

Minnesota Ground Water Association

www.mgwa.org

Newsletter

June 2012
Volume 31, Number 2

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- ◆ Betty McCollum Receives Groundwater Protector Award, page 6



MGWA President
Kelton Barr

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President's Letter

By Kelton Barr

It was great seeing so many of you at the Spring Conference! Our traditional venue was busting at the seams with a record number of attendees – 276! We still had to turn people away. We also had 14 posters at our growing poster session. They came from four states, from public, private, and academic presenters, and were all quite interesting. All of the abstracts from the conference and the poster session are on the MGWA website, as well as the conference slides and audio, which is quite a nice member benefit. Our membership is holding steady with 572 members, which is heartening, considering that the Grand Recession is still cutting into companies' and agencies' underwriting of professional dues.

Updating Metro Model: Expanding the Twin Cities Metropolitan Area Groundwater Model

by Lanya Ross, Metropolitan Council

Home to over half of Minnesota's population, the seven-county Minneapolis-St. Paul metropolitan area (Figure 1) struggles to balance many competing water supply needs. This challenge is likely to become more difficult in the future, as the region is expected to gain an additional 900,000 people by 2040.

For decades, groundwater models have been important tools for our region's planners, groundwater scientists, and residents in protecting their groundwater resources – the primary water supply for most of the region.

Metropolitan Council, the regional planning agency for the metro area, is responsible for the most recent regional modeling work. Building on previous models, particularly the MPCA's 'Metro Model', the Metropolitan Council released the 'Metro Model 2' in 2009. Now, following the release of several new regional datasets, Metro Model 2 is being updated.

Through the years, work on the evolving Metro Model has blazed a trail for water resource

We are continuing our work on the Fall Conference, which is being replaced by the MGWA's hosting of the 57th Annual Midwest Ground Water Conference. This will be a three-day affair with talks in concurrent sessions for the first two days – October 1 and 2 – and a field trip on October 3. The conference will be held at the Earle Brown Heritage Center in Brooklyn Center, Minnesota (6155 Earle Brown Drive), a venue with plenty of space for concurrent sessions. Consequently, the session chairs are hard at work lining up talks for the following topic sessions:

- ◆ Aquifer Characterization
- ◆ Geothermal Innovations and Applications
- ◆ Groundwater and Energy Production
- ◆ Groundwater Modeling

— continued on page 6

scientists and managers. The technical collaboration generated by these modeling efforts continually improves our understanding of the region's groundwater system.

For example, the Metro Model 2 project tested the USGS Soil Water Balance (SWB) recharge model; at the time, SWB was in its pre-release phase. The questions raised and lessons

— continued on page 4



Figure 1. Study area location.

MEMBER NEWS

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Newsletter Deadlines

Issue	Due to Editor
September '12	08/03/12
December '12	11/04/12
March '13	02/01/13

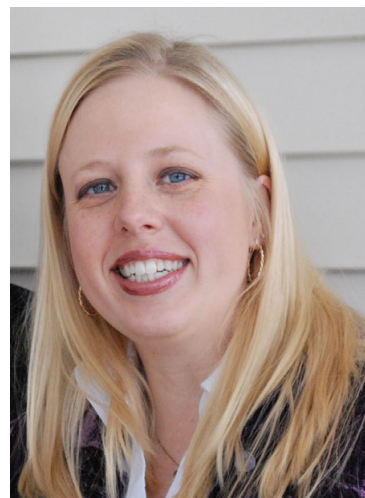
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Princesa VanBuren Hansen Joins DNR

Princesa VanBuren Hansen recently joined the DNR as Water Use Specialist in the Division of Ecological and Water Resources. She will develop and implement the water appropriations permitting program in order to deal with increasing water use conflicts and water supply issues. Her responsibilities will include collaboration with groundwater and surface water technical staff to ensure that water use permit decisions are watershed based, scientifically based, and meet legal requirements. She will also coordinate with other state, federal, and local water resource management programs on water use regulatory activities.

Princesa has been a Principal Planner at the Minnesota Environmental Quality Board (EQB) for the past six years. During her tenure at the EQB, she coordinated and led interagency projects and assessments for the strategic environmental planning program, including the Board's water planning and sustainable development activities. Prior to state service, Princesa was employed by the University of Minnesota to oversee stream geomorphology and Total Maximum Daily Load research projects, worked in the private sector at Delta Environmental Consultants, and was employed by the federal government with the U.S. Department of Agriculture – Agricultural Research Service.



