



Utah Water Conservancy District Reduces Outdoor Water Use with Sensus Solution

WEBER BASIN EDUCATES CUSTOMERS AND PROMOTES WATER CONSERVATION



CHALLENGE

Introduce secondary metering to inform customers of their outdoor water use

SOLUTION

Deploy Sensus Advanced Metering Infrastructure (AMI)

REACH FARTHER

Increase customer accountability with real-time data

The [Weber Basin Water Conservancy District](#), located just north of Salt Lake City, is charged with serving more than 625,000 residents living in the second driest state in the nation. With 65 percent of the district's water being soaked up by manicured lawns and lush gardens, excessive use of "secondary" or non-potable water became an issue for the district. With high consumption and a flat fee for unlimited use, Weber Basin trustees knew that something had to change.

"We had a situation where customers were using as much water as they wanted because they didn't have to pay any more for it," said Weber Basin's Assistant General Manager of Strategic Initiatives Darren Hess. "We didn't want to bill our customers more but instead wanted them to understand how much they were using so they could proactively conserve."



“We wanted something that was universal and would put the latest technology at our fingertips.”

DARREN HESS, P.E. *Assistant General Manager of Strategic Initiatives, Weber Basin Water Conservancy District*

The need for accountability

Weber Basin’s outdated system failed to provide a viable option for metering secondary water systems. District leaders knew they needed to implement new technology to track this particular water usage while holding customers accountable for the excessive use and teaching them how to properly conserve.

With more than 18,000 meter connections in the district, Weber Basin determined that an advanced metering infrastructure (AMI) solution would help capture the kind of data they needed to give customers insight into their consumption. However, there are more than 100,000 connections in the Weber and Davis County areas that are being served by secondary irrigation companies.

“Conservation efforts inside the home, such as not letting the water run when you’re brushing your teeth, are minor compared to the savings we can see outdoors,” said Hess. “As people realize how much water one sprinkler system cycle delivers, we can start to make real differences.”

Latest technology at their fingertips

Hess and his team determined that their AMI investment needed to deliver the

following benefits:

- Provide consistently accurate real-time data
- Gather system pressure data remotely
- Devote minimal resources to the operation and maintenance of the system
- Offer a foundation for future applications, such as a web-based consumer portal
- Allow customers to make more informed choices on water use

“We wanted something that was universal and would put the latest technology at our fingertips,” said Hess. “This meant having a system that could give us the data we needed now while also laying a foundation for further uses down the road.”

In with the new

After a thorough evaluation process, Weber Basin selected the [Sensus AMI solution](#) to revitalize the infrastructure and accurately measure water consumption. As part of the solution, the district deployed Sensus [iPERL® water meters](#) to accurately measure water flow data, including secondary water with abnormal amounts of silt or sediment. The meters were connected to the district office through the Sensus [FlexNet® communication network](#), allowing staff to monitor usage and report issues to customers in near real time.



“With the FlexNet system we didn’t need to tear up backyards and install a lot of new equipment,” said Hess. “We could install base stations above ground and still get accurate meter data from thousands of connections.”

Another attractive feature of the Sensus AMI solution was its ability to integrate with the district’s new software program. Through this integration, the district can present the customer with additional outdoor watering data based on their estimated need versus actual use with the goal of creating more conscientious users.

Wake-up call to conserve water

With the AMI solution deployed, Weber Basin has already seen dramatic results regarding improved customer education and conservation. Upon being presented with comprehensive usage information, 75 percent of customers said they were surprised by the high numbers and more than 30 percent promised to take action and reduce outdoor watering.

“The new system has allowed us to provide customers with a monthly statement that shows actual water use as compared to the customers’ estimated need,” said Hess. “It proved to be a real wake-up call for our customers.”

The reduced water usage resulted in significant cost savings for the district. Weber Basin estimates that better customer awareness led to a reduction of nearly 40 percent.

“Before we installed the new solution, many customers were excessively using water out of sheer habit or were unaware that their sprinkler systems were set to run for so long,” said Hess. “Since upgrading to AMI we’ve found that our customers are welcoming the data we’re now able to provide.”