

# TECHNICAL SESSIONS

## MONDAY, MARCH 12

8:00am-9:30am **OPENING PLENARY SESSION**  
Moderator: George Ice, National Council for Air and Stream Improvement (NCASI)

8:00am Opening Remarks - Ali Saleh  
8:05am Welcome to the city of San Antonio  
8:15am Market based solutions to Nonpoint Source Problems  
*Carl Lucero, National Leader for Clean Water, USDA - NRCS*

8:40am The TMDL Program, Progress and Challenges  
*Francoise M. Brasier, Associate Chief, Watershed Branch, USEPA*

9:05am TMDL and Water quality issues at the State level  
*David Schanbacher, Chief Engineer, Texas Commission for Environmental Quality*

9:30am-10:00am **BREAK**

### CONCURRENT SESSIONS I, II, III, IV, IV

#### I. URBAN PERSPECTIVES ON WATER QUALITY

Moderator: Tad Slawewicki, Limno Tech, Inc.  
Location: TBA

10:00am UAAs and the Standards-Setting Process  
*Brooks M. Smith, Hunton & Williams LLP*

10:25am Adaptive Implementation of TMDLs  
*Ken Reckhow, Duke University, Durham, NC United States*

10:50am Enforcement, Policy and Regulatory Developments Affecting the Agricultural Sector  
*David Cook, Nixon Peabody LLP*

11:15am The Urban and Rural Communities CAN work Together to Solve Environmental Problems!  
*Michael Moore, Orange County (CA) Sanitation District*

#### II. FIELD AND WATERSHED SCALE MODELING - PART 1

Moderator: Santhi Chinnasamy, USDA ARS  
Location: TBA

10:00am Comparison of the auto calibration tool available within SWAT 2005 and Manual calibration  
*Paula Jo Lemonds and Michael Kasch, HDR Engineering, Inc, Austin, TX (P.J.Lemonds, and M.Kasch)*

10:25am Application of CANWET and HSPF for TMDL Evaluation under Southern Ontario Conditions  
*Amanjot Singh, University of Guelph, Guelph, ON, Canada (A.Singh, R.P Rudra, B Gharabaghi, I Ahmed, and S Das)*

10:50am Using SWAT to Investigate TMDL of Bacteria in Upper Oyster Creek  
*Bing Du, TIAER, Stephenville, TX United States (L.M. Hauck, X.Y. Ji and B. Du)*

11:15am Impact of Urbanization on Watershed Hydrology and Hydro-Geology  
*Deepak Khare, Department of Water Resources Development & Management, Roorkee, Uttaranchal, India (D Khare, P. K. Garg, and M.K. Jat)*

#### III, IV. EMERGING PROBLEMS-NEW TMDL CASE STUDIES

Moderator: Michael Thomas, Florida Department of Environmental Protection  
Location: TBA

10:00am Spatially Explicit Load Enrichment Calculation Tool (SELECT) and Load Duration Curves for Identification of Ecoli Sources in Plum Creek Watershed, TX  
*Aarin E Teague, Texas A&M University, College Station, TX, United States (A. Teague, M. Babbar-Sebens, R. Karthikeyan, R. Srinivasan, J. Jacobs, M. McFarland, N. Dictson, and D. Boellstorff)*

10:25am Establishing a Framework for Phosphorus Trading in the Etowah Basin  
*L. Mark Risse, University of Georgia, Athens, GA, United States (D. Radcliffe, R. Jackson, and J. Romeis)*

10:50am Fate and Transport of Emerging Contaminants in a Wastewater Dominated Stream  
*Douglas J Schnoebelen, U.S. Geological Survey, Iowa City, IA, United States (D.J. Schnoebelen, D.W. Kolpin, L.B. Barber, E.. Furlong, M.M. Meyer and M. Skopec)*

11:15am Flood Control - A Mechanism for Extreme Bacteria Loading  
*Ron Stein, Texas Commission on Environmental Quality, Austin, TX, United States (R. Stein and Dr. H.Rifai) R. Jackson, and J. Romeis)*

#### IV. PERFORMANCE AND VALIDATION OF MODELS

Moderator: Larry Hauck, Texas Institute of Applied Environmental Research  
Location: TBA

10:00am Evaluation of Modeling Tools for TMDL Development and Implementation - Presentation of the Collection  
*Rafael Muñoz-Carpena, University of Florida, Gainesville, FL, United States (Muñoz-Carpena, R., G. Vellidis, A. Shirmohammadi and W.W. Wallender)*

