLCs and network equipment at the Mason Farm WWTP. Multiple PLC's are in design or construction.
- **Phase 3 – Wastewater Collections SCADA System Improvements:** Enhancing the wastewater collection and water distribution system by replacing outdated PLCs.
- **Phase 4 – General SCADA System Improvements:** Implementing organizational changes, developing a facility information management system, and integrating SCADA with enterprise business systems.

The efforts are complimentary and aspects of each may run concurrently with the majority of work in Phase 1 already underway. In the next two fiscal years, work will refocus on Phase 2 at the wastewater plant and Disaster Recovery planning. To date, investment in this initiative has led to two new positions created and filled in the IT department: the SCADA Manager and SCADA Technician. Capital Expenditures are within the amount budgeted in the CIP and largely on schedule. Standalone SCADA projects and work integral to other capital improvement initiatives have incurred expenses amounting to roughly $3 million over the past four years, all while being executed at a fraction of the expected costs from the original SCADA Master Plan.


Capital Project Estimated Costs versus Contracted Costs
(Year 3 Financial Results of SCADA Master Plan)
SCADA System Architecture Design (Water)
SCADA System Architecture Improvements (Water)
HMI Platform Replacement (Water)
Replace Obsolete PLCs (Water)
$0
$1,000,000
$2,000,000
$3,000,000
$4,000,000
Original Cost Estimate
Contracted Amount (approx.)


SCADA Technician Cost Summary for OWASA
(First 60-Day Budget Analysis)
$25,000
$20,000
$15,000
$10,000
$5,000
$0
-$5,000
-$10,000
-$15,000
-$20,000
-$25,000
Contractor Cost Savings Estimate
Wages and Benefits
Net Costs to OWASA

Strategic Priority: Emergency Management and Cybersecurity

Goal: Ensure staff are prepared and ready for emergencies of all types

Strategic Initiative: Develop and institute a Continuous Emergency Preparedness Model

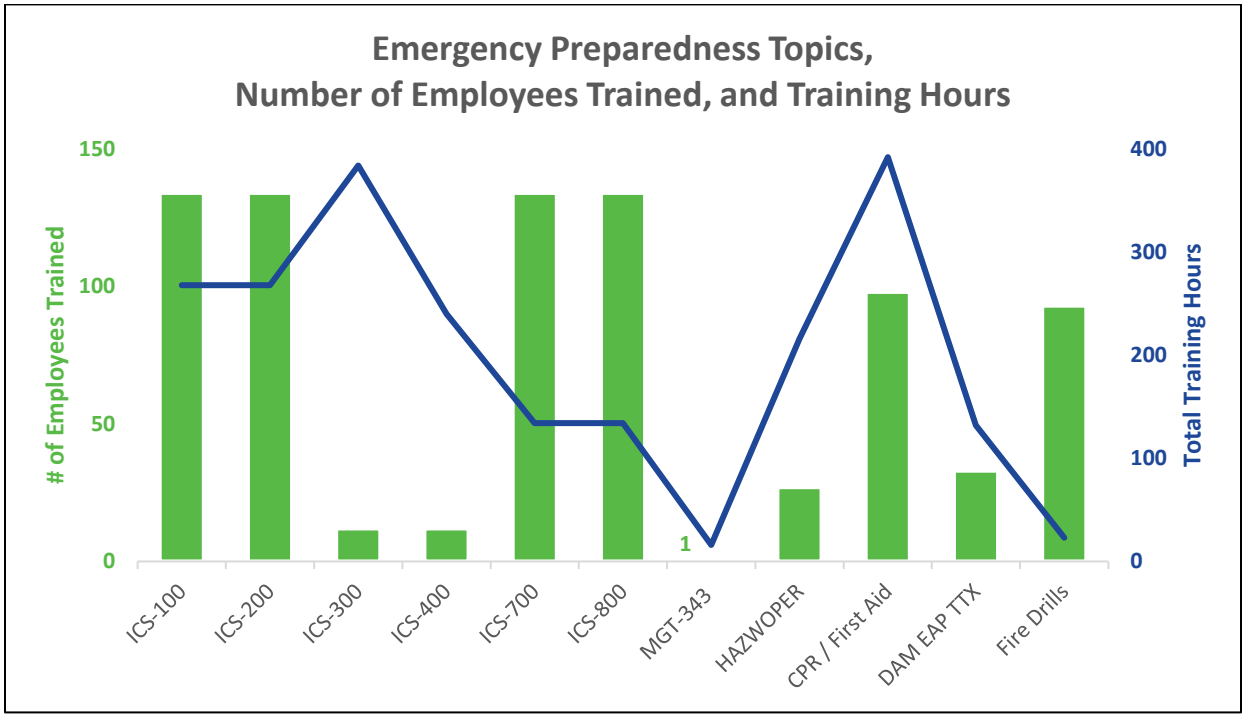
The Continuous Emergency Preparedness initiative for Orange Water and Sewer Authority (OWASA) was developed in response to growing concerns about the reliability and resilience of critical water and sewer infrastructure during extreme weather events, natural disasters, or other unforeseen emergencies. OWASA serves a medium size community in North Carolina, and like many utility providers, OWASA recognizes the increasing vulnerability of its infrastructure to threats such as hurricanes, flooding, and system failures. These risks could disrupt essential services, affecting public health, safety, and the community's daily functioning. Thus, proactive measures are needed to ensure that OWASA and our employees are well trained and prepared to respond quickly and safely to emergencies to continue to provide essential services to our community.

