

# What to do when the bubble has burst

A Georgia water utility has to respond quickly to historic personnel loss

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In 2010, the Cobb County (Ga.) Water System (CCWS) lost 8% of its work force, representing 38% of total employee tenure. From a local standpoint, a few key factors were at play and led to this exodus. First, there was the inordinately large number of personnel eligible for retirement. Second, Cobb County found itself deeply affected by the 2008–2009 recession. Third, the CCWS budget also was negatively affected by lost revenue from declining residential water use, which began its decline in 2001 due in part to the advent of high-efficiency plumbing fixtures and CCWS customer water conservation education programs. This was followed by mandated extreme conservation measures that were the result of a multiyear statewide drought and long-simmering contention with two neighboring states about water rights.

Responding to both local and national impacts, CCWS developed several countermeasures that were varied but interconnected.

## The challenges faced

A combination of factors contributed to the most extraordinary loss of personnel that CCWS ever had experienced.

**Recession/recovery impacts.** The 2008–2009 recession led to several negative impacts on CCWS employees. As employees of a Cobb County agency, CCWS staff are affected the same as any other county employees by salary restrictions, retirement incentives, and eliminated positions. The elimination of employee raises started in 2007 and ended in December 2012. Second, the county developed the Immediate Retirement Incentive program, designed to encourage employees eligible for retirement to do so. Third, CCWS experienced more staff cuts when the county ceased or froze the hiring of

replacement employees for vacant positions. Finally, the county imposed a 1-day-per-month furlough for all employees in fiscal year (FY) 2011 that was, in effect, a 4.6% pay decrease. Subsequent increases in medical insurance premiums and employee retirement contributions have affected employees further by effectively reducing their pay.

Although it was difficult to comprehend at the time, CCWS recognized that when the economic recovery came, it would bring another surge of employee resignations through retirements and from employees who felt they were underemployed and could leave for higher-paying jobs. This would leave CCWS with an even smaller number of experienced employees to operate the utility, a loss of institutional knowledge, and fewer experienced supervisory and managerial personnel.

**Retirement incentives.** Retirement attrition increased in FY 2009, although vacated positions were allowed to be filled at that time. In FY 2010, CCWS lost 8% of the work force through the Immediate Retirement Incentive program within a 3-month period. This percentage of departing staff represented some of the most senior and skilled managers, supervisors, and operators.

**Potential outsourcing.** Certain services provided by the county – such as CCWS water and wastewater field operations and other county agency field units – have been mentioned as possibly being outsourced to private contractors. Although no definitive timeline has been proposed, outsourcing and potential public–private partnerships have become much-debated political topics and caused great consternation with all potentially affected county employees.

**Furlough impacts.** The 1-day-per-month furloughs had a direct negative impact on employees, both financially and from a morale standpoint. It was difficult to replace certified operators who were

being furloughed for an 8-hour period with other certified operators without creating overtime issues, thus negating the intended furlough cost savings. The furloughs proved to be an administrative burden on managers and supervisors due to the unconventional operations staff schedules. They also resulted in delayed or curtailed projects and were disruptive to the level of customer service. Because of the furloughs' overall negative impact on the county, the sentiment is to not repeat this action.

## Implementing countermeasures

The following are initiatives and programs CCWS developed to counter the loss of personnel and tenured staff. These actions were taken both before and after the historical staff losses in 2010.

**Strategic planning.** CCWS concentrated on developing a strategic planning process, as opposed to a stand-alone written plan. The agency wanted to develop a strategic plan that clearly reflected its organization's mission statement and stakeholder policies. It became a tool by which the agency could streamline its efforts into cohesive factors to reduce the impact of loss of tenured employees and institutional knowledge. CCWS recognized that vital components of the strategic planning process would be succession planning versus replacement planning, which would have focused primarily on select individuals for advancement; knowledge retention; and both a leadership and cross-functional developmental program.

