

22nd Tennessee Water Resources Symposium

April 11		AGENDA		
7:00 a.m.	Golf Tournament at Montgomery Bell Golf Course			
7:30 a.m.	Coffee Break in the Exhibit Room			
	Special Sessions			
	Room A		Room B	
8:30 a.m.	<p>River 2D Hydrodynamic and Habitat Modeling Workshop</p> <p>Dr. John Schwartz UT, Civil & Environmental Engineering</p>		<p>Presentations from China</p>	
		8:30 a.m.	Study on Development and Utilization of Water Resource in Northwest of China. Qiang Huang	
		8:40 a.m.	Research on Dynamic Ecological Water Requirements and its Application to the Main Reach of the Weihe River. Ni Wang	
		8:50 a.m.	Sediment Transport Characteristics under Low Temperature Flow and Its Consequences in Inner Mongolian Reach. Yi Qin	
		9:00 a.m.	Monitoring and Characteristic Analysis of Snowstorm Runoff Pollution in Xi'an City. Huai'en Li	
		9:10 a.m.	Break	
		9:20 a.m.	Experimental Study on Gas-Liquid Two-Phase Flows in a Cylindrical Aeration Tank by PTV Method. Wen Cheng	
		9:30 a.m.	Establishing and Application on Single Parameter Model of Soil Water Diffusivity in Nanxiaohegou Basin. Xiaoyu Song	
		9:40 a.m.	Water Movement and Solute Transport in Heterogeneous Soils. Beibei Zhou	
		9:50 a.m.	Eco-environmental Risks Identification on the Cascade Development in the Upper Reaches of the Yellow River. Dexiu Hu	
		10:00-11:30 a.m.	Chinese Poster Session and questions for speakers and poster presenters	

April 11	AGENDA		
	Room A	Room B	Room C
8:30 a.m.	River 2D Hydrodynamic and Habitat Modeling Workshop. J. Schwartz Engineering Track	China Presentations-see agenda on separate page	
12:00 p.m.	Lunch with Keynote Speaker: "Responding to Challenges in Assuring Resilient Water Systems for Tennessee", Thomas J. Wilbanks, ORNL		
	Flood I	Engineering Applications Engineering Track	Groundwater
	Moderator: Tom Palko, Metro Water Services	Moderator: Saya Qualls, TDEC-WPC	Moderator: David Ladd, USGS
1:30 p.m.	Probabilistic Flood Risk Management Using Monte Carlo Based Fast 2D Flood Model to Incorporate Uncertainty. A. Kalyanapu	Evaluation of a Bioreactor to Reduce Contaminant Loads at Hardeman County Landfill, Tennessee. B. Cobb	Occurrence of Nitrate and Pesticides in the Memphis-Sparta Aquifer in W Tennessee and NW Mississippi. J. Kingsbury
2:00 p.m.	Technical Review of Flooding Issues in the Lick Creek Drainage Basin, Memphis, TN. E. Byrne	Innovative Solutions to Complex Environmental and Wastewater Issues. D. Adams	Geochemistry of Deep Aquifers in Tennessee and Implications for Carbon Sequestration. M. Bradley
2:30 p.m.	Dynamic Stormwater Modeling. J. Avent	SPR High Turbidity Wastewater Purifier and Technology. T. Liao	Hydrologic and Geologic Controls on Carbon Tetrachloride Transport and Biodegradation. T. Byl
3:00 p.m.	Coffee Break in the Exhibit Room co-sponsored by Hach Hydromet & Fulghum, MacIndoe & Associates, Inc.		
	Flood II	Restoration I Engineering Track	Karst
	Moderator: Michael Hunt, Metro Water Services	Moderator: Joey Woodard, TSMP	Moderator: Scotty Sorrells, TDEC-Water Supply
3:30 p.m.	Nashville SAFE: A City-wide Program for Flood Emergency Preparedness. J. Higgs	Transportation Mitigation. N. Ober	TN Underwater Caves: Enabling Watershed Management. J. Richards
4:00 p.m.	Cumberland River System Operations during the 2011 Mississippi River Flood. R. Kerr	Stream Restoration & Stormwater Treatment in an Urban Watershed. W. Barry	Deciphering Microbial Controls on Carbon Cycling in Karst Aquifers. T. Brown
4:30 p.m.	Using GIS Techniques to Map and Predict Flood Inundation in Tennessee. D. Ladd	Water Quality Best Management Practices at the Little River Animal & Environmental Unit. A. Ludwig	Quantitative Dye Tracing - Development of a New Interpretative Method. I. Embry
5-6 p.m.	Vendor Equipment Demonstration Session at the dock behind the hotel restaurant		
6-8 p.m.	Dinner and Live Music in Rooms A&B		
April 12			
7:00 a.m.	Fun Run sponsored by Barge Waggoner Sumner & Cannon, Inc.		
