

# Fort Worth Water Achieves Data-Driven Success with Xylem Technology

Utility reduces field investigations by 90%, enhancing operations and customer satisfaction with near real-time data



As the 12th largest U.S. city, Fort Worth, Texas, and its water utility is among the largest to use Xylem digital technology that has revolutionized their operations.

**Fort Worth Water** successfully implemented Advanced Metering Infrastructure (AMI) in its mission to ensure clean and affordable water to the growing city and foster water conservation.

“This new technology is delivering substantial annual cost savings, improving the customer experience and reducing water loss,” said Marty Barker, AMI administrator at the City of Fort Worth. “We now feel confident that we are providing the best service possible to our customers, while operating more efficiently.”

## Data-driven leak detection

Fort Worth Water completed their AMI project in 2022 with the help of distributor **Aqua-Metric**. The water utility now has just under 300,000 residential and commercial meters compatible with the **Sensus FlexNet® communication network** from **Xylem**. The network communicates via dedicated, FCC-licensed spectrum, ensuring secure and reliable data transmissions between the utility and their meters.

### Challenge

Transition from manual meter reading to Advanced Metering Infrastructure

### Solution

Implement the Sensus FlexNet® communication network

### Result

Reduced by 90% field investigations of customer inquiries into high water usage and bills, saved \$1.1 million in contract work and notified customers proactively of potential leaks

“Residents have become much more aware of their water usage. They now have the tools and information to take control of their consumption, emphasizing the importance of water and how they use it.”

Micah Reed, Water Conservation Manager  
City of Fort Worth

The first thing the utility noticed with the transition to AMI was the influx of data. They leveraged this information to track continuous water usage over 72 hours and alert customers directly by mail and text messages. The proactive approach helped customers to quickly address leaks and better follow the City’s two-day a week irrigation ordinance.

“By positively utilizing data, we are helping customers save money,” said Micah Reed, water conservation manager at the City of Fort Worth. “Before implementing this data-driven solution, it would typically take two or three months for customers to become aware of a problem.”

For instance, the utility attended a neighborhood meeting where a homeowners group discussed their water bills. The homeowner’s association president allowed Fort Worth Water to examine his consumption data which revealed three days of continuous use ranging from 30 to 40 cubic feet per hour. He realized this occurred when his children were topping off the pool and accidentally left the hose running.

### Field investigations decrease by 90%

The implementation of AMI significantly reduced field investigations of customer inquiries into high water usage and bills. There were more than 7,000 annual on-site work orders for investigations before the technology enhancement in 2019, but this dropped tremendously to less than 700 in 2024. The availability of consumption data for both customer service representatives and customers through an online portal called MyH2O led to an impressive 90% decrease in the necessity for these investigations, resulting in fewer truck rolls.

“This level of transparency fostered a win-win situation by enhancing trust and satisfaction among our customers, while optimizing water distribution operations,” said Barker.

The remotely managed system also led to significant cost savings of \$1.1 million through the contract elimination of manual meter readers. This shift streamlined operations and allowed the utility to focus on other programs and initiatives.



Fort Worth leverages the near real-time data to track continuous water use and alert customers of any potential issue.

## Resourceful remote monitoring

One such initiative involved revisiting irrigation ordinances. Previously, monitoring irrigation compliance relied on manual inspections and neighbor complaints. The utility leveraged the new data to identify residential customers watering their lawns too often or on an incorrect schedule and sent notices. In a hot weather state like Texas, the utility helps drive water conservation with this data-driven approach.

“Residents have become much more aware of their water usage. They now have the tools and information to take control of their consumption, emphasizing the importance of water and how they use it,” said Reed.

Another initiative concerned the formation of three District Metering Areas (DMAs) crucial to address water loss. A DMA has defined boundaries, and water loss is determined by measuring the amount of water going into the area compared to the metered consumption by residents. These smaller zones helped Fort Worth pinpoint areas that required repairs to leaking water mains. Fort Worth Water is exploring additional DMAs as a way to stem apparent water loss and further enhance operational efficiencies.

“Everything is much more accurate. It shows how we are using this precise data to make better decisions and report outcomes with greater confidence,” said Reed.



The data-driven approach helps the city properly categorize water loss and pinpoint where repairs are needed.