



Program Agenda

Wednesday, April 24, 2019 1:00 p.m. – 5:00 p.m.

- 1:00 - 1:10 **Welcome & Overview.** Terry Leeds, WWP Chairman
- 1:10 - 1:50 **Louisville MSD's \$4.3 Billion Critical Repair and Reinvestment Plan Overview.** Tony Parrott, Louisville MSD
- 1:50 - 2:30 **Evolving Wet Weather Treatment Technologies and Approaches.**
- Blending Update – EPA's Regulation and On-the-Ground Applications
 - Enhanced High Rate Treatment and Filtration, **Jim Fitzpatrick**, Black & Veatch
 - Satellite Treatment (including UV disinfection) for CSO Control
- 2:30 - 2:45 Break
- 2:45 - 3:45 **Cutting Edge Stormwater Permitting Developments.** This segment will cover key issues in stormwater permitting of general interest to municipal separate storm sewer system (MS4) owners nationwide. One area of analysis will be recent federal and state regulatory actions and court decisions applying or interpreting the maximum extent practicable (MEP) permitting standard for MS4s, which is critical for maintaining fiscally responsible approaches to effective stormwater management. In addition, other new or emerging regulatory issues in municipal, industrial, and construction stormwater permitting will be discussed. **Chris Pomeroy**, AquaLaw.
- 3:45 - 4:00 BREAK
- 4:00 - 5:00 **Green Infrastructure and Solutions Go Mainstream and Main Street.**
DC Water's \$27M GI Investment in the Rock Creek Basin and Ongoing GI Investments in the Potomac River Basin Near Georgetown. Seth Charde, DC Water
- Philadelphia's Green City, Clean Rivers – Eight Years Mature.** Marc Cammarata, Philadelphia Water Department

Networking Reception, *The Brown Hotel Rooftop*

Thursday, April 25, 2019 8:30 a.m. – 5:00 p.m.

Breakfast (Provided)

8:30 - 8:45 **Welcome and Overview**

- 8:45 - 9:30 **The Waters Report.** The Trump/Wheeler EPA, 116th Congress, and Key National Developments. Do opposites really attract? The case for Unprecedented Progress Ahead for Municipal Utilities. **Amanda Waters**, NACWA.
- 9:30 - 10:00 **Integrating Smart Watershed Programs with Gage Adjusted Radar.** Gage adjusted radar rainfall holds the promise of providing community sewer/stormwater managers with an even greater ability to manage wet weather surface and sewer flows during storm events, including cutting edge abilities to predict and minimize surface flooding. This presentation will review the latest developments and applications of using advanced radar platforms to benefit community stormwater and wet weather sewer system performance. **Baxter Vieux**, Vieux & Associates.
- 10:00 - 10:15 Break
- 10:15 - 12:00 **Understanding and Controlling Sewers and Watersheds to Achieve Optimal System Performance:**
- 10:15 - 10:45 **Maximizing and Optimizing Watershed Infrastructure.** **Tim Braun**, EmNet
Smart sewer sensor networks characterize a sewer system's response to wet weather events. By using the smart sewer sensor network, communities are able to "see" where capacity exists within the existing system. Communities can then leverage these data to make operating decisions in real time. As data is collected, it is used to train an artificial intelligence (AI) system to act as a "brain" of the sewer system or watershed.
- 10:45 - 11:15 **Improving Environmental Outcomes through Continuous Monitoring and Adaptive Control of Stormwater Infrastructure.** **Dayton Marchese**, OptiRTC
Advances in technology, including the pervasive growth of cloud computing, have made real-time and dynamic control of distributed stormwater facilities a viable, cost-effective solution to better manage changing environmental conditions. Continuous Monitoring and Adaptive Control (CMAC), allows stormwater managers to make intelligent and predictive control decisions, improving water quality, reducing flood risk, and mitigating sewer overflows at both the site and watershed level. Informative cases studies will be presented.
- 11:15 -11:45 **The Cincinnati Smart Sewer Story.** **Reese Johnson**, Cincinnati MSD
The Metropolitan Sewer District of Greater Cincinnati (MSD) is pivoting to a smart sewer solution to reduce the estimated \$3 billion (2006 estimate) infrastructure investment needed to meet EPA mandates. Over the last five years MSD has implemented a 600 sensor smart sewer network and now actively controls overflows at nine of its largest combined sewer outfalls. Already, MSD has improved existing facility/system performance by 33 percent and kept 1.2 billion gallons of combined sewage and stormwater from being discharged to receiving waters in 2018. MSD is seeking watershed-wide benefits going forward.
- 11:45 - 12:00 **Questions and Answers.**
- 12:00 - 1:15 **Lunch (Provided)**

