

2017 Mid-Atlantic Water Resources Conference
Water Research: Building Knowledge and Innovative Solutions
Draft Agenda

Thursday, October 12

6:30 AM – 8:00 AM	Breakfast <i>(Included with Conference Registration)</i>	<i>Commons</i>
7:30 AM – 4:30 PM	Registration	<i>Entry Auditorium</i>
8:30 AM – 10:00 AM	Welcome & Opening Remarks <i>(History of WRRRA)</i> <i>Entry Auditorium</i> Plenary Session – Town Hall with Institute Directors - <i>Brief discussion of research</i> - <i>Q&A with audience</i>	
10:00 AM – 10:30 AM	Networking Break	<i>Instructional West</i>
10:30 AM – 11:30 AM	Keynote Session <i>Austin Caperton, Cabinet Secretary,</i> <i>WV Department of Environmental Protection (confirmed)</i>	<i>Entry Auditorium</i>
11:30 AM – 12:40 PM	Lunch	<i>Commons</i>
12:40 AM – 1:50 PM	Breakout Session 1	<i>Instructional West</i>

Track 1A – Using Models for Watershed Management (3)

- *Prioritizing Lands to Protect Our Waters: a Strategic Approach with Virginia ConservationVision*
- *Impacts of Interpolation Schemes on Critical Source Areas Identification for Non-Point Source Pollution Control Based on SWAT Model*
- *Nutrient Modeling Tools and Training to Empower States to Meet their Modeling Needs*

Track 1B – Reducing the Impacts of Stormwater Runoff (3)

- *Retrofitting Stormwater Management Facilities – Benefits and Challenges*
- *Effects of Semi-Permanent Structures (HabiTubes & Habi-Mats) on Benthic Populations in Restored Streams*
- *Pervious Concrete for Impervious Landscapes: Hydrologic Function and Regulatory Credit*

Track 1C – Insights Into Groundwater (3)

- *Borehole Geophysical Characterization of Fractured-Rock Aquifers in West Virginia*
- *Emerging Information on Groundwater of the Virginia Eastern Shore*
- *Transport and Transformations of Nitrogen in Groundwater Seeps along the Stream Corridor of an Agricultural Watershed*

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2:00 PM – 3:10 PM

Breakout Session 2

Instructional West

Track 2A – Understanding the Water Budget (3)

- *Analysis of Seasonal-to-Annual Accumulating Precipitation Distribution across the Mid-Atlantic United States, 1987-2016*
- *Water Budget Estimation Using In-situ and Remote Sensing Products in the Chesapeake Bay Watershed*
- *The Freshwater and Liquid Waste Impact of Unconventional Oil and Gas in Ohio and West Virginia*

Track 2B – Quantifying Stormwater Treatment (3)

- *Developing a National Stormwater BMP Testing and Verification Program: An Update on the Stormwater Testing and Evaluation of Products and Practices (STEPP) Initiative*
- *Stormwater and Water Efficiency (A Global Perspective)*
- *Making Urban Trees Count: A Stormwater Crediting Framework for Urban Tree Planting*

Track 2C – Gaining Insights from Invertebrate Organisms (3)

- *The Effects of Artificial Substrates Containing Magnesium on Juvenile Oyster Recruitment and Fitness*
- *Chesapeake Bay Basin-Wide Index of Biotic Integrity*
- *Innovative Approaches to Improve Macrobenthic Invertebrate Communities through Stream Restoration*

3:10 PM – 3:40 PM

Networking Break

Instructional West

3:40 PM – 5:10 PM

Breakout Session 3

Instructional West

Track 3A – Forecasting Droughts and Floods (4)

- *Evaluation of Near-Real Time Drought Forecasting Using VIC and SWAT Models in the Contiguous U.S*
- *Investigation of Urban Flooding using the National Water Model in Southeast Virginia*
- *Ensemble Flood Forecasting in the U.S. Middle Atlantic Region*
- *Ensemble Flood Forecast Maps: A Case Study in the Delaware River near Philadelphia*

Track 3B – Monitoring and Managing Pollution from the Urban Env. (4)

- *Residents' Preferences in Adopting Water Runoff Management Practices: Examining the Effect of Behavioral Nudges in a Field Experiment*
- *Beyond Runoff Reduction-Thorough Green Infrastructure Design*
- *Tracking Illicit Discharges in Urban Stormwater Systems with Real-time 3G Wireless*

