

# Wisconsin Ground Water Association Newsletter



## Outgoing President's Message

Dear Members,

Wow! What a field trip! Those who did not participate really missed a good one. Non-participants can download a copy of the 2008 Field Trip Guidebook from the WGWA website and see exactly what you missed. There were many fantastic spots visited that otherwise would be somewhat hard to find – and the largest population center in Wisconsin could visit them all in one day. A limited number of printed and bound Guidebooks are also available for a charge of \$8 from field trip coordinator Paula Richardson at 920.674.3411.

We had a beautiful sunny day for our field trip and a full busload enjoyed every stop. See field trip photos later in the newsletter. The first two indoor stops were as educational as any we have ever had. We picked the brains of managers and scientists in the inner sanctums of both MMSD and the Great Lakes Water Institute. At MMSD, we learned the complicated process of turning Milwaukee's wastewater into pure effluent and saw the entrance to the deep tunnel. At GLWI, we heard and saw up-to-the-minute research on cleaning up area beaches, stocking perch and lake trout, and deep-water exploration.

The next several stops brought interpretative hikes through Cedarburg Bog, Riverside Park, and the Glacial Blue Hills. Then we visited Estabrook Park during a monarch butterfly migration stop with wildflowers blooming and butterflies flitting while we pounded on rare Devonian outcrops in search of fossils. We ended the day with a bus tour of the new roadside pollution traps along Bradford Beach.

How do we follow an act like that? Well, we do have our Annual Conference coming up on March 5th. As it is our 25<sup>th</sup> Anniversary of existence as an organization, we are inviting all former Board Members to attend and there will be a special cocktail reception after the presentations to allow everyone to acquaint (or reacquaint) themselves with these leaders in the water industry. Online registration will be available on our website.

Finally, big things are happening in Wisconsin ground water. The City of Waukesha, on November 13<sup>th</sup>, unveiled its plan to return its treated wastewater to Lake Michigan via Underwood Creek. With approval from the Common Council and the DNR, this plan should allow replacement of their well-water supply with Lake Michigan water. The ensuing effect on the mobility of radium in the ground water beneath Waukesha County is largely unknown, but this radical change in water supply will present the perfect opportunity to study that effect. Being one of the principal trackers of radium mobility in the past, I feel a call to mobilize a WGWA Task Force to encourage timely **radium sampling and mapping** of results for the public. If you likewise consider this knowledge useful, please contact me at 262-641-9341 and perhaps we can arrange a mapping program in cooperation with the Great Lakes Water Institute and the DNR.

Lee Trotta, PG  
Past-President

● [Board Meeting Minutes](#)

● [Treasurer's Report](#)

● [Interesting Articles and Other Tidbits on the Web](#)

**Cryo-Hydrogeology?:** Would these be considered frozen aquifers? Vast underground glaciers reported on Mars

**State of the Union's Groundwater:** Recent USGS report provides overview of current groundwater resources in U.S. Ground-Water Availability in the United States

**Will Wisconsin Hydrogeologists Benefit From Federal Spending?:** Stimulus package could lead to additional spending on water and environmental projects in the State. Wisconsin coalition pushes feds for 'green' jobs

**Drive-by (Photo) Shootings on the Web:** For many cities Google Map's street level view is a handy way to do quick and dirty reconnaissance of a site you have never been to. Google Map

● [Conferences, Meetings, and Courses \(January—March\)](#)

### [Conferences and Meetings](#)

[Jan. 25-28.](#) Minnesota Water Well Association Annual Meeting. Includes the 2009 NGWREF McElhiney Lecture (underwritten by Franklin Electric Co.). Duluth, Minnesota

[Feb. 10-11.](#) Illinois Association of Groundwater Professionals Annual Meeting and Expo. Includes the 2009 NGWREF McElhiney Lecture (underwritten by Franklin Electric Co.). Springfield, Illinois

[Feb. 18-20.](#) Environmental Industry Summit 2009. Coronado, California

## Incoming President's Message



Greetings WGWA Members!

First off I would like to thank Lee Trotta for his continued service to the WGWA. Lee had a great year as WGWA President, fulfilling the WGWA mission through outreach opportunities such as Groundwater Awareness Week and the Healthy Lakes/ Healthy Lives tour of the Earth Voyager. Also, Lee was instrumental in creating two new WGWA Task Forces, the Great Lakes Issues Task Force and Communications Task Force, to further advance our organization. Hats off to Lee!!

