



ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO: Board of Directors
FROM: Ed Kerwin
DATE: January 20, 2012
SUBJECT: PROGRESS REPORT ON OWASA'S STRATEGIC PLAN

OWASA's Strategic Plan establishes the key goals and objectives for the next several years to guide the organization's work and funding priorities. While there are many goals and objectives that must be met (and sustained) to ensure that OWASA successfully fulfills its mission, it is essential to establish the organization's highest priorities given that funding and staff resources are limited.

This progress report covers the period from March, 2010 to January, 2012.

The OWASA Board held a work session with staff on March 11, 2010 to discuss strategic planning. On March 25, 2010, the Board approved the OWASA Strategic Plan. Progress reports were provided to the Board on October 21, 2010; March 10, 2011 and September 22, 2011.

At their October 27, 2011 meeting, the OWASA Board agreed with the Finance Committee's recommendation that the Strategic Plan be updated every two years with status reports provided annually. The next update to the Strategic Plan will begin in October, 2012 with Board adoption by January, 2013.

We have made important progress on our Strategic Plan's goals and objectives. We are especially proud of work to achieve greater efficiencies and improve our financial stability. Recently completed engineering studies concluded that our water and wastewater systems are in good shape and we have a well-informed plan moving forward.

An essential objective which we continue to give very high priority is securing access to our Jordan Lake allocation. Staff looks forward to continuing our work with the Board and local governments to achieve our objective of a reliable water supply for current and future customers.

Ed Kerwin
Executive Director

Attachment

OWASA Strategic Plan Update

March 25, 2010 – January 20, 2012

Strategic Plan Objectives

A.1 Complete a comprehensive functional analysis to identify opportunities to reduce costs.

The following cost reduction and/or efficiency measures have been taken since March 25, 2010:

- Effective May 31, 2010, eliminated the vacant Human Resources Director position and reclassified the Safety and Training Administrator position to the new position of Human Resources and Safety Manager. Net annual savings are about \$80,000.
- Eliminated a vacant Administrative Assistant position in Fiscal Year (FY) 2012 with net annual savings of about \$45,000.
- Implemented process modifications suggested by the Hydraulic and Treatment Capacity Study for the Mason Farm Wastewater Treatment Plant which are expected to save about \$300,000 annually.
- Bond refunding in September, 2010 will result in about \$2.3 million of savings over the life of the bonds.
- Effective January 27, 2011, reorganized the Finance and Customer Service Department to include the elimination of two vacant Manager positions. These actions have improved efficiency and resulted in an annual net savings of about \$80,000.
- Initiated the replacement of energy intensive outdoor lighting with low energy fixtures, some controlled with motion sensors.
- Reduced telecommunications costs by over \$10,000 per year by reviewing all telecommunications services, selecting lower cost vendors and eliminating obsolete or unnecessary services.
- Effective July 1, 2011, reduced health and other insurance benefit costs \$64,000 by combining plans and using one vendor. Additionally, implemented employee wellness goals to achieve 3% credit on renewal rates for next FY. Employees successfully completed goals in December, 2011 which will result in expected savings of about \$40,000.

Future work:

- Evaluate opportunities to streamline and improve issuance of service orders, with special focus on processing of service availability fees (new connections) and cutoffs.
- Initiate a pilot project for Desktop Virtualization and Application Virtualization.
- Review the current Work Order process for field crews and evaluate the use of *CityWorks* as a technology to give employees mobile remote access to the Work Order system.
- Continue review to adequately define and optimize service levels in Distribution and Collections Department.
- Continue review of lighting improvements to reduce energy cost and review of heating, ventilation and air conditioning controls to minimize heating and cooling needs.
- Continue evaluation of opportunities to use digester gas (methane) as an energy resource at the Mason Farm Wastewater Treatment Plant.
- Continue review of our process for dealing with delinquent customer accounts and related service terminations, identify areas for improvement and consider alternatives for addressing them.

Measure of success: Savings noted above.

Complete by: Ongoing

A.2 Continue implementation of improvements to the financial management and billing system and related recommendations from the consultant's report with emphasis on improved accuracy and timeliness of key financial data.