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- *2-Dimensional Tidal Dispersion Coefficients and Total Suspended Solids Flux Characterization in the James River*

Track 3C – Gaining Insights from Vertebrate Organisms (4)

- *Effects of Unconventional Oil and Gas Development on Brook Trout Occupancy within an Actively Developing Watershed*
- *Revealing the Current Relationship between Stream Acidification and Fish Species Richness: What is the Status after Two Decades of Recovery in Appalachian Streams?*
- *Temporal Distribution of Cyanotoxins and Environmental Estrogens within the Upper and Middle Potomac River Drainage, USA*
- *Fish and Amphibian Response Trajectories in Reconnected Coastal Plain Stream Floodplain Valleys*

5:30 PM – 7:00 PM	Dinner <i>(Included with Conference Registration)</i>	<i>Commons</i>
7:00 PM – 9:00 PM	Reception & Poster Session	<i>Roosevelt Room</i>

Friday, October 13

6:30 AM – 8:15 AM	Breakfast <i>(Included with conference registration)</i>	<i>Commons</i>
8:00 AM – 11:00 AM	Registration	<i>Entry Auditorium</i>
8:30 AM – 9:30 AM	Welcome & Opening Remarks Keynote Session - <i>40-45 minute talk plus Q/A</i>	<i>Entry Auditorium</i>
9:30 AM – 10:00 AM	Networking Break	<i>Instructional West</i>
10:00 AM – 11:50 PM	Breakout Session 4	<i>Instructional West</i>

Track 4A – Monitoring Water Quality (5)

- *Inputs of Pollutants to Watersheds via Atmospheric Deposition, with Implications for Human Health and Aquatic Life*
- *Watershed-scale Impacts on Microbial Indicators of Water Quality*
- *ColiFind: A Digital Image Analysis Application to Identify E. coli colonies in Coliscan Easygel Water Quality Tests*
- *Reservoirs: Could They be Indicators of Climate Change?*
- *20 Years of Measured Changes in the Shenandoah River Quality*

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Track 4B – Improving Watershed Management (5)

- *Flood, Droughts and Interstate Conflicts: Why Eastern States Need to Worry about Water Quantity and Water Law*
- *Anatomy of the 2016 Drought in New York State: Implications for Agriculture and Water Resources*
- *Water Infrastructure Planning Under Uncertain Climate Change: Risk and Robustness-Based Approaches*
- *Designing the Next Generation of Inland Hydrography Data – Results of the National Hydrography Requirements and Benefits Study*
- *Identifying Key Issues in Water Quality Perceptions in Northern West Virginia*

Track 4C – Water-Energy Nexus: Meeting Challenges and Finding Solutions (5)

- *Downstream Drinking Water Impacts of Fossil Fuel Extraction and Utilization Choices*
- *Metal Reclamation Units (MRUs, Wetlands in a Box) Treating Acid Mine Drainage*
- *Lambert Run: A Watershed Scale Approach to Remediation*
- *DMME TMDL Program Success: Restoring Impaired Coalfield Streams*
- *Design and Construction of a Micro-scale Anaerobic Digester/Power Process*

11:50 PM – 1:00 PM

Lunch

Commons

1:00 PM – 2:50 PM

Breakout Session 5

Instructional West

Track 5A – Innovative Technologies for Data Collection and Management (5)

- *New Monitoring Technologies for Managing Water Quality*
- *Determining Bank Erosion Hazard Index Using Unmanned Ariel Systems*
- *Remote Sensing Techniques for the Valley Creek Watershed's Headwaters*
- *USGS Streamgaging and Innovative Approaches to Data Delivery*

Track 5B – Networks and Partnerships with a Focus on Water Research (5)

- *From Coal Country to the Chesapeake: USGS Water Science in West Virginia and Virginia*
- *Three Rivers QUEST – Managing and Displaying Water Quality Data throughout the Upper Ohio River Basin*
- *Sensing and Educating the Nexus to Sustain Ecosystems (SENSE): A Kentucky-West Virginia Partnership*
- *Water Environment and Reuse Foundation Agricultural Sector Research*
- *The West Virginia Outdoor Learning Lab: Using Research to Create Environmental STEM Outreach*

***Each speaker in the breakout sessions will have 20 min. including Q&A period**