In addition, on behalf of the entire association, I would also like to thank our board members, committee and task force members and regional coordinators for their hard work throughout the year and for their guidance and support throughout my term as President-Elect. Our current officials (myself included) stand on the shoulders of those of you who have served in the past, and we would like to offer special recognition of past Officers during our evening hors d'oeuvres reception at our conference in March, so please come and be recognized (and enjoy a drink on WGWA!).

As I look out my window this morning, I see a cloudy gray sky, some dirty remnants of snow, and a parking lot a little emptier than it used to be. These are tough times and, on the surface, things seem stagnant. But look a little closer and you may find the green fingers of crocuses poking through the mud and snow, a promise of revival and renewal, of brighter days ahead. The last year has brought many changes. Our economy, our country and our lives are being reshaped. Whatever your perspective, as groundwater scientists and those working on groundwater issues, we must recognize that we have an opportunity to shape the future of our water resources for generations to come. We must push for legislation that is supported in science and continue to raise awareness of water-related issues in our own communities. As Carl Sagan once said, "Anything else you're interested in is not going to happen if you can't breathe the air and drink the water. Don't sit this one out. Do something. You are by accident of fate alive at an absolutely critical moment in the history of our planet."

Our Spring Conference this year focuses on the discrepancy between what water resources scientists know and what the laws and current practices dictate. The lineup of speakers features graduate students presenting the best of cutting-edge research in our field, as well as seasoned professionals in the consulting and public arenas, sharing their experiences, observations and solutions. Additionally, our cocktail reception will feature a lively discussion with philosopher Mark Peterson about the new "social ecology."

We are holding our meeting in conjunction with the Wisconsin Chapter of the American Water Resources Association, in an effort to pool our resources as separate, but allied forces for change. Our goals are similar and related and I believe that sometimes the whole is greater than the sum of its parts and when there is a true symbiosis, great things can happen that seemed unimaginable before.

So come and join us on March 5<sup>th</sup> ([www.wgwa.org/09conference.html](http://www.wgwa.org/09conference.html)), join a task force or committee, contribute to the newsletter, just don't sit this one out.

Sincerely,

Paula Richardson  
WGWA President

**Mar 5.** Wisconsin Ground Water Association Annual Conference. Stevens Point, Wisconsin

**Mar. 10-11.** Planning and Designing Geothermal Systems. Minneapolis, Minnesota

**Mar. 16-17.** Michigan Ground Water Association 2009 Convention. Lansing, Michigan

**Mar. 23-24.** 12th Annual Ground Water Industry Legislative Conference: NGWA Washington Fly-in (#5090). Washington, DC.

**Mar 31.** FET Environment & Energy Symposium. Kimberly, Wisconsin

### Online Training

**Feb. 10.** EPA CLU-IN - ITRC In Situ Bioremediation of Chlorinated Ethene - DNAPL Source Zones

**Feb. 19.** EPA CLU-IN - ITRC Enhanced Attenuation of Chlorinated Organics: A Site Management Tool

**Feb. 25.** NGWA - Drill Bit Designs and Manufacturing for DTH Hammers Webinar (#824)

**Feb. 26.** EPA CLU-IN - ITRC Evaluating, Optimizing, or Ending Post-Closure Care at Municipal Solid Waste Landfills

**Mar. 3.** NGWA - A Practitioner's Guide to Isotope Hydrology Webinar (#825)

**Mar. 4.** EPA CLU-IN - Green Remediation Voluntary Standards Initiative

**Mar. 10.** EPA CLU-IN - Tackling the Carbon Footprint at Pump and Treat Projects: A Case Study in Energy Efficiency

**Mar. 17** UW Extension Jefferson County Webinar - Green Collar Jobs: Sustainable Work in a Low Carbon World

**Mar. 25.** EPA CLU-IN - Frequently Asked Questions Regarding Management of Chlorinated Solvents in Soils and Groundwater

**Mar. 25.** NGWA - America's Dependence on Ground Water: Trends and Forecasts in a Changing Marketplace Webinar (#822)

**Apr.7.** NGWA - Pump/Yield Testing Design and Transducer Data Collection Webinar (#823)

## A Look Back to a Warmer Time – the 2008 WGWA Fall Field Trip

Troy Thompson

The 2008 WGWA Fall Field Trip continued tradition with beautiful weather, an enthusiastic group, and a full and interesting set of stops. Unlike the most recent trips, this one consisted of just a single day – Saturday, September 20<sup>th</sup>.



