



---

# 2025 Annual Conference

March 10 - 12, 2025  
Tinley Park Convention Center  
Tinley Park, Illinois



**IAFSM**  
Illinois Association for  
Floodplain and Stormwater Management  
Transforming Floodplains for a  
Sustainable Future

## Welcome to IAFSM 2025 Annual Conference!

Dear Attendees,

It is our pleasure to welcome you to this year's conference, where we gather to learn, collaborate, and advance sustainable floodplain and stormwater management.

This year's conference theme, **Transforming Floodplains for a Sustainable Future**, reflects our dedication to developing innovative solutions, fostering resilience, and ensuring the long-term health of our natural and built environments. In the coming days, you'll engage with distinguished speakers, participate in dynamic discussions, and gain insights shaping the future of sustainable floodplain and stormwater management.

We encourage you to take full advantage of everything this conference offers, from keynote sessions and panel discussions to networking events, interactive workshops, field trips, social events, and exhibitor showcases. These events are dynamic hubs for learning, ideas, and connecting with fellow floodplain and stormwater managers. Don't miss out on the opportunity!

You asked for more social events, and we delivered! **The Casual Connect Reception** on Monday evening provided a pre-conference chance to connect, exchange ideas, and build relationships in a relaxed setting. We hope it was an enjoyable experience for all who attended. Along with our other engaging activities, we trust it helped strengthen the relationships that drive collaboration and progress within our field.

The success of this conference is thanks to the dedication and hard work of many individuals. Our deepest appreciation goes to our speakers, exhibitors, and sponsors for their invaluable contributions in sharing knowledge, resources, and support to make this event successful. A special thank you to our first-ever **Platinum Sponsors, Baxter & Woodman, Inc. and Christopher B. Burke Engineering Ltd.**, for their generous support, which has helped elevate this conference. We also sincerely appreciate our board members, volunteers, planning committees, and all those working behind the scenes who have contributed their time and expertise to making this conference possible. Thank you for being part of this event.

### A Special Thank You to Sarah Harbaugh

As this conference marks the culmination of her dedicated service, we extend our deepest appreciation to our long-time Executive Secretary, Sarah Harbaugh. Her tireless dedication and countless hours behind the scenes have shaped this and past events, strengthening our mission over the years. We wish her all the best in her well-earned retirement and thank her for the lasting impact she has had on our organization and this community.

We look forward to an enriching and inspiring conference experience together.

**Welcome, and enjoy the conference!**

Sincerely,

Sharon Østerby  
Vice Chair, IAFSM  
Chair, Annual Conference Committee

Table of Contents	1
IAFSM Officers	2
Regular Session Descriptions, Tuesday	3
Regular Session Descriptions, Wednesday	4
Conference Mobile App	5
Plenary Speakers	6-7
Featured Events & Activities: Beyond the Sessions!	8-9
Conference Speakers	10-13
Young Professional Scholarship Recipients	14
IAFSM Awards & Past Awards	15-16
Speaker Biographies	17-30
Tuesday Sessions 1A-3D	31-42
Wednesday Sessions 4A-5D	43-51
Exhibitors & Exhibitor Location Map	52-53
Sponsors	54-61
Conference Attendees	62-75
IAFSM Board Agenda	76
Board Officers Biographies & Election Ballot	77-78
Exhibit Door Prize Card	79
Tinley Park Convention Center Map	80

# IAFSM Leadership

## IAFSM Officers



**Chair**  
Dallas Alley, CFM



**Treasurer**  
Mary Richardson, CFM



**Vice Chair**  
Sharon Østerby, CFM



**Past Chair**  
Stephen Altman, PE, CFM



**Secretary**  
Jenny Loewenstein, PE, CFM



**Executive Secretary**  
Sarah Harbaugh

## IAFSM Committee Chairs:

### *Conference*

Sharon Østerby, CFM

### *Awards*

Sarah Hunn, PE, CFM

### *Certification*

Greg Thorpe, CBO, CFM

### *Community Rating System*

Julie Lomax, PE, CFM

### *Education Outreach*

Diane Bouckaert, PE, CFM

### *Floodplain Management*

Dawn Cosentino, PE, CFM, CPESC

### *Inter-Organizational*

Ajay Jain, PE, CFM

### *Legislative*

Kay Whitlock, PE, D.WRE

### *Mitigation*

Ron Davis, CFM

### *Newsletter*

Jennifer Maercklein, PE, CFM

### *Nominations & Elections*

Mark Hoskins, PE, CFM

### *Stormwater Management*

Steve R. Bicking, PE, D.WRE,  
CFM

### *Wetlands*

Tom Kehoe

### *Young Professionals Group*

Alana Rosenbaum

### *Youth Outreach*

Brian Chaille, PE, CFM

# TUESDAY SCHEDULE

---

8:00-9:00	<b>Registration, Exhibits, and Breakfast</b>
9:00-10:10	<b>Plenary Session</b> <ul style="list-style-type: none"><li>David Skuodas, Urban Waterway Design: Balancing Nature, Community, and Cost</li></ul>
10:10-10:30	<b>Break &amp; Exhibits</b>
10:30-Noon	<b>Session 1A: Floodplain Management Essentials</b> <ul style="list-style-type: none"><li>Floodplain Basics</li><li>Floodplain &amp; Floodway Permitting</li><li>Completing Substantial Damage Estimates</li></ul> <b>Session 1B: Stream Restoration &amp; Stabilization Strategies</b> <ul style="list-style-type: none"><li>Sugar Creek Restoration: Ecology &amp; Engineering</li><li>Restoration Efforts Along Woods Creek</li><li>A Streambank Stabilization/Restoration Retrospective</li></ul> <b>Session 1C: Optimizing Flood Modeling &amp; Hydraulic Analysis</b> <ul style="list-style-type: none"><li>2D Roadway Overtopping Study</li><li>Advanced Hydraulic Modeling for Dam Design</li><li>Comparing XP-SWMM, ICM, &amp; HEC-RAS 6.6</li></ul> <b>Session 1D: Flood Control &amp; Mitigation Projects</b> <ul style="list-style-type: none"><li>Levee 37 Improvements, Mt. Prospect, IL</li><li>Winnetka, IL Stormwater Management Program</li><li>Springinsguth Corridor/West Branch DuPage R. Flood Reduction Project</li></ul>
Noon-1:30	<b>Luncheon</b>
1:30-4:00	<b>Field Trip to Fullersburg Woods &amp; Graue Mill Dam Removal/Salt Creek Restoration Project</b>
1:30-3:00	<b>Session 2A: CRS for Safer Communities</b> <ul style="list-style-type: none"><li>CRS: the Illinois Easy 8</li><li>Get Organized for Your CRS Cycle Visit</li><li>Repetitive Loss Area Analysis for CRS Purposes</li></ul> <b>Session 2B: Wetland Planning &amp; Mitigation</b> <ul style="list-style-type: none"><li>Early Planning for Wetlands</li><li>Restoring Open Space as a Wetland Mitigation Bank</li><li>Lake Opeka Shoreline Restoration Project</li></ul> <b>Session 2C: Digital Innovation in Stormwater Management</b> <ul style="list-style-type: none"><li>Digital Tools for Stormwater Resilience</li><li>Overview &amp; Uses of AI</li><li>Digital Drainage &amp; Levee District Mapping</li></ul> <b>Session 2D: Public Engagement in Flood Management</b> <ul style="list-style-type: none"><li>Effective Engineer/Public Communication</li><li>Data-Driven Outreach &amp; Communication</li><li>My IAFSM</li></ul>
3:00-3:30	<b>Break &amp; Exhibits</b>
3:20-4:50	<b>Session 3A: Illinois Floodplain Management Updates</b> <ul style="list-style-type: none"><li>Integrated Floodplain Management: Is Illinois Ready?</li><li>IL's NFIP Permit Program for State-Owned Properties</li></ul> <b>Session 3B: Climate Change &amp; Community Resilience</b> <ul style="list-style-type: none"><li>Projecting Illinois Rainfall Due to Climate Change</li><li>MWRD Watershed Management Ordinance Updates &amp; Implementation</li><li>Climate Resilience Planning for Communities</li></ul> <b>Session 3C: Collaborative Flood Mitigation</b> <ul style="list-style-type: none"><li>Rockford Gully Erosion Stabilization Conclusion</li><li>UIUC's Green Infrastructure Plan for Rainwater</li><li>Sinkhole Response, Whitefish Bay, WI.</li></ul> <b>Session 3D: Professional Growth &amp; Leadership Insights</b> <ul style="list-style-type: none"><li>Public to Private Transition Lessons Learned</li><li>The Subtle Art of Being a Good Owner (60 min.)</li></ul>
4:45-6:45	<b>Social Hour</b>

# WEDNESDAY SCHEDULE

---

7:30-9:00	<b>IAFSM Board of Directors Meeting</b> <b>Registration &amp; Breakfast</b>
9:00-10:10	<b>Plenary Session: The Road Less Traveled: Taking the NAI Highway to Resilience</b> <ul style="list-style-type: none"><li>• Chad Berginnis</li></ul>
10:10-10:30	<b>Break</b>
10:30-Noon	<b>Session 4A: Floodplain Management &amp; Urban Drainage</b> <ul style="list-style-type: none"><li>• Biesterfield Road Basin Outfall Improvements</li><li>• Reducing Stormwater Discharge in the N. Branch Chicago R., Lake County</li><li>• Watershed-Based Planning for Watershed Improvements</li></ul> <b>Session 4B: Evolving Practices in Dam Removal &amp; Modification</b> <ul style="list-style-type: none"><li>• IDNR Dam Removals: Past, Present, &amp; Future</li><li>• Carpentersville Dam Removal</li><li>• North Aurora Dam Modifications &amp; Sediment Issues</li></ul> <b>Session 4C: Strengthening Resilience with 2D Modeling</b> <ul style="list-style-type: none"><li>• Cofferdam Regulatory Planning, Fox River, Geneva</li><li>• Going Beyond Flow Path Mapping</li><li>• I-80 Bridge Replacement Resilience Assessment</li></ul> <b>Session 4D: Equity in Disaster Preparedness &amp; Flood Mitigation</b> <ul style="list-style-type: none"><li>• FEMA-NAACP Partnership for Disaster Preparedness</li><li>• Flooding &amp; Racial Disparities in Greater E. St. Louis</li><li>• Agency Collaboration for the American Bottoms</li></ul>
Noon-1:30	<b>Awards Luncheon</b>
1:30-3:00	<b>Extreme Event Workshop</b> <b>Session 5A: Managing Stormwater: Big &amp; Local Challenges</b> <ul style="list-style-type: none"><li>• Golf Course Stormwater Management</li><li>• Long-Term Thinking for Stormwater BMPs in L.A.</li><li>• Stormwater Detention at the DuPage County Campus</li></ul> <b>Session 5B: Climate Resilience &amp; Adaptation</b> <ul style="list-style-type: none"><li>• Building Transportation Resilience in Northeast IL</li><li>• Vulnerability Assessment Tool for Infrastructure</li><li>• Leveraging USACE Expertise for Local Communities</li></ul> <b>Session 5C: Urban Flooding: Mitigation &amp; Planning</b> <ul style="list-style-type: none"><li>• Updating a Countywide Natural Hazard Mitigation Plan</li><li>• Combined Sewer Separation Planning in Elgin</li><li>• Flood Monitoring Systems: New Orleans &amp; Chicago</li></ul> <b>Session 5D: Water Resource Management Solutions</b> <ul style="list-style-type: none"><li>• Sect. 319 Watershed Planning, Upper W. Branch DuPage River</li><li>• Tips for Localized Drainage Studies</li><li>• Advances in Trash Capture Standards</li></ul>

# 2025 CONFERENCE MOBILE APP

## Welcome to Digital Access for the Conference Program!

We're excited to offer you seamless access to the **conference program** through our **Cvent Events App!** You should have received an email last week with a link to download the app. If you missed it, simply scan the **QR code** to get started. Once downloaded, the app will automatically direct you to our conference platform.

### How to Log In:

1. Enter your **first name, last name, and email**, then tap the **arrow**.
2. Check your email for a **verification code**.
3. Return to the app, enter the code, and tap the **arrow** again.
4. You're in! You'll be directed to the **event's Home page**.



### Why You'll Love the App:

- ✓ **Personalized Schedule** – Access the event agenda and customize it with your appointments.
- ✓ **Speaker Insights** – View speaker bios and presentations.
- ✓ **Interactive Exhibitor Map** – Easily locate booths and explore exhibitor offerings.
- ✓ **Networking Made Easy** – Connect with fellow attendees and exchange contact information.
- ✓ **Post-Event Surveys** – Share your feedback through post-presentation and event surveys.

If you have any questions or need assistance, visit the **registration desk**. You can also access the mobile app content through the **QR code** or by visiting this link from any web browser: <https://cvent.me/drPEyD>

## Unlock Your Professional Image!



**IAFSM**  
Illinois Association for  
Floodplain and Stormwater Management  
Transforming Floodplains for a  
Sustainable Future

# CHRIS MCGUIRE PHOTO GRAPHY

Chris McGuire  
309-989-7412  
[Chrismcguirephoto.com](http://Chrismcguirephoto.com)

Get a professional headshot with **CHRISMCGUIREPHOTOGRAPHY!**

You'll receive your personalized image gallery via email within minutes, plus optional expert retouching is available for just \$20 per image.

- 1.) Claim your time slot at: <https://shorturl.at/zqYtM>
- 2.) Register when you arrive by scanning the QR Code:
- 3.) Strike a pose!



**NEW THIS YEAR - Group photos available !**

Tuesday, March 11<sup>th</sup>, 2025, from 4:00 PM - 5:00 PM

# Plenary Address – Tuesday, March 11<sup>th</sup>, 2025

---

9:00 - 10:10 am, Exhibit South

## Urban Waterway Design: Balancing Nature, Community, and Cost

*David Skuodas, P.E., CFM, LEED AP, Mile High Flood District*

Modern urban waterway designs should aim to balance ecological needs with community desires by considering multiple objectives beyond just flood control and water quality. The goal is to create community assets that are also functional and sustainable. This involves a shift from traditional engineering approaches to a more holistic and collaborative design process. Here are some key points that will be discussed in this presentation to demonstrate how this balance can be achieved:

**Multi-objective solutions:** Designs should not be limited to flood control but should also consider other elements of urban stream function such as aquatic habitat, recreation, and aesthetics. The goal is to help communities thrive by creating spaces that are both functional and valuable.

**Community values:** Community values should be a major consideration, sometimes outweighing other factors such as cost or engineering constraints. This may include providing access to amenities like grocery stores, parks, or schools. Projects should be done with and for the community, not to the community.

**Collaboration:** Achieving multi-functional spaces requires collaboration and coordination among multiple disciplines, agencies, and community members. Visioning is important in the beginning to ensure all needs are considered and to delegate responsibilities.

**Beyond black and white:** While hydrology and hydraulics are foundational to achieving positive outcomes, the other elements of urban stream design, like geomorphology, vegetation, and community values, bring "color" to projects by focusing on the value that waterways bring to the community.

**Nature-based solutions:** These solutions mimic natural processes and rely on the science of fluvial geomorphology. They use vegetation and natural materials to provide stability and function. These solutions can be more resilient and cost-effective in the long term.

**Geomorphology:** Understanding geomorphology is essential for planning and design. This involves considering the stream's natural form, processes, and how it interacts with the surrounding environment.

**Life cycle costs:** Naturalized solutions tend to age better and require less maintenance compared to structural solutions using concrete and steel. Maintenance should be more about gardening than replacing infrastructure.

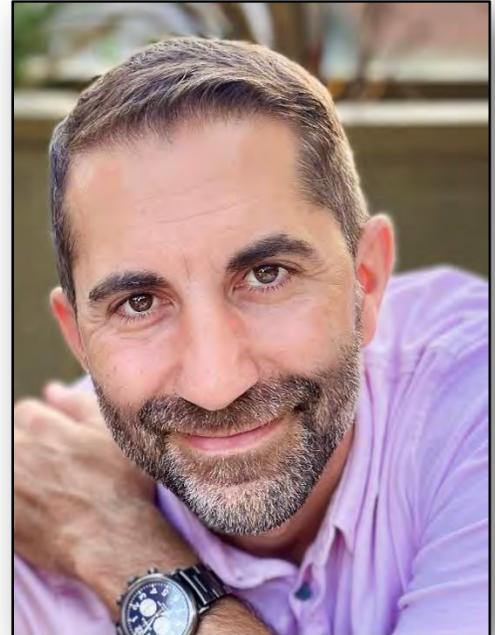
**Value creation:** The goal is to find a balance between cost and value. This involves using metrics beyond just dollars per foot or design flows, and considering the value provided to the community. This means considering things like mobility, access, and recreation.

**Flexibility and adaptation:** Designs should be adaptable to changing conditions, such as increased runoff from urbanization. This may involve designing for a range of flows and using materials that can withstand changes in the stream's flow regime. Projects should also include a maintenance plan as vegetation will change over time.

**Contextual design:** Each project should be designed based on its context. What works in one location may not be the best solution for another. Some projects are in constrained urban environments, while others are in open areas.

**Balancing competing needs:** There can be tension between nature and people, or between wilderness and economic development. There is a need to consider tradeoffs and how projects impact different stakeholders.

By considering these factors, urban waterway designs can successfully balance ecological needs with community desires, creating valuable assets that benefit both the environment and the people who live nearby.



# Plenary Address – Wednesday, March 12<sup>th</sup>, 2025

---

9:00 - 10:10 am, Exhibit South

## The Road Less Traveled: Taking NAI Highway to Resilience

*Chad Berginnis, CFM, Executive Director, ASFPM*

Flood losses in the nation are rapidly getting worse now averaging more than \$40 billion/year. Just doing the NFIP minimums is not enough and even what we thought of as higher standards may need to be even strengthened more. What does it take to achieve true community flood resilience? Through the lens of ASFPM's No Adverse Impact (NAI) initiative, a tailored approach can be developed for any community. Learn about the approaches and tools it takes to get there including the policies and resources that the Association of State Floodplain Managers is developing and promoting.

### **Chad Berginnis, CFM**

In 2011, Mr. Berginnis joined the staff of the Association of State Floodplain Managers (ASFPM). For more than 30 years, his work has focused on floodplain management, hazard mitigation, and land use planning at the state, local

and private sector levels. As a state official, Chad worked in the Ohio Floodplain Management Program and was Ohio's State Hazard Mitigation Officer. As a local official, he administered planning, economic development and floodplain management programs in Perry County, Ohio. In the private Sector, he was the national Practice Leader in hazard mitigation for Michael Baker Jr. Inc. Chad is a recognized national expert in floodplain management and hazard mitigation having participated in national research groups such as the National Academies of Science panels General Accountability Office interviews, presented Congressional testimony, and provided input on flooding issues to local, state, national, and international governments. Currently Chad serves on the National Advisory Council for the FEMA Administrator. He has a Bachelor of Science in Natural Resources from Ohio State University.





## Featured Events & Activities: Beyond the Sessions!

---

### **NEW!** Casual Connect Reception

We are delighted to invite you to our first annual Pre-Conference **Casual Connect Reception**—an exclusive opportunity to kick off our conference in a warm and relaxed setting. Join us on Monday, March 10th, 2025, from 7pm-9pm at the Tinley Park Convention Center for an evening of easy conversation, genuine connections, and the chance to unwind before the conference program begins.

### **NEW!** Gratitude Board

Take a moment to recognize and appreciate colleagues, mentors, and industry leaders who have made a difference. Visit the Gratitude Boards, located outside of Exhibits South and in the break area, to leave your message of thanks! The **Gratitude Board** is also available on the **conference app**, allowing attendees to share their appreciation digitally.

### **Meet the Author: Dave Skuodas**

Following the Tuesday plenary session, attendees will have the opportunity to meet **Dave Skuodas** and purchase a signed copy of his book, *The Effective Client*. Proceeds from book sales will benefit the ASFPM Foundation.

### **Field Trip! Fullersburg Woods & Graue Mill Dam Removal/ Salt Creek Restoration Project**

Tuesday, 1:30 - 4:00 pm, Meet at Conference Registration/South Entry

Fullersburg Woods Forest Preserve is home to the historic Graue Mill, a restored grist mill that is both popular and on the National Register of Historic Places. The site is characterized by Salt Creek and a run-of-the-river dam constructed by the Civilian Conservation Corps in the 1930's, adjacent to the mill. The impoundment above the dam had the poorest water quality, as measured by dissolved oxygen, anywhere on Salt Creek. Working together, the DuPage River Salt Creek Workgroup and Forest Preserve District of DuPage County removed the dam and restored approximately one and a half miles of riverine habitat and associated wetlands at Fullersburg Forest Preserve. Graue Mill was preserved and associated amenities were providing, including a pump system/water feature for the mill's raceway, motorizing the water wheel, new paths, interpretive signage, native gardens, an improved trail underpass below York Road, and a canoe launch. Come see the restored riffles and pools constructed as part of the project, as well as restored wetlands and floodplain forests.

### **IAFSM Exhibitor Social Hour**

Join us on Tuesday evening from 4:30 pm-6:30 pm at Exhibit West for the **Exhibitor Social Hour**, where you can network with industry professionals while engaging with exhibitors showcasing the latest innovations and solutions. Enjoy complimentary refreshments, connect with colleagues, and explore cutting-edge products and services in a relaxed and interactive setting. Don't miss this opportunity to expand your network and gain valuable insights!

# Featured Events & Activities: Beyond the Sessions!

---

## Young Professionals After Conference Social Hour

Let's keep the conversation going! Join the IAFSM Young Professionals for appetizers and drinks on Tuesday, March 11, 2025, at the Midnight Room at the Even Hotel (connected to the Convention Center) from 6pm-8pm. All are welcome.

## Awards Luncheon

The Awards Luncheon on Wednesday is a celebration of excellence in floodplain management, recognizing individuals and organizations for their outstanding contributions to the field. This event is a chance to honor leadership, innovation, and commitment to resilience efforts while networking with peers in a formal yet engaging setting.

In addition to the awards presentation, attendees will have the chance to win exciting door prizes and giveaways. Be sure to attend for a chance to take home a special prize while celebrating the achievements of your colleagues.

## EXTREME EVENT Workshop

Wednesday, 1:30 - 3:00 pm, North Pavilion 4-6

Moderator, Brian Chaille, PE, CFM

Back for the 2025 Annual Conference! The Extreme Event Workshop! The Extreme Event Game is a hands-on role-playing game that gives participants a taste of what it takes to build community resilience in the face of disaster. Players work together to make decisions and solve problems during this engaging, fast-paced disaster simulation. Come pit your wits and skills against the elements to help your community become more resilient! When the crisis is over, we'll debrief and open the floor to discuss how the game might be used in your own communities and organizations. The game materials are available to loan to IAFSM Members to use in outreach to schools, commissions, and communities (just like we loan floodplain and erosion models). Come have fun and learn how to use this award-winning outreach tool!

