#WEFCollections

COLLECTION SYSTEMS
SEWERS IN THE MOTOR CITY – THE ENGINE OF OUR INDUSTRY!

CONFERENCE PROGRAM

PRE-CONFERENCE WORKSHOPS
April 19

CONFERENCE | EXHIBITION
April 20–22 | April 20–21

2022

This conference is held by the Water Environment Federation in cooperation with the Michigan Water Environment Association.
Access Water organizes the information and technical content critical to the water sector into a single, central location.

...ALL WITHIN ONE POWERFUL TOOL

www.accesswater.org
Collection Systems Conference 2022

April 19-22
Huntington Place
Detroit, Michigan

#WEFCollections

This conference is organized by the Water Environment Federation in cooperation with the Michigan Water Environment Association.
To Our Friends and Colleagues:

Welcome to the great city of Detroit! The Water Environment Federation in cooperation with the Michigan Water Environment Association are excited to bring Collection Systems professionals and practitioners together for four days of learning, sharing and celebrating the value of our work. After almost two years of living through the COVID-19 pandemic, we acknowledge that engagements like this have been drastically altered from what we had become accustomed to. It’s truly a pleasure to offer this in person event where you will hear unique perspectives on collection system themes all while enjoying a great environment to network and discuss the latest hot topics with your peers.

As Chairs, we are confident of the value of this Conference, and we also hope you enjoy your time here. Please seek us out and share your experiences with us so we can reinvest that knowledge into continued success of this conference. Take a minute to complete a survey to provide us with your valuable input or share your thoughts with staff.

Conference Highlights

**When you arrive:** Detroit, the Motor City, has many great attractions in and around downtown to check out. Just outside of the hotel is the Detroit River Walk, a 3.5 mile walk along the river offering view of the river, downtown Detroit, and our international neighbors in Windsor, Ontario. Snap a photo with the Spirit of Detroit or enjoy the offerings in Campus Martius. For art lovers, the Detroit Institute of Arts is a great local attraction featuring the Diego Rivera “Detroit Industry Murals”. Architectural walking tours are available which highlight the diverse City buildings. At the very least, be sure to check out the Guardian Building with its art deco design and stunning lobby area. For those looking to venture outside of the city, the Henry Ford Museum is a great, family-friendly attraction. There are many great eatery establishments and Michigan as a whole is known for great breweries. Come early and/or stay late. Detroit has lots to offer for all family members.

**Pre-Conference Workshops:** Two Workshops are being offered on Tuesday that will enhance your educational experience with a focus on evaluating and mitigating inflow and infiltration in collection systems – **Asset Management-What’s in it for Me?** and **Using Design Thinking to Uncover Insights on Collection Systems.** Choose the one that will increase your agency’s effectiveness when you return to the office.

**Opening General Session:** The Opening General Session will include a welcome from Detroit Water and Sewerage Department and Detroit Riverfront Conservancy. Join your friends and colleagues and share the experience to kick-off the three-day conference of diverse technical sessions, mobile session, tours, and networking.
Technical Sessions, Technology Spotlights, and Exhibition: The technical program was developed to provide presentations that cover a wide range of topics, including Data Management, Trenchless Technology, Planning, Green Infrastructure, Combined and Sanitary Sewer Overflows, Pump Stations and Force Mains, Modeling, Design and Construction, Asset Management, Research and Innovation, Inflow and Infiltration, and Diversity, Equity and Inclusion. In addition, a session will also highlight local projects in Detroit and the surrounding communities. Two technology spotlights (previously mobile sessions) allow attendees to interact directly with exhibitors to gain hands-on knowledge about existing products and services, along with highlighting emerging topics and technologies that are new to the marketplace. Throughout the conference, attendees can gain first-hand knowledge by visiting the many exhibitors who will be joining us this year.

Tours and Exhibition: We encourage you to take part in one or both of our local tours. The first goes to the GLWA Connor Creek CSO. The second is a site visit to the South Huron Valley Utility Authority Treatment Plant and Collections System.

We encourage you to make the most of our time together. Step away from your daily routine of meetings, emails, deliverables, approvals and submittals to take a well-deserved pause. Here, you have rich opportunities to interact, in person, with the best and brightest in our sector - in an open, engaging, and unique program. This is a great time for you to think beyond the day to day about how you can increase your impact back home!

On behalf of WEF, the conference steering committee, the dedicated staff, and all moderators and speakers, we invite you to make this conference experience your best yet!

Thank you for joining us!

Sincerely,

Jennifer Welsch
Conference Co-chair

Karyn Stickel
Conference Co-Chair
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CONFERENCE AND SUMMIT CO-CHAIRS

Jennifer Welsch
Specialty Conference Committee Chair
Metropolitan St. Louis Water District

Karyn Stickel
Local Planning Group Chair
HRC

CONFERENCE COMMITTEES

SPECIALTY CONFERENCE COMMITTEE & LOCAL PLANNING GROUP

Scott Aurit
HDR

John Fletcher
Duke’s Root Control

Kip Koszewski
HESCO

Nate Coffin
HRC

Peter Garvey
Dewberry

Julia Matton
WSC Engineering

Jen Cook
Hazen and Sawyer

Walter Graf
GHD

Mike Michalak
HRC

Paul Costa
RJN Group

Paige Hammerl
HRC

Chad Miller
Maxliner

Kyle Curie
OHM

Greg Heath
AECOM

Gary Moore
Washington University

John Devlin
Aquafy

Jim Hewitt
GPD

Jen Morreale
HRC

Sara Ferrance
Fairfax County

Natasha Jansen
City of Ottawa
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<td>Maria Sedki</td>
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<td>Mott Macdonald</td>
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<td>Jennifer Steffens</td>
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<td>Kristi Steiner</td>
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<td>Jimmy Stewart</td>
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<td>Dianne Sumego</td>
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<td>Kevin Vander Tuig</td>
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<td>Brian VanZee</td>
<td>C2AE</td>
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<td>Christy Willson</td>
<td>Horner &amp; Shifrin, Inc.</td>
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HEALTH AND WELL-BEING

WEF’s priority at all meeting and events is always the health and safety of our community. Refer to this conference’s website for the most current protocols posted under “Health and Well-Being”: www.wef.org/CollectionSystems

WEF SOCIAL MEDIA POLICY

WEF strongly encourages the use of social media to share your experiences at our event. This includes sharing interesting quotes or information, taking pictures with colleagues, and using the event hashtag: #WEFCollections. However, to protect intellectual property, videotaping, filming, or live-streaming of any workshop or technical session presentation, or exhibit booth is prohibited. Any participant violating this policy must relinquish the media and may be removed from the conference. Also, promotional or commercial use of photographs taken at WEFTEC and other WEF conferences is strictly prohibited. If you are interested in content, materials, or products, please consider talking to the speaker or exhibitor, who may provide the information or grant permission.

CODE OF CONDUCT

WEF’s Vision
A community of empowered professionals creating a healthy global water environment.

Core Values
Leadership, Passion, Scholarship, and Collaboration, and Service

WEF Policies
WEF respects and takes the broadest view of human diversity and inclusion and is committed to providing a professional, safe, and welcoming environment at its events for all water professionals and their guests. WEF expects all sponsors, speakers, attendees, media, exhibitors and other participants to uphold our commitment to diversity and inclusion by helping us provide a positive conference environment for everyone.

For more information, please see WEF’s Diversity and Inclusivity Policy, as well as WEF’s Non-Discrimination and Harassment Policy at www.wef.org/about/about-wef.