10:25am Development of a TMDL for the Raccoon River in West Central Iowa using SWAT  
*Phillip W Gassman, Center for Agricultural and Rural Development, Ames, IA, United States (M. Jha, C. Wolter, K. Schilling, P.W. Gassman, and S. Secchi)*

10:50am Impacts of Changing Herd Sizes on the Effects of Manure Application Rates  
*Edward Osei, Texas Institute for Applied Environmental Research, Stephenville, TX, United States (E.Osei, B. Du, and L. Hauck)*

11:15am Estimating Environmental Benefits from a Manure Haul-off and Composting Project for North-Central Texas Watersheds  
*Larry M Hauck, TIAER, Stephenville, TX, United States (L.M. Hauck, A. Saleh, A. McFarland, and O. Gallego)*

11:40am-1:15pm **LUNCH**

### CONCURRENT SESSIONS V, VI, VII, VIII

#### V. FIELD AND WATERSHED SCALE MODELING - PART 2

Moderator: Cole Green, USDA ARS  
Location: TBA

1:15pm Assessing Alternative Fecal Coliform Direct Deposit Modeling Approaches  
*Kyle M Hall, Biological Systems Engineering Department, Virginia Tech, Blacksburg, VA, United States (K.M. Hall, B.L. Benham, K. M. Brannan, and R.W. Zeckoski)*

1:40pm Comparison of HSPF Simulated In-Stream Fecal Bacteria Concentration Using FTABLEs Generated with Field Survey and Digital Data  
*Kyle M Hall, Biological Systems Engineering Department, Virginia Tech, Blacksburg, VA, United States (K.M. Hall, R.W. Zeckoski, K.M. Brannan, and B.L. Benham)*

2:05pm Validating and Applying the Enhanced Dynamic Fertilizer Model (SWAT-DFC)  
*James B Houser, TIAER, Stephenville, TX, United States (J. B. Houser, A. Saleh, and L. Hauck)*

2:30pm Pathogen, Nutrient, and Sediment Prediction Using AVSWAT-X and WARMF Water Quality Models  
*Amir P Nejadhashemi, Kansas State University, Manhattan, KS, United States (A.P. Nejadhashemi, P.B. Parajuli, and K.R. Mankin)*

#### VI. AGRICULTURAL BMP EFFECTIVENESS - PART 1

Moderator: Philip Barnes, Kansas State University  
Location: TBA

1:15PM Sprinkler and Surface Irrigation Effects on Return Flow Water Quality and Quantity  
*David L. Bjorneberg, NWISRL, ARS, USDA, Kimberly, Idaho, United States (D.L. Bjorneberg, D.T. Westermann and N.O. Nelson)*

# TECHNICAL SESSIONS

## MONDAY, MARCH 12

1:40PM Implementing BMPs in a Agricultural Watershed  
*Daniel L. Devlin, Kansas State University, Manhattan, Kansas, United States (D.Devlin, P.Barnes, R. Graber, D. Ladd, and J. Neel)*

2:05PM The Attenuation of Atrazine and its Major Degradation Products in a Restored Rip  
*Paige Gay, University of Georgia, Tifton, GA, United States (P. Gay, G. Vellidis, and J.J. Delfino)*

2:30PM Assessing Best Management Practices Effectiveness in a Small Watershed using a Process-based Based Modeling Approach  
*Taesoo Lee, Amherst, NY, United States (T. Lee and C.S. Renschler)*

### VII. WATER QUALITY ISSUES FOR FOREST AND RANGELANDS - PART 1

Moderator: Eric B. Schilling, National Council for Air and Stream Improvement  
Location:TBA

1:15pm Predicting Background and Risk-based Sedimentation for Forest Watershed TMDLs  
*William J. Elliot, Rocky Mtn Research Station, Moscow, ID, United States (W. J. Elliot, I. S. Miller and B. D. Glaza)*

1:40pm Evaluation of Water Sampling and Storage Procedures Used in Herbicide Dissipation Studies  
*Joseph B Fischer, USDA Forest Service, Auburn, AL, United States (J.B. Fischer, J.L. Michael, and H.L. Gibbs)*

2:05pm Impacts of Contemporary Timber Harvest and Road Construction Practices in a Mountainous Catchment of North Idaho  
*John Gravelle, University of Idaho, Moscow, ID, United States (J.A. Gravelle, T.E. Link, J.A. Hubbard, J.H. Braatne, and D.L. Karwan)*

