



Albuquerque Water Utility Eases the Pressure on System Performance with Xylem Technology

SENSUS PRESSURE PROFILE SOFTWARE APPLICATION SAVES TIME AND RESOURCES



CHALLENGE

Manage pressure across vast water distribution system to ensure reliable service

SOLUTION

Leverage Sensus Pressure Profile to gain actionable insights with data from smart devices

REACH FARTHER

Continue proactive operations to reduce truck rolls, enhance customer service and improve modeling

It's been a long, hot day in the desert. Sun beating down. Cracked earth underfoot. After a full day outside, a long, cool shower is in order. Walk in the door. Turn on the faucet. Instead of a cold burst of refreshment, out comes a measly dribble. The plan changes. A much-needed cool down is replaced by a heated call to the local water provider.

The largest water utility in New Mexico is on a mission to ensure this kind of water service interruption doesn't happen. They're leading the way in continuous improvement by transitioning to smart digital solutions.

"The goal is to install 25,000 to 30,000 endpoints each year so that our entire system will rely fully on advanced metering infrastructure (AMI) within three to four years," said Joel Berman, chief engineer of the [Albuquerque Bernalillo County Water Utility Authority](#).

The Water Authority began deploying AMI from [Sensus](#), a Xylem brand in 2011. Utility personnel now manage their water distribution system remotely and in near-real time. Another benefit is tracking consistent water pressure.



“If we don’t identify an issue before the customer, something is wrong. It’s not just about monitoring the pressure; it’s about changing the way we do business.”

JOEL BERMAN *Chief Engineer, Albuquerque Bernalillo County Water Utility Authority*

Timely solutions

“When it comes to water pressure management, proactivity is key,” said Berman. “We keep our customers happy by remotely monitoring their water consumption and pressure to ensure any potential issues are identified before they experience them.”

The utility’s **Sensus ally®** residential water meters report pressure into the easily accessible, cloud-hosted **Sensus Analytics Pressure Profile** software application.

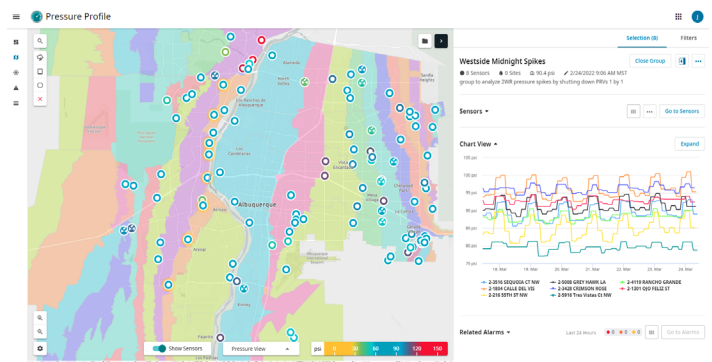
“This technology has taken many steps out of our typical pressure management process, including administrative tasks and truck rolls,” said Patrick Bayardo, an operations and maintenance superintendent at the Water Authority. “Now, we simply log into the website in the morning and the data is right at our fingertips. It’s a big time-saver for us.”

The application’s integration with the **FlexNet® communication network** allows for seamless data collection from smart meters across the system. The data is then aggregated into map-based graphs that visually depict pressure zones and levels within the community at any given time. Automated alerts notify utility crews when pressure deviations occur and they can begin investigating the situation from the convenience of the Water Authority offices.

“A customer noticed his new irrigation system was experiencing lower pressure than usual and just stopped working,” said Berman. “Using **Pressure Profile**, we were able to identify, resolve and restore the system pressure quickly—in only a matter of hours. The customer was grateful and it was a positive experience for everyone involved.”

Increased system visibility

The Water Authority also added the battery-powered **Sensus® Smart Gateway Sensor Interface** at pressure-reducing valve sites to monitor water distribution system performance. The **FlexNet**-enabled device, along with ally meters and pressure management software, located the root cause of recurring midnight pressure spikes during the winter months.



The Water Authority team simply logs onto a computer and opens the **Pressure Profile** application to view the latest data from smart meters and sensors on a map-based interface. Pressure zones, key assets and colored sensor icons offer a visual pulse of the system.



“We discovered an open valve—not mapped on our system—that was overpressurizing pressure from one zone to another,” said Bayardo. “Pressure Profile brings us the data we need in the timeframe we need it to troubleshoot and optimize each pressure zone for optimal performance.”

Berman added, “The application is really a plug-and-play system. It’s a seamless solution that our technicians have adopted, installed and programmed without third-party assistance.”

Proactive pressure management

The utility has found that timely data and convenient access to it is invaluable. According to Bayardo, shifting from a “boots-on-the-ground” approach to digital technology where the data is readily available on their computers has saved the utility service calls and routine maintenance.

“Now we can pinpoint areas and resolve potential water pressure issues within hours in what used to take weeks,” said Bayardo.

The adoption of Xylem technology has resulted in tactical shifts for the service provider to continuously improve operations.

“I’m proud to say that in the last decade we’ve collectively transitioned from being reactive to highly proactive with regards to water distribution pressures. These days, if we don’t identify an issue before the customer, something is wrong. It’s not just about monitoring the pressure; it’s about changing the way we do business,” said Berman.

What’s next

The water service provider plans to dig deeper into their advanced pressure management data for hydraulic model verification to further improve both water loss and quality.



The Water Authority has hundreds of pressure-reducing valve sites across the service area that can now be monitored with the battery-powered Smart Gateway Sensor Interface for timely remote management. Issues can be resolved within hours rather than weeks.

ABOUT SENSUS

Sensus, a Xylem brand, provides remotely-managed products and solutions that deliver the right data at the right time for investor-owned utilities, cooperatives and municipalities. As part of Xylem’s digital portfolio, our smart devices connect with a variety of communication technologies to help customers make timely decisions that optimize electric, gas and water systems. Learn more at [Sensus.com](https://www.sensus.com).