

32nd Annual Indiana Water Resources Association Conference
The Wabash River Watershed: Assessment, Management, and the Future

Co-Sponsored by
Professional Geologists of Indiana and Indiana Water Monitoring Council

Ball State University Alumni Center
2800 West Bethel Avenue, Muncie, Indiana
June 1-3, 2011

WEDNESDAY, June 1, 2011

11:30 Registration

1:00 Opening and Welcome

Mark Pyron, Ball State University, 2011 President IWRA

1:15 TNC's Initial Strategies for a Lasting Contribution in the Wabash Watershed

John Shuey, The Nature Conservancy

1:45 Evaluation of Constructed Wetlands in Agricultural Watersheds to Improve Drinking Water Quality

Maria Lemke, The Nature Conservancy

2:15 Asian Carp Know No Boundaries

David Nance, IDNR Division of Water

2:55 Break

3:25 A Process-Based Restoration Approach for the Wabash River Ecosystem

Mark Pyron, Ball State University

3:45 SWAT Model for the Wabash River Watershed: Modeling Challenges and Opportunities

Cibin Raj, Purdue University

4:05 Wabash River Angler, Recreational, and Commercial Fisher Activity Survey

Sandy Clark-Kolaks, IDNR

4:25 Comparison of Water Quality in Three Sub-Watersheds of the Wabash River

Ron Turco, Purdue University

4:45 Indianapolis' Deep Tunnel Vision for Capturing Combined Sewer Overflows

John Morgan, Indianapolis DPW; John Trypus, Black & Veatch

6:00 Poster Session/Social Hour/Cash Bar

Six student poster presentations

Abundance of Pharmaceutical in Near-Shore Habitats of Lake Michigan

Patrick Ferguson, Ball State University

Temporal Variation in Minnow Morphology: Effects of 100 Years of Habitat Alterations

Stephen Jacquemin, Ball State University

Using Social Indicator Surveys to Shape Education and Outreach Efforts in the Great Bend Region of the Wabash River Watershed

Nathan Mullendore, Purdue University

Frequency and Abundance of Metolachlor in Central Indiana Freshwaters

Ann Raffel, Ball State University

Pharmaceutical Transport and Persistence in a CAFO-Influenced Central Indiana Stream

Lora Smith, Ball State University

Effect of Pharmaceuticals on Microbial Respiration and Production

Katrina Van Zant, Ball State University

7:30 Banquet, After-Dinner Presentation, and Awards

Ball State University Geothermal Project: Jim Lowe, Ball State University

Awards Presentation: Mark Basch, IWRA Awards Committee

THURSDAY, June 2, 2011

(Breakfast - on your own)

8:30 Influence of Subsurface Drainage on Watershed Nitrate Load Using the Variable Infiltration Capacity Model

Sarah Rutkowski, Purdue University

8:55 Transport and Fate of Nutrients and Pharmaceutical Compounds in a Stream Receiving Effluent from a Wastewater Treatment Plant

Erin Looper, Indiana University

9:15 Hormone Transport in a Tile-Drained Agroecosystem

Heather Gall, Purdue University

9:35 Response of Algal, Invertebrate, and Fish Communities to Nutrients in the Upper Midwest

Jeff Frey, USGS; Shivi Selvaratnam, IDEM

9:55 Break

10:25 Top 10 Watershed Management Tools Developed in Indiana

Jane Frankenberger, Purdue University

10:45 Physical and Hydrologic Characteristics of the North Branch Elkhart River

David Nance, IDNR Division of Water

11:05 Determination of Wetlands for Restoration Using Streamflow Statistics and Flood Inundation Techniques

Moon Kim, USGS

11:25 Hydrologic Characteristics of a Managed Wetland and a Natural Riverine Wetland along the Kankakee River

Les Arihood, USGS

11:50 Lunch (provided)

- 1:10 Hydraulic Fracturing for Oil and Natural Gas**
Herschel McDivitt, IDNR Division of Oil and Gas
- 1:45 Evaluation of Groundwater Systems Near the Proposed Fall Creek/White River Tunnel System, Indianapolis**
Paul Johnson, American Structurepoint, Inc.
- 2:05 Concern for Groundwater Protection along the Wabash River Greenway, Tippecanoe County, Indiana**
Terry West, Purdue University
- 2:25 Indiana's Water Well Web Viewer**
Randy Maier, IDNR Division of Water
- 2:55 Break**
- 3:25 Collembola/Springtails: Macrobiologic Indicators of Microbiologic Activity Surrounding a Hydrocarbon Release**
Bob Autio, Environmental Data & Consulting, LLC
- 3:45 Statewide Ground Water Monitoring Network**
Rebecca Travis, IDEM Drinking Water Branch
- 4:05 Baseline Hydrogeology of the First Phase Ground-Source Geothermal Field at Ball State University**
Alan Samuelson, Ball State University
- 4:25 Use of Geophysical Imaging for Characterizing Subsurface Conditions at Large-Scale Geothermal Wellfields**
John Mundell, Mundell & Associates, Inc.
- 4:45 Walking Tour of the Ball State Geothermal Project**
Carolyn Dowling, Ball State University
- 6:00 Dinner (on your own)**
- 8:00 IWRA Business Meeting & Hospitality Hour**
All members and friends are welcome

FRIDAY, June 3, 2011

(Breakfast - on your own)

- 8:30 Long-Term Effects of Natural Flow Regime Mimicry on Native and Nonnative Fishes in the San Juan River, New Mexico and Utah**
Keith Gido, Kansas State University
- 9:05 Changing Water Quality: Impacts of Invasive Shrubs on Aquatic Ecosystems**
Richard Durtsche, Northern Kentucky University

- 9:30 Do Agricultural Management Practices Improve Water Quality? A Case Study in Sugar Creek**
Jeff Frey, USGS
- 9:50 The Great Lakes Compact**
Mark Basch, IDNR Division of Water
- 10:10 Break**
- 10:40 Indiana's Revised Water Quality Monitoring Strategy, 2011-2019**
Jody Arthur, IDEM Office of Water Quality
- 11:00 IDEM's Blue-Green Algae Surveillance Program**
Cyndi Wagner, IDEM Office of Water Quality
- 11:20 How Good Is Your Number? Part 1: Measurement Variability**
Jeff Martin, USGS
- 11:45 Conference Wrap-Up**
Mark Pyron, Ball State University, 2011 President IWRA
- 12:00 Meeting Adjourned**