Celebrating Working Together: 100 Years and Counting!

From our humble beginnings in 1917, our founder H.H. Henningson, not only served as engineer to many small towns, he also shared his expertise with them to help them find solutions to the issues they were facing then and look to the future. This journal reminds us that our history is about so much more than artifacts and memorabilia. It’s about the amazing people and clients that we serve. And it’s about the teachings handed down from one generation to the next—Building on our 100th anniversary and WEFTEC’s 90th anniversary, please join our experts as they share information.
“I’m excited to talk at WEFTEC about the evolution of numeric nutrient criteria development and implementation in Montana. This work has been an on-going effort with many stakeholders involved, challenged by a lawsuit and its changing the way many dischargers achieve compliance. I think as other states move forward with implementation of numeric criteria, some lessons could be learned from Montana’s work.”

**Amanda McInnis**  
Mon, Oct 2, 1:30pm, Room S502b | Wed, Oct 4, 9:30am, Room S403b

“The opportunity to engage with city and county leaders to develop strategies and tools to meet these goals has been a highlight of my career. The partnerships that we develop at WEFTEC have yielded unique approaches for prioritizing environmental improvement opportunities that align with community goals by leveraging our team of national thought leaders with local experts.”

**Trent Stober**  
Mon, Oct 2, 2:00pm, Room S502b

“The stormwater industry has been evolving, with phenomenal growth in the recent years. WEFTEC enables me to share and access diverse ideas and perspectives from a multitude of industry experts by participating in WEF committee meetings and collaborating with national experts on stormwater modeling compendium. My participation at WEFTEC keeps me abreast with new technologies and approaches, helping provide optimized solutions for our clients.”

**Nitin Katiyar**  
Mon, Oct 2, 2:00pm; 3:30pm, Room S503b | Wed, Oct 4, 8:30am, Room S503b
SATURDAY, SEP 30

Integrated Planning: A Solution For Your Utility?
Deborah Nagle (US EPA Headquarters), Jim Pletl (Hampton Roads Sanitation District), Cindy Skrukrud (Sierra Club, Illinois Chapter), Jim Schlaman, (Black & Veatch), Biju George (DC Water), Diane Taniguchi-Dennis (Clean Water Services), Patrick Bradley (City of Richmond), Ting Lu (Clean Water Services)
8:30am | 8 hours 30 minutes | Room S502a

JCW’s Experience: Using Data to Hit a Moving Performance Management Target
W10 Performance Management for Collection System O&M Programs
Ryan Eisele, Workshop Speaker (HDR); Aaron Witt, Workshop Speaker
1:30pm | 45 minutes | Room S501c

MONDAY, OCT 2

Career Fair
McCormick Place, South Building - Level 1
Courtney Neisius (HDR)
1:00 - 4:00pm | 3 hours | Room S105b

When They Go Low, Costs Go High: Pipeline Interconnection and Impact of Gas Quality Requirements
210 Biogas Cleaning, Treatment, and Use for Economic Gain
Jeremy Holland, Author (HDR)
1:30pm | 3 hours 30 minutes | Room S505a

Facing Challenges After Three Years of Numeric Nutrient Criteria Implementation in Montana
217 Nutrient Criteria, Trading, and Case Studies
Amanda McInnis, Author (HDR)
1:30pm | 30 minutes | Room S502b

Missouri's Reservoir Numeric Nutrient Criteria: Legal, Political, and Technical Issues and Approaches
217 Nutrient Criteria, Trading, and Case Studies
Trent Stober, Author (HDR); David Carani, Co-Author (HDR); John Christiansen, Co-Author (HDR); Jay Hoskins, Co-Author (Metropolitan St. Louis Sewer District)
2:00pm | 30 minutes | Room S502b

WEF Stormwater Quality Modeling Publication: 2017 Year in Review
216 Updates to WEF’s Stormwater Initiatives
Caroline Burger, Author (Brown and Caldwell); Nitin Katiyar, Co-Author (HDR); Anil Kumar Tangirala, Co-Author (MS Consultants); Steven Wolosoff, Co-Author (CDM Smith)
2:00pm | 30 minutes | Room S503b

Thought-Leader Panel Discussion
202 Optimizing the Nutrient-Resource-Energy Nexus in a Carbon and Energy Constrained World
Kartik Chandran, Invited Speaker (Columbia University); James McQuarrie, Invited Speaker (MWRD Denver); JB Neethling, Invited Speaker (HDR); Phil Zahreddine, Invited Speaker (US EPA)
4:20pm | 40 minutes | Room N426b

SUNDAY, OCT 1

HDR Client Event (RSVP only)
The Rookery | 2009 S LaSalle Street | 7:00 - 9:30pm
Before the WEFTEC17 SMACKDOWN first 200 guests can try a 4oz sample of Pure Water Brew!
TUESDAY, OCT 3

Impacts of Phosphorus Index Regulations and Emerging Phosphorus Recovery Technologies on Biosolids Land Application
309 Land-Based Biosolids Management Solutions
Sebastian Smoot, Author (HDR); Lawrence Hentz, Co-Author (HDR)
8:30am | 30 minutes | Room N426c

An Integrated Modeling Approach To Support the Development of a CSO Long-Term Control Plan
316 Modeling: Changing the Spotlight
Richard Isleib, Author (HDR); Jason Cassara, Co-Author (HDR); Keith Mahoney, Co-Author (NYCDEP)
8:30am | 30 minutes | Room S502b

Operational Strategies To Minimize Ammonia Release in Anoxic Basins During Biological Nutrient Removal
301 Advances in Mainstream Nitrogen Management
Murthy Kasi, Author (HDR); Ron Gearhart, Co-Author (City of Boise); JB Neethling, Co-Author (HDR)
8:30am | 3 hours 30 minutes | Room S501a