Reporting Concerns
If you have any concerns during this conference, please stop by the conference registration desk or you may email the WEF Executive Director Walter Marlowe at wmarlowe@wef.org.
Huntington Place
1 Washington Boulevard
Detroit, MI 48226
Phone: (313) 877-8777

In case of an emergency, use your cell phone to notify Huntington Place Security at 313-877-8281 and call 911. Huntington Place Security staff are CPR trained and there is a police station within ¼ of a mile of the convention center.

In the event of an emergency and evacuation is required, all attendees should exit the facility by using the closest marked exit door and/or stairwell. Do not use elevators. Once you exit the building, please proceed to Hart Plaza. Hart Plaza is Located between Huntington Place and the GM Building and can be accessed from the Southside of Jefferson or from the North side of the Riverwalk off of Atwater Street.
REGISTRATION

All events are held in Huntington Place.

The Registration Desk is located in the River Atrium and will be open at the following times:

- Tuesday, April 19: 7:30 a.m. – 5:00 p.m.
- Wednesday, April 20: 7:30 a.m. – 5:00 p.m.
- Thursday, April 21: 8:00 a.m. – 5:00 p.m.
- Friday, April 22: 8:00 a.m. – 12:00 p.m.

PRESENTER AND MODERATOR INFORMATION

All presenters, alternates, and moderators should sign in at the conference Registration Desk and attend their assigned briefing.

Presenters and alternates participating Wednesday, Thursday, and Friday should attend their assigned briefing. Please attend only once unless speaking on multiple days. The Speaker Briefing and room schedule is as follows:

- Wednesday, April 20 — Room 142 C: 7:30 a.m. – 8:15 a.m.  
  *Sessions 1 through 4
- Thursday, April 21 — Room 142 C: 7:30 a.m. – 8:15 a.m.  
  *Sessions 5 through 15

COMMITTEE MEETING

Technical Discussion and Committee Meeting
Thursday, April 21 | 4:30 – 5:30 p.m.
Room 140 A
Networking Luncheons
Lunch will be provided for all registered attendees on both full days of the Collection Systems Conference. Use this opportunity to meet your fellow participants from across the country and abroad while enjoying a luncheon. The menu has been created with a variety of dietary preferences in mind, but please let staff know if you have specific restrictions.

**Wednesday, April 20 and Thursday, April 21**
Exhibit Hall
11:45 a.m. – 1:30 p.m.

*Sponsored by: Doetsch*

Networking Reception
Join fellow Collection Systems Conference attendees, speakers, and exhibitors in the Exhibit Hall to network and relax while enjoying a complimentary beverage and light hors d’oeuvres.

**Wednesday, April 20**
Exhibit Hall
4:45 p.m. – 6:15 p.m.

*Sponsored by: Arcadis*

Networking Breaks will take place in the Exhibit Hall at the following times:

**Wednesday, April 20**
10:00 a.m. – 10:45 a.m. and 3:00 p.m. – 3:45 p.m.

**Thursday, April 21**
10:00 a.m. – 10:45 a.m. and 2:30 p.m. – 3:30 p.m.

**Friday, April 22** - Foyer outside session rooms
10:00 a.m. – 10:15 a.m.

MWEA Reception
MWEA will be hosting a welcome reception on Wednesday, April 19 from 5:30 to 8:30 p.m. for all attendees of the WEF Collection Systems Conference at the Waterview Loft. This convenient location is within walking distance from the WEF Collections Conference. Come join us for drinks & heavy appetizers and network with your peers!

Registration for the MWEA event is $35/per person. Visit www.wef.org/collectionsystems for more information and to register.
Continuing Education files will be available online at this link: https://ceu.experienteveint.com/WEF225/.

You will be able to view your participation details and access your Continuing Education Credits for Technical Sessions online. Attendees will have daily access to their certificates and transcripts through an online portal for 1 year from the event date. After that time, CE documentation will be available through WEF’s new CE Credit Archive site: https://www.wef.org/resources/wef-ce-credit-archive. These details will be posted on the PH page of WEF.org and emailed to event participants after the conference.

How Do I Receive Credit For this Conference?

In order to receive credit for participation in any of the training sessions attendees will be required to scan their badge when entering and exiting each session room. Credits obtained during this event will be available at the end of the conference using the link provided above.

Pre-Conference Workshops:

WEF offers Continuing Education Units (CEUs) for participation in workshops. One CEU is the equivalent to 10 hours of training or formal instruction. These are distributed for structured, relevant professional training above and beyond that of initial certification or employment in a particular field.

Technical Sessions:

WEF offers Professional Development Hours (PDHs) for participation in technical sessions. A PDH is defined as one hour spent engaged in an activity that contributes to the advancement or enhancement of professional skills or scientific knowledge of a professional engineer or operator.

When Will I Receive Credits For this Conference?

Certificates and transcripts are available for download during and post conference. WEF will send an email after the conference to remind each attendee where they can obtain these credits. Please keep in mind that most state licensing boards require the individual licensees to report continuing education credits.

Note: Educational Credits will not be recorded, and documentation will not be distributed unless the attendee is a confirmed registrant of this event and the proper steps are completed as indicated in the directions provided.
Are WEF Continuing Education Credits Approved in My State?

WEF applies for approval in many states and will be happy to work with individuals and Member Associations for additional state or agency approvals upon request. In addition, WEF has been approved as a Training Provider through the following:
The Florida Board of Professional Engineers, the New York State Department of Education, and the Ohio EPA. Several states typically accept WEF PDH and CEU credits as issued by WEF. For example: California (CWEA), Florida and New Jersey.

What Else Do I Need to Know?

WEF follows the International Association of Continuing Education and Training (IACET) guidelines along with state-specific regulations to achieve strict policies and procedures regarding its Continuing Education Program. WEF calculates education credits following a standardized method that is the most widely accepted by certification and licensing agencies. However, many states differ in the type and/or number of credits they will approve for educational events. Because of this, participants are responsible for exploring their state requirements and for ensuring that WEF conference credits are accepted.

Service and Support...

WEF maintains a database of all continuing education files for a minimum of 7 years. You may contact WEF’s Customer Service Team between the hours of 8:30 a.m. and 5:00 p.m. EST, Monday through Friday for questions related to WEF Programs - 1-800-666-0206 or csc@wef.org.

State Credit Calculations:
Each state has its own set of CE credit requirements. Some state licensing boards will accept CEUs for session under 3 hours in length. Some use different acronyms for training credits. In most instances the credits issued by WEF can be converted to meet state specific requirements that vary from the system used by WEF. This is usually managed at the state level using the following conversion:

1.0 CEU = 10 Hours of session time
1.0 PDH = 1 Hour of session time
1.0 Contact Hour = 1 Hour of session time

For example: 1.7 CEU Credits = 17.0 PDH depending on individual state regulations.

*CEU & PDH credits are available for Workshops to Professional Engineers licensed in the state of New York (NYSED).

For more information regarding WEF’s Continuing Education Program, please visit www.wef.org/CollectionSystems.
New Online Planner Launching for #WEFCollections

WEF is pleased to offer the mobile-friendly online WEF Collection Systems My Show Planner.

Set up your My Show Planner account to begin saving your favorite sessions, speakers, exhibitors, and sponsors to your plan and receiving recommendations.

Scan the QR code to download “Collection Systems Conference” now from the Google Play OR App Store. All other web-enabled devices can access the app via the web: cs22.mapyourshow.com.

ONLINE PROCEEDINGS

Conference proceedings consisting of manuscripts from all of the technical presentations have been made available through an online portal. Advance registrants will receive an email with instructions on how to access to the Collection Systems Conference 2022 online proceedings before the start of the conference. Onsite registrants will receive an email with instructions to access proceedings following the event’s conclusion.