**Asset management program.** With the implementation of the CCWS asset management program, the agency developed several initiatives that enabled it to transition from simply building and operating assets to managing its life-cycle costs while providing a level of service its customers demanded at a level of risk tolerable to the agency.

One significant technological improvement was an upgrade to a more functional computerized maintenance management system (CCMS). In addition to giving CCWS the ability to produce work orders while retaining historical data, the new CMMS enabled the agency to

- keep an inventory of assets,
- manage both proactive and reactive maintenance,
- assess the condition of its assets,
- use reliable geographic information system (GIS) maps of its linear assets,
- update maps through daily field-crew corrections, and
- identify employee and crew responsibility and production efficiency.

CMMS became a logical way for collecting records and procedures, as well as organizing and maintaining them in a usable format. The system also fostered an efficient personnel transition, lowered costs, increased system reliability, and made system maintenance and renewal of assets increasingly manageable. CCWS also used the CMMS to assist in developing its capital investment program, resulting in a more accurate and defensible budget.

**Succession planning and knowledge retention.** CCWS wanted to advance a sustainable process that would attract new employees and retain existing employees by developing their skills and leadership abilities and helping them advance to more-productive positions. CCWS also decided to link its succession planning efforts to its strategic planning process. The agency developed several objectives in its succession planning program, such as

- identifying and/or updating key critical positions and skills to be filled and the existing gaps in leadership roles,
- developing a system for knowledge transfer and training to the identified staff,

- providing both coaching and mentoring opportunities to the identified staff,
- providing and assigning increased duties and responsibilities to the identified staff,
- obtaining support from county leadership for the program,
- providing for a measurement of progress throughout the planning effort, and
- encouraging management commitment to and employee acceptance of the program.

CCWS wanted to identify critical positions that either had to be filled through immediate or imminent vacancies or provided a unique technical skill or critical leadership role in the organization.

CCWS also recognized that it had to address defined, explicit, and implicit knowledge transfer through written policies, procedure manuals, observation, insight, and judgment. The implied knowledge base constitutes the majority of the organization's culture and can only be learned through direct contact, such as on-the-job training, coaching, or mentoring.

CCWS deemed it necessary to develop its succession planning process around the county's human resources agency procedures. One way it did this was through a "position overfill process," whereby an individual is chosen for a position through accepted selection procedures and then allowed to work in the position with the departing individual, typically for a monthlong period. This way, the explicit knowledge required by the incoming individual for the position could be successfully and efficiently transferred.

**Operator certification training.** In 2006, CCWS entered into a capacity, management, and operation and maintenance (CMOM) consent agreement with the State of Georgia and the Environmental Protection Division of the Georgia Department of Natural Resources. The purpose of the agreement was to develop a program that would reduce – to the maximum extent possible – wastewater overflows. As part of that agreement, CCWS agreed to have a state-certified wastewater collection system operator on each wastewater crew. CCWS also independently decided to have a state-certified water distribution system operator on each water crew in order to balance its training program.

Facing loss of personnel, CCWS recognized that it could use certified operator positions to promote retention of existing key staff and to offer a recruitment incentive to new staff. The agency also wanted certified operators to retain knowledge from exiting personnel. Its main goal was to train approximately 50 certified operators for both water distribution and wastewater collection. In addition, CCWS wanted to work with an independent local community program, coordinate training with work schedules and testing dates, and provide an internal personal level of instruction beyond the usual on-the-job involvement. To accomplish this, the utility partnered with Chattahoochee (Ga.) Technical College and obtained county management's commitment to the certification program with training budget approval. The agency also added the certification requirement to the job description for affected positions. This was significant, as the requirement included a higher pay grade and compensation level.

Working with the college and its instructors, CCWS developed a curriculum for both the water and wastewater certification programs that would meet state-mandated training and pretest certification requirements. CCWS assisted the college in its presentations to the state licensing board to achieve approval of the new curriculum.