For more information see: <https://labx.org/our-programs/extreme-event/>

# Conference Speakers

---

**Altman, Steve | PE, CFM | IDNR-OWR | 3A Illinois State Owned Property and NFIP - Development of the State's new NFIP Permit Program**

**Anderson, Jr., Kenneth N., CFM, CPRP, CPESC, CPSC | Engineering Resource Associates, Inc. | 3D Public to Private Employment Transition Lessons Learned**

**Baltutis, Kira | U.S. Army Corps of Engineers-Chicago District | 5B Leveraging USACE Expertise for Resilience: Collaborative Solutions for Local Communities**

**Basalla, Emily, PE, CFM | Clark Dietz, Inc. | 3C Whitefish Bay's Emergency Storm Sewer Repair: What to do when a 70-foot-deep pipe fails?**

**Batista, Santos | DuPage County | 5D Watershed-Based Plan Development for the Upper West Branch DuPage River Watershed**

**Berginnis, Chad, CFM | AFSPM | Wednesday Plenary Session the Road Less Traveled: Taking the NAI Highway to Resilience**

**Bernahl, James, PE, CFM | Village of Winnetka | 1D Flood Control Partnerships Overcome Inadequate Stormwater Infrastructure in Winnetka**

**Bogart, Cloud | Forerunner | D2 Data-driven Resident Flood Communication & Outreach**

**Burgess, Sarah, PE, CFM | Hey and Associates, Inc. | 4C Going Beyond Flow Path Mapping**

**Burke, Michael, PE, CFM | Christopher B. Burke Engineering, Ltd. | 1D Mount Prospect Neighborhood Flood Mitigation and Levee Drainage Enhancements**

**Cattoor, Wesley, PE, CFM | IDNR - Office of Water Resources | 3B Projecting Illinois Rainfall due to Climate Change**

**Cattoor, Wes, PE, CFM | IDNR - Office of Water Resources | 4B IDNR Dam Removals - Past, Present & Future**

**Cattoor, Wes, PE, CFM | V3 Companies, Ltd. | 4B Carpentersville Dam Removal**

**Chaille, Brian, PE, CFM | Illinois State Water Survey | Extreme Event Workshop**

**Cofoid, Scott, CFM | Verisk/ISO | 2A CRS - The IL Easy 8**

**Cofoid, Scott, CFM | Verisk/ISO | 2A Get Organized for Your CRS Cycle Visit**

**Conley, Erin, CFM | Illinois Department of Natural Resources | 1A Floodplain Basics**

**Conley, Erin, CFM | Illinois Department of Natural Resources | 1A Floodplain & Floodway Permitting**

**Conley, Erin, CFM | Illinois Department of Natural Resources | 1A Assessing the Situation: Completing Substantial Damage Assessments**

**Conley, Erin, CFM | IDNR-OWR | 3A Illinois State Owned Property and NFIP - Development of the State's new NFIP Permit Program**

**Cosky, Elli | Metro Strategies Group | 3B Climate Resiliency Planning for Communities**

**Culcasi, Anna PE, CFM | Hey and Associates, Inc. | 4C Going Beyond Flow Path Mapping**

**Cunz, Cecily, AICP | Baxter & Woodman | 4A How a Watershed-Based Plan Can Lead to Comprehensive Watershed Improvement**

**Daly, Brian | Cook County Department of Environment and Sustainability | 3B Climate Resiliency Planning for Communities**

**Davis, Lacey, M.S. | American Rivers | 3A Integrated Floodplain Management: Is Illinois Ready?**

**DeTella, George | Integrated Solutions Consulting, inc. | 5C Updating the Countywide Natural Hazard Mitigation Plan**

**Doohaluk, Deanna | The Conservation Foundation | Field Trip to Fullersburg Woods & Graue Mill Dam Removal/Salt Creek Restoration Project**

**Dorsey, Sean | Village of Mount Prospect | 1D Mount Prospect Neighborhood Flood Mitigation and Levee Drainage Enhancements**

**Eshelman, Amanda | M3 Engineering Group | 1C Let's Take a Journey to Another Dimension: 2D Modeling to Address Flooding on Old IL-16 & IL-4**

- Evasic, Kate** | Chicago Metropolitan Agency for Planning | 5B Building transportation resilience in northeastern Illinois
- Falsey, Mary Beth** | DuPage County | 5D Watershed-Based Plan Development for the Upper West Branch DuPage River Watershed
- Feltes, Daniel M., PE, CFM** | Metropolitan Water Reclamation District of Greater Chicago | 3B MWRD Watershed Management Ordinance: 2024-2025 Updates & Implementation
- Fisher, Richard** | Metropolitan Water Reclamation District of Greater Chicago | 2D Bridging the Gap: Effective Communication Between Engineers and the Public
- Flunker, Brandon, PE, CFM** | Clark Dietz, Inc. | 3C Whitefish Bay's Emergency Storm Sewer Repair: What to do when a 70-foot-deep pipe fails?
- Fuller, Jeff, PE** | US Army Corps of Engineers | 4A Reducing Stormwater Discharge in the North Branch of Chicago River Lake County
- Gilbertsen, Logan, PE, CFM** | HR Green, Inc. | 1B Restoration Efforts along Woods Creek
- Gilbertsen, Logan, PE, CFM** | HR Green, Inc. | 5D Tips for Localized Drainage Studies
- Guerrero, Jeff, PE** | WBK Engineering & Village of Schaumburg | 1D Collaboration for the Win: Springinguth Corridor/West Branch DuPage River Flood Control and Restoration
- Gutkowski, Chris, PE, CFM** | Clark Dietz, Inc. | 3C Whitefish Bay's Emergency Storm Sewer Repair: What to do when a 70-foot-deep pipe fails?
- Hauser, Lee, PE** | Geosyntec Consultants | 3B Climate Resiliency Planning for Communities
- Hunn, Sarah, PE, CFM** | DuPage County | 5C Updating the Countywide Natural Hazard Mitigation Plan
- Jenkins, Emily Poynter, PhD, PE, CFM** | Farnsworth Group | 3C A Rockford Gully Erosion Story: How the Team Persevered Through Wild Weather and Excessive Sediment
- Jenkins, Emily Poynter, PhD, PE, CFM** | Farnsworth Group | 3C Redefining Stormwater as Rainwater: University of Illinois at Urbana-Champaign's Rainwater Management Plan
- Kovalsky, Paolla, PE** | M3 Engineering Group | 1C Let's Take a Journey to Another Dimension: 2D Modeling to Address Flooding on Old IL-16 & IL-4
- Krzmarzick, Alex, PLA, ASLA** | Stantec Consulting Services Inc. | 2B Thinking beyond the Project: Lake Opeka Shoreline Restoration Project
- Kurcab, Grace, PE, CFM** | Farnsworth Group | 3C Redefining Stormwater as Rainwater: University of Illinois at Urbana-Champaign's Rainwater Management Plan
- Leitschuh, Rebecca, AICP** | Stantec Consulting | 5B Prioritizing Resilient Infrastructure: Asset-Level Vulnerability Assessment Web Viewer
- Litteken, Garrett, PE, CFM** | Hanson Professional Services Inc. | 1C Evolving Tools for Evaluation of Dam Hydraulics and Breach Inundation
- Maercklein, Jennifer, PE, CFM** | V3 Companies | 1C XP-SWMM vs ICM vs HEC-RAS 6.6: which model to choose?
- Maercklein, Jennifer, PE, CFM** | V3 Companies, Ltd. | 5A When the Stormwater Agency has Stormwater Challenges: Stormwater Detention and Flood Risk at the DuPage County Campus
- Mahajan, Rishab, PE, CFM, BC.WRE** | Geosyntec Consultants | 5D Watershed-Based Plan Development for the Upper West Branch DuPage River Watershed
- Martin, Derrick, PE, CFM** | IDNR - OWR | 4B Carpentersville Dam Removal
- Matteson, Luke** | StormTrap | 5D Advances in Trash Capture
- McClain, Kaitlyn** | U.S. Army Corps of Engineers-Chicago District | 5B Leveraging USACE Expertise for Resilience: Collaborative Solutions for Local Communities
- McParland, Terra, PE, CFM** | IDNR - Office of Water Resources | 3B Projecting Illinois Rainfall due to Climate Change
- McParland, Terra, PE, CFM** | IDNR - Office of Water Resources | 4B Dam Modification Alternatives and Sediment Handling for North Aurora Dam

- McPartlan, Patrick, M.S.** | Agrowhere, LLC | 2C Illinois Drainage Districts Uncovered: Digital Mapping for Effective Stormwater Management
- Mengler, Jeffrey L., PWS** | Hey and Associates, Inc. | 2B Restoring the Donnelley Prairies & Oaks Open Space Tract as a Wetland Mitigation Bank
- Momcilo, Markus** | Illinois State Water Survey | 3B Projecting Illinois Rainfall due to Climate Change
- Monko, Peter, PE, CFM** | Metropolitan Water Reclamation District of Greater Chicago | 3B MWRD Watershed Management Ordinance: 2024-2025 Updates & Implementation
- Neidy, Eric** | Forest Preserve District of DuPage County | Field Trip to Fullersburg Woods & Graue Mill Dam Removal/Salt Creek Restoration Project
- Novotny, Thera, PE, MBA, PMP, CFM, ENV SP** | Stantec Consulting Services Inc. | 2B Thinking beyond the Project: Lake Opeka Shoreline Restoration Project
- Oliver, Jarod, PE** | HR Green, Inc. | 5C Combined Sewer Separation Master Planning in the City of Elgin
- Olson, Rebecca, M.S.** | Olson Ecological Solutions, LLC. | 3C A Rockford Gully Erosion Story: How the Team Persevered Through Wild Weather and Excessive Sediment
- Pace, Theodis** | Illinois NAACP | 4D The NAACP & FEMA Agreement: Equitable Disaster Preparedness
- Pande, Erin** | ERA and Hanover Park | 1D Collaboration for the Win: Springingsguth Corridor/West Branch DuPage River Flood Control and Restoration
- Papakos, Tatiana, PE, CFM** | Michael Baker International | 4C Incorporating Resilience through 2D Hydraulic Modeling
- Paradoski, Gary, PE** | Aqua Vitae Engineering, LLC. | 3C A Rockford Gully Erosion Story: How the Team Persevered Through Wild Weather and Excessive Sediment
- Pasquel, Fernando, CPM, PE** | Arcadis | 2C Developing an Actionable Stormwater Platform: Digital Technology Applications
- Pellizzari, Laura, PE, CFM** | HR Green, Inc. | 4A Biesterfield Road Basin Outfall Improvements Project
- Pollowy, Tim, RLA** | Hey and Associates, Inc. | 1B A Streambank Stabilization/Restoration Retrospective
- Pollowy, Tim, RLA** | Hey and Associates, Inc. | Field Trip to Fullersburg Woods & Graue Mill Dam Removal/Salt Creek Restoration Project
- Popa, Cristina, PE** | Arcadis | 2C Developing an Actionable Stormwater Platform: Digital Technology Applications
- Pracht, Andrea, PE, CFM** | HR Green, Inc. | 5C Combined Sewer Separation Master Planning in the City of Elgin
- Qasem, Karoline, PhD, PE, PMP, CFM** | Fehr Graham | 4C 2D Modeling Meets Real-World Flexibility: Managing Regulatory Challenges at the Geneva Fox River Crossing
- Raimondi, Ellen** | Gary R Weber Associates | 2B Early Planning for Wetlands
- Ray, Conner, EIT** | V3 Companies | 1C XP-SWMM vs ICM vs HEC-RAS 6.6: which model to choose?
- Reddy, Jason, PE** | IDNR | 4D Many Hands Make Light Work: How Multi-Agency Collaboration can affect real change
- Regnery, Andrew, PE** | V3 Companies, Ltd. | 5A The Golden Age of Golf Course Stormwater Management
- Rooks-Lopez, Jennifer** | Kane County FPD | 4B Carpentersville Dam Removal
- Rotherham, Aaron** | IDNR - Office of Water Resources | 4B Dam Modification Alternatives and Sediment Handling for North Aurora Dam
- Semlow, Courtney, PE, CFM, ENV SP** | Craftwater | 5A A Tale of Scale Long-Term Thinking to Address Big Stormwater Problems in L.A.
- Skuodas, Dave, PE, CFM, LEED AP** | Mile High Flood District | Tuesday Plenary Session
- Skuodas, David, PE, CFM, LEED AP** | Mile High Flood District | 3D The Subtle Art of Being a Good Owner Parts 1 & 2
- Stelle, Jon, PE, CFM** | Hanover Park | 1D Collaboration for the Win: Springingsguth Corridor/West Branch DuPage River Flood Control and Restoration
- Strack, Alex** | Baxter & Woodman, Inc. | 1B Urban Stream Restoration: Confluence of Ecology and Engineering

**Sucoe, Marilyn, CFM** | Verisk/ISO | 2A Repetitive Loss Area Analysis for CRS Purposes

**Tingle, Darnell** | United Congregations of Metro East. | 4D Addressing Flooding Disparities in Black Communities: The Crisis in Greater East St. Louis

**Wadia, Seema** | Metro Strategies Group | 3B Climate Resiliency Planning for Communities

**Waldron, Mike, PE** | Strand Associates, Inc. | 1D Flood Control Partnerships Overcome Inadequate Stormwater Infrastructure in Winnetka

**Wardynski, Brad, PE** | Craftwater | 5A A Tale of Scale Long-Term Thinking to Address Big Stormwater Problems in L.A.

**Wenzel, Sarah, PE, CFM** | Baxter & Woodman | D2 My IAFSM

**Wilford, Anne, CFM** | Kane County Dept of Environmental and Water Resources | 5C Updating the Countywide Natural Hazard Mitigation Plan

**Wolterstorff, Greg, PE** | V3 Companies | 2C AI in the AEC Industry: Overview and Use Cases

**Wong, Brandon** | Hyfi | 5C Building a flood warning system in Chicago using insights from New Orleans

**Woolford, Kurt, PE, CFM** | Lake County Stormwater Management Commission | 4A Reducing Stormwater Discharge in the North Branch of Chicago River Lake County

**Wright, Annie** | Metropolitan Water Reclamation District of Greater Chicago | 2D Bridging the Gap: Effective Communication Between Engineers and the Public

**Zimmerman, Steve** | Baxter & Woodman Natural Resources | 1B Urban Stream Restoration: Confluence of Ecology and Engineering

# YOUNG PROFESSIONALS SCHOLARSHIP RECIPIENTS



**Amrit Agarwal**

Hello, I'm Amrit Agarwal, a Civil Engineering student at the University of Illinois Urbana-Champaign. I'm passionate about designing sustainable solutions to shape the future of construction. Outside class, you'll often find me mixing music or playing the drums, inspired by the energy and creativity that rhythm brings. As an avid runner, I relish pushing my boundaries and tackling new challenges to stay active. These pursuits help me maintain a balance between my academic and physical interests. Ultimately, I hope to use my engineering knowledge to spark meaningful and lasting change in the world.

**Name: Mohammad Ahmadi Gharehtoragh**

Bio: My name is Mohammad, and I am a third year PhD student at Purdue University. I did my bachelor and master in Civil Environmental Engineering and now i am doing my PhD in Industrial Engineering. My research interests are Hydrology, Flood Risk Mitigation, Surrogate Modeling, Deep learning. I am deeply interested to solve the complex environmental problems using machine learning. Currently my project is about using surrogate modeling to predict storm surge and wave over evolving landscapes.



**Name: Anjanette Francisco**

Bio: I'm a senior at University of Illinois Chicago (UIC) graduating in May with a bachelor's in Civil Engineering. I recently passed the FE. I am currently interning with HR Green's water group in Aurora and will be working with them full-time starting in the summer.

**Jenni Nugent**

Jenni Nugent is a PhD candidate at the University of Illinois Urbana-Champaign in the Department of Civil and Environmental Engineering (Water Resources Engineering and Science area). As a member of the Stillwell Research Group, she studies embedded resources accounting in a spatial and temporal context. Her doctoral research focuses on quantifying the water footprint of electricity generation and modeling how this water is transferred virtually between regions over the electric grid. She will be joining Baxter & Woodman as a Water Resource Engineer in May.



# IAFSM AWARDS LUNCHEON

---



## *Exhibit South*

Wednesday, March 12, 2025

Noon - 1:30 pm

### **French and Mary Lu Wetmore Award for Lifetime Achievement**

This award is the IAFSM's highest honor. It is reserved for outstanding longtime floodplain managers. These individuals' long-term contributions have made a noticeable impact on floodplain and stormwater management efforts in the State of Illinois. This award is not always given on a yearly basis.

### **Floodplain Manager of the Year**

Recognizes outstanding individual efforts and contributions at the local level in floodplain management.

### **Outstanding Service**

Awarded to an IAFSM officer, a Federal, State, or Local Official, or a consultant who has gone above and beyond normal expectations and duties to promote or encourage IAFSM goals.

### **Stormwater Management**

Awarded to an individual or group who have improved Stormwater management or reduced urban flood risks through creative engineering, regulatory measures, or other approaches.

### **Mitigation**

Given to an individual or community that has encouraged flood hazard reduction through a buyout program, retrofitting, preparation of a mitigation plan, or other similar mitigation efforts.

### **Journalism or Public Outreach**

Given to a media outlet that has produced flood-plain or stormwater management special features during the year. The award can include individuals or agencies who have contributed to outreach and public awareness of floodplain or stormwater management issues.

### **Legislation**

Honors Illinois law makers or local officials for their efforts in floodplain issues. The award can also be given to an individual who makes extraordinary efforts to encourage the passage of legislation or to a community that has adopted unique local regulations that promote floodplain management or flood damage reduction.

### **Young Professionals**

This award is to recognize the professional contributions of younger members.

# PAST IAFSM AWARDS

## French & Mary Lu Wetmore Award for Lifetime Achievement

French Wetmore  
Phil Peters  
Gilbert White  
James Lee Witt  
Mike Klitzke  
Mike Buckley  
Matt Miller  
Linda Neely  
Jan Horton  
David Schein  
Christopher Burke  
Larry Larson  
Lou Sidell  
Don Vonnahme  
Rich Roths  
Pat Glithero  
Sally McConkey  
Paul Osman  
P. Kay Whitlock  
Matt Wahl  
Molly O'Toole  
Karen C. Kabbes

## Legislative

David Koehler

## Young Professional

Chris Hanstad

## Youth

Girl Scout  
Brownie  
Troop #1106

## Floodplain Manager of the Year

Mike Klitzke  
NIPC  
Don Hey  
Vil. Plainfield  
J. Gibbons  
Will County  
17 CRS Communities  
Karen Hensley  
Rita Krashaar  
SSBOA  
BOCA

Vil. of Shorewood  
Adams Co. Highway Dept.  
Vince Parisi  
S. Suburban Mayors & Mgrs.  
College Park  
Diane Gallagher  
Ray Nees  
DuPage Co.  
Bud Peters  
Fred Block  
Scott Cofoid  
Jennifer Hughes  
Mike Prough  
Jeff Denny  
Twyla Waring  
Greg Thorpe  
Jersey Co. Zoning Dept.  
Andrew Braun  
Mike Sutfin  
Chad Murray  
City of Metropolis  
Lake County SMC  
Mary Lou Kalsted  
Bob Mack  
Dallas Alley  
Thom Weber  
Doug Moslehi  
Marilyn Sucoe  
City of Ottawa  
Jersey County  
Joanna Colletti  
Paul Kruse  
Emily Grimm  
Paul Kendzior  
Julie Lomax

Andrew Braun  
Mike Sutfin  
Chad Murray  
City of Metropolis  
Lake County SMC  
Mary Lou Kalsted  
Bob Mack  
Dallas Alley  
Thom Weber  
Doug Moslehi  
Marilyn Sucoe  
City of Ottawa  
Jersey County  
Joanna Colletti  
Paul Kruse  
Emily Grimm  
Paul Kendzior  
Julie Lomax

## Mitigation

Peoria County  
Vil. River Grove  
Thebes  
CRS Task Force  
Des Plaines  
South Holland  
FEMA Region V  
IDNR/OWR  
IEMA  
NIPC  
Mt. Prospect  
Jan Horton  
DuPage County  
City of Ottawa

IMAG  
Gene Anderson  
E. Stuart Richter  
Lake County  
Kane County  
Park Forest  
Linda Wheeland  
City of Grafton  
City of Elgin  
City of Lisle  
Russel "Rusty" Rickert  
Machesney Pk.  
SIU Nat. Hazards Research Group  
City Champaign  
Molly O'Toole  
City Wood Dale  
Paul Miller  
Vill. Oquawka  
City Keithsburg  
John Duddles  
Jeff Denney  
City of Elmhurst  
DuPage County  
Kristie DeBrun  
Lake Co. Stormwater Mgmt. Commission  
Ron Davis

## Stormwater Management

Butterfield Creek Steering Comm.  
Chicago Botanic Gardens  
NIPC  
DuPage Co. SMC  
The Conservation Foundation  
Metro-East Stormwater Committee  
City of Moline  
S. Suburban Mayors & Mgrs.  
Kane Co.  
Vil. Palatine  
Mike Fruth  
Scott Goldstein  
Gary Jereb  
Brian Eber  
Tri-Co. Regional Planning Comm.

Vil. Frankfort  
Vil. Montgomery  
Dundee Twp.  
Darren Olsen  
V3 Companies of Illinois  
City of Rockford  
RainReady Program  
City of St. Charles  
Village of Downers Grove  
Village of Glenview  
Vill. Bensenville  
Metropolitan Water Reclamation District of Greater Chicago  
Vil. Wilmette  
City of Batavia

## Outstanding Service

H. Poertner  
Neil Fulton  
David Schein  
Rich Roths  
Mike Klitzke  
Karen Kabbes  
French Wetmore  
Brad Brink  
Susan Vancil  
Mary Lu Wetmore  
Paul Osman  
Sally McConkey  
Cleighton Smith  
Vince Parisi  
Ron Davis  
Don Glondys  
Kay Whitlock  
Rich Slevin  
Mark Hoskins  
E. Stuart Richter  
Jennifer Maercklein  
Hank DeHaan  
Matt Hunn  
Sara Harbaugh  
Matt Wahl  
Amanda Flegel  
Loren Wobig  
Matt Wahl  
Shauna Urlacher

Mike Sutfin  
Eric Gil  
Adam Blumstein  
Steve Altman  
Dallas Alley  
Sarah Wenzel

## Journalism or Public Education

Daily Herald  
J. Crawford  
D. Silverman  
Southtown Economist  
Highland Park Lakefront Task Force  
Chicago Tribune  
The Press, Addison Edition  
Dennis Dreher  
Susan Vancil  
PORTA H.S.  
S. Suburban Mayors & Mgrs.  
Sarah Shipley  
Chicago Wilderness  
Terry Hillig  
City of Ottawa  
Vil. S. Holland  
River Action  
Harriet Fessling  
Hal Sprague  
Ctr. for Neighborhood Technology  
Mary Mitros  
WUIS, NPR  
Illinois  
Anthony Heddlesten  
WBEZ  
Rob Moore  
Patrick O'Connell  
Erin Conley  
Marilyn Sucoe

## **SPEAKER BIOGRAPHIES**

### **Stephen Altman, IDNR-OWR**

Steve currently serves as Manager of OWR's Division of Resource Management, which includes Downstate Regulatory Programs, Northeastern Illinois Regulatory Programs, Dam Safety Program, Lake Michigan Programs, and Statewide Programs. The Division is responsible for all permitting authority under OWR, Illinois' participation in the FEMA's National Flood Insurance Program, and the State of Illinois-Funded Flood Mitigation Buyout program. Steve holds a Bachelor's Degree in Civil Engineering from Bradley University and is a licensed professional engineer in the States of Illinois, Nevada, and Texas, and is a Certified Floodplain Manager (since 2003). Steve is also a Past Chair of IAFSM.

*Session 3A.2*

### **Kenneth N. Anderson, Jr., CFM, CPRP, CPESC, CPSC, Engineering Resource Associates, Inc.**

Ken Anderson started a new chapter in April 2022 as an Environmental Project Manager for Engineering Resources Associates, Inc. (ERA), and now is the Business Development Coordinator for ERA. Prior to this transition Ken worked as Chief of Planning and Operations for the Forest Preserve District of Kane County for over 3.5 years. Before this Ken spent 30 years working for the County of Kane in various positions from Director of the Kane County Department of Environmental and Water Resources to a Soil Scientist/Planner with the Kane County Development Department. He is blessed with a beautiful wife and 3 daughters, 1 still in college. He has a Bachelor of Science in Watershed Management and Natural Resource Management with a minor in Soil Science from the University of Wisconsin - Stevens Point. He enjoys fishing, golfing, leading a community group at his church, spending time in the Lord's creation, hanging with my neighbors and HT time.

*Session 3D.1*

### **Kira Baltutis, U.S. Army Corps of Engineers, Chicago District**

Ms. Kira Baltutis is an Interdisciplinary Community Planner and District Tribal Liaison for the U.S. Army Corps of Engineers, Chicago District, within the Economic Formulation Section. She acts as a technical lead on teams that undertake various water resource challenges to support federally recognized Indigenous Tribes and communities addressing flood risk management, coastal resiliency, and ecosystem restoration. Ms. Baltutis is also Silver Jackets coordinator for the Chicago District, partnering with federal, state and local agencies to enhance preparedness, mitigation, response and recovery efforts regarding flood risk. Ms. Baltutis has been working in community planning and emergency management since 2019. Prior to receiving her Master's degree in Urban Planning and Policy from the University of Illinois at Chicago, she worked in international development supporting a variety of disciplines, including urban development and water resource management.

*Session 5B.3*

### **Emily Basalla, P.E., CFM, Clark Dietz, Inc.**

Emily Basalla brings over two decades of engineering leadership and expertise to her role at Clark Dietz. As a Regional Director based in Kenosha, WI, Emily has spearheaded numerous stormwater management and municipal design projects across Illinois and Wisconsin. Her dedication to improving flood resilience and infrastructure performance extends beyond her project work. Emily is an active member of IAFSM, WAFSCM, and APWA Chapters in both states, reflecting her commitment to advancing the field and connecting with peers. Emily earned her Bachelor's in Civil Engineering from the University of Missouri-Columbia and has resided in Illinois for 19 years, further grounding her in the region's unique challenges and opportunities from Chicagoland to Milwaukee.