Michelle Sutherland Joins MPCA

Michelle Sutherland began working for the Minnesota Pollution Control Agency (MPCA) on March 5, 2012, in the Closed Landfill Program of the Remediation Division. In this program, she will be responsible for continued monitoring and remediation for surface water and groundwater within closed landfills throughout the state of Minnesota, vendor management, budgeting, emerging contaminant research, and GIS use and production. She will also be assisting her landfill teams in site management, efficiency, design, construction, use and local government unit outreach.

Michelle's previous work includes: project management of Superfund Sites for the EPA via Sullivan International, environmental compliance for stores and distributions centers at Target Corporate, and laboratory analytics at the University of Minnesota Limnological Research Center. She has a MS in Geology from the University of Minnesota, a BS in earth sciences from the University of Southern California and a BS in biology from the University of Southern California.

Jim Walsh Promotion

Jim Walsh has accepted a position as Hydrologist Supervisor in the Source Water Protection Unit at the Minnesota Department of Health beginning May 9, 2012. In his new role, he supervises hydrologists working with public water supply systems in the northern part of the state on wellhead protection planning and other related drinking water protection activities. Prior to assuming his new position, Jim worked as a hydrologist at MDH for 22 years and for 5 years in mineral exploration and mining.



MEMBER NEWS

Steve Robertson is Promoted

Steve Robertson accepted a position as Hydrologist Supervisor in the Source Water Protection Unit at the Minnesota Department of Health in August 2011. In his new role, he supervises hydrologists working with public water supply systems in the southern part of the state on wellhead protection planning and other related drinking water protection activities. Prior to assuming his new position, Steve worked at MDH for 13 years and for 13 years in environmental consulting.



Bob Tipping Defends PhD Dissertation

Bob Tipping, MGWA's President-Elect, defended his PhD dissertation on May 15, 2012. The title of the dissertation is "Characterizing Groundwater Flow in the Twin Cities Metropolitan Area, Minnesota: A Chemical and Hydrostratigraphic Approach". Bob has promised to write a summary of his work for a future MGWA newsletter. Congratulations Bob!

Andrew Streitz joins the Newsletter Team

Andrew is a groundwater modeler with the Minnesota Pollution Control Agency. In his many years with the State, he has worked on a variety of projects, including the Department of Natural Resources' geophysics team, Superfund cleanup, and the original Metropolitan Area Groundwater Model. Most recently, he has been investigating groundwater/surface water interactions as part of MPCA watershed studies. He received a B.A. in history from St. Olaf College, and an M.S. in geology from the University of Minnesota. He has been a member of the Minnesota Ground Water Association for nearly 30 years, and is a licensed professional geologist in Minnesota.



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The primary objectives of the MGWA are:

- ◆ Promote and encourage scientific and public policy aspects of ground water as an information provider.
- ◆ Protect public health and safety through continuing education for ground water professionals;
- ◆ Establish a common forum for scientists, engineers, planners, educators, attorneys, and other persons concerned with ground water;
- ◆ Educate the general public regarding ground water resources; and
- ◆ Disseminate information on ground water.

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Abbreviations and Acronyms

- ◆ ASTM – American Society for Testing and Materials
- ◆ DNR – Minnesota Department of Natural Resources
- ◆ MDA – Minnesota Department of Agriculture
- ◆ MDH – Minnesota Department of Health
- ◆ MGS – Minnesota Geological Survey
- ◆ MPCA – Minnesota Pollution Control Agency
- ◆ USEPA or EPA – United States Environmental Protection Agency
- ◆ USGS – United States Geological Survey

FEATURE ARTICLE

Metro Model Update, cont.

learned shaped the final SWB model, which is now being applied state-wide in a joint project by the USGS and MPCA. The regional SWB model will also be updated as part of the Metro Model 2 update.

Need for a Twin Cities Metropolitan Area Groundwater Model

The Metro Model 2 is a critical part of the Metropolitan Council's integration of water supply planning into broader regional comprehensive planning. The model is used to assess regional water supply availability under water demand conditions projected by communities in their local water supply plans.

Through Metropolitan Council's planning role, Metro Model 2 results inform regional policy plan updates, local comprehensive plan updates, water supply plan and appropriation permit updates, source water protection plans, and other water supply planning efforts.

