24th Annual Sewer Conference

November 1-2, 2023

Monroeville Convention Center

Conference program including educational session descriptions & a full exhibitor guide



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Welcome to the 24th Annual 3 Rivers Wet Weather Sewer Conference. I can't help but reflect on how this conference has evolved from a small event with a handful of exhibitors and 150 attendees in 1999 to a record 100 exhibit booths and more than 400 attendees in 2023. We hope you take the time to explore the exhibit hall packed with experts on cutting-edge technologies,

equipment, and professional services to help you not only operate and maintain your municipal system, but improve it. We have also assembled an excellent slate of speakers who will share case studies demonstrating the success of regional approaches, best methods for implementing source reduction projects, how to access available fund-

ing options, and much more. 3RWW is happy to continue hosting this annual two-day educational conference on such an important environmental issue for southwestern Pennsylvania. While the entire region has made monumental progress in reducing overflows and improving the quality of our waterways, there is still much work to be done. We hope this conference helps you to

continue that critical work in tackling the challenges of the wet weather issue. On behalf of the entire 3RWW staff, thanks for attending, and enjoy the conference.

> W. David Montz Executive Director 3 Rivers Wet Weather

Table of Contents

Conference Sponsors	3
Conference Materials	5
Conference Schedule	7
Session Guide - November 1	9
Session Guide - November 2	13
Exhibitor Guide	17

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Conference Materials

Continuing Education Tracking Form

Please use the **Continuing Education Tracking Form** provided in your conference envelope to submit the sessions you attend. Your form needs to be signed by a member of our conference staff at lunch and then again at the end of each day to verify your attendance.

Certified Wastewater Operators

This two-day conference is a DEP-approved wastewater training program. Pennsylvania-certified wastewater operators can earn up to four contact hours by attending the two-day event. If you are a certified wastewater operator, please include your 5- or 6-digit DEP Client ID number on your tracking form. Note: Class A, B, and C wastewater operators need to complete 15 contact hours for the first renewal (3 years) and 30 for every renewal thereafter. Class D and E operators need 8 hours and 15 hours subsequently.

Licensed Professional Engineers & Other Professionals

Engineers and other licensed professionals may use the continuing education tracking form to request a conference completion certificate with the total number of professional development hours (8.75 pdhs). Your professional licensing board will determine the credit earned from attending the conference.

Exhibit Hall Map

A two-sided **Exhibit Hall Map** is provided to help you navigate the exhibit hall. One side lists exhibitors by booth number and the flip side lists the exhibitors in alphabetical order. If you would like more details about a particular exhibitor, a company profile and contact information for each vendor is provided in the back of this program booklet.

Evaluation Form

Please use the **Evaluation Form** to give us feedback on the educational sessions and the overall conference in general. We value your input as it helps to guide our future events. Every attendee who completes an evaluation form will be entered into a drawing for a \$50 gift card. Just drop your business card in the basket or complete our blank entry form with your name and email address. We will notify a winner shortly after the conference.

Exhibitor-Sponsored Prize Drawing

Please use the **Prize Drawing Entry Form*** to stop at each designated exhibit booth and get a stamp on your entry form to verify your visit. Once it is complete, drop the entry form into the prize drawing box for a chance to win a Gift Card Tree valued at more than \$1,000! One lucky winner will be chosen shortly after lunch on November 2. Winner does not need to be present to win.

AGAIN THIS YEAR: "Stay to win!"

Every registered attendee* will find **Two Colored Tickets** behind their name tag. Those who stay for the last educational session each day will have a chance to win a \$50 gift card. Tickets will be collected at the beginning of the session and a winner will be chosen immediately after the presentation. Winner must be present to win.

*Only registered attendees are eligible to win. Exhibitors/exhibit booth personnel, and conference staff are not eligible to win.





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Water - Rulison Evans <u>Rulison.evans@ghd.com</u> or Mallory Griffin <u>Mallory.griffin@ghd.com</u>

Environment - Daniel Cusick Daniel.cusick@ghd.com

Conference Schedule

Wednesday, November 1, 2023

8:00-8:55 a.m.	Registration, Continental Breakfast & Exhibit Hall
8:55-9:00 a.m.	Welcome W. David Montz
9:00-9:45 a.m.	ALCOSAN's Clean Water Plan Update Jeff Argyros, Shawn McWilliams, Timothy Prevost, & Julia Spicher
9:45-10:15 a.m.	Inspiring Better Source Reduction Solutions John Dening
10:15-11:00 a.m.	Break & Exhibit Hall
11:00-11:30 a.m.	Assessing and Managing I&I Issues Using Intelligent Sys- tems: A Canonsburg-Houston Joint Authority Case Study Ifeanyi Odigboh & Tyler Watts
11:30 a.m12:00 p.m.	Twelve-hour, Six-Hour, One- Year or Two: What Does a Design Storm Mean to You? Kendall Grimm
12:00-1:30 p.m.	Lunch & Exhibit Hall
1:30-2:00 p.m.	The Ohio River Tunnel Final Design: An Outline of Import- ant Decisions and Steps Mike Lichte, Mike Vitale, & Greg Colzani
2:00-2:30 p.m.	Bursting with Potential: How to Use Pipe Bursting as a Smart, Efficient Approach to Pipeline Replacement and Rehabilitation Mike Trail
2:30-3:15 p.m.	Refreshment Break & Exhibit Hall
3:15-3:45 p.m.	Regional I&I Reduction Program Cost-Effectiveness Evaluation: A Madison, Wisconsin Case Study Andy Lukas
3:45-4:15 p.m.	Street Trees for Urban Source Reduction Justin Kerns