*Session 3C.3*

### **Santos Batista, DuPage County**

Santos Batista joined DuPage County in late 2023. He works as a Senior Civil Engineer on various aspects of DuPage County's Storm Water Management program including Floodplain Mapping, Water Quality studies and development permits which include reviewing various types of Hydrology and Hydraulic models. Prior to joining DuPage County, Santos worked 31 years at Illinois Department of Transportation (IDOT). At IDOT, he worked 2 years as a Construction Engineer, 1 year in Plats and Legal, 3 years as a Geotechnical Engineer, and 25 years as a Hydraulics Engineer, working on various drainage studies for roadway projects and developments. Santos holds a Bachelor of Science degree from the City College of New York School of Engineering, part of the CUNY system.

*Session 5D.1*

## **SPEAKER BIOGRAPHIES**

### **James Bernahl, PE, CFM, Village of Winnetka**

James Bernahl is currently the Director of Engineering for the Village of Winnetka, Illinois. James joined Winnetka in 2014, prior to that James was the Public Works Engineering Division Manager for the City of St. Charles, and the Assistant Village Engineer for the Village of Deerfield. Combined, James has over thirty years of municipal experience. James graduated from the Illinois Institute of Technology (IIT) as a Civil Engineer, and obtained a master's degree in Public Administration from IIT/Kent Law School. James is a licensed Professional Engineer and a Certified Floodplain Manager (CFM) in the State of Illinois. James is the Past President for the APWA Fox Valley Branch and remains heavily involved with various municipal organizations.

*Session 1D.2*

### **Cloud Bogart, Forerunner**

Cloud Bogart is a Business Development Representative at Forerunner, where she connects with communities and attends conferences to share innovative solutions for floodplain management. Growing up near the coast, Cloud developed a passion for climate resilience and adaptation. She is eager to learn about both coastal and riverine flooding and how communities can better prepare for these challenges. In her free time, Cloud enjoys exploring the coast of Maine.

*Session 2D.2*

### **Sarah Burgess, PE, CFM, Hey and Associates, Inc.**

Sarah Burgess is a civil engineer at Hey and Associates, Inc. with nine years of professional experience. Her work includes hydrologic and hydraulic analyses of riverine and urban drainage systems, permitting, reviews, and stormwater management planning and design. She is skilled in a variety of advanced engineering modeling software programs including HEC-HMS, HEC-RAS, FEQ, XP-SWMM (including XP-SWMM 2D), and HSPF. She has experience using GIS for various analytical purposes including floodplain mapping and overland flow path analyses. She graduated with a Bachelor of Science degree in Civil Engineering from the University of Notre Dame. She is a registered Professional Engineer in Illinois and a Certified Floodplain Manager in Illinois.

*Session 4C.2*

### **Michael Burke, PE, CFM, Christopher B. Burke Engineering, Ltd.**

Michael Burke, PE, CFM, is a Senior Water Resources Project Manager at Christopher B. Burke Engineering, Ltd. in Rosemont, Illinois. Michael graduated from Southern Illinois University, Carbondale with a BSCE in 2009, and a MSCE in 2011. As a water resources engineer with over 13 years of experience, he is responsible for hydrologic analyses, steady and unsteady hydraulic analyses, FEMA map revisions, and design of conveyance systems. Michael has performed many flood studies using HEC and SWMM 2D modeling software, and designed improvement projects to help alleviate flooding problems. He has taught courses in the use of HEC-HMS and HEC-RAS for ASCE, the US Army Corps of Engineers, and IDOT. He has experience with Geographic Information Systems (GIS) to assist with the development and representation of 1D and 2D stormwater models. Michael is also the consulting Village Engineer for the Village of Deer Park and is active in APWA Lake Branch.

*Session 1D.1*

### **Wes Cattoor P.E., CFM, IDNR – Office of Water Resources**

Wes serves as the Section Chief of Engineering Studies in the Office of Water Resources at IDNR. His responsibilities include overseeing flood control, dam removal, flood surveillance, dam operations and water supply planning programs in Illinois. He has been with the Office of Water Resources for 18 years, with three prior years in consulting. Wes has served as a lead on multiple dam removal projects including Blackberry Creek, Danville, and Ellsworth Park. He has undertaken many past and current studies such as Montgomery Dam, Petersburg Dam, and various Des Plaines and North Branch dams. In addition to these, he has provided technical assistance on other dam removals and modifications. Wes currently serves as the IDNR project lead for the USACE 519 initiative. He is a graduate from Missouri University of Science & Technology, a Professional Engineer in Illinois, and a Certified Floodplain Manager.

*Sessions 3B.1, 4B.1, 4B.2*

## **SPEAKER BIOGRAPHIES**

### **Scott Cofoid, CFM, Verisk/ISO**

Scott Cofoid is currently the Senior Technical Coordinator for the National Flood Insurance Program's (NFIP's) Community Rating System (CRS). He works for Verisk/Insurance Services Office (Verisk/ISO) on behalf of the Federal Emergency Management Agency (FEMA) to research, develop and implement changes/improvements to the Program while maintaining consistency and quality in the Program. He also oversees the Central Review process that reviews the annual CRS recertifications and over 15,000 ECs annually. Previously, he was an ISO/CRS Specialist that worked with CRS communities in FEMA Region V, Region VII and Region VIII. Prior to joining ISO, he worked for LaSalle County, IL and Utica, IL as the local official responsible for floodplain, subdivision and development issues.

*Sessions 2A.1, 2A.2*

### **Erin Conley, CFM, Illinois Department of Natural Resources**

Erin Conley is the State Floodplain Coordinator for Illinois. In that role she serves as the contact person between communities and FEMA, and provides support and training to communities to assist with the enforcement of their floodplain development ordinances. Erin has a BA in Plant Biology from Southern Illinois University, Carbondale, and over 25 years of environmental regulatory experience working for the State of Illinois.

*Sessions 1A.1, 1A.2, 1A.3, 3A.2*

### **Elli Cosky, Metro Strategies Group**

As a trained urban planning professional, Elli has over 16 years of experience with community engagement, transportation and land use planning. She has the ability to take the complex and distill it to understandable information for agency leaders, the public, key stakeholders and interested parties. Elli also has a strong knowledge base in sustainability and climate resiliency issues, bringing a holistic perspective to projects. Having led and managed public and community engagement for major planning and infrastructure projects in the region, Elli has extensive experience with engaging and obtaining input from diverse and underrepresented groups.

*Session 3B.3*

### **Anna Culcasi, PE, CFM, Hey and Associates, Inc.**

Ms. Culcasi has 20 years of professional experience in civil and water resources engineering. Her areas of expertise include hydrologic and hydraulic modeling practices and stormwater infrastructure design. She has experience in developing design plans, specifications, and cost estimates for water resources projects, as well as performing hydrologic, hydraulic, and floodplain mapping studies. She is proficient in a variety of advanced engineering modeling software programs including XPSWMM, HEC-HMS, HEC-RAS, and GIS. She received her Bachelor of Science in Civil/Environmental Engineering from Michigan State University.

*Session 4C.2*

### **Cecily Cunz, AICP, Baxter & Woodman**

Cecily Cunz is an AICP-certified environmental planner with Baxter & Woodman. She has become a recognized expert in watershed and green infrastructure planning, helping communities navigate complex environmental challenges to achieve meaningful restoration outcomes. Cecily's track record of success is underscored by her ability to lead diverse stakeholder groups in driving impactful environmental improvements within their localities. Her dedication to sustainable solutions has resulted in significant contributions to various projects that have left a positive mark on the communities she has worked with. Cecily has over a decade in planning and policy experience, leading large stakeholder groups to protect and restore their natural resources. She has worked with urban and agricultural communities across the Midwest to develop nearly 20 watershed-based plans addressing nonpoint source pollution and to find funding to implement meaningful restoration.

*Session 4A.3*

### **Brian Daly, Cook County Department of Environment and Sustainability**

Brian Daly is a Program Manager with the Cook County Department of Environment and Sustainability, where he manages programs that advance Cook County's goals to support sustainable and resilient communities. He is currently working with community partners in suburban Cook County to create resilience hubs and to develop and implement resiliency plans to help them prepare for extreme events and thrive in a changing climate. Prior to joining Cook County, he worked at the Chicago Metropolitan Agency for Planning (CMAP), the official regional planning organization for northeastern Illinois, where he coordinated development of local plans and regional climate strategies.

*Session 3B.3*

## **SPEAKER BIOGRAPHIES**

### **Lacey Davis, M.S., American Rivers**

Lacey is an urban hydrologist, environmental educator, and community organizer. She has a deep passion for science communication and is a committed fighter for environmental justice working to uplift equitable access to the rivers that hold us all. At American Rivers, Lacey coordinates the Natural Floodplain Functions Alliance, the Illinois Floodplain Community Justice Network, and implements the 50 State floodplain strategy. Lacey has a M.S. in Water Science and B.S. in Geosciences from Georgia State University.

*Session 3A.1*

### **George DeTella, Integrated Solutions Consulting, Inc.**

Mr. DeTella is a professional with a career that spans four decades in both the public and private sectors. His experience includes policy, planning, and operations, with years of hands-on work. Since joining ISC in 2015, he has led successful Emergency Management and Public Health engagements, including program development, threat and capability assessments, and emergency response and recovery planning. He engages internal and external stakeholders while integrating relevant standards and federal benchmarks into project deliverables. Mr. DeTella previously served as the DuPage County Health Department Director of Business Administration. His background includes experience with the Illinois Department of Corrections, culminating as the Bureau of Operations Associate Director, with responsibilities for some 15,000 personnel and an annual budget exceeding a billion dollars, and provided legislative testimony on agency operations, budget, and program initiatives.

*Session 5C.1*

### **Deanna Doohaluk, The Conservation Foundation**

Deanna Doohaluk is a Senior Watershed Project Manager with The Conservation Foundation. She has over 20 years' experience in water resource management. Ms. Doohaluk serves as project manager of the Master Plan for Salt Creek at Fullersburg Woods, which includes the removal of the Graue Mill dam and the restoration of 1.25 miles of Salt Creek. She also worked on the development of the Nutrient Implementation Plan, aimed at identifying phosphorus reductions by point source and nonpoint sources, and other measures to improve the water quality in the DuPage River and Salt Creek watersheds. Ms. Doohaluk has a Masters of Public Health from the University of South Carolina.

*Fieldtrip*

### **Sean Dorsey, Village of Mount Prospect**

Sean Dorsey is the Director of Public Works at the Village of Mount Prospect. Sean has been with Mount Prospect Public Works for 34 years and has been Director for 14 years. He oversees a staff of 70 employees who serve the Village's 54,000 residents. Sean has guided the successful completion of numerous capital improvement projects throughout his tenure, including the completion of Levee 37 to prevent Des Plaines River overbank flooding, and the associated Levee 37 interior drainage improvements.

*Session 1D.1*

### **Amanda Eshelman, M3 Engineering Group**

Ms. Eshelman is a veterinarian-turned-future-engineer with a background that includes environmental science and conservation research. She currently assists with hydraulic modeling and roadway projects. She has a BS in Biology and a Doctor of Veterinary Medicine degree from the University of Missouri Columbia and is currently pursuing a MS in Environmental Engineering at Missouri S&T.

*Session 1C.1*

### **Kate Evasic, Chicago Metropolitan Agency for Planning**

As the Climate Resilience Program Lead at the Chicago Metropolitan Agency for Planning (CMAP), Kate focuses on increasing regional resilience to climate change and preserving one of the region's greatest assets - its fresh water. Her work advances climate resilience through stakeholder coordination, data analysis, policy development, and long-range planning. Kate is currently managing two regional efforts - the Transportation Resilience Improvement Plan for northeastern Illinois and the Comprehensive Climate Action Plan for Greater Chicago. Kate holds a Master's of Urban Planning and Policy from the University of Illinois at Chicago.

*Session 5B.1*

## **SPEAKER BIOGRAPHIES**

### **Mary Beth Falsey, DuPage County**

Mary Beth Falsey is the Water Quality Supervisor for DuPage County Stormwater Management. She's been with DuPage County for over 20 years. She works on various aspects of stormwater quality including overseeing the MS4 permit program for DuPage County and 41 co-permittee communities, developing and implementing Watershed-Based Plans, leading the County's spill response team, and managing DuPage County's water quality projects. Mary Beth has a master's degree in Geography, specializing in Natural Environmental Systems and Soil Science, from Northern Illinois University. She holds several certifications including Certified Floodplain Manager (CFM), Certified Professional in Erosion and Sediment Control (CPESC), and Certified Erosion, Sediment and Stormwater Inspector (CESSWI). In her free time, she enjoys reading, hiking, wakesurfing, and spending time with her cat.

*Session 5D.1*

### **Daniel M. Feltes, PE, CFM, Metropolitan Water Reclamation District of Greater Chicago**

Daniel M. Feltes, P.E., CFM serves as a Principal Civil Engineer with the Metropolitan Water Reclamation District of Greater Chicago (MWRD), with 22 years of experience working in regulating land development and stormwater management. Dan manages the MWRD's Local Sewer Systems Section Permit Review Unit, within the MWRD's Engineering Department. Dan received a B.S. in Civil Engineering from Iowa State University and a Master's in Project Management from Northwestern University. He is a registered Professional Engineer in the State of Illinois and a Certified Floodplain Manager.

*Session 3B.2*

### **Richard Fisher, Metropolitan Water Reclamation District of Greater Chicago**

Richard Fisher is a Principal Civil Engineer within the Stormwater Division of the Metropolitan Water Reclamation District's Engineering Department. He oversees many of the District's Stormwater Masterplanning efforts and Pilot Studies, administers the District's Flood Prone Property Acquisition Program, and Stormwater Partnership Program. Mr. Fisher has over 30 years of professional experience planning, designing, and managing public/private capital improvement projects. He received his bachelor's degree from the University of Illinois at Chicago and Master of Engineering from the Illinois Institute of Technology.

*Session 2D.1*

### **Brandon Flunker, P.E., CFM, Clark Dietz, Inc.**

Brandon Flunker is a Project Manager with 12 years of experience in municipal infrastructure design. Based in Milwaukee, WI, Brandon is adept at crafting tailored solutions for water main, storm and sanitary sewers, and road reconstruction projects. A graduate of the University of Wisconsin-Milwaukee, Brandon earned his Bachelor's in Civil Engineering with a focus on Environmental and Water Resources. His commitment to engineering excellence shines through in every project he undertakes.

*Session 3C.3*

### **Jeff A. Fuller, PE, U.S. Army Corps of Engineers, Chicago District**

Jeff Fuller is a hydraulic engineer with the Chicago District, Corps of Engineers. He has provided support to the Chicago District's Lake Michigan Diversion Accounting (LMDA) Program for over 15 years, the last seven of which as its program manager. Jeff received his B.S. in Civil Engineering from the University of Illinois at Chicago and his M.S. in Civil Engineering from Purdue University. He is also a registered Professional Engineer in the State of Illinois.

*Session 4A.2*

### **Logan Gilbertsen, P.E., CFM, HR Green, inc.**

Logan Gilbertsen is a Regional Manager for the Illinois Water Resources team at HR Green with 13+ years' experience. He specializes in Water Resources and Environmental Engineering. He works with a wide variety of projects ranging from stream bank stabilization and naturalization to the design of storm water Best Management Practices (BMPs) in urban and rural settings. Logan has a passion for improving our natural resources, he participates in Conservation@Home where he and his kids maintain raingardens and bioswales in their yard.

*Sessions 1B.2, 5D.2*

### **Jeff Guerrero, PE, WBK Engineering and Village of Schaumburg**

Jeff is a water resources engineer with 17 years of experience working to restore streams and rivers and manage stormwater. He has managed projects that include streambank stabilization, dam removals, fish passage, green stormwater infrastructure, and floodplain reconnection throughout the Midwest.

*Session 1D.3*

## **SPEAKER BIOGRAPHIES**

### **Chris Gutkowski, P.E., CFM, Clark Dietz, Inc.**

Chris Gutkowski is a Water Resource Engineer with nearly two decades of experience tackling complex stormwater challenges. At Clark Dietz, he specializes in watershed master planning, floodplain mapping, stormwater detention and conveyance design, levee restoration, and hydrologic/hydraulic modeling. Chris's extensive portfolio also includes drainage designs from DOT bridges to local infrastructure projects. Beyond his technical acumen, Chris is a leader in the engineering community, having served eight years on the ASCE Central Illinois Section board, including two terms as president. A graduate of the University of Illinois at Urbana-Champaign, Chris holds both a Bachelor's in Environmental Engineering and a Master's in Civil Engineering.

*Session 3C.3*

### **Lee Hauser, PE, Geosyntec Consultants**

Lee Hauser is a water resources engineer at Geosyntec Consultants with over nine years of experience providing significant design support with green infrastructure and other urban BMPs, stormwater management and flood risk analysis, and climate risk assessments across the Midwest. He integrates detailed hydrologic and hydraulic modeling with stormwater planning, flood relief, and engineering design projects. Lee is adept at using stormwater modeling tools (SWMM, HEC-HMS, and HEC-RAS) to show existing and projected flooding extents due to increased rainfall as a result of climate change, as well as Geographic Information Systems (GIS) and AutoCAD to provide conceptual figures and engineering plan sets for urban gray and green infrastructure stormwater solutions to gain stakeholder feedback.

*Session 3B.3*

### **Sarah Hunn, PE, CFM, DuPage County**

Sarah is passionate about Stormwater Management and Environmental Conservation. Frequently engaging with stakeholders, policymakers, and the public to raise awareness about the importance of stormwater management and the need for collective action to address water-related challenges. The Director of Dupage County Stormwater Management, she has been with County for nearly 20 years. Sarah is a graduate from the Civil Engineering Program at Michigan Technological University.

*Session 5C.1*

### **Emily Poynter Jenkins, PhD, PE, CFM, Farnsworth Group**

Emily Poynter Jenkins is the Water Resources Group Lead and Champaign Civil Manager at Farnsworth Group. She earned a civil engineering degree from UIUC (B.S.), ecological engineering degree from University of Maryland (M.S.), and a Ph.D. in agricultural and biological engineering from UIUC. Emily was a "Forty under 40" recipient in Champaign County in 2021. She specializes in sustainable and ecological designs, such as stream restorations and bank stabilizations, green infrastructure, and multi-functional stormwater detention.

*Sessions 3C.1, 3C.2*

### **Paolla Kovalsky, PE, M3 Engineering Group**

Ms. Kovalsky is a Project Engineer with experience in infrastructure planning and design for roadways, stormwater and stream restoration. She has worked on project concept and feasibility analyses, data collection, production of preliminary and final design plans, and preparation of construction estimates. She is also a Geospatial Analyst/Geospatial Technician with experience in GIS application programming, mapping and decision analysis. She is adept at a variety of engineering programs, including Microstation, HEC-RAS, SWMM, CityWorks, AutoCAD, and Python.

*Session 1C.1*

### **Alex Krzmarzick, PLA, ASLA, Stantec Consulting Services Inc.**

Alex is a Landscape Architect and Urban Designer committed to creating socially and ecologically sustainable public spaces across multiple scales. Alex is currently working on several brownfield development projects in urban environments, reconnecting the community to these spaces. Alex has managed the design of large-scale and complex projects, including community wide master plans, light rail and bus transit corridors, urban plazas and streetscapes, and parks, trails, and open-spaces. Alex earned her Master of Landscape Architecture degree from the University of New Mexico.

*Session 2B.3*

## **SPEAKER BIOGRAPHIES**

### **Grace Kurcab, PE, CFM, Farnsworth Group**

Grace Kurcab, P.E., CFM is a Water Resources Engineer at Farnsworth Group in Champaign, Illinois. Grace graduated from the University of Illinois at Urbana-Champaign with a Bachelor of Science in Agricultural and Biological Engineering, and has 6 years of experience in a variety of water resources, drinking water, and wastewater projects, including hydrologic and hydraulic modeling, floodplain modeling, pump stations, and drinking water wells. She has experience with projects during all phases of work including planning, study, design, permitting, bidding, and construction.

*Session 3C.2*

### **Rebecca Leitschuh AICP, Stantec Consulting**

Rebecca is a certified planner with broad experience in hazard mitigation and climate adaption, risk assessment, emergency management, land use planning, outreach, and project management. She began her career in resilience planning after her experience as an evacuee from Hurricane Katrina in New Orleans. She then held positions in local, state, and federal government in hazard mitigation, community development, and disaster recovery roles. Rebecca is now leveraging that experience to help communities across the country to overcome barriers and advance resilience.

*Session 5B.2*

### **Garrett Litteken, P.E., CFM, Hanson Professional Services Inc.**

Garrett Litteken is a water resource engineer with Hanson Professional Services in Springfield, IL. Garrett received his bachelor's and master's degrees in civil and environmental engineering from Southern Illinois University Carbondale. He has over 11 years of professional experience in water resource engineering for government and private clients. Garret has performed hydraulic and hydrologic investigations for a number of projects including wind/wave analysis, breach analysis, scour analysis, modeling 2,200 linear feet of the Cedar River flood control levee system, and CFD modeling of SFWMD spillway works. Holds a BS and MS in Civil Engineering. His experience includes multi-scale HEC-HMS hydrologic modeling, HEC-RAS (2D), AdH 2D, SRH 2D, ACES/STWAVE, and Flow-3D (CFD) hydraulic modeling.

*Session 1C.2*

### **Jennifer Maercklein, PE, CFM, V3 Companies**

Jennifer Maercklein, P.E., CFM, V3 Companies, is a Project Manager within V3's Water Resources Group. Jennifer has extensive experience managing complex project teams of engineers, scientists, surveyors and technical experts. She is a great communicator and strives to keep her team and clients fully informed of the progress on a project. She has over 25 years of experience performing hydrologic and hydraulic analyses associated with watershed studies, roadway projects, site developments, and mitigation projects; modeling experience including unsteady, dynamic and three-dimensional models; permitting experience for local, county, state and federal permits; and preparation of construction documents. She has a degree in Civil Engineering from the University of Wisconsin at Madison.

*Sessions 1C.3, 5A.3*

### **Rishab Mahajan, PE, CFM, BC.WRE, Geosyntec Consultants**

Mr. Mahajan focuses on providing clients with affordable solutions to meet their regulatory obligations through a combination of numerical modeling and data analysis. Over a career spanning more than 14 years, he has worked on and led detailed studies for stormwater and watershed management planning, floodplain permitting, Clean Water Act compliance, site design, watershed analysis, water quality management planning, and floodplain mapping.

*Session 5D.1*

### **Momcilo Markus, Illinois State Water Survey**

Dr. Momcilo Markus recently retired after a 25-year tenure at the Illinois State Water Survey, where he served as a Principal Scientist and Head of the Watershed Science Section. Prior to his time in Illinois, he earned his Ph.D. from Colorado State University in Fort Collins. His career included positions at Northern Water in Loveland, Colorado; the National Weather Service in Silver Spring, Maryland; and Michael Baker Corporation in Alexandria, Virginia. Dr. Markus joined ISWS in January 2000, focusing on statistical hydrology, river nutrients, and hydroclimatology. In recent years, he coauthored ISWS Bulletins 75 and 76, which detail current and future precipitation frequency in Illinois, respectively. He holds the title of Research Associate Professor in both the Department of Natural Resources and Environmental Sciences and the Department of Agricultural and Biological Engineering at the University of Illinois. Additionally, Dr. Markus serves as the Editor-in-Chief of the Journal of the American Water Resources Association.

*Session 3B.1*

## **SPEAKER BIOGRAPHIES**

### **Derrick Martin P.E., CFM, V3 Companies**

Derrick Martin, P.E., CFM, CPESC, V3 Companies, is the Group Manager for V3's Natural Resources Group. Mr. Martin is a licensed Professional Engineer and Certified Floodplain Manager with over 25 years of professional experience. He is involved in the preparation of hydrologic and hydraulic analyses associated with watershed studies, roadway drainage projects, site development floodplain analysis & stormwater management, and existing drainage assessments and remediation. He has significant experience with natural area improvements, including dam removals and creek restoration. He has extensive experience with federal, state and local permitting relative to roadway and site design, floodway/floodplain issues and stormwater management improvements. He has a degree in Civil Engineering from Washington University in Saint Louis, Missouri.

*Session 4B.2*

### **Luke Matteson, StormTrap**

Luke Matteson is a Water Quality Regulatory Specialist at StormTrap and has been in the industry for over 7 years. StormTrap specializes in precast stormwater vaults and water quality devices. His job at StormTrap is to interpret stormwater regulations for clients, assist with design when needed, and gain approvals for StormTrap products in jurisdictions that require it. Luke is also involved in Product Development, and he participated in testing the TrashTrap in accordance with ASTM E3332. Luke is an Environmental Engineer and went to school at the University of Wisconsin - Platteville. In his limited free time he enjoys everything outdoorsy including hunting, fly fishing, camping, and hiking.