Not attending this year’s Conference or Summit? Copies of proceedings may be ordered on Access Water after the conference ends. You may call 1-800-666-0206 or visit www.AccessWater.org to place your order.
The Water Environment Federation offers many ways to get engaged, build a network, and improve your skills as a water professional. See below for just a few examples.

### Become a WEF Member
WEF is your access to water knowledge and invaluable networking opportunities with more than 30,000 professionals and thought leaders in water quality. For more information about membership categories, pricing, and member benefits, visit [www.wef.org/membership/join-wef](http://www.wef.org/membership/join-wef).

### Join a WEF Committee
More than 2,500 WEF members participate in WEF committee activities, developing conference programs, writing technical manuals and books, developing training materials and program content, and many other WEF program activities. Committees include Collection Systems, Public Communications and Outreach, and more! To learn more about joining a committee, visit [www.wef.org/committees](http://www.wef.org/committees). WEF membership is required to participate.

### Submit to Water Environment Research
Published since 1928, Water Environment Research (WER) is an international multidisciplinary water resource management journal for the dissemination of fundamental and applied research in all scientific and technical areas related to water quality and resource recovery. In addition to original research articles, short communications, case studies, reviews, and perspectives are encouraged.

### Continue your Education Online
In addition to in-person conferences, WEF also offers a variety of technical and leadership courses online. Through the WEF Learning Center, members and non-members can sign up to join webcasts, online courses, and virtual workshops. Visit [https://learn.wef.org](https://learn.wef.org) for more information. In addition, WEF also offers a blending learning program called the Water Leadership Institute which brings together water professionals from around the US, Canada, and world. Learn more at [www.wef.org/wli](http://www.wef.org/wli).

### Attend WEFTEC
WEFTEC is WEF’s largest and most comprehensive conference, featuring dozens of technical sessions, a massive exhibit hall, and plenty of networking opportunities. WEFTEC 2022 will be held October 8-12, 2022 in New Orleans, Louisiana. More information can be found at [www.weftec.org](http://www.weftec.org).
We would like to thank the following sponsoring companies for their contributions to the conference and program.

**Teledyne ISCO**

**InfoSense, Inc**
www.infosense.com

**Vaughan**
www.chopperpumps.com

**HDR**
www.hdrinc.com

**PLATINUM**

**GOLD**

**SILVER**

**BRONZE ELITE**
We would like to thank the following sponsoring companies for their contributions to the conference and program.

**ARCADIS**
www.arcadis.com
NETWORKING RECEPTION

**Doetsch**
www.doetschenv.com
LUNCHEONS AND TOTE BAGS

**kando**
Inarking People, Impoicting Lives.
www.kando.eco
CHARGING STATION
<table>
<thead>
<tr>
<th>Session Number</th>
<th>Session Title</th>
<th>Start Time</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Tuesday, April 19</td>
<td></td>
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<tr>
<td>Workshop A</td>
<td>Asset Management – What’s in it for Me?</td>
<td>8:30 a.m.</td>
<td>5:00 p.m.</td>
<td>0.6 CEUs</td>
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<td>Workshop B</td>
<td>Using Design Thinking to Uncover Insights on Collection Systems</td>
<td>1:30 p.m.</td>
<td>5:00 p.m.</td>
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<td>Wednesday, April 20</td>
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<tr>
<td>OGS</td>
<td>Opening General Session</td>
<td>8:30 a.m.</td>
<td>10:00 a.m.</td>
<td>1.5 GCHs</td>
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<td></td>
<td>Technology Spotlight I</td>
<td>10:30 a.m.</td>
<td>11:50 a.m.</td>
<td>1 GCH</td>
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<td>Session 01</td>
<td>Data Management</td>
<td>10:45 a.m.</td>
<td>11:45 a.m.</td>
<td>1 PDH</td>
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<td>GLWA Conner Creek CSO Tour</td>
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<td>1:00 p.m.</td>
<td>3:00 p.m.</td>
<td>1.5 GCHs</td>
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<td>Session 02</td>
<td>Sanitary Sewer Overflows</td>
<td>1:30 p.m.</td>
<td>4:45 p.m.</td>
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<td>Session 03</td>
<td>Potpourri</td>
<td>1:30 p.m.</td>
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<td>Session 04</td>
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<td>Inflow and Infiltration</td>
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<td>Technology Spotlight II</td>
<td>10:30 a.m.</td>
<td>11:50 a.m.</td>
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<td>Session 08</td>
<td>Pump Stations and Force Mains</td>
<td>10:45 a.m.</td>
<td>11:45 a.m.</td>
<td>1 PDH</td>
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<td>Session 09</td>
<td>Seeing Collection Systems Through a DE&amp;I Lens</td>
<td>10:45 a.m.</td>
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<td>1 PDH</td>
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<td>South Huron Valley Utility Authority Tour</td>
<td>1:30 p.m.</td>
<td>4:00 p.m.</td>
<td>2.5 GCHs</td>
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<td>Session 10</td>
<td>Research and Innovation</td>
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<td>Session 11</td>
<td>Modeling</td>
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<td>Session 12</td>
<td>Design and Construction</td>
<td>1:30 p.m.</td>
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<td>2 PDHs</td>
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<tr>
<td>Session 13</td>
<td>Combined Sewer Overflows</td>
<td>8:30 a.m.</td>
<td>11:15 a.m.</td>
<td>2.5 PDHs</td>
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<tr>
<td>Session 14</td>
<td>Asset Management</td>
<td>8:30 a.m.</td>
<td>11:15 a.m.</td>
<td>2.5 PDHs</td>
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<tr>
<td>Session 15</td>
<td>Local</td>
<td>8:30 a.m.</td>
<td>11:15 a.m.</td>
<td>2.5 PDHs</td>
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</tbody>
</table>

Friday, April 22
Workshop A: Asset Management – What’s in it for Me?
Tuesday, April 19, 2022
8:30 a.m. – 5:00 p.m.  
0.6 CEUs

8:30 a.m.  Introduction

8:35 a.m.  Asset Management Works
Patrick Fellrath, Charlie Card, Township of Plymouth; Scott Parker, Kansas City Water

9:15 a.m.  Learn and Engage 1: Initial Benefits Table Discussion and Exercise
Christene Mitchell, AECOM; Walter Graf, GHD

9:45 a.m.  How to Communicate Asset Management
Chris Garrett, Brown & Caldwell

10:15 a.m.  Break

10:45 a.m.  Learn and Engage 2: Long-Term Benefits Table Discussion and Exercise
Christene Mitchell, AECOM; Walter Graf, GHD

11:20 a.m.  Learn and Engage 3.A: Asset Management Elements
Christene Mitchell, AECOM; Walter Graf, GHD; Chris Garrett, Brown & Caldwell

12:00 p.m.  Break for Lunch

1:30 p.m.  Learn and Engage 3.B: Asset Management Elements
Christene Mitchell, AECOM; Walter Graf, GHD; Chris Garrett, Brown & Caldwell

2:55 p.m.  Break

3:30 p.m.  Learn and Engage 3.C: Asset Management Elements
Christene Mitchell, AECOM; Walter Graf, GHD; Chris Garrett, Brown & Caldwell

4:40 p.m.  Asset Management Success Video and Q&A

5:00 p.m.  Workshop Adjourns
Workshop B:  Using Design Thinking to Uncover Insights on Collection Systems
Tuesday, April 19, 2022
1:30 p.m. - 5:00 p.m.  0.3 CEUs

