

NEWWA / NEWEA 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, Executive Vice President, Ti-SALES, Sudbury, MA

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

As part of a Sanitary Sewer Evaluation Study (SSES) for the Boston Water and Sewer Commission (BWSC), 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 DANIEL ROOP P.E., Project Manager, 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

1:15 PM - "How Artificial Intelligence Can Enhance Condition Assessment" - JOHN HELWIG, P.E., CMRP, A55K, Principal and Discipline Leader - Asset Management, CDM Smith, Boston, MA

As water utilities build the foundational elements of their asset management (AM) programs, many are wondering what Artificial Intelligence (AI) can do to enhance AM. To answer this, we will investigate the area of vertical asset condition assessment, looking at one approach that utilizes photographic information to assess condition, and another that leverages multiple condition parameters. The presentation will explain not only how both methods save effort and time – and thus money – but also suggest the necessary interventions to maintain asset health and service levels. This discussion on AI will be preceded by an explanation of the core elements of an asset management program, including the asset register, maintenance management, and risk assessment, all of which comprise the necessary foundations to harness the potential of AI.

This presentation will conclude with guidance on what elements of an asset management program must simply remain human driven.

1:45 PM - "Utility Data Unification for Pennichuck Water: Breaking Data Silos" - ASHLEY PIPER, Environmental Scientist, Pennichuck Water Works, Nashua, NH, and TJ BULTER, 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 PM - "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

TARGET AUDIENCE

The NEWWA/NEWEA Information Technology & Asset Management Fair is a unique interactive learning forum targeted to share the latest technological tools available for use as identified by drinking water and wastewater operations professionals who use, or plan to use, information technology in their daily work. Water and wastewater information technology professionals, senior operations personnel, as well as general water/wastewater managers will find this program of interest. This year's program was developed by members of the NEWWA Information and Operational Technology Committee and the NEWEA IT & Asset Management Committee.

LOCATION

The NEWWA/NEWEA Information Technology & Asset Management Fair will be held at the NEWWA Training Center, 125 Hopping Brook Road, Holliston, MA 01746. Visit newwa.org for detailed directions to this facility.

HOW TO REGISTER

NEWWA and NEWEA members receive a discounted fee of \$195.00. The full price is \$355.00. The fee covers attendance, admission to exhibits, lunch, handouts, and TCH certificate. Register online or by completing the registration form below and return by email to mkeating@newwa.org, fax to (508) 893-9898, or detach and mail with a check or purchase order to: **NEWWA,** 125 Hopping Brook Road, Holliston, MA 01746-1471.

SPONSORSHIP OPPORTUNITIES

The **NEWWA/NEWEA Information Technology & Asset Management Fair** offers a limited number of opportunities for exhibit tabletops. The exhibits must pertain to topics, services or equipment related to Information Technology and/or Asset Management. The cost to exhibit is \$375.00 and includes a full registration to the event. If you are interested in exhibiting, contact Katelyn Todesco at katelyn@newwa.org.

CANCELLATION / REFUND POLICY

NEWWA reserves the right to cancel a course due to insufficient enrollment. In the event of a cancellation, you will be notified by phone and have the option of obtaining a full refund, or applying payment to the next available course. If you cannot attend you must contact NEWWA in writing two business days prior to the start of this program to request a refund or credit minus a \$30 administrative fee. If you contact NEWWA within one business day you will be charged 100% of the original course registration fee. This charge is non-refundable and non-transferable. Written refund/credit request made for special circumstances will be considered if received within two weeks from the start date of this program. Credits issues are valid for six months from the date of this program. If you register within 2 days of the course add a \$20 late fee.

REGISTRATION FORM NEWWA/NEWEA Information Technology & Asset Management Fair October 6, 2025 — Holliston, MA								
(As you want	your name on certificate)			vant on your name				
Address:	Fax:							
NEWWA/NEWEA members receive a discounted fee. Check the appropriate box below (PAYMENT IN FULL IS REQUIRED UPON REGISTRATION)								
Member Discounted Fee	□ \$195	Full Price	□ \$355		Total Fee	Enclosed:	\$	
Method of Payment: ☐ Personal Check (Payable NEWWA)☐ Company Check ☐ PO Enclosed ☐ MasterCard ☐ Visa ☐ AMEX ☐ Discover								
PO#	Credit Card #			Exp C	CVV	Signature		
☐ Check here if you have a disability and require accommodations to fully participate. You will be contacted by NEWWA.								