7:30 a.m.	Coffee and Biscuits in Exhibit Room co-sponsored by Secure Waters & KCI Technologies		
	Health I	Water Supply/Availability Engineering Track	Education
	Moderator: Frank Bailey, MTSU	Moderator: Shannon Williams, USGS	Moderator: Shawn Hawkins, UT
8:30 a.m.	Results of a Data Evaluation to Establish Priority Remediation Areas for Dry Weather Fecal Contamination in a Karst Influenced Watershed. S. Evans	Estimating Water Use at Thermolectric Power Plants. M. Harris	Building a Successful Rainwater Harvesting Outreach Program through Creative Partnerships. J. Scott
9:00 am.	Survey of Pharmaceutical and Personal Care Products in Untreated Drinking Water in Tennessee. A. Layton	Evaluating Effects of Ground-Water Withdrawals Associated with Combined-Cycle Combustion Turbine Plants. C. Haugh	The Potential of Rainwater Harvesting in Tennessee. J. Logan
9:30 a.m.	Review of a Municipality's Use of a qPCR Technique for Fecal Source Tracking in Impaired Streams. M. Stallard	Analysis and Comparison of Low Flow (7Q10) for Rural and Urbanized Basins in North and East Central USA. S. Zabet	The Creation of Nashville's Low Impact Development Manual. R. Dohn
10:00 a.m.	Coffee Break in Exhibit Room co-sponsored by Crawford Hydrology Lab and Burchart Horn		
10a-12p	Poster Session in the Mezzanine-students and professionals will be available for questions		
	Health II	Monitoring and Water Quality	Modeling Tools Engineering Track
	Moderator: Tom Moss, TDEC-Water Supply	Moderator: Greg Denton, TDEC-WPC	Moderator: Anne Hoos, USGS
10:30 a.m.	Assessing Microbiological Integrity of Water Supply with High-Throughput Sequencing. Q. He	Tennessee Volunteer Watershed Monitoring. J. McFadden	Simulation of Time-Varying Land Use with LSPC. J. Wyss
11:00 a.m.	Detection of Pentobarbital in Leachate from an Organic Burial Pit Containing Euthanized Large Animals. S. Hawkins	The TVA Kingston Ash Spill: Three Years Later. N. Carrier	A New Tool for CE-QUAL-W2 Model Calibration. G. Burnette
11:30 a.m.	Major Ion Toxicity: Technical Issues, Regulatory Status, and Options in Water Quality Manage. L. Minella	Status of Turbidity Monitoring at TMI Sites in East Tennessee. J. Schwartz	Water Reuse and Conservation Considerations in Drought Planning Using OASIS Modeling. B. Fennell

	Lunch with Luncheon Speaker in Rooms A&B: "Integrated Water Resources Planning – Sustainable Concepts and Strategies" Steve McDonald, Carollo Engineering			
Noon	Planning I		Stormwater Engineering Track	Ecology/Biology I
	Moderator: George Garden, BWSC		Moderator: Paul E. Davis, P.E.	Moderator: Rodney Knight, USGS
1:30 p.m.	The City of Franklin's Integrated Plan to Address Water Resource Challenges. D. Mason		Incorporating Effective Maintenance Strategies into a Stormwater Management Program. M. Miller; M. Lelong	What is Effecting the Mussel Populations on the Clinch River? G. Johnson
2:00 p.m.	Dissolved Oxygen, What 10 Years of Data Tells Us about Water Quality in the Harpeth River. M. Cain		What, Where, and How Much will it Cost? Watershed-scale Stormwater BMP Planning and Optimization. D. Bambic	Chemical Analysis of Trout Otoliths as a Measure of the Biological Impact of Aqueous Aluminum in the Smokies. M. Connolly
2:30 p.m.	Working with Non-industrial Private Forest Landowners to Ensure a Clean, Abundant Public Water Supply. D. Arnold		Suspended Sediment Concentrations and Turbidity from Highway Construction Outfalls. T. Diehl	A Network for Monitoring the Effects of Climate Change on Macroinvertebrate Populations in Southeastern Streams. D. Arnwine
3:00 p.m.	Coffee Break in the Exhibit Room sponsored by ARCADIS			
