

2024 GLOBAL BURIED ASSET MANAGEMENT CONGRESS

NOVEMBER 14-16, 2024
OMNI SEVERIN HOTEL, INDIANAPOLIS, INDIANA

ORGANIZED BY:







Presentation & Exhibition & Food Room: JENNINGS BALLROOM, OMNI SEVERIN HOTEL

Day #1 (Thursday, November 14, 2024)

9:00 am - 12:00 pm: Preparation

2:00 pm - 5:00 pm: Registration open, Exhibition setup

2:00 pm - 5:00 pm: Committee Chairs & Board of Directors meeting.

5:30 pm - 7:30 pm: Kickoff Reception

Day #2 (Friday, November 15, 2023)

7:30 am - 8:30 am | Breakfast

8:30 am - 9:00 am | Welcome

9:00 am - 10:00 am | 2 Presentations

10:00 am - 10:30 am | Break

10:30 am - 11:00 am | Presentation

11:00 am - 12:00 pm | Panel 1

12:00 pm - 1:30 pm | Lunch and Keynote Speech

1:30 pm - 3:00 pm | 2 Presentations

3:00 pm - 3:30 pm | Break

3:30 pm - 4:00 pm | Presentations

4:00 pm - 5:00 pm | Panel 2

Day #3 (Saturday, November 16, 2024)

7:30 am - 8:30 am | Breakfast

8:30 am - 10:00 am | 3 Presentations

10:00 am - 10:30 am | Break

10:30 am - 11:00 am | Presentation

11:00 am - 12:00 pm | Panel 3

12:00 pm - 1:00 pm | Lunch

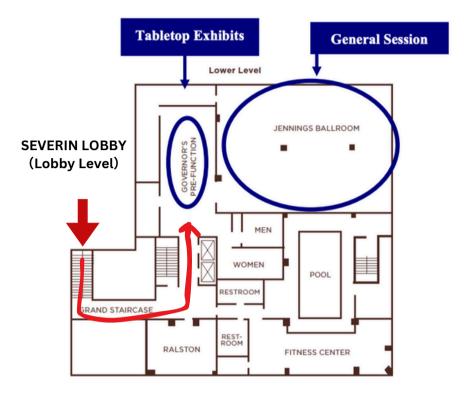
1:00pm - 3:00pm | 4 Presentations

3:00 pm - 3:15 pm | Break

3:15 pm - 3:45 pm | Presentation

3:45 pm - 4:30 pm | Think Tank Discussion

Event Room: JENNINGS BALLROOM



Congress's participants:

The GBAMC will be held on the lower level in the Jennings Ballroom. You can reach it by descending the grand staircase from the Severin Lobby and walking past the elevator, or you can take the elevator directly to the lower level.

TABLE OF CONTENTS

Congress At A Glance	1
A Message From GBAMC Team	3
Speaker Biographies	4-11
Program	12-16
Thank You To Our Sponsors/Exhibitors /Partners	

Dear 2024 GBAMC Participants:

We are delighted to welcome you to the 2nd Global Buried Asset Management Congress, hosted by Buried Asset Management Institute - International (BAMI-I) and Southwest Environmental Finance Center. Building on the success of last year's inaugural event, we're thrilled to have you here to explore new directions and deepen our collective understanding in the field of Buried asset management.

Our theme this year, "New Horizons in Buried Asset Management," reflects our commitment to exploring innovative strategies and solutions for managing the unseen yet essential infrastructure that supports our communities. With BAMI-I's 20-year legacy of promoting asset management practices for utilities, this congress unites a global network of experts and leaders to establish shared goals, assess current practices, and set a bold path forward.

Our speakers will address both foundational principles and emerging trends in asset management, with a particular focus on the unique challenges and opportunities in underground infrastructure. We have tailored sessions to foster meaningful discussions, and most speakers will be present throughout the congress, providing ample opportunities for engagement and networking with industry peers.

We encourage you to join the Think Tank discussion on Saturday afternoon, a session designed to inspire actionable strategies and to significantly influence the future of our field.

Thank you for being part of this collaborative effort. Together, let's shape new horizons in Buried asset management and make this congress a memorable experience!

GBAMC Team









Keynote Speaker / Luncheon Speaker
Olugbenga Ibikunle Ph.D., P.Eng., CRL, MBA
Co-Founder | Managing Principal | Author/Speaker | Teacher
| Motivational Speaker | Mentor, Avodahtec



Dr. Ibikunle is a dynamic and inspiring speaker known for his motivational approach and impactful storytelling. With a passion for driving change in water infrastructure practices, he brings not only technical expertise but also stories of resilience, innovation, and transformation from over 17 years in the field. His journey through academia and industry has led to his significant contributions to water and wastewater conveyance engineering, pipeline trenchless rehabilitation and construction practices, and the development and application of new condition assessment methodologies for buried linear assets, including pressurized and gravity-fed pipes.

As a cross-border Certified Asset Management (AM) Professional and Certified Reliability Leader, Dr. Ibikunle's expertise covers a broad spectrum of asset and infrastructure management practices. He brings practical knowledge in AM Planning, AM Strategy, Risk Management, and Asset Life Cycle Management. His accomplishments are underscored by his active participation in professional organizations, including his roles with the North American Society for Trenchless Technology (NASTT), the American Water Works Association (AWWA) Asset Management Committee, and the Utility Engineering and Surveying Institute (UESI) of ASCE

Dr. Ibikunle's commitment has been recognized through numerous awards, such as the IAM 2020 NxtGen Global Award, the 2021 CNAM TEREO National Asset Management Ambassador Award, and the 2020 Stantec Water Sector Project Award. His forward-looking vision is dedicated to educating and empowering the next generation of asset managers. Recently, he founded Avodahtec, an employee-owned engineering and management consulting firm focused on delivering value-driven solutions in engineering and infrastructure management.

Tom Iseley, Ph.D., P.E., Dist. M. ASCE, PWAM
Beavers Heavy Construction Distinguished Fellow
Professor of Engineering Practice, Lyles School of Civil and Construction Engineering, Purdue University
Chair, BAMI-I Board of Directors

Dr. Tom Iseley has over 40 years of experience in the planning, design, and construction of underground infrastructure systems. During the past 40 years, he has maintained an international leadership position in Trenchless technology. In 1989, Dr. Iseley established the Trenchless Technology Center (TTC) at Louisiana Tech University. He is a founding director of the North American Society for Trenchless Technology (NASTT). In 2003, he established BAMI-I (Buried Asset Management Institute – Internatinal), non-profit professional organization, committed to providing training and certification for water infrastructure asset management.