*Session 5D.3*

### **Kaitlyn McClain, U.S. Army Corps of Engineers, Chicago District**

Ms. Kaitlyn McClain is the Chief of the Economic Formulation Section within the Planning Branch at the Chicago District, U.S. Army Corps of Engineers (USACE). She leads interdisciplinary and interagency teams to deliver engineering solutions to water resource challenges under a range of study authorities. Prior to becoming Section Chief in December 2024, she held positions within USACE as a Community Planner and Planning Technical Lead. She has a decade of planning and environmental policy experience in federal and state government and the non-profit sector. She received a B.S. in Environmental Management, an M.S.E.S. in Applied Ecology, and an M.P.A. in Sustainability and Sustainable Development from the Indiana University-Bloomington's School of Public and Environmental Affairs.

*Session 5B.3*

### **Terra McParland, PE, CFM, IDNR - Office of Water Resources**

Ms. McParland joined IDNR Office of Water Resources (OWR) in 2019 after working in the consulting field for much of her career. As part of the Engineering Studies Section, one of her duties is as Flood Surveillance Program Manager. She coordinates with the Emergency Operations Center (EOC) during flood events and provides technical assistance when needed. She is the lead OWR contact for the Silver Jackets projects in Illinois, serves as the Flood Damage Mitigation Committee leader for the IL State Water Plan, and sits on the education/engagement working group for IDNR's Climate Action Plan. She obtained her BSCE at the University of Michigan in Ann Arbor in 1990 and decided to forgo the snow and head to Hawaii to complete her MS in Environmental Engineering at the University of Hawaii in 1992. She is a registered professional engineer, certified floodplain manager, and has obtained certifications for the LEED and Envision sustainable design programs.

*Sessions 3B.1, 4B.3*

### **Patrick McPartlan, M.S., Agrowhere, LLC**

Patrick McPartlan is the founder of Agrowhere LLC, a cartography firm specializing in drainage mapping across Illinois, with a focus on Drainage Districts. He holds a master's degree in Cartography/GIS Development and has extensive experience in technical roles with the Kane-DuPage SWCD, and as a Septic Designer with Environmental Design Service. Patrick is highly skilled in water management, stormwater control, and agricultural conservation. Recently hired by the Illinois Association of Drainage Districts to develop the first interactive database of Illinois drainage districts, Patrick combines a deep understanding of drainage systems with advanced mapping technology to support both urban and rural communities. His CPESC certification, Part 107 license, and expertise as a certified septic installer underscore his commitment to precise, practical solutions for complex environmental challenges.

*Session 2C.3*

## **SPEAKER BIOGRAPHIES**

### **Jeffrey L. Mengler, PWS, Hey & Associates**

Jeffrey Mengler is Senior Project Scientist at Hey and Associates, Inc., with almost 40 years experience. He has worked with private, non-profit, and government organizations in the research, management, restoration, protection, and assessment of Midwestern ecosystems, especially wetlands. His work has included NEPA compliance; endangered species recovery, searches, and consultations; wetland permitting; wetland mitigation design/implementation; resource protection plans and assessments; green infrastructure/watershed planning; streambank stabilization and wetland restoration oversight; and interagency/stakeholder coordination. Mr. Mengler began his career in the research department at the Morton Arboretum, worked as a senior biologist in the U.S. Fish and Wildlife Service's Chicago Ecological Services Field Office for 18 years, and joined Hey & Associates in 2010. He continues to serve in leadership roles with conservation organizations in the Chicago region. He holds a B.S. and M.S. in Biological Sciences from Northern Illinois University, and is a certified Professional Wetland Scientist (PWS), a Certified Wetland Specialist (CWS) for Lake and McHenry Counties, and a Qualified Wetland Review Specialist (QWRS) in Kane County, Illinois.

*Session 2B.2*

### **Peter Monko, PE, CFM, Metropolitan Water Reclamation District of Greater Chicago**

Peter Monko, P.E., CFM has over 20 years of experience working in the public sector with a focus on land development and water resource engineering. Peter works in the Metropolitan Water Reclamation District's (MWRD) Local Sewer Systems Section Permit Review Unit, within the MWRD's Engineering Department. Peter received a B.S. in Civil Engineering from the University of Illinois at Chicago and a Master's in Environmental Management and Sustainability from Stuart School of Business at Illinois Institute of Technology. He is a registered Professional Engineer and Certified Floodplain Manager in the State of Illinois.

*Session 3B.2*

### **Eric Neidy, Forest Preserve District of DuPage County**

Erik has worked for the Forest Preserve District of DuPage County since 2001. Primary focus has been on Native Ecosystem Restoration over roughly 15,000 of 26,000 acres of open space in DuPage County. Restoration of wetland, woodland, prairie, and riparian habitats aimed at maximizing biodiversity and increasing water quality and wildlife utilization across all habitats.

*Session Fieldtrip*

### **Thera Novotny, P.E., MBA, PMP, CFM, ENV SP, Stantec Consulting Services Inc.**

Ms. Novotny is a Principal Project Manager with Stantec with over 23 years of experience focused on water resources related projects, including urban stormwater drainage, watershed master planning, streambank stabilization, flood control planning and design, and waterfront engineering. She is currently the Chicago Business Center Practice Leader, steering regional business development initiatives and client services, and cultivating a collaborative team environment. Ms. Novotny received her Bachelor of Science Degree in Civil Engineering from Marquette University in 2001, and her Master of Business Administration from Lake Forest Graduate School of Management in June 2013.

*Session 2B.3*

### **Jarod Oliver, PE, HR Green**

Jarod Oliver is an engineering professional with 19 years of experience in stormwater management, water distribution, geotechnical engineering, and construction management. Jarod has managed a variety of projects involving stormwater master plans, bank stabilization, flood control design, roadway drainage; and storm, sanitary, and water main improvements. Jarod has worked with multiple permitting agencies including local, state, and federal agencies. His current focus is on stormwater master plans and design of flood control projects.

*Session 5C.2*

### **Rebecca Olson, M.S., Olson Ecological Solutions, LLC**

Rebecca Olson is a Senior Ecologist and Certified Wetland Specialist with over 25 years of experience in approaches to modern ecological concerns like green stormwater infrastructure, wetland and stream mitigation, native vegetation restoration, and land protection. She is the founder and president of Olson Ecological Solutions, LLC, and volunteers on committees for the Natural Land Institute and Region 1 Planning Council. Rebecca has a vision of bringing the beauty and function of nature into the built environment so that people can have experiences with nature as part of their daily lives, while balancing our environmental impacts. Rebecca holds a Master of Science in wildlife biology from Colorado State University and a Bachelor of Arts in biology and minor in chemistry from Denison University.

*Session 3C.1*

## **SPEAKER BIOGRAPHIES**

### **Theodis Pace, Illinois NAACP**

Theodis Pace holds a Master's Degree in Education Administration and Supervision from Purdue University and a Bachelor's Degree in Sociology from Lane College, Jackson, Tennessee. He has three children, and is a Retired Employee of the State of Illinois, Department of Human Services, as a Public Service Administrator.  
*Session 4D.1*

### **Erin Pande, ERA and Hanover Park**

Erin Pande is the Environmental Project Manager at Engineering Resource Associates. Erin has over 15 years of experience in environmental services. Her work experience includes wetland delineation and quality assessment; riparian environment assessment; streambank and shoreline stabilization design; natural area mitigation/restoration design; water quality best management practice implementation; and regulatory permitting.  
*Session 1D.3*

### **Tatiana Papakos, CFM, PE, Michael Baker International**

Ms. Papakos is a professional engineer with 24 years of experience in water resources and project management. She heads the Department of Water Resources at Michael Baker's Chicago office, where she leads multidisciplinary teams in water master planning, dam removal, and ecosystem restoration design projects. Ms. Papakos excels in H&H modeling, drainage design, hydraulic studies, floodplain analysis, watershed and stormwater master planning, permitting, best management practices, green infrastructure design, TMDL development, and water quality assessments. She has served as project manager for USACE, US EPA Region V, Metropolitan Water Reclamation District, and Department of Natural Resources agencies overseeing planning and design of civil engineering infrastructure.  
*Session 4C.3*

### **Gary Paradoski, PE, Aqua Vitae Engineering**

Gary Paradoski is President of Aqua Vitae Engineering and Director of Engineering at 2IM Group, which specializes in green infrastructure, natural resources, and water quality. He earned his civil engineering degree from Lawrence Technological University (B.S.) with an emphasis in construction and studied Digital Transformation at the Massachusetts Institute of Technology. Gary has over 30 years of engineering and land surveying experience with projects that include stream stabilization and ecosystem restoration.  
*Session 3C.1*

### **Fernando Pasquel, CPM, PE, Arcadis**

Fernando is a Water Resources Manager with 35+ years of experience developing and implementing resilience, stormwater, and green infrastructure programs. Fernando has coauthored BMP/GI manuals in several states, and has conducted workshops covering funding, planning, designing, and maintaining BMPs. He was also a contributing author of two WEF publications: *User-Fee Funded Stormwater Programs* (2013) and *Green Infrastructure Implementation* (2014) - Financing Strategies Chapter. He also led the Task Force and contributed to chapters of the WEF/ASCE MOP *Urban Stormwater Controls Operations & Maintenance* (2022). He currently serves as Chair of the Resilience Focus Group of WEF's Stormwater Committee. Fernando received B.S. and M.S. degrees in Civil Engineering from Virginia Tech.  
*Session 2C.1*

### **Laura Pellizzari, PE, CFM, HR Green, Inc**

Laura Pellizzari is a Project Engineer for the Illinois Water Resources team at HR Green, with 6 years of experience. She specializes in Water Resources and works primarily on urban stormwater projects from the initial drainage study phase through contract plan development.  
*Session 4A.1*

### **Tim Pollowy, RLA, Hey and Associates, Inc.**

Built upon an education in landscape architecture and natural resources from the University of Illinois, Mr. Pollowy has over 30 years of experience in landscape architecture, environmental planning, and ecological restoration. Areas of expertise include natural and nature-based solutions, sustainable and resilient site design, green infrastructure, and the restoration and management of natural areas. He is an experienced project manager, using his organizational and communication skills to keep projects on track and within budget. Tim has a thorough hands-on understanding of construction management and has overseen the successful implementation of a wide variety of projects. Mr. Pollowy is a Registered Landscape Architect in Illinois and Wisconsin.  
*Sessions 1B.3, Field Trip*

## **SPEAKER BIOGRAPHIES**

### **Cristina Popa, PE, Arcadis**

Cristina is a Civil Engineer with a background in urban water management. Her current work focuses on an array of topics from stormwater management to Python programming for intelligent water solutions. Her experience includes evaluation and coordination of CSO and MS4 permits for municipalities, having a deep understanding of permitting regulations. Cristina completed her Bachelor's and Master's degrees in Civil and Environmental Engineering in Romania and Switzerland. She also holds a Master's degree in Project Management from Northwestern University.

*Session 2C.1*

### **Andrea Pracht PE, CFM, HR Green**

Andrea Pracht is a Project Manager for the Illinois Water Resources team at HR Green. She has over 20 years experience specializing in Water Resources and Environmental Engineering. She works on a variety of projects, from drainage studies to the design of storm water solutions. Andrea connects her engineering skills and love of the outdoors through volunteering with scouts and as a beginner backyard bee keeper. If you get a chance, ask her about how bee keeping is harder than finding comp storage in the 10-100 year range.

*Session 5C.2*

### **Karoline Qasem, PhD, PE, PMP, CFM, Fehr Graham**

Karoline is a water resources engineer with experience in watersheds, water quality, and hydrodynamic modeling; regulatory permits; nutrient criteria limits; watershed planning; and stormwater management. By modeling storm events, dam removal, and urban development, Karoline studies their effects on dissolved oxygen and nutrients. As a steering committee member at the Calumet Stormwater Collaborative - MPC, Karoline resolves stormwater problems in the Calumet region. She is also the Chair of the Illinois Water Environment Association Watershed Management Committee.

*Session 4C.1*

### **Ellen Raimondi, Gary R Weber Associates**

Ellen Raimondi is a wetland consultant with over 8 years' experience in private consulting. A graduate from Northern Illinois University (NIU), Ellen has an interdisciplinary background in geology, geography and environmental studies. The NIU graduate and undergraduate programs provided an understanding of soil, water, and policy that have allowed her to develop confidently in the field of wetland science. She has a special interest in early coordination during due diligence phases and aims to provide land development clients with the tools to plan accordingly around wetlands and water resources.

*Session 2B.1*

### **Conner Ray, EIT, V3 Companies**

Conner Ray, EIT, V3 Companies, is a Design Engineer specializing in water resources engineering. His experience includes hydraulic modeling, analysis, and design for stormwater infrastructure improvements. Prior to joining V3, Conner spent time as an Engineering Intern at IDOT, where he gained experience on a variety of state policies and procedures. Conner is proficient in AutoCAD Civil3D, GIS ArcMap, Bentley OpenRoads Designer, HEC-RAS, FEQ, EPA SWMM, XP SWMM, ICM, and Python. Conner graduated with a BS in Civil Engineering from the University of Illinois at Chicago.

*Session 1C.3*

### **Jason Reddy, PE, IDNR**

Jason Reddy has served as the Operations Engineer for the Illinois Department of Natural Resources Office of Water Resources, out of Springfield, Illinois, since the end of 2020. Before joining the IDNR, Jason graduated from the University of Missouri Science and Technology in 2003 and spent 17 years in the Central Illinois and Western Kentucky coal mining industry. When he is not working, Jason gets to enjoy spending time with his wonderful family, where he and his wife enjoying shuttling their two kids, who are involved in band and musical theater, between various concerts, musicals, plays, and other performances.

*Session 4D.3*

## **SPEAKER BIOGRAPHIES**

### **Andrew Regnery, PE, V3 Companies, Ltd.**

Andrew is a Licensed Professional Engineer specializing in the planning, design, and construction of water, wastewater, and stormwater management infrastructure. His expertise includes stormwater modeling, floodplain impact analyses, water distribution modeling, and project management. He has worked on domestic and international infrastructure projects of varying scales, from a multiyear flood resilience study in Haiti to stormwater master plans for small municipalities in Illinois. Additionally, Andrew is an avid golfer and golf course architecture enthusiast.

*Session 5A.1*

### **Jennifer Rooks-Lopez, CPRP, LEED AP, Forest Preserve District of Kane County**

Jennifer Rooks-Lopez is the Director of Planning and Land Protection for the Forest Preserve District of Kane County. In this role she serves a diverse county population of over 500,000. As the Director of Planning she is responsible for planning, restoration and maintenance of almost 24,000 acres, including ten Illinois State Nature Preserves, five Historic sites, as well as the acquisition, design and construction of existing and future preserves within the County. Before joining the Park and Recreation field in 2009 Jennifer worked for the Landscape Architecture and Planning firms, Wood and Partners, Inc of Hilton Head Island, SC and the Hitchcock Design Group, Ltd. in Naperville, IL, where she managed land planning, construction and landscape design projects throughout the south-east and mid-west. Jennifer holds a Bachelor degree in Landscape Architecture from the University of Georgia and is a Certified Park and Recreation Professional (CPRP) and LEED AP.

### **Aaron Rotherham, IDNR - Office of Water Resources**

Mr. Rotherham has been with the State of Illinois for 7 years, the last three with the Office of Water Resources (OWR) at the Department of Natural Resources. As a member of the Engineering Studies Section, one of his duties is Project Engineer for studies undertaken by the office, primarily utilizing HEC-RAS to compare possible alternatives against existing conditions. As one of OWR's drone pilots, he conducts flights to document and analyze data during flood events, document projects, and utilize photogrammetry capabilities. Finally, he oversees the daily dam operations of the William G. Stratton Lock and Dam to maintain appropriate water levels on the Chain of Lakes. Before graduating from Old Dominion University, he spent time as a heavy equipment operator with the US Navy Seabees.

*Session 4B.3*

### **Courtney Semlow, PE, CFM, ENV SP, Craftwater**

Courtney Semlow is a registered Professional Engineer and Certified Floodplain Manager with a career spanning nearly two decades, encompassing a wide range of civil/site projects for federal, state, and municipal clients. Courtney has recently focused on designing regional stormwater capture projects that help municipalities achieve regulatory compliance for stormwater pollutant removal. Prior to joining Craftwater, Courtney focused on site development, water mains, and highway drainage designs in the northeast and central United States. Her favorite project was working on the field drainage at Fenway Park in Boston when they moved the infield fence in three feet to add another row of seats in the 108-year-old park. She has an engineering degree from the University of Illinois and served as member of the City of Waltham's Conservation Commission for three years. Before landing in LA, Courtney grew up in Illinois and spent time in Massachusetts, but she does not miss snow. She and her two kids enjoy all things Harry Potter and even named their dog Draco.

*Session 5A.2*

### **David Skuodas, PE, CFM, LEED AP, Mile High Flood District**

Dave Skuodas works as the Director of Design, Construction, and Maintenance at the Mile High Flood District. He oversees an internal group of around two dozen staff that work to deliver over \$100 million worth of infrastructure and maintenance along the Denver region's urban waterways on an annual basis. He's worked at the District since 2010; prior to that he was an engineering consultant for 9 years in Kansas, Nebraska, and Colorado. Dave is also the author of the book, *The Effective Client: Why Being a Good Client is Smart Business in the A/E/C Industries*. The book uses numerous stories and examples from his experience in building urban waterway infrastructure projects and highlights various ways owners can attract more talented teams, get more for their money, and build better projects.

*Sessions 3D.2, 3D.3*

### **Jon Stelle, PE, CFM, Hanover Park, Village Engineer**

Some words to come in the future.

*Session 1D.3*

## **SPEAKER BIOGRAPHIES**

### **Alex Strack, Baxter & Woodman, Inc.**

Alex Strack is a water resources engineer with 4 years of experience in the civil engineering industry. Since starting at Baxter & Woodman in the summer of 2022, he has focused his career on urban stream restoration and streambank stabilization. Alex works on all kinds of stormwater projects, but is specializing in restoration, and stormwater/water quality funding programs like 319 grants and GIGO. Stream restoration projects he has worked on range from a few hundred feet of bank stabilization to more than 1,000 feet of channel reconfiguration and riparian improvements. He has attended several restoration and geomorphology seminars to hone his skills in stream work.

*Session 1B.1*

### **Darnell Tingle, United Congregations of Metro East**

Darnell Tingle has worked championing the rights of workers and community members for more than 15 years. He has been active in various union and community organizations, including ACORN, SEIU, and Unite Here. Through his work, Darnell has assisted numerous people with finding their voice for fair working conditions, compensation, fighting gentrification, and the right to vote. Darnell believes in the power of collective work; working alone will only get you so far. By coming together as a group, there is more opportunity to succeed and achieve great things! As the Executive Director UCM, Darnell hopes to inspire others to take action, make a positive impact, and move from a place of *I can't* to a place of *We will*.

*Session 4D.2*

### **Seema Wadia, Metro Strategies Group**

Seema brings over 25 years of experience in program planning, development, evaluation, and funding to help communities achieve their goals. Her expertise includes program and policy work at all levels in environmental, transportation, and human service areas, with community organizations and large agencies in both public and private sectors. Seema offers a unique blend of experience in working with cross-sector stakeholders that represent diverse interests. She provides strategy for stakeholder and community engagement, facilitates strategic visioning sessions and working groups, and coordinates with state, regional, and local agencies to help implement local projects. Seema has worked with numerous agencies to identify funding opportunities, and has secured over \$50 million in funding for critical projects.

*Session 3B.3*

### **Mike Waldron, P.E., Strand Associates, Inc.**

Mike is a Senior Associate with Strand Associates, Inc. in its Joliet, Illinois office. He has been with Strand for more than 33 years and is Coordinator of Municipal Engineering. Mike has managed a wide variety of stormwater management, flood control, and green infrastructure-related projects in his career. He authored Winnetka's Western and Southwestern Winnetka Stormwater Management Program and has been leading program implementation since 2015.

*Session 1D.2*

### **Brad Wardynski, PE, Craftwater**

Brad Wardynski is a licensed Professional Engineer in Michigan and California, with over a decade of experience in watershed management and green stormwater engineering, both nationally and internationally. He brings a broad range of experience including municipal stormwater compliance strategies; hydrologic and water quality modeling; stormwater design guidance development; BMP construction, inspection, and maintenance training; cloud-based stormwater project monitoring and operation; and web-based planning tools. Over the last 5 years, Brad has closely supported implementation and strategic adaptation of LA County Public Works' \$300M per year Safe, Clean Water Program. Brad has engineering degrees from Michigan State and North Carolina State Universities. Brad and his family live reclusively in the woods of Michigan, but occasionally emerge to hunt for Thai food and live music.

*Session 5A.2*

## **SPEAKER BIOGRAPHIES**

### **Sarah Wenzel, PE, CFM, Baxter & Woodman**

Sarah Wenzel, PE, CFM, has 7 years of experience as a water resource engineer in Peoria, IL, with a technical background in hydrologic and hydraulic modeling. Sarah is an active member of the Outreach Committee and a founding member of the Young Professionals Committee, and served as Committee Chair from 2021-2024.  
*Session 2D.3*

### **Anne Wilford, CFM, Kane County Dept of Environmental and Water Resources**

Anne has 30 years of experience in Water Resources and Environmental Engineering, including education, local government, and private consulting. She has been with Kane County's Department of Environmental and Water Resources for 9 years, working on Stormwater and Floodplain Management. Anne also co-chairs the County's Natural Hazard Mitigation Planning Committee. She holds a degree in Civil Engineering from the University of Windsor in Ontario.  
*Session 5C.1*

### **Greg Wolterstorff, P.E., V3 Companies**

Gregory V. Wolterstorff, P.E. is Vice President, Innovation and Process for V3 Companies where he is responsible for efficiency and technology advancements across the organization. He is currently leading the V3 AI Team in developing generative AI implementation within work product. His technical background is in water resources engineering and he engaged in direct supervision of complex water and natural area projects, including those which integrate natural area science and engineering. He is passionate about meeting client needs with creativity, sustainability, and innovative solutions. His experience includes wetland design and natural area restoration, dam removal/modification, stream modification and bank stabilization, complex hydrologic and hydraulic modeling of flood prone areas, and flood forecasting of severe storm events.  
*Session 2C.2*

### **Brandon Wong, Hyfi**

Brandon Wong is the CEO of Hyfi with an expertise in sensing, data, and water. He holds dual degrees in Computer Science and Civil Engineering from the University of Michigan. Dr. Wong is also the co-founder of *Open-Storm.org* and led the Hyfi team to win the Verizon Climate Prize in 2022 in recognition of Hyfi's contribution to leading-edge technologies for climate resilience.  
*Session 5C.3*

### **Kurt Woolford, PE, CFM, Lake County Stormwater Management Commission**

Kurt Woolford is the Executive Director for the Lake County Stormwater Management Commission, where he oversees stormwater programs across 80 local government jurisdictions, focusing on improving water quality, reducing flood damages, and restoring natural drainage systems. He has 30 years of professional service in the public, private, and military sectors. Kurt's leadership plays a critical role in protecting the headwaters of watersheds in the Chicagoland region. He received his civil engineering degree from the University of Illinois at Chicago, and an MBA from the Lake Forest Graduate School of Management.  
*Session 4A.2*

### **Annie Wright, Metropolitan Water Reclamation District of Greater Chicago**

Annie Wright has worked for MWRD since 2006, starting in the Public Affairs section, and then moving to the Law Department to handle Freedom of Information Act requests. In 2018, Annie began seeking grants and moved to the Engineering Department. Since that time, MWRD has received over \$30 million in grant funding.  
*Session 2D.1*

### **Steve Zimmerman, Baxter & Woodman Natural Resources**

Steve Zimmerman is a Senior Restoration Ecologist and leads Baxter & Woodman's Natural Resources, Ecological Services Division. He has worked in ecological restoration and stewardship since 2001. His specialties include stream ecology and restoration, prairie/woodland/wetland restoration, green infrastructure planning, vegetation monitoring, and construction oversight. In addition, many aspects of these projects include obtaining environmental permits, preparation of construction documents, erosion control design, and specifications. Steve has also given dozens of ecological restoration-related presentations to clients and the general public.  
*Session 1B.1*

# SESSION 1A: FLOODPLAIN MANAGEMENT ESSENTIALS

Tuesday, 10:30 am – Noon, South Pavilion 1

Moderator: Steve Altman, PE, CFM

---

## FLOODPLAIN BASICS

*Erin Conley, CFM, Illinois Department of Natural Resources*

This presentation is geared for those new to floodplain management or anyone looking for a refresher. We will go over the NFIP program requirements including duties of a floodplain administrator, a review of the local ordinance, building protection standards, substantial improvement, substantial damage, and flood insurance.

## FLOODPLAIN & FLOODWAY PERMITTING

*Erin Conley, CFM, Illinois Department of Natural Resources*

This presentation will go into detail on the requirements for both the local floodplain development permit for communities that participate in the NFIP, and the State floodway development permit.

