



MI-ACE

2024

“Planning for Tomorrow”

86TH ANNUAL CONFERENCE

SEPTEMBER 10-13, 2024 • AMWAY GRAND PLAZA • GRAND RAPIDS, MI

MI-ACE 2024

"Planning for Tomorrow"

What Does Planning for Tomorrow Look Like?

Consider the Challenges and Importance of Water Resources

- **Aging Infrastructure:** Michigan has faced significant challenges with aging water infrastructure. Upgrading and maintaining water systems are crucial for preventing public health emergencies.
- **The Water State:** Michigan, with access to about 20 percent of the world's fresh surface water, must manage its source water and groundwater responsibly to ensure long-term sustainability.
- **Economic Importance:** Water is vital for Michigan's economy, not just for domestic use but also for its agricultural, manufacturing, and tourism sectors. Ensuring the availability and quality of water supports economic stability and growth.
- **Legislative and Regulatory Frameworks:** Implementing robust water laws and regulations, and planning for their enforcement, helps safeguard water quality and public health.

How Else Can We Plan for Tomorrow?



NOTE FROM THE CONFERENCE CHAIR

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Hazen



We're back in Grand Rapids for MI-AWWA's 86th Annual Conference & Exhibits (MI-ACE 2024). We're pleased with the program we've put together as well as all the other aspects of the conference. Read on and make plans to attend, exhibit, or sponsor. It will be a conference to remember!

Who Should Attend?

MI-ACE is ideal for directors, managers, superintendents, supervisors, engineers, and anyone aspiring to leadership roles in the water sector.

Attending Will Help You:

- Hone your existing skills and learn new ones
- Gain insights from speakers
- Gain inspiration to improve on your typical approach
- Stay ahead of industry trends
- Benefit from different perspectives and fresh ideas
- Take the opportunity to meet leaders and find mentors
- Strengthen your professional network connections
- Find out what's new from consultants, manufacturers, and suppliers
- Earn continuing education credits or professional development hours
- Valuable experience



SCHEDULE AT A GLANCE

* additional fee required
** by invitation only

TUESDAY, SEPTEMBER 10, 2024

10:30 am	Golf Outing Fundraiser *
12:00 pm	Deep End Session **
3:00 pm	Communications Workshop *
6:15 pm	Board and Sponsor Dinner **
7:30 pm	Welcome & Networking Reception

WEDNESDAY, SEPTEMBER 11, 2024

7:15 am	Early Morning Coffee with Exhibitors
8:00 am	Attendee Breakfast in the Exhibit Hall
8:00 am	First-Time Attendee Orientation and Breakfast
8:45 am	Awards & Opening General Session
12:00 pm	Lunch in Exhibit Hall
1:35 pm	Breakout Sessions
4:35 pm	Happy Hour in Exhibit Hall
6:15 pm	Vendor Night

THURSDAY, SEPTEMBER 12, 2024

8:00 am	Business Meeting & Awards Breakfast
9:00 am	General Session
12:00 pm	Fuller Awards Luncheon
1:35 pm	Breakout Sessions
4:35 pm	Women on Water Networking *
6:15 pm	Networking Dinner *

FRIDAY, SEPTEMBER 13, 2024

7:15 am	Tom Newhof Leadership Breakfast **
8:00 am	Attendee Breakfast
8:30 am	Closing General Session

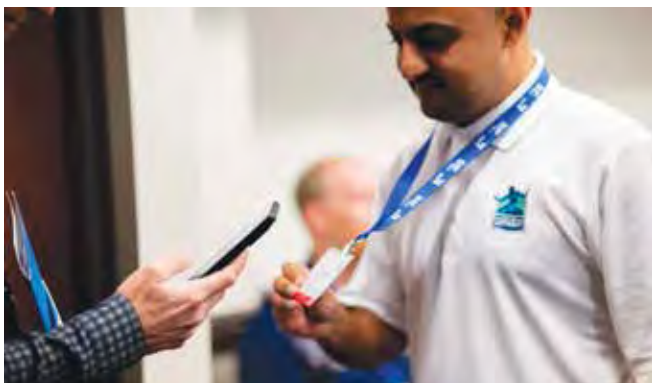


Exhibit Hall

Wednesday, September 11, 2024
7:15 am to 6:00 pm

Featured Time

7:15 am - 8:40 am – Breakfast with Exhibitors
10:05 am - 10:20 am – Break in Exhibit Hall
12:00 pm - 1:30 pm – Lunch with Exhibitors
3:15 pm - 3:30 pm – Break in Exhibit Hall
4:35 pm - 6:00 pm – Happy Hour in the Exhibit Hall



EXHIBITORS 2024 Exhibitors (as of June 6, 2024)

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Dixon Engineering, Inc. (DIXON) is a consulting engineering firm specializing in the evaluation and preparation of specifications and contract documents for the coating and rehabilitation of steel and concrete structures. We offer an extensive structural and coating inspection program specializing in water storage tanks.