Dulcy M. Abraham, Professor, Lyles School of Civil and Construction Engineering, Purdue University

Dr. Dulcy M. Abraham is a Professor in the Lyles School of Civil nd Construction Engineering, Purdue University, West Lafayette, IN. The main thrust of her research centers on the development of assessment technologies and decision-making methodologies for the rehabilitation of underground infrastructure. Her research initiatives in civil infrastructure systems include the development of: (1) an automated approach for analyzing and interpreting data regarding the status of wastewater pipelines; (2) a life-cycle based approach to infrastructure management; (3) an asset valuation methodology that incorporates deterioration modeling; (4) models for vulnerability analysis and disaster mitigation of pipelines infrastructures, and (5) evaluation of interdependencies/couplings between water/wastewater infrastructure systems and human interactions. Dulcy Abraham served on the ASCE Construction Research Council (CRC) Executive Committee (secretary, vice-chair and chair). She has also served on the ASCE Committee on Construction Equipment and Techniques Committee, the ASCE Water Infrastructure Security Enhancements (WISE) Committee, the ASTM Committee on Technology and Underground Utilities, and the WERF (Water Environment Research Foundation) Project Committee on the Examination of Innovative Methods Used in the Inspection of Wastewater Collection Systems.



James H. Anspach, PG(r), Dist.M.ASCE, NAC, Affiliate Assistant Professor, Iowa State University

Jim Anspach is one of the original developers of subsurface utility engineering. He chaired ASCE 38, the standard for how to investigate and document utilities on project development plans. He was a prime developer of ASCE's Utility Engineering and Surveying Institute, and served as the 2018 President for its first year of stand-alone operation. Jim jointly developed the concepts and curriculum for the BAMI-I Utility Investigation School, now give 23 times across the country. Jim currently serves as the Chair of the UES Certification Board for Pipeline Engineers (Water), Project Utility Engineers, and Surveying Engineers.

Steven L. Barfuss, Research Professor at Utah State University, Associate Director at the Utah Water Research Laboratory Steve has been employed full time at USU since 1987. He performs hydraulic research in the UWRL hydraulics laboratory and supports graduate students in their research. His research focus on Hydraulic structures, physical modeling, flow meter, pipe and valve testing.

Glenn Barnes, Director, Water Finance Assistance

Glenn Barnes is the Director of Water Finance Assistance, a training and technical assistance organization dedicated to building the financial and managerial skills of drinking water and wastewater utility employees. He has worked for more than 15 years with utilities of all sizes across the country. Glenn's work focuses on rate setting, asset management, affordability, increasing bill payments, accessing infrastructure funding, water loss and conservation, and workforce retention. All the work of Water Finance Assistance is rooted in data analysis, allowing utility staff to make informed and objective decisions to improve their sustainability and to serve their communities for years to come. Glenn is based in North Carolina.

Michelle D. Beason, PE, Regional Manager/Principal Engineer, National Plant Services, Inc.

Michelle received a BS in Civil Engineering from Purdue University, and is a registered Professional Engineer in California, Nevada, Oregon, and Arizona; with over 30 years of water and wastewater asset management and construction experience.

She has worked as a Project Engineer for Capitol Engineering (Indianapolis) and Black &Veatch (Kansas City), as an Asset Management Engineer with the East Bay Municipal Utility District, she owned her own Engineering & Construction firm for 5 years, and for the last 14 years has specialized in multi-sensor inspections and trenchless rehabilitation of sewer, storm, and water assets. She is currently the Regional Manager for National Plant Services, Inc., covering the 12 Western States, including Hawaii and Alaska. Michelle is also active in many industry organizations. In addition to serving as a Board Member of the Western Chapter of the North American Society for Trenchless Technologies, she is a Board Member of NASSCO, and is Chair of the NASSCO Infrastructure Assessment Committee which manages all revisions to the US standard language for pipe and manhole defect codes (NASSCO's PACP/MACP/LACP).

Bill Blomquist, Consultant, Author, Researcher, Instructor, White River Alliance

Bill Blomquist began working at White River Alliance in 2022, having previously been a member of the Alliance's board of directors representing IUPUI. Bill's work with the Alliance focuses mainly on the Indiana Water Summit and Summit-related activities such as the Water Summit Working Group and our pre- and post-Summit online Science & Policy forums. Bill also follows the legislative process during the sessions of the Indiana General Assembly. Bill is also a Professor Emeritus of Political Science at IU-Indianapolis, a Senior Research Fellow at the IU Ostrom Workshop, and an adjunct instructor of Political Science at Butler University.

5



Calvin Clifton, Business Development & Recruiting Manager, Mattern & Craig, Inc.

Calvin Clifton has over 30 years of experience in public works and utilities in the southeast. His business, Mattern & Craig, Inc., works with many small-medium municipalities, as well as rural utility districts.

Clifton has a very diverse background, in both the public and private sectors. He spent the early years of his career in the public works field serving in management positions with both the cities of Kingsport and Athens, Tennessee. Since 2004, Clifton has worked in the consulting engineering field in the role of project manager, asset management consultant, and business development & recruiting manager. He works primarily in east TN, North & South Carolina, and southwest VA.

As a former utilities and public works director, he approaches clients and projects from the standpoint of the owner, manager, and maintainer. His experience includes design oversight and management of water/wastewater, stormwater, streets, and traffic signs/signals.

A graduate of East Tennessee State University and Northeast State Community College, Clifton received his Municipal Specialist Certification in Public Works/Utilities from the University of Tennessee Center for Government and received his Professional Water Asset Manager (PWAM) certification in 2017.

A native of the east Tennessee mountains, Clifton and his wife, Leslie, reside in Kingsport. They have two grown children and four grandchildren.

Leticia Eberly, President and CEO of LMEC LLC

Leticia Eberly is the President and CEO of LMEC LLC, where she leads software development and consulting projects, specializing in underground infrastructure. She developed the WICKED Product Suite, the first proprietary software for underground inspection certified by NASSCO. Leticia holds master's degrees in Computer Systems and System Information and Re-Engineering from Oxford University and ORT University. She has extensive experience in IT leadership, having served as Chief Operating Officer and IT Director in various industries. Leticia is also a co-chair of the NASSCO Software Committee and an active member of several industry-related committees. She is fluent in Spanish, English, and Portuguese.

Megan Glover, CoFounder and CEO of 120Water

Megan Glover is the CoFounder and CEO of 120Water, a leading software and services company that water professionals use to manage lead and other compliance programs. For nearly a decade, 120Water has been working on national lead programs such as the State of Indiana, Pittsburgh Water and Sewer Authority, Denver Water, City of Chicago and Newark, NJ. In addition serving large scale inventory, replacement and compliance programs, 120Water is a proud partner of national and state Rural Water Associations; currently working with nearly 10,000 rural water systems across the US to develop inventories, asset management and other water quality programs.

