



Collection Systems Conference 2020

Technical Program

(Updated December 18, 2019)

June 2 – 5, 2020

El Paso Convention Center

El Paso, Texas

This conference is being held by the Water Environment Federation (WEF) in cooperation with the Water Environment Association of Texas (WEAT) and the Water Research Foundation (WRF).

Session 05: Inflow and Infiltration

Thursday, June 4

8:30 AM - 10:00 AM

- 8:30 AM** **The Seduction of Depth-only Measurement for I/I Work**
Patrick Stevens, ADS Environmental Services; Derek Sutton, Citizens Energy Group
- 9:00 AM** **How Much Rainwater Are You Treating? Solutions and Budgeting for Effective I&I Reduction for a TCEQ SSO Initiative from Conroe's Perspective**
Kendall Ryan, Ishita Rahman, Freese and Nichols, Inc.; Rafael Carrasquillo, City of Conroe
- 9:30 AM** **Effective I&I Reductions Using Adaptive Asset Management Approach**
Kristina Zuniga, Christopher Dinsmore, Eileen White, East Bay Municipal Utility District
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate:** **How Effective is RDII Mitigation Technology?**
Qiuli Lu, Hazem Gheith, Arcadis

Session 06: Modeling
Thursday, June 4
8:30 AM - 10:00 AM

8:30 AM **Unique Approaches to Using Hydraulic Models to Assist System Capacity Management and Sewer Assessment and Rehabilitation for DeKalb County**
Darren Eastall, Chunxian Li, DeKalb County; Haiyi (Helen) Lu, Jacobs; Nancy Schultz, CH2M

9:00 AM **Understanding and Mitigating Hydrogen Sulfide Impacts through Collection System Modeling**
Kelsey Kenel, HDR; Chris Easter; Louis Engels; Coralynn Revis, HDR; Jes Vollertsen, Aalborg University

9:30 AM **Predicting Septicity and Composition of Wastewater in Dubai's Deep Sewer Tunnels**
Ersin Kasirga, GHD; Ahamed Ifthikar, Parsons

10:00 AM **Session Adjourns for Networking Break**

Alternate: **Enhanced Modeling Approach to Improve Coastal City Resilience**
Hazem Gheith, Khaled Abdo, Qiuli Lu, Arcadis

Session 07: Operation & Maintenance

Thursday, June 4

8:30 AM - 10:00 AM

8:30 AM The New 'P' in Your Collection System Maintenance Program – Predictive Cleaning

Alexander Palmatier, Jacob Mueller, HDR; Matthew Whitman, Winston-Salem Forsyth County Utilities

9:00 AM Control What You Can, Accept What You Can't: How CMOM Can Reduce the Impact of SSOs

Daniel Porter, Brown and Caldwell; Michael Erkkila; Gary Fedak, Lake County Dept. of Utilities, OH; Steve Donovan, Brown and Caldwell

9:30 AM Systematic PM Sewer Cleaning Program

Harikrishnan Panthayi, Tacie McCall, City of Atlanta

10:00 AM Session Adjourns for Networking Break

Alternate: Capital Grouting replaces Maintenance Grouting – Why Packer Injection Grouting Has Displaced 90% of our Cured in Place Lining

James Shelton, Emily Sadowsky, Arcadis

Session 08: Sanitary Sewer Overflows

Thursday, June 4

10:45 AM - 11:45 AM

10:45 AM Optimizing Tunnel Shaft Design for Performance and Constructability: The Singapore Experience

Christopher Ranck, Arcadis; John Richardson; Heather Smith, Randy Lagumbay, Arcadis; Michael Schumas, Ed. Zublin AG; Ho Hong Whatt, Chua Wei Rong, Darryl Tan, Singapore PUB

11:15 AM Getting the most out of your limited CIP dollars – Wet weather storage solution to reduce CIP spending while improving performance

Carlos Toro-Escobar, Brown and Caldwell; Ashley Yeh, Berkeley County Water and Sanitation; A. Retana, Brown and Caldwell

11:45 AM Session Adjourns for Networking Luncheon

Alternate: Achieving Consent Order Compliance: Comprehensive Mini-Basin Planning and Rehabilitation to Eliminate Sanitary Sewer Overflows and Reduce Hydraulic Overloads

Joel Kostelac, Josiah Bair, GHD Inc.

