SmartSights

CASE STUDY | Water & Wastewater Treatment

# Advanced Technology Helps Utility Improve Operations

LIVINGSTON COUNTY WSA WATER & SEWER AUTHORITY

**LOCATION**
Livingston County, New York

**INDUSTRY**
Water & Wastewater Treatment

**WEBSITE**
lcwsa.us >

**CHAMPION**
Lauren Monaghan

**Located on the western edge of New York's Finger Lakes region, Livingston County is a rural community and the LCWSA serves approximately 8,000 water and sewer customers. Within the past five years, leadership in the organization changed and Jason Molino and Lauren Monaghan were hired as executive director and deputy executive director, a newly created position, respectively. They oversee a staff of 20 full-time employees.**

**LCWSA's water assets include 45 sewer pump stations with two pumps at every station and 13 water tanks. Daily, the team wrote on their clipboards a run time for every pump, which required Monaghan to take these papers at the end of the month and manually input this information into spreadsheets. But accuracy was never guaranteed by the field team writing down the information or Monaghan guessing at team members' handwriting and re-entering the data; she knew there had to be a more efficient way to do this. The information needed to be digitized for analysis and to make better decisions, particularly since the SCADA system collects the data in real time, but then the team manually enters it at a later date.**

## Livingston County Water and Sewer Authority Makes More Informed, Data-Driven Decisions

Effective and resilient water infrastructure is critical to public and environmental health. In addition to ensuring safe water as well as navigating an aging and retiring workforce, utilities face regulatory pressures, compliance, and reporting requirements. These challenges led the Livingston County Water and Sewer Authority (LCWSA) to examine its operations and see if there was an efficient way to address these concerns.

### Advanced Technology

For the past 20 years, LCWSA had been using SmartSights basic level WIN-911 alarm notification system integrated with GE Verona iFIX Supervisory Control and Data Acquisition (SCADA) system. However, Monaghan's civil engineering education and extensive experience in engineering design, and water and sewer infrastructure project management led her to realize that the organization wasn't utilizing either system to the fullest potential.

While LCWSA previously depended on manual systems, Molino and Monaghan knew the SCADA system was collecting vast amounts of data, but no one was reviewing it in a timely manner. Understanding this information in real time would help the organization towards its mission of being less reactive and more proactive to repair and replace equipment to avoid emergencies. To that end and to better manage this data, the organization upgraded the existing WIN-911 software plan and integrated SmartSights XLReporter. Monaghan's technical background allows her to analyze the data and communicate issues to the field sooner.

The upgrade includes WIN-911's mobile functionality with 11 people having access, six with the water/wastewater and five in the sewer treatment. Additionally, LCWSA upgraded to the SmartSights bundle integrating XLReporter, which helps with industry compliance, internal auditing, and data collection. Since the organization already had WIN-911, it made sense to bundle it with XLReporter and have support 24/7/365 from a SmartSights subscription program, which also means that legacy software isn't an issue because LCWSA now has access to the newest technology.

> **The team really appreciates WIN-911's mobile app feature that allows them to see the alarm on the screen rather than listening to an automated message, and then merely press 'acknowledge' without entering a passcode; it couldn't be any easier**
>
> **Lauren Monaghan**
> Deputy Executive Director
> Livingston County Water & Sewer Authority

### Reporting

While accurate, real-time data is pivotal to operations, harnessing this data effectively requires advanced technology and analytical capabilities, which XLReporter provides. While Monaghan knows that she will publish more data reports in the future, currently she's using XLReporter to send daily reports of plant flow to the wastewater plant operators and the water operators receive a daily report on chlorine residuals throughout the water system

The LCWSA currently has nine re-chlorination stations through the public water systems that require routine checks and maintenance. The analyzers take water samples and report data back to the SCADA system approximately every 10 minutes. These detailed reports allow Monaghan to better understand the overall water system and how equipment issues at one location can lead to operational changes downstream. It has also helped with scheduling routine maintenance when data trends in the wrong direction. The team depends on the alarms and these detailed reports to notify them of any issues.

### Compliance

XLReporter enables Monaghan to turn raw process data into actionable information, thereby increasing efficiency and reducing costs. Furthermore, this advanced software streamlines regulatory compliance by consolidating data from disparate sources like instrumentation readings, HMI audit trails, and alarm history. As the data is collected it is summarized as key metrics and compiled into the monthly reports.

© SmartSights 2026. All rights reserved.

## Avoiding Problems

Beforehand, the field team received paper maintenance requests and would then write data on a form, or they would take the work order and check the station but not record any information. These manual processes were inefficient and prone to errors. For example, typically, workers only checked stations once a week, which meant that it might be another week until any problems would be discovered – such as a lever inadvertently engaged and therefore a pump wasn't working correctly.

Now, an upgraded work order management system and the daily XLReporter reports allows Monaghan to review historization and analytics. Analyzing this historical data allows her to identify patterns, trends, and anomalies that may otherwise go unnoticed. These insights serve as the foundation for creating accurate forecasts and efficient operations, particularly relating to LCWSA's chlorine management. It's critical to not over or under chlorinate to ensure the community's safety and palatability. However, without accurate, real-time data reports it's a maintenance guessing game versus a tailored, strategic plan.

## Upgrading Technology

Molino has been successful at securing grants, allowing LCWSA to implement many infrastructure upgrades like the SmartSights software. Additionally, the organization is planning to implement a more robust GE Verona iFIX SCADA system, which will help them to further improve efficiency, reliability, and safety.

> **By upgrading and integrating technology like SmartSights WIN-911 and XLReporter, we are able to make more informed, data-driven decisions. Bridging the gap between people, processes, and tools allows us to empower our team and strive for a more proactive and efficient operation**
>
> **Lauren Monaghan**
> Deputy Executive Director
> Livingston County Water & Sewer Authority

SmartSights

© SmartSights 2026. All rights reserved.

Americas: +1 512.326.1011 or 800.331.8740
EMEA & APAC: +33 (0)6 89 30 36 58

sales@smartsights.com

SmartSights.com