

## WEDNESDAY, MARCH 15<sup>TH</sup>

### 7:30-8:45 MORNING LOGISTICS & MENTORSHIP PROGRAM MEET & GREET

LOBBY

Registration and load PowerPoint presentations for concurrent sessions

ROOM 1D



Mentorship Program Meet and Greet

Poster & Exhibit Set up, Coffee & Morning Refreshments

### 8:45-10:00 OPENING SESSION

ROOM 1A

**Conference Welcome**

*Susan White & Nicole Wilkinson, NC Water Resources Research Institute*

**Opening Keynote** From the Nile to North Carolina: Crossing Boundaries for Creative and Effective Collaboration

*Mina Girgis, Ethnomusicologist and CEO of the Nile Project*

### 10:00-10:20 BREAK

ROOM 1D



Networking, Refreshments, View Exhibits & Posters

### 10:20-11:40 CONCURRENT SESSION 1

ROOM 3

**UNDERSTANDING DROUGHT AND ITS IMPACTS IN THE CAROLINAS**

**MODERATOR: PHIL MAY, CAROLINA ECOSYSTEMS INC.**

**10:20-10:40** A Hydroclimate Extremes Atlas for the Carolinas **Greg Carbone, University of South Carolina**

**10:40-11:00** Mapping Drought Monitoring Reports to Improve Access and Usability **Amanda Farris, Carolinas Integrated Sciences and Assessments**

**11:00-11:20** Using the Coastal Salinity Index for Monitoring Drought in the Carolinas **Lauren Rouen, US Geological Survey**

**11:20-11:40** 2016 Southern Appalachian Wildfires: Burn Severity and Implications for Watershed Response **Zack Mondry, USDA Forest Service**

ROOM 4

Session

Sponsored By:



**RIVER STORIES: THE CAPE FEAR RIVER**

**MODERATOR: CY STOBER, CITY OF MEBANE**

**10:20-10:40** Stakeholders' Perceptions of Water Issues in the Cape Fear River Basin **Tom Hoban, Cape Fear River Assembly**

**10:40-11:00** The Cape Fear and Climate Resilience **Alba Polonkey, Sustainable Sandhills** and **Hannah Ehrenreich, Sustainable Sandhills**

**11:00-11:20** 35 Years of Protecting the Haw River **Elaine Chiosso, Haw River Assembly**

**11:20-11:40** Growing Community Stewardship of Loves Creek **Catherine Deininger, Biocenosis LLC**

*Thank you to the NC Water Resources Association for their support of this session.*

ROOM 5



**RESTORING STREAMS, LAKES AND WETLANDS FOR UPLIFT, HYDROLOGY AND INTENDED USE**


**MODERATOR: BARBARA DOLL, NC SEA GRANT**

**10:20-10:40** Where has the Grass Gone: Factors Impacting Submerged Aquatic Vegetation Bring Together Partners at Lake Mattamuskeet, **Michelle Moorman, USFWS**

**10:40-11:00** Water Quality Impacts of Using Pumps to Control Drainage in Coastal Agriculture and Waterfowl Impoundments **Randall Etheridge, East Carolina University**

**11:00-11:20** Hydrology of Natural Wetlands in North Carolina and the Implications of Future Wetland Restoration, **Jack Kurki-Fox, NC State University**

	<p><b>11:20-11:40</b> Stream and Wetland Restoration + Regenerative Stormwater Conveyance = Significant Functional Uplift in Columbia, SC <b>Ward Marotti, WK Dickson</b></p>
<b>ROOM 6</b>	<p><b>PLANNING FOR ADOPTION AND IMPLEMENTATION OF STORMWATER BMPs</b></p> <p><b>MODERATOR: COREY CAVALIER, RK&amp;K</b></p> <p><b>10:20-10:40</b> Stormwater Management Under a Changing Climate <b>Scott Job, Tetra Tech</b></p> <p><b>10:40-11:00</b> A Pilot Study for Low Impact Development in a Protected Watershed <b>Charles Stillwell, NC State University</b></p> <p><b>11:00-11:20</b> Establishing Regulatory Pollutant Removal Credits for Stormwater Control Measures in North Carolina, <b>Sarah Waickowski, NC State University</b></p> <p><b>11:20-11:40</b> Evaluating the Spatial Distribution of Pollutants and Associated Maintenance Requirements in an 11 Year Old Bioretention Cell in Urban Charlotte, NC <b>Jeffrey Johnson, NC State University</b></p>
<b>11:40-1:00</b>	<b>NETWORKING &amp; AWARDS LUNCHEON</b>
<b>ROOM 2A</b>	<p>Enjoy a Preview Performance from the Nile Project Musicians Celebrate the 3<sup>rd</sup> Annual Source Water Protection Awards</p>
 	