The initiative involved a four-step comprehensive assessment process of OWASA's emergency preparedness. Utilizing an “All Hazards” approach, the assessment involved an in-depth review of the following emergency related written plans the Comprehensive Emergency Management Plan (CEMP), the DAM Emergency Action Plans (EAP), the Emergency Evacuation Plan, the Continuity of Operations Plan (COOP), The Spill Prevention Control, and Countermeasure Plan (SPCC), the WTP Emergency Response Plan (ERP). Other focus areas of the assessment included the levels of emergency response training, drills, and exercise programs, as well as emergency preparedness facilities and equipment. Upon completion of the comprehensive assessment process, OWASA began focusing on improving our ability to respond to and recover from various disaster scenarios. This included updating emergency response plans, and enhancing communication strategies with team members, public safety partners, and community members. Additionally, this initiative emphasizes ongoing staff training and scenario-based drills/exercises to ensure that employees are well-prepared for quick, coordinated action during an emergency, and, wherever possible, technological upgrades, such as investment into redundant systems and backup power supplies for critical infrastructure resilience.

The impact of the initiative has resulted in a better trained workforce, ensured employee safety, enhanced relationships through collaboration with local and state public safety partners and bolstered the organization’s capacity to respond swiftly and effectively to emergencies. Through better-prepared infrastructure and a trained workforce, OWASA has significantly reduced the potential for service disruptions. We believe this initiative fosters greater public trust, as residents and businesses in the service area can be confident that OWASA is dedicated to maintaining service continuity in challenging conditions. Furthermore, the updated protocols and advanced systems have enhanced our ability to recover quickly from any disruption, minimizing downtime and ensuring the swift restoration of essential services.

Looking ahead, OWASA plans to continue refining our emergency preparedness strategies through ongoing drills/exercises, training, annual evaluations, and improvements. Next steps include the following:

- Maintaining/updating the Multi-Year Training and Exercise Plan (MYTEP). Adherence to the MYTEP will ensure proactive preparedness and mitigation efforts are reviewed, practiced, and improved upon on an ongoing basis. The MYTEP will be updated and extended to address medium to long term goals.
- Continued bi-monthly collaboration meetings with local emergency managers from the Town of Chapel Hill, Town of Carrboro, Orange County, Town of Hillsborough, UNC-CH, and UNC Healthcare.
- Active participation in the North Carolina Water and Wastewater Agency Response Network (NC WaterWARN). OWASA's active participation ensures that reciprocal support from the NC WaterWARN partners would be available if ever needed.



Initiative Summary (FY2024 to FY2025 YTD)

Total Training/Exercise Hours – 2,207

Total Cost – $13,725*

*This cost has remained reasonably low due to an abundance of in-house training. This is anticipated to increase as OWASA's Emergency Preparedness Program continues to grow.