Thursday, November 2, 2023

8:00-9:00 a.m.	Registration, Continental Breakfast & Exhibit Hall
9:00-9:30 a.m.	ALCOSAN's Approach to Assessment of Water Quality Improvements Karilyn Heisen & Sam Shamsi
9:30-10:30 a.m.	PANEL DISCUSSION Finding the Funding for Compliance Celine Colbert, Dan Mikesic, Christine Gregory Phillips, Timothy Prevost, & Gregory Welker
10:30-11:15 a.m.	Break & Exhibit Hall
11:15 -11:45 a.m.	The State of Public Sector Green Infrastructure Barbara Hopkins & Beth Dutton
11:45 a.m12:15 p.m.	The Perils of Surcharging Interceptors: Unintended Consequences of In-line Storage Jim Shelton
12:15-1:30 p.m.	Lunch & Exhibit Hall
1:30-2:00 p.m.	Designing & Implementing Risk Mitigation for Existing Critical Utilities by Means of Construction Sequencing Greg Rogoff
2:00-2:30 p.m.	Fast-Track Sewer Line Replacement: An Aspinwall Case Study Zachary Hughes & Jeff Coffey
2:30-3:00 p.m.	Coordinating Complex Underground Projects Dan Nemanic
3:00-3:30 p.m.	It's a Beast: Fats, Oils, and Grease Tori Morgan

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8:00-8:55 a.m. Registration, Continental Breakfast & Exhibit Hall

8:55-9:00 a.m. Welcome W. David Montz ■ 3 Rivers Wet Weather

9:00-9:45 a.m.

ALCOSAN's Clean Water Plan Update Jeff Argyros, Shawn McWilliams, Timothy Prevost, & Julia Spicher ■ ALCOSAN

The Allegheny County Sanitary Authority (ALCOSAN) has embarked on a comprehensive, \$2 billion Clean Water Plan (CWP) with four primary components including wastewater treatment plant expansion, source controls and Green Revitalization of Our Waterways (GROW), regionalization, and increased conveyance capacity. Attendees will hear an update on the status of the CWP, including how the various components impact their municipalities, and how they can participate in CWP implementation.

Jeff Argyros is ALCOSAN's Manager of Capital Projects for the treatment plant where he oversees the ongoing Wet Weather Plant Expansion, which will double the treatment plant's capacity in the next seven years. He is a registered professional engineer in Pennsylvania. **Contact:** 412.734.6281 | jeff.argyros@alcosan.org

Shawn McWilliams is a Project Engineer at ALCOSAN working on all facets of sanitary sewer system design and construction. Shawn has more than 15 years' experience working on our region's collection and conveyance system. **Contact:** 412.732.8053 | shawn.mcwilliams@alcosan.org

Tim Prevost is ALCOSAN's Manager of Wet Weather Programs and oversees ALCOSAN's award-winning GROW program. Tim has more than 20 years' experience working at ALCOSAN, is a registered professional engineer, and a past recipient of the ASCE Engineer of the Year award. **Contact:** 412.734.8731 | timothy.prevost@alcosan.org

Julia Spicher is ALCOSAN's Manager of Regionalization. She actively works with customer municipalities to transfer ownership and maintenance for 265 miles of trunk sewer and associated facilities from the municipalities to ALCOSAN. Julia is a LEED AP and certified wastewater collection system operator.

Contact: 412.734.8749 | julia.spicher@alcosan.org

9:45-10:15 a.m.

Inspiring Better Source Reduction Solutions John Dening
Mott MacDonald

In its efforts to reduce CSOs and mitigate flooding in the Trumbull Street area, the City of Elizabeth installed a one-million-gallon tank under a new rain garden and pedestrian plaza on a triangular parcel of land. The rain garden naturally filters and detains stormwater, while the tank captures and temporarily stores stormwater runoff from the surrounding drainage area. Attendees will learn about the challenges and opportunities for large-scale projects in confirmed urban spaces, and how this specific project beautifies the neighborhood, enhances community connectivity, and provides environmental enhancements by capturing and filtering rainwater from smaller storms.

John Dening, the Mott MacDonald U.S. Stormwater Technical Specialist and head of the stormwater group at the company's North American headquarters in New Jersey, holds bachelor's and master's degrees in civil engineering from Cooper Union. With his 22 years' experience, he manages a wide array of stormwater-related projects including site development, linear development, flood control, combined sewer modeling, flood hazard permitting, riverine modeling, urban stormwater control, and drainage design. **Contact:** 973.912.2464 | john.dening@mottmac.com

10:15-11:00 a.m. Break & Exhibit Hall

11:00-11:30 a.m.

Assessing and Managing I&I Issues Using Intelligent Systems: A Canonsburg-Houston Joint Authority Case Study

Ifeanyi Odigboh & Tyler Watts 🗖 Greenman-Pedersen Inc.