2:30pm Addressing Infrequent, Brief, and Small Excursions of Water Quality  
*George G Ice, NCASI, Corvallis, OR, United States (G.G. Ice, J.P., Unwin, T.J. Hall, and P.Wiegand)*

### VIII. DATA COLLECTION TO SUPPORT TMDL DEVELOPMENT - PART 1

Moderator: Rafael Munoz-Carpena, University of Florida  
Location:TBA

1:15pm Study on Wireless-Sensor-Based Groundwater  
*Dongping Qian, Agricultural University of Hebei, Baoding, Hebei, China (D. Qian)*

1:40pm Productivity, Biochemical Oxygen Dynamics and Nutrient Cycling in the Tidal Segment of the Arroyo Colorado, Texas  
*Meghan C Roussel, USGS, Austin, TX, United States (M. Roussel, R. Kiesling, and M. Canova)*

2:05pm Measurement of Water Residence Time, Flowpath and Sediment Oxygen Demand in Seasonally Inundated Floodplain Wwamps of the Georgia Coastal Plain  
*Jason Todd, UGA, Tifton, GA, United States (M. J. Todd, G. Vellidis, and C.M. Pringle)*

2:30pm Improving TMDL Determinations Through Assessment of Benthic Macroinvertebrate Communities  
*Adrienne Viosca, School of Renewable Natural Resources, Baton Rouge, LA, United States (A. Viosca, Y.J. Xu, and W.E. Kelso)*

2:55pm-3:15pm **BREAK**

## CONCURRENT SESSIONS IX, X, XI, XII

### IX. PERFORMANCE AND VALIDATION OF MODELS FOR TMDLS - PART 1

Moderator: Cole Green, USDA ARS

Location:TBA

3:15pm Evaluation of Nutrient Component of AnnAGNPS Model in a Watershed in Ontario  
*Samaresh Das, University of Guelph, Guelph, Ontario, Canada (S Das, R.P. Rudra, B. Gharabaghi, A. Singh, I Ahmed, and P. K. Goel)*

3:40pm Evaluation of HSPF Uncertainty Bounds Using a Probabilistic Point Estimate Method  
*Jairo N Diaz-Ramirez, Mississippi State University, Mississippi State, MS, United States (J. Diaz-Ramirez and W. McAnally)*

4:05pm Storm event Simulations in the Upper North Bosque River Watershed  
*Mauro Di Luzio, TAES - Blackland Research Center, Temple, TX, United States (M. Di Luzio, A. Saleh, A. McFarland, and J.Arnold)*

4:30pm Considering Measurement Uncertainty in Model Evaluation  
*Daren Harmel, USDA-ARS, Temple, TX, United States (D. Harmel and P. Haan)*

4:55pm A Neural Network Model for the Prescription of TMDLs in Groundwater Systems  
*T Akinfenwa Fashanu, University of Lagos, Nigeria (T.A. Fashanu, V.O.S. Oluoyo, and O. Ibadapo-Obe)*

### X. TMDL AND WATER QUALITY ISSUES: WATERSHED APPROACH

Moderator: Philip Barnes, Kansas State University

Location:TBA

3:15pm Challenges of Watershed Implementation Plans: Joe's Bayou Watershed  
*Daniel N Moriasi, USDA-ARS, El Reno, Oklahoma, United States (D.N. Moriasi and J. Boydston)*

3:40pm Alternative Wetland Analysis Approaches with SWAT for the Boone River Watershed in North Central Iowa  
*Philip W Gassman, Center for Agricultural and Rural Development, Iowa State University, Ames, IA, United States (S. Secchi and, M. Jha)*

4:05pm Difficulties in Measuring for Success  
*Anne McFarland, TIAER - Tarleton State University, Stephenville, TX, United States (A. McFarland, J. Millican, and A. Bekele)*

4:30pm Key Consideration in development of Watershed approaches  
*Ron Jones, TIAER - Tarleton State University, Stephenville, TX, United States (R. Jones)*

### XI. MANAGEMENT PRACTICES FOR SEDIMENT CONTROL

Moderator: Eric B. Schilling, National Council for Air and Stream Improvement

Location:TBA

3:15pm Soil Disturbance Indicators Associated With Watershed Sediment Losses Following Clearcut Harvesting With Best Management Practices  
*Matthew W McBroom, Stephen F. Austin State University, Nacogdoches, TX, United States (M.W. McBroom, R.S. Beasley, M. Chang, and G. Ice)*