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If you have a water engineering challenge, Hazen and Sawyer has your solution. Our range of services encompasses water-related projects' planning, design, and construction management. Hazen helps clients address water supply and water quality challenges with solutions tailored to deliver lasting benefits to the communities we serve.

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Jones & Henry Engineers is the region's premier provider of water engineering consulting services. For nearly 100 years, the professionals at Jones & Henry have provided large and small clients with innovative solutions to their most challenging infrastructure problems.

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We are a services-based, family-operated company that has been in business for over 40 years. We specialize in water loss control, asset management, and wastewater services. Our passion is partnering with communities to help utilities deliver safe drinking water to everyone.

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F&V Operations & Resource Management, Inc. (FVOP) provides full-service operations for clients throughout Michigan and Indiana. We provide professional operations staff with expertise in drinking water treatment and distribution, wastewater treatment and collections, technical services, and maintenance.



Giant Maintenance & Restoration, Inc.

Mark Giarrante

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T: 847-566-9188 • E: info@giant2u.com • W: www.giant2u.com

Giant Maintenance & Restoration, Inc., established in 1989 and incorporated in 2002, is a leader in fire hydrant painting. We emphasize meticulous surface preparation and rigorous quality control to prevent coating failures. Our highly trained team guarantees top-quality results and thorough inspections. Committed to community safety, we manage, clean up, and protect our surroundings during projects, delivering exceptional service and expertise in hydrant painting.



Spicer Group, Inc.

Steven Rutkowski, PE

230 S Washington Avenue, Saginaw, MI 48607

T: 989-754-4717 • E: steverutkowski@spicergroup.com • W: www.spicergroup.com

Spicer Group is a full-service consulting firm with nine offices in Michigan that has been in business since 1944. We have over 300 professionals who provide engineering, surveying, architectural, and community planning services to municipalities across Michigan.



Stantec Consulting Services

Jim Bearman

1168 Oak Valley Drive, Suite 100, Ann Arbor, MI 48108

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In addition to providing all aspects of engineering services, Stantec also develops financial plans/rate studies for municipal enterprise funds, particularly water and sewer. Such analyses include determining needed revenues, determining cost assignment by customer class, and developing user and miscellaneous fees.



REASONS TO ATTEND MI-ACE 2024



Strengthen your professional network connections



Take the **opportunity to meet leaders** and find mentors



Gain inspiration to improve on your typical approach



Stay ahead of **industry trends** and the competition



Hone your existing skills **and learn new ones**



Gain insights from speakers



Benefit from **different perspectives** and fresh ideas



Find out what's new from consultants, manufacturers, and suppliers



Gain a personal **renewal/refresh**



Earn continuing education credits



Visit a different part of the state

See you there!

ENTERTAINMENT AND NETWORKING

GOLF OUTING FUNDRAISER

(separate registration required)

This year's Outing will be held at the Mines Golf Club in Grand Rapids. The Club houses 18 holes of rolling fairways and undulating bent grass greens. The course offers playability from four sets of tees, making your round truly exceptional. The site features mature hardwoods, rolling terrain, and sandy soils. The Mines is a par 70 that is generally forgiving on the tee shots and playable through the green. Enjoy lunch before the noon shotgun start. Network on the course while helping to raise money for Safe Water in Ecuador and AWWA's Water Equation.

- Registration Individual – \$125
- Registration Foursome – \$500
- Hole Sponsorship – \$250
- Water Drive – 3 balls for \$5
- Mulligans – 2 do-overs for \$5

FUNDRAISING BENEFICIARIES

Safe Water in Ecuador (SWIE), a program of MI-AWWA, works to bring clean, safe drinking water to indigenous communities in Ecuador. **Water**

Equation, a program of AWWA, offers training scholarships and leadership development to young professionals.



FIRST-TIME ATTENDEE ORIENTATION AND BREAKFAST

Those attending MI-ACE for the first time are invited to participate in an orientation breakfast before the Opening General Session on Wednesday. Leaders of MI-AWWA will provide you with some tips for how to get the most out of attending. This is an excellent opportunity to get acquainted with other attendees prior to sessions starting. RSVP is required during registration.

CONTINUING EDUCATION

It is possible to earn a total of 1.3 continuing education credits or 13 professional development hours. Final EGLE approval of CECs is pending. Check the website for final credit approval closer to the conference.

Earning CECs is dependent on scanning in and out of sessions. Please familiarize yourself with the scanning process prior to arriving onsite. Information will be available on the microsite at www.mi-water.org/mi-ace.