Update to Expand Model Extent, Include New Data, Add Transient Capability

This project will result in an updated regional SWB model and updated groundwater flow model (Metro Model 2). Model extents will be expanded (Figure 2), new water budget and aquifer property information will be included, and transient capability will be added.

A significant amount of new information was generated after the release of the Metro Model 2 in 2009, due in part to increased funding from the 2008 Clean Water, Land and Legacy Amendment. Along with other information, the Metro Model 2 update will include new

Metropolitan Council land use data (Figure 3); Natural Resources Conservation Service (NRCS) soil survey data; MGS geologic atlases; DNR observation wells; USGS synoptic water-level measurements; and MGS research on Quaternary aquifer properties, geochemistry, and groundwater recharge pathways (Figure 4).

These new data will improve model calibration, allow for new approaches to modeling Quaternary aquifers, and refine the approach used to define surface water boundary conditions. Transient capability will be added to the model to examine the seasonal impacts of various water demand scenarios.

Schedule

On February 15, 2012, the Metropolitan Council executed a project with Barr Engineering Company to update the Metro Model 2.

Update of the conceptual model will be summarized in a progress report to be completed in the fall of 2012. Model calibration and uncertainty analysis will occur through 2013, with all project deliverables to be finalized in 2014 and be made available to the public with the goal of supporting sustainable water supply management in the region.

The project schedule will allow the Metropolitan Council to share the results of new model scenarios with community planners before the next round of local comprehensive and water supply planning begins in 2015 and 2016.

Project Team

The Metropolitan Council is leading this effort; Lanya Ross is serving as project manager. Tim P. Brown and Evan Christianson of Barr Engineering Company are leading the technical work to update the regional recharge and groundwater flow models, respectively.

The success of this project depends upon the continued collaboration of the region's many technical experts. A technical advisory committee has been convened to provide input throughout this process. The first meeting on March 30, 2012 was well attended by many of the state's groundwater experts, and additional meetings are anticipated later this summer and periodically through 2014.

Project Funding

This work is supported by the Clean Water, Land and Legacy Amendment's Clean Water Fund.

For More Information

For information about this project or to be added to the mailing list for project updates, contact Lanya Ross, at (651)602-1802 or Lanya.Ross@metc.state.mn.us

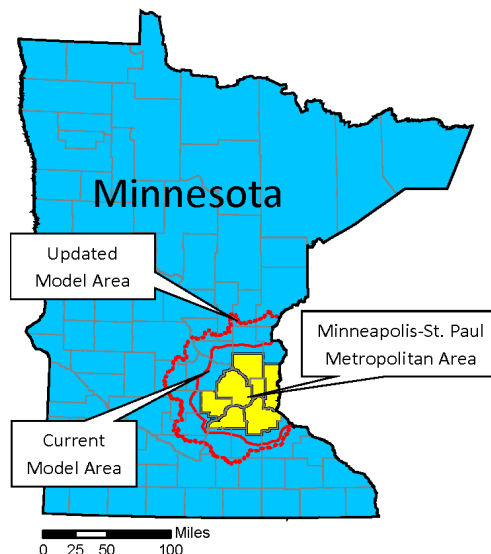


Figure 2. Current and updated model area for the Twin Cities Metropolitan Area regional groundwater model (Metro Model 2).

Metro Model Update, cont.

Figure 3. Proposed distribution land use categories for the SWB model. Data in the seven-county metropolitan area is defined by Metropolitan Council 2010 land use maps. Data outside of the seven-county metropolitan area is defined by the USGS 2006 National Land Cover Dataset.