Over the past several years, influent flow volumes to the Canonsburg-Houston Joint Authority (CHJA) wastewater treatment plant have increased due to I&I throughout the system. A \$27.5 million plant upgrade program in 2022 increased the overall daily flow capacity of the plant and addressed stringent effluent discharge requirements. While completing plant improvements, CHJA also recognized the benefits of assessing its conveyance infrastructure tributary to the treatment plant. You will learn about the challenges and pitfalls in developing a robust I&I mitigation program, as well as the benefits of using smart technologies to better predict system deficiencies, plan system rehabilitation programs, and implement effective mitigation measures.

Session Guide Wednesday, November 1

Ifeanyi Odigboh serves as the Director of Water Resources for GPI in Pittsburgh. Ifeanyi has broad technical expertise in H&H analysis/modeling, stormwater infrastructure design, planning, permitting, and regulatory compliance. He supports business development activities, including client relationship building, defining, and implementing pursuit strategies, and participating in networking and outreach events and activities.

Contact: 814.314.2874 | iodigboh@gpinet.com

A Project Manager with GPI, Tyler Watts is an experienced leader with strong management and interpersonal skills, who efficiently implements and completes tasks, and fosters a receptive team environment. Tyler has more than six years' field experience in construction management of water distribution systems, wastewater collection systems, and stormwater projects.

Contact: 814.314.2893 | tylerwatts@gpinet.com

11:30 a.m.-12:00 p.m. Twelve-hour, Six-Hour, One-Year or Two: What Does a Design Storm Mean to You? Kendall Grimm
R2O Consulting

Many water resource planning studies and capital improvement projects rely on hydraulic modeling to determine design criteria and demonstrate performance objectives. A critical early input to this entire process is the design storm, but what is a design storm, and how does the selection of the design storm influence the results, and ultimately the capital expenditures a community makes? This presentation will demonstrate the importance of design storm selection and how a sensitivity analysis of the design storm components is reviewed in context of the overall project purpose, such as master planning, regulatory compliance, or addressing community flooding issues.

Kendall Grimm is a Water Resources Engineer and Modeler with R2O Consulting. Since graduating with her Ph.D. in 2018, she has worked with clients, regional entities, and local communities. Her expertise focuses on stormwater and sanitary collection system master planning and wet weather improvement projects as required under National Pollutant Discharge Elimination System (NPDES) permits and consent decrees, and local capital improvement planning. **Contact:** 913.620.6272 | grimmk@r2oconsulting.com

12:00-1:30 p.m. Lunch & Exhibit Hall

1:30-2:00 p.m.

The Ohio River Tunnel Final Design: An Outline of Important Decisions and Steps Mike Lichte ALCOSAN Mike Vitale Mott MacDonald

Greg Colzani ■ Jacobs

In 2020, ALCOSAN began preliminary planning for the Ohio River Tunnel (ORT), the first of three tunnel projects. In 2021, the Authority focused on the final design of the tunnel as part of a federal consent decree to comply with the U.S. EPA's CSO Control Policy. In this session, participants will learn about the important decisions and advancements made regarding the ORT preliminary planning concepts and Basis of Design considering factors, such as property availability, alignment optimization, supply chain uncertainties, tunnel boring machine evaluation, contract packaging, and delivery schedules.

An ALCOSAN employee since 2008, Mike Lichte has served as the Authority's Director of Regional Conveyance since 2021. Previously, he was Manager of Planning focused on implementing ALCOSAN's Clean Water Plan. He received his B.S. in aquatic environments from Allegheny College and an M.S. in civil engineering from the University of Pittsburgh. He has 25+ years' experience and is a licensed engineer in Pennsylvania.

Contact: 412.732.8004 | michael.lichte@alcosan.org

Mike Vitale has served as Project Manager and/or Tunnel/ Shaft Design Manager for many water/wastewater tunnels, several of which have won awards for innovation in design. He was one of the primary authors of the ASCE Standard Guideline for Microtunneling (design section) and authored Chapter 7, Wastewater Tunnels, in "The History of Tunneling in the United States." He currently serves as Tunnel and Shaft Design Manager on the ALCOSAN ORT Tunnel. **Contact:** 216.535.3652 | michael.vitale@mottmac.com

Gregory Colzani has more than 40 years' experience in mining, tunneling, and heavy civil and underground construction with an emphasis in quality control and construction management. He serves as Jacobs Global Practice Leader for tunnel construction management and inspection. For the last 25 years, Greg has managed large underground water and wastewater infrastructure projects throughout the U.S. and currently serves as the Tunnel Lead for ALCOSAN's Tunnel Program Manager.

Contact: 503.849.6560 | greg.colzani@jacobs.com

Session Guide Wednesday, November 1

2:00-2:30 p.m.

Bursting with Potential: How to Use Pipe Bursting as a Smart, Efficient Approach to Pipeline Replacement and Rehabilitation Mike Trail
Gannett Fleming

In today's world, budget constraints and compliance deadlines are critical issues for water and sewer rehabilitation programs across the country. To help surmount these challenges, some utilities are turning to pipe bursting to reduce the time for meeting consent decree deadlines and to lower the cost of rehabilitation projects with limited budgets. This presentation will provide you with information about the history, environmental benefits, time, and cost savings of pipe bursting. It will also provide you with key benefits when comparing pipe bursting to open-cut methods of replacement, as well as lessons learned on past projects.

