



Loudoun Water Partners with Sensus to Sustainably Manage Water Resources

AMI SOLUTION HELPS THE UTILITY KEEP PACE WITH GROWING CUSTOMER DEMAND



CHALLENGE

Create more efficient water resource management

SOLUTION

Deploy Sensus AMI solution

REACH FARTHER

Empower customers to make smarter water usage decisions

Loudoun County is one of the fastest growing counties in the nation. This growth brings a high demand for water from both industrial and residential customers.

In response, **Loudoun Water**, the region's water utility, is on an exciting path forward to plan for and deliver advanced water and wastewater technologies that will support its growing community for generations to come.

"As the region undergoes rapid transformation, Loudoun Water maintains its mission to sustainably manage water resources in advocacy of health, environment and quality of life," said Loudoun Water's Customer Relations Report Technician Michael Rowe.

Manual data collection creates inefficiencies

Loudoun Water's process for collecting water consumption data from more than 78,000 water meters was arduous. Technicians had to manually read each meter, a cumbersome process that left little time for analyzing meter data and informing customers about their usage.



“Ultimately, it comes down to customer service. If we can help the customer use water efficiently, they are conserving water, saving money and protecting Earth’s most precious resource.”

MICHAEL ROWE *customer relations report technician, Loudoun Water*

“We saw lots of issues with leaks that went undetected and mainly relied on our customers to call it in,” said Rowe. “For example, we had water running down the road due to a problem with an irrigation system. After a call, our technician showed up to read the meter and discovered a significant leak of more than 100 gallons an hour.”

Loudoun Water’s team wanted to increase efficiency to make better use of water resources. They decided their system needed a technology upgrade.

After an extensive evaluation process, Loudoun Water ultimately determined that the Sensus **Advanced Metering Infrastructure (AMI)** solution would best fit their needs.

“One of the first Sensus customers we visited shared many similarities with our utility, including the customer demographics, number of accounts and type of accounts,” said Loudoun Water’s IT Project and Supplier Manager Lara Bowers. “We learned how they were using the system to improve internal efficiencies and were able to see how it could work for us. This made the decision easy for us.”

Loudoun Water’s solution consisted of Sensus **iPERL**® residential and **OMNI**™ water meters, all connected by the **FlexNet**® **Communication Network**, an advanced two-way communication network that enables the utility to capture meter data remotely over a wide coverage area. Using the FlexNet system, Loudoun Water can now monitor customer usage data in real-time and proactively address leaks before they become bigger issues.

Proof in the numbers

To alert customers of leaks, Loudoun implemented a four-step process:

1. **Automated phone call or letter**, providing initial leak notification due to increased usage alert –completed between 72 and 95 hours of the first leak alert.
2. **Follow up letter**, notifying the customer the leak is still happening and outlining ways to troubleshoot the issue; check toilets, irrigation systems, water heaters, central humidifiers – carried out within 10 to 11 days.
3. **Physical property visit**, identifying the source of the leak–performed within 20 to 21 days of the first leak alert.
4. **Personal phone call**, attempting final contact–accomplished before the next billing cycle begins.

Out of 13,000 calls made to customers in 2017, Loudoun Water sent 2,600 letters and conducted 1,500 property visits. With



Loudoun Water keeps pace with growing customer demand and sustainably manages its resources with our Advanced Metering Infrastructure (AMI) solution.

Sensus AMI technology, Loudoun Water alerted customers quickly to identify and mitigate approximately 80 percent of leaks with an initial call. Before the smart water system, Loudoun Water technicians had to manually correct these leaks, leading to higher bills and increased non-revenue water.

“The Sensus AMI solution provides the information we need, when we need it, equipping us with the resources to provide the best possible service to our customers,” said Rowe. “Instead of being reactive to customer inquiries, this smart water technology allows us to alert them proactively—before they receive a higher bill.”

Investing for the future

Loudoun refocused its efforts on efficiency and customer service by eliminating manual meter reads. Now the utility remotely collects usage data from its 78,000 water meters, empowering customers with insights to become more mindful about their usage.

“You can see our main values; integrity, innovation, leadership, and stewardship, reflected in the decision to implement the AMI solution,” said Rowe.

Not only does AMI provide accurate data measurement to inform decisions about water usage, it has the capability to help Loudoun Water scale its operations as the region continues to flourish.

“Ultimately, it comes down to customer service,” said Rowe. “If we can help the customer use water efficiently, they are conserving water, saving money and protecting Earth’s most precious resource.”