Coordinator:  Jenn Campbell, University of Virginia

1:30 p.m.  INTRODUCTION: Introduction to facilitators, design thinking, the problem, and their teams

2:05 p.m.  INSIGHTS: Identifying and engaging users, turning user wants and needs into insights, methods for user engagement

3:00 p.m.  Break

3:30 p.m.  IDEATION: Methods for brainstorming and prototyping

4:05 p.m.  IMPLEMENTATION: Methods for selecting, validating, and iterating a solution

4:40 p.m.  CONCLUSION: Group debrief, individual action plan

5:00 p.m.  Workshop Adjourns
Opening General Session
Wednesday, April 20, 2022
8:30 a.m. – 10:00 a.m.
Room 140 A/B/C
1.5 PDHs

8:30 a.m.  WEF Collection Systems Conference Chair Welcome
Jennifer Welsch, The Metropolitan St. Louis Sewer District, Specialty Conference Chair
Karyn Stickel, HRC, Local Planning Group Chair

8:35 a.m.  WEF Welcome
John Trofatter, WEF Board of Trustees, Teledyne

8:45 a.m.  City of Detroit Welcome
Palencia Mobley, Detroit Water and Sewerage Department

8:55 a.m.  The Detroit Riverfront- Past, Present, and Future
Chiara C. Clayton, Detroit Riverfront Conservancy

WEF CSC 2023 Destination

9:55 a.m.  Jennifer Welsch, The Metropolitan St. Louis Sewer District, Specialty Conference Chair

Session Adjourns for Networking Break in Exhibit Hall

10:00 a.m.
The four exhibitors listed below will each be holding the same 20-minute presentation three times in a row. Participants are invited to join a different presentation at each of the times listed below. Choose the top three you would like to attend. Each presentation happens at the exhibitor’s booth. Presentations kickoff concurrently at: 10:35 a.m., 11:00 a.m., and 11:25 a.m. in each of the five booths.

10:30 AM  Mobile Session Introduction at entrance to exhibit hall
10:35 AM  4 Simultaneous Presentation A
11:00 AM  4 Simultaneous Presentation B
11:25 AM  4 Simultaneous Presentation C

Booth 208  Why Clean Clean Pipes? How to use Acoustic Inspection to Enable a Condition-Based Collection System Maintenance Protocol  
Alex Churchill, InfoSense

Booth 222  The Next Generation in Manhole and Vertical Chamber Assessment Technologies  
Veronica Alvarez, Jeffrey Griffiths, RedZone Robotics

Booth 429  Selecting the Proper Flow Measurement Location and Sensor for your Collection System  
Darrell Kuta, Teledyne

Booth 409  Mitigating Risks in Collection Systems Design Using Progressive Cavity Grinder Pumps  
Derek Lachut, Environment One Corporation
Session 01: Data Management
Wednesday, April 20, 2022
10:45 a.m. - 11:45 a.m.
Room 140 D/E
1.0 PDHs

Moderators: Kevin Vander Tuig, Wade Trim; Christy Willson, Horner & Shifrin, Inc.

10:45 a.m. Adapting to Changing Rainfall in the SEMCOG Region
Rachael Barlock, Kelly Karll, Southeast Michigan Council of Governments

11:15 a.m. What Factors Should I Consider Before Performing Inspection and/or Investigations of my Sewer System?
Dianne Sumego, dms water solutions

11:45 a.m. Session Adjourns for Luncheon in Exhibit Hall

FACILITY TOUR
(Additional fees required)

GLWA Conner Creek CSO Tour
Wednesday, April 20, 2022
1:00 p.m. – 3:00 p.m.
1.5 GCHs

GLWA will provide an overview of the regional authority's east side collection system, including Freud and Conners Pump Stations as they relate to the Conner Creek Retention Treatment Basin (RTB). We will provide an overview of the Conner Creek RTB facility design and operations. For confined space areas, we will include a virtual tour to show attendants the portions of the facility that are below grade and generally not visible from the surface. For non-confined space areas we will provide an on-site tour walk through of the Conner Creek Combined Sewer Overflow Control Facility. The walk through will include the headworks/screening area, chemical feed and storage areas, as well as a trip out across the top of the basin. Areas covered by virtual tour will include viewing the headworks area from below grade, the chemical feed mixers, the basin interior and viewing the basin effluent gates from below grade.
Session 02: Sanitary Sewer Overflows
Wednesday, April 20, 2022
1:30 p.m. - 4:45 p.m.
Room 140 D/E
2.5 PDHs

Moderators: Greg Heath, AECOM; Scott Helfrick, ADS Environmental Services

1:30 p.m. Reinventing an Old Technology; Protecting Michigan’s Surface Waters Through Maximizing Collection System Storage
Vincent Astorino, Steven Rozycki, Macomb County; Brian Rubel, Tetra Tech

2:00 p.m. Two Sides of the World, One Surprising Collection System Truth
Mark Holstad, Albuquerque Bernalillo County Water Utility Authority; Stephen Graham, Yarra Valley Water; Brandon De Flon, Albuquerque Bernalillo County Water Utility Authority; Rebecca King, Yarra Valley Water

2:30 p.m. Design and Construction Consideration When Working in an Urban Environment
William Landshof, Frank Lopeman, Arcadis

3:00 p.m. Networking Break in Exhibit Hall

3:45 p.m. Surviving an EPA SSO Consent Decree and the Lessons Learned Regarding Extending Pipeline Service Life, and Reducing or Eliminating SSOs
Kent Carlson, National Clay Pipe Institute

4:15 p.m. NetSTORM Precipitation Frequency Statistics: A Complementary Tool to NOAA’s Atlas 14 and a Data Processing Powerhouse
Constantine Karos, Mitchell Heineman, CDM Smith; Jason Waterbury, Metropolitan District; Duane Martin, Town of West Hartford

4:45 p.m. Session Adjourns for Networking Reception in Exhibit Hall
Session 03: Potpourri
Wednesday, April 20, 2022
1:30 p.m. - 4:45 p.m.
Room 140 F/G
2.5 PDHs

Moderators: Jennifer Welsch, Metropolitan St. Louis Sewer District; Alex Churchill, InfoSense

1:30 p.m. Overcoming Operations and Maintenance Challenges in Siphons
Veronica Alvarez, RedZone Robotics, Inc

2:00 p.m. Don’t Forget Manhole Rehabilitation: Significant I&I Reduction Accomplished Through Asset Management Program Methods
Ryan Eisele, HDR; Alex Beck, Johnson County Wastewater; Kathryn Maschmann, HDR

2:30 p.m. Off the Curve - Using Hydraulic Modeling Software to Identify Problems in Pump Stations and Force Mains
Joseph Siwek, Fishbeck; Evans Bantios, 2Oakland County Water Resources Commissioner’s Office

3:00 p.m. Networking Break in Exhibit Hall

3:45 p.m. California’s Revised Sanitary Sewer Regulations - Ready, Set, Go
Paul Causey, Causey Consulting

4:15 p.m. Preventing Sewer Overflows by Conducting Onsite Fats, Oils, & Grease Inspections
Sam McLeod, Fats, Oils, & Grease Best Management Plan