**The Cobb County (Ga.) Water System took several actions after losing 8% of its work force. One program created an internal training and certification program in such areas as excavation and trenching.**

Cobb County Water System

In addition to 40 hours of formal classroom training at the college, all CCWS students are required to attend study sessions at CCWS on days prior to their 2-day-per-week classroom sessions. Senior personnel lead the in-house sessions, which essentially cover assigned homework from the classroom. The practice keeps senior personnel current and reinforces information the students are learning in the classroom, giving them the chance to ask questions about material covered and not covered in classroom textbooks.

CCWS was able to exceed its goal of 50 certified operators. It now has 85 certified operators and more than 110 wastewater collection and water distribution certifications. The pass rate of employees in the certification program exceeded 90%. More importantly, CCWS reduced the loss of personnel, increased personnel knowledge retention, and recognized and developed personnel for potential leadership positions.

**Updating certification training.** As the number of CCWS certified employees grew, it became increasingly evident that CCWS should implement an internal training program. The program would educate and inform employees about the latest information, satisfy safety requirements, and be authorized to award certification points to operators and engineers. Such a program would save the growing expense of funding the required training externally, usually through conference registration and associated travel costs.

To initiate the program, the CCWS safety officer obtained both U.S. Occupational Safety and Health Administration outreach and train-the-trainer instruction. The safety officer, CCWS operations manager, and the Cobb County Risk Management Office prepared documentation and the curricula for several training efforts and presented these to the state licensing bureau. The programs developed included lockout/tagout, confined-space entry, respiratory protection, bloodborne pathogens, excavation and trenching, and many others.

CCWS then was authorized by the bureau to conduct classes and award certification points internally. Now, 20 different subjects are offered, and the training has proved to be extremely beneficial both to employees and to CCWS and will be expanded in the future.

**Online training.** The county also set up an extensive "eLearning" program. This high-quality training resource is now available free to county employees and available anytime and anywhere employees have Internet access. It includes self-study tutorials, online instructor-led courses, digitized reference materials, and online certifications to increase knowledge and skills in such areas as professional development, written communications, team leadership, and organization and time management.

**Crew reporting and vehicle staging.** Starting in 2009, CCWS began equipping crew vehicles with mounted laptop computers, and now, approximately 50 of the vehicles have a mobile version of its CMMS software solutions. The mobile solution software enables operations center and field vehicles to transmit work orders back and forth via cellphone. With the mobile system installation, CCWS was able to move some crews to one its four water resource recovery facilities located on the county periphery. The crews now check in and start their workday with equipment and vehicles at this facility. By doing this, CCWS has reduced considerably the personal travel time of employees that live outside the county.

The laptop computers also have proved beneficial. They are imbedded with GIS maps of all CCWS' linear assets throughout the county, and the crews were able to indicate alterations to these maps through the network if they observed discrepancies between the existing maps and actual field conditions. The network is protected from interception by other than select county users. In addition, vehicles are equipped with automated vehicle locators that enable supervisors and the dispatch center to better assign crews, depending upon their proximity to job sites, therefore saving time and fuel costs.

These actions have given employees the flexibility to perform their jobs more efficiently and have more ownership and pride in what they do.

**Crew award incentive.** CCWS, in cooperation with the Cobb County Customer Services Council, created a quarterly award designed to recognize an assigned field team or crew whose work assignment performance consistently exceeded expectations by providing excellent customer service. The award was created because field crews and teams do not often interact with office employees and often feel they are neglected when it comes to recognition.

To be eligible for the award, the team or crew must consist of between three to seven individuals who have been assigned together on a long-term basis. The documentation and examples of excellent customer service should come from the public and from the employees' direct supervisor or other employees who have direct knowledge of the service they provided. Upon selection, the crews also are recognized at county board of commissioners meetings.





