



NEW ENGLAND WATER ENVIRONMENT ASSOCIATION  
**NEWWEA**  
WORKING FOR WATER QUALITY

## **NEWWA / NEWWEA Information Technology & Asset Management Fair Technology in the Water Works Profession**

**Monday, October 6, 2025**

**9:00AM - 3:45 PM - Holliston, MA**

5.0 Training Contact Hours (TCHs)

### **8:30 AM - Registration and Coffee**

**9:00 AM - Background, Orientation, Purpose, and Learning Outcomes** – DON BUNKER, Education Director, NEWWA, Holliston, MA

**9:20 AM - Welcome and Introduction by Moderator** - LOUIS SCHOOLCRAFT II, NEWWA IT/OT Committee Chair and Executive Vice President, Ti-SALES, Sudbury, MA

**9:30 AM - “Enhancing Building Inspections with GIS: ESRI Solutions in Support of an SSES Program”** - ZACH OZEREKO, GISP, Senior GIS Project Analyst, Weston & Sampson, Reading MA

As part of a Sanitary Sewer Evaluation Study (SSES), a building inspection program was conducted to identify potential illicit connections—such as sump pumps, downspouts, and area drains. ESRI ArcGIS tools streamlined data collection, field coordination, and reporting. A custom Survey123 form captured inspection data, photos, and GPS-tagged observations on mobile devices. The survey form was linked to a Field Maps application for real-time status insights and location accuracy. Inspection results populated a Survey123 report template to automatically generate standardized PDFs. ArcGIS Pro was used to create a map series of building-specific observations for follow-up dye testing. Experience Builder dashboards tracked contractor progress and enabled real-time project oversight. A separate data review application allowed each contractor to view and edit only their own records, preserving data integrity. This integrated solution improved efficiency, consistency, and data quality across the inspection program.

**10:00 AM - “Leveraging A State Grant to Develop an Asset Management Plan – The SBWSB Case Study”** - JOHN FORTIN, CMRP, Sustainability Manager, Salem & Beverly Water Supply Board, Beverly MA

As a key component of their Sustainable Water Infrastructure Management Plan, the Salem and Beverly Water Supply Board (SBWSB) is developing their next Asset Management and Sustainability Master Plan. The approach is leveraging the MassDEP Asset Management Planning grant program to help build a 20-year

lookahead plan. This presentation will cover the development and implementation efforts from the grant application process through to current implementation efforts and lessons learned to aid others embarking on such a journey.

### **10:30 AM – BREAK (10 minutes)**

**Interactive Learning Stations:** All participants will be divided into small breakout groups and visit each of three forty-minute duration learning stations: two before lunch and one after lunch. To receive credit for attendance, participants **MUST** visit **ALL THREE** stations.

### **Attendees visit their first two Learning Stations – 10:40 AM, then 11:20 AM**

#### **Learning Station A - “Efficient Operations Through Smart Leak Detection: A Case Study in Technology Adoption” - PAUL LANDER, President, 64seconds, Inc.**

Modern water utilities face a growing challenge as the proliferation of specialized tasks, regulatory oversight and public scrutiny stretches resources. The solution is to increase productivity, principally through adopting modern software-driven technology. This session presents a case study that illustrates important aspects of technology adoption. 64seconds has developed ALFX: A network of smart sensors that continuously monitors pipeline vibrations to enable detecting, characterizing and pinpointing water leaks with cloud analysis. The key innovation is adaptive software learning. Statistical signal processing learns over time from many sensors, permanently installed on fire hydrants, across many utilities. Technically, the goal is to preempt catastrophic pipe failures by enabling proactive, efficient maintenance. For the utility, outsourcing expertise and procuring services makes sense if it simplifies existing distribution workflows; delivers a significant and measurable return on investment; and - in this case - improves pipeline integrity and conserves water and electricity.

#### **Learning Station B – “What’s in that Manhole?” - LANCE ALLEY, Asset Management Analyst, Lewiston Public Works Department, Lewiston, ME**

This presentation highlights the City of Lewiston’s partnership with Rinnovision, a leading provider of manhole inspection technology. By integrating Rinnovision’s innovative camera systems into our wastewater asset management program, we’ve enhanced the accuracy, efficiency, and safety of manhole inspections. Attendees will learn how this technology supports condition assessments, streamlines GIS mapping, and improves capital planning. We’ll share lessons learned and demonstrate how this approach is helping modernize our wastewater utility for long-term sustainability and compliance.