Moving From Non-Potable to Potable Reuse: What Do We Do With UV TNT: Dynamite Treatment for Potable Reuse
June Leng, Author; Chengyue Shen, Co-Author (HDR)
9:00am | 30 minutes | Room S404a

Leveraging Asset Management in Master Planning for Comprehensive Sewer Management Plans
318 Nexus of Master Plans and Asset Management Plans: An Integrated Approach
Eric Scherch, Author (HDR); Elmer Alex, Co-Author (City of Vista); Chris Dzwigalski, Co-Author (City of Vista)
9:30am | 30 minutes | Room S403a

Structuring the Procurement Phase of a Progressive Design Build Project To Meet a Rapidly Approaching Permit Deadline: A Case Study With Great Lakes Water Authority
419 Alternative Project Delivery Methods: Yes, They Work
Richard Atoulikian, Author (HDR); Philip Kora, Author (Great Lakes Water Authority); Jill Jamieson, Co-Author (JLL); Wendy Barrott, Co-Author (Great Lakes Water Authority); Sanjeev Mungardwadi, Co-Author (Great Lakes Water Authority), Carter Strickland
2:30pm | 30 minutes | Room S403a

Delivering CSO Solutions Using GC/CM: Owner, Engineer, and Contractor Perspectives To Reducing Risk While Being a Good Neighbor
419 Alternative Project Delivery Methods: Yes, They Work
Edith Hadler, Author (HDR); Eric Bergstrom, Co-Author (HDR); Alan Lord, Co-Author (Seattle Public Utilities); Andrew Powell, Co-Author (Hoffman Corporation)
4:00pm | 30 minutes | Room S403a

When Vibration Masks the Real Problems
412 Together Again: Wet Weather, I/I, and Pump Stations in the Collection System
John Koch, Author (HDR); Charlie Allaben, Co-Author (HDR); Noel Frederick, Co-Author (AVS Engineering)
4:00pm | 30 minutes | Room N426a

Case Study: Developing an Accurate and Defensible Collection System Model
Tom Newman, Author (HDR); Michael Ames, Co-Author (ADS Environmental Services); Keith Mahoney, Co-Author (NYCDEP); James Mueller, Co-Author (NYCDEP); Masatsugu Takamatsu, Co-Author (World Bank); Sharon Tsay, Co-Author (AECOM)
4:00pm | 30 minutes | Room N426c
WEDNESDAY, OCT 4

Inhibitions of Cadmium and Combined Cadmium-Copper on Nitrification by Attached and Suspended Growth Mixed Cultures Containing Ammonia Oxidizing Archaea
500 What’s in Your Sludge? Application of Modern DNA Tools
Eakalak Khan, Author (North Dakota State University); Dhritikshama Roy, Author (North Dakota State University); Murthy Kasi, Co-Author (HDR); John McEvoy, Co-Author (North Dakota State University); Chaiwat Rongsayamanont, Co-Author (Prince of Songkla University)
8:30am | 3 hours 30 minutes | Room S402b

514 Time Out! Evaluating the Promise and Practice of Real-Time Control (RTC) for Stormwater Management
Irrigate, Infiltrate, Automate: Stormwater Reuse at Upper Villa Park
Nitin Katiyar (HDR), Kristel Zaman (Xylem Water Solutions)
8:30am | 3 hours 30 minutes | Room S503b

Strategy To Yield Sound Bacteria TMDLs and Implementable Load Reductions in St. Louis, Missouri
515 Bacteria: Trust Your Gut!
Jay Hoskins, Author (Metropolitan St. Louis Sewer District); David Carani, Co-Author (HDR); John Christiansen, Co-Author (HDR); Trent Stober, Co-Author (HDR)
9:00am | 30 minutes | Room S502b

Operational Flexibility and Continuous Optimization of the Des Moines Metropolitan WRA 390-mgd Wet Weather Facility
408 Wet Weather Treatment Strategies and Real Time Control
Ron Sova, Author (HDR); James Beck, Co-Author (Des Moines Water Reclamation Authority); Scott Hutchens, Co-Author (City of Des Moines)
4:00pm | 30 minutes | Room S501d

What’s in Your Toolbox? Applying Information Technology To Reduce SSOs
420 Winning Utility Management! EUM Strategies
Bill Lloyd, Author (HDR); Annette Duron, Co-Author (San Antonio Water System)
4:30pm | 30 minutes | Room S403b

Facing Low Nutrient Endpoints in the Yellowstone River: The City of Billings Looks to Integrated Planning
516 Efficient and Effective Utility Management: The New Normal
Amanda McInnis, Author (HDR); Louis Engels, Co-Author (City of Billings)
9:30am | 30 minutes | Room S403b

Analyzing Salt Movement To Manage TDS
618 Ensuring Reuse Water Quality Through Source Control
Amy Omae, Author (HDR); Ray Bennett, Co-Author (Irvine Ranch Water District); Jennifer Duffy, Co-Author (HDR)
2:30pm | 30 minutes | Room S505a

Hardeeville Water Reclamation Facility Envision Verification Process
615 Envision: Successes and Challenges After Five Years of Implementation in Utility Projects
Tracy Lewis, Invited Speaker (HDR)
3:30pm | 30 minutes | Room S403a

What is the Cost for Optimizing a WRRF for Nutrient Removal?
620 Plant Optimization: How To Make a Good Thing Better
Michael Falk, Author (HDR); Holly Kennedy, Co-Author (HDR); JB Neethling, Co-Author (HDR); David Reardon, Co-Author (HDR)
3:30pm | 30 minutes | Room N426b