3:40pm Channel Erosion and Best Management Practice Simulation using SWAT  
*Balaji Narasimhan, Spatial Sciences Laborator y, College Station, TX United States (B. Narasimhan, P.M. Allen, R. Srinivasan, J. Arnold and J.A. Dunbar)*

4:05pm The Influence of Intermittent Stream Hydrology on Target TMDLs  
*Philip Saks, Louisiana State University, Baton Rouge, LA, United States (P. Saks and J. Xu)*

4:30pm The Effectiveness of Rural Unpaved Road BMP's in Reducing Sediment Loads in the Stillwater Creek, OK Watershed  
*Donald J. Turton, Oklahoma State University, Stillwater, OK, United States (D.J. Turton, E. Stebler and M.D. Smolen)*

# TECHNICAL SESSIONS

## MONDAY, MARCH 12

### XII. DATA COLLECTION TO SUPPORT TMDL DEVELOPMENT - PART 2

- Moderator: Rafael Munoz-Carpena, University of Florida  
Location: TBA
- 3:15pm Predicting the Contribution of Atmospheric Deposition to the Seasonal and Daily Nitrogen Loads at the East Fork Little Miami River Watershed  
*Xinhao Wang, School of Planning, University of Cincinnati, Cincinnati, OH, United States*
- 3:40pm A Site-specific Water Quality Trading Ratio: Using GIS and Watershed Modeling to Account for Spatial and Temporal Variability  
*Ming-chieh Lee, Kansas State University, Manhattan, KS, United States (M.-C. Lee and K.R. Mankin)*
- 4:05pm Fertilizer Nitrogen Management to Reduce Tile Water Nitrates  
*Ken Smiciklas, Illinois State University, Normal, IL, United States (K.D. Smiciklas and A.S. Moore)*
- 4:30pm Factors that Influence Variability in Relationships Between Suspended Sediment Concentrations and Turbidity  
*Matthew W Meadows, Oregon State University, Corvallis, OR, United States (M.W. Meadows and A. Skaugset)*
- 5:30pm-8:00pm **POSTER SESSION, EXHIBITS & RECEPTION**  
Moderator: Mauro Di Luzio, TAES - Blackland Research Center  
Location: TBA
- Poster # Title
- #1 Application of Generalized Regression Neural Network in Water Requirement of Paddy Forecasting  
*Daocai Chi, Shenyang Agricultural University, Shenyang, Liaoning, China*
- #2 Economic Assessment of Natural Resources of Lake Arpi and its Watershed Basin  
*Karen Ghazaryan, Yerevan State University, Chair of Ecology and Nature Protection, Yerevan, Capital Armenia (K. Ghazaryan and K. Grigoryan)*
- #3 Assessment of the Microbial Load along Chino Creek, CA, Using a Multi-Indicator Approach  
*Abasiotok M Ibekwe, USDA-ARS, Riverside, CA, United States (M.B. Leddy, A.M. Ibekwe and R.M. Bol1)*
- #4 Pollution Control of Groundwater within an Industrial Zone (Skikda, Algeria).  
*Sofiane Labar, University of Skikda, El Hadeik, Skikda Algeria (S. Labar, A. Hani, C. Cunningham, and A. Younsi)*
- #5 Comparison of Stream Nutrient Conditions in a Subtropical Lowland Watershed to EPA Suggested Criteria  
*April Mason, School of Renewable Natural Resources, Baton Rouge, LA, United States (A. Mason, Y. J. Xu and J.M. Grace)*
- #6 The Leon River Watershed: A CEAP Joint ARS Benchmark and Special Emphasis Watershed  
*Daniel N Moriasi, USDA-ARS, El Reno, Oklahoma, United States (D.N. Moriasi, T. Dybala, C. Amonett, T. Marek, D.N. Moriasi, C.H. Green, and J.G. Arnold)*
- #7 Stream Rehabilitation on a Rural/Urban Watershed  
*Wesley Rosenthal, Blackland Research Center, Temple, TX, United States (W. Rosenthal, P. Casebolt, and D. Hoffman)*
- #8 Evaluating Uncertainty in E. coli Retention in Vegetated Buffer Strips in Locations Selected with SWAT Simulations.  
*Ali M Sadeghi, USDA-ARS, Beltsville, MD, United States (A. Guber, A. Sadeghi, and Y. Pachepsky)*
- #9 Data Base Management System for Karun River Water Quality  
*MohammAdreza Sakian Dezfouli, Khuzestan Water and Power Authority, Ahwaz, Khuzestan, Iran (D.M.R. Sakian)*
- #10 Water Quality Issues Facing the Forest Products Industry: Current Research Focus and Future Research Needs  
*Erik B. Schilling, NCASI, Newberry, FL, United States (E. Schilling, G. Ice, M. Miwa, and A. Saleh)*

