

PROGRAM SUMMARY

Gathering of the Waters

27th Annual Meeting of the American Water Resources Association – Wisconsin Section

Thursday, February 27, 2003

- 9:00 a.m. – 2:30 p.m. Registration – *Hall of Nations*
- 11:15 – 11:45 Business Meeting and Election – *Stockbridge/Munsee & Sokaogan*
- 11:45 – 12:45 Welcome and Lunch – *Stockbridge/Munsee & Sokaogan*
- 12:45 – 2:15 **Plenary Session on Waters of Wisconsin – *Stockbridge/Munsee & Sokaogan***
- Todd Ambs**, Water Division Administrator, Wisconsin Department
 of Natural Resources
 George Kraft, Director, Center for Watershed Science and
 Education, UW-Stevens Point
 Pat Leavenworth, State Conservationist, Natural Resources
 Conservation Service, USDA
 Curt Meine, Director of Conservation Programs, Wisconsin
 Academy of Sciences, Arts and Letters
- 2:15 – 3:45 **Break** – Please leave the dining area to allow the rooms to be reset.
- 2:45 – 3:45 **Concurrent Sessions 1A and 1B**
- Session 1A – Surface Water Studies – *Stockbridge/Munsee***
 Moderator: Tim Kratz, UW-Trout Lake Station
- 2:45 Hydrogeologic and Vegetative Gradients Across a Wetland Transect in
 South Central Wisconsin. A.L. McDermott.*
- 3:05 Stream Assessments, Restoration and Watershed Management: An
 Automated Approach Using GIS. B.A. Brown.
- 3:25 Sources and Variability of Cryptosporidium in the Milwaukee River
 Watershed. S.R. Corsi.

Session 1B – Agriculture and Groundwater – Sokaogan
Moderator: James Hurley, UW-Madison Aquatic Sciences Center

2:45 Atrazine in Shallow Groundwater of the Western Lake Michigan Drainages: Looking for Trends. J.C. Thomas.

3:05 Nitrate and Pesticide Loading, Fate and Origin in a Wisconsin Groundwater Basin. R.S. Mentz.*

3:25 Denitrification in Shallow Groundwater: Management-Intensive Grazing versus Annual Cropping on Sandy Soils. B.A. Browne.

3:45 – 4:05 **Break**

4:05 – 5:25 **Concurrent Sessions 2A and 2B**

Session 2A – Surface Water Chemistry – Stockbridge/Munsee
Moderator: William Sonzogni, State Laboratory of Hygiene

4:05 Calcium and Phosphorus in a Hardwater Eutrophic Lake. A. DeChamps.*

4:25 An Overview of In-lake Results from the Mercury Experiment to Assess Atmospheric Loading In Canada and the United States (METAALICUS). C.L. Babiarz.

4:45 Factors Controlling the Fate and Transport of Mercury and Methylmercury in Hypolimnetic Lacustrine Environments. S.P. Chadwick.*

5:05 Polybrominated Diphenyl Ethers: The Saga Continues. W.C. Sonzogni.

Session 2B – Groundwater Chemistry – Sokaogan
Moderator: Maureen Muldoon, UW-Oshkosh

4:05 Comparison of Solute Concentrations Collected from Experimental and Field Data at the Reclaimed Flambeau Mine, Ladysmith, Wisconsin. R.T. Jakubowski.

4:25 Geochemical Controls on High and Low Arsenic Concentrations in Residential Well Water, Fox River Valley, Wisconsin. M.B. Gotkowitz.

4:45 Delineation of High Salinity Conditions in the Cambro-Ordovician Aquifer of Eastern Wisconsin. L.E. Schmidt.*