Photo Collage of Emergency Preparedness Exercises

DAM Emergency Action Plan



CPR / First Aid Training



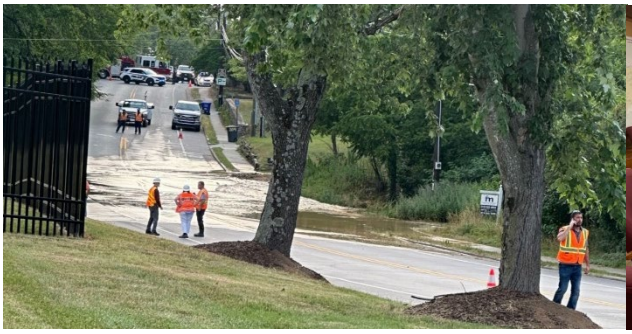
Chapel Hill Fire Dept Confined Rescue Site Visit



Admin Building Fire Drill (Rally Point A)



Jones Ferry Road Water Main Break





In the Pipeline

Strategic Priority: Employee Recruitment, Retention, and Development

Goal: Ensure staff are prepared, informed, and engaged to lead OWASA into the future

Initiative: Develop and institute an Employee Development Plan

The 2021 Employee Survey results contained requests for additional opportunities for professional development. Employee development programs ensure employees, and their skills, are elevated and retained in an organization. They reduce turnover rates, improve job satisfaction, and expand the ability of organizations. Focusing on employee development ensures we have a more resilient and capable workforce, allowing us to effectively meet the needs of our community. The planned offerings will address current gaps in knowledge and skill that can assist OWASA employees in taking steps into leadership positions, develop professional development goals, gain skills in technology, and successfully complete certification programs. We plan to focus on building overall abilities broadly, and specific skills individually.

- Implement programs and resources to promote skill growth for everyone, like classes and a new mentorship program.
- Promote the use of Human Resources as a place to consult on avenues for individual professional development based on employee's goals; can use education funds to work on professional development goals.

At the moment, we will house these efforts in Diversity, Equity, Inclusion & Belonging (DEIB) to help the workforce realize that ensuring all employees have the ability to succeed in their goals and grow professionally is a part of our DEIB philosophy.

Q3 of FY2025:

- **Level Up Job Application and Interview Success:** Provide training on successful completion of job applications and answering interview questions. This is a skill that is not often taught, and when it is lacking it can prevent members of the workforce from advancing into higher positions.
- **New and Improved Mentorship Program:** This new program will train mentors in essential skills like goal setting, using OWASA and outside resources for growth, and sharing skills and expertise. Training mentors in the skills needed for successful mentorship should improve the impact of the mentorship program and improve knowledge retention by ensuring that the knowledge and skills of our employees are passed on to the future leaders of OWASA.

Q4 of FY2025:

- **Study Skills and Math Practice for Exam Success:** To improve our ability to prepare employees for certification exams, we can teach them how to use their materials (E.g. Operator Manual) to distill information for studying. We can also provide a venue to practice math for exams, which can be a stumbling block to exam pass rates.

- **Develop Guiding Principles and Issue a Request for Proposals on Employee Development:** While we are beginning to address needs for workforce development in house, we also plan to engage a consultant to complete a needs assessment around further employee development needs.

Q1 of FY2026:

Basic Computer Skills: Provide training on basic computer functions, including how to use Microsoft Word, Excel, SharePoint, and Outlook efficiently.

Strategic Priority: Equitable Services

Goal: Increase adequacy and accessibility of customer assistance funding

Initiative: Evaluate and update Care to Share Program

The 2023-2027 Strategic Plan set a strategic initiative to evaluate and update the Care to Share program. Care to Share provides temporary bill assistance to OWASA customers. In 1997, it was one of the first water bill assistance programs established in North Carolina in partnership with the Interfaith Council for Social Services and has been a long-standing resource for OWASA customers, funded by donations by OWASA customers. The update of this program is two-fold:

1. Ensure that customers that need assistance have access to these funds and that Care to Share donations are put to use
2. Explore opportunities to establish sustained water bill assistance for low-income customers



Mayors Anderson and Foushee "dared" the community to support Care to Share in a 2024 Care to Share fundraising campaign.

Over the years, OWASA has helped to drive an increase in donations to the Care to Share program. In fiscal year 2024, donations to Care to Share were nearly five times greater than they were in fiscal year 2018 ($28,000 vs $6,000). However, the amount of bill assistance provided was the same: $6,000.