Processes that have been improved/streamlined for the purpose of improving accuracy and/or efficiency and/or reducing costs are:

- New process for entering Purchasing Card transactions has been implemented.
- Redundancies in entering customer credit card payments have been eliminated as a result of implementing additional on-line information and services for customers (Customer Web).
- New process for issuing invoices for miscellaneous billings and recording cash receipts has been implemented.
- Implemented a more efficient UNC invoicing process.
- Created numerous quality control reports to assist in processing and verification of data.
- All miscellaneous billings (for services other than monthly water and sewer) are being migrated into a normal monthly billing cycle. This provides for better tracking of accounts receivable, reduces data entry and improves accuracy.
- Created a process to capture more layers of water and sewer revenue in order to enhance quality control of revenue.
- Moved responsibility for all invoicing to Customer Service.
- Implemented new functionality that allows more options for Taste of Hope donations.
- New purchasing module has been installed and implemented in almost all of the departments. (The final implementation steps will be complete by March 31, 2012.) This has improved the purchasing process and provided better control and visibility in monitoring budget performance and improved internal control related to the purchasing function.
- We have increased our focus on budget execution. We are making sure the departments are aware of how they are performing against their budgets and establishing contingency plans as appropriate.

Future work:

- Create and implement additional business intelligence reporting.
- Streamline financial reporting, month-end close process, budget development and the process for forecasting revenues and expenditures.

Measure of success: While objective measures for the above improvements are not yet available, we are achieving important efficiencies.

Complete by: The process of identifying areas for improved efficiency and cost reduction is ongoing.

A.3 Adopt rate adjustments to ensure financial stability.

For FY 2013, a rate study is underway and will be completed before the end of March, 2012. Additionally, we have compiled almost all of the information necessary for populating the FY 2013 financial model and will be prepared to make a recommendation to the Board regarding rates as part of the FY 2013 budget process.

Measure of success: All objectives (except affordability measurement) of the Financial Management Policy are being met.

Complete by: Ongoing

A.4 Develop and implement a plan to increase our customers' understanding of the value of water and the need for rate adjustments which reflect the "true cost" of OWASA's water, sewer and reclaimed water services.

The Community Outreach Committee has been renamed the "Outreach and Education Committee." The group has established a committee charge as well as goals and objectives.

On June 9, 2011, the Outreach and Education Committee recommended and the Board of Directors adopted a set of Goal Statements and Objectives for community outreach and education; on July 13, 2011, the Outreach and Education Committee received and discussed the implementation plan for the Goal Statements and Objectives. These documents set forth detailed plans for communications related to the value and cost of our services.

In related actions on September 22 and December 8, 2011, the Board of Directors approved the Committee's recommendations for (1) the branding program for OWASA (which focuses on water quality, customer service and stewardships as keys to OWASA's "value proposition"), and (2) the public engagement and dialogue program.

Measure of success: To be determined by future research (customer surveys).

Complete by: The implementation plan includes deadlines for completing various outreach and education items as well as the implementation of ongoing processes.

B.1 Develop a Comprehensive Asset Management Plan

The following is a summary of the efforts to develop a comprehensive asset management plan for the "above ground" water and wastewater conveyance and treatment facilities. Individual prioritization plans have been developed through earlier engineering studies for our water and sewer mains and therefore are not included in the scope of this initial asset management effort.

- Data collection on above ground assets (treatment plants, pump stations, tanks, etc.) resides in the Computerized Maintenance Management System (CMMS) and includes features such as: equipment number, location, equipment type, manufacturer, acquisition date, useful life, replacement cost and service history. A similar database on the below ground assets (water & sewer mains) is maintained by the Engineering Department.

