

Apr 13	25 th TWRS AGENDA		
7:30am	Golf Tournament at Montgomery Bell Golf Course		9am Mountain Bike Ride <i>sponsored by Trutta Consulting</i>
7:30 a.m.	Coffee Break in the Exhibit Room		
8:30 a.m.	OASIS Workshop		
	Room A	Room B	Room C
12:00 p.m.	Lunch/ Keynote: "Fostering Collaborative Solutions to Water Resource Management Challenges" Michael Kern, Director, The William D. Ruckelshaus Center		
	USGS Water Resources Institute Moderator: Rodney Knight, USGS	Stormwater I Moderator: Michael Hunt, Metro Water Services	ASCE EWRI Track Integrated Water Resources Approaches Moderator: George Garden, TDEC-DWR
1:30 p.m.	The USGS Water Resources Research Act Program: A Federal-State Partnership. E. Greene	Is it Time for a National Stormwater Testing and Evaluation Program for Products and Practices? M. Miller	Water Quality Protection Program An Innovative Approach to NPDES Permitting at ORNL. M. Peterson
2:00 p.m.	A Systems Approach Toward Sustainability: Bringing Biogeochemistry, Ecology, Economics and Land Ethics Together. T. Papanicolaou	The Health of Trees in Existing Bioretention Areas in Tennessee and North Carolina. A. Tirpak	Progress Toward Fully Supporting Urban Streams: A Partnership Between Non-Profits, Government and the Consulting Communities. M. Houghton
2:30 p.m.	Reach Scale Sediment Source Potential in Small Urbanizing Stream Systems. R. Woodman	Runoff Uncertainty Related to Fine-Scale Spatial Variability in Urban Watersheds. T. Epps	Characterization of Baseflow along the Duck R between Columbia and Centerville, TN, Sept 2015. G. Johnson
3:00 p.m.	Coffee Break in the Exhibit Room- <i>sponsored by Center for the Mgmt, Utilization & Protection of Water Resources, TTU</i>		
	Meteorology Moderator: Adrian Ward, BWSC	Stormwater II Moderator: Paul Davis, P.E.	ASCE EWRI Track Groundwater Moderator: Michael Bradley, USGS
3:30 p.m.	Throughfall Chemistry Study in the Great Smoky Mountains National Park. A. Veeneman	Stormwater Control Measures...Metro Nashville Latest Lessons Learned. J. Hayes	Groundwater Flow within the Western Limb of the Stones R. Syncline, Rutherford Co, Central TN. M. Abolins
4:00 p.m.	Knoxville Microclimates: Spatial Variability in Air Temperature across Four Urban Neighborhoods. D. Howe	Evaluation of Biofiltration Media for Optimum Stormwater Treatment Under Controlled Outflow Conditions. J. Fears	Recharge Mechanisms to the Unconfined Memphis Aquifer, Fayette County, Western Tennessee. D. Larsen
4:30 p.m.	Utilizing NEXRAD Data for Determination of Precipitation. T. Cropp	Solving the Sediment Dilemma: Successful Construction Site Outreach to a Difficult Audience. T. Lawrence	Historical Trends of the Water-Table Aquifer in Shelby County, Tennessee. T. Ogletree
5-6 p.m.	Vendor Equipment Demonstration Session at the dock behind the hotel restaurant		
6-8 p.m.	Dinner and Brian Malow, Science Comedian, in Rooms A&B- <i>evening beverages sponsored by Stevens Water Monitoring and Hydromet Ott</i>		
Apr 14			
7:00 a.m.	Fun Run <i>sponsored by Barge Waggoner Sumner & Cannon, Inc.</i>		
7:30 a.m.	Coffee and Biscuits in Exhibit Room- <i>sponsored by AMEC Foster Wheeler Environment & Infrastructure, Inc.</i>		
	Wastewater Moderator: Jack Gordon, TTU	Acid Rock Drainage Investigation I Moderator: Deedee Kathman, Civil & Environmental Consultants	ASCE EWRI Track Case Studies Moderator: Anne Hoos, USGS
8:30 a.m.	Total Dissolved Solids Toxicity--The Science, Challenges, and Full Scale Solutions. S. Hall	Potentially Acid Producing Rock (APR) on TDOT Highway Construction Projects. J. Hoilman	Wolf Creek Dam Rehabilitation and Environmental Considerations. T. Higgs
9:00 am.	Integrating Site Specific Bioassessment Data into Future Permits as Controlling Criteria. J. Corn	Acid-Rock Drainage from Seeps and Springs at Road Cuts in Tennessee. M. Bradley	Mercury Monitoring and Research in Oak Ridge, Tennessee. M. Peterson
9:30 a.m.	Temperature Control Challenges For Aerobic Biological Treatment of High Strength Wastewater. C. Robinson	Characterization of Runoff Water Quality from Highway Cut Slopes through Pyrite Geology. J. Schwartz	Stream Restoration: Myth, Mystery or Fact? G. Moody
10:00 a.m.	Coffee Break in Exhibit Room- <i>sponsored by Civil & Environmental Consultants, Inc.</i>		
10a-12p	Poster Session in the Mezzanine-students and professionals will be available for questions		
	Water for Agriculture I Moderator: Jim Kingsbury, USGS	Acid Rock Drainage Investigation II Moderator: Mike Bradley, USGS	ASCE EWRI Track Water Resources Moderator: David Duhl, TDEC-DWR
10:30 a.m.	Water for Agriculture: How Will Climate Change Affect Tennessee? F. Walker	Attenuation of Acid Rock Drainage with a Sequential Injection of Compounds to Revers Biologically Mediated Pyrite Oxidation T. Byl, USGS	Examination of Algal Assemblages in Rivers of Middle Tennessee: A Project Supported by the Tennessee Healthy Watershed Initiative. J. Lebkuecher