Josh Hawley, Utility Advocate | Solutions Consultant, Ziptility

Josh Hawley, a ten-year industry veteran, led Cordry-Sweetwater in Brown County, Indiana for seven years, pioneering advancements in asset management and technology. In the last three years at Ziptility he has emerged as a dedicated advocate for rural utilities nationwide. Josh utilizes the Ziptility platform to address real-world industry challenges, showcasing his commitment to innovation and sustainable solutions.

Heather Himmelberger, Director, Southwest Environmental Finance Center, University of New Mexico

Heather Himmelberger is a registered professional engineer with over 35 years of experience working with water and wastewater utilities all across the U.S. She has a BS from Penn State University and an MS from Johns Hopkins University both in Environmental Engineering. As Director of the SW EFC, Heather has been a staunch advocate and promoter of asset management practice for over 20 years. She has provided hundreds of asset management trainings and directly assisted systems of all sizes and types with understanding and implementing asset management. She has presented asset management presentations at regional, national, and international conferences. She has created guidance materials and documents



Adam Hershberger, EPA Water Specialist, Alliance of Indiana Rural Water

Adam has a background in water and wastewater operations management, including treatment, distribution and collection systems. He currently holds WT4, DSM, and Wastewater Class II certifications along with having a Loss Audit Validator Adam spent time as a Utility Asset Management Consultant prior to joining the Alliance in August 2023.

Jill Hoffmann, Executive Director, White River Alliance

Jill Hoffmann is Executive Director of the White River Alliance, and President and Principal Owner of Empower Results, LLC, an environmental consulting company focused primarily on environmental education, outreach, and various public involvement services. Her work as the Executive Director for the White River Alliance is gaining national recognition as a model for water partnerships and programs. Jill has been recognized with several state and local awards for her work. Jill is experienced in technical disciplines such as water quality assessment, stormwater management, and nonpoint-source pollution prevention strategies, and in policy areas such as zoning, ordinance development, and public information.

Steven Kramer, PE, Senior Vice President, COWI

Steven Kramer is a Senior Vice President at COWI. He has 40 years of experience in engineering firms serving the infrastructure industry. Steve led the design, management and construction of over 75 underground projects around the globe with construction values up to \$1 billion.

A frequent speaker and active participant at industry conferences and in technical societies, Kramer has published more than 90 technical and management papers. Kramer served as the 2023 President of the ASCE Utility Engineering and Surveying Institute (UESI). In recognition of his significant accomplishments and contributions to the industry, Kramer was named the recipient of the 2004 Trenchless Technology Person of the Year award, received a 2016 Engineering Alumni Achievement Award from Washington University in St. Louis, elected to the Moles in 2020 and inducted into the Trenchless Hall of Fame in 2023.

George E. Kurz, P.E., DEE, Consulting Engineer & Researcher, Sewer Capacity Management

George has 46 years of experience as a government and private engineering consultant focused on improving effectiveness and efficiency in municipal sewer systems. He believes that I/I is the most significant problem facing most operators, but that the true magnitude of the problem is underestimated and has been largely overlooked. He is a specialist in detecting, measuring, and stopping I/I in sewage collection systems. George developed standard methods for measuring effectiveness of rehabilitation using flow monitoring and existing treatment plant data.

Cory Kreutzer, Technical director for IQ4H2, a subsidiary of Braindrip, LLC

Cory is a subject matter expert (SME) in hydrogen systems integration and has diverse background in mechanical engineering, chemistry, computational science, and business. Cory has an extensive history in applied research and development on energy systems including system design, safety assessment, product development and optimization, and control system design, with an emphasis on renewable energy systems. His role at IQ4H2 is focused on safety, optimization, and acceleration of hydrogen systems with an emphasis on the advancement of Braindrip's novel composite pipeline technology. This includes the incorporation and advancement of pipeline health monitoring through advanced sensor systems. Prior to working at IQ4H2, Cory worked at the National Renewable Energy Laboratory as a group manager and research engineer for the hydrogen infrastructure team. Prior to that, he worked professionally on a range of topics including electric vehicle climate control technologies, biomass cookstove development and manufacturing, and natural gas internal combustion engine performance. Cory holds a bachelors degree in chemistry from the Colorado School of Mines and masters degree in mechanical engineering from Colorado State University.



Calvin Levy Chief Technology Officer at Mahjee

Calvin Levy is a visionary leader with an exceptional track record in the realm of digital transformation and technology innovation. Holding a wealth of experience in integrating cutting-edge digital solutions within critical infrastructure sectors, Calvin has played a pivotal role in steering Mahjee's mission to revolutionize the water industry. His career is marked by a relentless pursuit of excellence in harnessing the power of data, real-time monitoring, and predictive analytics to significantly enhance operational efficiency, resilience, and sustainability within the water sector.

At Mahjee, Calvin has spearheaded numerous initiatives that leverage advanced digital technologies to address some of the most pressing challenges faced by the industry today. These challenges include the deterioration of aging infrastructure, the impacts of climate change, and the imperative for decarbonization. Under his leadership, Mahjee is developing and implementing innovative solutions that not only optimize asset performance but also preempt potential failures, thereby ensuring a more adaptive and responsive water management system.

Calvin's approach is deeply rooted in the belief that actionable data and advanced analytics are key to informed decision-making. By fostering a culture of data-driven excellence, he is enabling utilities to conduct thorough evaluations and optimizations of their operations. His work extends to various applications, such as quality monitoring, infrastructure management, and compliance with evolving regulatory standards. This holistic approach not only enhances the operational capabilities of water utilities but also contributes to the overall well-being and safety of communities and the environment.

In addition to his technical prowess, Calvin is known for his forward-thinking vision and strategic mindset. He consistently advocates for the adoption of digital water technologies as a means to create a more sustainable and resilient future. His dedication to leveraging technology for societal benefit, coupled with his ability to inspire and lead teams, makes him a pivotal force in Mahjee's ongoing quest for excellence in water management.

Calvin Levy's contributions to the field of digital water intelligence are a testament to his commitment to innovation and sustainability. As Mahjee's CTO, he continues to drive progress and set new standards for the industry, ensuring that the company remains at the forefront of technological advancements and continues to make significant strides in creating a resilient and adaptive water management system.