Mike Trail is a Construction Manager at Gannett Fleming with more than 37 years of engineering and construction experience in the water/ wastewater industry. Mike enjoyed a 30-year career at WSSC Water, where he spent his final 12 years as Construction Manager for more than 325 miles of water and sewer projects, ranging in size from 4-inch to 102-inch, which included numerous pipe-bursting projects. Mike's experience also includes working for a utility contractor specializing in pipe bursting. **Contact:** 301.458.1555 | mtrail@gfnet.com

2:30-3:15 p.m. Refreshment Break & Exhibit Hall

3:15-3:45 p.m. Regional I&I Reduction Program Cost-Effectiveness Evaluation: A Madison, Wisconsin Case Study Andy Lukas ■ Brown and Caldwell

Faced with a growing service area and aging sewer collection systems, Madison Metropolitan Sewerage District embarked on an effort in 2019 to plan a Regional I&I Reduction Program. After reviewing several alternative models, the District selected a program that would establish clear peak flow performance standards for tributary satellite sewer collection systems. Areas exceeding these standards would be expected to develop I&I reduction work plans that detailed the effort to achieve compliance within five years. During this session, attendees will learn about the rigorous process for evaluating regional I&I reduction cost-effectiveness, how I&I increases due to system degradation can be important drivers for establishing long-term programs, and insights on how I&I volumes can be an important consideration for I&I limits in a regional system.

As a national Wet Weather Practice Leader, Andy Lukas is engaged in strategic projects across the country, which are driven by state and federal consent orders related to wet weather compliance issues. Andy provides consulting to clients on issues, such as flow metering, hydraulic modeling, I&I reduction, and combined and sanitary sewer overflow control. He is a Vice President at Brown and Caldwell and has both a B.S. and M.S. in civil engineering. **Contact:** 414.203.2901 | alukas@brwncald.com

3:45-4:15 p.m.

Street Trees for Urban Source Reduction Justin Kerns I ms consultants

This presentation will showcase the versatility and applicability of street trees for source reduction through stormwater management in the urban environment. Heavily developed areas have significant space constraints that can make capturing and detaining stormwater difficult and expensive. This presentation will feature a case study from a combined sewer separation project that used a unique design combining permeable pavement, bioretention, and street trees into one continuous stormwater control measure. Attendees will learn about the technical challenges, successes, and lessons learned in implementing this innovative design.

Justin Kerns serves as the Water Resources Technical Services Manager and Project Manager for ms consultants in Pittsburgh. For the past 10 years, he has specialized in water resources-related projects with an emphasis on stormwater research, green infrastructure, post-construction stormwater management, and hydrologic/hydraulic analyses. He is a licensed professional engineer in Ohio and Pennsylvania and a certified professional in erosion and sediment control.

Contact: 412.264.8701 | jkerns@msconsultants.com

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8:00-9:00 a.m. Registration, Continental Breakfast & Exhibit Hall

9:00-9:30 a.m. ALCOSAN's Approach to Assessment of Water Quality Improvements Karilyn Heisen CDM Smith Sam Shamsi ALCOSAN

As part of its Clean Water Plan, ALCOSAN has developed a water quality model to establish the level of CSO control needed to meet water quality requirements. During this presentation, attendees will learn about the model calibration and water quality forecasting applications. The current model includes 280 miles of streams and rivers, simulation of hydrology and river hydraulics, bacteria loading, and temperature-dependent first-order decay. Participants will learn about the calibration of bacterial water quality models, the model uncertainty associated with data variability, and how water quality models can be used to evaluate impacts of proposed conveyance system and treatment plant CSO control measures.

Karilyn Heisen is a Water Resources Engineer with CDM Smith. She has experience in modeling for surface water quality, groundwater, and collection systems. She has presented at the National Groundwater Association conference, the national conference for Restore America's Estuaries, and local conferences. **Contact:** 617.452.6000 | heisenkj@cdmsmith.com

Sam Shamsi is a Hydraulic Engineer at ALCOSAN. Within two years of getting his Ph.D. in hydraulic engineering from the University of Pittsburgh, he built ALCOSAN's first SWMM model for the Chartiers Creek basin in the early 1990s. In 2020 he garnered the ASCE Region 2 Lifetime Achievement Award. He loves it most when people ask him modeling questions and enjoys troubleshooting municipal models.

Contact: 412.734.6242 | sam.shamsi@alcosan.org

9:30-10:30 a.m. PANEL DISCUSSION Finding the Funding for Compliance

Celine Colbert
PA DCNR
Dan Mikesic
PENNVEST
Christine Gregory Phillips
PA DEP
Timothy Prevost
ALCOSAN
Gregory Welker
PA DCED

This panel of Pennsylvania state agency and ALCOSAN representatives will each provide an overview of funding resources, timelines, and grant information specific to their agency's opportunities. These experts will discuss many funding pathways and grant programs, including the resources and information you need to apply for municipal funding to help meet compliance requirements in the Phase II consent orders. A Q&A session will offer the opportunity for attendees to ask relevant funding questions and interact with these agency experts.