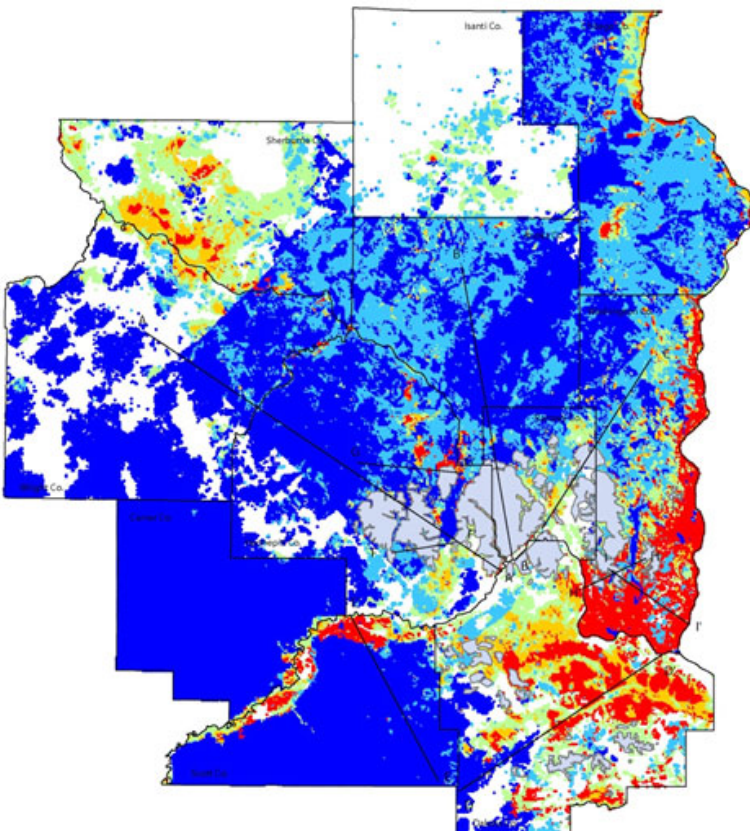
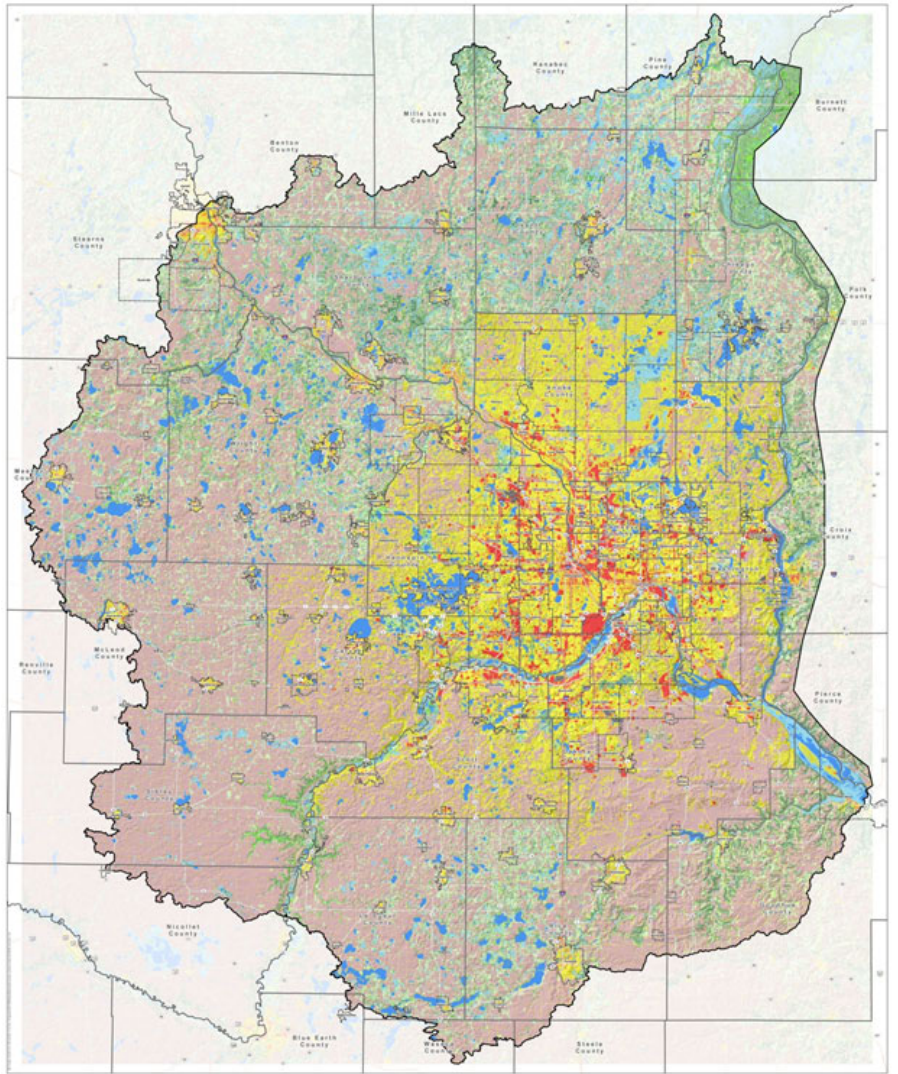
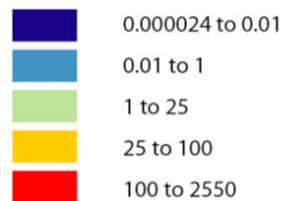


Figure 4. Estimated composite vertical hydraulic conductivity (ft/day) from regional water table to the bedrock surface (from 2011 MGS report, 'Distribution of Vertical Recharge to Upper Bedrock Aquifers, Twin Cities Metropolitan Area').



