



## SUCCESS STORY

# NUTTER FORT EMBRACES SMART WATER TECHNOLOGY FOR A SUSTAINABLE FUTURE

*A proactive approach to modernizing water infrastructure with advanced metering saves money and reduces wasted water in a small-town community*

### BACKGROUND

The Town of Nutter Fort, West Virginia, embodies the spirit of a close-knit community, where generations have lived, worked, and raised families together. It is the quintessential small town, with a population of around 1,450 that nearly doubles when school is in session, thanks to one of the state's largest elementary schools. "Nutter Fort is small town USA," said Treasurer Leslie Cummings. She has served as the town's treasurer for over 15 years and, along with the rest of the town's leadership, is deeply invested in helping the community flourish and grow.

This dedication to serving the town drives every infrastructure decision the Nutter Fort team makes, ensuring that the community's needs are met in the most efficient, sustainable ways possible. In line with this commitment to modernizing its water infrastructure with advanced metering technology reflects a forward-thinking approach that has reshaped the way the town's water infrastructure is handled, drastically reducing water loss, labor hours, and overall municipal costs—and making water management more efficient, sustainable, and beneficial to the entire community.

### ADDRESSING HIGH WATER LOSS AND INEFFICIENCIES

Historically, Nutter Fort faced significant water loss—up to 30%—which presented both operational and financial challenges. As a "purchase system," the town buys water from a neighboring area, making it crucial to account for each drop. "When you're putting that much strain and stress on the system and not knowing where your water's going, it's tough on a small town," said Public Works Director Taylor Keith. High water loss also meant increased sewage costs, impacting both the town's budget and its residents' expenses.

With these challenges in mind, Nutter Fort embarked on a mission to find a more accurate and responsive solution. The criteria for a new system were clear: it had to offer high



accuracy, be easy to use for both the department and the community, and provide reliable real-time data on water usage.

After evaluating multiple options and vendors, they ultimately selected Master Meter's Advanced Metering Infrastructure (AMI) system, coupled with ultrasonic metering technology, Harmony Meter Data Management (MDM) software, and the My Water Advisor customer portal app. "Master Meter had the best technology out of everything we tested," Keith explained, "and the service was second to none."

### STREAMLINING OPERATIONS WITH REAL-TIME DATA

The transition to ultrasonic meters replaced the outdated compound meters that previously required extensive manual labor for readings and maintenance. Under the old system, Keith's team dedicated two full weeks every month to complete the readings—a process that often involved pumping water from meter pits and physically inspecting each unit.

"Our old system was tired, worn out, and out of date," said Roger Keith, Code Enforcement Project Coordinator, who oversees various public works projects for the Town of Nutter Fort. Not only did the old meters require manual readings but



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it often took days to process resident inquiries and reconcile numerous billing inaccuracies, creating significant hurdles for the town's public works and billing departments.

Now, with advanced metering data, daily digital reports offer comprehensive insights into water usage, leaks, and tampering alerts, all available in real time. "We're saving hundreds of man-hours," Taylor Keith said. "You're taking two guys from 100 hours [over two weeks] to about 45 minutes once a month." This significant reduction in labor not only lightened the load on the public works team but also cut down on costs and freed up resources for other municipal needs.



## EFFICIENCY, ACCURACY, AND TRANSPARENCY

Master Meter's Allegro AMI system now allows Nutter Fort's public works employees to monitor water usage down to the minute, which has been instrumental in identifying leaks early and preventing substantial water losses. Roger Keith described the system's accuracy as a game-changer, allowing the town to identify problems before they escalate. "We used to spend days lifting lids and searching for leaks. Now, we can pinpoint issues instantly," he noted.

As someone at the forefront of customer interactions, Cummings appreciates the transparency the system provides. The data gathered in the Harmony Meter Data Management (MDM) system allows the Nutter Fort team to address residents' questions about water usage in real time. "Before, it would take a couple of days if someone called with questions about their usage or wanted their meter checked. Now, we can check it while they're on the phone," she explained.

This immediacy helps resolve inquiries much more efficiently. "We can provide daily, weekly, or monthly reports, and review usage on specific streets if needed," Cummings explained. And,

with the same data available to both residents and the town, misunderstandings and disputes over water usage are now far easier to address and resolve.

## COMMUNITY EMPOWERMENT THROUGH DATA ACCESS

One of the significant benefits of the AMI system is that it empowers residents to take control of their water usage. Through the consumer portal and My Water Advisor app, residents can monitor their own consumption daily, which has helped many reduce their bills.

