



41st Annual Indiana Water Resources Association Symposium
June 22-24, 2022
Brown County State Park, Nashville, Indiana

“The future of monitoring and water planning in Indiana”

Agenda – Day 1

Wednesday, June 22nd – Abe Martin Lodge, Melodeon Hall

12:00 pm – 1:00 pm

Registration

1:00 pm

Welcome and Symposium Announcements – Ryan Mueller

1:10 PM **Session 1 – Water resources planning** – Ryan Mueller, Moderator

The Future of Planning with Hydrostratigraphic Unit Maps for Indiana – Ginger Davis, IGWS

USGS Integrated Water Science in the Illinois River Basin – Jim Duncker, USGS

Science Assessment to Support the Indiana State Nutrient Reduction Strategy – Julie Harold, ISDA and Jane Frankenberger, Purdue University

Break

3:00 PM **Session 2 – Water resources tools and strategies** – David Lampe, Moderator

Floodplain Mapping in Indiana – History and Future Directions – David Knipe, IDNR

The River Assessment Field Teams (RAFT) volunteer sampling program....strategic, aligned, innovative! – Kelly Brown, White River Alliance

The Indiana DNR dam breach flooding inundation mapping project: Online resources for dam risk awareness – Garth Lindner, IDNR

Break and Poster Session Preparation

5:00 pm **Poster Session**

Characterizing Perennial Springs of the Upland Regions of Indiana Springs of Orange County and Owen County – Tracy Branam, IGWS

The Utilization of Real-Time Camera Systems in Streamgaging Applications – Matt Hardebeck, USGS

PFAS in Lake Michigan (USA) Salmonids: Implications for Human Dietary Intake – Alison Zachritz, Notre Dame University

An assessment of alteration in hydrologic regions of the White River, Indiana – Tusher Mohanta, Ball State University

Effects of microplastics on male courtship and female choice in fathead minnows (*Pimephales promelas*) – Grace Carter, Ball State University

6:30 pm – **IWRA Banquet**, Abe Martin Lodge

Informal Reception – Cabin Suite (details provided at the meeting)

Agenda – Day 2

Thursday, June 23rd – Abe Martin Lodge, Melodeon Hall

8:00 am – 9:00 am **Registration and Continental Breakfast**, Melodeon Hall

9:00 am – **Welcome and Symposium**

AM **Session 1 – Groundwater** - Ginger Davis, Moderator

Hydrogeologic mapping and three-dimensional geologic modeling of glacial deposits in a multi-county area of northwestern Ohio, northeastern Indiana and southeastern Michigan – Alex Riddle, USGS

Agenda – Day 2 (continued)

A tool to assess human impact on the Upper Wabash River Basin Water Cycle – Sanoar Rahman, Purdue University

Redistribution of potential groundwater resources in Indiana, USA, 1980-2019 – Sally Letsinger, Indiana University

Break

10:45 AM **Session 2 – Watershed Hydrology** – Martha Clark Mettler, Moderator

Investigating Late Holocene Climate-Flood Relationships on the Lower Ohio River – Harvie Pollard, USGS

Fluvial Erosion Hazards (FEH) and implications for Indiana’s waterways – Bob Barr, IUPUI

Hydrology and water quality of a restored dune and swale wetland in the Grand Calumet – Indiana Harbor area of concern monitored during and after record-high Lake Michigan water levels, 2019 – 2022 – Shawn Naylor, USGS

12:15 – 1:30 **Lunch**, Abe Martin Lodge

1:30 PM **Session 1 – Water Supply** – Sally Letsinger, Moderator

Indiana Uplands Drinking Water: Formative Research with water professionals to support reliable, safe, and affordable water – Michelle Del Rio, Alyson Alde, Ginger Davis, and Lauren Kwan, Indiana University

Water Supply Perspectives – Jack Wittman, INTERA

Update of Regional Water Planning Activities – Sarah Hudson, Indiana Finance Authority

Break

3:30 PM **Session 2 – Water Quality** – Jeff Frey, Moderator

A survey of forever chemicals in Indiana: does agricultural biosolids application contaminate wetland ecosystems with per- and polyfluoroalkyl substances (PFAS)? – Tyler Hoskins, Purdue University

Quantifying microplastic particles in wastewater: Implications of sample treatment and preparation – Moayad Yacoub, Ball State University

A monitoring study of sediment, nutrient and bacteria loads for the Big Creek Watershed, Posey County, Indiana – John Stofleth, cbec eco engineering and Carrie Parmenter, The Nature Conservancy

Review Friday field trip logistics – Ryan Mueller

Dinner on your own – Explore Nashville!

Informal Reception – Overlook Shelter, Brown County State Park

Agenda – Day 3 Field Trip

Friday, June 24th – Strahl Shelter, Brown County State Park

Breakfast on your own

10:00 am – Meet at Strahl Shelter, Brown County State Park

Overview of the 2019 flood event and impacts to Brown County State Park

Ogle and Strahl Lake Dam Tour – Dave Nance, IDNR

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