4:45 p.m. Session Adjourns for Networking Reception in Exhibit Hall
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30 p.m.</td>
<td>The Proper Order of Operations to Achieve the Maximum Sealing Benefit from the Trenchless Rehabilitation of a Collection System</td>
<td>Larry Kiest, LMK Pipe Renewal LLC</td>
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<tr>
<td>2:00 p.m.</td>
<td>Curving Concrete Pipe: What a Relief</td>
<td>Kevin Wojciechowski, GPD Group; Cecilia Mazzei, City of Cleveland</td>
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<tr>
<td>2:30 p.m.</td>
<td>Innovative Approaches &amp; Technologies in the DWSD CIPMO Program</td>
<td>Pei Boayue, Matthew McCloskey, Detroit Water and Sewerage Department</td>
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<td>3:00 p.m.</td>
<td>Networking Break in Exhibit Hall</td>
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<tr>
<td>3:45 p.m.</td>
<td>Pilot Tube Method of Guided Boring over Soil Stabilization in the Great Lakes Basin</td>
<td>Steve Matheny, Logan Clay Products; Daniel DiLegge, DVM Utilities, LLC</td>
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<td>4:15 p.m.</td>
<td>FRP for Structural Rehabilitation of Large Diameter Sewers</td>
<td>Firat Sever, Mo Ehsani, Owen Yan, QuakeWrap, Inc.</td>
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<tr>
<td>4:45 p.m.</td>
<td>Session Adjourns for Networking Reception in Exhibit Hall</td>
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</tbody>
</table>
Session 05: Planning
Thursday, April 21, 2022
8:30 a.m. - 10:00 a.m.
Room 140 D/E
1.5 PDHs

Moderators: Eric Harold, Carollo; Greg Health, AECOM

8:30 a.m. Richmond’s Story of Integrated Planning, Integrated Permitting, and CSO Compliance
Andy Lukas, Matthew Pugh, Brown and Caldwell; Patrick Bradley, Grace LeRose, Alan Harrison, City of Richmond

9:00 a.m. Strategic CIP Prioritization Utilizing Optimization Algorithms to Maximize Return on Investment
Joel Wilson, Andrew Faulkner, David Garcia, WCS Engineering; James Brescol, Tetra Tech

9:30 a.m. 62 Communities, 270 Square Miles — Local Sewer System Evaluation Studies Provide a Roadmap for the Northeast Ohio Regional Sewer District and Member Communities to Improve Sewer Systems
Kevin Vander Tuig, David Cox, Wade Trim; Lita Laven, Northeast Ohio Regional Sewer District

10:00 a.m. Session Adjourns for Networking Break in Exhibit Hall
Session 06: Green Infrastructure
Thursday, April 21, 2022  Room 140 F/G
8:30 a.m. - 10:00 a.m.  1.5 PDHs

Moderators: Ashok Perera, Atkins Global; Suibing Liu, Jacobs

8:30 a.m. Green Infrastructure Siting Using Robust Efficient Procedure
Khaled Abdo, Hazem Gheith, Arcadis

9:00 a.m. Outcomes not Outputs, Optimizing Green and Gray Projects to Create the Best Collection System Outcome for Atlanta
Nicholas Anderson, Stantec; Mikita Browning, City of Atlanta Department of Watershed Management; Patrick Flynn, Stantec

9:30 a.m. Onondaga County’s Resilient Combined Sewer System: The Implementation of Green and Gray Infrastructure to Reduce CSOs and Increase System Resiliency and Capacity
Zachary Monge, Jacobs; Shannon Harty, Onondaga County WEP; Adam Woodburn

10:00 a.m. Session Adjourns for Networking Break
Session 07: Inflow and Infiltration
Thursday, April 21, 2022  Room 141
8:30 a.m. - 10:00 a.m.  1.5 PDHs

Moderators:  Paul Costa, RJN Group; Dianne Sumego, dms water solutions

8:30 a.m.  Bridging the Gap: Bringing Data Transparency in a Citywide Wastewater System Condition Assessment Program for I/I Mitigation
Karen Rico, Daniel Jackson, RJN Group

9:00 a.m.  Successful I&I Reduction using Design-Build - Developing and Implementing the River Valley Highlands Design-Build Sewer Rehabilitation Project
James Shelton, Arcadis

9:30 a.m.  Implementing Advanced Technologies and Asset Management to Help Prioritize and Rehabilitate Critical Pressurized Pipeline Infrastructure
Mark Wade, BlueWater Solutions Group

10:00 a.m.  Session Adjourns for Networking Break
Technology Spotlight II
Thursday, April 21, 2022
10:30 a.m. – 11:50 a.m.
Exhibit Hall

The four exhibitors listed below will each be holding the same 20-minute presentation three times in a row. Participants are invited to join a different presentation at each of the times listed below. Choose the top three you would like to attend. Each presentation happens at the exhibitor’s booth. As these sessions are about emerging topics and technologies, the presentations may have a sales focus. Choose the top three you would like to attend. Each presentation happens at the exhibitor’s booth. Presentations kickoff concurrently at: 10:35 a.m., 11:00 a.m., and 11:25 a.m. in each of the five booths.

10:30 AM  Mobile Session Introduction at entrance to exhibit hall
10:35 AM  4 Simultaneous Presentation A
11:00 AM  4 Simultaneous Presentation B
11:25 AM  4 Simultaneous Presentation C

Booth 429  Sampling for Wastewater Based Epidemiology. Selection of Type of Sampler and Sampling Methodology Based on Purpose and Location
Kaushal Trivedi, Teledyne

Booth 223  Killing Two Birds with One Stone - The Role of Magnesium Hydroxide in Odor Control
John Van Wingerden, Inland Environmental Resources

Booth 411  Eliminating FOG and Odor in the Collection System
Jim Dartez, Reliant Water Technologies

Booth 115  How a Pump Modification Bridged a Gap Between Costly FOG/Scum Problems in Lift Stations
Arthur Savage, Landia, Inc.
Session 08: Pump Stations and Force Mains
Thursday, April 21, 2022     Room 140 D/E
10:45 a.m. - 11:45 a.m.     1.0 PDHs

Moderators: Bill McMillin, Jacobs; Kevin Vander Tuig, Wade Trim

10:45 a.m. MSDGC’s Critical Assets Planning- The Pleasant Run Planning Challenge
Nick Jones, MSDGC; Dinesh Kumar Palaniswamy, Deborah Schafer, Jacobs

11:15 a.m. Not So Quiet On The Western Trunk — HRSD Sets The Standard For Connecting To Concrete Pressure Pipe
William Gibson, AECOM; Phillip Hubbard, HRSD; Virginia Opp, AECOM

11:45 a.m. Session Adjourns for Luncheon in Exhibit Hall

Session 09: Seeing Collection Systems Through A DE&I Lens
Thursday, April 21, 2022     Room 140 F/G
10:45 a.m. - 11:45 a.m.     1.0 PDHs

Moderator: Kraig Moodie, RJN Group

10:45 a.m. A Case Study on Water Equity: the Alabama Black Belt
Anniestacia Miskel, Arcadis

11:15 a.m. Applying Diversity, Equity, and Inclusion to CMOM Projects
Tanya Miro, Kimley-Horn

11:45 a.m. Session Adjourns for Luncheon in Exhibit Hall
South Huron Valley Utility Authority Treatment Plant and Collections System Tour
Thursday, April 21, 2022
1:30 p.m. – 4:00 p.m.