Irene McSweeney, PE, Director of Construction, Boston Water and Sewer Commission

Irene McSweeney has served the City of Boston for 34 years at the Boston Water and Sewer Commission as Director of Construction, Chief of Operations and Chief of Special Operations. Prior to joining the BWSC, she worked at Allen and Major Associates as a Senior Project Manager, overseeing site development projects and residential and commercial subdivisions. Irene earned a Bachelor's Degree in Civil Engineering from Wentworth Institute of Technology and a Master's in Environmental Engineering from Worcester Polytechnic Institute. Her work spans all types of major infrastructure, from cleaning and lining of water mains, to major sewer separation projects to clean up Boston Harbor, as well as numerous trenchless projects. As COO, she oversaw the Commission's emergency response and maintenance of the Commission's 1500 miles of Sanitary and Storm Sewers and 1008 miles of water mains

Justin Nolan, project director, UNC Environmental Finance Center

Justin Nolan is a project director for the UNC Environmental Finance Center. He has been with the organization for going on two years now doing work on a variety of projects including EPA P2, the 2024 Appalachian Regional Commission study, C2 Technical Assistance for Communities, and providing learning opportunities for water utility staff across the EPA Region 4. Justin graduated from UNC with his master's degree in City and Regional Planning and immediately went to work with the Environmental Finance Center. He continues to apply the skills from his origins in the NC education system to the work he does engaging with NC citizens around the state.



John W. Norton, Jr., PhD., PE, Director of Energy, Research, & Innovation Great Lakes Water Authority

Dr. John Norton is Director of Energy, Research, and Innovation for GLWA, a combined water/wastewater utility in Southeast Michigan. GLWA treats more than 40% of the water, and 30% of the wastewater, for the state of Michigan. Norton leads GLWA's research efforts to understand, extend, and enhance its linear and process infrastructure and directs projects ranging from source water monitoring and distribution system water quality, through to energy extraction from biosolids. GLWA owns over 388 miles of PCCP, and over 800 miles of transmission main, 4 ft diameter or greater.

Mike Peters, Member and Team Principal, Braindrip & IQ4H2

Mike is a Member and Team Principal at IQ4H2. He is a leading subject matter expert (SME) in hydrogen systems integration, safety, and optimization. At IQ4H2 he leads tasks related to quality assurance, data management, safety, test programs, and product compliance for BrainDrip's Innervated Tubular Composite (ITC). In his previous role, he worked for over a decade as an applied researcher at the National Renewable Energy Laboratory (NREL). While at NREL, he gained expertise on projects from hydrogen production to end-use and everything in-between. His previous roles have led to numerous advances of hydrogen technologies including demonstrating electrolyzers as distributed energy resources (DERs) within the grid, leading a medium-/heavy-duty modeling and hardware test program for Class 8 trucks, and leading a 30+ partner hydrogen blending project for the U.S. Department of Energy. Mike and his IQ4H2 team will be exponentially extending BrainDrip's market lead as designers, engineers, developers, and implementors of innovative products for the safe and effectual distribution and storage of highly compressed hydrogen.

Chad Reynolds, Water Circuit Rider, Alliance of Indiana Rural Water

Chad started his water and wastewater career in 2001. He holds a DSS, WT3 and Class 1 license, and he is a validator for water audits. He holds a Level 2 license and is the RD Apply for USDA to assist in filling out loan applications. Chad also holds a Category 8 license for mosquito spraying. He sits on a committee with IFA and AWWA overseeing water audits, as well as the IDEM Water Exams Committee. In his free time, Chad loves to be involved with his two boys, deer hunt and fish.

Matthew Rushing, E.I., Project Engineer, North Carolina's Department of Environmental Quality

Matthew Rushing manages the Asset Inventory and Assessment grant and Merger/Regionalization Feasibility Study grant programs at North Carolina's Department of Environmental Quality which directly support North Carolina's Statewide Water and Wastewater Master Plan, "The Road to Viability".

Since graduating from Ole Miss with a B.S. in Chemical Engineering in 2011, Matthew has managed over 450 construction and planning projects for drinking water and wastewater utilities.

His passion to confront complex challenges with a combination of best practices and unique solutions has resulted in a wealth of experience engaging with all levels of the regulated community and supporting their efforts to provide reliable and affordable water and wastewater services



Boston Snyder, Asset Manager, City of Goshen, IN

Boston started his municipal utility career in 2008 performing construction on sewer systems. He worked construction for a few years before taking a role in 2014 where he focused primarily on geographic information systems and construction inspection. After joining the Goshen team in 2022, he assumed the role as the city's first Asset Manager in March of 2024. He is currently enrolled at Indiana University – South Bend where he is obtaining a Bachelor of Science in Business with a concentration in Management Information Systems and a minor in Business Analytics where he is set to graduate in 2024.

Savanna Speciale, Principal and founder of Carbon Solutions, LLC

Savanna Speciale is an expert at managing commodity origination and cross-trade finance transactions across the supply chain for refined products, crude oil, hydrogen, hydrogen vectors, CCUS, RNG, waste circularity and decarbonization solutions. Savanna has over 13 years of experience in trading, operations, analytics, risk management, structured transactions and origination across energy markets at industry majors. Early career highlights include building supply chain logistics and trading at Motiva, the largest refinery in the United States for jet fuel and later crude oil. More recently, Savanna worked at bp as Director of Low Carbon and Cross-Commodity Origination identified project development and partnership opportunities to acquire assets, originate supply and offtake opportunities, and pilots within hard-to-abate sectors, utilities, and the maritime industry seeking to decarbonize. Savanna is currently the Principal of Carbon Solutions, LLC, where she works to bridge commercial gaps between traditional oil and gas and decarbonization in the evolving energy landscape. Savanna holds a Bachelor of Management in Legal Studies and Finance and Master of Energy Trading and Finance from Tulane University and her career spans roles at ConocoPhillips, Motiva Enterprises, bp and Gasology.

John W. Tuggle PE PS, Executive Director, Region 4 Planning and Development Council, Summersville, WV

John joined the WV Regional Planning and Development Councils in Oct. 2013 after spending 27 yrs as a Consultant Engineer, primarily in the water and wastewater infrastructure sector. He is a licensed PE in WV,OH, and VA. Virtually all of his prior years as a consultant were spent working closely with State and local government entities to improve the infrastructure needed to support the health and well being of the citizenry in West Virginia and surrounding States. He has experienced the creation and evolution of existing State and Federal funding programs over the years and developed the relationships with those agencies necessary to facilitate successful infrastructure improvements of all types. John has been a key player with GIS corporate decision-making process in both Public and Private Sector scenarios for over 20 yrs. His focus has been to research and develop ways to improve basic utility and government operations with the efficiencies and cost effectiveness that GIS means and methods bring to bear. John manages a superb staff of project administration personnel at Region 4 as well as co-manage the Fayette Raleigh Metropolitan Planning Organization. John is very proud to be a lifelong West Virginian. He has a wonderful wife, Romona, three grown and very successful children, and five grandchildren he adores.

Mark G. Wade, P.E., President, BlueWater Solutions Group, Inc.