Celine Colbert is the Tree Canopy Coordinator for the PA Department of Conservation & Natural Resources. She assists communities in managing their community trees by matching them with funding opportunities and facilitating use of the statewide TreeKeeper map. Contact: 717.705.7988 | c-cecolber@pa.gov

Dan Mikesic has managed PENNVEST projects in the SW region of PA since 2016. In this capacity, he aids applicants in accessing funding through the State Revolving Fund. **Contact:** 717.783.6673 | dmikesic@pa.gov

Christine Gregory Phillips currently serves as a Watershed Manager with the Southwest Regional Office of the DEP. Previously, she worked in DEP's Waterways & Wetlands Program as an Aquatic Biologist and as an Aquatic Ecologist in environmental consulting. Contact: 412.442.4304 | christinph@pa.gov

Tim Prevost is Manager of Wet Weather Programs and manages ALCOSAN's Green Revitalization of Our Waterways (GROW) grant program. He earned a B.S. in civil engineering technology from the Rochester Institute of Technology. **Contact:** 412.734.8731 | timothy.prevost@alcosan.org

Gregory Welker is Director of CFA Programs for the PA Department of Community and Economic Development (DCED). He is responsible for administering grants and loans that facilitate economic development at the local and regional level. He has a B.A. from Shippensburg University. **Contact:** 717.720.1321 | gwelker@pa.gov

Session Guide Thursday, November 2

10:30-11:15 a.m. Break & Exhibit Hall

11:15-11:45 a.m.

The State of Public Sector Green Infrastructure Barbara Hopkins
GI Leadership Exchange Beth Dutton
Pittsburgh Water & Sewer Authority

In 2022, the Green Infrastructure Leadership Exchange, a peer learning network of public sector practitioners, conducted the inaugural State of Public Sector Green Stormwater Infrastructure survey to understand the current state of green infrastructure implementation; to assess the drivers, barriers, and levers affecting adoption; to move the industry toward a shared standard for green infrastructure; and to offer recommendations for the public sector to support scaling of green stormwater infrastructure that serves communities. Attendees will learn about the survey's results and recommendations, as well as the best practice standards for green stormwater infrastructure articulated in the report and implemented locally to reduce combined sewer overflows and benefit the community.

Trained as a lawyer and landscape architect, Barbara Hopkins has served since August 2022 as Executive Director of the Green Infrastructure Leadership Exchange, which activates local governments and water agencies to implement green stormwater infrastructure. Prior to that, she spent 13 years as the Executive Director of Neighbor-Space of Baltimore County, an urban land trust. Contact: 410.657.2657 | barbara@giexchange.org

Beth Dutton is an environmental scientist and Senior Project Manager at PWSA where she is responsible for planning, coordinating, and managing work activities in the Storm Water Group. She previously worked at 3 Rivers Wet Weather and holds a B.S. in biology from the University of Vermont and an M.S. in environmental and occupational health from the University of Pittsburgh. **Contact:** 412.491.4414 | bdutton@pgh2o.com

11:45 a.m.-12:15 p.m. The Perils of Surcharging Interceptors: **Unintended Consequences of In-line Storage** Jim Shelton ARCADIS

Utilities are more and more frequently resorting to realtime control systems that intentionally block flows in interceptors to take advantage of available in-line storage during storm surges to combat overflows from sewers.

Many utilities are also more frequently extending their pump station's wet wells into the sewers. This presentation will identify the causes, mechanisms of failure, evidence of likely failure of surcharges, inspection techniques to identify pipes at risk if surcharged, and rehabilitation methods once a pipe is compromised.

Jim Shelton is a National Technical Director for Buried Infrastructure for ARCADIS, focusing on condition assessment, rehabilitation, construction management, capacity assurance, operational assistance, and program development and management. He has a degree in chemical engineering from the University of Pennsylvania, is a licensed water and sewer contractor in several states, and holds professional engineering licenses in 14 states. Contact: 302.723.1450 | jshelton@pirnie.com

12:15-1:30 p.m. Lunch & Exhibit Hall

1:30-2:00 p.m. **Designing and Implementing Risk Mitigation** for Existing Critical Utilities by Means of **Construction Sequencing**

Greg Rogoff ■ Delve Underground

The Doan Valley Storage Tunnel (DVT) project is part of the Northeast Ohio Regional Sewer District's (NEORSD) Project Clean Lake program, a \$3 billion, 25-year program with the ultimate goal of capturing 98% of the combined sewer overflows (CSOs) for treatment and reducing raw sewage discharges into Lake Erie and associated waterways. The project necessitated a coordinated work sequence to maintain flows in the existing brick interceptor. As a risk mitigation measure, acoustic sensors were used to monitor the effects of construction on the water mains during excavation. Attendees will learn about implementation considerations for acoustic monitoring on aged water mains and how to sequence construction activities to construct a new diversion structure while maintaining active sewer flows.

Greg Rogoff is an Associate Geotechnical Engineer with Delve Underground with design and construction experience in large-diameter tunnel projects. He earned a B.S. in civil and environmental engineering and an M.S. in geotechnical engineering from the University of California, Berkley. Greg served as Resident Engineer during construction of the Doan Valley Tunnel Project.

