

Freshwater in the North Carolina Coastal Plain

Understanding and Preparing for 21st Century Challenges

Feb 16, 2016
New Bern Convention Center
New Bern, NC

AGENDA

8:00-9:00 **REGISTRATION, SIGN-IN & MORNING NETWORKING**

9:00-9:05 **WELCOME**
BALLROOM B *Mike O'Driscoll, East Carolina University*

9:05-9:50 **INTRODUCTION**
BALLROOM B **UNDERSTANDING THE COASTAL PLAIN: GIVING CONTEXT TO REGIONAL CHALLENGES**
David Genereux, NC State University

10:00-11:30 **RESEARCH, DATA, AND RESOURCES IN THE COASTAL PLAIN**
BALLROOM B **WHAT WE KNOW, WHAT WE DON'T KNOW, AND WHAT WE DON'T KNOW THAT WE DON'T KNOW**
Kristen McSwain, US Geological Survey
Cam McNutt, NC Department of Environmental Quality, Division of Water Resources
Amy Keyworth, NC Department of Environmental Quality, Division of Water Resources
Steven Berkowitz, NC Department of Health and Human Services, Division of Public Health
Rebecca Cumbie-Ward, NC State Climatology Office

11:30-12:00 **LUNCH, NETWORKING & POSTER VIEWING**
Take advantage of this time to view student posters and meet with the authors, network with other attendees, pick up your boxed lunch and take it with you to Concurrent Session 1.

12:00-1:20 **CONCURRENT SESSION 1**

BERNE ROOM **TRACK A – SUPPLY**
CONSIDERATIONS, PROJECTIONS AND CONCERNS RELATED TO SUPPLY FOR THE REGION
Moderator: *Mike O'Driscoll, East Carolina University*

A1: Sources of Freshwater in the Coastal Plain and Associated Impacts to Sources
Speaker: *Jay Holley, East Carolina University*

A2: Understanding Ecological Flows in Coastal Plain Systems and Implications for Downstream Needs
Speaker: *Eban Bean, East Carolina University*

A3: Developing and Ensuring Future Supplies and Considerations for Proper Planning
Speaker: *Tom Fransen, NC Division of Water Resources*

Facilitated Discussion: Join a discussion with the moderator, speakers, and other session attendees about questions, concerns and interests related to supply issues in the coastal plain.

TRYON ROOM A/B **TRACK B – CONTAMINANTS**
CONTAMINATION AND WATER QUALITY CHALLENGES, SOURCES, AND HEALTH IMPLICATIONS
Moderator: *Nicole Wilkinson, NC Water Resources Research Institute*

B1: Considerations for large and small utilities for addressing emerging contaminants from upstream sources
Speaker: *Detlef Knappe, NC State University*

B2: Discharges from Leaking and Failing Infrastructure – Package Plants, High Rate Infiltration Systems, and Septic Systems
Speaker: *Dianne Reid, Dragonfly Resources*

B3: Agricultural Practices and implications of waste management and land application of biosolids, poultry litter and fertilizers
Speaker: *Stephen Harden, US Geological Survey*

Facilitated Discussion: Join a discussion with the moderator, speakers, and other session attendees about questions, concerns and interests related to contaminant issues in the coastal plain.

1:20-1:30 **BREAK**

1:40-3:00 **CONCURRENT SESSION 2**

BERNE ROOM

TRACK A – DEMAND

CONSIDERATIONS FOR CURRENT & FUTURE DEMAND FOR DRINKING WATER, WASTEWATER AND INDUSTRIAL NEEDS

Moderator: *Mike O'Driscoll, East Carolina University*

A4: Where is the water going? Accommodating needs and demands from diverse sectors and stakeholders

Speaker: *Linwood Peele, NC Division of Water Resources*

A5: Permitting the use, management and distribution of water: Implications and the limitations of permits

Speaker: *Linwood Peele, NC Division of Water Resources*

A6: Infrastructure Challenges: How to fund and support current and future demand

Speaker: *Seth Robertson, NC Division of Water Infrastructure*

Facilitated Discussion: Join a discussion with the moderator, speakers, and other session attendees about questions, concerns and interests related to demand issues in the coastal plain.

TRYON ROOM A/B

TRACK B – TREATMENT

PROS, CONS, CONCERNS AND CONSIDERATIONS FOR TREATMENT OPTIONS

Moderator: *Nicole Wilkinson, NC Water Resources Research Institute*

B4: Aquifer Storage and Recovery

Speaker: *David Pyne, ASR Systems LLC*

B5: Centralized Treatment Options and Challenges

Speaker: *Mike Richardson & Ben Kearns, Cape Fear Public Utility Authority*

B6: Decentralized Treatment Options and Challenges

Speaker: *Charlie Humphrey, East Carolina University*

Facilitated Discussion: Join a discussion with the moderator, speakers, and other session attendees about questions, concerns and interests related to treatment issues in the coastal plain.

3:00-3:10 **BREAK**

3:10-3:50 **IMPACTS TO HEALTH, ECONOMY AND THE ENVIRONMENT**

BALLROOM B

THE IMPLICATIONS OF ISSUES WITH SUPPLY, DEMAND, CONTAMINANTS AND TREATMENT IN THE COASTAL PLAIN

Mike Piehler, University of North Carolina at Chapel Hill

4:00-4:15 **WRAP UP & NEXT STEPS**

BALLROOM B

APPLYING KNOWLEDGE, ADDRESSING NEEDS AND CLOSING THE GAPS

Nicole Wilkinson, WRRRI

Mike O'Driscoll, East Carolina University

4:15 **NETWORKING AND RECEPTION**

Join your fellow researchers, students, and water professionals at nearby Persimmon's Waterfront Restaurant (you can order beverages, appetizers, or a full meal). Learn more about the work that fellow attendees are doing in the coastal plain and discuss your ideas for future solutions to issues discussed throughout the day.

Directions to Persimmon's from Convention Center (5 minute walk):

- From Convention Center, head East on S. Front Street
- Turn left to go North on E. Front Street.
- Go 0.1 mile, turn right onto Pollock Street and walk to the end of the street to the restaurant.