The Treatment Plant provides secondary treatment for 7 communities with a service population of approximately 90,000. The plant features cost savings and innovative upgrades including fine-air diffusers, a new class “A” sludge production facility that is the first in Michigan, a plant water system that saves on potable water usage for pump cooling, stacked tray grit removal system, and submerged final effluent weirs. The plant also features efficient LED lighting throughout and a 6.6 Million Gallon Equalization Basin. The Trenton Arm Pump Station provides 33% of the plant’s daily flow and is a focal point during high flow events, especially during the pump upgrade period and the sewer relining project. A water well was installed at the pump station to save on potable water usage at the station and provide uninterrupted, reliable service even during water main breaks.
Session 10: Research and Innovation
Thursday, April 21, 2022
1:30 p.m. - 4:30 p.m.
Room 140 D/E
2.0 PDHs

Moderators: Ronald Thomann, TREKK; Eric Sullivan, SewerAI

1:30 p.m. Rethinking Buffalo Sewer's CSO Long Term Control Plan
Rosaleen Nogle, Buffalo Sewer Authority

2:00 p.m. Transforming Design Tools into Predictive Operational Tools through Artificial Intelligence and Machine Learning (AI/ML)
Derek Sutton, Christina Bowers, Citizen’s Energy Group; Christopher Ranck, Black and Veatch

2:30 p.m. Networking Break in Exhibit Hall

3:30 p.m. Lessons Learned from Fan Testing in Multiple Large Diameter Sewer Systems in Austin, Texas
Mark Perkins, Aryana Davin, Harrison Duban, Perkins Engineering Consultants; Brian Huang, V&A Engineering; Soo Soon, Thomas Van Winkle, Kevin Koeller, Austin Water

4:00 p.m. Wastewater Sampling Methods for Water Based Epidemiology
Kaushal Trivedi, Teledyne ISCO

4:30 p.m. Session Adjourns
Session 11: Modeling
Thursday, April 21, 2022
1:30 p.m. - 4:30 p.m.
Room 140 F/G
2.0 PDHs

Moderators: David Garcia, WCS Engineering; Mike Jankowski, Drummond Carpenter

1:30 p.m. Using a Digital Twin to Control Sewer Overflows - Sweden
Dennis Jursic, Douglas Lumley, DHI Group; Ann Quenzer, Murraysmith

2:00 p.m. Intercepting Maine’s Largest Combined Sewer Overflow Volumes with 1-D and 3-D Dynamic Hydraulic Modeling
Kevin Trainor, Jason Kreil, Woodard & Curran; Gregory Heath, AECOM; Bradley Roland, City of Portland Public Works

2:30 p.m. Networking Break in Exhibit Hall

3:30 p.m. Modeling a Complex Manifolded Pump Station Sewer System with Parallel Pressure Pipes and Variable Vacuum and Pressurized Conditions
Pradeep Sudini, Arcadis; William Cassidy, Dickie Fernandez, Orange County Sanitation District; Harmik Aghanian, Xintong Qiu, Arcadis

4:00 p.m. Forensic Modeling: How Building a Detailed Model Revealed Clues to Detroit’s Sewer System
Erika Campbell, Brian Dara, Detroit Water and Sewerage Department; Andres Gomez, Sharon Tsay, Dan Rosenberg, Aditi Shetti, AECOM

4:30 p.m. Session Adjourns
Session 12: Design and Construction
Thursday, April 21, 2022
1:30 p.m. - 4:30 p.m.
Room 141
2.0 PDHs

Moderators: Christy Willson, Horner & Shifrin, Inc.; Jennifer Welsch, Metropolitan St. Louis Sewer District

1:30 p.m. The Venice Dual Force Main: Ensuring Resiliency through Redundancy in a Historically Large Scale Microtunneling Project
Eduardo Perez, Gevork Mkrtchyan, LA Sanitation

2:00 p.m. Planning, Design, and Construction of the Gravois Trunk Sanitary Storage Facility in St. Louis, Missouri
John Weiland, Wade Trim, Inc.; Curt Kimmel, Burns & McDonnell; Steven Roberts, Metropolitan St. Louis Sewer District

2:30 p.m. Networking Break in Exhibit Hall

3:30 p.m. Detroit River Interceptor Flow Control Facilities Construction
Mini Panicker, Great Lakes Water Authority; Fritz Klingler, FK Engineering

4:00 p.m. Procurement of Missouri's Longest Tunnel Project and the Largest Clean Water SRF Project in State History
Everett Litton, Richard Wischmann, WSP USA, Inc.; Jerry Jung, Metropolitan St. Louis Sewer District

4:30 p.m. Session Adjourns
Session 13: Combined Sewer Overflows
Friday, April 22, 2022
8:30 a.m. - 11:15 a.m.

Moderators: Dave Servidio, Mott MacDonald; Bill McMillin, Jacobs

8:30 a.m. The Great Lakes Water Authority’s Integrated Collection System Management Program: High Tech to High Touch
John Norton, Sherri Gee, Daniel Gold, Great Lakes Water Authority; Andrea Busch; Branko Kerkez; Curt Wolf, University of Michigan; Dax Blake, EMNet Inc

9:00 a.m. Innovative Solutions for Combined Sewer Overflow Control in Muncie, Indiana
Robert Page, HNTB Corporation

9:30 a.m. Omaha’s Unique Approach to Updating their CSO Long Term Control Plan
Patricia Nelson, Thomas Heinemann, Jacobs; Adam Wilmes, City of Omaha Public Works

10:00 a.m. Networking Break

10:15 a.m. Post-Construction Assessment of the North Dorchester Bay Tunnel System
Gregory Heath, Daniel Braz, AECOM; Jeremy Hall, Massachusetts Water Resources Authority

10:45 a.m. Distributed Optical Measurements Enable Smart CSO Management
Samuel Shelley, Paul Dickenson, Louise Keogh, NURON LIMITED; Simon Tait, Kirill Horoshenko, University of Sheffield

11:15 a.m. Conference Adjourns
Session 14: Asset Management  
Friday, April 22, 2022  
8:30 a.m. - 11:15 a.m.  
Room 140 F/G  
2.5 PDHs

Moderator: Jennifer Steffens, Suez

8:30 a.m. Don't Give Up When Things Get Tough to Perform Your Critical Force Main Inspections  
Celine Hyer, Arcadis; Harrison Steed

9:00 a.m. Phased Development and Implementation of a Force Main Condition Assessment and Management Program  
Vincent Genco, HDR; Jennifer Morales, City of Omaha, Nebraska; Derek Gardels, HDR

9:30 a.m. Stormwater Risk Assessment in Portland, OR  
Arnold Engelmann, DHI Water and Environment; Heidi Berg, Matt Burlin, Bureau of Environmental Services

10:00 a.m. Networking Break

10:15 a.m. Full Scale Trial of a Low-Hazard Buffered Iron Product (SulFeLox®) to Control Hydrogen Sulfide Odors at The City of Portland, OR  
Brenda Sherwood, City of Portland; Khalil Kairouz, Carollo Engineers; Lam Nguyen, Jeff Zucek, John Walton, Michael Fagan, USP Technologies

10:45 a.m. Targeted Inspections Used to Assess Force Main Condition After Failure  
Allison Zeoli, Arcadis; Bryce Annino, Corrosion Probe, Inc.

11:15 a.m. Conference Adjourns
Session 15: Local
Friday, April 22, 2022
8:30 a.m. - 11:15 a.m.
Room 141
2.5 PDHs

Moderators: Karyn Stickel, HRC; Maria Sedki, FTCH

8:30 a.m. Flood Control and Water Quality: Balancing Gray and Green Infrastructure in Detroit
Humaira Jahangiri, Gregory Kacvinsky, OHM Advisors; Donald Carpenter, Drummond Carpenter PLLC; Palencia Mobley, Lisa Wallick, Sarah Stoolmiller, Detroit Water and Sewerage Department

9:00 a.m. Innovative Inspection of Pump Station No. 1 Wet Well
David White, Wade Trim; Dan Alford, Great Lakes Water Authority

9:30 a.m. Aging Interceptor Systems: A Comprehensive Asset Management Approach to Address SSOs
Nancy Russell, Gregory Kacvinsky, OHM Advisors

10:00 a.m. Networking Break

10:15 a.m. 60 Years of Progress in Combined Sewer Overflow Control in Michigan
Dan Beauchamp, EGLE; Sally Duffy, Hubbell Roth and Clark Inc

10:45 a.m. Milk River CSO Facility Modernization
Carol Hufnagel, Roger Kaliman, Tetra Tech; Pete Trombley, Southeast Macomb Sanitary District

11:15 a.m. Conference Adjourns

ALTERNATE PRESENTATION
This presentations may be called into any of the previous sessions if space arises.