Contact: 216.285.9689 | rogoff@delveunderground.com

Session Guide Thursday, November 2

2:00-2:30 p.m. Fast-Track Sewer Line Replacement: An Aspinwall Case Study Zachary Hughes ■ ALCOSAN

Jeff Coffey ■ DLZ

In some circumstances, sewer line projects require a very short "emergency" timeline, which was the case in Aspinwall Borough. A Sewer Line Replacement project design scope was created recently due to the sewer line's age (built in the 1950s) and severe corrosion. The line had lost much of its capacity and high flows during wet weather were creating surcharges. The project was "fast-tracked" so it could be completed prior to the inception of another large project scheduled to begin in early 2024. This presentation will describe the fast-track decision-making steps, how intermediate submittals and reviews were completed quickly, and how sharing project information made a two-month design schedule possible.

Zachary Hughes has served on ALCOSAN'S Regional Conveyance team since 2022. He has been a part of the Ohio River Tunnel Geotechnical and Design Team, Project Manager for ART – Near Surface Facility #6 design, and is currently a member of WEF, SPE, and NASSCO. He graduated from Marietta College in 2019 with a dual degree in petroleum engineering and geology. Contact: 412.766.4810 | zachary.hughes@alcosan.org

Jeff Coffey has been with DLZ since 2006. He has planned and designed numerous sanitary sewer systems, sewer rehabilitation, pump station and force main systems, and wastewater treatment process components over his 30-year career. His primary area of expertise has become tunneling and trenchless pipeline design, and he has worked on several large-tunnel projects. He graduated in 1989 with a BSCE from the Ohio State University. Contact: 412.319.4100 | jcoffey@dlz.com

2:30-3:00 p.m. Coordinating Complex Underground Projects

Dan Nemanic 🗖 Pennsylvania 811

Have you ever wished that there was better coordination on underground infrastructure projects? Have you wondered how utility companies and municipalities can collaborate on projects to save costs, like opening or cutting the street once versus several times? Do you wish that there was better communication and cooperation between underground facility owners, Department of Transportation, excavators and municipalities? This session will detail the application tool called "Coordinate PA" that Pennsylvania 811 provides to help project owners, designers/engineers, facility owners, and excavators manage underground construction projects more effeciently.

Dan Nemanic is a Damage Prevention Liaison with the Pennsylvania One Call System or PA 811. He joined the organization in April 2023 after working for the Pennsylvania General Assembly and the U.S. House of Representatives in constituent services. Dan is a graduate of the University of Pittsburgh with a joint degree in economics and political science. **Contact:** 412.464.7102 | djnemanic@pa1call.org

3:00-3:30 p.m. It's a Beast: Fats, Oils, and Grease Tori Morgan ■ Entech Engineering

Fats, Oils and Grease (FOG) programs can vary in size and scope depending on a client's needs, but all projects need to start with a comprehensive understanding of the collection system, followed by six steps to create a FOG Program, resulting in enhanced system operations and improvement of the environment. In this presentation, attendees will hear an overview of FOG programs, then the detailed steps and platforms available to manage data. Finally, participants will hear success stories where utilities had fewer issues in their collection systems linked to FOG, fewer problems at their plants, and fewer sanitary overflows and backups into homes and businesses, ultimately saving their utilities time and money.

Tori Morgan spent 25 years with Suez as a Regulatory Compliance Manager and Licensed Operator, and now brings that insight of the rules and regulations for water, wastewater, and industrial pretreatment to Entech and its clients. She has a natural flair for distilling complicated information and shares the critical elements on 'The Cork,' an online bulletin board she created and curates. She is active in PA AWWA, EPWPCOA, and the Lehigh Valley Chamber Energy and Environment Committee. **Contact:** 484.347.9580 | tmorgan@entecheng.com

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Booth 5

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Pennsylvania 811

Booth 47

Booth 85

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Contact: Scott Legg ■ 412.504.9787 slegg@rainforrent.com ■ www.rainforrent.com

Booth 10

Offers an advanced pipeline assessment with decisionmaking capabilities to successfully and proactively manage a sewer collection system. Has equipment platforms for any size sewer and flow conditions, and delivers data in various requirements whether CCTV in PACP, MACP, sediment, ovality, gas detection, and enhanced premium engineering reports of bend geometry, virtual mandrel, alignment, and as-built models. All data is provided in a sewer asset management program, ICOM.

Contact: John DePasquale ■ 412.476.8980 ext. 292 jdepasquale@redzone.com ■ www.redzone.com

Reline America

Booth 78

A member of the international Reline UV Group. We are a Virginia-based manufacturing company of Alphaliner® full composite, UV GRP and state-of-the-art installation equipment. We serve the infrastructure protection and rehabilitation needs of municipalities, DOTs, railways, airports and other industries.

Contact: Pat Godwin ■ 724.678.6395 pgodwin@relineamerica.com ■ www.relineamerica.com

Robinson Pipe Cleaning

Booth 1

Offers full-length digital CCTV, sonar, laser profiling, sewer cleaning, main line grouting, lateral grouting, manhole rehabilitation, sectional point repairs, CIPP lining of laterals from the main, and lateral connection lining. Contact: Mike Long = 412.921.2100 long@robinsonpipe.com = www.robinsonpipe.com

Rockacy and Associates Inc.

