CASE STUDY

Eastern Municipal Water District Improves Meter Read Accuracy

Utility uses FlexNet to better serve growing customer base

Challenge
Improve customer service and data accuracy

Solution
Deploy the Sensus FlexNet communication network

Reach Farther
Empower customers to conserve water during record-breaking drought



Eastern Municipal Water District's headquarters is home base for leak detection and water conservation in Riverside County, California.

Too many meters, not enough time

For Eastern Municipal Water District's (EMWD) field technicians, manually reading 148,000 meters across a 555 square mile service area was a daunting task. They spent their days traveling around dry, drought-stricken Riverside County, California to read each of the utility's meters—only to find that missing data limited the organization's ability to proactively review data and provide customer service options and updates that help customers become more efficient.

"EMWD has a responsibility to implement industry-leading technologies that create an efficient environment and empower the customer to conserve water," said David Gayneaux, manager, meter services, EMWD. "By doing so, we are able to limit the water lost to leaks in an economically responsible manner."

To provide their growing customer base with the best possible service and water for years to come, the utility needed more accurate data, fast.

Managing a growing population

Headquartered in Perris, California, EMWD provides services to seven cities in Riverside County and is California's sixth-largest water agency. With 795,000 individuals served and counting, the Southern California water provider is quickly installing meters to keep up with its expanding customer base. In the past four years alone, the utility has installed more than 7,000 new residential and commercial meters.

With a growing number of customers to gather data from each month and California's ongoing drought creating new regulatory challenges, the organization needed to conserve time and water.

© 2016 Sensus

"With FlexNet, we are able to alert users if they exceed their monthly water budget," said Gayneaux. "Doing so ensures we are doing our part to assist in statewide conservation efforts in a constantly changing regulatory environment."

Data needed to conserve resources

To increase efficiency, EMWD invested in new processes to read meters. To conserve water, the utility needed to monitor for high usage patterns, identify areas where customers exceeded their water budgets and detect leaks throughout the system. Without accurate data, it was challenging to educate consumers or spot leaks.

EMWD uses an allocation-based rate structure that provides both indoor and outdoor water budgets to customers. By obtaining additional data through their smart water network, they were able to better track water budget compliance and proactively assist customers with leak detection.

Reaping benefits with new technology

EMWD deployed the Sensus FlexNet® communication network to improve operations and meet the needs of a growing population. The utility now relies on the FlexNet system to read meters remotely, a vast improvement over manual reads. In fact, EMWD now reads more than 52,000 meters using Sensus technology.

In addition, EMWD uses FlexNet to:

- Collect accurate data in a timely manner
- Generate reports for customers
- Analyze usage
- Improve operational efficiency
- Conserve water

Remote meter reading leads to new opportunities

Without FlexNet, EMWD leaders estimate it would take as many as eight additional staff members to manually read the meters of the utility's growing population. With it, employees can instead focus their time on analyzing data and using insights gleaned to better serve customers, assist customers in water use efficiency and conserve water.

Case in point: the utility was able to identify a leak and immediately address the issue with a grateful customer within the first two days of deploying the technology. A retaining wall in a sloped area of the yard concealed a broken sprinkler head in a customer's backyard, making it difficult to notice. Had EMWD not caught the leak in time, the customer's monthly bill could have easily doubled.

But efforts don't stop with leak detection.

Using data to empower customers

FlexNet opened the door to new monitoring possibilities that have given rise to innovative ways to rally customers around water conservation and combatting the drought. Continuous usage reports identify consumers with high consumption levels. EMWD staff initiates contact via phone call, email or text message to inform customers of elevated usage and encourages them to repair the issue. To date, 2,600 customers have been contacted regarding continuous usage at their residence, and 2,300 of them no longer show signs of leaks.

"To help abide by state-imposed drought mandates, we implement certain allowances for our outdoor watering," said Gayneaux. "With FlexNet, we're able to alert users if they exceed their allowance, which helps improve conservation efforts."

Opportunity for the future

As a flexible and scalable technology, FlexNet enables accurate and reliable meter reads no matter how many people and businesses come to Riverside County.

"Accurate meter reads and data monitoring are just the beginning of what we can do with FlexNet," said Gayneaux. "We look forward to expanding our use of technology to better serve our customers, including the launch of a customer portal so that users can self-monitor their consumption."

The FlexNet system not only provides EMWD with meaningful benefits, it also equips them for the future by providing support for many years of sustainable growth.

About Sensus

Sensus helps public service providers—from utilities to cities to industrial complexes and campuses—do more with their infrastructure to improve quality of life in their communities. We enable our customers to reach farther by responding to evolving business needs with innovation in sensing and communications technologies, data analytics and services. Learn more at sensus.com.