#### **Learning Station C - “Bringing Clarity to Water System Operations” - MOHAMMAD AMEEN, Digital Product Specialist, SHAWN SHEPARD, Senior Development Engineer, and ELIZABETH HANNA, Staff Engineer II Tighe & Bond, Worcester, MA**

Enable greater certainty in asset management and capital planning with 3D Reality Capture. Tools such as ground and drone-based LiDAR generate high fidelity data sets of complex and sprawling facilities, distribution corridors, and infrastructure networks. These tools enable safe, dependable, and cost-effective data collection, which facilitates better operational management through accurate and secure visuals and supports future solutions like digital twins.

See the equipment in action and learn how it can simplify your operations and management solutions.

## **12:00 PM - LUNCH**

## **12:30 PM - Attendees visit their final Learning Station**

**1:10 PM - Welcome Back and Introduction by Moderator** - ELIZA STYCZYNSKI, NEWEA Asset Management Committee Chair and Asset Management Consultant, Brown and Caldwell, Andover, MA

**1:15 PM - “Flat Paper to 3-D Assets, Who Could Imagine?”** - PAUL J, FERLAND, EIT, Administrator of Community Utilities, City of Fall River, and PETER BERDOS, Asset Manager, Inframark

This presentation will show you how Fall River Community Utilities has been able to navigate through the age-old issue of getting the information where it is needed, in the field and in the workforces' hands. We will tell you the story on how we went from driving back to “the shop” to get information to being able to have a 3-D walk through of facilities with links right to all the assets information in the palm of all the staffs' hands.

**1:45 PM - “Utility Data Unification for Pennichuck Water: Breaking Data Silos”** - ASHLEY PIPER, Environmental Scientist, Pennichuck Water Works, Nashua, NH, and TJ BUTLER, Director of Client Solutions Architecture, Xylem Vue

In 2024, Pennichuck Water Works, one of New Hampshire's largest water providers, faced a critical challenge—multiple data systems that made it difficult for staff to access and leverage operational insights. Partnering with Xylem, Pennichuck integrated key data systems into Xylem Vue, transforming how they manage and utilize information. This session will explore how breaking down data silos has started Pennichuck Water Works down the road to enhanced decision-making, optimized operations, and a data-driven future. Join us to discover how smart data integration can improve efficiency and resilience in water utilities.

**2:30 PM - “Shortcut to the Future: A Modernized Stormwater Asset Management Program”** - MATTHEW CORBIN, P.E, Lead Project Engineer, and CHRISTINE MANDERSON, Lead GIS Analyst, Wright-Pierce, Burlington, MA

The Town of Athol, Massachusetts knew it needed an advanced approach to manage its utility assets. Leveraging a \$107,000 Asset Management Planning grant from the

Massachusetts Clean Water Trust, the Town began to modernize its stormwater asset management platform.

The project began with only GPS locations for structures and a closet of paper records. Much of the system was well-known by former DPW employees, but when they retired, that institutional knowledge left with them. An effort was needed to capture experience of current staff and provide institutional system knowledge for years to come.

The engineering firm conducted an extensive field investigation program to locate and better understand the system and identify potential stormwater improvement projects. Pipe connectivity was established in the field as part of the inspection process and was digitized directly in the GIS. Athol now has a clear plan to maintain and improve the system.

**2:50 PLM - “Integrated GIS-Based Pavement & Culvert Asset Management for Carlisle, MA”** - NIC PETERSON, GISP, GIS Specialist, Nitsch Engineering, Inc., Boston, MA

Deferred maintenance and extreme storms have increased risk to Carlisle’s roads and culverts, but fragmented data and budget constraints hinder proactive planning. In 2023–24, Nitsch Engineering (with Baden Consulting Services) implemented a unified GIS solution covering 59 miles of pavement and 157 culverts. Participants will engage with live dashboards, mobile survey forms, and automated feature reports to modernize asset management and optimize maintenance.

**3:30 PM Questions & Answers, Assessment and Review**

**3:45 PM ADJOURN**