Booth 81

A manufacturer's representative selling to the municipal market. Focus is to strategically position innovative manufacturers into our market to provide value to the needs of our clients. We work with manufacturers, engineers, and municipal personnel to provide the right products for the right application. Territory: Virginia, Maryland, District of Columbia, Delaware, Pennsylvania, New Jersey, and West Virginia. Offices in Charlottesville, VA, and Pittsburgh, PA. **Contact: Stephen Sharps = 412.721.2023 stephen.sharps@rockacy.com = www.rockacy.com**

MA

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Surveying, GIS Systems, ALTA Surveying, Construction Staking Surveying, Topography, Boundary Surveying, Unmanned Aerial Systems



The RootX® Company

Booth 49

For over 30 years The RootX® Company has been your direct source for solving Fats, Roots, Oils & Grease (F.R.O.G.) issues using the RootX® and Grease-X product lines. The simplicity of application allows municipal sewer crews and contractors to effectively eliminate SSOs caused by F.R.O.G.

Contact: Drew Raffensperger ■ 800.844.4974 drew@rootx.com ■ www.rootx.com

SAERTEX multiCom

Booth 22

Industry-leading manufacturer of UV-cured fiberglassreinforced pipe liner in the world. A solution provider for the trenchless rehabilitation of wastewater and supply pipes, we partner with our customers throughout the installation process from initial planning and bidding to on-site support and project completion. As a result, our high-performance liners have been successfully installed on thousands of projects. **Contact: Troy Cubero 414.499.6545**

t.cubero@saertex.com **u**www.saertex-multicom.com

Sauereisen Inc.*

Booth 19

A 124-year old, Pittsburgh-based company and a world leading manufacturer of corrosion-resistant materials of construction. We manufacture sealants, corrosion barriers and substrate repair materials for the protection and restoration of wastewater infrastructure. From collection systems to treatment facilities, Sauereisen offers materials to resist acidic environments and prevent water inflow & infiltration. **Contact: Mackenzie Paesano 1**412.963.0303 **mlpaesano@sauereisen.com1www.sauereisen.com**

Sci-Tek Consultants Inc.*

Booth 56

Founded in 1996. A certified-MBE organization providing sustainable solutions for clients in various industries including water and wastewater. Our services include site civil design, design of green stormwater infrastructure, water resources engineering and planning, geotechnical engineering, GIS and asset management, surveying and mapping, and environmental consulting.

Contact: Maria Atkinson ■ 412.371.4460 ext. 109 matkinson@scitekanswers.com ■ www.scitekanswers.com

Sherwin-Williams Protective & Marine

Booth 45

There are many coatings manufacturers, but there is only one Sherwin-Williams Protective & Marine. Deploying a team of highly experienced and skilled functional experts working closely together to help our customers achieve success is the hallmark of our knowledge and product delivery. Contact: Toby Butler = 717.753.0653 toby.butler@sherwin.com = https://industrial.sherwin-williams.com/na/us/en/

https://industrial.sherwin-williams.com/na/us/en protective-marine.html

S.M. Sawchuk Sales Inc.

Booth 6

A leader in the water/wastewater industry for over 38 years, serving Western Pennsylvania, Western Maryland and West Virginia. This year, we are featuring HACH Flow's transition to HACHFlow/McCrometer. Sawchuck continues to specialize in data delivery services, inflow and infiltration, overflow, stream monitoring, and industrial applications, while providing the latest technology and customer service.

Contact: Steven T. Sawchuk ■ 412.443.5167 sawchuk22@aol.com ■ www.smsawchuksales.com

Society of Women Environmental Booth 48 Professionals (SWEP)

Our mission is to provide women environmental professionals, working within the Three Rivers region, a community that recognizes and supports women's leadership and career development, provides a forum to share information and ideas, and promotes public service within the environmental field.

Contact: Meredith Welle ■ 412.497.6249 meredith.welle@hdrinc.com ■ www.swep3rivers.org

*Participating exhibitor in the gift card prize drawing

State Pipe Services Inc.

Booth 42

Full-service municipal sewer & storm infrastructure inspections, cleaning and rehabilitations, NASSCOcertified CCTV inspectors, jet and vactor truck cleaning, debris disposal, HDPE pipe bursting and slip lining, CIPP point repairs, pressure grouting, and manhole rehabilitations.

Contact: Tim Kenney ■ 724.679.0104 tkenney@statepipeservices.com ■ www.statepipeservices.com

StormTank

Booth 28

Products include: Module, Shield, Pack and URS. Offers an affordable and sustainable solution for storm water management. These products have been designed to address customers' unique project applications from largescale detention and infiltration to rainwater harvesting and urban root systems.

