Wisconsin Ground wgwa Water Association = Newsletter

President's Message

I am delighted to tell you that your **2007 Annual Meeting** is ready to go and I look forward to seeing you all there. As you know, the meeting is being held at the **Great Wolf Lodge and Conference Center in Wisconsin Dells, WI on February 23, 2007**. Our Keynote Address starts at 8:00 am so get there early.

Over the last several months, a group of your fellow members have been working very hard to put together your meeting. This group includes all of your officers, directors, regional coordinators, committee chairs, editors, aquifer model stewards, web-site administrator, and interested members. I know you will be happy with the results.

By looking at the list of speakers and topics they have offered to discuss, you know this is a great time to be involved in ground water issues. Our Keynote Address will be offered by our own Roger Kuhns who will talk about managing storm water and ground water in conservation developments. This will be an interesting talk. We have folks from what seems to be all sides of groundwater issues: from supply to protection. We have folks who will report on studies about surface water and ground water interactions. We have folks who will talk about ground water resource planning. We have folks who will talk about arsenic and radon in ground water. We have talks about stabilizing metals in ground water. We will hear reports on redevelopment projects, about the Fox River cleanup, and about the importance of hydrogeology to restoration projects. We have poster sessions from students who asked to share with you their work at the universities with some of the best known ground water folks in academia. And don't forget, we have the McElliney Lecturer from the NGWA coming to speak to us over lunch.

This is a really great time to be involved in ground water issues. Your meeting will cover topics that plague our advanced society but also plaque underdeveloped nations around the world. Come and meet your old friend and make some new ones. Engage the speakers who have offered to share their work and have fun. And don't forget to thank the folks who put this whole thing together.

On behalf of the Organizing Committee, we can't wait to see you.

Michael S. Raimonde President of the Wisconsin Ground Water Association

- President's Message
- Calendar of Events
- Treasurer's Report
- Board Meeting Minutes
- Interesting Articles and Other Tidbits on the Web

Looking for an old geological book, journal, or map? While we normally avoid (unpaid) commercial messages, it's probably worth noting that there are a lot of out-of-print geological publications for sale on Ebay.

For you cheap types. The large-scale, 1974, USGS map of the United States can be downloaded for free in electronic form (strictly for broad band connections) at http://pubs.usgs.gov/dds/dds11/kb.html

For you really cheap types. The USGS National Geologic Map Database provides access to almost all free, on-line, digital, geological maps for the United States available on the web. http://ngmdb.usgs.gov/

New York town may have set record for frozen recharge. It may have been miserably cold here, but at least we don't have to deal with this, or the spring aftermath. Yahoo.news

The *MidWest GeoSciences Group* is offering a 3 day short-course on May 8, 9 and 10, 2007—

"Assessing Ground Water Movement and Contaminant Migration Through Aquitards: From Field Investigation to Hydrogeologic Analysis".

Click Here for their brochure on this course.

WGWA Announces 2007 Annual Meeting

The Wisconsin Ground Water Association (WGWA) is pleased to announce its 2007 Annual Meeting to take place on Friday, February 23. 2007 at Great Wolf Lodge in Wisconsin Dells. The theme of the Annual Meeting is "Ground Water as a Catalyst for Change". In addition to a range of interesting presentations, this Annual Meeting will offer some additional highlights. The keynote presentation will be given by Mr. Roger Kuhns whose Indiana Jones-like career as a geologist for international mining companies has taken him across the globe from South America to Africa to the Far East. Currently he is working as an environmental geologist in Wisconsin. He has also combined stories of his adventures with his interest in theater to create theatrical monologues, which he performs in Door County. His talk will be on "Managing Stormwater and Groundwater in Conservation Developments". Over lunchtime, WGWA will be hosting the NGWA McElhiney Lecture by Mr. Edd Schofield. Mr. Schofield's lecture, "Water and Oil—They Really Should Mix", provides an historical overview of the water well/oil drilling industries and how the water well drilling industry could now benefit from the advances of the oil drilling industry. This lecture is free to everyone (lunch is available to non-Meeting attendees at an additional charge). Planned presentation topics include radium mobility, down-hole geophysics, arsenic occurrence, hydrogeologic site characterization, and conceptual site model development. WGWA is soliciting additional podium and poster presentations related to the Annual Meeting theme, particularly in the areas of hydrogeology, watershed management, hydrology, limnology, aquatic toxicology, water chemistry, and aquatic ecology. For those looking for a late-winter family trip, WGWA has obtained special rates for spending the weekend at the Great Wolf Lodge indoor water park resort. For further information see www.wgwa.org/ springconference.html