**With a loss of 38% of its employee tenure – meaning more seasoned employees left – the county was in a proverbial hole. And, when economic recovery came, the county expected another drop through retirements and employees leaving for higher-paying jobs. This would mean even fewer experienced employees to operate the utility, a loss of institutional knowledge, and fewer experienced supervisory and managerial personnel.** Cobb County Water System

**Enhanced employee performance appraisal system.** The county adopted a revised employee performance appraisal system with a focus on creating a goal-setting process, documenting position requirements, identifying training needs, and establishing employee accountability. Four levels of performance were identified, with employees at the highest level potentially being eligible for the greatest merit percentage increase. The four levels enable supervisors to have a basis to provide professional encouragement to all employees. The new system also establishes seven different areas for supervisors to grade employees, thus enhancing communication with employees regarding their performance. The system includes two progress discussions that precede the year-end final appraisal. It also is completed entirely online, thus saving time and paper expense, as well as encouraging all employees to learn and practice their computer skills.

The overall goal of the new system was to emphasize dialog with employees by defining and evaluating essential duties and responsibilities versus elementary form completion and documentation. This is a new process, but the position requirements and goal-setting elements have been rewarding in employees' transition to vacated positions.

**Frozen positions reopened.** During the hiring freeze, existing positions could not be refilled automatically when a vacancy occurred. County agencies were encouraged, if possible, to reassign duties of the vacated position or use part-time instead of full-time employees in those positions. The effect, in many cases, was a measured service loss to county residents and CCWS customers.

CCWS was not affected as much as other agencies by the vacancy freeze. Some of CCWS' vacated positions were, in effect, unfrozen immediately by county management because the positions were mandated by regulation and/or required by a state-issued license or certification to meet permit requirements.

## Taking the next step

After recognizing the past successes of other measures to supplement the loss of personnel and to assist employees in gaining additional skills, the county and CCWS took on other programs.

**Employee compensation review.** In 2011, the county commission selected a citizens oversight committee to review countywide organizational structure, revenues and expenses, and priorities and options, and then to make recommendations. The final report from the committee was presented in February 2012, and it included a recommendation that the county perform a comprehensive market review of total employee compensation. This would include a comparison of both private- and public-sector jobs in relevant markets. The committee believed the study would help promote fairness among pay grades for similar responsibilities and make sure they were priced fairly with the private sector. This study was eagerly endorsed by employees.

**Enrichment program.** Within CCWS succession planning, the primary positions the agency is most concerned about filling are senior operator, supervisor, and superintendent. Some staff members have the technical knowledge and field experience to qualify for the vacated positions but lack some or all of the basic and essential skills vital to the position. Another impediment is the competency-based assessment that was added by the county human resources agency to the interview process. It includes questions that are relevant to the position being filled, and an applicant may be required to respond verbally, in writing, or through a computer exercise. To prepare for this portion of the interview, CCWS wants to offer training in basic computer knowledge, reading comprehension and composition, math, interviewing and competency-based assessments, and situational awareness and active listening.

**Additional mobile software and Web map improvements.** To assist in knowledge retention, CCWS soon will add mobile software applications that will enable crews to view previously recorded videos of wastewater lines in their laptop vehicles. This will greatly enable crews to save time in renewal activities and respond to a new field assignment more efficiently.

**Changing work force and social media.** CCWS wants to improve clear and direct communication with employees. It is working with multiple generations of workforce, from those born before 1946 to Generation Y, all requiring different modes of communication. Another obstacle to better communication was the limited access of some field employees to the CCWS e-mail system. Many work in remote field locations and have staggered work schedules. CCWS reasoned that an effective mechanism to accomplish enhanced communications with these groups would be social media.

## An evolving problem, shifting solutions

What CCWS found most frustrating in all these separate but related problems was the short length of time over which the issues have developed and continue to evolve. The agency to date continues to struggle through an economic recovery and continued mandated water conservation measures.

The programs and measures undertaken have proven beneficial in regenerating and maintaining a stable workforce and desired level of customer service by retaining key employees and system knowledge in an unstable economic climate. CCWS also recognizes that in addition to the actions outlined, it must have a strategic vision and process that is proactively supported through financial sustainability and open communication with employees, stakeholders, and customers.

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