Contact: Sam Williamson ■ 484.401.0401 sam.williamson@brentwoodindustries.com ■ www.stormtank.com

StormTrap

Booth 70

Offers solutions for managing runoff, protecting waterways, and improving the use of property. Committed to providing cost-effective, customized water management solutions to engineers, owners, and municipalities across North America and abroad. Whether you're concerned about water quality, detention, infiltration or water harvesting, StormTrap has a design to reduce our footprint, accommodate site constraints, lower overall costs, and meet specific project needs. **Contact: Justin Nace = 267.449.1679**

jnace@stormtrap.com **www.stormtrap.com**

Sullivan Environmental Technologies*

Booth 88

A regional manufacturer's representative firm specializing in equipment and technology solutions for clients in the water and wastewater treatment, collection, and distribution arenas. We are headquartered in Fort Mitchell, KY and represent manufacturers in Ohio, Kentucky, Indiana, Pennsylvania, and West Virginia. Contact: Dan Sullivan **■** 859.426.5133

dan@sullivanenvtec.com

Tri-State Environmental Services LLC

Booth 90

Offers pipeline sewer inspection & cleaning equipment. Sales, service, rentals, and retrofits. Contact: Walter Jeness ■ 908.797.8570 walterjenness@tristateenviro.com ■ www.tristateenviro.com

Trumbull MFG

Booth 9

Located in Youngstown, OH. We manufacture products for the water and wastewater industries. They include tools, composite manhole lids and frames, polymer meter lids, mud valves, valve acc, chainwheels, polywrap, and other products. **Contact: Brian Rogers 724.699.8776**

brian.rogers@trumbull-mfg.com ■ www.trumbull-mfg.com

U.S. Municipal

Booth G

A dealer for several environmental products like Vac-Con Combination Sewer Units, Ibak Pipeline Inspection Equipment, PipeHunter Jetters and Enz Nozzles. Nine salespeople cover all of Pennsylvania for these products and provide service after the sale.

Contact: Bob Griffiths ■ 412.335.9303 rsg@usmuni.com ■ www.usmuni.com

Vortex Companies

Booth 89

Providing trenchless technology for tomorrow's water and sewer infrastructure. At Vortex, we anticipate problems, imagine solutions, and develop no-dig, trenchless technologies to solve big infrastructure problems cost-effectively and permanently. Our technology and solutions are field-proven, third-party-tested and centered around both the contractor and the end user.

Contact: Derek Offutt ■ 724.923.8922 doffutt@vortexcompanies.com ■ www.vortexcompanies.com



Waterline Renewal Technologies Booth 87

A nationwide manufacturer and supplier of the latest trenchless technology that is 100% USA made. We provide trenchless rehabilitation of degraded infrastructure through differentiated products, technologies, and services to prevent inflow and infiltration of sewer systems in mainline and lateral connections. Provides rehabilitation of large structures such as manholes, large-diameter storm pipes, and pump and lift stations. Our brands include LMK, APM, PLI, PLS, and Lightray.

Contact: Jacob Patten ■ 815.640.9343 jpatten@waterlinerenewal.com ■ www.waterlinerenewal.com

Watertap Inc.*

Booth 21

Provides live taps, valve insertions, and line stops with bypass capabilities. Our services are performed while the system remains under pressure and available to the community. This eliminates system disruption and the need to send out boil water alerts. Watertap Inc. has been servicing municipalities for 25 years and has the knowledge and experience to help customers tackle the most complicated issues as they arise. **Contact: Eric Olsen = 248.794.7122** eric@watertapinc.com **=** www.watertapinc.com

WB Wells Co. Inc.*

Booth 67

The exclusive representative for Draeger fixed gas detection products and systems in western Pennsylvania and an authorized distributor of Draeger portable gas detection products. WB Wells is the only Draeger-Certified Service Partner based in western Pennsylvania. WB Wells was founded in 1970 and specializes in analytical instrumentation for safety, environment, and process control. **Contact: Marty Schuff = 412.221.0390** mschuff@wbwellsco.com = www.wbwellsco.com

WinCan LLC*

Booth 13

WinCan VX is an innovative data collection and analysis software that has the ability to make critical decisions based on data collected from pipeline inspections. Once collected, this data and video can be shared and delivered effortlessly through a cloud-based service called WinCan Web. **Contact: Tim Mallon** 412.335.8271 t.mallon@wincan.com www.wincan.com

WSP USA Inc.*

Booth 2

WSP safeguards communities against flood-related impacts by developing customized infrastructure and leveraging multi-benefit nature-based solutions. We help clients define and respond to wet weather threats and develop management practices that address water quality issues. Our sustainable and environment-positive solutions manage and protect surface water resources for the long term. **Contact: Kelly Lennon = 410.385.4162 kelly.lennon@wsp.com = www.wsp.com/en-us**

Xylem Dewatering Solutions*

Booth 34

Maintains a fleet of 6,000 portable pumps and 3,200 pieces of related equipment for use in construction dewatering, mining, drinking water supply, and water/wastewater bypass. Available in sizes 2 inches to 24 inches. The Dri-Prime Pump features priming to 28-feet, dry running, and solids handling capabilities.

Contact: Linda Bayne ■ 724.266.6936 linda.bayne@xylem.com ■ www.xylem.com

Xypex USA

Booth 86

Xypex concrete waterproofing technology is an innovative approach to treating concrete at the microscopic level. We have evolved into a family of waterproofing products that solve water issues in construction.

Contact: John Lutkowski ■ 516.816.4763 john.lutkowski@xypex.com ■ www.xypex.com

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