



# Advancing Water Loss Control and Improving System Viability

## A Summit for NC's Water Utilities

November 13, 2019

The Conference Center at Guilford Tech Community College

Sponsored by the NC Division of Water Infrastructure, in partnership with the NC Water Resources Research Institute and Cavanaugh & Associates

### AGENDA

- 9:00 – 10:00 **Arrive, check in, coffee, networking**
- 10:00-10:10 **Welcome and Introduction to Summit**  
Nicole Wilkinson McIntosh, NC Water Resources Research Institute  
Kim Colson & Kavitha Ambikadevi, NC Division of Water Infrastructure
- 10:10-10:20 **Current Water Loss Tracking in North Carolina**  
Vardry Austin, NC Division of Water Infrastructure
- 10:20-10:35 **National contexts for water loss control and the future of the industry**  
Steve Cavanaugh, Cavanaugh & Associates
- 10:35-11:00 **NC Water Loss Control Pilot Program: Leading utilities down the road to viability**  
Drew Blackwell, Cavanaugh & Associates  
*Learn about a year-long effort to build capacity among 10 water systems across North Carolina and the connections to the state's infrastructure master plan.*
- 11:00-12:00 **Show me the Data (and the Money)**  
Drew Blackwell & Will Jernigan, Cavanaugh & Associates  
*Dive into program results and gain practical applications for all systems.*
- 12:00-1:00 **Networking Lunch**
- 1:00-2:00 **Perspectives from the trenches: Panel discussion with pilot program participants** Mike Trivette, Town of Boone; Russell Byrd, City of Clinton; Brad Boris, City of Morganton  
*Hear insights and lessons about adopting best practices with limited resources and participate in an open discussion about how systems can move forward despite challenges.*
- 2:00-3:00 **Small Group Discussions**  
*Take a deeper dive into the topics explored through earlier presentations and share your ideas for advancing water loss control in North Carolina. Please see reverse side of agenda for topics and table numbers.*
- 3:00- 3:30 **Report out & Next Steps**  
*Summit participants share their needs, wants, opportunities and strategies to further address water loss in North Carolina through future initiatives.*
- 3:30 **Adjourn**

## BREAK OUT GROUP DISCUSSION TOPICS

### 1. **Supply Meter Testing**

Facilitated By: Larry Lewison, Cavanaugh & Associates

Notetaker: Vardry Austin, NC DEQ Division of Water Resource

Discuss the variety of testing methods, how they differ from each other, and why it's critical to understand differences in the methods and how testing information can be used. What experiences have participants had with testing, realizing significant meter errors, investing in expensive but ineffective meter replacement programs? What would it take for you to get started with an informed supply meter testing program?

### 2. **The Importance of Communication and Team Building**

Facilitated By: Steve Cavanaugh, Cavanaugh & Associates

Notetaker: Nicole Wilkinson McIntosh, NC WRRRI

Discuss the culture of utilities, how different departments interact with each other and how many hats individuals wear. What are the benefits and barriers to enhancing communication and team building? What would it take for you to start (or enhance) team building at your utility?

### 3. **Advanced Validation: Trusting Your Data and Your Decisions**

Facilitated By: Will Jernigan, Cavanaugh & Associates

Notetaker: Linwood Peele, NC DEQ Division of Water Resources

Discuss the nuances of validating data and the potential risks of decision making without confidence in your data. What are logical, effective and efficient water loss control actions that can be taken based on variations in data confidence? What would it take for you to start this process?

### 4. **State Perspectives: Help Us Help You**

Facilitated By: Kim Colson, NC DEQ Division of Water Infrastructure

Notetaker: Kavitha Ambikadevi, NC DEQ Division of Water Infrastructure

The Division of Water Infrastructure has strong interest in infrastructure management and viability for the hundreds of NC utilities it serves. The program presented at today's workshop is one example, as are numerous other funding and technical assistance opportunities it provides. Discuss options for support with DWI and share your individual needs, interests, questions and feedback with Division staff. What do you need to help you participate in DWI offerings, or what else do you need that you feel is not being offered?

### 5. **So You Want to do an Audit?**

Facilitated By: Drew Blackwell, Cavanaugh & Associates

Notetaker: Mary Tiger, OWASA

Take part in a miniature technical assistance-style discussion about how to get started with conducting an audit. Learn what you might be missing by not performing routine audits or investing in water loss strategies without supporting data. What would it take for you to start this process? If you could only do a few things, what would they be?