

# Complete change-out to E-Series® Ultrasonic meters, ORION® Cellular endpoints and BEACON® Advanced Metering Analytics (AMA) software suite is a winning combination for Harris County (Texas) Utility District

# **Aging System Needed to be Replaced**

Servicing more than 3,000 residents in the Greenfield Village and Copper Creek subdivisions in northwest Houston, Texas, Harris County Utility District (UD 15) had an aging water metering system with numerous inefficiencies. As a result, the district was experiencing lost revenues and inaccurate meter readings. It was time to replace the system.

Phillip Givens, board director and general manager of UD 15, started the process by researching industry options over a five-year period, after which he invited other local municipal utility districts (MUDs) in the Houston area to a day-long meeting. During the meeting, six leading providers of water meters and meter reading systems shared presentations.

"I knew we needed a complete overhaul of equipment and technologies. I wanted to ensure, however, that our investment wouldn't be obsolete within the next five years," said Givens. "The presentations gave us the opportunity to see first-hand what was available and what we could potentially order as a larger group to help reduce costs."

# "The product I had been waiting for"

"I had been researching new technologies in the water metering industry for about five years and had seen the trend towards advanced metering infrastructure (AMI) systems, and more recently, the increasing use of cellular technology in meter reading," Givens continued. "When we heard Badger Meter's presentation, I learned they had the capabilities we needed, such as cellular endpoints. I knew this was the product solution I had been waiting for."

UD 15 chose Badger Meter's BEACON® AMA Managed Solution, including the BEACON AMA cloud-based software suite, ORION® Cellular endpoints and E-Series® Ultrasonic meters.

"The simplicity of Badger Meter's technology was the huge selling point for UD 15," said Dayne Burson, owner of Accurate Meter & Supply, the Badger Meter distributor for UD 15. "Since the system uses existing cellular networks, there is no infrastructure, such as towers and gateways, to maintain. They also don't need to own and maintain their own server and software. All they need is a laptop and browser to access the system."

The district replaced its approximately 900 residential meters with stainless steel E-Series Ultrasonic meters, ranging from 5/8 inch to two inches in size. They also installed 30 commercial three-inch and six-inch meters and retrofitted several commercial meters to work with the BEACON AMA software. All of the district's meters use ORION Cellular endpoints.

### **An Efficient New System**

UD 15 employs Municipal Operations & Consulting (MOC) to operate its system. Prior to implementing the Badger Meter solution, employees with MOC had to manually check each meter on a monthly basis and enter each reading. With BEACON AMA, the district now automatically receives readings every day.

"Not only is the district vastly reducing the time spent in the field getting direct reads, BEACON AMA is helping to eliminate human error," said Burson. "With the increased accuracy and efficiency of the new Badger Meter system, the MOC staff is free to focus on more pressing projects."

UD 15 was able to install BEACON AMA and E-Series meters within a two- to three-month window. MOC did prep work, such as cleaning meter boxes and repairing equipment, and also installed the meters.

# E-Series Ultrasonic Meters Generate Additional Savings

"When they were using mechanical meters, the district replaced equipment after one million gallons, per the AWWA Standard," said Burson. "Because the E-series meters use solid state technology and have no moving parts, they have greater reliability and a longer life expectancy than mechanical meters. In fact, UD 15 expects to double or triple the life expectancy of its meters."

"In the time it would take to replace two or three mechanical meters, the Badger Meter E-Series meters will need to be replaced once. Plus, meter repairs are no longer an issue," added Burson. "This is where UD 15 will see the largest savings as a result of this overhaul."

(continued)



### **Customer Service Sees Huge Improvements**

"With our old system, we were limited by monthly reads. When customers called to complain about bills or request more information about their water consumption, all we could rely on was the data we received once a month," shared Givens. "Now, we receive daily alerts with real-time data. If there's a leak, we can notify the customer right away."

The district's BEACON AMA system includes the EyeOnWater® mobile app, which enables the district's customers to take a hands-on approach to monitoring their water usage. With the app, customers can see and understand their water consumption in real-time. They have the ability to detect a potential leak right away, without waiting to see it on their monthly bill.

UD 15 introduced EyeOnWater at their annual customer appreciation BBQ event. At the event, the team helped customers set up their app and learn how to log on. "One of our objectives as a utility is to help customers save money. The accuracy and efficiency of the Badger Meter solution has truly helped us to achieve that objective," said Givens.

# **Harris County Solution**

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

### Results

- A new system that saves time and money
  - Solid-state ultrasonic meters provide increased reliability and longer life expectancy
  - Cellular technology has no infrastructure requirements
  - Cloud-based analytics platform provides real-time daily reads
- Improved customer serivce
  - Faster leak detection
  - Accurate data to respond to customer inquiries
  - Customers can monitor their water use on their smartphone or tablet

# 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