<b>1:00-2:20</b>	<b>CONCURRENT SESSION 2</b>
<b>ROOM 3</b>	<p><b>CLIMATE IMPLICATIONS FOR WATER RESOURCES</b></p> <p><b>MODERATOR: MICHAEL PAUL, TETRA TECH</b></p> <p><b>1:00-1:20</b> Developing Exercises to Improve Planning for Public Health Impacts on Community Water Infrastructure from Coastal Hazards <b>Jessica Whitehead, NC Sea Grant</b></p> <p><b>1:20-1:40</b> Climate Implications for Long-term Water Supply Planning <b>Aashka Patel, University of South Carolina</b></p> <p><b>1:40-2:00</b> Climate Voyager: An Iteratively Built Tool for Visualizing Climate Projections <b>Corey Davis, NC State Climate Office</b></p> <p><b>2:00-2:20</b> Open Discussion on Climate Implications for Water Resources</p>
<b>ROOM 4</b>	<p><b>WATER SUSTAINABILITY THROUGH NANOTECHNOLOGY: PART 1</b></p> <p><b>MODERATOR: JACOB JONES, NC STATE UNIVERSITY</b></p> <p><b>1:00-1:20</b> Nanophotonics Enhanced Direct Solar Membrane Distillation: Towards Off-grid Desalination and Water Purification <b>Qilin Li, Rice University</b></p> <p><b>1:20-1:40</b> Continuation of previous presentation...</p> <p><b>1:40-2:00</b> Molecular Modeling of Functional Materials for Water Cleanup <b>Yara Yingling, NC State University</b></p> <p><b>2:00-2:20</b> The Challenge of Prototyping New Water Treatment Technologies <b>Young Chul Choi, RTI International</b></p>
<b>ROOM 5</b>	<p><b>INNOVATIVE TOOLS AND TECHNIQUES FOR IMPROVED WATER QUALITY, TREATMENT AND ASSESSMENT</b></p> <p><b>MODERATOR: SUSHAMA PRADHAN, NC DEPARTMENT OF HEALTH AND HUMAN SERVICES</b></p> <p><b>1:00-1:20</b> Accelerating Methane Generation Rates in Anaerobic Digesters using Electrically Conductive Materials <b>Douglas Call, NC State University</b></p> <p><b>1:20-1:40</b> Assessing the Role of Turbulent Mixing on Phytoplankton Dynamics in Piedmont Reservoirs <b>Tarek Aziz, NC State University</b></p> <p><b>1:40-2:00</b> Innovative Ecological Engineering BMPs and their Application Towards the Chesapeake Bay Cleanup Effort <b>Kevin Nunnery, Biohabitats</b></p> <p><b>2:00-2:20</b> Applications and Benefits of the High Definition Stream Survey: Combining GPS, Video, and other Sensors to Gather More Data in Less Time and with Lower Costs <b>Brett Connell, Trutta Consulting</b></p>
<b>ROOM 6</b>	<p><b>ASSESSING AND ADDRESSING STORMWATER IMPACTS IN COASTAL NORTH CAROLINA</b></p> <p><b>MODERATOR: GLORIA PUTNAM, NC SEA GRANT</b></p> <p><b>1:00-1:20</b> Addressing Coastal Stormwater Pollution at the Community Scale in North Carolina <b>Tracy Skrabal, North Carolina Coastal Federation</b></p>