Minnesota Congresswoman Betty McCollum receives Groundwater Protector Award from the National Ground Water Association

Congresswoman Betty McCollum (D-MN) has received the 2012 Groundwater Protector Award from the National Ground Water Association (NGWA).

The Groundwater Protector Award honors people in government, industry, and the private sector for their public service efforts in conjunction with groundwater conservation, protection, and use.

Congresswoman McCollum is being recognized for her leadership in championing a National Ground Water Monitoring Network to provide information on the source of water supply for nearly 130 million Americans and approximately 40 percent of the nation's irrigation water.

"Representative McCollum's commitment to protecting groundwater is important and farsighted. She understands how vital groundwater is to our country's future, from drinking water supplies and cropland irrigation to energy production and the health of our ecosystems," said NGWA Executive Director Kevin McCray.

"It is no exaggeration to say that groundwater is part of the lifeblood of our country. So Representative McCollum's support of the National Ground Water Monitoring Network is most worthy of our 2012 Groundwater Protector Award," McCray said.



President's Letter, cont.

- ◆ Groundwater Quality
- ◆ Groundwater-Surface Water Interactions
- ◆ Groundwater Sustainability and Public Policy
- ◆ Karst Hydrogeology
- ◆ Urban Hydrogeology

Speakers are already coming from almost all of the 14 states and two provinces that are part of the Midwest's reach and will be providing interesting, different perspectives on these topics. A great chance to hear of groundwater-related problems and solutions in other states and other terranes, right here in the Twin Cities!

PLEASE CONSIDER OFFERING A TALK OR POSTER! Many of you have projects that are memorable and that you learned from; others would be interested in learning from them too. All you need to do is prepare an abstract, go to the conference website (www.mwgwc.org) and submit it to the appropriate session. You will be contacted by a session chair to complete the process.

PLEASE REGISTER for the conference! It will be bigger and better than our usual conferences and will be more relevant than GSA, AGI, or other national conferences. And it's happening locally! Just go to the conference website (www.mwgwc.org) to register.

Also, PLEASE VOLUNTEER to help out with the conference! We will have several jobs that won't take too long. Your help will benefit MGWA and give you the chance to mingle with your peers (always worthwhile)! Just email office@mgwa.org to offer

your assistance. The success of the MGWA has been built by its members, who step forward when called. This has built us into an enduring organization that is emulated around the country.

Finally, our long-serving Advertising Manager, Jim Aiken, is looking for several members to serve on a team to increase the wind in our financial sails. This keeps dues reasonable and also funds the ongoing work in raising public awareness of the groundwater profession. If you are interested, PLEASE VOLUNTEER to help the Advertising and Underwriting Team! Send a brief email to office@mgwa.org of your interest.

Thank you in advance for volunteering!



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New Landfill Siting Rule Adopted

MPCA has the general authority to adopt and amend existing solid waste rules under Minnesota Statutes § 116.07, subs. 2 and 4(b). In May 2010 the Legislature directed MPCA to develop a rule to prohibit siting certain types of solid waste land disposal facilities that were not permitted before January 1, 2011, based on an area’s sensitivity to groundwater contamination and where karst is likely to develop. The statute specifies that sensitivity to groundwater contamination is based on the predicted minimum time of travel of groundwater contaminants from the solid waste to the compliance boundary. The statute requires that the rules specify testable or otherwise objective thresholds for these criteria. The new rule (7001.3111) took effect on March 19, 2012. This new rule addresses most new solid waste disposal facilities while exempting certain demolition and industrial landfills.