To reduce the burden of applying for bill assistance, OWASA moved the administration of accepting applications for Care to Share bill assistance from OWASA customers from the Interfaith Council for Social Services to OWASA's customer service team in 2024. In addition, we increased the amount a customer can receive for bill assistance in a year from $200/year to $250/year. The new amount covers the cost of two months of an average residential water bill. Throughout 2025, we will increase the

promotion of the Care to Share program as a source of bill assistance (as well as to continue to promote donations to Care to Share) to better balance the availability and distribution of funds.

Nonetheless, we know that there is a significant number of OWASA customers that are low-income and for whom the OWASA bill is becoming less and less affordable. Approximately 16% of Carrboro households and 19% of Chapel Hill households have incomes below $25,000 and pay at least 4.5% of their monthly income on their water bill. The current Care to Share program does not provide the kind of sustained water bill assistance needed by these customers.

Over the past year, staff have worked with the Orange County Department of Social Services to draft a program concept that would provide regular, monthly water bill assistance to OWASA customers who qualify for federal assistance programs (e.g. Food and Nutritional Services). Over the coming year, OWASA staff will bring this concept forward to the OWASA Board and local governments to work to identify funding to support a more sustained bill assistance program. This initiative will be led by the Director of Community Relations and supported by current staff in the Community Relations Department, as well as Deputy Executive Director Winters. Our goal for the coming year is to work with the local governments in the region to identify funding to support a pilot program.

Strategic Priority: Climate and Land Use Change Adaptation

Goal: Prepare for organizational impacts of climate and land use change

Initiative: Develop Climate Action Plan

Climate change readiness and adaptation was identified as a high priority by OWASA staff, the Board of Directors, community, and stakeholders during the development of the 2023-2027 Strategic Plan. There are numerous ways that climate change and associated land use change could impact OWASA and our service delivery to customers, including increased flooding events, increased inflow and infiltration into the wastewater collection system, increased drought events, and workforce productivity. While the awareness of these risks is not new, OWASA has not undertaken a comprehensive evaluation of the risks and potential impact on our planning and operations. Therefore, the Strategic Plan identified the initiative of developing a Climate Action Plan.

OWASA will contract a consulting firm to develop a Climate Action Plan. The Climate Action Plan will incorporate climate change science into OWASA's plans to help ensure our operations and our community's water and wastewater services and infrastructure are prepared. Developing a Climate Action Plan will help OWASA better prepare for potential risks to our assets, operations, and organizational impacts from climate change. There is also a need to identify a suite of both near and long-term strategies for reducing OWASA's risks, preparing for, and adapting to climate change impacts from both organizational and infrastructure perspectives.

OWASA solicited interest from the consulting community through a Request for Qualifications process and identified a consulting firm which is expected to be under contract in early 2025. We expect the Climate Action Plan will build on regional climate planning efforts and currently available information from OWASA. The Climate Action Plan will help identify and prioritize OWASA's highest climate change risks and include an action plan with available strategies to address those risks. It is expected that climate adaptation efforts will continue to be evaluated and implemented beyond the 2023-2027 Strategic Plan cycle.

OWASA received the draft contract scope for the development of the Climate Action Plan from the consultant on January 10, 2025. No funds have been dedicated to this initiative to date.

Strategic Priority: Service Reliability and Resiliency

Goal: Establish and pursue capital investment goals

Initiative: Establish and implement Capital Investment Strategy

The strategic initiative to establish and implement a capital investment strategy will address challenges related to determining and communicating the necessary investments to repair and rehabilitate our aging infrastructure, as well as the risks associated with underinvestment. As our systems continue to age and deteriorate, the costs associated with repairs and replacements can increase drastically, and neglecting these issues may lead to increased service disruptions, higher long-term expenses, and increased risks to public safety. Recognizing this, our Board of Directors and staff have identified the need for a clear and data-driven approach to assess and prioritize investment needs, ensuring our utility remains sustainable, resilient, and capable of delivering the high level of service our community expects.

This initiative is connected to several tasks in our "Assess and Update Asset Management Program" (AMP) initiative. With the CY 25 updates and improvements to our wastewater collection system risk model now complete, the remaining AMP prerequisites to the development of a Capital Investment Strategy include completing the implementation of NexGen, the new Computerized Maintenance Management System (CMMS) for our plants and pump stations (establishing asset-level risk), updating the distribution system model, and developing enterprise-level risk mapping. Once those are complete, in FY2027 we plan to engage a consultant to collaborate with staff, the Board, and stakeholders to re-establish level of service criteria and develop the Capital Investment Strategy. We expect this work may be on the order of $250,000 to $300,000. We aim to begin implementing this initiative in FY2028.