	<p><b>1:20-1:40</b> Contributions of Citizen Science Towards Assessing the Impacts of Sea Level Rise on the Extent of Groundwater and Marine Inundation on a Barrier Island Setting <b>Alex Manda</b>, <i>East Carolina University</i></p> <p><b>1:40-2:00</b> Town Creek Culvert: The Model Marriage Between Green and Gray Infrastructure <b>Mark Horstman</b>, <i>WK Dickson</i> and <b>Miranda Smalling</b>, <i>WK Dickson</i></p> <p><b>2:00-2:20</b> Implementation and Monitoring of Stormwater Control Measures in the Lower White Oak River Watershed, North Carolina <b>Charlie Humphrey</b>, <i>East Carolina University</i></p>
<p><b>2:20-2:40</b></p> <p><b>ROOM 1D</b></p> 	<p><b>NETWORKING BREAK</b></p> <p>Networking, Refreshments, View Exhibits &amp; Posters</p>
<p><b>2:40-4:20</b></p> <p><b>ROOM 3</b></p>	<p><b>CONCURRENT SESSION 3</b></p> <p><b>PLANNING FOR OUR WATER FUTURE: TOOLS, ASSESSMENT AND ENGAGEMENT TO INFORM MANAGEMENT AND POLICY</b></p> <p><b>MODERATOR: JULIE COCO, INTEGRA ENGINEERING</b></p> <p><b>2:40-3:00</b> A New Water Quality Model for Evaluating Stormwater Discharges from Transportation Projects <b>Curtis Weaver</b>, <i>US Geological Survey</i> and <b>Ryan Mullins</b>, <i>NC Department of Transportation</i></p> <p><b>3:00-3:20</b> Assessment of Watershed Vulnerability to Land Use and Climate Change <b>Kelly Suttles</b>, <i>NC State University</i></p> <p><b>3:20-3:40</b> Alternative Approaches to Water Resource Restoration and Planning <b>Cam McNutt</b>, <i>NC Department of Environmental Quality</i></p> <p><b>3:40-4:00</b> State to State: A Comparison of Water Loss Training Programs Across Multiple States <b>Drew Blackwell</b>, <i>Cavanaugh &amp; Associates</i></p> <p><b>4:00-4:20</b> Assessment of Stream Quality in the Piedmont Area of the Southeastern United States <b>Celeste Journey</b>, <i>US Geological Survey</i></p>
<p><b>ROOM 4</b></p>	<p><b>WATER SUSTAINABILITY THROUGH NANOTECHNOLOGY: PART 2</b></p> <p><b>MODERATOR: MAUDE CUCHIARA, NC STATE UNIVERSITY</b></p> <p><b>2:40-3:00</b> Separation of Ammonia and Phosphate Minerals from Wastewater Using Gas-permeable Membranes <b>Matias Vanotti</b>, <i>USDA-ARS</i></p> <p><b>3:00-3:20</b> <i>Continuation of previous presentation...</i></p> <p><b>3:20-3:40</b> Opportunities for Nano-enabled Resource Recovery <b>Detlef Knappe and Douglas Call</b>, <i>NC State University</i></p> <p><b>3:40-4:00</b> Ensuring Sustainable Development of Water Treatment Technologies <b>Khara Grieger</b>, <i>RTI International</i></p> <p><b>4:00-4:20</b> <i>Open discussion and networking</i></p>
<p><b>ROOM 5</b></p>	<p><b>PUBLIC AND ENVIRONMENTAL HEALTH: PRESENCE, RISK, AND MANAGEMENT (PART 1)</b></p> <p><b>MODERATOR: DIANNE REID, DRAGONFLY RESOURCES LLC</b></p> <p><b>2:40-3:00</b> Efficacy of Sodium Hypochlorite for Disinfecting <i>Raoultella terrigena</i>, <i>Salmonella typhimurium</i> LT2, and Primary Influent Derived <i>E. coli</i>, <i>Salmonella spp.</i>, and Total Coliforms Cells Cultured with Varying Preparation Conditions, and in Multiple Test Water Matrices Under Point-of-Use Conditions <b>Collin Coleman</b>, <i>University of North Carolina-Chapel Hill</i></p> <p><b>3:00-3:20</b> Occurrence and Concentrations of Infectious Adenoviruses in North Carolina Type 2-Like Reclaimed Water <b>Emily Bailey</b>, <i>University of North Carolina-Chapel Hill</i></p> <p><b>3:20-3:40</b> Impact of Hospital and Patient Discharges on North Carolina Surface and Drinking Water Quality as Measured by Iodinated Contrast Agents <b>Kirsten Studer</b>, <i>University of North Carolina-Chapel Hill</i></p> <p><b>3:40-4:00</b> A Bayesian Belief Network Model Assessing the Risk to Wastewater Workers of Contracting Ebola Virus Disease During an Outbreak <b>Joseph Zabinski</b>, <i>University of North Carolina-Chapel Hill</i></p> <p><b>4:00-4:20</b> Hospital Sewage and Human Fecal Waste Contaminated by Ebola Virus: Why is Chlorine-Based Disinfection a Risk? <b>Emanuele Sozzi</b>, <i>University of North Carolina-Chapel Hill</i></p>