Landslides and Groundwater

By Troy Thompson

Editor's Note: This article is the third in a series of four that review the role that groundwater can play in various geological hazards and catastrophic events that have occurred, and may occur again.

Landslides would appear to be a purely surficial phenomena. A mass of surface soil or rock on a steep slope lets loose, for whatever reason, cascades down the slope, and comes to rest at the bottom, perhaps destroying a road or house in the process. However, groundwater plays a critical and interesting role in most landslides. And landslide risk is not simply limited to careless Californians that build too close to the edge of a cliff.

<<<u>More>></u>

Radium – New Visitor in Dane County By Lee Trotta

Pollution!

It seems like it's all we hear about in the news these days. Articles like "Pollutants threaten Madison's aquifer!", "A loss of public trust", "More money and action" center around high levels of manganese and carbon tetrachloride. At least we don't have to worry about radioactivity – or do we? Dangerous concentrations of radium have also been found in certain water



The 2006 Board, Committee, and Area Coordinators

President (2007)

Mike Raimonde (2008 President) Metcalf & Eddy, Inc. Phone: 262.909.8316 mike.raimonde@m-e.com

President-Elect (2007, President 2008)

Lee Trotta Crispell-Snyder, Inc. Phone: 262.641.9341 Ictrotta53072@yahoo.com

Secretary (2007-2008)

Troy Gawronski, Hydrogeologist Foth Infrastructure & Environment, LLC Phone: 920.496.6850; Fax: 920.497.8516 TGawronski@foth.com

Treasurer/Membership (2007)

Rebecca Caudill Natural Resource Technology, Inc. Phone: 262.522.1215; Fax: 262.523.9001 rcaudill@naturalrt.com

At-Large Board Members

Corey Pagels (2004-2006) Phone: 608.833-5555 pagels@lbgmad.com

Kenneth Wade (2005-2007) Phone: 262.548.6733 (Tu, W) Phone: 608.767.3111 (M, Th, F) kenneth.wade@dot.state.wi.us

Michael Raimonde (2006-2008) Phone: 773.756.2427 mike.raimonde@m-e.aecom.com

Committee Chairpersons

Newsletter

Troy Thompson, Editor Phone: 414.217.1541 troyrt@earthlink.net

Ground Water Sand Model Reservations

Lori Rosemore Phone: 715.834.3161 rosemorel@AyresAssociates.com supplies within Dane County. Until recently, the City of Madison has been spared this additional burden. It's as if they have been protected by an invisible wall. This wall is likely created by faults in the geologic layers of the earth. <<**More**>>

Wisconsin Hydrogeologists Expose Aquitard Realities

Ken Bradbury (WGNHS) and Dan Kelleher (Midwest Geosciences Group)

How many times have you learned of a shallow groundwater contamination problem and heard someone say "We don't have to worry about the deep aquifer, it is protected by an overlying aquitard"? How many times have you seen cross sections showing that downward migration of contaminants stops at a clay or shale layer? Have you ever really investigated these aquitards? How do you know they are effective barriers to contaminant movement?

A team of researchers from the Wisconsin Geological and Natural History Survey, Marshfield Clinic, and University of Waterloo recently completed a review of aquitard science for the American Water Works Association Research Foundation (AwwaRF). This work has evaluated the state of aquitard science and has also summarized the most appropriate methods for aquitard assessment, with emphasis on contaminant movement. Technical reports from this work are currently available to AwwaRF subscribers (including most water utilities) through the AwwaRF website (http://www.awwarf.org/research/).