COMMUNICATIONS PRE-CONFERENCE WORKSHOP

(Ticket – \$50)

Mastering Social Media: Building Your Toolkit for Success

Participants will learn to create a robust social media toolkit covering goal setting, audience targeting, and content strategy. Through interactive breakout exercises and discussions, learn to monitor analytics and foster community engagement to excel in the dynamic world of social media. By the end, attendees will be equipped with practical skills to maintain effective social media management.

Sign up for this bonus session held Tuesday at 3:00 pm. This two-hour workshop will help you hone your social media skills so that you can help advance public trust in water.

SWIE CHANCE AUCTION

(Tickets – 3 for \$10 and 10 for \$20)

Chance Auction items are displayed near the exhibit hall in the Center Concourse, and a basket is placed near them. Place your ticket in the basket of the item you most want to win. Winners are drawn randomly from each basket for each item. There is no limit to the number of tickets you can place in any basket. The SWIE Chance Auction is open Wednesday, September 11, during Happy Hour in the Exhibit Hall.

The SWIE Committee is seeking items for the Chance Auction. To donate an item, please email info@mi-water.org. Thank you in advance to our item donors.

TICKETED NETWORKING EVENTS

These events are offered to allow attendees to maximize their networking and require an additional fee.

- **Women on Water** (Ticket – \$25)
Women are becoming more common in the water sector, but there are still issues unique to women. This networking event offers the opportunity for women in the water sector to connect and share experiences.
- **Thursday Networking Dinner** (Ticket – \$60)
"Striking Connections: Networking Dinner and Fun"
Join us for an evening of networking, delicious food, and casual fun! Unwind after a busy day and connect with industry peers over a delightful meal in a relaxed atmosphere. Whether you're forging new connections or strengthening existing ones, this is the perfect opportunity to mingle and exchange ideas. Plus, enjoy the added bonus of optional bowling in a retro-themed setting for those who want to add a touch of nostalgia and friendly competition to the evening. Don't miss out on this fantastic chance to network and unwind in great company!

Conference App

Download the conference app and plug into everything that happens at MI-ACE. Track your CECs earned, meet speakers, connect with exhibitors, receive conference notifications, and engage for a chance to win one of several prizes.



AWARDS AND RECOGNITION

HELP CELEBRATE EXCELLENCE IN THE WATER SECTOR!

Wednesday, September 11

Silver Water Drop Award
Gold Water Drop Award
Life Member Status Award
EGLE Edward Dunbar Rich Award

Thursday, September 12

Van der Kolk Volunteer of the Year
Young Professional of the Year
Excellence Award – Individual and Organization
Operator Meritorious Award
Richard Husby Public Awareness Award

Thursday, September 12, at the Fuller Luncheon

Michigan Water Utility Hall of Fame
Raymond J. Faust Award
George Warren Fuller Award



VOLUNTEERING AT MI-ACE

Did you know the Section relies on the generous time and effort of volunteers to make MI-ACE a success? Consider lending a helping hand at MI-ACE 2024! Volunteers are needed for registration, session moderating, the member booth, and more. A volunteering form will be available this summer. Please contact staff at info@mi-water.org to be added to the list of prospective volunteers.

TECHNICAL PROGRAM

WEDNESDAY, SEPTEMBER 11, 2024

8:45 AM - 9:00 AM

1.1 Opening Remarks, Welcome and Awards

9:00 AM - 10:00 AM

1.2 High-Performing Teams & How to Leverage Them

Kenneth Sullivan, Arizona State University

(School of Sustainable Engineering & the Built Environment)

This keynote unpacks the economic and workforce trends of the future, the reskilling and upskilling of our teams through technology adoption, and the critical role of leadership in driving proactive strategies to drive organizational success in turbulent times.

10:20 AM - 10:55 AM

1.3 A Birds Eye View of Water in the United States

Cheryl Porter, AWWA President and COO at Great Lakes Water Authority

An overview of AWWA's state of the industry will be presented. As a president of many firsts, she will share her own unique perspective on what got us to this point, what's happening in the water sector across the United States, and what the future may bring for water professionals.

10:55 AM - 11:25 AM

1.4 Design Build vs. Traditional Bid Build (When and Why?)

Amanda Rainville, PULLMAN

Design-Build and Integrated Project Delivery are growing delivery systems for major new construction projects. However, similar and additional benefits can be gained in using an integrated Design-Build approach for both small and larger repair projects in the water/wastewater industry, where there is a need to identify the degree of the problem and the root cause before developing the proper repair design. This approach not only enhances project efficiency but also ensures the most effective solutions are implemented, optimizing resources and minimizing disruptions. Ultimately, embracing integrated Design-Build methods offers a comprehensive and efficient solution for addressing repair needs in the water/wastewater sector.