**ROOM 6****GO GREEN OR GO HOME: SUCCESSES OF GREEN INFRASTRUCTURE IN THE URBAN ENVIRONMENT****MODERATOR: TODD KENNEDY, ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.****2:40-3:00** Managing Trees to Reduce Stormwater: i-Tree Hydro can help Urban Forests and other Green Infrastructures Play a Vital Role in Reducing Stormwater Runoff **Catherine Deininger, Biocenosis LLC****3:00-3:20** An Evaluation of Gray and Green Infrastructure to Address Water Quality and Flooding in the City of Encinitas **Jason Wright, Tetra Tech****3:20-3:40** Hydrologic and Water Quality Impacts of a Green Street Retrofit in Fayetteville, North Carolina **Kathryn Conroy, NC State University**

Sign up for Day 1 PDH credits & turn in sponsor evaluation forms at the registration desk before tours and evening reception. Must sign for both days, if applicable.

**4:00-5:45 FIELD TOURS (VARIOUS TIMES)****4:15-5:45****GREEN INFRASTRUCTURE AND STORMWATER MANAGEMENT AT NC STATE UNIVERSITY****TOUR LEADS: CHRISTY PERRIN, NC WATER RESOURCES RESEARCH INSTITUTE AND BETSY PEARCE, WAKE COUNTY**

Learn about some of the many great features and practices implemented at NCSU that protect water resources through green infrastructure practices. Sites include innovative design/build projects completed by College of Design students, the Rocky Branch stream restoration, and green infrastructure at the Student Health Center and Talley Student Union that were added during facility redesign/redevelopment.

Participation limited to those who RSVPed in advance.

**Meet at 4:15 p.m., Tour Departs at 4:30 p.m.****Where to Meet:** Outside of Talley Student Union, 2610 Cates Avenue, Raleigh NC 27606. Meet in front of Starbucks on bottom floor facing Cates Avenue. The group will start walking at 4:30 p.m.**Getting There:** See front of conference program for transportation options to Talley and parking information.**4:00-5:15****NCSU SOLAR HOUSE TOUR****TOUR LEAD: GLORIA PUTNAM, NC SEA GRANT**

The North Carolina Solar House was constructed in 1981 by NCSU's College of Engineering and is now part of the NC Clean Energy and Technology Center, which serves as a resource center for for industry, citizens and students for innovative, clean energy technologies through demonstration, technical assistance, outreach and training. The tour will highlight the many sustainability features incorporated into the Solar House.

Participation limited to those who RSVPed in advance.