- #11 Chapel Branch Creek TMDL Development: Integrating TMDL Development with Implementation.  
*Devendra M Amatya, USDA - Forest Service, Charleston, SC, United States (T. M. Williams, D. M. Amatya, D. Hitchcock, and N. Levine)*
- #12 Reliability Test on Water Quality and Distribution Network of Two Selected Dam in Ondo State Nigeria  
*O. A Elemide, Federal College of Agriculture, Akura Ondo State, Nigeria*
- #13 Calibration of the SWAT Model to the Aysén Basin of the Chilean Patagonia: Challenges and Lessons  
*Matt Yarrow, Laboratorio de Modelación Ecológica, Las Palmeras, Santiago, Chile (M. Yarrow and P. Chambel Leitão)*
- #14 Use of Nitrogen Removing Technology in Onsite Sewer Disposal Systems in Relation to the Bay Restoration Fund and Nutrient Reduction Implementation Plans in the Corsica River Watershed  
*Shan Abeywickrama, Maryland Department of the Environment, Baltimore, MD, United States (S. Abeywickrama)*
- #15 Reducing Losses with Polymers for Improvement in Water Management and Watershed Maintenance  
*Michael Hurd, Kemira Water Solutions (M. Hurd and V. Johnson)*

## TUESDAY, MARCH 13

### CONCURRENT SESSIONS XIII, XIV, XV

#### XIII. AGRICULTURAL BMP EFFECTIVENESS - PART 2

- Moderator: Rebecca Zeckoski, Virginia Tech University  
Location: TBA
- 8:15am Evaluation of the Riparian Ecosystem Management Model for 4 Sites in the Stemple Creek Watershed in California  
*Carrie D Graff, Limno Tech, Washington DC, United States (C. Graff, R. Lowrance, and R. Williams)*
- 8:40am Cycling of Biosolids Through Turfgrass Sod Prevents Sediment and Nutrient Loss  
*Ronnie W Schnell, Texas A&M University, College Station, TX, United States (Schnell, R. D. Vietor, R. White, C. Munster, X. Dai, and T. Provin)*
- 9:05am 5 years of BMP Implementation Outreach in Florida  
*Michael Thomas, FL Dept. Environmental Protection, Tallahassee, FL, United States (B. Boman and M. Thomas)*
- 9:30am Reclaim De-Ionized Water (RDI) Reuse in Silicon Wafer Fabrication Minimize Water Quality Impact  
*Mazibur R Khan, Siltronic Corp., Beaverton, OR, United States (M. Khan, T. McCue, and B. Fish)*

#### XIV. WATER QUALITY STANDARDS

- Moderator: Kent Becher, USGS  
Location: TBA
- 8:15am Emerging Contaminants in U.S. Waters  
*Kent D Becher, USGS, Fort Worth, TX, United States (K. Becher)*
- 8:40am Impacts of Aircraft Deicer and Anti-icer Runoff on Receiving Waters from Dallas/Fort Worth International Airport, Texas, USA  
*Glenn R Harwell, US Geological Survey, Fort Worth, TX, United States (S.R. Corsi, G.R. Harwell, S.W. Geis, and D. Bergman)*
- 9:05am Bacteria TMDL Issues--A View from Both Sides of the Aisle  
*Paul A Jensen, PBS&J, Austin, TX, United States (P. Jensen and Y.-C. Su)*
- 9:30am Streamflow and Nutrient Dependence of Temperature Effects on Dissolved Oxygen in Low-Order Forest Streams  
*April Mason, School of Renewable Natural Resources, Baton Rouge, LA, United States (A. Mason, Y. J.n Xu, P. Saks, A. Viosca, J.M. Grace, J. Beebe, and R. Stich)*

