

Case Study

Locating and Eliminating Water Loss

Bedford, NY

The Farms Water District, a small water district in Bedford, NY, serves a population of approximately 300, with 83 service connections. The Farms also serves a consecutive system, Old Post Road Water District, population of 1,500, with 69 service connections. As part of the AWQR preparation, unaccounted for water had to be reported. In 2024, 3.5 million gallons of unaccounted for water were calculated, which, on average, was approximately 9,500 gallons per day. This was discovered in April 2024.

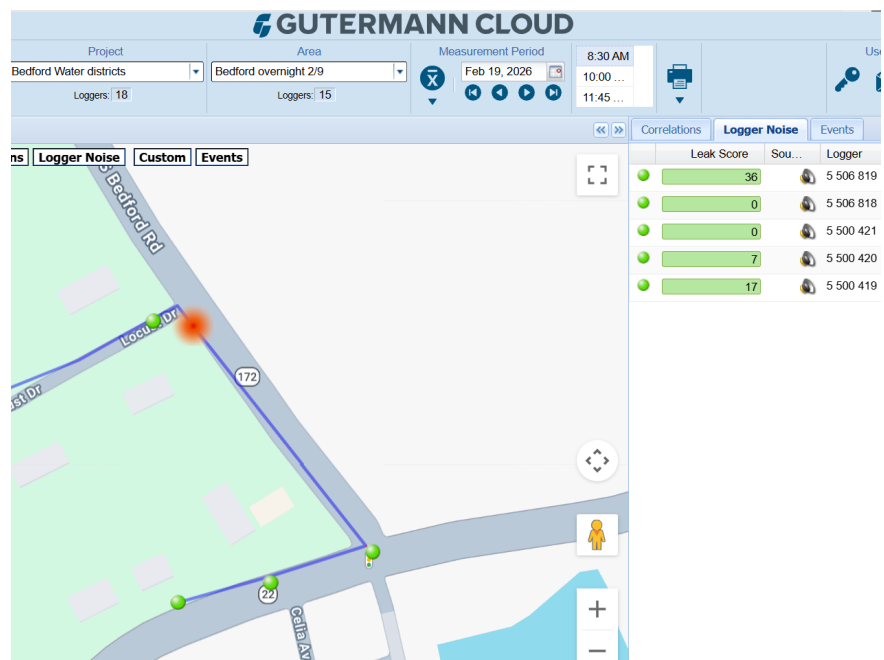
ZONSCAN 8507
Correlating Leak Noise Logger



The town staff had attempted to locate the leak, but their efforts were not fruitful; the leak continued to evade the town. Through the process, issues had been discovered and repaired, but the troublesome leak remained veiled.

After seemingly exhausting all options, foreman James Rosafort recalled a Westchester Water Works Conference presentation by Team EJP, which led to contacting the professionals about solutions for the issue at hand. The town decided to invest in deploying the Gutermann data loggers with the forethought that the helpful tool would be useful for years to come.

Team EJP Round Lake's Tyler Larouche collaborated with the town to locate the leaks. Working together, they doubled back to check all of the water mains. The results were inconclusive except that the loggers detected noise near a large building. The leak in the building was repaired, but it did not make a difference in demand... the leak was still ongoing. When it was determined that another area was consistently showing strong signs of a leak, the team went out to investigate the area.



The correlation data showed two spots for leaks, one on Route 172 near Locust Drive and one on Locust Drive itself.

The Town dug test holes in the vicinity of the “blister spots,” but the ground was dry. During their investigation, the team discovered that one of the houses on Locust Drive (at the corner of Rt 172 and Locust Drive) had no snow in the yard while every other house did. This observation, paired with the Gutermann leak detection technology, led to the discovery of the costly leak... the homeowner’s service line that had been repaired in previous years. With the homeowner’s approval, temporary water from the neighbor was connected, and the service line was shut off.



That night, the district gained back 31,000 gallons in 12 hours on a ¾” line. Collaborating with Team EJP while utilizing the quality Gutermann technology ultimately led to locating the leak and ending the months-long search.

Although desperation and the elusive leak had already led to the town having to purchase 28 tanks of water in the last couple of weeks prior to the discovery, finally finding and stopping the leak was a relief to the team. On average, the system lost more than 10 million gallons of water due to leaks, totaling \$500,000 in water loss – not including thousands of man-hours dedicated to finding the leaks.

Thanks to the specialists at Team EJP and the quality Gutermann products, this “nightmare leak” was able to be located and stopped.

“From the minute they were contacted, they were very helpful, especially Tyler, who would, on multiple occasions, come and try finding the leak for us and with us. He became invested in the search and would check in often to see how we were making out.”

- Bedford, NY