The expected impact of this initiative is twofold. First, it will provide a clear and transparent framework for making investment decisions, which can be communicated effectively to both internal stakeholders and the public. This will foster greater confidence in our utility's ability to manage its infrastructure and ensure service continuity. Second, it will allow us to mitigate risks related to infrastructure failure and extend the lifespan of critical assets through timely and well-targeted investments. Ultimately, this initiative will contribute to long-term cost savings, improved reliability, and enhanced operational efficiency.

Next steps for the initiative include finalizing the updated Asset Management Program, integrating data from the new CMMS, and collaborating with the consultant to develop the investment strategy. Once the strategy is developed, we will revise the prioritization process as needed and align financial resources to support the plan. Continuous monitoring and updates to the strategy will be essential as new data becomes available and system conditions evolve, ensuring that the capital investment plan remains relevant and responsive to our needs over time.

Strategic Priority: Emergency Management and Cybersecurity

Goal: Reduce risk exposure

Initiative: Assess risk on collection and wastewater system and implement high priority risk mitigation action for entire system

The OWASA Board (past and present), stakeholders, and community members all ranked "preparing for emergencies and cybersecurity threats" as one of their top three priorities for OWASA to address over the next five years. However, 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. Therefore, this priority was adapted to broadly address emergency management. OWASA has a robust emergency management and cybersecurity program. The following initiatives would enhance existing efforts and help to increase our capacity to manage emergencies.

In FY2021, OWASA completed a risk assessment of its water and distribution systems as part of the America's Water Infrastructure Act (AWIA) process. This consultant-led process involved a thorough review of our water and distribution system, identifying several risks that require mitigation. During our strategic planning, we recognized the need to extend this evaluation to our collection, wastewater, and reclaimed water systems to identify risks and formulate mitigation strategies. Our goal is to align the analyses of both the water and wastewater systems and to develop a comprehensive risk mitigation plan by FY2027.

Next steps: Due to high staff workloads, OWASA decided to utilize the support of a consultant to complete this assessment. We plan to begin the Request for Qualifications (RFQ) process in January. We anticipate the analysis will take about 12 months to complete and cost $100,000 to $150,000. In addition to our consultant, members of OWASA Leadership, staff from Engineering, Distribution and Collection, and our Wastewater Management teams would be integral to the assessment's development.

Strategic Priority: Community Engagement

Goal: Increase the quality and use of community feedback

Initiative: Develop and implement regular community survey

The Strategic Plan noted that achieving and maintaining the trust of our community requires that we effectively engage with them and respond to their needs. To learn more about whether quality and priority information is reaching the community, and through which channels, a community survey was identified as an important initiative in the strategic plan.

By repeating the survey every three years, improvements in community engagement can be identified and communications efforts can be honed to set intentions and maximize efficiency and effectiveness. The first edition of the survey has just been completed and is planned to be presented to the Board of Directors in March of 2025, along with proposed actions and budgetary needs in response to the information.

OWASA's staff leadership developed the following goals for the survey:

1. Determine community's current perception of value of service.
2. Determine community's perception of customer service support.
3. Determine customers' preferred methods of doing business.
4. Determine community perception of PFAS in drinking water.
5. Determine which communications channels are helpful for community members.
6. Determine whether community members are satisfied with OWASA's strategic priorities, including climate change readiness and adaptation as well as adaptation to land use change.
7. Evaluate residents' perceptions of the utility's service reliability and preparedness and responsiveness to water- and sewer- related emergencies, such as leaks, contamination incidents, sanitary sewer overflows, or water service disruptions.
8. Determine community's perception of OWASA's trustworthiness.

OWASA engaged community survey consultants ETC Institute to develop and conduct the survey. ETC Institute has managed community surveys for several local government entities across North Carolina, including the Town of Chapel Hill.

The Odum Institute at UNC-Chapel Hill was brought on for their community expertise to refine the survey instrument and support future iterations of the survey. The survey analysis reported to OWASA in March 2025 will be used to identify community engagement priorities for the Community Relations Department. The plan is for this survey to be repeated in FY2028, and every three years thereafter, to assess the impact of our efforts and to help inform the next Strategic Plan.

