

Etowah Water & Sewer Authority Partners with Sensus for Successful Smart Water Network

Utility Achieves High Marks in Customer Service, Conservation and Cash Flow

CASE STUDY

Identify Goals

Score high in the three C's of a successful AMI deployment:

- Customer service
- Conservation
- Cash flow

Determine Approach

- Deploy the Sensus FlexNet™ communication system
- Replace aging meters with Sensus iPERL™ water meters

Reach Farther

The Authority has already seen these benefits:

- Helpful, fact-based conversations with customers
- Accurate meter reads from eight miles away in hilly terrain
- A 5 percent increase in revenue—with no rate increase

Future opportunities include:

- New rate structure options
- Capture of low flow usage that was unaccounted for in the past

It all adds up to realizing ROI in less than five to seven years.

Nestled in between Lake Lanier and the Appalachian Mountains, about an hour north of Atlanta, is the Etowah Water & Sewer Authority (the Authority). Chartered in 1980 with a mission to improve the quality of life for its customers, community and the environment through proper management of water resources, the Authority serves 5,400 consumers and runs 1.5 million gallons of water per day through 175 miles of pipe.

“We’re a small, relatively young utility that takes its commitment to the community seriously,” shared Brooke Anderson, General Manager, Etowah Water & Sewer Authority. “Our customers trust in us to make solid decisions about our limited water resources. Consequently, our vendors must be equally reliable and focused on partnering with us for everyone’s benefit.”

Replace Aging Meters with an Eye to the Future

Faced with aging meters of all kinds from multiple manufacturers, the Authority looked to implement a complete replacement program, one that would not simply replace all existing meters but would also favorably position the Authority for years to come. Specifically, they looked for an advanced metering infrastructure (AMI) solution from one vendor that offered improved accuracy, greater longevity and forward-looking capabilities that would allow them to grow and develop as the future warranted. Two-way communication between the meters and base stations was a primary driver as were overall cost and a clear, quick path to achieving return on investment (ROI). Also important was the type of relationship that would help ensure success—that is, one of a partner, not just a vendor.

A smart water network is an integrated set of products, solutions and systems that enable utilities to remotely and continuously monitor and diagnose problems, prioritize and manage maintenance issues and use data to optimize all aspects of the water distribution network.

The Authority turned to the Sensus for its FlexNet™ communication system and iPERL™ meters, which offer unparalleled low flow accuracy with high flow durability all with a 20-year warranty. AMI connectivity gives the Authority two-way communication capabilities and the ability to read meters



The Authority’s service area includes scenic natural wonders, like Amicalola Falls in Dawsonville, GA.

every hour. Because of the mountainous terrain in and around the Authority, powerful, long-range radio capabilities like those found in FlexNet were necessary to ensure reliable communication.

According to Anderson, “The benefits of the Sensus solution are incredible. The accuracy of the iPERL meter is second to none, as is the range of FlexNet, with some of our meters registering from eight miles away in hilly terrain. You simply cannot top those capabilities.”

Measure Against Priority Outcomes

The Authority measured results against three key metrics: customer service, conservation and cash flow.

Since the deployment, customer service is the best it’s ever been. The Authority is currently developing Customer Connect, an online portal which will allow customers to access their account and see their consumption over a 24-hour period, making billing and water usage virtually transparent. Alerts triggered by unusual or continuous usage patterns also warn them of possible leaks before there is extensive use and possible damage to their residence or business.

“Now, we’re able to have intelligent, fact-based conversations with our customers,” said Anderson. “When they call questioning high bills, we’re immediately able to ask the right questions about

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their usage and remind them they filled their swimming pool last Saturday. We’re also able to catch probable leaks within 24 hours and can proactively alert the customers so leaks can be fixed before a big bill arrives in their mailbox or possible damage is done to their home.”

Given the area’s drought or near-drought conditions of recent years, the Authority focuses heavily on conserving and protecting limited water resources. Aside from leak detection capabilities, the Sensus FlexNet system gives the Authority the ability to accurately read the lowest usage flows, ensuring customers are accurately billed for all the water they use.

Reach Farther

The deployment has opened the door to the possibility of new rate structure options in the future. The increased accuracy of the meters also impacts revenue for the Authority by accounting for low flow that went uncaptured in the past. It all adds up to a significant and timely ROI for the service provider.

“The improved accuracy from the Sensus FlexNet system has given



Its Smart Water Network reinforces Etowah Water & Sewer Authority’s core values of excellence, integrity, stewardship, commitment, efficiency and vision.

us a 5 percent increase in revenue—without a corresponding rate increase,” notes Anderson. “Even by the most conservative measures, a meter conversion with Sensus will provide a complete ROI in less than five to seven years. We are very pleased with both these numbers and our partnership with Sensus.”

Published March 2015



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