- Purchase date, mileage, condition and maintenance information has been collected on OWASA's rolling stock (vehicles, backhoes, etc.) with the goal of making this portion of the asset plan an early success.
- An upgrade to the CMMS software utilized by the OWASA Maintenance staff has been completed.
- Work to develop an asset management plan for a portion of OWASA's assets by a grad student from the UNC Operations Research Department was completed and presented to several OWASA staff members.
- A Request for Qualifications (RFQ) for consultant assistance was completed and CH2M Hill of Raleigh was selected to assist OWASA staff with the development of an asset management plan.
- The Asset Management Team, Department Managers and Directors participated in an introductory asset management workshop conducted by the consultant.
- Individual staff interviews were conducted by the consultant to understand OWASA's current practices and procedures related to asset management.
- 24 OWASA staff members participated in a workshop to provide survey information that was used by the consultant in developing a gap analysis.
- Received consultant's report on gap analysis, which included a summary of current OWASA practices and identified additional needs (skill sets, resources, training, etc.) to close identified gaps.
- Received activity list, cost information and timeline for developing initial Asset Management Plan.

Future work:

- Develop standards and procedures for data management and collection.
- Define staff roles and responsibilities. Review workflow and provide training to staff. Review existing asset information related to condition, criticality or consequences of failure for identified assets. Collect additional or new asset data where gaps exist. The asset information will be used along with other data (age, failures, remaining useful life, etc.) to determine a risk score for each asset.
- Assemble, review and test assumptions in the asset management plan.
- Produce Draft Asset Management Plan document with associated funding requirements for review and evaluation of the impact on our financial management plan.

Measure of success: To be determined.

Complete by: Updated schedule indicates initial asset plan to be complete in March, 2013 – ongoing improvements beyond that.

B.2 Complete ongoing engineering studies (Wastewater Treatment Plant Capacity Study; Water Distribution Model and Wastewater Collection System Evaluation) to improve our ability to identify and prioritize capital improvement projects.

WWTP Hydraulic and Treatment Capacity Study: Complete. Like the hydraulic and treatment capacity portions of the study, the plant's optimization efforts have produced positive results that will

continue to yield significant cost savings for current and future customers. Information from the report was used to identify capital improvements in the FY 2012–2016 Capital Improvement Plan.

Water Distribution Hydraulic Model: Complete. This report identified areas of capacity and/or pressure needs to be addressed through 2030. The model results indicated that OWASA’s system has relatively few deficiencies. Information from the report was used to identify capital improvements in the FY 2012–2016 Capital Improvement Plan.

Wastewater Collection System Evaluation (includes flow monitoring and computer modeled condition assessment): The final report was issued in November, 2011. Information from the draft version of this final report was used to identify capital improvements in the FY 2012–2016 Capital Improvement Plan and information from the final report will be used to identify capacity needs and areas where additional (physical) assessment and inspection should occur in our system through 2030.

Measure of success: These engineering studies provide information to further improve our ability to identify and prioritize capital projects needed to sustain our operation.

Complete by: Action complete. Studies very similar to these will be performed periodically in the future (every five years or so) so that OWASA’s capital investment plans will be kept well informed and up-to-date.

B.3 Secure Future Access to OWASA’s Jordan Lake Water Supply Allocation by working with the Jordan Lake Partnership and other stakeholders.

OWASA continues to play an active role in the Jordan Lake Partnership, including assisting the Triangle J Council of Governments in developing the Triangle Area Regional Water Supply Plan (RWSP), which will provide information to support the allocation requests of individual Partners. The NC Division of Water Resources (DWR) is updating the Cape Fear River Hydrologic Model, which will be used to verify/validate yield estimates of existing water supply sources and the effects of future water withdrawals on downstream flows throughout the Cape Fear River basin. DWR currently projects a September, 2012 submittal deadline for draft allocation requests. Final applications would be due by the end of calendar year 2012. OWASA is continuing discussions to obtain local government approval to revise the 2001 *Water and Sewer Management, Planning and Boundary Agreement* (WSMPBA) to clarify that the Agreement does not constrain access to our Jordan Lake storage allocation.

Future work:

- Continue to seek approval from Towns of Chapel Hill and Carrboro for modification of the WSMPBA.
- Submit application for 5 million gallons per day (MGD) Jordan Lake Level 1 water supply allocation.

Measure of success: EMC approval for OWASA to retain its 5 MGD water supply allocation and convert its status from Level II (long-term future use) to Level I (for use within the next 5 years).

Complete by: 2012

C.1 Continue to evaluate and implement needed changes in compensation and development programs to attract and retain a diverse and high performing team of employees.

In May, 2011 applicants were offered the option of applying for vacant positions completely on-line.