3-3:30p.m.	Poster Session in the Mezzanine-students and professionals will be available for questions			
	Planning II		Restoration II Engineering Track	Ecology/Biology II
	Moderator: Tom Allen, Neel-Schaffer, Inc.		Moderator: Forbes Walker, UT	Moderator: Bill Wolfe, USGS
3:30 p.m.	Climate Adaptation for Water Resources in Tennessee. G. Griffith		The Effects of the May 2010 Floods on TSMP Stream Restoration. A. Spiller	Using Species Sensitivity Distributions in a Tennessee Watershed Assessment. B. Coffey
4:00 p.m.	Past, Current, and Future Water-Use Studies in Tennessee. J. Robinson		Rehabilitating Oostanaula Creek: Use of Stream Enhancement and Agricultural BMPs, CFD Modeling, and University Students. K. Neff	Fish Community Response to Altered Ecological Flow Regimes. R. Knight
4:30 p.m.	Understanding Flood Events in the Greater Nashville Metropolitan Area 1970 - 2010: Correlating Urban Growth with Analysis of Storm. C. Schaney		Oostanaula Creek Watershed Restoration Projects To Date: Rural and Town Solutions. L. Reynolds	Which Types of Hydrologic Models Best Address the Needs of Ecological Flow Research? J. Murphy
5:00 p.m.	Poster Session in the Mezzanine: All Poster Presenters will be available for questions about their displayed poster			
6-8pm	Dinner in Rooms A&B followed by TN AWRA Business Meeting			
April 13				
7:30 a.m.	Coffee and Biscuits in Exhibit Room sponsored by Water Resources Research Center/ISSE, UT			
	Municipal Storm Water Engineering Track		Geomorphology	Reservoir I
	Moderator: Tom Lawrence, Water Quality Matters!		Moderator: Tim Diehl, USGS	Moderator: Dan Eagar, TDEC-WPC
8:30 a.m.	Environmental Stewardship Program: Sustainable Approaches to the Age Old Public Works Requests for Pipe and Rip Rap. P. Gibson		Streambank Video Mapping to Determine Erosion Susceptible Areas. B. Connell	Permitting, Mitigation, and Monitoring of a Small Cumberland Plateau Reservoir. R. Martin
9:00 am.	Stormwater Utility Lessons Learned - Kingsport, TN. D. Mason		Geomorphic and Fish Community Response to Disturbance in a Middle Tennessee Flat Rock Creek. B. Wolfe	Engineering Design and Construction Management of a Small Cumberland Plateau Reservoir. W. Griggs
9:30 a.m.	Green Infrastructure and Urban Retrofit Initiative in the City of Chattanooga. D. Green		Mapping Tennessee River Systems with Sensor Technology and Georeferenced Above and Below Water Video. P. Ayers	Creating Streams from Ponds: Two Approaches. B. Wood
10:00 a.m.	Coffee Break in Exhibit Room co-sponsored by Tennessee Stream Mitigation Program & EnSafe			
	GIS		TN's Nutrient Reduction Strategy Engineering Track	Reservoir II
	Moderator: Yvette Clark, TTU		Moderator: Scott Gain, USGS	Moderator: Jim Hagerman, City of Knoxville
10:30 a.m.	Geomorphology from the GIS Desktop: Interpretation of High-Resolution DEMs for Urban Watershed Assessment. N. Jokay		Application of Regional Regression Models of Nutrient Transport to Water-Quality Assessments in the Southeastern U.S. A. Hoos	Water Management in the Cumberland River Basin. R. Dillingham
11:00 a.m.	A GIS-based Geomorphic Classification Technique for West TN Streams. C. Bridges		State of Tennessee Nutrient Reduction Strategy for Rivers and Streams. S. Qualls	An Overview of Water Quality Impacts Resulting from Pool Level Restrictions Imposed Within the Cumberland River Basin Reservoir System. R. Tippit
11:30 a.m.	Why the Internet and Your GIS is the Next Power Couple. R. Duncan		Developing West Tennessee's Nutrient Reduction Plans for Agricultural Watersheds. F. Walker	Center Hill Lake Hydrodynamic and Water Quality Model Development Using CE-QUAL-W2 Version 3.6. J. Gregory
	Adjourn			