11:30 AM - 12:00 PM

1.5 The History of the City of Grand Rapids Water System and Coldbrook Pumping Station

Lindsay Sagorski-Munsell, City of Grand Rapids Water System

Nick Fisher, City of Grand Rapids Water System

This session will explore the 150-year history of the Grand Rapids Water System, focusing on its largest and oldest pump station, Coldbrook. The Coldbrook Pump Station housed two generations of steam-driven pumps and two different styles of electric pumps. However, due to maintenance costs, system growth, and riverfront access, the pump station was recently decommissioned. The presentation will provide a detailed

overview of the decommissioning process, highlighting five major capital projects and the relocation of the Coldbrook pumping operations to the City's oldest reservoir, Livingston.

1:35 PM - 2:05 PM

2.1 Design Considerations for Replacement of Large Centrifugal Pumps – Lessons Learned from Grand Rapids High Lift Pump Replacement Project

Mark Parsley, Fishbeck

Wayne Jernberg, City of Grand Rapids Water System

The City of Grand Rapids upgraded aging high-service pumps at the Lake Michigan Filtration Plant to increase pumping efficiency and operational flexibility and to implement real-time condition-based monitoring of the pumps to improve maintenance activities. This project included rehabilitation of some components of the pumps while upgrading the rotating assembly and wear parts, which allowed for cost-savings compared to a full replacement. Considerations were made to confirm that the new pumps would interact with the surrounding building adequately and not cause excessive vibration due to the excitation of the building structure due to the pump rotation. Fishbeck and the city included real-time condition-based monitoring in the design to prevent pump damage and wear by monitoring temperature and vibration at various locations within the pump assembly. This presentation will summarize the engineering design and construction of replacing these large centrifugal pumps and the challenges and subsequent solutions encountered.

2:10 PM - 2:40 PM

2.2 DWAM Grants & Condition Assessment – Developing a GIS Framework for Hydrant & Valve Inspections in Carrollton Township

Steve Rukowski, PE, Spicer Group

This presentation will cover the development of a framework for the condition assessment of water assets, including hydrants and valves, for an asset management plan. The presentation includes descriptions of factors contributing to the likelihood of failure, the consequences of failure, and risk. An overview of the process used to conduct condition assessments with the use of ESRI Survey123 by field staff and a review of the benefits of workflow and efficiency by integrating Survey123 into GIS will be provided. An overview of integration strategies for water system operation and maintenance will also be provided.

2:45 PM - 3:15 PM

2.3 Conducting a Representative Comprehensive Corrosion Control Study for a Complex System – Part 3: Optimizing Corrosion Control

Vittoria Hogue, Great Lakes Water Authority

Gwendolyn Kubacki, Arcadis

GLWA is conducting a study to ensure corrosion control treatment is optimized and remains in compliance, given recent

and pending state and federal regulatory changes. The study consists of pipe rigs placed throughout GLWA's system to test several treatment strategies on harvested and constructed materials. This presentation will discuss the study's outcome and the implementation challenges.

1:35 PM - 2:05 PM

3.1 A Broader Perspective – Aboveground Assessments of Water Mains

Jane Burnett, HDR

Scott Jauch, HDR

As infrastructure continues to age, performing condition assessments on water transmission mains is becoming increasingly important to reduce water main failures and the resulting disruptions to affected communities. Aboveground assessments, a minimally impactful condition assessment method, are valuable to performing any inspection. During an aboveground assessment, the length of the pipe from the ground surface is traversed to locate and exercise appurtenances and to identify topographic features (e.g., standing water and grading alterations). In this presentation, we will discuss the best practices for these assessments, discuss the benefits offered for water utilities, and discuss potential actionable outcomes. Case studies of aboveground assessments performed for various utilities will be included in this presentation.

2:10 PM - 2:40 PM

3.2 Saving Money and Improving Performance through Jar Testing

Matthew Charles, Hazen and Sawyer

Pretreatment optimization at surface water facilities is critical to both plant performance and operating costs. Jar testing results across five facilities at a large Midwest utility showed that treatment costs could be reduced at its largest facility by over \$100,000 a year without affecting treatment performance, polymer use could be reduced at several facilities, and significant cost savings could be achieved at its other facilities as well. This presentation will cover the findings of tests across all five facilities and show how bench testing can be used to help optimize treatment chemistry, improve performance, and save money.