The Board approved an average merit pay increase for employees of 2.5% effective October 24, 2011.

In December, 2011 work began on the Employee Classification and Compensation Study. The study will analyze and recommend improvements in four areas: employee classifications, compensation structure, total compensation, and our performance appraisal/pay-for-performance system.

Future work:

- Working with the Board’s Human Resources (HR) Committee, provide recommendation to the Board of Directors regarding the draft Final Report for the Employee Classification and Compensation Study (expected in spring 2012).
- Meet with HR Committee to discuss additional opportunities to “attract and retain a diverse and high performing team of employees.”

Measure of success: Attrition rate July 1, 2010 – December 31, 2011 = 4.4%

Diversity July 1, 2010 – December 31, 2011:

Male 78%

Female 22%

Minority 24%

Complete by: Ongoing

C.2 Develop a Succession Plan for Key Positions.

Succession Plan for the Executive Director was accepted by the Board on June 10, 2010.

Succession plans for key employees throughout the organization have been completed.

Measure of success: There have been five internal promotions using the Skill Based Pay program.

Complete by: Completed. Plans will be modified as needed as personnel changes occur.

C.3 Complete development and field validation of OWASA infrastructure in the Geographic Information System (GIS).

Substantial progress has been achieved, but much work remains and will require several more years of sustained effort. Recent accomplishments:

- Completed field validation of the locations and attributes of water distribution lines, fittings, hydrants, valves, etc. for 76% of OWASA’s service area.

- Purchased new “survey grade” global positioning system equipment to accurately locate the vertical and horizontal locations of key assets. Provides greater overall accuracy of GIS data – especially for the wastewater collections system – and less reliance (and associated costs) on outside surveyors.
- Integrated key information from the Customer Service database into the GIS database, thus enabling GIS users to view service and customer information through the GIS and WebGIS interfaces.

Future work:

- Field validation of the remainder of the water distribution system; improved accuracy of sewer system data in areas where problems have been specifically identified; and improved linkage between GIS and OWASA’s Customer Service database. Improving the accuracy/functionality of this critical system will be ongoing.
- Further integration between Customer Service and GIS databases; will provide access to historical consumption data through GIS.
- Properly recorded or platted easements do not exist for substantial parts of OWASA’s wastewater collection system, especially for the older portions that were constructed before OWASA began operating in 1977. The lack of documentation can interfere with our ability to access portions of our system, thereby preventing or limiting our ability to properly maintain, repair and rapidly respond to emergencies. This lack of documentation can also limit OWASA’s legal authority to resolve or prevent encroachments where property owners place structures, driveways, plantings, etc. above or in close proximity to our underground infrastructure. These encroachments further complicate our access issues, posing challenges for OWASA work crews and contractors. Work is underway to define and identify the scope of the situation; resolving it may require additional resources.

Measure of success: All employees regard GIS-based water and sewer information as highly accurate and reliable.

Complete by: The validation of water features in the remainder of the service area and resolution of other known deficiencies will be completed by 2016.

D.1 Implement new and improved online billing and account management features.

Customer Web is up and running. Redundancies in entering credit card transactions have been eliminated as noted above. Approximately 31% of customers have registered for Customer Web and 13% have elected to receive their bills online versus receiving a paper bill by mail.

Future work:

- Promote increased use of Customer Web.

Measure of success: Customer Web formally rolled out to customers October 28, 2010; redundant transaction processing eliminated by October 1, 2010; 10% growth per year in number of customers using online billing with 30% of customers using online billing by the end of the third year from implementation.

Complete by: 10% of customer base using online billing by June, 2011 (this measure was achieved)
30% of customer base using online billing by June, 2013 (currently at 13%)

D.2 Develop a plan to measure customer satisfaction, now and into the future.

Future work:

- On November 3, 2010, The Outreach and Education Committee agreed that this survey should be deferred until after the budget process in 2011. The survey will be a part of the Outreach and Education Committee's implementation plan mentioned in Section A.4 above.

Measure of success: Extent of customer participation in the survey.

Complete by: November, 2012. However, the Outreach and Education Committee's implementation plan calls for development of future annual surveys of customers' satisfaction and their perceptions of OWASA.