- 1:15 - 3:00 **The Final Sewer Frontier: Identifying and Addressing Cost-Effective Private Property Defects for Peak Flow Control.** This session will evaluate (1) how cost-effectiveness should be determined for private property I/I controls, (2) what approaches have worked, and (3) key lessons learned.
- Moderator: **Clyde Wilber**
 - Hampton Roads Sanitation District, **Ted Henifin**
 - St. Louis MSD, **Bruce Litzsinger**
 - Kansas City, Missouri's "Keep the Rain Out" Program, **John Pruss**, Burns & McDonald
 - How Building Codes Influence I/I Sources and Private I/I Removal Effectiveness, **Deron Huck**, Jacobs
- 3:00 - 3:15 BREAK
- 3:15 - 5:00 **Integrated Planning Accelerates with Passage of Water Infrastructure Improvement Act.** Integrated planning has been embraced by many municipal utilities to achieve economies of scale and deliver priority community benefits. This session will briefly review recent federal IP legislation and then demonstrate IP in action with three community IP profiles.
- Community Integrated Planning – Cutting Edge Case Studies.** **Trent Stober** and **Jeff Eger**, HDR.
- Lowell Water's Integrated Plan: Balancing CSO and SSO Control with Drinking Water Improvements and other Community Capital Projects.** **Peter Young**, Hazen & Sawyer.
- Integrated Wet Weather Improvement Plan for Lakewood, Ohio.** **Andy Lukas**, Brown & Caldwell; **Lou McMahan**, McMahan Deguilis
- 5:00 PM Adjourn

Friday, April 26, 2019 (8 a.m. - 12 noon)

Breakfast (Provided)

- 8:00 - 9:00 **Tunneling Construction & Operation Lessons Learned.**
- DC Water's Northeast Boundary Tunnel and Lessons Learned from Three Earlier Tunnels. **Carlton Ray**
 - Operational Optimization of Hartford's South Tunnel to Achieve MDC's Regulatory Priorities; **Greg Heath & Jim Sullivan**, AECOM
- 9:00 - 9:30 **Adaptive Management of Community Sewer Overflow Control Programs.** **Andy Shively**, Kansas City, Missouri.
- 9:30 - 9:45 BREAK
- 9:45 - 11:00 **Aligning Approved, Mature LTCPs and Water Quality Standards/Instream Realities.** A discussion of practical approaches and solutions including approaches such as deferring

resolution of ultimate control requirements until better information about instream attainability is available, working your wet weather loadings into a TMDL for pollutants of concern, variances, UAAs, partial support, suspended use, and other regulatory tools.

- Moderator: **Adrienne Nemura**, Geosyntec Consultants
- Citizens Energy Group, **Ann McIver**
- Massachusetts Water Resources Authority, **Beth Card**
- Kentucky Division of Water, **Pete Goodman**
- MSD Louisville, **Brian Bingham**

11:00 - 11:15 BREAK

11:15 - 11:45 **Cooperative Federalism 2.0 – Opportunities Abound for Your Utility and Clients.** With every EPA Regional Administrator having State Government experience, this session will review significant changes in how the Trump EPA is interacting with delegated states in NPDES permitting for wastewater and stormwater systems, reviewing State water quality standards submittals, as well as long-term sewer overflow control program development and modification. It will also address federal and State enforcement developments and outlook. **Paul Calamita**, AquaLaw.

11:45 - 12:00 **Leading Clean Water Act Cases.** This session will briefly review the most significant pending Clean Water Act-related cases and those decided during the past year. MS4-related cases will be addressed during the first day's MS4 program. **Paul Calamita**, AquaLaw.

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