# **Tri-Con Pre-Conference Workshops**

# **Building Water Resilience in Your Community**

# U.S. Environmental Protection Agency, Office of Water, Water Security Division

Drinking water and wastewater systems across the country are at risk to many kinds of water emergencies, causing disruptions in their service. The risks and threats range from floods, droughts, fires, cyber-attacks or broken mains. The types of assets that need to be resilient to these hazards include: pipes, physical barriers, source water, water collection and intake, electronic, computer, or other automated systems and many more. To help with this planning, the United States Environmental Protection Agency (USEPA) developed tools and resources that can help build resilience within your water system.

Tools and resources will include:

Assess: Risk and Resilience Assessments and Creating Resilient Water Utilities resources Plan: Emergency Response Plan Template and Community-Based Water Resiliency Train: Tabletop Exercise Tool and Cybersecurity Response: Response On-The-Go and Water Contaminant Information Tool

Recovery:

 Federal Funding for Water and Wastewater (FedFUNDS) and Hazard Mitigation Guide

# **Charlene Kormondy**

Charlene Kormondy is a Physical Scientist in the Water Security Division at the U.S. EPA. Currently, her work focuses on creating outreach and communication and providing trainings to water utilities across the country related to requirements under America's Water Infrastructure Act. Previously, Charlene completed an Oak Ridge Institute for Science and Education Fellowship in the Standards and Risk Management Division of EPA's Office of Ground Water and Drinking Water. Charlene earned her master's degree in Environmental Science and Management, with a focus on water resources management, from the Bren School of Environmental Science and Management at the University of California, Santa Barbara. While in graduate school, Charlene completed a summer internship at EPA in the Office of Wastewater Management, Water Permits Division. Charlene also holds a Bachelor of Science in Environmental Studies from the University of Central Florida.

#### Curt Baranowski

Curt leads EPA's Creating Resilient Water Utilities initiative, which provides resources for drinking water and wastewater utilities to address to climate change by promoting a clear understanding of climate science and adaptation options. Before working on climate-related water issues, Curt managed Agency programs that provided technical assistance and training to small community wastewater utilities. Curt has been with the U.S. EPA's Office of Water since 1998. Prior to joining EPA, Curt worked in the water and air programs of the New Jersey Department of Environmental Protection.

### Verónica Aponte-Morales

Verónica Aponte-Morales is a Physical Scientist at the Environmental Protection Agency's Office of Water, Water Security Division (WSD). The WSD's focus is on enhancing the preparedness and resiliency of the nation's drinking water and wastewater infrastructure. As a Water Laboratory Alliance Team member, Verónica serves as the Program Manager for the Water Contaminant Information Tool (WCIT). This database provides information on contaminants of concern for drinking water and wastewater systems. The information helps guide various activities in Emergency Response. She has also developed technical documents for the water sector that focus on the remediation and clean-up phases following a contamination incident. Before her position at EPA, Verónica worked as a research assistant at the University of South Florida, where she designed, implemented, operated, and maintained innovative physical, chemical, and biological processes to treat industrial wastewater. Verónica has an interdisciplinary educational background with a B.S. in Chemistry, an M.S. in Environmental Science, and a Ph.D. in Environmental Engineering.

### **Audrey Ramming**

Audrey Ramming is a member of EPA's Creating Resilient Water Utilities initiative, which provides water utilities with the resources and technical assistance needed to adapt to, and prepare for, changing climate conditions. Audrey joined the EPA's Office of Water in April 2022.

Prior to the EPA, Audrey worked in the corporate governance sector as an ESG Analyst for Institutional Shareholder Services; and before that, as a Climate Research Journalist for the Potomac Conservancy. Audrey holds a dual degree in Biology and Environmental Studies from Salisbury University and a Master's in Climate Science & Society from Columbia University in the City of New York.

# The Science of Manholes

## J. Scott Shipe, Scott Inspection Services

Logical Infrastructure Water Science is the objective of this presentation.