Mark is President and a Senior Pipeline Technologist for BlueWater Solutions Group. This includes a wide range of buried pipeline infrastructure for municipal, commercial, federal, and industrial clients. Throughout his 46 years of experience in consulting engineering he has accumulated a broad range of experience for the improvement and management of water, wastewater, and stormwater conveyance systems. This includes planning, modeling, design, and asset management services. He has managed more than 1,100 projects and programs related to buried pipeline systems in North America, Southeast Asia, New Zealand, and Europe. Mark has also authored and presented nearly 100 technical papers related to conveyance system evaluation and rehabilitation. Several have been published in trade magazines, journals, manuals-of-practice, and books. He currently provides senior-level technology and project management oversight for several sewer assessment and rehabilitation projects, particularly large-diameter conveyance systems, in Colorado, Texas, Missouri, Mississippi, Florida, Kansas, and lowa.



Ross Waugh, Director, Waugh Infrastructure Management

Ross is the founder of Waugh Infrastructure Management and is an Asset Management and systems integration specialist with 40 years experience in local government asset management and engineering. Ross has been consulting in asset management practices for 24 years.

Ross is passionate about assisting people to practice Asset Management holistically and comprehensively yet practically. His strategic analysis of client practices is balanced with a strong practical background that always ensures results not theory. Ross has experience of eight cycles of integrating asset management planning with long term Council financial planning within the New Zealand context.

Kurt Wright, Owner/President, SDG Engineering, Inc

Mr. Wright established his own professional engineering firm in 2002 based in Rutherford County, North Carolina. The corporate mission is to meet client's requirements by providing quality professional water and wastewater engineering services with solutions for a sustainable environment. Mr. Wright has 36 years of experience in engineering planning, design, project financing (grantsmanship), advertisement/bidding, contract administration, construction management, and startup services for numerous types of projects. Most of Mr. Wright's experience is with municipal water and wastewater infrastructure.

Mr. Wright's experience with Asset Management began in 2012 with his membership in BAMI-I (Buried Asset Management Institute – International). Mr. Wright was the chief author of the Asset Management Plan for the town of Spindale, NC, which was approved by the state of North Carolina in 2013. He holds a certificate of completion for CTAM 100, 200, 300 & 400, is a Professional Water Asset Manager (PWAM), and contributed to the development of the CTAM 200 and 400 training manuals.

Greg Zoeller, VP External Affairs, Wabash Valley Resources LLC

Mr. Zoeller plays a key role in building partnerships at local, state, national, and international levels. He has served as Chairman of the World Trade Center Indianapolis since 2017, where he connects Indiana leaders with the World Trade Centers Association. Previously, he was the Attorney General of Indiana from 2009 to 2017. Greg's background includes working in the U.S. Senate and White House with Senator and then Vice President Dan Quayle. He has over a decade of experience in private practice, providing legal and strategic counsel to national and international companies, and leading World Trade Center initiatives. Greg earned his law degree from Indiana University Maurer School of Law and has been an adjunct professor at I.U. McKinney School of Law.



8:30 am - 9:00 am I Welcome

9:00 am - 9:30 am | Presentation: Funding the Future: Appropriate Rate Increases for Spindale, NC- by Glenn Barnes

Abstract: Spindale, NC operates a wastewater utility serving roughly 7,500 people. The town updated its asset management plan last year that included a rate study. The study determined that Spindale's current rates would not be sufficient to cover its future operating and capital expenses and that a rate increase would be needed. This session will identify the challenging demographics of Spindale's customer base. The session will also describe the data analysis behind the rate study and will discuss how affordability concerns informed the town's new rates. The session will finally explore how regionalization and infrastructure funding opportunities could be key to the financial future of the utility.

9:30 am - 10:00 am | Presentation: Spindale Wastewater Collection, Conveyance, and Treatment System Asset Management Plan Update 2024 - by Kurt Wright

Abstract:: The first Asset Management Plan (AMP) for the Town of Spindale, North Carolina, Wastewater Collection, Conveyance, and Treatment System was prepared by SDG Engineering, Inc. in 2012. (The SDG Engineering, Inc. name at that time was Kurt D. Wright & Associates, Inc.) The Spindale AMP was submitted to the Town of Spindale and the funding agency, the North Carolina Division of Water Infrastructure (DWI), under the Department of Environmental Quality. It was approved by DWI in 2013. At the time of DWI's approval, the reviewer stated that it was the best AMP of all fifty that had been submitted that year. Kurt attributes thisaccolade in part to his involvement in the Buried Asset Management Infrastructure – International (BAMI-I). During the development of the Spindale AMP in 2012, Kurt joined theBAMI-I organization and assisted them with the development of CTAM-200, Developing an Asset Management Plan. SDG Engineering updated and revised the Spindale AMP this year. Glenn Barnes, with Water Finance Assistance, was a member of the SDG Engineering Team developing the Spindale AMP. Glenn conducted the Rate Analysis component of the AMP. Together, Kurt and Glenn presented several options to the Spindale Board of Commissioners as to how they could establish the Enterprise Fund for the Spindale Wastewater Collection, Conveyance, and Treatment System on a sound financial footing. This presentation focuses on the many challenges associated with the rate analysis component of the Spindale AMP Update.

10:00 am - 10:30 am Break

10:30 am - 11:00 am | Presentation: Why Are We Still Talking About I/I? – Answers From Statewide Studies - by George Kurz

Abstract:: The only statewide study of I/I shows that leakage is getting worse since 2016. Last year, EPA estimated that the cost nationally to correct I/I related problems in sewers has increased by a third since 2012: to \$12.64 billion. A simple, open-source Excel spreadsheet tool will be described for use by wastewater system operators. They can use daily data that they already collect for determining the level of I/I and RDI/I in their collection system and evaluate the effectiveness of sewer rehabilitation work. An operator can analyze a year's data in 20 minutes. New examples will be included.

11:00 am - 12:00 pm | Panel 1: Water and Wastewater Asset Management in The US Moderator: Heather Himmelberger, Panelists: Irene F McSweeney, Calvin Clifton, John Tuggle

Abstract: This panel will delve into the landscape of water and wastewater asset management across different states, highlighting both the challenges and opportunities. We will discuss diverse practices, emerging technologies, and strategies that are shaping the way utilities manage infrastructure, particularly focusing on resilience, regulatory compliance, and financial sustainability.