## ASSESSING THE SITUATION: COMPLETING SUBSTANTIAL DAMAGE ASSESSMENTS

*Erin Conley, CFM, Illinois Department of Natural Resources*

This presentation will go over the steps that must be followed to perform damage assessments for structures in the mapped floodplain. The substantial damage assessment is a critical function of the community's floodplain manager, so this presentation will walk attendees through the process on a step-by-step basis.

# SESSION 1B: STREAM RESTORATION & STABILIZATION STRATEGIES

Tuesday, 10:30 am – Noon, South Pavilion 2

Moderator: David Kraft

---

## URBAN STREAM RESTORATION: CONFLUENCE OF ECOLOGY AND ENGINEERING

*Alex Strack, Baxter & Woodman, Inc*

*Steve Zimmerman, Baxter & Woodman Natural Resources*

Sugar Creek was channelized over time to make room for development and to quickly convey stormwater away from developed areas. Eventually, the channel was lined with concrete to increase conveyance capacity and channel stability. The resulting channel is not a suitable habitat for fish and aquatic insects that historically would have lived there. The Bloomington-Normal Water Reclamation District has made an initiative to restore green infrastructure within its jurisdiction, including Sugar Creek. Baxter & Woodman was contracted for a design-build project along Sugar Creek.

Design-Build is the ideal project delivery method for stream restoration, as the level of detail needed to properly construct can be difficult to capture in engineering plans. Design-Build allows for a working relationship between the Engineer, Ecologist, and Ecological Contractor to bridge that gap. Design-Build projects can be completed faster, cheaper, and better than traditional project delivery methods.

The existing concrete channel bottom will be removed, followed by regrading to a "Two-Stage" configuration. This consists of excavating material from one bank and filling the opposite to create a meandering centerline with pool-riffle sequences. The outside bank of each bend is armored with stone-toe and the inside bank has a flat floodplain bench at the bankfull elevation. During normal flow, water running through the channel will be sinuous. During flood events the water level increases and spills into the "Two-Stage" floodplain benches, thereby dissipating energy while providing flood storage. The dynamic flow regime, variable aggregate distribution, and native vegetation planted on the benches and side slopes drastically improves the ecological and aesthetic value of the stream.

Baxter & Woodman will highlight major steps in the design-build process from site assessment to design/permitting to construction.

# SESSION 1B: STREAM RESTORATION & STABILIZATION STRATEGIES

Tuesday, 10:30 am - Noon, South Pavilion 2

Moderator: David Kraft

## RESTORATION EFFORTS ALONG WOODS CREEK

*Logan Gilbertsen, P.E., CFM, HR Green, Inc.*

The Woods Creek Watershed-Based Plan was approved by the Illinois EPA in 2013. Since the plans' approval, numerous stream and wetland restoration projects have been designed, implemented, and are undergoing long-term maintenance. This presentation will focus on the success of this watershed-based plan, which has resulted in nearly the entire length of the Woods Creek corridor being restored.

The Illinois communities of the Villages of Lake in the Hills and Algonquin are home to much of the 8.6 square mile watershed, and both have adopted a stance that water quality improvements within the watershed are a priority. Both have implemented physical stream, wetland and riparian corridor improvements along Woods Creek and its tributaries. These projects range from bank stabilization improvements, stream alignment modifications to reintroduce meanders, pool and riffle installations, cross vane weirs, invasive brush management and wetland enhancements.

HR Green will discuss funding through the EPA's Section 319(h) program for two previously constructed reaches (Reaches 10 & 11), review two reaches that are currently under construction (Reaches 6 & 7) and introduce an additional reach (Reach 8) which is currently under design and permitting. The presentation will summarize the restoration efforts overall, how design techniques have evolved, maintenance, and some lessons learned.

## A STREAMBANK STABILIZATION/RESTORATION RETROSPECTIVE

*Tim Pollowy, RLA, Hey and Associates, Inc.*

Biotechnical streambank stabilization and restoration has been popular for several decades. Today we'll be revisiting several projects on different streams and rivers Tim Pollowy worked on 15 to 25+ years ago to evaluate the sites' present-day conditions. Different biotechnical streambank stabilization and restoration techniques and approaches that were used will be reviewed, and a critical evaluation of what worked well and what didn't will be discussed, along with an attempt to understand why. Lessons learned will be presented to help improve the science (and art) of natural approaches to bank stabilization and restoration.

# SESSION 1C: OPTIMIZING FLOOD MODELING & HYDRAULIC ANALYSIS

Tuesday, 10:30 am - Noon, South Pavilion 3-6

Moderator: Jennifer Maercklein, P.E., CFM

## LET'S TAKE A JOURNEY TO ANOTHER DIMENSION: 2D MODELING TO ADDRESS FLOODING ON OLD IL-16 & IL-4

*Paolla Kovalsky, PE, M3 Engineering Group*

*Amanda Eshelman, M3 Engineering Group*

This study investigates the cause of roadway overtopping affecting Old IL-16 and IL-4 in Madison County, where persistent flooding has been reported by local residents. Despite prior mitigation efforts, the issues remained unresolved. A two-dimensional hydraulic model, SMS: SRH-2D (Surface-water Modeling System: Sedimentation and River Hydraulics Two-Dimensional), was developed to tackle the problem using local survey data, LiDAR terrain, and USGS StreamStats peak flow estimates. The relatively flat terrain was effectively represented through a mesh generated from the DEM (Digital Elevation Model), with additional inputs such as roughness coefficients, existing ditches and culverts, and inflow hydrographs.

The model was calibrated using observations reported by residents and Illinois Department of Transportation maintenance crews, providing valuable data on roadway overtopping elevations, flow patterns, and velocities. With a clear understanding of the root causes of flooding, multiple alternatives were developed that included modifications to ditch dimensions, culvert upsizing, and road elevation adjustments. Each alternative was analyzed to improve flow patterns and mitigate overtopping during a 50-year storm event. The study ultimately presented four alternatives that demonstrated no overtopping on the roadways, while outlining the pros and cons of each, and providing actionable recommendations.

# SESSION 1C: OPTIMIZING FLOOD MODELING & HYDRAULIC ANALYSIS

Tuesday, 10:30 am - Noon, South Pavilion 3-6

Moderator: Jennifer Maercklein, P.E., CFM

---

## EVOLVING TOOLS FOR EVALUATION OF DAM HYDRAULICS AND BREACH INUNDATION

Garrett Litteken, P.E., CFM, Hanson Professional Services Inc.

In light of significant shifts in rainfall patterns throughout the US, the importance of effective dam design and a thorough understanding of potential breach impacts on the downstream floodplain has never been more critical. This presentation will explore the evolution of 2-D modeling as a foundational tool in the industry, showcasing the latest advancements in the HEC-RAS software suite. We will delve into the rapid incorporation of 2-D modeling and the emerging trend of Computational Fluid Dynamics (CFD) in complex dam design scenarios.

Focusing on a case study in South Florida, we will examine a perched impoundment that includes a reservoir and a storage treatment area, addressing every stage of hydraulic design. Key topics will include enhancements in wind/wave and overwash modeling through programs like STWAVE and ACES, as well as the application of HEC-RAS 2-D modeling to assess dam breach scenarios from multiple directions, highlighting the use of rainfall on grid to develop depth above baseline maps. We will discuss the design of internal works, considering the influence of roadway culverts, multiple channels, and rules governing gated water control structures. The presentation will also highlight the next step in hydraulic modeling, focusing on its role in identifying energy dissipation needs. By improving accuracy over traditional hand equations or modeling depth-average velocities, these advancements aim to balance safety and cost-effectiveness in dam design.

## XP-SWMM vs ICM vs HEC-RAS 6.6: WHICH MODEL TO CHOOSE?

Conner Ray, EIT, V3 Companies

Jennifer Maercklein, PE, CFM, V3 Companies

V3 recently worked on a project that required an analysis to determine the high water levels within a series of isolated depressions. The depressions act independently in a small storm event, but in larger storms they begin to spill into and interact with each other, necessitating use of a dynamic modeling tool.

The project presented a perfect opportunity to test out the tried-and-true (but being retired) XP-SWMM model versus the new ICM model (which was IAFSM's recommended replacement) versus the latest version of HEC-RAS. The depressions - and their interaction with each other - were complicated enough to create a good test case, but simple enough to get through the testing quickly without using a lot of overhead budget.

The presentation will describe the modeling that was performed to develop high water levels for the isolated depressions using each software. We will share the successes - and lessons learned - of importing XPS to ICM, show how the WSELs compare to each other across the software, describe some lessons learned, and share thoughts for the future.

# SESSION 1D: FLOOD CONTROL & MITIGATION PROJECTS

Tuesday, 10:30 am - Noon, North Pavilion 1-3

Moderator: Darren Olson

---

## MOUNT PROSPECT NEIGHBORHOOD FLOOD MITIGATION AND LEVEE DRAINAGE ENHANCEMENTS

Michael Burke, PE, CFM, Christopher B. Burke Engineering, Ltd.

Sean Dorsey, Village of Mount Prospect

The residential subdivision in the northeast portion of the Village of Mount Prospect (Village) along the Des Plaines River (DPR) is an area that has been historically impacted by riverine flooding. To reduce the risk of DPR flooding, the United States Army Corps of Engineers (USACE) constructed the Levee 37 floodwall with three pump stations to protect areas of the Village and the City of Prospect Heights. During the April 2013 storm event, approximately 5.5" of rain fell locally, while the gravity storm sewer outfalls were limited by high DPR tailwater conditions. The pump stations along Levee 37 were unable to keep up with the large volume of runoff, resulting in flooding of residential structures and streets. Christopher B. Burke Engineering, Ltd. was hired by the Village in 2015 to perform a hydrologic and hydraulic analysis of the Levee 37 interior drainage system. An XPSWMM 2D model was developed and calibrated to the April 2013 event, and used to develop conceptual improvements. The study resulted in construction of two detention basins, an upgraded pump sta-

# SESSION 1D: FLOOD CONTROL & MITIGATION PROJECTS

Tuesday, 10:30 am - Noon, North Pavilion 1-3

Moderator: Darren Olson

---

## **MOUNT PROSPECT NEIGHBORHOOD FLOOD MITIGATION AND LEVEE DRAINAGE ENHANCEMENTS**

*Michael Burke, PE, CFM, Christopher B. Burke Engineering, Ltd.*

*Sean Dorsey, Village of Mount Prospect*

-Continued

tion, and backup generators for two pump stations. A 15 acre-foot above ground, multi-use detention basin at Burning Bush Trails Park was completed in 2021, and a 17 acre-foot below ground detention basin at Aspen Trails Park was completed in 2022. The Village partnered with River Trails Park District to allow construction of these detention basins on their property. MWRD was an instrumental project partner, contributing more than \$4.1 million toward the construction of the detention basins. In 2024, the USACE upgraded the Levee 37 pump station with the largest upstream drainage area for improved sewer conveyance during high DPR tailwater conditions, and two pump stations were outfitted with backup generators for improved resiliency.

## **FLOOD CONTROL PARTNERSHIPS OVERCOME INADEQUATE STORMWATER INFRASTRUCTURE IN WINNETKA, ILLINOIS**

*Mike Waldron, P.E., Strand Associates, Inc.*

*James Bernahl, PE, CFM, Village of Winnetka*

In response to three historic rainfall events in 2008, 2011, and 2013 that produced widespread flooding and significant property damage and losses for more than 1,000 homes, the Village of Winnetka adopted the Western and Southwestern Winnetka Stormwater Management Program in July 2016. The program addresses inadequate existing stormwater infrastructure in this 1,000-acre watershed, with a combination of wet ponds, underground storage, wetland modifications, and conveyance improvements, while maintaining existing stormwater release rates to downstream water bodies and communities. When fully implemented, the program will provide 100-year design storm level of protection to the western and southwestern portion of the village. This presentation explains the holistic watershed evaluation used in program development, the extensive public engagement process that built community consensus, the multi-agency negotiations and agreements that were foundational to the projects, and the unique stormwater management system designed and constructed to deliver confidence to the Village and its constituents in the wettest weather.

## **COLLABORATION FOR THE WIN: SPRINGINSGUTH CORRIDOR/WEST BRANCH DUPAGE RIVER FLOOD CONTROL AND RESTORATION**

*Jeff Guerrero, PE, WBK Engineering and Village of Schaumburg*

*Erin Pande, ERA and Hanover Park*

*Jon Stelle, PE, CFM, Hanover Park*

The Springingsguth Corridor project is a story of successful collaboration between multiple communities, consultants, and agencies over the past 14 years. Initiated by MWRD in 2010 as part of a Detailed Watershed Plan, the project originally targeted flood reductions for Village of Schaumburg residential neighborhoods. Recognizing that the project wouldn't receive grant funding without being included in an IEPA approved Watershed Based Plan, ERA worked with the Villages of Hanover Park and Schaumburg to assess the stream and worked with DuPage County, the agency preparing the watershed-based plan, to include the project in the plan.

The project morphed and expanded over the next several years to ultimately include floodplain reconnection, stream daylighting, inclusion of habitat improvements, and bank stabilization work in erosion-prone areas of the stream from Springingsguth Road to Anne Fox School in Hanover Park. ERA assisted the Villages with preparing a conceptual plan and applying to the IEPA for section 319h and Green Infrastructure Grant Opportunity

# SESSION 1D: FLOOD CONTROL & MITIGATION PROJECTS

Tuesday, 10:30 am – Noon, North Pavilion 1-3

Moderator: Darren Olson

---

-Continued

(GIGO) funding. ERA also assisted with applying for Water Partnership Funds from MWRD. Schaumburg also applied for Department of Commerce and Economic Opportunity (DCEO) funds for their portion of the project.

The project received \$1.6M from GIGO, \$1.25M from MWRD and \$412K from DCEO funds to complete 4,450 feet of stream channel and riparian improvements, 1,500 feet in Hanover Park and 2,950 feet in Schaumburg. Two Villages, two consultants, three funding agencies, multiple permitting agencies, and the decision to bid the project as one contract due to the combined funding made for extensive coordination. ERA (on behalf of Hanover Park) and WBK Engineering (working with Schaumburg) collaborated to develop cohesive engineering plans and permit submittals through 2022 and 2023, with construction completed in the summer of 2024.

The project reduces 100-year flood elevations that impacted six residential structures, and added 1.3 acre-feet of adjacent floodplain storage. A portion of the stream was daylighted and a trash rack that was prone to clogging was replaced. Design features included engineered riffles for grade control, over 2,100 feet of vegetated stone toe, reconstruction of numerous stormwater outfalls, lowering 500 feet of watermain via jack and bore installation, and 260 feet of sanitary sewer cured in place pipe (CIPP) lining.

## SESSION 2A: CRS FOR SAFER COMMUNITIES

Tuesday, 1:30 – 3:00 pm, South Pavilion 1

Moderator: Julie Lomax, PE, CFM

---

### CRS – THE IL EASY 8

Scott Cofoid, CFM, Verisk/ISO

The Community Rating System (CRS) provides a valuable framework for strengthening floodplain management programs and offers insurance premium discounts to NFIP policyholders. Participating NFIP communities in Illinois can easily obtain a Class 8 rating (Class 7 for Chicago-area communities) in the CRS Program through the various floodplain management activities that the state requires communities to do, and many regional programs available to everyone. Attendees will learn how many of the things that the state or regional entity does for them, along with adopting the state model ordinance, earns points in the CRS Program and can be used to achieve at least a Class 8, which is a 10% discount on flood insurance premiums for residents.

### GET ORGANIZED FOR YOUR CRS CYCLE VISIT

Scott Cofoid, CFM, Verisk/ISO

The Community Rating System (CRS) provides a valuable framework for strengthening floodplain management programs and offers insurance premium discounts to NFIP policyholders. The CRS Program can be complicated and time-consuming if you don't have a plan for how to prepare for and participate in your 3- or 5-year CRS Cycle verification. The documentation requirements for a cycle verification are specific, but can be customized for your community if you get prepared ahead of the verification visit. Attendees will learn the usual, important pieces of information required, along with the specific documentation needed in order to perform an organized, successful, and stress-free cycle verification.

### REPETITIVE LOSS AREA ANALYSIS FOR CRS PURPOSES

Marilyn Sucoe, CFM, Verisk/ISO

While the news focuses on structures with severe repetitive loss, there are thousands of homes and businesses repetitively flooded with lower level damages. These structures rarely receive substantial damage determinations or can meet the cost-benefit thresholds required for a buyout. Preparing a Repetitive Loss Area Analysis (RLAA), as outlined in the Community Rating System (CRS) program, provides a community with the details needed to develop mitigation plans for each flooded area.

The 5-Step program outlined by the CRS, which includes visiting each property and contacting the property owners, allows you to understand the causes of the repetitive flooding and can lead to unique mitigation measures. Low-cost solutions, such as tree trimming to prevent power outages, may result from determining the causes of local flooding. This presentation will review the CRS RLAA guidance, review examples of mitigation measures, and show how GIS apps can be used to complete your work.

# SESSION 2B: WETLAND PLANNING & MITIGATION

Tuesday, 1:30 - 3:00 pm, South Pavilion 2

Moderator: Thomas Kehoe

---

## **EARLY PLANNING FOR WETLANDS**

*Ellen Raimondi, Gary R Weber Associates*

Assessing the presence of wetland and water resources when considering land-use has never been more important. In an ever-changing landscape of local, state, and federal regulation, having an understanding of wetlands on a property early in the due diligence process leads to responsible land planning. In this presentation, we will discuss the suite of publicly available mapping resources that can help shape land-use risk assessments, and the regulatory scenario developers face in Illinois.

## **RESTORING THE DONNELLEY PRAIRIES & OAKS OPEN SPACE TRACT AS A WETLAND MITIGATION BANK**

*Jeffrey L. Mengler, PWS, Hey and Associates, Inc.*

The open space parcel known as Donnelley Prairies & Oaks was the last in a series of open space parcels owned by Libertyville Township Open Space District to be restored to a native ecosystem. The parcel was already under conservation easements that precluded its use for anything other than native restoration. There were existing wetlands present, but no floodplain or floodway. Developing the site as a wetland mitigation bank provided the financial resources to fund this and other ongoing restoration in the Libertyville Township Open Space District. The presentation will review the site design, permitting, construction, and management, and the lessons learned along the way.

## **THINKING BEYOND THE PROJECT: LAKE OPEKA SHORELINE RESTORATION PROJECT**

*Thera Novotny, P.E., MBA, PMP, CFM, ENV SP, Stantec Consulting Services Inc.*

*Alex Krzmarzick, PLA, ASLA, Stantec Consulting Services Inc.*

Lake Opeka is a 40-acre man-made recreational lake located in Lake Park in the City of Des Plaines, Cook County, Illinois. Lake Park, owned and maintained by the Des Plaines Park District, provides numerous recreational opportunities including walking and bike paths, golfing, fishing, paddle boating, sailing, kayaking, and much more. Lake Opeka's shoreline had varying material and condition, with several locations showing significant cracking with signs of undermining and erosion. The main objective of the project was to stabilize the ~5,500 linear feet of shoreline using a combination of living and hard-edge treatments. The project features include a robust rip-rap edge, sheet pile walls, vegetated prairie buffer, and aquatic shelf with vegetated rip-rap to strengthen the shoreline. Fishing walls, a fishing plaza, and fishing nodes with access walkways provide opportunities for park users to interact with the lake while fishing or attending one of the many park events.

This presentation will highlight how the project evolved from a simple shoreline restoration to an activated lake edge - creating new habitat for pollinators and aquatic species, built-in resilience against wave action, enhancement to user experience of Lake Park, Lake Park Golf Course, and the Foxtail on the Lake restaurant, and how small design enhancements can provide big use impact.

# SESSION 2C: DIGITAL INNOVATION IN STORMWATER MANAGEMENT

Tuesday, 1:30 – 3:00 pm, South Pavilion 3-6

Moderator: Matthew J. Moffitt, PE, CFM

---

## DEVELOPING AN ACTIONABLE STORMWATER PLATFORM: DIGITAL TECHNOLOGY APPLICATIONS

*Cristina Popa, PE, Arcadis*

*Fernando Pasquel, CPM, PE, Arcadis*

In an evolving world where technology profoundly shapes our lives, digital applications emerge as powerful allies in safeguarding water and urban spaces. In this session, we'll explore how modeling coupled with digital platforms contribute to a sustainable future, protecting cities from floods and natural disasters. Midwestern and national examples on data integration will illustrate how technology can help visualize upcoming events and boost flood resilience. A detailed case study for the City of Portsmouth, VA, will illustrate development of a resilience strategy to protect the community from flood hazards, reduce street flooding, and enhance safety services during storm events. We will also describe the creation of an Actionable Stormwater Platform (ASP) that integrates a citywide stormwater model with weather data. The ASP platform offers a cloud-based dashboard with information on the impact of real-time and upcoming storms on the city's stormwater system by providing details on potential flooded areas at a street-by-street level. We will give an overview of requirements to implement an ASP, including integrating watershed stormwater models with real-time and predicted precipitation and tide levels. It will also outline topics such as available data, forecast models, and the delivery of model results via dashboards.

## AI IN THE AEC INDUSTRY: OVERVIEW AND USE CASES

*Greg Wolterstorff, P.E., V3 Companies*

Two years ago there is not a person in the room that would have predicted that generative Artificial Intelligence (AI) would be able to perform design and reporting functions in the architecture, engineering or construction (AEC) industry. But since the explosion of ChatGPT in 2023, and the massive uptake of usage by all of us architects, engineers, scientists, and construction professionals, that forecast is substantially different today.

This presentation will discuss the different locations for the sources of AI that you can utilize in your business, such as OpenAI, Copilot, and Azure AI. This discussion will identify some of the best practices, and cautions for use of these AI Large Language Models. We will also take a look at various use cases that are under development and implementation by V3 and other leading AEC firms. Let's discuss where AI is taking our industry.

## ILLINOIS DRAINAGE DISTRICTS UNCOVERED: DIGITAL MAPPING FOR EFFECTIVE STORMWATER MANAGEMENT

*Patrick McPartlan, M.S., Agrowhere, LLC*

This presentation unveils Illinois' first comprehensive digital map of over 1000 drainage and levee districts, designed to enhance visibility, accountability, and interagency coordination across urban and rural stormwater management systems. Attendees will gain insight into how accurate, accessible data can support informed decision-making at every level, from floodplain management to mitigation and beyond.

Using the Slocum Lake Drainage District in Lake County as a case study, we will discuss the impact of urban expansion on traditional drainage structures and the mixed responses to shifting drainage management from dedicated district authorities to county and municipal oversight. This case highlights the need for clear district boundaries and data transparency as essential tools for effective local governance and flood resilience planning. The presentation will also cover the critical role of assessment rolls in funding drainage maintenance and infrastructure in traditional drainage and levee districts, showing how consistent contributions support ongoing flood protection and water management efforts. Attendees will see firsthand how Illinois floodplain managers, stormwater planners, and commissioners can leverage this unified digital platform to address key urban flooding issues, optimize MS4 water quality BMPs, and foster resilient, water-smart communities across diverse landscapes.

Join us to discover how this project aligns with IAFSM's goals, offering innovative, practical solutions for the evolving demands of Illinois water management.

# SESSION 2D: PUBLIC ENGAGEMENT IN FLOOD MANAGEMENT

Tuesday, 1:30 - 3:00 pm, North Pavilion 1-3

Moderator: Sarah Wenzel, PE, CFM

---

## **BRIDGING THE GAP: EFFECTIVE COMMUNICATION BETWEEN ENGINEERS AND THE PUBLIC**

*Richard Fisher, Metropolitan Water Reclamation District of Greater Chicago*

*Annie Wright, Metropolitan Water Reclamation District of Greater Chicago*

Have you ever listened to an engineer explain a complex technical concept, only to walk away more confused than when you started? It's like we are speaking a foreign language. The non-technical public are left scratching their heads, wondering what on Earth we are talking about.

It's time for engineers to ditch the jargon and start speaking plain English. We need clear, concise explanations the public can actually understand. After all, they're the ones who will be impacted by our decisions. Let's break down those barriers and build a future where everyone can be part of the conversation.

Effective communication between engineers and the non-technical public is crucial for successful floodplain management projects. This presentation will explore the challenges that arise when technical information is not effectively conveyed to the public and how these communication gaps can hinder public understanding, trust, and participation in flood mitigation efforts. Strategies for improving communication will be discussed. By enhancing communication, engineers can foster informed decision-making and build stronger partnerships with communities to address flood risks and create more resilient landscapes.

## **DATA-DRIVEN RESIDENT FLOOD COMMUNICATION & OUTREACH**

*Cloud Bogart, Forerunner*

Resident communication and outreach are fundamental aspects of floodplain management. If done successfully, they can have cascading positive effects. Providing the community with actionable flood risk information can empower them to take individual action to mitigate and adapt, resulting in fewer compliance issues over time. More-informed residents can also mean a safer community overall, with open lines of communication helping to strengthen government trust.

