

Please join us for our Water Resources Planning Speakers Program event on

Friday, September 27, 2019.

The North Carolina Division of Water Resources presents:

**A Water Resources Planning Speakers Program Event
“Understanding Potential Water Resources-Related Risks and Impacts”**

Special Guest Speakers:

Dr. Katie van Werkhoven and Mr. Mark Woodbury, RTI International

September 27, 2019 – 10:30 to 12:00 pm

Ground Floor Hearing Room of the Archdale Building, Raleigh, NC
(512 N Salisbury St, Raleigh, NC)

After the presentation, we will have an open discussion about the Event topic. Please plan to attend and participate in our water resource planning discussion.

The Water Resources Planning Speakers Program presents experts from the water resources community who offer insights into water supply challenges faced by North Carolina communities, businesses, and government.

If you are likely to attend the September 27 event, please give us an [RSVP](#).

Presentation Description: The Southeast is highly vulnerable to increasing water-related risks. Water resources and floodplain managers across the region are grappling to find ways to better prepare for the threats of extreme events, uncertain supplies and declining water quality. Population growth and a shifting climate compound the challenge as these mechanisms of change are inextricably linked and inherently uncertain. The Center for Water Resources at RTI International is helping water managers across the country to more fully assess and understand their system risks in order to guide planning and mitigation decisions. We will present approaches we are using to better characterize uncertainty, evaluate feasible water resources system responses, and distill complex results to understand trade-offs. The case studies we present, from projects in CO, TN, and NC, are examples of a broader paradigm shift that RTI is advancing – a shift away from narrow future assumptions toward a more complete understanding of potential water resources-related risks and impacts. Embracing this approach may be challenging but it is proving to be a key factor in helping water resources managers to prepare for an uncertain future.

Speaker Bios:



Dr. Katie van Werkhoven – Katie has nearly 20 years of experience developing and applying watershed, water quality and hydrologic models to guide water management decisions and better understand how natural and anthropogenic factors are impacting water resources. Applications of her work have included flood and inflow forecasting, reservoir management, climate change and land use change impacts, water-quality forecasting, pollutant source assessment and mitigation, and Total Maximum Daily Load (TMDL) analysis. At RTI, Katie advises teams developing modeling approaches to guide source water protection and methods to interpret and communicate hydrologic forecasts for a range of end-users. Katie holds a PhD in Civil Engineering from Penn State University, an MS in Hydrology from the University of Arizona, and a BS in Environmental Engineering from the University of Notre Dame.



Mr. Mark Woodbury – Mark has over 30 years of experience conceptualizing, developing, and directing the implementation of water resource management projects that address hydrologic simulation and forecasting, climate change impacts, river hydraulics, hydrometeorologic data collection and management, reservoir operations simulation, and water resource management and allocation. Of particular relevance, Mark led an investigation of water resources vulnerability to climate change for the Front Range Colorado Region; served as a Technical Advisory Committee Member for a Water Research Foundation study of safe yield of a water supply system in NC, and advised a Web-based Climate Change Drought Decision Support System that enabled water managers to rapidly assess the impacts of projected climate change on riverine flow. Mark holds an MS in Civil and Environmental Engineering from Utah State University and BS in Civil Engineering from Texas A&M University.

If you have questions, please contact Craig Caldwell at craig.caldwell@ncdenr.gov or Linwood Peele at linwood.peele@ncdenr.gov.

We look forward your participation in this important topic.