Strategic Priority: Community Engagement

Goal: Streamline customer account experience

Initiative: Integrate online billing and water use portals

Much of the community's interaction with OWASA involves paying their bills. Demonstrating high levels of competence in everyday customer engagement is one of the most effective ways for OWASA to build and maintain the community's trust and showcase the value of our services. The adoption of Advanced Metering Infrastructure and the corresponding customer portal was a success story from the previous strategic plan. However, OWASA's current online bill payment system is not integrated with our water use portal, leading to a disjointed customer experience that fails to connect water usage with billing.

Over 87% of OWASA customers pay their bills electronically. Enhancing the integration of OWASA's online billing platform with the Agua Vista web portal will better link customer water usage with their bills, creating a more cohesive customer experience.

In 2024, OWASA transitioned to a new billing system as the first step toward achieving this initiative. Over the coming year, OWASA will evaluate options for a customer portal that maintains existing functionality while integrating more effectively with an online bill payment system, thereby providing a single portal for all functions. It is anticipated that the transition to a new platform will incur costs; however, ongoing costs are expected to remain relatively stable. This initiative will be overseen by the Director of Community Relations and the Director of IT.

Strategic Realignment

Strategic Priority: Climate and Land Use Change Adaptation

Goal: Increase drought resilience

Initiative: Implement most viable Jordan Lake alternative

A critical planning task managed by OWASA is preparing for our community's future water needs. To do so, we take a very long view, using a planning horizon of 50 years for our Long-Range Water Supply Plan. When OWASA last updated our Long-Range Plan in 2023, we looked at our community's projected and water needs, based on estimated population growth, and water supply in the face of a changing climate. The update included an evaluation of the costs and benefits of various alternatives to increase the resiliency of our water supply. OWASA determined that Jordan Lake offers the most resilient, cost-effective, and viable opportunity to meet future water demands. OWASA has a 5 million gallon per day (mgd) allocation to the Jordan Lake water supply pool from the NC Environmental Management Commission. Currently, OWASA is able to access this allocation on an emergency basis through our mutual aid agreements with the Town of Cary and City of Durham. Implementing the most viable alternative to access OWASA's allocation from Jordan Lake was identified as a critical initiative in OWASA's 2023-2027 Strategic Plan.

To secure access to our allocation of water from Jordan Lake, OWASA has been part of the Western Intake Partnership (WIP), which also includes the City of Durham, the Town of Pittsboro, and Chatham County. The WIP was formed in 2012 and an interlocal agreement was signed in 2019 to develop a new water supply intake on the western side of Jordan Lake, a new water treatment plant, and associated transmission lines. The current phase of WIP infrastructure is estimated to be online in approximately 2031.

In 2022, the WIP began preliminary engineering for the regional facility. OWASA has invested roughly $910,000 in WIP contracts for preliminary engineering of certain elements of the facility and has received American Rescue Plan Act (ARPA) funding in the amount of $400,000 towards these costs. Based on current estimates, OWASA's share of capital costs for this phase of construction would be roughly $90 million. As we do not need this water on a regular basis for at least two decades, and in light of more immediate capital improvement needs, in 2024 OWASA declined to invest as a full financial partner during this phase, deferring our pursuit of this strategic initiative to a future capacity upgrade of the proposed treatment plant and transmission pipelines. In the meantime, we will utilize a revised mutual aid agreement with the City of Durham to access our Jordan Lake allocation once the new WIP facility is operational.

Since the City of Durham has a more immediate need for their water supply allocation from Jordan Lake, Durham will finance and own the Raw Water Intake Facility. An interlocal agreement is being negotiated to define the terms under which the other WIP partners may access capacity to the WIP facilities when needed in the future. Currently, the WIP partners are finalizing the draft interlocal agreement, which is focused on the new raw water intake, to take to their respective governing boards for approval. OWASA purchased property in 1989 to the west of Jordan Lake for the purpose of building a water treatment plant in the future. OWASA intends to sell that land to the City of Durham for the purpose of building a

new water treatment plant near the new raw water intake on the western side of Jordan Lake. The land sale agreement is currently pending a Phase II Environmental Site Assessment that Durham is conducting.

Since OWASA has deferred further pursuit of this initiative to some point beyond the timeframe of this strategic plan, this item will be removed from future annual updates.