**Meet at 4:00 p.m., Tour Departs at 4:15 p.m.****Where to Meet:** Outside the front entrance of the McKimmon Center under the large awning facing Western Blvd. Your tour guide will be there with a sign. Tour leaves at 4:15 for a short walk to the Solar House.**5:30-7:30****NETWORKING RECEPTION, STUDENT ART CONTEST & SILENT AUCTION****TALLEY  
STUDENT  
UNION,  
SECOND FLOOR  
LOBBY****DON'T FORGET YOUR NAMEBADGE! IT IS YOUR ADMISSION TO RECEPTION AND CONCERT!****Reception Info:** Meet at the Talley Student Union on NCSU's main campus for heavy hors d'ouvres, beer and wine. Network with fellow conference participants. Enjoy the high school art contest submissions and bid on your favorite piece to take home (all proceeds go back to the contestant's classroom to support art programming).**Nile Project Concert Tickets:** All conference registrants will receive a ticket, but you must pick up your ticket during the reception from the WRRRI information table. Please pick up your ticket as soon as you arrive to the reception. Tickets will be handed out on a first come-first served basis so arrive early to get the best seats! If you'd like to sit together, you must pick up your tickets together to ensure seats are in the same section.**Getting There:** See front of conference program for transportation options to Talley and parking information.**7:30-9:15****NILE PROJECT CONCERT****TALLEY STUDENT UNION,  
STEWART THEATER**

See above for information about picking up your tickets during reception.

Stewart Theater and concert seating begins at 7:00 p.m. Concert begins at 7:30 p.m.

## THURSDAY, MARCH 16<sup>TH</sup>

### 8:00-9:30 POSTER SESSION & NETWORKING

LOBBY

Registration, Load PowerPoint presentations for concurrent sessions

ROOM 1D



Join us early for coffee and morning refreshments as you meet with poster presenters and talk with them about their work.

### 9:30-10:45 RIVER STORIES: THE NEUSE RIVER 20 YEARS LATER

ROOM 1A

Session

Sponsored By:



Join the Nile Project's Mina Girgis and panelists to learn about the successes and challenges of managing the Neuse River through the lens of storytelling and connecting with your local river. Featured panelists include Chris Dreps, Ellerbe Creek Watershed Association, Greg Bell, Eno River Festival, and Matt Starr, Neuse Riverkeeper/Sound Rivers.

*Thank you to the NC Water Resources Association for their support of this session.*

### 10:45-11:00 NETWORKING BREAK

ROOM 1D



Networking, Refreshments, View Exhibits & Posters

### 11:00-12:20 CONCURRENT SESSION 4

ROOM 3

#### CONNECTING WATER RESOURCE RESEARCH TO THE NEEDS OF THE PRIVATE WELL USER COMMUNITY: PART 1

MODERATOR: EVAN KANE, WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

**11:00-11:20** North Carolina's Plan to Close Performance Gaps in its Private Well and Health Program *Crystal Lee Pow Jackson*, NC Department of Health and Human Services

**11:20-11:40** Examining Lead Release from Well Components in Macon County: A Research Perspective *Kelsey Pieper*, Virginia Tech

**11:40-12:00** Hexavalent Chromium in Drinking Water Wells from North Carolina: Where is it Coming From and how Widespread is it? *Jennie Harkness*, Duke University

**12:00-12:20** Use of GIS Technology to Improve Public Access and Knowledge of Sites Inventoried by the Division of Waste Management *Amy Axon*, NC Department of Environmental Quality

ROOM 4

#### NUTRIENT INPUTS, EUTROPHICATION AND ALGAL BLOOM DYNAMICS IN COASTAL NC RIVERS

MODERATOR: JOHN FEAR, NC WRRI & NC SEA GRANT

**11:00-11:20** Role of Organic Nitrogen to Eutrophication Dynamics in the Neuse River Estuary, NC *Alexandria Hounshell*, University of North Carolina-Chapel Hill

**11:20-11:40** Unraveling Dual Influences of Increasing Nutrients and Changing Flow Regimes on Bloom Potentials Along the Middle Cape Fear River *Nathan Hall*, University of North Carolina-Chapel Hill

**11:40-12:00** How Changes in Quality and Quantity of Nitrogen Loading to the Neuse River Estuary have Affected Algal Biomass *James Bowen*, University of North Carolina-Charlotte