- 5:05 Insights into Radium Occurrences in the Deep Sandstone Aquifer of Eastern Wisconsin. T. Grundl.
- 5:30 – 7:00 **Poster Session** – *Hall of Nations*
- Arsenic Removal During Iron Treatment. J. Baumann.*
- Development of a Tribal Fish Consumption Advisory Based on Inter-agency Data Sharing. E.D. Chiriboga.
- Importance of Disinfection on Arsenic Release from Wells. A.F. Clary.
- Cooperative Mercury Sampling of Surface Waters Near the Site of the Proposed Crandon Mine. J.S. Coleman.
- Monitoring Contaminant Flux from a Stormwater Infiltration Facility to Groundwater. C.P. Dunning.
- Eutrophication in Wisconsin Lakes During the Last 150 Years. P.J. Garrison.
- Trinity Creek Multi-Feature Restoration Project: Stream Enhancement, Wetland Rehabilitation, Northern Pike Spawning Habitat and Flood Mitigation. J.J. Hiller.
- Urban Storm Drainage in Hilly Areas. M.G.J. Jacques.*
- Maintaining Continuity in Chlorophyll Trend Data While Improving the Analytical Method. D. Kennedy-Parker.
- Monitoring Update for Argonne National Laboratory Sanitary Landfill, Argonne, Illinois. R.G. Kolzow.
- Validating the Ammonia Analysis Technique Used in Surface Water and Wastewater Monitoring. G. Krinke.
- Arsenic in Groundwater in Southeastern Wisconsin: Sources of Arsenic and Mechanisms of Arsenic Mobilization. T.L. Root.*
- Spatial and Temporal Variability of Groundwater Chemistry Beneath Agricultural Land: Implications for Assessing Environmental Impacts of a New Unsewered Subdivision. J.D. Wilcox.*

7:00 **Dinner** – *Stockbridge/Munsee & Sokaogan*

Banquet Speaker - **Larry Wawronowicz**, Deputy Administrator of Natural Resources, Lac du Flambeau Band of Lake Superior Chippewa Indians

Friday, February 28, 2003

- 7:00 – 8:30 AWRW-Wisconsin Section Board of Directors' Breakfast Meeting
– *Eagle's Nest*
- 8:30 – 9:30 **Concurrent Sessions 3A and 3B**
- Session 3A – Groundwater Remediation** – *Stockbridge/Munsee*
Moderator: George Kraft, Center for Watershed Science & Education, UW-Stevens Point
- 8:30 Three Seasons of Phytoremediation of VOCs in Soil and Groundwater. E.L. McLinn.
- 8:50 Response of Redox Conditions to Air Sparging in a Geochemically Heterogeneous Groundwater System. I.L. Ekstrom.*
- 9:10 Surfactant Enhanced Oxidative Dechlorination of Chlorinated Solvents by Permanganate – Proof of Concept. Z. Li.
- Session 3B – Hydrogeologic Characterization** – *Sokaogan*
Moderator: Madeline Gotkowitz, Wisconsin Geological & Natural History Survey
- 8:30 Flow Across the Maquoketa Shale Aquitard in Southeastern Wisconsin. D.J. Hart.
- 8:50 Use of the Time-Domain Electromagnetic Method for Determining the Presence and Depth of Aquitards. M.L. Anderson.*
- 9:10 Time-Domain Electromagnetic Induction Survey of the Sandstone Aquifer in the Lake Winnebago Area of Eastern Wisconsin. J. Jansen.
- 9:30 – 10:00 **Break**
- 10:00 – 11:40 **Concurrent Sessions 4A and 4B**
- Session 4A – Water Policy and Management** – *Stockbridge/Munsee*
Moderator: Michael Lemcke, Wisconsin Department of Natural Resources

- 10:00 How the Wisconsin River Watershed has Benefited from Three Decades of Clean Water Act Programs. R.E. Martini.
- 10:20 Meeting the NPDES Phase II Requirements: A Demonstration of the Benefits of Infiltration Practices in Wisconsin, 1999-2002. W.R. Selbig.
- 10:40 Efforts to Manage Aquatic Invasive Species in Wisconsin. R.H. Martin.
- 11:00 Great Lakes Water Use Following the Ecosystem Improvement Principles of Annex 2001. M.D. Mittag.
- 11:20 Modernizing Groundwater Quantity Management in Wisconsin: Needs and a Potential Approach. G.J. Kraft.
- Session 4B – Groundwater Modeling – Sokaogan**
Moderator: James Krohelski, U.S. Geological Survey
- 10:00 Using Characteristic Leakage Length as a Guide to Model Design: Application to the Grindstone Springs Area, Lac Courte Oreilles, Wisconsin. P.J. Juckem.
- 10:20 Delineation of Five-Year Zones of Contribution for Municipal Wells in La Crosse County, Wisconsin: Methodology and Results. D.C. Chapel.
- 10:40 Hypothesis-Testing by Groundwater Flow Modeling: the Maquoketa Aquitard. T.T. Eaton.
- 11:00 Using Diverse Data Types to Calibrate a Watershed Model of the Allequash Creek Basin, Northern Wisconsin. R.J. Hunt.
- 11:20 Both sessions reconvene in Stockbridge/Munsee.
- 11:40 – 12:00 **Announcement of Student Paper Award Winners and Closing Remarks - Stockbridge/Munsee**

* denotes student presentation