12:00 pm - 1:30 pm | Lunch and Keynote Speech: Olugbenga Ibikunle, Co-Founder | Managing Principal | Author/Speaker | Teacher | Motivational Speaker | Mentor, Avodahtec

1:30 pm - 2:30 pm | Presentation: The Infinity Loop of Asset Management: Looking Back to Go Forward - by Heather Himmelberger and Ross Waugh

An in-depth conversation between Heather and Ross

2:30 pm - 3:00 pm | Presentation: Implementing Advanced Technologies and Asset Management to Help Prioritize and Rehabilitate Critical Pressurized Pipeline Infrastructure by Mark Wade

Abstract: The condition of pressurized pipeline (both water and wastewater) has been insignificant decline since the mid-1970s. It's getting worse by the decade. Solutions are needed sooner-than-later! This presentation will give a brief overview of these needs and advanced tools and technologies available to cost-effectively renew these systems. It will also include an overview of how asset management, using a risk-based modeling approach, can be used to select those assets which are highest in priority for renewal and rehabilitation.

3:00 pm - 3:30 pm | Break

3:30 pm - 4:00 pm | Presentation: The challenges and benefits of utility research collaborationsbyJohn Norton

Abstract: In this presentation, Dr. John Norton will discuss the unique challenges and significant benefits of collaborative research initiatives in the utility sector. By leveraging partnerships between utilities, academia, and industry, these collaborations can drive innovation, improve service delivery, and address critical issues such as water quality, operational efficiency, and infrastructure resilience. Attendees will gain insights into the best practices for fostering successful collaborations and how these efforts contribute to more sustainable and effective utility management.

4:00 pm - 5:00 pm | Panel 2: Energy Decarbonization Solutions Moderator: John Norton, Panelists: Michael Peters, Cory Kreutzer, Savanna Speciale, Greg Zoeller

Abstract: This panel will explore innovative solutions for energy decarbonization, focusing on transitioning to cleaner energy sources, improving efficiency, and reducing carbon emissions. Key topics include the repurposing of existing pipelines for faster, safer, and more cost-effective infrastructure adaptation, and the role of asset management in modernizing both underground and above-ground systems like pipelines and grids. Additionally, we will delve into the Health and Risk Monitoring System for Buried Asset Management, which plays a crucial role in ensuring the longevity and safety of critical infrastructure, while minimizing environmental impact. The panel will also discuss cross-industry collaboration and long-term sustainability, addressing how sectors can work together to support a low-carbon future. Challenges such as opposition to combustion-based solutions will also be addressed.

Saturday November 16, 2024

8:30 am - 9:00 am | Presentation: Advancing Better Water Policy and Strategies: Development of the Indiana Water Summit - by Bill Blomquist & Jill Hoffmann

Abstract: The Indiana Water Summit is distinctive in three principal ways: its breadth of topics, diversity of audience, and ongoing emphasis on moving from thoughtful discussion to constructive action. The Summit stands alone as a statewide event that draws interested citizens, public officials, and water professionals together. Since its inception, the Summit has grown in attendance, scope, and activity. A Water Summit Working Group now meets bimonthly to take a deeper dive into issues raised during the Summit, to learn more (from within Indiana and beyond) about what's possible and promising, and to strategize about promoting positive change.

9:00 am - 9:30 am | Presentation: Unique Asset Management Challenges in Campus-Type Facilities- by Jim Ansapch

Abstract: Campus-type facilities have unique asset management issues. Campuses consist of varied types of utilities, not always located in a typical configuration due to expansion or repurposing of buildings over time, and constrained budgets. Most utility asset managers are well versed in one type of utility system, but campuses may require expertise or knowledge in potable water, fire water, gas, steam, telecommunications, electric, drainage, sewer, irrigation, and sometimes more exotic ones. However, the basic concepts of an asset management system are universal. Knowledge of what utilities exist, their characteristics, location, condition, and interdependencies are standard management issues.

9:30 am - 10:00 am | Presentation: Predictive Modeling and User Rates - Goshen's Lead Service Line Inventory and Replacement Plan- by Boston Snyder

Abstract: Goshen will be completing predictive modeling between now and October 2024, to complete our service line inventory. This is being performed in conjunction with an application for State Revolving Funds to complete service line inspections. These inspections will allow us to both reach a 95% confidence in our model and satisfy EPA validation pool requirements under the proposed LCRI. Goshen has also applied for service line replacement State Revolving Funds where analysis was performed to determine a project scope, projected to begin in November 2024, which maximizes service line replacements, replaces aging utility infrastructure, and does not affect user rates.

10:30 am - 11:00 am | Presentation: Balancing the Risks and Rewards of Delivery Methods for Underground and Trenchless Projects - by Steve Kramer

Abstract: The underground construction industry is impacted by many risks and challenges. The linear nature of underground work is different than general construction and methods for recovery due to problems are frequently limited. The challenges between owners, designers and constructors sometimes feel like they are in conflict. Funding sources are frequently limited, yet demands for projects remain very high across the country.

Owners want solutions to improve, rehabilitate and build new underground public infrastructure. We live an environment where better procurement and delivery strategies are needed. There are many types of delivery methods from conventional to alternative delivery that can be used for projects. There is a clear shift away from conventional delivery to alternative delivery as the preferred method. Each method has its advantages and challenges. There is not a magic solution that works for every project.

This presentation describes the trends in tunneling/trenchless procurement and delivery being used across the Americas and the world along with insights on how to fairly balance the risksand rewards between the participants.

11:00 am - 12:00 pm | Panel 3: Asset Management Fundamentals: Mapping, Inventory, and Beyond Moderator: Ross Waugh, Panelists: Josh Hawley, Leticia Eberly, Megan Glover.

Abstract: This panel will focus on the foundational aspects of asset management, specifically addressing mapping and asset inventories. As many utility professionals are eager to learn about these topics, we aim to provide an in-depth exploration of best practices and key concepts that are essential to infrastructure management. adopt best practices, invest in technology, and promote continuous improvement.

12:00 pm - 1:00 pm | Lunch

1:00 pm - 1:30 pm | Presentation: Strategic Water Audits: Driving Sustainability and Efficiency in Utility Management -by Adam Hershberger& Chad Reynolds

Abstract: This presentation focuses on the strategic significance of water audits for utilities, highlighting their role in identifying inefficiencies and fostering long-term sustainability. The validation process and dashboard outputs offer valuable data-driven insights that can be integrated into a broader asset management strategy, improving operational efficiency. By sharing statewide data on non-revenue water and associated costs, utilities can benchmark their performance and develop targeted strategies for reducing water loss. The data serves as a foundation for a roadmap toward improvement, encouraging utilities to adopt best practices, invest in technology, and promote continuous improvement.