The app has proven to be very popular with residents. "[They] love being able to track their water usage, and for families with high water demands, it has become a helpful budgeting tool," said Cummings. The data not only helps residents better manage resources but also fosters a more sustainable approach to water usage across the community.

"Everybody nowadays has a smartphone," Taylor Keith remarked. "It is amazing that in real time, I can pick my phone up, turn the faucet on, and know exactly what's going on." By offering transparency and control, Nutter Fort has strengthened its relationship with residents, giving them a hands-on tool to manage their water consumption and costs.

The app also notifies customers if their water usage exceeds a certain threshold. Cummings recounted a recent incident where a resident on vacation received a leak alert, preventing what could have been severe water damage to their home. "They were ecstatic," she said. "Without this system, they would have returned to a flooded home."

## DETECTING AND REDUCING WATER LOSS

An unexpected advantage of the ultrasonic metering technology was its ability to detect previously hidden leaks. Shortly after installation, the system flagged a leak at a local elementary school, a surprising discovery that had been wasting water at a rate of over 10,000 gallons per day, or about 325,000 gallons each month. "Those numbers add up extremely fast," said Taylor Keith. Thanks to the new meters, the town was able to repair the leak, saving the school system thousands of dollars.

The benefits extend beyond leak detection. By tracking usage down to as little as a 64th of a gallon, these meters offer far greater accuracy than the older mechanical models, which only measured to an eighth of a gallon. Taylor Keith noted that this degree of accuracy is particularly essential in a purchase system. "We set our standards higher than AWWA



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[American Water Works Association]," he emphasized. "We are accountable for every drop that runs through our master meter."



### FINANCIAL BENEFITS AND LONG-TERM SUSTAINABILITY

For Nutter Fort, upgrading to an AMI system was as much a financial decision as a practical one. The significant reduction in water loss, dropping from over 30% to below 10%, has resulted in considerable cost savings. "This water loss reduction alone creates a huge savings for the town, and these savings ultimately help keep residents' rates low," Cummings explained. Additionally, the reduced need for manual labor allows public works employees to focus on other community projects, further enhancing efficiency.

Originally projected to achieve a return on investment within six to eight years, the town saw positive returns in just under three years. By cutting water loss, the system has not only reduced costs but has also generated additional revenue that the town can invest back into infrastructure and future technology. "It's just the right thing," said Taylor Keith, "when you're saving millions of gallons a month that can be used elsewhere."

It's not just about immediate savings: the data available to Nutter Fort helps them plan maintenance to avoid future problems. "We can be more proactive with our infrastructure," Leslie says. "Instead of just letting things go or waiting for something to happen, [we] can proactively fix things now."

This approach to water management also prepares Nutter Fort for future growth. With plans to expand infrastructure into undeveloped areas, the town's improved water system will play a key role in supporting new businesses and schools within the town limits. "This technology ensures we're not just prepared for today's needs but well-equipped for tomorrow's opportunities," said Roger Keith.

As the infrastructure continues to evolve, Taylor Keith is optimistic about the town's commitment to sustainable water usage and technological innovation. "Water is very precious. We only have so much of it. We definitely need to take care of it," he said.

### COMMITMENT TO COMMUNITY-CENTRIC PROGRESS

Implementing the AMI system is part of a broader commitment by Nutter Fort's leaders to create a community where residents can thrive. For Cummings, who described her role as an advocate for the town's fiscal responsibility, the AMI system demonstrates the efficient, forward-thinking approach needed to meet modern challenges. "We want our residents to be happy and have all the resources they need, whether it's water, sewer, EMS, or other essential services," she said. The support provided by Master Meter, including training and customer service, has only strengthened the town's confidence in this partnership.

Nutter Fort's success in modernizing water management exemplifies how a small town can take big strides in community service and infrastructure development. With forward-looking leaders at the helm, Nutter Fort is setting a benchmark for resource management that not only addresses current needs but prepares for a sustainable, thriving future. "Our biggest objective is to help our residents flourish, and every decision we make is for their benefit," said Cummings. By investing in sustainable infrastructure now, Nutter Fort is paving the way for a prosperous future that supports residents' needs, promotes economic growth, and preserves the community's precious resources.

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### CONTACT INFORMATION

To learn more about how Master Meter can help your utility, visit us at [www.MasterMeter.com](http://www.MasterMeter.com) or call us at 1-800-765-6518.

### CUSTOMER DETAILS

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