**12:00-12:20** Environmental Factors that Contribute to the Occurrence of N<sub>2</sub>-Fixing Cyanobacterial Blooms and N<sub>2</sub>-Fixation of Diazotrophic Algae During an Algal Bloom in Pamlico River, North Carolina *Linghan Dong*, University of North Carolina-Chapel Hill

ROOM 5

#### PUBLIC AND ENVIRONMENTAL HEALTH: PRESENCE, RISK, AND MANAGEMENT (PART 2)

MODERATOR: LAURA TAYLOR, NC STATE UNIVERSITY

**11:00-11:20** Methods for Surveillance of Antimicrobial Resistant Bacteria in Environmental Water and Wastewater in North Carolina *Katy Brown*, University of North Carolina-Chapel Hill

	<p><b>11:20-11:40</b> Coal Combustion Residual (CCR) Uptake and Oxidative Stress Profiles in Fathead Minnows Following Dietary Exposure to Biofilm and Plankton Collected from a CCR-Impacted Lake <b>Jessica Brandt</b>, <i>Duke University</i></p> <p><b>11:40-12:00</b> Prevalence of Antibiotic-Resistant <i>E. coli</i> in North Carolina Watersheds With and Without Swine CAFOs <b>Elizabeth Christenson</b>, <i>University of North Carolina-Chapel Hill</i></p> <p><b>12:00-12:20</b> Season Matters When Sampling Streams for Swine Waste Disposal Impacts <b>Michael Mallin</b>, <i>University of North Carolina-Wilmington</i></p>
<p><b>ROOM 6</b></p>	<p><b>BEFORE, DURING AND AFTER THE STORM: THE USGS AND PARTNERS' RESPONSE TO HURRICANE MATTHEW</b></p> <p><b>MODERATOR: CHAD WAGNER, US GEOLOGICAL SURVEY</b></p> <p><b>11:00-11:20</b> USGS Documentation of Peak Streamflow and High Water Marks from Inland Flooding Following Hurricane Matthew <b>J. Curtis Weaver</b>, <i>US Geological Survey</i></p> <p><b>11:20-11:40</b> Stream Gaging and Flood Forecasting: A Partnership of the U.S. Geological Survey and the National Weather Service <b>Jeanne Robbins</b>, <i>US Geological Survey</i> &amp; <b>Michael Money Penny</b>, <i>National Weather Service</i></p> <p><b>11:40-12:00</b> Tracking Storm Tide and Coastal Flooding During Hurricane Matthew <b>Stephen Harden</b>, <i>US Geological Survey</i></p> <p><b>12:00-12:20</b> Forecasting and Observing Coastal Erosion Hazards during Hurricane Matthew <b>Kara Doran</b>, <i>US Geological Survey</i></p>
<p><b>12:20-1:30</b></p> <p><b>ROOM 2</b></p>  	<p><b>NETWORKING LUNCH</b></p> <p>Lunch &amp; Celebrate the Winners of the NCWRA-WRRI Student Poster Competition and the Student Art Competition.</p>
<p><b>1:30-3:30</b></p> <p><b>ROOM 3</b></p>	<p><b>PARTICIPATORY SESSIONS</b></p> <p><b>CONNECTING WATER RESOURCE RESEARCH TO THE NEEDS OF THE PRIVATE WELL USER COMMUNITY: PART 2</b></p> <p><b>MODERATOR: KATHLEEN GRAY, UNC-CHAPEL HILL SUPERFUND RESEARCH PROGRAM</b></p> <p>With approximately one third of North Carolinians reliant on private wells, these systems play a critical role in meeting our state's water resource needs. The private well community (well users, public health officials, well contractors, etc.) is increasingly looking for ways to ensure that private well users have access to safe drinking water. This session is the second part of a two-part series that provides an opportunity for researchers and members of the private well community to convene to hear the latest water resource research, and examine how this research is being, or can be, applied to solving immediate challenges in the private well community. In this "lightning round" session, private well practitioners from local government and communities will highlight their needs, and discuss their experiences bridging the gap between research and practice. The goal is to better understand how to integrate research and practice. Following each series of brief presentations, there will be a facilitated discussion where participants will examine how research is being or can be applied to solving immediate challenges in the private well community. Topics will cover well construction and lead, bridging the divide between well owners and government, the risks that arise from flooding and tackling big data.</p>
<p><b>ROOM 4</b></p>	<p><b>EFFECTIVE COMMUNICATION OF SCIENCE AND ITS IMPACTS: TOOLS AND SKILL BUILDING FOR STUDENTS, FACULTY AND THE SCIENTIFIC COMMUNITY</b></p> <p><b>MODERATOR: JORY WEINTRAUB, DUKE UNIVERSITY INITIATIVE FOR SCIENCE AND SOCIETY</b></p> <p>Funding is scarce. Anti-science rhetoric is on the rise. Policymakers often fail to grasp the research necessary to make informed decisions in the best interests of their constituents. But empirical data suggest that good science communication both empowers citizens and benefits the careers of scientists. This session is geared towards students, postdocs and faculty (though anyone can attend) and will explore the empirical benefits of communicating science and address practical skills for effective communication and demonstrating the broader impacts of research through hands-on, interactive exercises</p>
<p><b>ROOM 5</b></p>	<p><b>SHIFTING DIFFICULT CONVERSATIONS INTO LEARNING CONVERSATIONS</b></p> <p><b>MODERATORS: CHRISTY PERRIN, NC WATER RESOURCES RESEARCH INSTITUTE &amp; NC SEA GRANT AND GLORIA PUTNAM, NC SEA GRANT</b></p> <p>We all face difficult conversations in our work, community and family lives. A difficult conversation is anything that you find hard to talk about. This interactive session will explore techniques for how to turn a difficult conversation into a more effective learning conversation. Techniques will help participants consider how to shift a conversation from a</p>