1:30 pm - 2:00 pm | Presentation: NC Grant Efficacy Study and Outcomes- by Matthew Rushing & Justin Nolan

Abstract: This presentation revolves around qualitative research conducted by the UNC Environmental Finance Center on behalf of the NC Department of Environmental Quality. The research concerned the efficacy of two programs: the Merger and Regionalization Feasibility Grant and the Asset Inventory Assessment Grant. During the presentation Matthew Rushing, manager of these grants, will cover the context that led to the study. Justin Nolan, one of the researchers involved with the study will then cover the findings revealed by the study and the conclusions the EFC drew. Finally Matthew will discuss what the moves the program has done with the information gathered.

2:00 pm - 2:30 pm | Presentation: Utilizing New Technologies to Make Better Asset Management Decisions -by Michell Beason

Abstract: Sanitary sewer and stormwater system owners are tasked with ongoing asset management decisions that will help maintain the level of service for their customers at the lowest lifecycle cost. The first step in this process is to inspect these pipelines so that these asset management decisions can be made. Closed-circuit television (CCTV) has been the typical form of pipeline inspections since the 1960's; however, with advances in technology, there are more sophisticated tools and processes now available that can provide more quantitative data so that more accurate asset management decisions can be made.

This presentation will discuss four methods by which system owners can use new technology to better manage their systems. These topics will include: 1. High Definition (HD) CCTV video to record pipeline defects, 2. Using multi-sensor inspection robots (using HDCCTV, LiDAR, sonar) to determine remaining useful life and when rehabilitation is necessary, 3. Using drones in sewer smoke testing, and 4. How GIS applications are simplifying data collection in the field from handheld devices.

2:30 pm - 3:00 pm | Presentation: The current state of the pipe infrastructure in the USA and Canada from a recent USU study- by Steven L. Barfuss

Abstract: Water main break rates are the most important indicator for quantifying failing undergroundpipelines. For this reason, break rates are a critical factor in asset management decision-making. This presentation summarizes a recent comprehensive study of water main break rates of common pipe materials performed by Utah State University utilizing input from 802 utilities. The presentation will discuss pipe failure causes, trends and correlations to utility size, pipe age and diameter. Also included will be information about how pipe materials have been changing over time and how pipe materials are used regionally.

3:00 pm - 3:15 pm | Break

3:15 pm - 3:45 pm | Presentation: Digital Defense for Hidden Infrastructure and Water Network-by Calvin Levy

Abstract: This presentation will deliver a strategic overview of cybersecurity, cyber-defense, and cyber-offense for the Water Utility and Buried Asset Management industries, addressing the growing risks and challenges these sectors face. It will emphasize the need for a holistic approach that integrates IT and OT security to safeguard critical infrastructure. Key topics will include the role of advanced technologies, such as Al-driven threat detection and blockchain for secure data management, as well as the importance of compliance frameworks in achieving robust security. The briefing will feature case studies illustrating real-world impacts and lessons learned, including the significant financial consequences of data breaches. Additionally, the discussion will highlight emerging trends, such as 'Digital Twins', and address the persistent challenge of securing legacy systems. The goal is to provide conference attendees with actionable insights to strengthen their cybersecurity strategies and ensure the resilience of vital infrastructure and the reduction of life safety risks associated with digital threats and attacks.

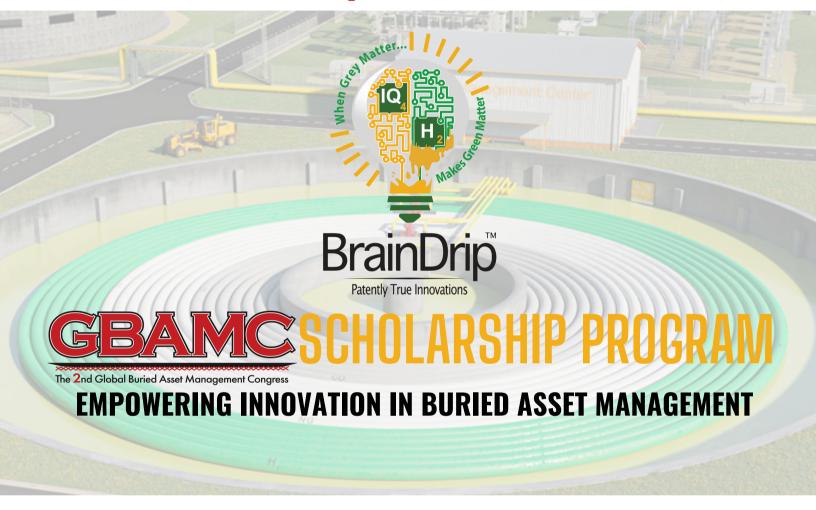
3:45 pm - 4:30 pm: Think Tank Discussion- Moderator: Tom Iseley & Dulcy M. Abraham

The purpose is to provide the opportunity for all congress participants to share their ideas and recommendations on how to advance asset management practices in the industry. This is the critical component of our program to accomplish the congress's objectives, which include the state of practice and present strategic future directions.

4:30 pm Congress Adjourned



Thank You To Our Scholarship Sponsor



The mission of the Global Buried Asset Management Congress (GBAMC) Scholarship Program is to provide financial support to professionals from municipalities and utilities, allowing them to participate in the GBAMC. By offering these scholarships, we aim to foster greater access and engagement across key stakeholders within the utility infrastructure sector. The program strengthens the field of asset management by connecting individuals to valuable resources, best practices, and professional networks. The GBAMC Scholarship Program is made possible through the generous sponsorship of Braindrip, LLC this year. The scholarship is intended to help reduce out-of-pocket expenses to attend the GBAMC. Scholarships for the 2024 GBAMC fully covers congress registration and accommodation expenses.

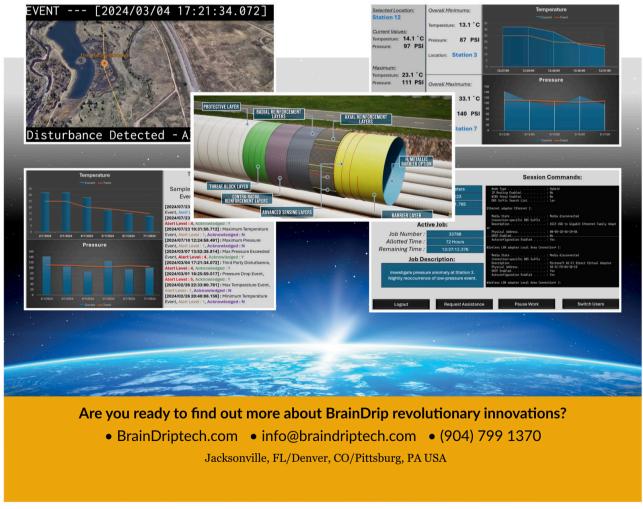
Thank You To Our Premier Sponsors

Transitioning the world's pipeline and storage infrastructure to meet the needs of existing and future markets.