While effective communication is crucial, making it a priority can be difficult in communities where floodplain managers have competing important tasks and not enough time. It has also become increasingly complex with map changes and shifts in insurance. Compounding this is the need for clarity and specificity - with more and more residents seeking detailed information about individual properties. It can be hard to provide nuanced data to a large public and even harder to keep track of that communication for internal record-keeping, relationship building, and programs like the CRS.

Using a case study of Forerunner's work with a partner community in Tennessee, this session will outline how the community combines technology with robust outreach strategies to boost resident communication. We'll discuss how software like Forerunner can help communities pull together disparate datasets and mobilize information for property-specific outreach to provide smarter resources to a variety of community stakeholders. We'll explore how using digital workflows for outreach can ensure faster response time to resident requests, better compliance enforcement, and stronger data continuity. The presentation will also include suggestions on how communities might be able to leverage data to strengthen their floodplain management programs.

## **My IAFSM**

*Sarah Wenzel, PE, CFM, Baxter & Woodman*

A discussion about the resources available for IAFSM members through various committees.

# SESSION 3A: ILLINOIS FLOODPLAIN MANAGEMENT UPDATES

Tuesday, 3:20 – 4:50 pm, South Pavilion 1

Moderator: Steve Altman, PE, CFM

---

## INTEGRATED FLOODPLAIN MANAGEMENT: IS ILLINOIS READY?

Lacey Davis, M.S., American Rivers

American Rivers is working to promote integrated floodplain management (IFM) concepts nationally, and as part of this effort, American Rivers is undertaking audits of the enabling conditions for IFM in every state. This session will summarize the Illinois audit findings, created in partnership with The Nature Conservancy, and offer recommendations, including where opportunities to accelerate IFM are ripest, what common threads exist in terms of barriers and opportunities, and what roles a national partnership or accelerator program could play in enabling that. Additionally, this session will highlight floodplain protection status and alteration in Illinois as determined by the Protected Floodplain Assessment of the United States (developed in partnership between American Rivers and Conservation Science Partners). Coupling data from the IFM audits and Protected Floodplain Assessment of the United States report in this session is intended to identify opportunities to expand protection and scale up restoration efforts in Illinois.

## ILLINOIS STATE OWNED PROPERTY AND NFIP – DEVELOPMENT OF THE STATE’S NEW NFIP PERMIT PROGRAM

Erin Conley, CFM, IDNR-OWR

Stephen Altman, PE, CFM, IDNR-OWR

This presentation will go into detail about the new Illinois State permit program for State-owned property, and the NFIP compliance requirements for State development activity. The presentation will cover the process of developing and writing the new rule for this permit program, the outreach and training needs that went along with implementing a new permit program, the issues that we encountered, and the lessons we learned that other states can follow - or avoid.

# SESSION 3B: CLIMATE CHANGE & COMMUNITY RESILIENCE

Tuesday, 3:20 – 4:50 pm, South Pavilion 2

Moderator: Mary J. Richardson, CFM

---

## PROJECTING ILLINOIS RAINFALL DUE TO CLIMATE CHANGE

Terra McParland, PE, CFM, IDNR - Office of Water Resources

Momcilo Markus, Illinois State Water Survey

Wesley Cattoor, PE, CFM, IDNR - Office of Water Resources,

The Precipitation Frequency Study for Illinois (Bulletin 75, 2020) provided updated precipitation frequencies throughout Illinois for a range of event durations and for a variety of recurrence intervals. While this document accounts for increased rainfall in recent years, the analysis relies on historical rainfall events, so it does not account for the increases projected in the future due to climate change. Bulletin 75 advises that future engineering will require the use of both historical data and climate model-based projections. Therefore, the Illinois State Water Plan (2022) recommended updating rainfall predictions using climate change projections for the entire state. OWR and ISWS have collaborated to develop a recently-published guide to provide appropriate rainfall data for today’s models and designs to be able to withstand future impacts. We are one of the first states to develop rainfall predictions to incorporate climate change impacts. First, an overview of the results and analysis developed for the recently published guide will be provided. Then, we’ll discuss how the future predicted rainfall data might impact future policy, regulations, models and designs moving forward. Most importantly, we want to ensure the information can easily be used by practitioners throughout the state.

# SESSION 3B: CLIMATE CHANGE & COMMUNITY RESILIENCE

Tuesday, 3:20 – 4:50 pm, South Pavilion 2

Moderator: Mary J. Richardson, CFM

---

## **MWRD WATERSHED MANAGEMENT ORDINANCE: 2024–2025 UPDATES & IMPLEMENTATION**

*Daniel M. Feltes, PE, CFM, Metropolitan Water Reclamation District of Greater Chicago*

*Peter Monko, PE, CFM, Metropolitan Water Reclamation District of Greater Chicago*

The MWRD's Watershed Management Ordinance (WMO) regulates land development throughout suburban Cook County. The ordinance sets uniform minimum standards of stormwater management, including the regulation of floodplains, for over 135 communities. The ordinance regulates sanitary sewer construction, stormwater detention, volume control, erosion control, and development located within floodplains, wetlands, and riparian areas. The WMO was amended in 2024 to incorporate a way to comply with wetlands regulations when a Jurisdictional Determination from the USACOE is not available. The WMO was amended in 2025 to clarify language, extend the pilot study for offsite stormwater detention and volume control, and refine definitions. MWRD staff will present on the recent changes and how revised WMO language will be applied. The presentation will also incorporate case studies and examples to demonstrate how to streamline the WMO review process and minimize the time required to obtain a WMO permit.

## **CLIMATE RESILIENCY PLANNING FOR COMMUNITIES**

*Brian Daly, Cook County Department of Environment and Sustainability*

*Lee Hauser, PE, Geosyntec Consultants*

*Seema Wadia, Metro Strategies Group*

*Elli Cosky, Metro Strategies Group*

The Cook County Climate Resiliency Planning for Communities program is helping 5 municipalities (Bellwood, Franklin Park, Justice, Lynwood, and Markham) develop local Climate Resiliency Plans and implement near-term solutions to address climate hazards such as severe storms and urban flooding. A community-driven planning and prioritization process has helped set goals and identify projects to prepare for changing climate impacts.

Cook County's Department of Environment and Sustainability along with consultant teams, Geosyntec and Metro Strategies Group, will co-present highlights and lessons learned about the process, hazards analysis, prioritization of solutions and plan recommendations. Based on community feedback, urban flooding and stormwater management are key focus areas for potential solutions. The project team can share valuable insights and lessons learned to help inform initiatives in other communities. This is a unique program addressing critical cross-cutting issues for communities that lack sufficient capacity to plan for long-term climate impacts, with recommendations informed by a comprehensive community engagement process.

# SESSION 3C: COLLABORATIVE FLOOD MITIGATION

Tuesday, 3:20 - 4:50 pm, South Pavilion 3-6

Moderator: Diane E. Bouckaert

## **A ROCKFORD GULLY EROSION STORY: HOW THE TEAM PERSEVERED THROUGH WILD WEATHER AND EXCESSIVE SEDIMENT**

*Emily Poynter Jenkins, PhD, PE, CFM, Farnsworth Group*

*Gary Paradoski, PE, Aqua Vitae Engineering*

*Rebecca Olson, M.S., Olson Ecological Solutions, LLC,*

At the 2023 IAFSM conference, Farnsworth and subs Aqua-Vitae and Olson Ecological Solutions left you on a cliffhanger with an erosion stabilization project in Rockford, Illinois. The project was on the brink of construction after initial bids came in too high and the project was value engineered in order for the client to proceed using the grant funding they had secured. After the value engineering and a strategic rebid during winter months, a contractor was selected and the project proceeded.

Now, two years later, the project has been completed, but not without its own trials and tribulations. What happens when you have the 8th wettest July in city history a week after final grading and seeding has occurred on a steep and highly erodible gully system...and 6" of that water falls within one weekend? After the panic subsided, the team got to work collaborating with the contractor and client to mitigate the erosion damage caused by the rain event through grading, extra seeding, and additional erosion blankets and coir logs. The long-term sediment basin maintenance plan was also adjusted, since the basin was filling with sediment at a much higher rate than predicted.

Now that the site is fortified and vegetation established, how is the overall system performing? The value engineering from 2023 removed a large section of storm sewer pipe upsizing from the downstream perennial garden; what are the effects of that design change and is the perennial garden protected from surcharging manholes and sedimentation on walkways? Have we accomplished our goals of the project despite the setbacks we've encountered? Join us to hear the exciting conclusion to our Rockford erosion story.

## **REDEFINING STORMWATER AS RAINWATER: UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN'S RAINWATER MANAGEMENT PLAN**

*Emily Poynter Jenkins, PhD, PE, CFM, Farnsworth Group*

*Grace Kurcab, PE, CFM, Farnsworth Group*

Stormwater is often thought of as a nuisance - something that communities need to capture and remove through massive concrete pipes underground. Granted, it often causes a lot of concerns: flooding, erosion, infrastructure damage, non-point source pollution, etc. Communities will often take the "out of sight, out of mind" approach as they put in bigger and bigger pipes to combat these issues. However, the University of Illinois is striving to redefine stormwater as rainwater in their most recent Rainwater Management Plan. The Plan recommends green infrastructure throughout campus as the primary means to reducing the release rates. It not only provides a roadmap for campus as further development continues, but it also focuses on retrofitting existing areas of traditional stormwater infrastructure into a variety of green infrastructure facilities.

Rainwater can be an incredible asset to the community - one that engages the community through aesthetically pleasing "artful rainwater" concepts and encourages a connection between the community with nature. Implementing and providing knowledge about green infrastructure to the community creates a sense of ownership in the campus' rainwater and a responsibility to protect local waterways. The University's Rainwater Management Plan embraces these themes throughout, tying solutions from the Campus Landscape Master Plan together with green infrastructure to create a cohesive and sustainable campus for future generations.

This presentation will discuss the development of and the recommendations in the Rainwater Management Plan, as well as highlight green infrastructure funding opportunities for universities.

## SESSION 3C: COLLABORATIVE FLOOD MITIGATION

Tuesday, 3:20 – 4:50 pm, South Pavilion 3-6

Moderator: Diane E. Bouckaert

### WHITEFISH BAY'S EMERGENCY STORM SEWER REPAIR: WHAT TO DO WHEN A 70 FOOT DEEP PIPE FAILS?

*Chris Gutkowski, P.E., CFM, Clark Dietz, Inc.*

*Emily Basalla, P.E., CFM, Clark Dietz, Inc.*

*Brandon Flunker, P.E., CFM, Clark Dietz, Inc.,*

On June 9, 2024, what began as an ordinary day in Buckley Park, in the Village of Whitefish Bay, WI, quickly turned extraordinary when a massive sinkhole appeared. Nestled on bluffs overlooking Lake Michigan, the park became the epicenter of community concern and media attention. The culprit? A failed 54-inch storm sewer pipe buried nearly 70 feet below the surface. This critical pipe, draining 230 acres, was a cornerstone of the Village's stormwater infrastructure. Adding urgency to the situation, forecasts predicted several inches of rain in the coming days.

A collaborative response team, including local officials, contractors, and Clark Dietz engineers, devised a temporary solution to reestablish flow to Lake Michigan and protect the community. Although the anticipated storms ultimately spared the Village, the interim fix held strong, proving the team's ingenuity under pressure. This session will explore the quick-thinking strategies and engineering expertise that stabilized the situation, and what comes next in developing a permanent solution for this critical infrastructure.

## SESSION 3D: PROFESSIONAL GROWTH & LEADERSHIP INSIGHTS

Tuesday, 3:20 – 4:50 pm, North Pavilion 1-3

Moderator: Jenny Loewenstein, PE, CFM

### PUBLIC TO PRIVATE EMPLOYMENT TRANSITION LESSONS LEARNED

*Kenneth N. Anderson, Jr., CFM, CPRP, CPESC, CPSC, Engineering Resource Associates, Inc.*

This presentation will focus on assisting those in the public and private sector to understand the major differences between their respective sectors. This will be a lighthearted review of my experiences. Examples include: time sheets, billable hours, plans vs. plan reviews, public vs. client relations, mission, politics, office politics, employee relationships, pensions vs. IRA, etc. My hope is that you will learn from my 38+ years of employment that the green grass may be somewhere beneath your feet, but it just may be a different shade of green.

### THE SUBTLE ART OF BEING A GOOD OWNER, PARTS 1 & 2

*David Skuodas, PE, CFM, LEED AP, Mile High Flood District*

In this presentation, we'll dive into insights from the book *The Effective Client: Why Being a Good Client is Smart Business in the Architecture, Engineering, and Construction Industries* by David Skuodas. David works as the Design, Construction, and Maintenance Director for the Mile High Flood District in Denver, where he oversees \$100 million in annual projects across the metro's urban waterways. His book is drawn from years of hands-on experience in the owner's (i.e. client's) seat, managing infrastructure projects, and it was sparked by his role in the aftermath of Colorado's devastating 2013 floods, which obliterated billions of dollars' worth of infrastructure.

During the flood recovery, despite a wealth of business opportunities, designers and builders consistently chose to work with David's agency. Why? To find the answer, he interviewed over 50 industry professionals, consultants, contractors, and fellow owners, uncovering the core principles that make owners irresistible to top-tier designers and builders. His key question: "Why does being a good owner matter?"

# SESSION 4A: FLOODPLAIN MANAGEMENT & URBAN DRAINAGE

Wednesday, 10:30 am - Noon, South Pavilion 1

Moderator: Matthew J. Moffitt, PE, CFM

---

## **BIESTERFIELD ROAD BASIN OUTFALL IMPROVEMENTS PROJECT**

*Laura Pellizzari, PE, CFM, HR Green, Inc*

The Biesterfield Road Basin Outfall Improvements Project is an urban drainage project centered around the replacement of a failing arched pipe. The failing pipe carried runoff from the Biesterfield Road Basin through residential backyards to a downstream waterway. Limited space was a big project constraint, as there was a 60" Northwest Suburban Municipal Joint Action Water Agency watermain bordering the project area on the eastern side, while the western side was bordered by a fence along the edge of the residential properties. The problem had been studied previously, but the proposed solution was not feasible due to the limited available space. HR Green expanded upon an existing H&H model to develop a solution that greatly reduced the project cost and provided a constructible solution. HR Green was able to reduce the size of replacement pipe to allow it to be installed in the narrow available space. The proposed design relies on an overland flow path and restored storage capacity of the Biesterfield Road Basin to bring it in compliance with MWRD requirements. Construction of the project was completed in 2024. The presentation will cover the project challenges, innovative solutions, and lessons learned.

## **REDUCING STORMWATER DISCHARGE IN THE NORTH BRANCH OF CHICAGO RIVER, LAKE COUNTY**

*Kurt Woolford, PE, CFM, Lake County Stormwater Management Commission*

*Jeff A. Fuller, PE, US Army, Corps of Engineers, Chicago District*

After nearly 80 years of litigation, the 1980 Supreme Court issued a decree under which the State of Illinois' Lake Michigan diversion is currently operated. The decree established a 3,200 cfs limit, averaged over 40 years and a requirement to complete an annual accounting of the diversion, for which the U.S. Army Corps of Engineers has been responsible since 1986. Optimization of the use and monitoring of the diversion has increasingly come into focus over the years, particularly as municipal water supplies continue to switch to Lake Michigan as their primary source. The efforts of regional stakeholders have shown a demonstrable impact on the water supply and direction diversion constituent flows of the diversion; the implementation of flood risk mitigation projects, such as those by the Lake County Stormwater Management Commission, have helped to affect reductions in the runoff portion of the diversion.

## **HOW A WATERSHED-BASED PLAN CAN LEAD TO COMPREHENSIVE WATERSHED IMPROVEMENT**

*Cecily Cunz, AICP, Baxter & Woodman*

A watershed-based plan can be an excellent tool to outline a path toward achieving holistic watershed health for your community. A watershed-based plan that follows the USEPA's Nine Elements defines and addresses existing or future water quality problems from both point sources and nonpoint sources of pollutants. The planning process brings together all the stakeholders in a watershed, from local governments to private landowners, identifies water quality problems and solutions, and potential funding sources to implement solutions, both sharing the burden amongst landowners and bringing more funding sources to the table.

Solutions to water quality problems often include best management practices such as stream restoration, wetland restoration, and detention basin retrofits that also address flooding. The same project can often be applied to various grants by highlighting the features that best fit that funding opportunity, provided they were designed with both water quality and flooding benefits in mind. An IEPA-approved watershed-based plan can be crucial in identifying and funding comprehensive watershed improvements and getting stakeholder buy-in for implementing those projects.

Baxter & Woodman will highlight what makes the watershed-based planning process uniquely valuable to achieving stakeholder buy-in for implementation, and case studies of how they were able to work with local governments - from planning and stakeholder engagement, to finding funding for projects, and all the way through implementation. Case studies will demonstrate how multiple funding sources were leveraged to implement holistic watershed restoration that both improved water quality and reduced flooding.

# SESSION 4B: EVOLVING PRACTICES IN DAM REMOVAL & MODIFICATION

Wednesday, 10:30 am - Noon, South Pavilion 2

Moderator: Kelsey Gattone, PE, CFM

---

## **IDNR DAM REMOVALS – PAST, PRESENT, & FUTURE**

*Wes Cattoor P.E., CFM, IDNR - Office of Water Resources*

The IDNR Office of Water Resources has been heavily focused on dam removal for over a dozen years. We have participated in eighteen dam removals during that time and currently there are five dams actively under study. The presentation will include an overview of work that has been completed, and some of the lessons learned. An update on the five dams currently under study will be shared. We will discuss the progress being made in partnership with USACE 519 Fox Reconnection Study, and the state's perspective of dealing with "state-owned dams" and coordination with communities along with considerations to liabilities the state holds with it's ownership. With the recent publication of the OWR's new Dam Removal Guidance Document, we will take a deep dive into what it entails including provide direction in the prioritization for dam removals, technical assistance that can be provided by the Office, as well as OWR funding that can be made available to communities interested in dam removal or modification. Lastly, consideration will be given to what the future direction of the OWR dam removal program may look like in the near and distant future.

## **CARPENTERSVILLE DAM REMOVAL**

*Derrick Martin P.E., CFM, V3 Companies*

*Wes Cattoor, P.E., CFM, IDNR - OWR*

*Jennifer Rooks-Lopez, Kane County FPD,*

The Carpentersville Dam Removal project is located within the Fox River Shores Forest Preserve which is owned and operated by the Forest Preserve District of Kane County. The dam removal project was a joint effort between the District and the Illinois Department of Natural Resources. This project was previously identified in IDNR's report Evaluation of Public Safety Run-of-River Dams, a statewide program introduced in 2007.

The Carpentersville Dam removal project is consistent with the generally-accepted position that run-of-river dam removals not only eliminate public safety risks, but also significantly improve the health of waterways by removing major barriers to fish passage and the movement of other aquatic species. Dams generally degrade the overall water quality and habitat in a river by altering the natural flow regime.

The Carpentersville Dam was a broad-crested low head run of the river dam, with a sloping concrete face that was approximately 9 feet high and 380 feet wide. The dam was reportedly constructed in the 1830s but was suspected to have been rebuilt, potentially multiple times, and was in a deteriorating condition.

This presentation will briefly discuss IDNR's position on dam removals, specifically as it relates to the Carpentersville Dam and their IGA with the Forest Preserve District of Kane County. It will also discuss some of the early dam removal design considerations and permitting challenges and some of the changes identified and implemented. The final part of the presentation will focus on the actual dam removal construction activities and how unexpected field conditions were addressed by the project team.

## **DAM MODIFICATION ALTERNATIVES AND SEDIMENT HANDLING FOR NORTH AURORA DAM**

*Terra McParland, PE, CFM, IDNR - Office of Water Resources*

*Aaron Rotherham, IDNR - Office of Water Resources*

IDNR's Office of Water Resources will summarize the findings of a strategic dam modification study for the North Aurora Dam on the Fox River. The earliest known construction of a dam on the Fox River at North Aurora was in 1833 with the purpose of providing power to a sawmill. The current dam was constructed in 1973, and causes a downstream hydraulic roller which is a life-safety hazard. In addition to safety, the other goals of modifying the dam are to provide ecological benefits through river connectivity, improve the water quality in the river with better dissolved oxygen levels, and enhance the recreational use of the river. Other considerations for the project included keeping the nearby Mill Race flowing, and minimizing changes at the adjoining park. Preliminary testing indicates that portions of the river contain contaminated sediment, so OWR is working with IEPA to develop methods to quantify sediment volumes and review mitigation options. This presentation will compare the hydraulic models for several different alternatives as well as highlight the sediment testing and sediment transport modeling results.

# SESSION 4C: STRENGTHENING RESILIENCE WITH 2D MODELING

Wednesday, 10:30 am – Noon, South Pavilion 3-6

Moderator: Nikhil Sangwan, PE

## **2D MODELING MEETS REAL-WORLD FLEXIBILITY: MANAGING REGULATORY CHALLENGES AT THE GENEVA FOX RIVER CROSSING**

*Karoline Qasem, PhD, PE, PMP, CFM, Fehr Graham*

The City of Geneva's WWTP Improvement and River Crossing project aims to address sanitary overflows and simplify maintenance. The project involves installing two temporary cofferdams on each side of the Fox River mapped floodway. A 2D HEC-RAS model was employed to evaluate how temporary cofferdams would impact water levels in the Fox River. Model results showed that the water surface elevation would exceed the regulatory limit during the 100-year flood event. To address this, a flexible contingency plan was developed to remove the cofferdams in anticipation of major storms. This presentation summarizes how combining advanced modeling with adaptive planning allowed the project to meet regulatory requirements while mitigating risks. (Andrew Barbeau made a significant contribution to this work).

## **GOING BEYOND FLOW PATH MAPPING**

*Sarah Burgess, PE, CFM, Hey and Associates, Inc.*

*Anna Culcasi, PE, CFM, Hey and Associates, Inc.*

Flow path mapping is an amazing tool. Using digital elevation models, detailed analysis can be performed to visually represent how stormwater flows across the ground for an entire community. These efforts can help public works, community development, and engineering departments better engage with the public to demonstrate where water is coming from, where is it going, better understand property flooding, and plan solutions. Flow path maps can be used in a variety of ways, from verifying regulatory requirements to siting green infrastructure. Using related ArcHydro tools, an even wider array of applications is possible. Example projects will highlight applications such as performing tributary drainage area calculations, model input calculations, green infrastructure planning, pipe capacity screening, and depressional risk analysis. These applications can help solve problems and answer the unique questions that arise depending on varying community circumstances.

## **INCORPORATING RESILIENCE THROUGH 2D HYDRAULIC MODELING**

*Tatiana Papakos, CFM, PE, Michael Baker International*

Decision-makers in government and other agencies are incorporating resilience into infrastructure design to ensure structures can withstand and recover from disruptions caused by extreme weather. Using advanced 2D hydraulic modeling, engineers can more accurately evaluate potential climate change impacts and identify adaptations and mitigation measures to enhance infrastructure resilience and reduce long-term maintenance costs.

A major bridge replacement project on I-80, led by PennDOT, incorporated a resiliency assessment to identify potential impacts of future climate change, along with proposed countermeasures for various components of each bridge structure. The resiliency assessment was performed using SRH-2D for hydraulic modeling of the stream and structures to determine the impacts of increased flow scenarios on water surface elevations, velocities, shear stress, and freeboard. The SRH-2D models were calibrated and compared against agency-approved HEC-RAS models used for permitting. The assessment identified climate change impacts on bridge and culvert infrastructure due to failure modes such as increased upstream flooding, stream bank erosion, roadway approach and structure overtopping, loss of roadway embankment stability, increased pier or abutment scour, and ice/debris jams. A risk-based methodology was developed to determine structure vulnerability by evaluating future climate risk, potential failure modes, capital cost, maintenance cost, and other economic, engineering, or environmental concerns. Adaptive designs were developed for each potential failure to mitigate impacts from increased flows. A cost-benefit analysis of the life cycle cost damage associated with each potential climate scenario was conducted to aid in selecting adaptations that enhance the structures' resilience against future climate conditions.

# SESSION 4D: EQUITY IN DISASTER PREPAREDNESS & FLOOD MITIGATION

Wednesday, 10:30 am - Noon, North Pavilion 1-3

Moderator: Brian Chaille

---

## **THE NAACP & FEMA AGREEMENT: EQUITABLE DISASTER PREPAREDNESS**

*Theodis Pace, Illinois NAACP*

In September 2023, FEMA Administrator Deanne Criswell and NAACP President Derrick Johnson signed an agreement, link below, outlining how the two organizations will work together to help people before, during and after disasters. This agreement continues the longstanding partnership that began in 2013. Participants in this workshop will learn about the agreement, how the NAACP and FEMA are working together nationally, and in Illinois.

