

Jacksonville, Texas Tackles Weather Emergency, Improves Customer Service with Xylem Technology

THE SENSUS ALLY WATER METER WITH REMOTE SHUTOFF HELPS PREVENT PROPERTY DAMAGE



CHALLENGE

Address water loss and prevent property damage during winter weather emergency

SOLUTION

Use the ally meter and FlexNet communication network to strategically locate pressure issues and remotely shut off water

REACH FARTHER

Provide high levels of service with precise data through Customer Portal

Snow and ice. Millions without power and water. Infrastructure damage.

It was no ordinary February across the state of Texas. Severe and uncommon winter weather conditions led to a state of emergency. Frigid temperatures caused pipes to burst, disrupting the water supply for about half of the state's population.

Fortunately, the City of Jacksonville, Texas kept the water flowing for its more than 5,000 residents with the help of its smart utility network from Sensus, a Xylem brand.





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GREG SMITH Former City Manager, Jacksonville, TX

Emergency Preparedness

When faced with atypical temperatures, well below 10 degrees Fahrenheit, many Texans quickly realized they were ill-equipped for what unfolded—total loss of power and serious infrastructure damage caused by freezing conditions.

"We were pumping nearly double what the water consumption was normally, we were losing almost more water than we could produce, and we were getting ourselves into some critical situations," said former Jacksonville City Manager Greg Smith.

Crisis averted

However, Jacksonville's Water and Sewer Utilities team was well prepared for the winter weather emergency. Using the ally water meter along with the two-way Sensus FlexNet communication network, the team ran near real-time usage reports and discovered some customers were losing up to 28,000 gallons of water per day, compared to normal daily consumption of 100 gallons. The smart technology allowed the city to remotely shut off water distribution to residential customers and protect their homes against flood damage from burst pipes.

"Without a shadow of a doubt, the system we installed saved us millions of gallons of water," said Smith. "It certainly turned out to be one of the biggest advantages we had during the storm."

Another significant benefit of the ally meters was the built-in functionality to remotely identify pressure points around the city which allowed the team to isolate water main and service line breaks. They identified and addressed approximately 65 issues—half of which were discovered by data from the smart water meters.

"Once we located and turned off the largest leak, we were able to get pressure back," said Smith. "Without the pressure data, we would not have been able to respond or isolate leaks as quickly as we did."

In the span of just 72 hours, the City of Jacksonville was able to identify damage, respond to its customers and repair its infrastructure.



The City of Jacksonville completed an upgrade to advanced metering infrastructure in October of 2020, so they were well prepared for any water issues during the cold snap just a few months later.



Recovery program

Not only did the smart utility network allow for near real-time response to residents and business owners of Jacksonville, but once the city began to thaw, the system's data helped resume normal water service.

The city's utility team also used analytics to quantify storm-related damage versus typical water use, which resulted in the development of an amnesty policy for those impacted by high water bills.

"Even after the storm, the benefits of our smart water technology prevailed," said Smith. "Because we had such precise data, the city was able to set a policy and understand the financial impact to the city and residents of the winter storm.

Customers who signed up for the online Sensus Customer Portal could see for themselves their daily water consumption and if it corresponded to any issues caused by the deep freeze.

Just two years before this wicked winter weather, the City of Jacksonville knew it needed a modernization effort with the majority of its meters nearing a 20-year life span. While the purpose of the system upgrade was not initially to address storm resilience, the remotely managed network more than proved its value when inclement weather covered their service territory. It allowed the city to quickly collect data, locate and assess storm-related damage, and respond before it caused further damage.

"Without the Xylem system, the entire city could have been without water, and our response would have been totally different," said Smith. "The system paid for itself in just that one week."

An outstanding achievement

Jacksonville city employees can take pride in providing exemplary customer service during a winter weather emergency. Their actions earned the City of Jacksonville the 2021 Texas Municipal League (TML) Excellence Award, which recognizes municipalities for innovative problemsolving, excellent management and high levels of service.



In near real-time, the city can detect leaks, pinpoint pressure issues and shut off water remotely with the ally residential water meter anchored by the FlexNet communication network.

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.