11:00 a.m.	Assessing Water Availability in the Hiwassee River Basin Using a Hydrologic Budget. T. Papanicolaou	Salamanders as Indicators of Environmental Stress: Impacts of Acid-Rock Drainage on Headwater Stream Integrity. B. Hogan	Applications of the High Definition Stream Survey on Choccolocco and Turkey Creek. B. Connell
11:30 a.m.	Investigating the Performance of One-and Two-dimensional Flood Models in a Channelized River Network: A Case Study of Obion River System. T. Dullo	Open discussion	High Definition Stream and Fish Surveys: Integrating Fish Habitat, Channel Geomorphology, Water Quality, Water Quantity, and Infrastructure Surveys. J. Parham

Noon	Lunch with Luncheon Speaker in Rooms A&B: "A Science Comedian's Guide to Communicating Science" by Brian Malow, North Carolina Museum of Natural Sciences			
	Water for Agriculture II Moderator: Tom Byl, USGS	Environmental Microbiology I Moderators: Qiang He, UTK & Tania Datta, TTU	ASCE EWRI Track	Stream Restoration I Moderator: Jimmy Smith, TDEC-DWR
1:30 p.m.	Analysis of Groundwater Availability for Agricultural Sustainability in Select Watersheds in Western Tennessee. B. Waldron	Potential Utility of Microbiome Analysis in Microbial Source Tracking. K. Wyckoff		Reclamation of the Lower North Potato Creek Watershed. T. McComb
2:00 p.m.	Estimating an Economic Value of Water in Tennessee. C. Clark	Impact of Process Configuration on Nitrifying Populations in Wastewater Treatment. S. Chen		Conception, Design, and Construction of a Regenerative Stream Restoration in Knoxville, Tennessee. K. Barry
2:30 p.m.	More Floods and Droughts: University of Tennessee Extension Approaches to Adapting to Climate Change in Tennessee. F. Walker	An Investigation of Microbial Communities in Wastewater Treatment Facilities Undergoing Optimization for Nutrient Removal. T. Datta & G. McClellan		Phase I Restoration of Beaver Creek, Bristol TN/VA. I. Luffman
3:00 p.m.	Coffee Break in the Exhibit Room-sponsored by Center for Applied Earth Science and Engineering Research (CAESER)			
3-3:30p.m.	Poster Session in the Mezzanine-students and professionals will be available for questions			
	Water for Agriculture III Moderator: David Money, TDEC-DWR	Environmental Microbiology II Moderators: Qiang He, UTK & Tania Datta, TTU	ASCE EWRI Track	Stream Restoration II Moderator: Jennifer Dodd, TDEC-DWR
3:30 p.m.	Educational Enhancements at UT Martin Associated with the Joint Water for Agriculture Project. P. Gale; G. Nail	Microalgae for Biofuel Production. T. Mathews		Hatchery Creek Stream Restoration Project: A Unique Opportunity to Enhance Sport Fishing. O. Routt
4:00 p.m.	Education Curriculum for Youth - Water Quality and Quantity. L. Reynolds	A Review of Bioremediation in Karst Aquifers. T. Byl		Nashville Zoo Stormwater Retrofit: Applying Level Spreader and Creek Dam Design Principles to Restore Riparian Area and Protect Receiving Stream. S. Casey
4:30 p.m.	An Assessment of the Effectiveness of Winter Wheat Cover Crops for Nutrient Load Reduction in the Red and Obion River Watersheds. S. Hawkins	Microbial Interactions in Methanogenic Treatment Processes. Q. He		Dam Removal in Tennessee: An Alternate Form of Stream Mitigation Credit? A. Spiller
5:00 p.m.				Ecological Effectiveness of Channel Restoration in the Coastal Plains. J. Fore
6-8pm	Dinner and Live Music followed by TN AWRA Business Meeting in Rooms A&B-evening beverages sponsored by ARCADIS U.S., Inc.			
Apr 15				
7:30 a.m.	Coffee and Biscuits in Exhibit Room-sponsored by UT, Water Resources Research Center			
	EPA/TDEC Moderator: Amy Feingold, EPA	Floods Moderator: Alfred Kalyanapu, TTU	ASCE EWRI Track	Sediment Moderator: Ingrid Luffman, ETSU
8:30 a.m.	Low Cost Opportunities for Energy & Nutrient Reductions at WWTPs. B. Freeman	Developing Flood Consequence Correlation Using Global DEMs. M. Bhuyian		Relationship between Cohesive Soil Erosion Behavior and the Physical and Geochemical Properties of Soil in Tennessee, USA. B. Mahalder
9:00 am.	Overview of the National Aquatic Resource Surveys. D. Melgaard	A Probabilistic Hydrologic Model to Analyze the Uncertainty of the Design Hydrograph Attributes. E. Ahmadisharaf		GIS Tools to Locate Potential Sediment Sources in Stream-channel Networks. J. Cartwright
9:30 a.m.	Coming Full Circle: How TDEC is Meeting New Challenges in Data Management and Energy Savings. J. Dodd	Making Room for Big Creek. A. Ward		Utilizing Stream Restoration to Reduce Sediment Loads. A. McIntyre
10:00 a.m.	Coffee Break in Exhibit Room			
	Better Outcomes for Natural Resources Management: Aligning for Success!			ASCE EWRI Track
	Moderator: Scott Gain, USGS			
10:30 a.m.	Scott Gain, U.S. Geological Survey			
	Tisha Calabrese Benton, TDEC			
	Susannah Kniazewycz, TDOT			
	Ted Fox, Blue Stream Task Force			
Adjourn				