# TECHNICAL SESSIONS

## TUESDAY, MARCH 13

### XV. PERFORMANCE AND VALIDATION OF MODELS FOR TMDLS - PART 2

Moderator: Jeff Arnold, USDA-ARS

Location: TBA

- 8:15am SWAT Simulation of Streamflow, Sediment, and Nutrients on the Blackfoot River Watershed in Western Montana  
*Michael W Van Liew, Montana DEQ, Helena, MT, United States (M.W. Van Liew, K.F. Flynn, D.T. Marshall, and T.M. Byron)*
- 8:40am Mathematical Simulation Tools for Developing Dissolved Oxygen TMDLs  
*P. Barnes, University of Georgia, Tifton, GA, United States (G. Vellidis, P. Barnes, D.D. Bosch, and A.M. Cathey)*
- 9:05am A Numerical Stream/River Water Quality Model for TMDL Studies  
*Gour-Tsyh (George) Yeh, Univ of Central Florida, Orlando, FL, United States (G-T Yeh and F Zhang)*
- 9:30am A Multi-objective Programming Approach for Optimal Management of the Rio Caonillas Watershed in North-Central Puerto Rico  
*Christian A. Villalta, University of Puerto Rico at Mayaguez, Mayaguez, PR, United States (L.R. Pérez Alegria, PhD, P.E. and C. Villalta Calderón, MSc)*
- 9:55am-10:15am **BREAK**

### CONCURRENT SESSIONS XVI, XVII, XVIII

#### XVI. EMERGING ISSUES

Moderator: Rebecca Zeckoski, Virginia Tech University

Location: TBA

- 10:15am Preemptive Strategies for Agricultural Sector (TMDL context).  
*Mahendra P Mohite, Malcolm Pirnie, Inc., Houston, TX, United States (M.P. Mohite, P.E.)*
- 10:40am Model Evaluation Guidelines for Systematic Quantification of Accuracy in Watershed Simulations  
*Daniel N Moriasi, USDA-ARS, El Reno, Oklahoma, United States (D.N. Moriasi, J.G. Arnold, M.W. Van Liew, R.L. Bingner, R.D. Harmel, and T. Veith)*
- 11:05am Water Politics and Law for Trans-Boundary Level (Example of Central Asia)  
*Yusup Khaidarovich Rysbekov, Scientific-Information Center ICWC of Central Asia, Tashkent, Tashkent, Uzbekistan (R. Yusup Khaidarovich)*
- 11:30am Application of TMDL and Risk Assessment Principles for Pathogen Management at an Urban Recreational Lake  
*Nicholas J Ashbolt, Univ of New South Wales, Sydney, Australia (N.Ashbolt, D. Roser, C. Davies, W. Glamore, K. Hakwer and B. Miller)*

#### XVII. BACTERIAL MONITORING, SOURCE IDENTIFICATION AND CONTROL PRACTICES

Moderator: Kent Becher, USGS

Location: TBA

- 10:15am Watershed-Wide Analysis of Fecal Contamination and Fecal Source Identification in Santa Ana River Watershed Impacted by Differences Sources.  
*Abasiofiok M Ibekwe, USDA-ARS, Riverside, CA, United States (A. Mark Ibekwe and M. Leddy)*
- 10:40am Soil Microcosm Based Estimates of CMA Oxygen Demand and Bacterial Density in a Highway Infiltration Basin  
*David W Ostendorf, Civil and Environmental Engineering Department, Amherst, MA, United States (K.B. Wisdom and C. Rotaru)*
- 11:05am New Methods in Modeling Sources Specific Bacteria at Watershed Scale Using SWAT  
*Prem B. Parajuli, Kansas State University, Manhattan, KS, United States (P.B. Parajuli, K. R. Mankin, and P. L. Barnes)*
- 11:30am Evaluation and Application of Microbial Source Tracking Methodologies for TMDL Development in Texas  
*Andrew Sullivan, Texas Commission on Environmental Quality, Austin, TX, United States (J. A. Sullivan and F. Hambleton)*

