

BEACON® Advanced Metering Analytics (AMA) and E-Series® Meters Offer an Accurate and Long-Term Metering Solution for Heber Springs Water and Wastewater Utility

Heber Springs Water and Wastewater Utility, in Heber Springs, a resort town located on Greers Ferry Lake in northcentral Arkansas, serves approximately 5,500 water customers and two wholesale water systems. The utility services weekend and summer vacation homes, which make up many of the water utility's customers, as well as commercial and industrial customers. Heber Springs had been experiencing various challenges for a number of years. The utility's team was facing difficulties in finding qualified personnel to obtain accurate and timely meter readings, identifying leaks quickly due to inaccurate or old meters, and managing extra time spent on misreads and rechecking meter reads.

To address these concerns, Heber Springs worked with its distributor, Henard Utility Products, Inc. to find a solution. "Starting in 2012, I began discussing the benefits of implementing an Advanced Meter Reading (AMR) or Advanced Meter Infrastructure (AMI) system with Heber Springs. They had been using local read meters for a number of years and were facing challenges that resulted in water loss and extra time spent on meter reading," said Blake Culbreath, sales representative at Henard Utility Products. "During the course of the past five years, the conversation turned more specifically to AMI solutions, and Heber Springs began seriously considering its options."

Heber Springs spent months researching and discussing the best AMI solution for its water system, including speaking with other water utilities in the region on recommendation from Henard Utility. Ultimately, Heber Springs decided to implement Badger Meter's BEACON® Advanced Metering Analytics (AMA) managed solution with ORION® Cellular endpoints and the EyeOnWater® smartphone/tablet application, in addition to installing Badger Meter's E-Series® Ultrasonic meters throughout its system.

"The main factor was cost. We saw that Badger Meter's solution would be more cost effective in the long-term compared with other major metering companies," said Paul Graham, assistant manager of Heber Springs Water and Wastewater Utility. "Also, by going with the ORION Cellular endpoints, we knew we wouldn't need to install relay towers throughout the city. This is helping us save time and money on maintaining a physical infrastructure."

A Better Managed Solution

The BEACON® AMA managed solution, enabled by ORION Cellular endpoints, has greatly increased efficiencies for Heber Springs. Because the cloud-based software suite uses existing cellular networks, there is no need to install or maintain fixed-network gateways. In addition, Heber Springs' water utility team now receives real-time water usage data on a daily basis, rather than monthly. This helps the team detect and address leaks faster than ever before.



BEACON® Advanced Metering Analytics (AMA)



E-Series® Ultrasonic meter

"I check leak alerts on the BEACON AMA software suite every morning. A few months ago, I saw that one of the vacation homes in our system had a considerable leak. I was able to alert the customer, who lives in Little Rock, Arkansas full time, almost immediately," said Kent Latch, general manager of Heber Springs Water and Wastewater Utility. "I stopped by her vacation home the same day, and I found and stopped the leak in a matter of minutes. The customer was so happy that she came to our office to personally thank us for our work."

(continued)



(continued from front page)

Using BEACON AMA, the Heber Springs utility team was also able to find a 283 gallon-an-hour leak at one of the city's baseball fields. Heber Springs meters the field but does not charge the city for the water use, so this leak was a major source of non-revenue water loss for the utility. After identifying the leak using the BEACON AMA managed solution, the Heber Springs team quickly fixed the problem.

"Our water loss has dropped pretty substantially," added Graham. "Currently, we have reduced our water loss between four and eight percent. We still have a number of meters to install, so this isn't even a complete indicator of the water system's full capability."

With the new managed solution, Heber Springs has also seen improved accuracy in billing. Since BEACON AMA provides real-time accurate data, there is no discrepancy in a billing month – a month is a month. Whereas in the past, a month could have been a month and one or two days depending on the calendar.

New Low-Flow Metering Helps Reduce Water Loss

In addition to the BEACON AMA managed solution, Heber Springs has installed Badger Meter's polymer E-Series Ultrasonic meters in its water system. E-Series Ultrasonic meters, which monitor consumption, rate of flow, and provides reverse-flow indications and alarms, have no moving parts. They last longer and are more accurate than mechanical meters and are especially suited for metering low flows.

In fact, Kent Latch tested the E-Series Ultrasonic meter's low-flow capabilities in his own home. "I turned on a faucet to a drip. Astonishingly, the E-Series meter registered the leak, and I received a notice saying that there was a leak in my home," said Latch. "Prior to installing the E-Series meters, low flow usage had been unaccounted for. Because we're measuring these flows now, we have seen a considerable reduction in measurable water loss in the system and an increase in revenue."

EyeOnWater Helps Customers Consciously Consume Water

With the new water metering system in place, Heber Springs' customers are also able to have more hands-on access to their water usage. The BEACON AMA solution includes the EyeOnWater mobile application, which allows water customers to see their water usage in real-time. In addition they can set alarms when their water usage has reached a certain level. As a result the utility has seen a reduction in the time spent managing customer questions.

"With many of our customers living in other areas and using their homes here on a seasonal basis, the EyeOnWater application is especially valuable. Once the customer understands the capabilities of EyeOnWater, they love the ability to follow their usage from wherever they are. They also appreciate that we notify them when they have a substantial leak within a few days rather than after a month," said Graham. "Overall, our customers are pleased with the new system, and so are we. We would recommend this system to anyone."

Heber Springs Water & Wastewater Utility Solution

- BEACON® Advanced Metering Analytics (AMA)
- ORION® Cellular endpoints
- E-Series® Ultrasonic Meters
- EyeOnWater® smartphone/tablet app

Results

- Solutions that save time & money
- ORION Cellular technology eliminates need for fixed infrastructure and ongoing maintenance
- BEACON AMA's cellular capabilities save time and man-hours on drive-by reads and rereads
- Meter reading accuracy
- New ability to meter low-flow water
- Faster leak detection
- No moving parts increases lifeexpectancy of E-Series meter
- Improved customer service
- Faster leak detection
- EyeOnWater® mobile app enables hands-on water usage data for end-water customers, especially customers who are only part-time seasonal residents
- More detailed usage information reduces billing disputes

Making Water Visible®

Making Water Visible, BEACON, ORION, E-Series, and EyeOnWater are registered trademarks of Badger Meter, Inc. Other trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2017 Badger Meter, Inc. All rights reserved.

www.badgermeter.com