2:45 PM - 3:15 PM

3.3 Highlights of RTP Fellows' Research – Mechanisms of Chloramine-Driven Inactivation of Viruses: Predicting Viral Persistence During Chloramination

Abigail Atwood, University of Michigan

Chloramines, an increasingly popular secondary disinfectant in the US, are used to prevent pathogen proliferation in distribution systems. Despite their importance, little is known about viral reactivity with chloramines. Understanding the kinetics behind chloramine inactivation of viruses will allow us to develop predictive models for how emerging pathogens will react in chloraminated systems and optimize dosage. This research identifies the mechanisms of viral inactivation by chloramines



by determining rate constants for chloramine reactions with bacteriophages of different structures and by probing the causes of chloramine-genome reactivity.

Primer on Waterborne Mycobacteria: Opportunistic Pathogens Viability Assessment Post UV Using a Novel Molecular Approach

Nuha Alfahham, University of Michigan

This research investigates a novel molecular approach to assess the viability of slow-growing nontuberculous mycobacteria (NTM) in drinking water post-UV treatment. By analyzing precursor ribosomal RNA (pre-rRNA) from clinical and drinking water isolates, we determined the pre-rRNA decay rate constant, and compared it to the inactivation rate constant from culture-dependent methods. Our goal is to provide rapid and sensitive assessment of UV disinfection efficacy against NTM and other waterborne pathogens while enhancing detection accuracy.

3:30 PM - 4:00 PM

4.1 Plainfield Township PFAS: Cause and Effects of Water Supply System Extensions

Jeremy Kamp, PE, Prein&Newhof

Matt Weldon, Plainfield Township Water Department

Plainfield Township is now on the tail end of a four-year-long effort to extend its water distribution system to connect homes affected by PFAS contamination in northern Kent County. The total scope of work included installing over 28 miles of new water main and around 1,075 new water service lines from the water main into the house. Over 35 miles of copper water service lines were installed (primarily on private property), and over 1,000 private drinking water wells were abandoned as part of this work. This presentation will give a brief overview of the scope of work, discuss how the Township Water Department planned ahead during material shortages to ensure the planned projects could stay on schedule, review the impacts this project has had on the Township's staffing due to the increased workload, and talk about the shift from system extension projects back to capital improvement projects.

4:05 PM - 4:35 PM

4.2 Safe Water in Ecuador:**Snapshot of Water Quality and Its Health Effects in Rural Communities of Columbe, Chimborazo, Ecuador***Mark De Haan, Life Giving Water International**Julie Wildschut, Calvin University**TBD, Hope College*

This presentation will touch on the current work happening in Ecuador, including water quality testing and health surveys to better understand the impact of properly protected springs, consistent chlorine application, and reliable water access on health in rural Ecuadorian communities in the Andes Mountains. The presentation will share a representative snapshot of typical access to water in rural communities and how organizations in Ecuador are currently tackling the issues of access, treatment, and funding of water systems.

THURSDAY, SEPTEMBER 12, 2024

8:00 AM - 8:55 AM

5.1 Business Meeting and Awards Breakfast**EGLE Forward: Charting Michigan's Environmental Future***Phillip Roos, Director Michigan Department of Environment, Great Lakes, and Energy (EGLE)*

The Michigan's Department of Environment, Great Lakes, and Energy (EGLE) mission is to protect Michigan's environment and public health by managing air, water, land, and energy resources. Dive into what's next for EGLE, exploring exciting initiatives that'll shape the future landscape of water in Michigan.

9:00 AM - 9:30 AM

6.1 Earn Your Degree or Certificate with Water Flex CBE*Troy Gallagher, Bay College*

Bay College has been approved by the Higher Learning Commission to teach their water courses in a CBE format. Earn Your Degree or Certificate with Water Flex CBE. Competency-based education is focused on actual student learning and the application of that learning rather than time spent in a class/on the material. CBE courses allow existing operators and managers to apply their work experience to gain credit and test out specific modules within water and wastewater courses. CBE courses allow the students to avoid following the traditional format and schedule. They can finish courses at a much quicker pace.

9:35 AM - 10:05 AM

6.2 Considerations in Developing Water Affordability Programs*James Bearman, Stantec Michigan*

Water affordability for customers in Michigan is facing increased scrutiny. This presentation will provide a number of options for municipalities to consider in developing a water affordability program in their respective community. Recognizing that rate structure, fees, penalties, and deposit requirements may all adversely impact customers struggling to pay their water bills.

10:20 AM - 10:50 AM

6.3 Strategic Consumer Messaging for Microplastics in Drinking Water*Brent Alspach, Arcadis*

With the state of California mandating microplastics sampling in drinking water supplies over the next four years, the state of New Jersey and New York City proposed to follow suit, and third-party sampling efforts being conducted across the country, publicly available microplastics occurrence data is poised to proliferate rapidly. The disclosure of these data, coupled with a myriad of media reports about microplastics' ubiquity, will inevitably prompt consumer inquiries. Water Research Foundation project 5155 represents an unprecedented proactive effort to develop appropriate consumer messaging resources for utilities in advance of these inquiries while simultaneously building water industry institutional knowledge about microplastics. This presentation will provide a concise summary of the research findings, including the most and least effective messaging (based on a scientifically administered, statistically significant survey), as well as a series of infographics to convey key points in a form conducive to public dissemination. The purpose of this presentation is to discuss the key messages and raise awareness of the utility resources generated by the research conducted under WRF 5155.