USEPA's Unregulated Contaminant Rule 2 (UCMR2) By Mal Gross and R T Krueger (Northern Lake Service)

The latest phase of USEPA's UCMR program is underway. Public Water Supply systems serving over 10,000 people (as well as some selected smaller systems) will be required to sample and analyze for two lists of unregulated contaminants.

Sampling is scheduled to occur during a 12-month period between 2008 and 2010.

The resulting analytical data is used by USEPA to determine whether regulatory standards should be established for these chemicals.

Although the program has not been fully promulgated, preparations at some laboratories have already been proceeding for several months. Preparation includes completing the approval process in time to be ready to accept samples for UCMR2 compliance when the sampling period beginning in 2008.



Ground Water Sand Model Reservations (continued)

Kathi D. Ried, P.G. Phone: 414.847.0464 Kathi.Ried@CH2M.com

Web Site

Joan Viney Phone: 608.279.9598 jviney@tds.net

Education Committee

Paula Richardson Natural Resource Technology, Inc. Phone: 262.522.1221; Fax: 262.523.9001 prichardson@naturalrt.com

Area Coordinators

We are looking for coordinators in many of the following areas. If you are interested, please contact Rebecca Caudill at reaudill @naturalrt.com
Area Coordinators

Western Area

(LaCrosse, Black River Falls, Eau Claire, Chippewa Falls, surrounding area)
Position Open.

Southern Area

(Madison and surrounding area) John Tweddale Phone: 608-224-2830 jtweddale@bt2inc.com

North Central Area

(Stevens Point, Wisconsin Rapids, Wausau, Rhinelander, surrounding area)
Tod Roush

Phone: 715.845.4100

Northeast Area

(Green Bay, Appleton, Oshkosh, Fond du Lac, surrounding area) Position Open.

Southeast Area

(Milwaukee, Sheboygan, Racine, Kenosha, surrounding area) Michael Raimonde Phone: 262.909.8316 mike.raimonde@m-e.com

Conferences, Meetings, and Courses



Ground Water-Related Conferences and Meetings

WGWA Spring Conference, Wisconsin Dells, February 23, 2007

4th Conference on Hydrogeology, Ecology, Monitoring, and Management of GW in Karst Terrains, AGWSE, Safety Harbor, FL, February 27-28, 2007

AWRA - Wisconsin Section 2007 Meeting, Wisconsin Dells, WI, March 1-2, 2007

Federation of Environmental Technologists Environment 07 Conference, Milwaukee, WI March 12-14, 2007

2007 NGWA Ground Water and Environmental Law Conference, Dublin, OH, July 24-25, 2007

Ground Water-Related Courses in Midwest

Principles of Ground Water: Flow, Transportation, and Remediation, NGWA, Dublin, OH, March 21-23, 2007

Model Calibration & Predictive Uncertainty Analysis Using PEST, SSPA, Minneapolis, MN, April 16-18, 2007, Advanced Session April 19, 2007

Assessing Ground Water Movement and Contaminant Migration Through Aquitards, Midwest Geosciences Group, Fermilab, Illinois May 8, 9, and 10, 2007

Analysis and Design of Aquifer Tests Including Slug Tests and Fracture Flow, NGWA, Dublin, OH, June 18-20, 2007

EPA Ground Water-Related On-Line Courses (free, see www.clu-in.org)

Nanotechnology - Metal Remediation, Feb 13, 2007, 1:00PM-3:00PM EST

ITRC Evaluating, Optimizing, or Ending Post-Closure Care at Municipal Solid Waste Landfills, Feb 15, 2007, 11:00AM-1:15PM EST

ITRC Risk Assessment and Risk Management: Determination and Application of Risk-Based Values, Mar 27, 2007, 2:00PM-4:15PM EST

The newsletter is published four times per year. If you have any suggestions or submissions, please contact us at: Wisconsin Ground Water Association, c/o Troy Thompson, W174 N7507 Joanne Drive, Menomonee Falls, WI 53051. Email: wgwainfo@wgwa.org; Web site: http://www.wgwa.org. The deadline for submissions to the 2nd quarter of 2007 newsletter is May 15, 2007.