### XVIII. FIELD AND WATERSHED SCALE MODELING - PART 3

Moderator: Jeff Arnold, USDA-ARS

Location: TBA

- 10:15am Simulation of Landscape Processes within the SWAT Watershed Model  
*Jeffrey G. Arnold, USDA, ARS, Temple, TX, United States (J.G. Arnold, P. M. Allen and M. Volk)*
- 10:40am Comparison of SWAT Phosphorus Watershed Transport Model Routines  
*Cole Green, USDA ARS GSWRL, Temple, TX, United States (J.G. Arnold and J.R. Williams)*
- 11:05am Use of CEEOT-SWAPP Modeling System for Targeting and Evaluating Environmental Pollutants Necessary for a Successful Trading Program  
*Ali Saleh, TIAER, Stephenville, TX, United States (A.Saleh, E. Osei, and O. Gallego)*
- 11:30am Application of WEPP to Natural Gas Exploration and Production Sites  
*David J Wachal, City of Denton, Denton, TX, United States (D.J. Wachal and K.E. Banks) Allen and M. Volk)*
- 10:40am Comparison of SWAT Phosphorus Watershed Transport Model Routines  
*Cole Green, USDA ARS GSWRL, Temple, TX United States (J.G. Arnold and J.R. Williams)*
- 11:05am Addressing Watershed Nonpoint Source Pollution with SWAPP- An Environmental and Economic Modeling System  
*Ali Saleh, TIAER, Stephenville, TX United States (A.Saleh, E. Osei, and O. Gallego)*
- 11:30am Application of WEPP to Natural Gas Exploration and Production Sites  
*David J Wachal, City of Denton, Denton, TX United States (D.J. Wachal and K.E. Banks)*
- 11:55am-1:15pm **LUNCH**  
Keynote Speaker - Dr. Kenneth Reckow, Duke University
- 1:30pm-6:30pm **TECHNICAL TOUR** - San Antonio River Authority Urban Floodplain Management Tour (Optional - prior registration needed)

1907-2007



Mark your calendar

**June 17-20, 2006**

and plan to attend the  
100th Anniversary of

**ASABE Annual International Meeting**

to be held in  
Minneapolis, Minnesota

# TECHNICAL SESSIONS

## WEDNESDAY, MARCH 14

### CONCURRENT SESSIONS XIX, XX, XXI

#### XIX. FIELD AND WATERSHED MODELING - PART 4

- Moderator: Manaj Jha, Center for Agricultural and Rural Development  
Location: TBA
- 8:15am Development of an Extensive Fate and Transport Model for Pathogens in Watersheds  
*Meghna Babbar-Sebens, Texas A&M University, College Station, TX, United States (M. Babbar-Sebens, R. Karthikeyan, and R. Srinivasan)*
- 8:40am A Web-Based Multi-User Model Scenario Generator for Use in Model Allocation and Implementation Planning  
*Robert W Burgholzer, Chesapeake Bay Program - University of Maryland, Annapolis, MD, United States (R.W. Burgholzer.)*
- 9:05am Comparing the Performance of SWAT and AnnAGNPS Model in a Watershed in Ontario  
*Samresh Das, University of Guelph, Guelph, ON, Canada (S Das, R.P. Rudra, B. Gharabaghi, P. K. Goel, A. Singh, and I Ahmed)*
- 9:30am A paired watershed study to investigate the impact of best management practices: Little Arkansas River, Kansas  
*P. L. Barnes, Department of Biological and Agricultural Engineering, Kansas State University, Kansas (P. L. Barnes, D. Devlin, T. Kearne and J. Neel)*

#### XX. WATER QUALITY ISSUES FOR FOREST AND RANGELANDS - PART 2

- Moderator: Matthew W. McBroom, Stephen F. Austin State University  
Location: TBA
- 8:15am Erosion Rates from Forest and Rangeland Following Fuel Management  
*William J Elliot, USDA Forest Service, Moscow, ID, United States (W.J. Elliot, I.S. Miller and B.D. Glaza)*
- 8:40am Quantifying Stream Temperature Changes Following Forest Harvesting in Non-Fish-Bearing Headwater Reaches of Hinkle Creek: A Paired Watershed Investigation  
*Kelly M Kibler, Oregon State University, Forest Engineering Department, Corvallis, OR, United States (K. Kibler and A. Skaugset)*
- 9:05am Water Quality of Two First Order Forested Watersheds in Coastal South Carolina  
*Devendra M Amatya, USDA Forest Service, Center for Forested Wetlands Research, Charleston, SC U.S.A (D.M. Amatya, C.A. Harrison, and C.C. Trettin)*
- 9:30am Portable Water Quality Monitoring System  
*Ben Miller, Rain for Rent (B. Miller)*