Taking WaPUG to a New Practical Dimension: Introducing an Innovative H&H Model Validation Tool
Hazem Gheith, Arcadis; John Barton, MSDGC
EXHIBITION SCHEDULE

Wednesday, April 20

10:00 am – 6:15 pm ................................. Exhibit Hall Open
10:00 am – 10:45 am ................................. Networking Break
10:30 am – 11:50 am ................................. Technology Spotlight I
11:45 am – 1:30 pm ................................. Networking Luncheon
3:00 pm – 3:45 pm ................................. Networking Break
4:45 pm – 6:15 pm ................................. Networking Reception

Thursday, April 21

10:00 am – 3:30 pm ................................. Exhibit Hall Open
10:00 am – 10:45 am ................................. Networking Break
10:30 am – 11:50 am ................................. Technology Spotlight I
11:45 am – 1:30 pm ................................. Networking Luncheon
2:30 pm – 3:30 pm ................................. Networking Break

Children under 18 entering the Exhibition must be accompanied by a parent or guardian at all times. The parent or guardian must obtain a child badge at registration, and assumes all risk and responsibility for the child’s safety.

Due to the proprietary nature of the displays, photography of displays and materials is forbidden without exhibitors’ express permission.
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

**ADS Environmental Services** ................................................. Booth 421
www.adsenv.com  
Phone: 256-430-3366  
340 The Bridge St, Ste 204  
Huntsville, AL 35806

**Airvac Vacuum Sewer Technology** ....................................... Booth 324
www.airvac.com  
Phone: 574-208-5867  
4079 N Old US Hwy 31  
Rochester, IN 46975

**Anua** ......................................................................................... Booth 225
www.anuainternational.com  
Phone: 336-547-9338  
4106 Bernau Ave  
Greensboro, NC 27407

**Centralsquare Technologies** .................................................. Booth 216
www.centralsquare.com  
Phone: 407-304-3370  
1000 Business Center Dr  
Lake Mary, FL 32746

**Compliance EnviroSystems LLC** ........................................... Booth 211
www.ces-sses.com  
Phone: 225-765-2933  
1401 Seabord Dr  
Baton Rouge, LA 70810

**Denso North America** ............................................................. Booth 210
www.densona.com  
Phone: 281-821-3355  
9710 Telge Rd  
Houston, TX 77095

**Exhibitor Directory Continues on Next Page…**
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

Doetsch Environmental Services, Inc. ......................................... Booth 320
https://doetschenv.com
Phone: 586-755-2090
21221 Mullin Ave
Warren, MI 48089

Duke’s Root Control, Inc. .......................................................... Booth 109
www.dukes.com
Phone: 888-655-4085
400 Airport Rd, Ste E
Elgin, IL 60123

Duperon Corporation .............................................................. Booth 322
www.duperon.com
Phone: 989-401-7154
1200 Leon Scott Ct
Saginaw, MI 48601

DVM Utilities Inc. ..................................................................... Booth 117
www.dvmutilities.com
Phone: 810-560-3984
6045 Sims Dr, Ste 2
Sterling Heights, MI 48313

Eastech Flow Controls, Inc. ................................................... Booth 112
www.smartwastewater.com
Phone: 918-664-1212
4250 S 76th E Ave
Tulsa, OK 74145

Exhibitor Directory Continues on Next Page…
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

Eganix, Inc. ................................................................................................. Booth 123
www.eganix.com
Phone: 248-880-5046
1091 Centre Rd, Ste 120
Auburn Hills, MI 48326

Environment One Corporation ................................................................. Booth 409
www.eone.com
Phone: 518-579-3033
2773 Balltown Rd
Niskayuna, NY 12309

FOG BMP ..................................................................................................... Booth 228
www.fogbmp.com
Phone: 614-519-1769
PO BOX 461
Carroll, OH 43112

Grande Water Management Systems .................................................... Booth 314
https://grandeinc.com
Phone: 450-315-1115
3950 Montee Masson
Laval, QC H7B 1C4
Canada

Granite Inliner LLC .................................................................................. Booth 121
www.inliner.com
Phone: 734-955-2508
28529 Goddard, Ste 106
Romulus, MI 48174

Exhibitor Directory Continues on Next Page…
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

InfoSense, Inc ........................................................................... Booth 208
https://infosense.com
Phone: 877-747-3245
8116 S Tryon St, Ste B3-203
Charlotte, NC 28273

Inland Environmental Resources .......................................... Booth 223
https://ierwater.com
Phone: 509-439-9626
1717 S Rustle St
Spokane, WA 99224

Landia, Inc ............................................................................... Booth 115
www.landiainc.com
Phone: 919-592-9955
111 Triangle Trade Dr
Cary, NC 27513

Logan Clay Products, LLC ..................................................... Booth 229
www.loganclay.com
Phone: 248-977-8652
6008 Petros Dr
West Bloomfield Township, MI 48324

Logiball Inc. ............................................................................. Booth 328
www.logiball.com
Phone: 418-656-9767
440 Papin St
Quebec, QC G1P 3T9
Canada

Exhibitor Directory Continues on Next Page…
As of March 30, 2022

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M.E. Simpson Co Inc .............................................................. Booth 129
www.mesimpson.com
Phone: 815-347-5431
2105 Northwestern Ave
Waukegan, IL 60087

Madewell Products Corporation ............................................ Booth 221
www.madewell.net
Phone: 770-558-7330
7561 Industrial Ct
Alpharetta, GA 30004

OBIC LLC ................................................................................. Booth 310
www.obicproducts.com
Phone: 866-636-4854
525 Winzeler Dr
Bryan, OH 43506

Orenco Systems ...................................................................... Booth 217
www.orenco.com
Phone: 541-459-4449
814 Airway Ave
Sutherlin, OR 97479

Process Wastewater Technologies LLC ............................... Booth 108
http://pwtech.us
Phone: 410-238-7977
9004 Yellow Brick Rd, Ste D
Baltimore, MD 21237

RedZone Robotics, Inc ........................................................... Booth 222
www.redzone.com
Phone: 412-476-8980
195 Thorn Hill Rd, Ste 110
Warrendale, PA 15086

Exhibitor Directory Continues on Next Page…
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

Reliant Water Technologies ................................................... Booth 411
www.reliantwater.us.com
Phone: 504-444-2200
141 Robert Lee Blvd, #284
New Orleans, LA 70124

Rexa, Inc ........................................................................... Booth 316
www.rexa.com
Phone: 508-584-1199
4 Manley St
West Bridgewater, MA 2379

RJN Group Inc ..................................................................... Booth 425
www.rjn.com
Phone: 630-682-4700 x1365
200 W Front St
Wheaton, IL 60187

SewerAI ............................................................................... Booth 128
https://www.sewerai.com
Phone: 855-952-2200
2815 Mitchell Dr, Ste 215
Walnut Creek, CA 94598

SmartCover Systems ......................................................... Booth 423
https://smartcoverystems.com
Phone: 908-507-0915
2110 Enterprise St
Escondido, CA 92029

Taplin Group, LLC .............................................................. Booth 120
www.TaplinGroup.com
Phone: 269-375-9595
5140 W Michigan Ave
Kalamazoo, MI 49006
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

Teledyne Isco
Phone: 402-465-2046
4700 Superior St
Lincoln, NE 68504

Trimble Utilities
https://utilities.trimble.com
Phone: 585-667-2285
295 Woodcliff Dr
Fairport, NY 14450

Trumbull MFG
www.Trumbull-mfg.com
Phone: 724-699-8776
3850 Hendricks Rd
Youngstown, OH 44515

Uni-Bell PVC Pipe Association
www.uni-bell.org
Phone: 972-243-3902
201 East John Carpenter Freeway, Ste 750
Irving, TX 75062

Vaughan Company, Inc.
www.chopperpumps.com
Phone: 360-249-4042 x227
364 Monte-Elma Rd
Montesano, WA 98563

Exhibitor Directory Continues on Next Page…
As of March 30, 2022

For Company Descriptions, view Exhibitors in the mobile app.