10:55 AM - 12:00 PM

6.4 Exploring the West Michigan Water Career Program Through the Interns' Lens*Hillary Caron, City of Grand Rapids Water System**Sarah Boling, City of Grand Rapids**Abigail Cairns, City of Grand Rapids Environmental Services**Angel Vazquez, City of Coopersville*

In 2022, Grand Rapids Community College, in collaboration with Bay College and the City of Grand Rapids, secured a pivotal \$500,000 grant from the US Environmental Protection Agency focused on Water Infrastructure Workforce Development. A significant initiative from this award was developing and implementing The West Michigan Water Career Program, an innovative and equitable internship program for new water



industry professionals. Join us for an engaging panel discussion delving into the transformative West Michigan Water Career Program from the unique perspective of its interns.

1:35 PM - 2:05 PM

7.1 The Nuts and Bolts of Adsorption Piloting for PFAS Treatment

Molly McManus, Intuitech

Co-Authors: Germano Salazar-Benites, HRSD, and Brock Emerson, Intuitech

As the industry reacts and adjusts to the proposed **National Primary Drinking Water Regulation** for six PFAS, many water purveyors will be affected by the regulation. For many utilities, activated carbon adsorption and/or ion exchange resins will be the preferred treatment technologies. This paper will discuss the design, operational, and sampling elements that owners should be aware of prior to beginning an adsorption pilot for PFAS removal. It will compare and contrast adsorption piloting to the more familiar practice of granular media piloting. Additionally, it will present case studies of how small and large utilities have approached their adsorption pilots to meet their PFAS treatment needs.

2:10 PM - 2:40 PM

7.2 Great Lakes Water Authority Northeast Flow Control Facility Case History

Brian Phillips, Fishbeck

Timothy Kuhns PE, Great Lakes Water Authority

In January 2019, GLWA began the right-sizing process of WTPs with the solicitation of proposals for Design Build Services to design and construct the Northeast Flow Control Facility (NE FCF). The presentation will outline the project challenges from engineering, construction, and operational points of view. The presentation will summarize the equipment selection process performed as part of the design and challenges encountered during construction and the startup of the facility. Performance testing data for the NE FCF will also be presented.

2:45 PM - 3:15 PM

7.3 Orchard Hills Well Disconnections and Watermain Improvements

Max Clever, PE, PS, Spicer Group

Keith Risdon, PE, City of St. Louis

Amidst a close-knit neighborhood, voided agreements, ruffled feathers, and multiple jurisdictions, Spicer Group entered into a joint project with the EPA and the City of St. Louis to provide municipal water to landowners at risk of well contamination. In addition to the water main installation, the project included private property plumbing and well abandonment. Using perseverance and continuous communication throughout the scoping, design, and construction process, the City and Spicer Group facilitated a project that ultimately satisfied and alleviated all those concerned.

3:30 PM - 4:00 PM

7.4 City of Grand Rapids Asset Management and Lining Projects for Water, Sewer, and Stormwater

Chad Reul, City of Grand Rapids Water System

This presentation provides an overview of the changes in asset management the City of Grand Rapids has made over the past five years. As we began to perform more lead service line replacements, we found opportunities to include more sewer and stormwater lining opportunities in the scope of the projects. Our current process allows us to televise all our sewer and stormwater assets. Perform spot lining procedures and identify stormwater basins for spray liner applications. We will discuss what changes we have made, the impact of those changes, and plans for the future. In addition, we will have lining contractors that we work with available for project discussion and questions.

4:05 PM - 4:35 PM

7.5 Why Are My Pipes Failing? Best Practices for Managing and Assessing Ferrous Transmission Mains

Susan Donnally, HDR

Metallic pipelines make up about two-thirds of buried water mains in the US. These pipelines continue to age and subsequently fail at an increased rate, causing service disruptions, property damage, and traffic disruptions. Utility owners are quickly recognizing that managing their metallic pipe inventory is critical to maintaining reliable service to their customers, as well as the integrity of their capital budgets. This paper discusses best practices for managing metallic pressure pipes, including failure mechanisms, causes of and forms of corrosion, corrosion control, as well as a selection of condition assessment techniques and methods for determining which pipes to repair and which to prioritize for replacement. Two case studies will be presented, including one from the City of Ann Arbor, MI, regarding the assessment of their 24-inch ductile iron raw water transmission main and one from the Washington Suburban Sanitary Commission (WSSC) regarding the assessment of a 42-inch steel water transmission main.