BrainDrip's Health and Risk Monitoring System: Asset Reliability, All the Time

A comprehensive asset management solution created through a combination of novel advanced sensors, asset instrumentation, and machine learning/artificial intelligence based software platforms. Purpose built for BrainDrip's pipeline liner solutions, and compatible with any composite liner system. Suitable for traditional buried asset types and deployable with polymer-based liner products, traditional steel pipes, and even tubular storage assets such as Type III - IV stationary ground storage. Superior performance to ensure that your buried asset remains in peak operating condition throughout its expected lifetime while minimizing or eliminating costly inspection practices and potential downtime.



Thank You To Our Premier Sponsors



A Comprehensive Solution to Your Sewer System Maintenance Needs

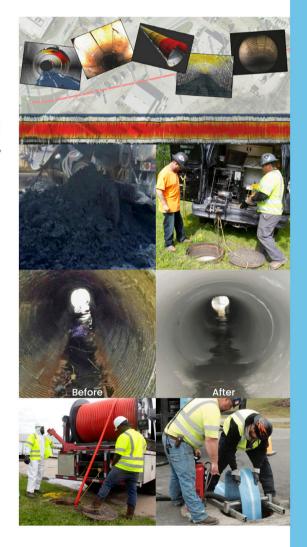
It doesn't matter if your project calls for the use of one piece of equipment or multi-disciplinary crews and a fleet of specialized equipment.

Ace Pipe Cleaning is uniquely positioned to work side-by-side with municipalities, utilities and industrial companies to deliver proven, scalable solutions.

- Multi Sensor Pipeline Inspection
- · Manhole to Manhole Lining
- · Structural Rehab with Cement and Epoxy
- · Spincast Cement Pipe Rehab
- · CIPP Lateral Rehab
- · Lead Service Line Identification
- Hydroexcavation Services

Headquarters 6601 Universal Avenue Kansas City, MO 64120

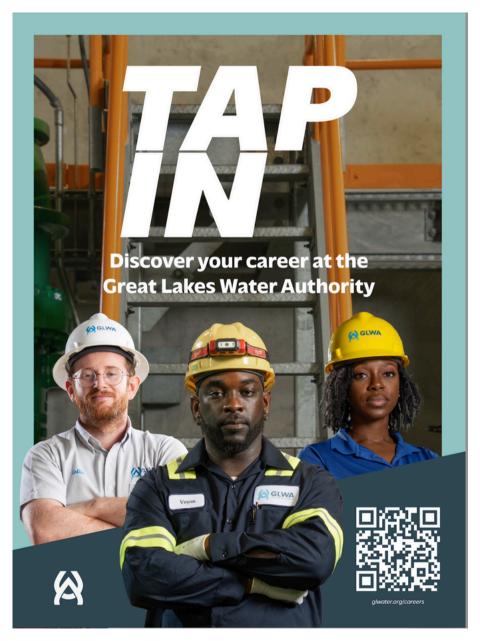
(800) 325-9372



www.acepipe.com

Thank You To Our Gold Sponsors





The Great Lakes Water Authority provides water to nearly 3.9 million people and wastewater services to 2.8 million individuals in southeast Michigan. Join our One Water Team and start your career as a technician, chemist, electrician, and more! Make a difference in your community at GLWA.

https://www.glwater.org/

Thank You To Our Gold Sponsors





Established in 1976 as a 501(c)(6) trade association, NASSCO has been at the forefront of providing top-quality education on pipeline condition assessment and inspection. Through its member-driven committees, NASSCO delivers unbiased technical resources in the form of specification guidelines and other valuable tools. However, NASSCO's impact goes beyond education and resources.

As a strong advocate for underground infrastructure funding and the widespread acceptance and growth of trenchless technologies, NASSCO plays a pivotal role in shaping industry standards. Its diverse membership base includes contractors, suppliers, public agencies, utility owners, engineers, and other stakeholders dedicated to setting high standards to ensure the health and safety of our communities.

Https://www.nassco.org

Thank You To Our Gold Sponsors









The World Trade Center Indianapolis (WTCI) is the premier global trade organization in Indiana ready to serve small and medium-sized businesses seeking to purchase and sell goods on the international market. Our mission is to accelerate business growth, create jobs, and increase wealth for Indiana companies through global trade. WTCI offers business-to-business matchmaking, trade information, market research, educational resources, and legal and consulting services to Indiana businesses. Additionally, WTCI provides businesses with a growing network of contacts through the World Trade Centers Association, focused trade missions, and an expanding international logistics network.

https://www.wtca.org/world-trade-center-indianapolis

Thank You To Our Bronze Sponsors



Plastics Pipe Institute Municipal & Industrial (PPI) aims to educate users about HDPE/PE4710 as the best solution for trenchless and open-cut water piping systems due to:

- resiliency, sustainability, flexibility, ductility, fused and restrained joints, leak-free, lead-free, largest flow capacity
- resistance to corrosion, tuberculation, water hammer, fatigue, freezing, earthquakes, ground movements
- Lowest failure rate and lowest life cycle costs <u>www.plasticpipe.org/MABpubs</u>





PVC Pipe Association's mission is to promote use of longer-life, lower-maintenance, corrosion-proof PVC pipe in water and wastewater systems – for real sustainability, strength and long-term asset management.

www.uni-bell.org



Thank You To Our Bronze Sponsors

Polymer Technologies USA

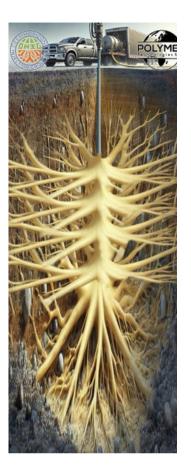
DHIG (Deep Horizons Injection Grouting)

Polymer Technologies USA proudly introduces DHIG- a groundbreaking trenchless technology engineered for optimal buried asset management. Our DHIG technology excels in:

- . Eco-Friendly Innovation: Minimizes environmental impact through sustainable, trenchless methods.
- . Proven Reliability: A trusted solution for leak sealing, wastewater repairs, sinkhole remediation, and soil stabilization.
- . Efficiency & Versatility: Rapid deployment with adaptable applications across a diverse range of buried asset challenges.
- . Cost-Effective Performance: Delivers substantial long-term savings while preserving existing infrastructure.

Discover a smarter approach to buried asset management with DHIG.

Visit: www.polymertechnologiesusa.com



Thank You To Our Exhibitor



USG Water Solutions is the #1 infrastructure asset management solution provider in the municipal water industry. With eleven (11) service centers located throughout the US and over 600 employees; we offer proprietary and value creating solutions in water storage tanks, water quality, distribution pipeline, concrete infrastructure, and metering application

https://usgwater.com/





2024 GBAMC Sponsors/Exhibitors



















Partners





