Session 09: Asset Management

Thursday, June 4

1:30 PM - 4:45 PM

- 1:30 PM** **Coachella Valley Water District: A Festival of Asset Management**
James Reitmeier, Clinton McAdams, Black & Veatch; Bethany McDonald, HDR Inc; James Strayer, Black & Veatch; Daniel Charlton, Coachella Valley Water District
- 2:00 PM** **Plymouth Township, MI – Developing a Comprehensive Asset Management Plan**
Charles Card, GHD; J Muckleroy, Stearns & Wheeler; Patrick Fellrath, Charter Township of Plymouth
- 2:30 PM** **Is there an “Easy Button” for Making Asset Management Planning Decisions? Using Operational Data to Inform System Renewal Planning Processes**
David Saunders, Alexander Palmatier, HDR
- 3:00 PM** **Networking Break**
- 3:45 PM** **Integrating Performance-Based Failure Modes into a Risk-Based Asset Renewal Program for a Large Wastewater Collection System**
Daniel Olson, Garver; Gregory Lushbaugh; Aaron Schindewolf, Christopher Meeks, San Jacinto River Authority
- 4:15 PM** **Developing a Sewer Rehabilitation Plan Using InfoMaster - A Tiered Criticality Approach to Risk Analysis**
Pubudu Ranasinghe, Gert Walt, Ella Garcia, DC Water
- 4:45 PM** **Session Adjourns**
- Alternate:** **Management of a 50 Year Old Collection System to Extend the Service Life, Reduce I & I and Reduce Backups and Overflows**
Michael Wynne, Hanover Sewerage Authority
- Alternate:** **Holistic Approach to Collection System Assessment and CIP Prioritization**
Chris Collier, City of Cocoa; Kunal Nayee, Carollo Engineers

Session 10: Panel Discussion on Data

Thursday, June 4

1:30 PM - 4:45 PM

This session will consist of four 20-minute presentations before the break, followed by a panel discussion after the break.

- 1:30 PM** **Data Management Tool Facilitates Long Term Flow Reduction Program**
Catherine Morley, RJN Group Inc; Michael Litwin, City of Elmhurst; Jon Stelle,
City of Elmhurst
- From Feast to Famine – Adapting Your Asset Management Plan based on
Data Availability**
Ellen McDonald, Reza Malek, Plummer
- Powerful Asset Data Analytics to Support Utility Decision Making**
Celine Hyer, Christopher Heltzel, Arcadis
- Wellington Water’s Application of Artificial Intelligence for Wastewater
Infrastructure Planning**
Andrew Faulkner, Joel Wilson, WCS Engineering; Steve Hutchison, Wellington
Water; Abby Jensen, Beca
- 3:00 PM** **Networking Break**
- 3:45 PM** **Panel Discussion**
- 4:45 PM** **Session Adjourns**

Session 11: Project Delivery
Thursday, June 4
1:30 PM - 4:45 PM

- 1:30 PM** **NCSD Watkins Pump Station, Twenty-Four Inch Emergency Force Main Repair**
Chadwick Abrams, Nicholas Bussinah, North Charleston Sewer District
- 2:00 PM** **Successful Procedure: Wastewater Bypass in the Heart of Dallas**
Cullen Carlson, Erin Flanagan, Freese & Nichols Inc; Regina Stencel, Dallas Water Utilities
- 2:30 PM** **Rehabilitation Challenges to 1909-era 126-Inch Concrete Sewer Under a Levee**
Randy Cook, Wood; Chad Jones, Amec Foster Wheeler; Kevin Williams, Wood
- 3:00 PM** **Networking Break**
- 3:45 PM** **Physical Modeling to Optimize Wetwell Design – Raleigh’s East Neuse Regional Pump Station**
Frederick Stroud, Carl Frizzell, CDM Smith; Perry Allen, City of Raleigh
- 4:15 PM** **Lessons Learned and Best Practices for Value Engineering and Contractor Engagement while Delivering Capital Projects for a \$2.4 Billion CSO Program**
Vincent Genco, HDR; Scott Aurit; Thomas Heinemann; Adam Wilmes, Jake Hansen, City of Omaha
- 4:45 PM** **Session Adjourns**
- Alternate:** **Alternative Assessment and Project Delivery: Challenges and Opportunities with the Rehabilitation of a Multi- Jurisdictional Interceptor**
Getachew Melsew, DC Water; Robert Bell, O'Brien & Gere Engineers; Pubudu Ranasinghe, DC Water
- Alternate:** **Managing the Risks and Untangling the Web of Interstate Versus Interceptor**
Evan Tromble, Garver; Randall McIntyre, Malcolm Pirnie