polarized situation into one from which both parties can benefit and move forward. This session is based on materials and expertise from Mary Lou Addor, Director of the NC Natural Resources Leadership Institute at NC State University, whose specialties include conflict resolution and negotiation around environmental issues.

**ROOM 6**

**FALLS LAKE AND THE UPPER NEUSE RIVER BASIN ASSOCIATION: MANY STAKEHOLDERS, MANY CHALLENGES**

**MODERATOR: FORREST WESTALL, UPPER NEUSE RIVER BASIN ASSOCIATION**

The Upper Neuse River Basin Association (UNRBA) was formed in the mid-1990s to provide a forum for the water quality issues and concerns emerging from the new Falls of the Neuse Reservoir developed by the Army Corps of Engineers. Following a long and controversial process that led to the reservoir's creation, the dam was completed and filling of the reservoir was initiated in the early 1980s. The eutrophication issues of the reservoir led to legislative actions between 2006 and 2008. These actions resulted in the development of the most restrictive and ambitious nutrient reductions requirements ever developed in North Carolina. The UNRBA changed focus in 2010-11 and in 2012 embarked on the development of a comprehensive program of monitoring, information collection and modeling that would allow a reexamination of the nutrient management strategy for Falls Lake. The UNRBA is working toward its reexamination and on September 28, 2016 convened a group of stakeholders to help guide the Association's Modeling and Regulatory Support project that will provide critical input to the development of recommended adjustments to the nutrient management strategy. In 2016, the NC Legislature, in a budget amendment, designated an evaluation process for both the Jordan and Falls Reservoirs under the direction of UNC-CH. The General Assembly also created an environmental policy "Collaboratory" which, in addition to its general charge, manage the evaluation for Falls and Jordan. The emerging and parallel efforts on nutrient management for Falls Lake creates many opportunities and challenges for collaboration on a complex water quality issue with huge public policy considerations. This session will review these interactions and the efforts of the UNRBA to capture input from many stakeholders.

**3:30**

**CONFERENCE ADJOURNS**

**Sign up for PDH credits and turn in sponsor evaluation forms at the registration desk. Must sign for both days if applicable.**

**Visit [go.ncsu.edu/wrri\\_aceval](http://go.ncsu.edu/wrri_aceval) to complete a conference evaluation and enter a drawing to win a free 2018 conference registration.**