1:35 PM - 2:05 PM

8.1 Infrastructure Funding for Small Community Water & Wastewater Systems

John A. Sullivan, Michigan Tech

This is a presentation on the steps involved in securing funding for a small community water or wastewater infrastructure project. It will discuss the two primary sources of funds for small communities: USDA Rural Development and State Revolving Loan Funds. It will also discuss the steps to secure an engineering firm through the Qualification Based Selection process.

2:10 PM - 2:40 PM

8.2 PFAS Treatment: From Concept to Construction

Andrew Dow, PE, Donohue & Associates

This presentation features a case study of one water utility's journey to address PFAS in its groundwater supply. The case

study will cover the various strategies considered as potential short-term, medium-term, and long-term solutions and how those strategies were evaluated using bench-scale testing, pilot testing, cost opinions, and other considerations. Data from seven months of pilot testing with granular activated carbon and two types of anion exchange processes will be presented to illustrate the insights gained from simulating various treatment strategies. The presentation will also feature insights from the design and ongoing construction of a full-scale GAC treatment system at the utility's drinking water treatment facility.

2:45 PM - 3:15 PM

8.3 Reading the Room: Verification and Certification of Water Quality Test Devices for Drinking Water

Kathryn Foster, MS, NSF International

From simple test kits used for screening contaminants at the tap to in-line sensors providing continuous monitoring of drinking water quality parameters at the water utility, water quality test devices are playing an expanding role in monitoring the quality of our drinking water. Given the increasingly widespread use of these water quality test devices and their critical role in protecting public health via water quality monitoring, it is crucial that these devices perform as advertised and that they are accurate and precise across the entire concentration range of the water quality parameter(s) the product is meant to operate. NSF has published a new certification protocol: NSF Protocol 524: Water Quality Testing Devices for Drinking Water. The protocol provides a means for third-party verification of water quality testing devices against the precision and accuracy claims made by the manufacturer. This talk will discuss this critical new test protocol and its ability to ensure the proper performance of these devices, which are becoming an increasingly common mechanism for monitoring water quality to provide safe drinking water for our communities.

3:30 PM - 4:00 PM

8.4 Hot off the Press: An Overview of the 2nd Edition of M77 – Condition Assessment of Water Mains

Scott Jauch, HDR

Condition assessment technologies evolve every year and can change the current practices in the industry. The advancements in artificial intelligence/machine learning and in-line ultrasonics have expedited the updates to the M77 – Condition Assessment of Water Mains. Other various changes in the industry are addressed in the updates discussed in this presentation. From this presentation, the participant will learn about the changes in the industry and what updates have been made to the AWWA Manual of Practice by the chair of the revision.

4:05 PM - 4:35 PM

8.5 Lead Service Line Replacements: Seeking Efficiency

Tom Bulten, City of Grand Rapids Water System

Cindy Irving, City of Grand Rapids Water System

The City of Grand Rapids is replacing 24,000 lead water service lines as quickly and efficiently as possible. With limited resources,

it coordinates replacements with scheduled projects for road resurfacing and water main replacement. Challenges include matching City resources for planning and inspection with available funding, contractors' schedules, and supply chain delays. This session will review seven years of lead service line replacements in Grand Rapids, exploring both the hurdles of the past and the opportunities ahead. It will contribute to the ongoing discussion of how best to eliminate lead in drinking water.

FRIDAY, SEPTEMBER 13, 2024

8:30 AM - 9:00 AM

9.1 How a Hunch, Operator Experience, Investigation, & Regulatory Transparency Led to the Largest Wellfield Rehabilitation Project in State History

Aaron Davenport, PE, Jones & Henry Engineers

Perry White, City of Battle Creek

Battle Creek's wellfield is particularly susceptible to contamination due to an adjacent Superfund Site. Working off a hunch/intuition, the City televised their wells and found significant defects, which were allowing water from the glacial drift aquifer into wells that were supposed to be drawing from the confined sandstone aquifer below. The City called a foul on themselves to alert the State, which followed the required regulatory path. In response, the City submitted a DWSRF Project Plan, which was selected for funding in FY24. Now, the City and its Team are in the middle of designing the largest wellfield rehabilitation project in the state's history.

9:00 AM - 9:30 AM

9.2 Village of St. Charles Water System Improvements

Mitchel Jacquain, PE, Spicer Group

Hartmann Ave, Village of St. Charles

The Village of St. Charles in Saginaw County implemented a proactive approach to asset management to complete Phase I of their water system improvements, replacing 11,500 feet of water main. The project included lead service line replacement, roadwork, and sidewalk improvements. The Village applied for and





received an MDOT Category B Grant to complete the roadwork in addition to the water main work. The Village will continue to work toward Phase II and III of its water system improvements.