<https://www.fema.gov/press-release/20230922/fema-signs-memorandum-agreement-naacp-strengthen-partnership-during-and>

## **ADDRESSING FLOODING DISPARITIES IN BLACK COMMUNITIES: THE CRISIS IN GREATER EAST ST. LOUIS**

*Darnell Tingle, United Congregations of Metro East.*

In the Greater East St. Louis area, including Centreville and Cahokia Heights, persistent flooding has disproportionately impacted Black communities. These low-lying areas, with outdated and poorly maintained infrastructure, face repeated flooding that disrupts daily life, damages homes, and endangers health. This presentation explores how systemic disinvestment, environmental neglect, and racial disparities in public policy contribute to a cycle of vulnerability for Black residents. It also examines community efforts to address these inequities and proposes policy reforms that prioritize sustainable infrastructure improvements. Through this lens, we will highlight solutions that are grounded in environmental justice and equity, aiming to build resilience in historically marginalized areas.

## **MANY HANDS MAKE LIGHT WORK: HOW MULTI-AGENCY COLLABORATION CAN AFFECT REAL CHANGE**

*Jason Reddy, PE, IDNR*

The Metro East St. Louis is a metropolitan area that stretches across 8 counties in Illinois and is home to over 600,000 people. Within the Metro East St. Louis area is a flood-prone region known as The American Bottoms. The American Bottoms sits within the historic Mississippi River flood plain, protected from the river by levees on the west and bounded by high bluffs to the east, and is home to about a dozen different communities. The majority of these communities are classified as economically disadvantaged. This area is part of the “rust belt” and since the industrial collapse in the 1960’s has been plagued with failing infrastructure and interior flooding caused by severe storms and a high water table. At the end of 2020, a renewed effort to address these problems has developed and grown into a coalition of local communities, state agencies, federal agencies, and congressional offices, that is undertaking a unique approach to affect meaningful change in this region. This group has overcome roadblocks and hurdles to successfully deliver resources to these underserved communities. While change can be painfully slow, four years after this renewed effort started, projects and resources are being delivered and residents are seeing improvements that can last for years to come. This presentation will teach attendees about the underlying conditions and complicating factors in the American Bottoms that contribute to the flooding and infrastructure challenges that these communities face. It will also provide a blueprint for attendees to set up their own collaborative groups, detailing obstacles these groups might face, and how to overcome them to uplift underserved communities. By arming people with these tools, collaborative groups across the country can be established, delivering needed resources to areas that are often overlooked.

# SESSION 5A: MANAGING STORMWATER: BIG & LOCAL CHALLENGES

Wednesday, 1:30 - 3:00 pm, South Pavilion 1

Moderator: Jennifer Maercklein, P.E., CFM

## THE GOLDEN AGE OF GOLF COURSE STORMWATER MANAGEMENT

*Andrew Regnery, PE, V3 Companies, Ltd.*

Effective stormwater management on golf courses presents unique challenges, particularly as many courses in Illinois and around the US were designed without fully addressing stormwater runoff. Initial designs often overlooked the impact of large storm events, resulting in layouts that struggle to manage heavy rainfall. Further complicating this issue, development around courses has increased, adding additional runoff that leads to frequent flooding, erosion, and drainage issues, which disrupt playability and drive up maintenance costs.

Golf courses frequently contain or border sensitive wetlands, which require careful management to prevent direct and indirect impacts. Preserving these ecosystems is a delicate balancing act, as modifications to the landscape must avoid harm to wetland areas while supporting the course's drainage needs. Unlike typical land development projects, grading on golf courses is constrained by the need to preserve the architectural integrity of the course's design, including green contours, bunkers, and fairway slopes.

Retrofitting courses with improved stormwater management solutions, such as retention ponds, vegetated buffers, and advanced drainage systems, requires innovative strategies that respect the golf course architecture, as well as environmental constraints. This presentation will explore the nuanced approaches needed for effective stormwater management on golf courses, emphasizing the importance of sustainable planning and protection of surrounding ecosystems.

## A TALE OF SCALE LONG-TERM THINKING TO ADDRESS BIG STORMWATER PROBLEMS IN L.A.

*Courtney Semlow, PE, CFM, ENV SP, Craftwater*

*Brad Wardynski, PE, Craftwater*

To address aggressive stormwater quality regulations with impending deadlines, public parcels throughout Los Angeles County are being retrofitted with regional stormwater treatment BMPs featuring large, subsurface storage chambers. Traditionally, these systems were geared towards flood or quantity control at the site level and had a "set it and forget it" approach to access, monitoring, and maintenance. Adapting these off-the-shelf systems to function as water quality BMPs that can manage thousands of tributary acres is a unique challenge where proper and long-term functionality of the BMPs is vital to the health of the watersheds. Additionally, as communities in SoCal continue to feel the pressure of water shortages and historical disinvestments, creative solutions are needed to squeeze multiple benefits from every capital project.

Our approach to watershed transformation starts with engineer-informed planning and modeling to ensure BMPs are sited and sized for optimum performance. The design process then focuses on providing adequate access for monitoring and maintenance and promotes realistic operation efforts for municipalities with limited resources. Often, multiple modes of water quality treatment are incorporated to ensure long-term functionality and promote water supply augmentation, including infiltration, filtration, and/or diversion of runoff to the sanitary sewer for reclamation and potable reuse. To maximize benefits, gain local support, and improve funding potential, every subsurface project also includes surface-level community investments and nature-based solutions.

This presentation will define the specific long-term stormwater quality goals and how our BMP design approach helps accomplish those goals while considering long-term operation and maintenance. The discussion will reference specific examples from dozens of successful projects, and discuss how these methods can be adapted to the drivers and conditions of Illinois and the greater Midwest.

# SESSION 5A: MANAGING STORMWATER: BIG & LOCAL CHALLENGES

Wednesday, 1:30 - 3:00 pm, South Pavilion 1

Moderator: Jennifer Maercklein, P.E., CFM

---

## WHEN THE STORMWATER AGENCY HAS STORMWATER CHALLENGES: STORMWATER DETENTION AND FLOOD RISK AT THE DUPAGE COUNTY CAMPUS

Jennifer Maercklein, P.E., CFM, V3 Companies

In 2021, V3 Companies began an assessment of the DuPage County government campus, for the purpose of identifying locations for new detention storage. The County was planning a series of facility improvements at a number of sites across the campus, and sought a regional or holistic solution for the cumulative stormwater detention needs associated with the current and future development projects. Reviewing the performance of existing stormwater management systems in consideration of new and future rainfall standards is an important part of emergency preparedness and stormwater management.

While in the process of identifying locations for new stormwater detention, V3 observed that the existing detention ponds on campus did not have adequate capacity when Bulletin 75 rainfall was applied to the site and the upstream tributary watershed. The existing ponds were originally constructed with TP-40 rainfall standards and expanded over the decades as the campus grew, in compliance with the stormwater regulations that were effective at each phase of development. These ponds are expected to overflow in a Bulletin 75 100-year event, sending the overflow towards critical facilities on campus and putting buildings at risk - including the County Jail, the Emergency Operations and 911 Dispatch Center, and the building which houses the County's computer servers to support these critical operations.

This presentation will describe V3's stormwater analysis, discuss how new detention storage and post-construction BMPs were created on campus, and present the County's action items for mitigating flood risk due to existing pond overflow during a Bulletin 75 storm event.

# SESSION 5B: CLIMATE RESILIENCE & ADAPTATION

Wednesday, 1:30 - 3:00 pm, South Pavilion 2

Moderator: Stephanie Nurre, PE, PMP, CFM

---

## BUILDING TRANSPORTATION RESILIENCE IN NORTHEASTERN ILLINOIS

Kate Evasic, Chicago Metropolitan Agency for Planning

Northeastern Illinois is feeling the effects of climate change. Hazards like intense storms and high temperatures put both transportation infrastructure and users at risk. Future impacts are projected to become more frequent and intense across the region. The Chicago Metropolitan Agency for Planning (CMAP) seeks to improve the resilience of the region's transportation network. Through the Transportation Resilience Improvement Plan (TRIP), we are identifying regional transportation assets vulnerable to climate change and prioritizing them for equitable resilience investments. TRIP will inform transportation planning and decision-making at CMAP and throughout the region. It will also meet the Federal Highway Administration's Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program requirements, and position northeastern Illinois to compete for PROTECT and other resilience funds.

The first phase of TRIP, a risk-based vulnerability assessment, uses recent trends and projections to analyze climate risks. The assessment identifies which are the greatest climate hazards to the region and its transportation system, and where risks are distributed. Unsurprisingly, flooding poses the biggest threat, impacting all transportation infrastructure, operations, and users. The next phase is to develop a regional Transportation Resilience Improvement Plan by late 2025. The vulnerability assessment will be a key component, supporting transportation resilience planning by helping identify and prioritize resilience projects. TRIP will also explore practices to advance climate resilience, such as design guidelines, land-use policy, and asset management.

Kate will provide an overview of the vulnerability assessment and discuss how TRIP recommendations can support floodplain and stormwater management efforts in the region.

## SESSION 5B: CLIMATE RESILIENCE & ADAPTATION

Wednesday, 1:30 - 3:00 pm, South Pavilion 2

Moderator: Stephanie Nurre, PE, PMP, CFM

### PRIORITIZING RESILIENT INFRASTRUCTURE: ASSET-LEVEL VULNERABILITY ASSESSMENT WEB VIEWER

*Rebecca Leitschuh AICP, Stantec Consulting*

As climate change impacts are being actualized, infrastructure owners are needing increasingly quantitative vulnerability assessments to understand, compare, visualize, and communicate the risks to their assets and users across multiple hazards and time scenarios. Stantec has developed a quantitative vulnerability assessment scoring program to provide asset-level vulnerability scores based on exposure, sensitivity, and adaptive capacity to multiple climate scenarios. The program utilizes ArcGIS, Python, and SQL to automate large scale vulnerability assessments and provide interactive spatial results. The program has been successfully deployed to score over 100,000 assets for the Kansas Department of Transportation to nine natural hazards and two climate scenarios. The process and tool can be applied to any system that has physical locations with supporting asset data, including public water systems. The results are visualized in an interactive Web Viewer to allow planners, engineers, and the public to understand vulnerability and develop actions to increase resilience. The results can facilitate resilience project development, resilience project supplementation, maintenance prioritization, and emergency response planning.

### LEVERAGING USACE EXPERTISE FOR RESILIENCE: COLLABORATIVE SOLUTIONS FOR LOCAL COMMUNITIES

*Kaitlyn McClain, U.S. Army Corps of Engineers, Chicago District*

*Kira Baltutis, U.S. Army Corps of Engineers, Chicago District*

The U.S. Army Corps of Engineers (USACE), Chicago District will provide a brief overview of several programs that make the agency's technical expertise available to support local communities, including floodplain and urban stormwater management, coastal resilience, ecosystem restoration, emergency management, recreation and interagency support services.

In addition, USACE will provide a summary and lessons learned from a unique FEMA mission assignment implemented in response to severe flooding in Cook County and the City of Chicago, that resulted in FEMA disaster declarations. USACE partnered with local community groups on Chicago's south and west sides, and Cook County's south and west suburbs, to facilitate workshops with agencies at the federal, state, regional, county, and local levels. The workshops spotlighted the efforts of the community groups who played a significant role in community recovery from the 2023 flood disasters and included discussions on resources and long-term solutions to create more flood-resilient communities.

## SESSION 5C: URBAN FLOODING: MITIGATION & PLANNING

Wednesday, 1:30 - 3:00 pm, South Pavilion 3-6

Moderator: Sarah Hunn, PE, CFM

### UPDATING THE COUNTYWIDE NATURAL HAZARD MITIGATION PLAN

*Anne Wilford, CFM, Kane County Dept of Environmental and Water Resources*

*Sarah Hunn, PE, CFM, DuPage County*

*George DeTella, Integrated Solutions Consulting, Inc.*

This presentation will provide an overview of the process and importance of updating a county's Natural Hazard Mitigation Plan (NHMP). It will explore the key steps involved, including risk assessment, stakeholder engagement, and the incorporation of new data and technologies. Special emphasis will be placed on addressing the impacts of climate change, shifting population dynamics, and evolving infrastructure vulnerabilities. Attendees will learn how the updated plan integrates the latest hazard data, enhances community resilience, and aligns with state and federal mitigation strategies. The session will also highlight best practices for public involvement and how local governments can use the NHMP to secure funding for mitigation projects. Finally, the presentation will discuss the challenges faced in updating the plan and strategies for overcoming them, ensuring the county is better prepared for future natural disasters.

# SESSION 5C: URBAN FLOODING: MITIGATION & PLANNING

Wednesday, 1:30 – 3:00 pm, South Pavilion 3-6

Moderator: Sarah Hunn, PE, CFM

---

## COMBINED SEWER SEPARATION MASTER PLANNING IN THE CITY OF ELGIN, IL

*Andrea Pracht PE, CFM, HR Green*

*Jarod Oliver, PE, HR Green*

To meet their 2012 IEPA Long Term Control Plan (LTCP) requirements, the City of Elgin has separated approximately 2,000 acres of combined sewer drainage area, with approximately 1,000 acres remaining combined. The purpose of the Combined Sewer Master Planning is to assess the current state of all the combined sewer basins, update H&H models, prepare alternative analysis to achieve the intent of the City's LTCP to the extent practical, and prepare a prioritized implementation plan of future improvements.

For this presentation, we will outline the steps taken towards combining multiple historical models into one larger model - including the impacts of updating the historical models to reflect current land use and rainfall events. We will also discuss how recommendations were prioritized based on recorded overflows, and to fit within the City's Water Master Plan and roadway improvement projects.

## BUILDING A FLOOD WARNING SYSTEM IN CHICAGO USING INSIGHTS FROM NEW ORLEANS

*Brandon Wong, Hyfi*

With cities facing increasingly severe flood risks, we examine whether lessons from one city's flood monitoring and response efforts can be effectively adapted to another. Specifically, we consider whether an early warning system used to report flooding from the streets and canals of New Orleans has potential to help improve flood response and mitigation for Chicago's viaducts, basements, and waterways.

In 2024, in partnership with the New Orleans Office of Hazard Mitigation and the Sewerage & Water Board of New Orleans, we launched a high-resolution flood monitoring network with the goal of improving flood response and resilience. This initiative focused on monitoring fifty high-flood risk sites as determined by critical infrastructure locations, flood models, and community input. When Hurricane Francine struck, the network's real-time data proved essential in helping emergency responders inventory flooded roads and coordinate response efforts.

Building upon this experience in collaboration with the City of Chicago and the Center for Neighborhood Technology, we aim to develop a similar flood warning network tailored to Chicago. Drawing from historical flood reports, model outputs, and neighborhood qualities, we envision a hyperlocal resource for Chicago residents driven by fifty sensors and real-time analytics. We will share our progress towards that goal since the first sensors were installed in Chicago in the fall of 2024. This presentation will explore where solutions designed for Chicago align with those of New Orleans, and where they are unique, focusing on site selection, interagency collaboration, and technical challenges. Attendees will gain insights into the early findings from our partnership in Chicago and whether these approaches could serve as a blueprint for network design by neighboring communities.

# SESSION 5D: WATER RESOURCE MANAGEMENT SOLUTIONS

Wednesday, 1:30 - 3:00 pm, North Pavilion 1-3

Moderator: Ajay Jain

## WATERSHED-BASED PLAN DEVELOPMENT FOR THE UPPER WEST BRANCH DUPAGE RIVER WATERSHED

*Rishab Mahajan, PE, CFM, BC.WRE, Geosyntec Consultants*

*Mary Beth Falsey, DuPage County*

*Santos Batista, DuPage County*

US EPA's Section 319 Nonpoint Source Clean Water Act grant guidelines refer to “nine minimum elements” of successful watershed projects developed and implemented with Section 319 funds. Developing a watershed-based plan (WBP) that adheres to these nine elements has distinct advantages for municipalities looking to evaluate and address water quality issues in a watershed. WBPs also offer a way for municipalities and other stakeholders to obtain funds to improve and protect the health of local watersheds.

This presentation will describe the ongoing development of the WBP for the Upper West Branch DuPage River, and lessons learned from the process. DuPage County Stormwater Management has received a Section 604b Grant from the Illinois EPA to complete the 9-element WBP, which aims to identify causes of waterway impairments and propose water quality projects and program solutions. As part of WBP, DuPage County is conducting a detailed assessment of stormwater basins, streams, and lakes. A continuous simulation model, Hydrologic Simulation Program Fortran (HSPF), is being used to quantify the pollutant loading estimates and load reduction from Best Management Practices for these WBPs. The quantitative method of HSPF provides greater insight into anticipated pollutant loading and reductions than simplistic models such as STEPL. The development of WBP will enable the stakeholders in the watershed to allocate resources better to achieve target water quality objectives.

## TIPS FOR LOCALIZED DRAINAGE STUDIES

*Logan Gilbertsen P.E., CFM, HR Green, inc.*

At the 2022 conference, HR Green presented Tips for a Successful Site Visit. This presentation is a continuation, discussing what happens after the site visit. Nuisance flooding is a common issue for municipalities and can pose a challenge for engineers who need to develop a solution. Sometimes we need to look further than the simplest solution and get creative to develop constructible and cost-effective solutions to nuisance urban flooding issues. Completing numerous drainage studies in his career, Logan has found many tips and tricks to help successfully find a solution that fits the needs of a given site. During the presentation, Logan will go over the process of visiting a site, gathering survey data and conceptualizing solutions that balance conveyance and detention, and considerations for presenting findings.

## ADVANCES IN TRASH CAPTURE

*Luke Matteson, StormTrap*

Testing and verification programs for hydrodynamic separators (HDS) and filters have been in use for decades but, until 2023, there was no standardized test for trash capture devices (TCD). At that time ASTM E3332 “Standard Test Method for Determining Trash and/or Debris Capture Performance of Stormwater Control Measures” was published. In 2024, the first TCD was tested to E3332 and the results were independently verified by the Stormwater Testing and Evaluation of Products and Practices (STEPP) program.

Other technologies are following suit so now, for the first time, watershed managers will have independently verified, standardized performance data for TCDs. This is significant for a few reasons:

- 1. TCD performance can be compared on an apples-to-apples basis.
- 2. TCDs can be evaluated for more than simply “do they capture trash?”
- 3. There is an independent body, STEPP, that does the heavy lifting of reading and verifying test reports

A discussion of ASTM E3332 and the STEPP program, including examples from published, verified reports, will explain how these tools can help watershed managers take advantage of the three opportunities listed above. There will also be discussion of lessons learned while testing to the E332 standard and what revisions are in store for that standard.

# Exhibitors

Booth #1



Booth #2



Booth #3



Booth #4



Booth #5



Booth #7 & 8



Booth #10



Booth #11



Booth #12



Booth #13



Booth #14



Booth #15



Booth #16



Booth #17



Booth #18



Booth #19

*Hey and Associates, Inc.*

Booth #20



Booth #21



# IAFSM 2025 ANNUAL CONFERENCE

## EXHIBIT DOOR PRIZE CARD

\_\_\_ A3 Environmental Consultants (11)

\_\_\_ Hyfi (10)

\_\_\_ AEC Supply (12)

\_\_\_ IAFSM - Sediment Table (7)

\_\_\_ AquaShield, Inc. (1)

\_\_\_ IAFSM - Water Table (8)

\_\_\_ Baxter & Woodman (21)

\_\_\_ Illinois State Water Survey (3)

\_\_\_ Contech Engineered Solutions (2)

\_\_\_ ISO/Verisk (14)

\_\_\_ Engineering Resource Associates (13)

\_\_\_ RES (15)

\_\_\_ Farnsworth Group, Inc. (5)

\_\_\_ StormTrap (20)

\_\_\_ Ferguson (18)

\_\_\_ TERRA Engineering, Ltd. (16)

\_\_\_ Forerunner (4)

\_\_\_ Unilock Chicago, Inc. (17)

\_\_\_ Hey & Associates, Inc. (19)

**YOUR NAME (PLEASE PRINT):**

---

### INSTRUCTIONS

Once you have every blank initialed by all the private exhibitors, **turn this sheet in to the Registration Table before you leave on Tuesday** for the door prize drawing at Wednesday's Lunch Session.

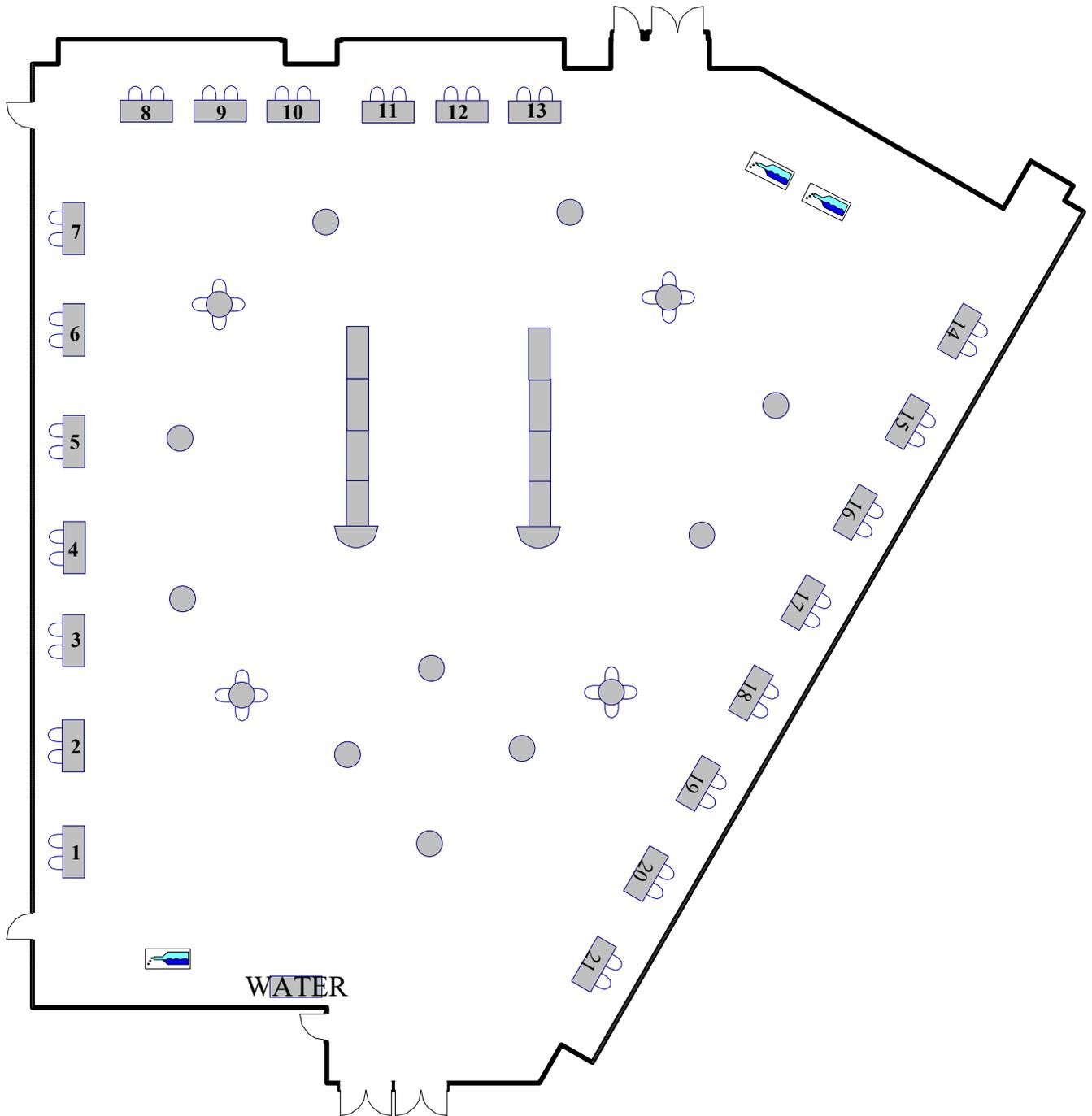
You cannot win a an exhibitor door prize if you do not have your name on this card.

You must be present at Wednesday's Lunch Session to win.

# Exhibitor Map

---

## Exhibit West



# Platinum Sponsor

## **BAXTER & WOODMAN** Consulting Engineers



From developing comprehensive master drainage plans to designing and constructing individual drainage projects, Baxter & Woodman is committed to providing solutions that maximize flood control and enhance water quality...  
**protecting water resources for future generations.**



Contact: Matt Moffitt, PE, CFM  
815.444.4470  
[mmoffitt@baxterwoodman.com](mailto:mmoffitt@baxterwoodman.com)

### **WATER RESOURCES**

- Modeling
- Design
- Funding Assistance
- Flood Studies
- Green Infrastructure
- Planning
- Regulatory Assistance



**PERSONAL SERVICE.  
QUALITY ENGINEERING.**

[baxterwoodman.com](http://baxterwoodman.com)



# Platinum Sponsor



**LEVEL 37 INTERIOR DRAINAGE**  
STORMWATER IMPROVEMENT PROJECTS

## CBBEL PROUDLY SUPPORTS IAFSM

Christopher B. Burke Engineering, Ltd. (CBBEL) is a full-service consulting engineering and surveying firm committed to delivering accurate, timely and cost-effective solutions to a wide range of engineering and environmental challenges. Learn more at [CBBEL.com](http://CBBEL.com).