Teaching Students to Utilize Tools that are available regarding Soil Science, Corrosive Science, Flood Plain Soils or how to identify Priority Infrastructure

- Introduction: Why inspect manholes?
- Developing and maintaining accurate records for performing a logical sanitary sewer inspection audit
- Developing inspection maps with existing contract drawings
- Developing Manhole (MH) numbering system
- Midnight investigations
- Preparing collection system base maps
- Assigning manhole ID numbers when working with property
- Obtaining easement access where priority manholes are located; cleaning easements
- How to take a digital photograph of a sanitary sewer manhole and what equipment is needed for inspection
- Manhole components
- Identifying defects in manholes
- Evidence of surcharge conditions
- Evidence of Inflow & Infiltration
- Corrosion to concrete
- Mortar invert
- Diameters
- Odor Issues
- Color of sewage

J. Scott Shipe has 45 years of experience managing water & wastewater utilities having worked at four utilities. During his career he has developed many programs regarding addressing Inflow and Infiltration (I&I) & Sanitary Sewer Overflows (SSO's). He has performed countless projects, managed and or inspected over 10,000 Manholes and 3,000 Miles of Sewer Pipeline Infrastructure, including development of a comprehensive 35 step Sanitary Sewer Manhole Asset Inspection Program aimed at maintenance and rehabilitation for minimizing sanitary sewer overflows (SSO's) and (I&I).

# **Using Dashboards to Solve Problems Faster**

### Presented by the Asset Management Committees of CSAWWA and CWEA

1:00-1:15	Introductions and Kickoff	Ethan Vidal - Xylem Assessment Services
1:15-1:30	Defining the Goals: What Problems Can Dashboard Solve? (Presentation)	Theresa Bruton - DC Water
1:30-2:00	Goal Setting Activity (Small Group Activity)	Theresa Bruton - DC Water
2:00-2:15	Data 101: Best Practices (Presentation)	Brian Ball - City of Baltimore
2:15-2:45	Data Cleaning Activity (Small Group Activity)	Brian Ball - City of Baltimore
2:45-3:00	Break (Cookies & Coffee)	
3:00-3:30	Dashboard Skill Building (Presentation)	Allen Brunson - Black & Veatch
3:30-4:00	Ask an Expert - Dashboard Skill Building (Panel)	Allen Brunson - Black & Veatch

### Speaker Bios:

## <u>Ethan Vidal</u>

Mr. Ethan Vidal is a Program Manager for Xylem Assessment Services. He is a licensed professional engineer in Maryland with over 10 years of experience, specializing in leading linear asset condition assessment projects. He has a Bachelors degree in Psychology from Amherst College and earned a second Bachelors, in Civil Engineering, from the University of North Dakota in 2020. He is the Chair of the Asset Management Committee for CS AWWA.

### Theresa Bruton

Ms. Theresa Bruton is the Manager of Asset Management at DC Water's Blue Plains AWTP. Ms. Bruton has 20 years of experience in design, construction, commissioning, maintenance and operations in the water and wastewater industry. She has a Bachelors and Masters degree in Engineering, a Professional Engineer license in Maryland and has focused the last 6 years on Asset Management and Reliability.

### Brian Ball

Mr. Brian Ball is Chief of the Office of Asset Management for Baltimore City Department of Public Works. After serving in the United States Marine Corps for 12 years, Mr. Ball earned his Bachelors in Civil Engineering from Temple University in 2010. He has over 12 years of experience in condition assessment, rehabilitation, and asset management of buried infrastructure. He is a licensed professional engineer in Maryland.

# Allen Brunson

Mr. Allen Brunson is a data management and business intelligence consultant and professional engineer with over 21 years of experience in utility system planning and data program implementation. His specialties include data program planning and implementation, systems integration and business

intelligence reporting for utilities. While employed at Charlotte Water, Allen designed and implemented the data management and business intelligence program and infrastructure. Since joining Black & Veatch, he has developed BI solutions for clients across the nation, including Northern Virginia, the Carolinas, Georgia and Florida.