9:30 AM - 10:00 AM

9.3 Water Affordability Update

Jaime Fleming, City of Wyoming Utilities Department

This presentation will provide the current status of where the package of bills is in the legislative process and possible outcomes given the landscape in Lansing.

10:30 AM - 11:00 AM

9.4 Policy Update from Midwest Strategy Group

Mike Compagnoni, Midwest Strategy Group

Hear from Midwest Strategy Group about the state of water and wastewater policy in Michigan, including updates on stormwater utility, infrastructure funding, SRF, and ongoing political happenings.

11:00 AM - 11:30 AM

9.5 EGLE's Drinking Water and Environmental Health Division Update

Brian Thurston, EGLE

An update from EGLE's Drinking Water and Environmental Health Division on drinking water industry regulatory issues, IT modernization efforts, business process changes, and staffing updates to increase efficiencies and provide technical and compliance assistance.

11:30 AM - 12:00 PM

9.6 Retaining Your Recruitment Strategy

*Stefanie Burns, Great Lakes Water Authority
Curtis Buris-White, Great Lakes Water Authority*

Water and wastewater leaders in our region have long been faced with increasing levels of attrition and a high turnover rate for skilled labor jobs. As the regional water provider for almost four million Michiganders, the Great Lakes Water Authority has been working to transfer the knowledge of their system to the next generation of water and wastewater professionals through apprenticeships, entry-level roles, and on-the-job training. To tackle this shift head-on, GLWA's Public Affairs team produced Tap In, a full-scale campaign, to recruit the future leaders of water and wastewater in our communities. This presentation will serve as a case study of the Tap In campaign so that other organizations can gain a foundational understanding of the Great Lakes Water Authority's process and, in return, create their own recruitment funnels for our One Water community. By showcasing the videos, branding, advertising methods, and more, the session will take the audience from pre-production to final assessment and data.

12:00 PM - 12:15 PM

9.7 Closing Remarks

GENERAL INFORMATION

Registration

Introducing simplified registration. Registration now includes breakfast and lunch on the days of attendance. Wednesday and Thursday include breakfast and lunch. Friday includes breakfast.

TICKET	May 1 - Aug 22	Aug 23 - onsite
ATTENDEE REGISTRATION		
Full Conference Member	\$510	\$545
Full Conference Non-Member	\$600	\$635
Full Conference Retiree Member	\$300	\$335
Full Conference Small System Member	\$300	\$335
Single Day Member	\$300	\$335
Single Day Non-Member	\$390	\$425
Awardee	\$0	\$10
SPEAKER REGISTRATION		
Full Conference Speaker Member	\$325	\$335
Full Conference Speaker Non-Member	\$415	\$425
Single Day Speaker	\$0	\$10
EXHIBITOR REGISTRATION <i>(includes a 10'x10' and Wednesday registration for 2 people)</i>		
Exhibitor Member with a 10'x10' Booth Space, Full Conference for One Individual	\$975	\$1,010
Exhibitor Member with a 10'x10' Booth Space	\$675	\$710
Exhibitor Non-Member with a 10'x10' Booth Space	\$775	\$810
Exhibitor Non-Member with a 10'x10' Booth Space, Full Conference for One Individual	\$1,165	\$1,200
Additional Exhibitor Member (Wednesday Only)	\$300	\$335
Additional Exhibitor Non-Member (Wednesday Only)	\$390	\$425
GUEST REGISTRATION		
Conference Guest	\$250	\$285
Awardee Guest	\$30	\$40

Cancellation

Complete Substitution: If you are not able to attend, complete substitutes are permitted. No partial substitutions are permitted. Please email the substitution request to info@mi-water.org. Rates are based on membership status, so additional fees may apply.

If you must cancel, please notify MI-AWWA by email to info@mi-water.org.

1. If canceled by 4:00 pm on or before August 15, you will receive a full refund, less a \$35 processing fee.
2. If canceled after 4:00 pm on August 15 but before 4:00 pm August 31, you will receive 50% of the registration fee paid. There is no refund for ticketed events.

3. If canceled after 4:00 pm on August 31, or if you are a conference no-show, there will be no refund.

Lodging

A block of rooms has been reserved at the Amway Grand Plaza Hotel, the location of this year's conference. To receive the conference rate of \$160.00 (before taxes), make sure to say you are with the MI-Section American Water Works Association:
 ☎ 800-253-3590 🌐 <https://book.passkey.com/e/50700888>

There are a select number of per diem room rates available – call to inquire.

All conference rates are available until August 17, 2024, or until room blocks are sold out.