**Vogelsang USA**  ............................................................................................................. Booth 116
www.vogelsangusa.com
Phone: 330-296-3820
PO Box 751, 7966 St Rt 44
Ravenna, OH 44266

**WinCan, LLC** ............................................................................................................. Booth 209
www.wincan.com/en/home
Phone: 412-335-8271
300 Cedar Ridge Dr, Ste 308
Pittsburgh, PA 15205
<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Session</th>
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<tr>
<td>Khaled Abdo</td>
<td>Arcadis</td>
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<td>Veronica Alvarez</td>
<td>RedZone Robotics, Inc</td>
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<td>Nicholas Anderson</td>
<td>Stantec Consulting Inc</td>
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<td>Bryce Annino</td>
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<td>Johnson County Wastewater</td>
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<td>Pei Boayue</td>
<td>Detroit Water and Sewerage Dept</td>
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<td>Charlie Card</td>
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<td>Aryana Davin</td>
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<td>LA Sanitation</td>
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<td>Kraig Moodie</td>
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Jennifer Morales  
City of Omaha, Nebraska  
*Speaker Session 14*

Mark Pasco  
Detroit Riverfront Conservancy  
*Speaker OGS*

David Servidio  
Mott MacDonald  
*Moderator Session 04, Session 13*

Patricia Nelson  
Jacobs  
*Speaker Session 13*

Ashok Perera  
Atkins Global  
*Moderator Session 06*

Maria Sedki  
FTCH  
*Moderator Session 15*

Lam Nguyen  
USP Technologies  
*Speaker Session 14*

Eduardo Perez  
LA Sanitation  
*Speaker Session 12*

Firat Sever  
QuakeWrap Inc  
*Speaker Session 04*

Rosaleen Nogle  
Buffalo Sewer Authority  
*Speaker Session 10*

Mark Perkins  
Mead & Hunt  
*Speaker Session 10*

Samuel Shelley  
NURON LIMITED  
*Speaker Session 13*

John Norton  
Great Lakes Water Authority  
*Speaker Session 13*

Christopher Ranck  
Black & Veatch  
*Speaker Session 10*

James Shelton  
Arcadis  
*Speaker Session 07*

Robert Page  
HNTB Corporation  
*Speaker Session 13*

Karen Rico  
RJN Group Inc  
*Speaker Session 07*

Joseph Siwek  
Fishbeck  
*Speaker Session 03*

Dinesh Kumar Palaniswamy  
Jacobs  
*Speaker Session 08*

Brian Rubel  
Tetra Tech  
*Speaker Session 02*

Jennifer Steffens  
SUEZ  
*Moderator Session 14*

Mini Panicker  
Great Lakes Water  
*Speaker Session 12*

Nancy Russell  
OHM Advisors  
*Speaker Session 15*

Karyn Stickel  
HRC  
*Moderator Session 15*

Scott Parker  
Kansas City Water  
*Speaker Workshop A*

Diane Ryu  
InfoSense  
*Speaker Technology Spotlight I*

Pradeep Sudini  
Arcadis  
*Speaker Session 11*

Arthur Savage  
Landia, Inc.  
*Speaker Technology Spotlight II*

Eric Sullivan  
SewerAI  
*Moderator Session 10*
Dianne Sumego
dms water solutions
*Speaker Session 01; Moderator Session 04, Session 07*

Ronald Thomann
TREKK
*Moderator Session 10*

Kevin Trainor
Woodard & Curran Inc
*Speaker Session 11*

Kaushal Trivedi
Teledyne ISCO
*Speaker Session 10, Technology Spotlight II*

Kevin Vander Tuig
Wade Trim
*Moderator Session 01, Session 08; Speaker Session 05*

John Van Wingerden
Inland Environmental Resources
*Speaker Technology Spotlight II*

Mark Wade
BlueWater Solutions Group
*Speaker Session 07*

John Weiland
Camp Dresser & McKee Inc
*Speaker Session 12*

Jennifer Welsch
Metropolitan St. Louis Sewer District
*Moderator Session 03, Session 12*

David White
Wade Trim
*Speaker Session 15*

Christy Willson
Horner & Shifrin, Inc.
*Moderator Session 01, Session 12*

Richard Wischmann
WSP
*Speaker Session 12*

Kevin Wojciechowski
GPD Group
*Speaker Session 04*

Allison Zeoli
Arcadis
*Speaker Session 14*
Tuesday, April 19

7:30 a.m. – 5:00 p.m. Registration
8:30 a.m. – 5:00 p.m. Workshop A: Asset Management – What’s in it for me?
1:30 p.m. – 5:00 p.m. Workshop B: Using Design Thinking to Uncover Insights on Collection Systems

Wednesday, April 20

7:30 a.m. – 5:00 p.m. Registration
8:30 a.m. – 10:00 a.m. Opening General Session
10:00 a.m. – 6:15 p.m. Exhibit Hall Hours
10:30 a.m. – 11:50 a.m. Technology Spotlight I
10:45 a.m. – 11:45 a.m. Technical Session 1
11:45 a.m. – 1:30 p.m. Networking Luncheon
1:00 p.m. – 3:00 p.m. GLWA Conner Creek CSO Tour
1:30 p.m. – 4:45 p.m. Technical Sessions 2, 3, 4
4:45 p.m. – 6:15 p.m. Networking Reception

Thursday, April 21

8:00 a.m. – 5:00 p.m. Registration
8:30 a.m. – 10:00 a.m. Technical Sessions 5, 6, 7
10:00 a.m. – 3:45 p.m. Exhibit Hall Hours
10:30 a.m. – 11:50 a.m. Technology Spotlight II
10:45 a.m. – 11:45 a.m. Technical Sessions 8, 9
11:45 a.m. – 1:30 p.m. Networking Luncheon
1:30 p.m. – 4:00 p.m. South Huron Valley Utility Authority Tour
1:30 p.m. – 4:30 p.m. Technical Sessions 10, 11, 12

Friday, April 22

8:00 a.m. – 12:00 p.m. Registration
8:30 a.m. – 11:15 a.m. Technical Sessions 13, 14, 15
11:15 a.m. Conference Adjourns
Residuals and Biosolids Conference
May 24-27, 2022
Columbus, Ohio
www.wef.org/residualsbiosolids

Innovations in Process Engineering Conference
June 20-23, 2022
Miami, Florida
www.wef.org/processengineering

Stormwater Summit
June 27-29, 2022
Minneapolis, Minnesota
www.wef.org/stormwatersummit

WEFTEC
October 8-12, 2022
New Orleans, Louisiana
www.weftec.org
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