- The day kicked off with a behind the scenes tour of the Jones Island Wastewater Treatment Plant. While this might not be among the top ten Milwaukee tourist stops (if tourists could get in), for those concerned about water and water quality it was a fascinating look at a large-scale, modern treatment facility.
- This was followed by a stop at the Great Lakes Water Institute, the largest academic freshwater research facility on the Great Lakes. There the group was given a tour of the Institute's facilities' and equipment, and an overview of its research efforts.
- No WGWA field trip would be complete without a fossil hunt! The need was filled by a trip to Estabrook Park to look at an outcrop of the youngest visible Devonian bedrock in Wisconsin (the Milwaukee Formation complete with fossils and asphalt vugs), and also a talk about river revitalization projects, the history of the Milwaukee Cement Company and historic sewer discharge to the river.
- Riverside Park in West Bend provided a restful stop for lunch and an opportunity to talk about and see the results of dam removal firsthand. The park was the former location of the Woolen Mills Dam on the Milwaukee River and removal of the dam has lead to 60 acres of previously flooded land being developed as parkland and a rebound of fish species.
- The glacial geology of southeastern Wisconsin was experienced by a vigorous climb up a spectacular kame at the Glacial Blue Hills Recreation

### ● The 2008 Board, Committee, and Area Coordinators

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Devonian asphalt seep and fossils at Estabrook Park  
(courtesy Beth Trotta)

### *Get Yourself Published*

We are looking for articles for future editions of the WGWA newsletter. Articles should be 1 to 8 pages in length and can include photographs and graphics. Articles should be generally technical in nature focusing on groundwater or environmental topics, but non-commercial or political.

Area along the Ice Age National Scenic Trail. This stop also featured a talk by Bruce Brown regarding the balance between utilizing the gravel resources of the area and preserving the area's scenic beauty. Also along those lines, the group was addressed by the President of a local landowners' association dedicated to preserving the area from rampant residential development.

- Doug Cherkauer led the group on a walk along the boardwalk at the Cedarburg Bog UWM field station, a rare relict of the Ice Age. There the group took a look at the largest, intact bog and southeastern Wisconsin, which represents the remains of a glacial lake and discussed the areas unique hydrogeology.
- The trip ended with a stop at beautiful Bradford Beach to review a shoreline restoration project underway. This included a look at a pocket beach constructed to prevent sand migration and water gardens installed around storm sewer discharge points to mitigate e.coli impacts on the beach.



Lee Trotta, Joe Piatt, & Doug Cherkauer in Cedarburg Bog (courtesy Beth Trotta)

## WGWA Finalizing 2009 Conference Preparations

Preparations for the 2009 WGWA Spring Conference are nearing completion. This year's theme is "Groundwater - What is known and what is practiced" and will highlight the discrepancy between what water-related professionals know and what the law and current practices dictate..

In line with last year's Conference we are again presenting it in conjunction with the American Water Resources Association's (AWRA) annual meeting in Stevens Point. To give people the opportunity to attend both meetings without missing any of either, this year's WGWA Spring Conference will consist of a morning session on Thursday, March 5<sup>th</sup>. It will be followed that afternoon by the first half day of the AWRA meeting. The second half of the AWRA meeting will on Friday morning. People will have the option of registering for one or both meetings depending on their preference.

Our lineup of speakers includes George Kraft, Ken Bradbury, and Bruce Hensel, as well as philosopher Mark Anderson. In addition to our presentations that morning we will have our own poster session and hors d'oeuvres reception with a special recognition for our former officers in celebration of WGWA's 25<sup>th</sup> anniversary. This will be an excellent opportunity for those looking to meet a wide-range of people beyond those that attend our normal Spring Conference. If you are recruiting for entry-level employees, there will be a large number students present.

Costs are \$30 for professionals and \$20 for students. For more information and a registration form, [<<CLICK HERE>>](#).

## National Intelligence Council Report: Water Shortages Will Challenge Global Stability

By Troy Thompson

A recent report issued in November 2008 by the National Intelligence Council, a group of the Nation's top intelligence analysts, examines likely trends and potential outcomes affecting how the world will look in 2025. One of the issues highlighted in the report is how the growing scarcity of water may make the term 'water wars' more than a euphemism.

[<<READ MORE>>](#)

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