#### XXI. WATERSHED IMPLEMENTATION PLANNING

- Moderator: Brian Benham, Virginia Tech University  
Location: TBA
- 8:15am TMDL Implementation Plan Development for a Rapidly Urbanizing Watershed in Northern Virginia  
*Brian Benham, Virginia Tech, Blacksburg, VA, United States (M.L. Wolfe, B. Benham, F. Dukes, S. Morris, A. Collins, T. Borisova, and G. Yagow)*
- 8:40am Identification of a Management Framework for TMDL Source Allocations in the Flathead Lake Basin, Montana  
*Kyle F Flynn, Montana DEQ, Helena, MT, United States (K.F. Flynn, M.W. Van Liew, M. Pipp, and J. Bond)*
- 9:05am Watershed Prioritization Considering Soil Erosion Status: A Case Study of India  
*Deepak Khare, Department of Water Resources Development & Management, Roorkee, Uttaranchal, India (D. Khare, K.S. Singh, K.A. Dhore, and T. Bhatnagar)*
- 9:30am Implementation Planning – Lessons Learned from 3 Watersheds in Virginia  
*Gene Yagow, Virginia Tech, Biological Systems Engineering Department, Blacksburg, VA, United States (G. Yagow, B. Benham, M.L. Wolfe, C. Heatwole, and B. Zeckoski)*
- 9:55am-10:15am **BREAK**

### CONCURRENT SESSIONS XXII, XXIII, XXIV

#### XXII. DATA COLLECTION TO SUPPORT TMDL DEVELOPMENT - PART 3

- Moderator: Jim Houser, Texas Institute for Applied Environmental Research  
Location: TBA
- 10:15am Joint State (Kansas and Nebraska) Atrazine Big Blue River Monitoring Project  
*Phillip Barnes, Kansas State University, Manhattan, KS, United States (P. Barnes)*
- 10:40am The Effects of Tree Species on Microbial Respiration in Coastal Plain Blackwater Streams  
*Andrew S Mehring, University of Georgia, Athens, GA, United States (A.S. Mehring, G. Vellidis, and C.M. Pringle)*
- 11:05am Analysis of Particle Size Distributions within a Stream Channel to Identify Mobile Sediment and Phosphorus  
*Michael R Penn, Univ. of Wisconsin-Platteville, Platteville, WI, United States (M. Penn, B. VandenBoom, A. Hoffman, D. Armstrong, and R. Lathrop)*
- 11:30am On-Farm Watershed Study of Water Use and Water Quality for Rice Production  
*Phil Tacker, University of Arkansas, Little Rock, AR, United States (P. Tacker, W. Smith, and R. Lipsey)*

#### XXIII. ECONOMIC IMPLICATIONS OF TMDLS

- Moderator: Brian Benham, Virginia Tech University  
Location: TBA
- 10:15am Net Economic Benefits of Using Ecosystem Restoration to Meet Stream Temperature Objectives  
*Kristin Lee, ECONorthwest, Eugene, Oregon, United States (E. Niemi, K. Lee, and T. Raterman)*
- 10:40am Survey of Lawn Care Practices in a Water Supply Watershed  
*Dianne K Olsen, Cornell Cooperative Extension of Putnam County, Brewster, NY, United States (C. Cutietta-Olson, V. Giorgio, J. Lee, D. Olsen, A. Snider, and J. Stengle)*
- 11:05am Application of a Farm-Level Economic Simulation Model to Evaluate Tillage  
*Edward Osei, TIAER, Stephenville, TX, United States*
- 11:30am Water Quality and Economic Benefits of Livestock Exclusion from Streams: Experiences from Virginia  
*Rebecca W Zeckoski, Biological Systems Engineering/Virginia Tech, Blacksburg, VA, United States (R.W. Zeckoski and B.L. Benham)*

#### XXIV. WATER QUALITY ISSUES FOR FOREST AND RANGELANDS - PART 3

- Moderator: George Ice, National Council for Air and Stream Improvement  
Location: TBA
- 10:15am Water Quality Effects of Enhanced Ephemeral Stream Protection  
*Jami E Nettles, Weyerhaeuser Company, Columbus, MS, United States (J. Nettles and H. Liechty)*
- 10:40am The Hydrology of Forest Roads in Western Oregon.  
*Arne E Skaugset, Oregon State University, Corvallis, OR, United States (A.E. Skaugset, A.N. Simmons, K. Ellingson, E. Gilbert, C. E. Marbet, E. M. Toman, and C. Surfleet)*
- 11:05am Accomplishments of the Plum Creek Timber Company Native Fish Habitat Conservation Plan at 5 Years  
*Brian D Sugden, Plum Creek Timber Company, Columbia Falls, MT, United States (B. Sugden)*
- 11:30am Designing Forest Roads to Minimize Turbid Runoff during Wet Weather Use  
*Elizabeth M Toman, Oregon State University, Corvallis, OR, United States (E.M. Toman and A.E. Skaugset)*