# Gold Sponsors

---



<http://www.eraconsultants.com/>  
eramarketing@eraconsultants.com  
630-393-3060, Tracy Moon

Engineering Resource Associates, Inc. (ERA) is a consulting firm providing civil engineering, structural engineering, environmental science, and surveying services to clients throughout Illinois, Indiana, and Wisconsin. Our diverse clientele includes municipalities, park districts, forest preserves, sanitary districts, county agencies, state agencies, and private development.

Resolving issues and planning for the wise use of water resources often requires balancing multiple and sometimes conflicting demands and needs. Flood control, water supply, water quality, development, recreation, population growth and urbanization all have potentially long-lasting impacts to water resources. ERA has 35 years of experience identifying and working on a wide variety of water resource projects. Our staff of professionals includes licensed engineers, structural engineers, surveyors, environmental scientists, certified floodplain managers, and CAD/GIS specialists.

ERA provides technical expertise for your stormwater and floodplain project needs. We utilize hydrologic and hydraulic modeling for the design of infrastructure like bridges, culverts, storm sewers, dams, control structures, and open channels. Projects are designed to comply with regulatory requirements at the local, state, and federal level for streamline permitting. Our experience leads to proven designs that are feasible and constructable.



<https://www.hrgreen.com/>  
e-mail-info@hrgreen.com  
815.385.1778  
Marin Schmitt

# HRGreen®

Founded in 1913, HR Green is one of America's longest-operating design and construction firms serving the following markets: Broadband, Construction, Environmental, Geospatial, Governmental, Land Development, Planning, Transportation, and Water.

## Gold Sponsors

# *Hey and Associates, Inc.*

Engineering, Ecology and Landscape Architecture

<https://www.heyassoc.com/>  
Jeff Wickenkamp

847-740-0888  
volo@heyassoc.com



Hey and Associates, Inc. is a professional engineering, ecological consulting, and landscape architecture firm founded in 1976 to deliver comprehensive solutions to complex water resources and natural resources challenges. Over the last 49 years, the firm has grown to offer a full range of professional services. Our engineers, scientists, and landscape architects collaborate to identify opportunities, design creative solutions, and implement projects that are grounded in the fundamental principles of water resources, environmental science, and sustainability. In addition to our specialized water resources and wetlands capabilities, Hey also provides professional services for natural areas management, lakes and fisheries management, parks and open space design, site development, transportation projects, and construction management.

# **GHA** GEWALT HAMILTON ASSOCIATES, INC.

<https://www.gha-engineers.com/>  
Mei Zhu

Gewalt Hamilton Associates, Inc. (GHA) is a multi-disciplinary civil engineering, surveying and consulting firm. We offer a wide range of professional services, serving clients in both the private and public sectors. This includes partnerships with municipal, county, and state agencies, transportation authorities, stormwater commissions, and townships. We currently serve as the full-time municipal engineer for 13 Chicago-area municipalities and are the preferred engineer for 22 municipalities.

The competing concerns of site drainage, offsite impacts, and preservation of water quality must all be addressed in compliance with overlapping and sometimes conflicting federal, state, and local regulations. We guide clients through the complex range of requirements relating to regulated areas. On each project, we seek opportunities to apply best management practices and sustainable design - and whenever possible, we facilitate the incorporation of sustainable design elements through grant funding. Whether considering rain gardens, restoring natural areas, or installing permeable pavement, we focus on achieving effective, sustainable benefits without sacrificing site functionality. Our strategies blend proven stormwater management approaches with innovative naturalized systems to reduce both the volume and rate of stormwater runoff and enhance water quality.

As an employee-owned firm, GHA is dedicated to crafting solutions that deliver lasting value across all our service lines. GHA consistently creates designs that blend functionality and cost-effectiveness with the conservation of natural resources, ensuring both public appeal and regulatory approval. Our commitment to sustainable design extends beyond adhering to ordinances and best management practices; it is rooted in our dedication to positively impacting the world around us.



# Gold Sponsors

---



<https://res.us/>  
Lucas Lilly

RES is the nation's largest dedicated provider of Nature-based Solutions, restoring lands and waters across all scales. From wetlands, prairies, and species habitats to floodplains, streams, and coastal systems, we rehabilitate ecosystems with long-term success in mind. Our integrated team designs, builds, and guarantees the performance of each project. With a presence in every major eco-region, our experts are deeply connected to local biodiversity and water resource challenges, backed by a proven track record of impactful restoration.



Leading projects that are transforming Illinois and the Midwest, V3 Companies delivers award-winning stormwater and floodplain management projects that combine talents across specialties, including water resources, site civil, environmental, ecological restoration, construction, and more. Our multidisciplinary team understands the intersection of innovation and practical implementation of infrastructure design and nature-based solutions, enabling us to deliver complex projects that invigorate communities. Since 1983, we've put principles and people first, making us a Best Firm to Work For with more than 40 years of growth and success.

## **V3 Companies**

<https://www.v3co.com>

[info@v3co.com](mailto:info@v3co.com)

630-724-9200

Derrick Martin

# Silver Sponsors

---

## Michael Baker

### INTERNATIONAL

hydrology, environmental impact assessments, and sustainable water infrastructure planning & design. We offer visionary leadership in facilitating transformational change for our clients in the water sector. For over 84 years, Michael Baker International has addressed some of the world's most complex water resources challenges with a legacy of expertise, innovation, and integrity.

<https://mbakerintl.com/en/>  
Tatiana Papakos

Michael Baker International is a leading provider of civil engineering and consulting services across the United States. Our water resources engineering services in Illinois include surface water management,



<http://www.benesch.com/>  
Eric Dean

Since our founding in 1946, we been driven by one goal - improving communities large and small. Comprised of multidisciplinary experts including planners, hydrologists and civil and hydraulic engineers, the Benesch Team is committed to implementing sustainable solutions, putting cutting-edge technology to the test and helping reimagine what is possible for our clients as they tackle their resiliency challenges.



<http://www.ciorba.com/>  
Tony Wolff, PE, CFM, VP Water Resources  
P: 773.355.2961  
C: 847.910.2082

For over 95 years, Ciorba Group has provided comprehensive engineering solutions for water resources, transportation, structural, municipal, and construction projects. We deliver people-first engineering solutions that add value to communities, solve real-world problems and improve lives; meeting the needs of our clients and making their jobs easier. At Ciorba, we've built our community to better serve yours.



Engineers and Consultants

**Crawford, Murphy & Tilly, Inc**  
<https://www.cmtengr.com/>  
Chris Dagiantis

Through innovation and a passionate pursuit of excellence, our team of engineers, planners and other related design professionals are driven to help our clients achieve the highest value possible for the infrastructure they build and manage. Together we work to make our communities more livable and sustainable through insight, performance, and investment.



## Engineering Enterprises, Inc.

<https://eeiweb.com/>

Angie Smith

Engineering Enterprises, Inc. is an award-winning consulting engineering firm providing services to public agencies and private entities throughout northern Illinois. Over 75 experienced firm members including licensed professional civil engineers, land surveyors, and support team members provide a full range of services for planning, design, and construction of infrastructure projects, funding assistance and municipal consulting.

# Silver Sponsors

---



**Farnsworth**  
GROUP

<https://www.f-w.com>  
Ken Chastain  
kchastain@f-w.com  
708.326.4000

Farnsworth Group, a national engineering, architecture, and planning firm with 9 Illinois offices and 600+ team members, provides comprehensive water resources engineering statewide.

**Geosyntec**  
consultants

<https://geosyntec.com/>  
Rebecca Helfrich

Geosyntec is a consulting and engineering firm specializing in solving complex challenges for private and public sector clients related to the environment, natural resources, and civil infrastructure.

engineers | scientists | innovators



**Hanson Professional Services, Inc.**  
<https://www.hanson-inc.com>  
Tony Comerio

Hanson is a national, employee-owned consulting firm, headquartered in Springfield, Illinois, providing engineering, planning and allied services.



<https://mollyotoole.com/>



**StormTrap**<sup>®</sup>

MODULAR CONCRETE  
STORMWATER MANAGEMENT

<https://stormtrap.com/>  
Thais Giacomet

StormTrap provides cost-effective, customized water management solutions for engineers, owners, and municipalities across North America and abroad. Whether you are concerned about water quality, detention, infiltration or water harvesting, StormTrap has a design that will reduce your footprint, accommodate site constraints, lower overall costs and meet your project's needs.

# Bronze Sponsors

---

**BLECK**

engineers | surveyors

**Bleck Engineering Co., Inc.**  
<https://bleckeng.com/>  
Patrick Bleck

**ClarkDietz**

**Clark Dietz, Inc.**  
<https://www.clarkdietz.com/>  
Chris Gutkowski

**ECT**

> [ectinc.com](http://ectinc.com)  
**Environmental Consulting & Technology, Inc.**  
<https://www.ectinc.com/>  
Thomas Price

**GRÄEF**

**GRAEF**  
<https://graef-usa.com/>  
Joanna Colletti

 **HAEGER ENGINEERING**  
consulting engineers · land surveyors

**Haeger Engineering**  
<http://www.haegerengineering.com/>  
Len Kleinjan

**HMG**  
ENGINEERS

**HMG Engineers, Inc.**  
<https://hmgengineers.com/>  
Chris Bouchard

 **HORNER SHIFRIN**  
*An Employee-Owned Company*

**Horner & Shifrin, Inc.**  
<https://www.hornershifrin.com/>  
Stephen Randolph

**WBK**   
**ENGINEERING**  
*Part of Bodwé Group*

**WBK Engineering, LLC**  
<https://www.wbkengineering.com/>  
jguerrero@bodwegroup.com

 **Weaver Consultants Group**

**Weaver Consultants Group**  
<https://wcgrp.com/>  
Bill Perry

# IAFSM Board of Directors Meeting



# IAFSM

Illinois Association for  
Floodplain and Stormwater Management

General Agenda For Wednesday March 12, 2025

7:30 To 8:45 am,  
Tinley Park Convention Center,  
Samuel Tinley Room

**1.0 Call To Order**

**2.0 Approval of Previous Meeting Minutes**

2.1 Minutes of the January 10, 2024 Meeting

**3.0 Officers' Reports**

- 3.1 Chair – Dallas Alley
- 3.2 Vice Chair – Sharon Østerby
- 3.3 Treasurer – Mary Richardson
- 3.4 Secretary – Jenny Loewenstein
- 3.5 Past Chair – Steve Altman

**4.0 Committee Reports**

- 4.1 Annual Conference – Sharon Østerby, Chair
- 4.2 Awards – Sarah Hunn, Chair
- 4.3 Certification – Greg Thorpe, Chair
- 4.4 CRS – Julie Lomax, Chair
- 4.5 Education Outreach – Diane Bouckaert, Chair
- 4.6 Floodplain Management – Dawn Cosentino, Chair
- 4.7 Inter-Organization – Ajay Jain, Chair
- 4.8 Legislation - Kay Whitlock, Chair
- 4.9 Mitigation – Ron Davis, Chair
- 4.10 Newsletter – Jennifer Maercklein, Chair
- 4.11 Nominations And Elections – Mark Hoskins, Chair
- 4.12 Stormwater Management – Stephen Bicking, Chair
- 4.13 Wetlands – Tom Kehoe, Chair
- 4.14 Young Professionals – Alana Rosenbaum, Chair
- 4.15 Youth Outreach – Brian Chaille, Chair

**6.0 Old Business**

**7.0 New Business**

- 7.1 ASFPM Project Committee 2025 project solicitation
  - 7.1.1 Flood Mitigation Educational Kiosks - attached is the draft grant proposal
  - 7.1.2 Funding: The approved 2025 Budget contains a line item for Special Projects. It currently has \$39,305 in unallocated funds.  
*Draft Motion: "Allocate up to \$10,000 for the ASFPM grant matching flood mitigation educational kiosks"*

**8.0 Ratification Motion**

I move to ratify and affirm all delegated and authorized acts of the Board of Officers, Chairs and Staff for and on behalf of the Association.

**9.0 Adjourn**

Time: \_\_\_\_\_

Next Meeting: May 14, 2025  
Time: 10:00 am – Noon  
Place: Virtual  
Meetings are typically held virtually via ZOOM, on the second Wednesday of the odd-numbered months, from 10:00 am to Noon.

Anticipated Future Meetings:  
July 9, 2025  
September 10, 2025  
November 12, 2025

# OFFICER CANDIDATE BIOGRAPHIES

## TREASURER

### JOSEPH KRATZER

Joe Kratzer has a Bachelor of Science in Civil Engineering from Purdue University and is a licensed professional engineer and certified floodplain manager. Joe currently manages MWRD's Stormwater Management Program, with an annual capital budget of \$100M and manages a staff of 25 talented and dedicated engineers and support staff.

Joe has been with MWRD for over 21 years and has been integrally involved in its annual budget process to ensure MWRD's Stormwater Management programs and projects can be advanced in alignment with the agency's goals and strategic plan. These efforts have resulted in over 200 projects implemented to address both regional and local flooding problems throughout the metropolitan Chicago area. Previously Joe served as an officer with the American Public Works Agency (City Branch) including as its Treasurer for several years.

## SECRETARY

### SARAH WENZEL

Sarah Wenzel is a hydrologic engineer at Baxter & Woodman in Peoria, IL. In 2017 she became a founding member of the IAFSM Young Professionals Committee and served as the Young Professionals Committee Chair from 2021-2024. During her tenure as committee chair, she expanded the student conference scholarship program and established an annual award for IAFSM Young Professional of the Year. In 2024, she was recognized with the IAFSM Outstanding Service Award. Sarah currently serves on the committees for Young Professionals and Outreach.

This year Sarah has asked for the opportunity to continue serving IAFSM in the role of Secretary. If elected, it is her goal to serve the collective interests of our members to the best of her ability. Sarah is passionate about supporting communities in flood preparedness and resiliency, creating opportunities for emerging professionals to learn about and excel in this profession, and making access to IAFSM's expertise and resources available statewide.



# IAFSM

Illinois Association for  
Floodplain and Stormwater Management

## OFFICIAL BALLOT

**2025 – 2026 Officers: *Please vote for only one candidate for each office***

### CHAIR

- Sharon Østerby, CFM, Lake County Stormwater Management, Libertyville
- Write-in: \_\_\_\_\_

### VICE CHAIR

- Jenny Loewenstein, P.E., CFM, CPESC, Contigo Engineering, PLLC, Bartlett
- Write-in: \_\_\_\_\_

### TREASURER

- Joseph Kratzer, MWRDGC, Chicago (See bio on reverse)
- Write-in: \_\_\_\_\_

### SECRETARY

- Sarah Wenzel, Baxter and Woodman, Peoria (See bio on reverse)
- Write-in: \_\_\_\_\_

Dallas Alley will move into the Board Position of Past Chair

**Please return your ballot to the conference front desk**

**You must be an IAFSM member to vote.**

**Please print your name.**

---

**Your name, please print**

# CONVENTION CENTER MAP

## PLAN KEY:

-  PUBLIC RESTROOMS
-  PUBLIC ELEVATORS
-  NON-PUBLIC SPACE
-  PUBLIC CORRIDORS/  
CONCOURSE

**North Pavilion 4-6**  
Extreme Event  
Wednesday

**Exhibit West**  
Exhibits & Evening  
Reception  
Tuesday

**Exhibit South**  
Breakfast & Lunch  
Plenary Sessions  
Tuesday & Wednesday

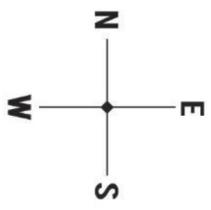
**North Pavilion 1-3**  
Concurrent Session D  
Tuesday & Wednesday

**South Pavilion 1, 2, 3-6**  
Concurrent Session  
A, B, C  
Tuesday & Wednesday

## TINLEY PARK CONVENTION CENTER

- 1 NORTH PAVILION THREE
- 2 NORTH PAVILION TWO
- 3 NORTH PAVILION ONE
- 4 BREMEN ROOM
- 5 NORTH PAVILION
- 6 NORTH PAVILION FOUR
- 7 NORTH PAVILION FIVE
- 8 NORTH PAVILION SIX
- 9 NORTH EXHIBIT
- 10 WEST EXHIBIT
- 11 SOUTH EXHIBIT
- 12 SOUTH PAVILION
- 13 SOUTH PAVILION ONE
- 14 SOUTH PAVILION TWO
- 15 SOUTH PAVILION THREE
- 16 SOUTH PAVILION FOUR
- 17 SOUTH PAVILION FIVE
- 18 SOUTH PAVILION SIX
- 19 NORTH LOBBY
- 20 WEST LOBBY
- 21 BUSINESS CENTER
- 22 WEST SUITE
- 23 SAM TINLEY ROOM
- 24 SOUTH LOBBY
- 25 SOUTH SUITE
- 26 SALES OFFICE
- 27 CONFERENCE ROOM 1
- 28 CONFERENCE ROOM 2
- 29 CONFERENCE ROOM 3
- 30 CONFERENCE ROOM 4/FLEX ROOM
- 31 EXECUTIVE BOARD ROOM
- 32 TERRACE/PROMENADE

**South Entry**  
Registration



## Thank You!

The success of this conference is thanks to the dedication and hard work of many individuals. Our deepest appreciation goes to our speakers, exhibitors, and sponsors for their invaluable contributions in sharing knowledge, resources, and support to make this event successful. A special thank you to our first-ever **Platinum Sponsors, Baxter & Woodman, Inc. and Christopher B. Burke Engineering Ltd.**, for their generous support, which has helped elevate this conference. We also sincerely appreciate our board members, volunteers, planning committees, and all those working behind the scenes who have contributed their time and expertise to making this conference possible. Thank you for being part of this event.

## Special Acknowledgement

A heartfelt thank you to Liana Winsauer for her time and effort in laying out this program. Your work is greatly appreciated! Thanks to Sarah Harbaugh and Amanda King for your hard work and dedication in making this conference a success. Your efforts behind the scenes do not go unnoticed, and we truly appreciate all that you do!



IAFSM 2026 Annual Conference  
March 9<sup>th</sup>– March 12<sup>th</sup>, 2026  
Wyndham Springfield City Centre  
Springfield, Illinois



## Wyndham Springfield City Centre

Discover the Heart of Springfield at Wyndham Springfield City Centre

Immerse in the vibrant history and culture of Springfield, Illinois, with a stay at Wyndham Springfield City Centre. Nestled within the city's historic area, this welcoming hotel boasts panoramic city views and a prime location next to the BOS Center. Just two blocks from The Abraham Lincoln Presidential Museum and Library, and a short stroll to Lincoln's home site, guests are at the perfect starting point for exploring Springfield's rich heritage.

## Tuesday

	South Pavilion 1	South Pavilion 2	South Pavilion 3-6	North Pavilion 1-3
<b>8:00-9:00, Exhibit Hall, Registration, Exhibits, and Breakfast</b>				
<b>9:00-10:10, Exhibit South , Plenary Session: David Skuodas, Urban Waterway Design: Balancing Nature, Community, and Cost</b>				
<b>10:10-10:30, Exhibit Hall, Break &amp; Exhibits</b>				
10:30- Noon	<b>1A: Floodplain Management Essentials</b> Floodplain Basics Floodplain & Floodway Permitting Completing Substantial Damage Estimates	<b>1B: Stream Restoration &amp; Stabilization Strategies</b> Sugar Creek Restoration: Ecology & Engineering Restoration Efforts Along Woods Creek A Streambank Stabilization/Restoration Retrospective	<b>1C: Optimizing Flood Modeling &amp; Hydraulic Analysis</b> 2D Roadway Overtopping Study Advanced Hydraulic Modeling for Dam Design Comparing XP-SWMM, ICM, & HEC-RAS 6.6	<b>1D: Flood Control &amp; Mitigation Projects</b> Levee 37 Improvements, Mount Prospect, IL Winnetka, IL Stormwater Management Program Springinsguth Corridor/W. Br. DuPage R. Flood Reduction
<b>Noon-1:30, Exhibit South, Lunch</b>				
<b>1:30 - 4:00, Meet at Registration, Field Trip to Fullersburg Woods &amp; Graue Mill Dam Removal/Salt Creek Restoration Project</b>				
1:30- 3:00	<b>2A: CRS for Safer Communities</b> CRS: the Illinois Easy 8 Organizing for Your CRS Cycle Visit Repetitive Loss Area Analysis for CRS Purposes	<b>2B: Wetland Planning &amp; Mitigation</b> Early Planning for Wetlands Restoring Open Space as a Wetland Mitigation Bank Lake Opeka Shoreline Restoration	<b>2C: Digital Innovation in Stormwater Management</b> Digital Tools for Stormwater Resilience Overview & Uses of AI Digital Drainage & Levee District Mapping	<b>2D: Public Engagement in Flood Management</b> Effective Engineer/Public Communication Data-Driven Outreach & Communication My IAFSM
<b>3:00-3:20, Exhibit Hall, Break &amp; Exhibits</b>				
3:20- 4:50	<b>3A: Illinois Floodplain Management Updates</b> Integrated Floodplain Mgmt: Is Illinois Ready? IL's NFIP Permit Program for State-Owned Properties	<b>3B: Climate Change &amp; Community Resilience</b> Projecting Illinois Rainfall Due to Climate Change MWRD Watershed Ordinance Updates & Implementation Climate Resilience Planning for Communities	<b>3C: Collaborative Flood Mitigation</b> Rockford Gully Erosion Stabilization Conclusion UIUC's Green Infrastructure Plan for Rainwater Sinkhole Response, Whitefish Bay, WI.	<b>3D: Professional Growth &amp; Leadership Insights</b> Public to Private Transition Lessons Learned The Subtle Art of Being a Good Owner (40 min.)
<b>4:45-6:45, Exhibit Hall, Social Hour</b>				

## Wednesday

	South Pavilion 1	South Pavilion 2	South Pavilion 3-6	North Pavilion 1-3
7:30- 9:00	<i>Samuel Tinley Room</i> <b>IAFSM Board of Directors Meeting</b>		<i>Dining Hall</i> <b>Registration &amp; Breakfast</b>	
<b>9:00-10:10, Exhibit South, Plenary Session: Chad Berginnis, ASFPM, The Road Less Traveled: Taking the NAI Highway to Resilience</b>				
<b>10:10-10:30, Exhibit South, Break</b>				
10:30- Noon	<b>4A: Floodplain Management &amp; Urban Drainage</b> Biesterfield Road Basin Outfall Improvements Reducing Stormwater Discharge in the N. Br. Chicago R., Lake Co. Watershed-Based Planning for Watershed Improvements	<b>4B: Evolving Practices in Dam Removal &amp; Modification</b> IDNR Dam Removals: Past, Present, & Future Carpentersville Dam Removal North Aurora Dam Modifications & Sediment Issues	<b>4C: Strengthening Resilience with 2D Modeling</b> Cofferdam Regulatory Planning, Fox River, Geneva Going Beyond Flow Path Mapping I-80 Bridge Replacement Resilience Assessment	<b>4D: Equity in Disaster Preparedness &amp; Flood Mitigation</b> FEMA-NAACP Partnership for Disaster Preparedness Flooding & Racial Disparities in Greater E. St. Louis Agency Collaboration for the American Bottoms
<b>Noon-1:30, Exhibit South, Lunch &amp; Awards</b>				
<b>1:30-3:00, North Pavilion 4-6, Extreme Event Workshop</b>				
1:30- 3:00	<b>5A: Managing Stormwater: Big &amp; Local Challenges</b> Golf Course Stormwater Mgmt. Long-Term Thinking for Stormwater BMPs in L.A. Stormwater Detention at the DuPage County Campus	<b>5B: Climate Resilience &amp; Adaptation</b> Building Transportation Resilience in Northeast IL Vulnerability Assessment Tool for Infrastructure Leveraging USACE Expertise for Local Communities	<b>5C: Urban Flooding: Mitigation &amp; Planning</b> Updating a Countywide Natural Hazard Mitigation Plan Combined Sewer Separation Planning in Elgin, IL Flood Monitoring Systems: New Orleans & Chicago	<b>5D: Water Resource Management Solutions</b> Sect. 319 Watershed Planning, Upper W. Br. DuPage River Localized Drainage Study Tips Advances in Trash Capture Standards