<https://www.revisor.mn.gov/rules/?id=7001.3111>

Summary of the CEC Advisory Forum

by Michele Ross, Minnesota Department of Health

The annual Advisory Forum of the Minnesota Department of Health’s (MDH’s) Drinking Water Contaminants of Emerging Concern (CEC) program was held on February 9, 2012. The meeting was open to the public and included presentations from MDH staff on public perceptions of water quality and from Minnesota Department of Agriculture (MDA) staff on their pesticide monitoring network. An open mic session rounded out the forum and participants were encouraged to share activities related to their work on contaminants of emerging concern and to nominate contaminants for review. For additional information, or to sign up to receive email announcements about future meetings, refer to the program web page at www.health.state.mn.us/cec.

New Groundwater Recharge Project

(Reprinted with permission from the U.S. Geological Survey, Minnesota Water Science Center Newsletter; Winter 2012)

Groundwater recharge is one of the most important unknowns for estimating water budgets, calibrating groundwater models, and assessing contaminant transport, aquifer replenishment, and water-quality protection. Recharge is highly variable both spatially and temporally, making accurate estimates at a regional scale difficult to ascertain. Point estimates of recharge are not appropriate for regional-scale models, and multi-year hydrologic assessments based on static recharge estimates can lead to large miscalculations in the overall water budget. Several techniques currently exist to estimate variable recharge rates. However, consideration must be given to not only the most appropriate method for quantifying the recharge rates but also the ease of use and the availability of the required input data. The objectives of a new study by the USGS, in cooperation with the MPCA, are to provide a reasonable statewide estimate of recharge using the Soil-Water-Balance (SWB) model, validate the simulation results, and conduct a parameter sensitivity analysis to identify the most sensitive model parameters. For the purposes of this application of the SWB model, the simulation results will be conducted on selected watershed basins in the state and compared against previously established recharge estimates. Using a gridded data structure, these new temporally and spatially distributed recharge estimates can be easily integrated into regional groundwater-flow models.

Contact Erik Smith (easmith@usgs.gov) or Andrew Streit (andrew.streit@state.mn.us) for more information.




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New Drill Rig Acquired by DNR

By Matt Meyer, Minnesota Department of Natural Resources

The Minnesota Department of Natural Resources purchased a brand new CME-55 drilling machine in March of 2012. The drill was manufactured by Central Mine Equipment Company, located in St. Louis, Missouri. The CME-55 is their "mid-sized" drill, which can be used for various geotechnical and environmental jobs. It is designed to drill primarily with hollow stem augers, but can be outfitted with mud rotary and coring tooling as well. The CME-55 is equipped with an on-board water/mud pump, which is used for grouting and various other tasks. It also features a high-volume air compressor, which is used mainly for well development. The drill is mounted on the back of a 2012 Freightliner single-axle truck chassis. The DNR will be using the new CME-55 to drill and install shallow observation and monitoring wells (up to 100 feet deep) throughout the state. It will also be assisting with sealing old, non-functioning observation wells owned by the DNR.



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Spring Conference a Huge Success

A record 276 people attended the MGWA Spring Conference on April 19 entitled Conduits, Karst and Contamination—Addressing Groundwater Challenges. Two keynote speakers from the University of Guelph, **Beth Parker** and **Jessie Meyer**, kicked off the conference day with lively talks on high-resolution characterization of hydraulic conductivity in fractured sedimentary rock.



Beth Parker discussed several techniques for determining horizontal hydraulic conductivity, fracture aperture, and fracture conductivity.

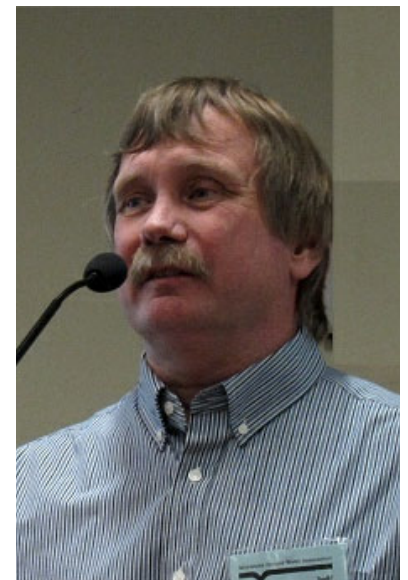


Jessie Meyer described a study of hydrogeologic units using vertical hydraulic conductivity in the Ordovician to Cambrian sequence near Madison, WI.

These and the seven other talks of the day (listed below) were well received. The poster session was also well-stocked with a variety of topics in hydrogeology. Please refer to www.MGWA.org/membersonly for more information and description of the talks.



Tony Runkel of MGS spoke on vertical fractures in the Platteville and on springsheds in Fillmore County.



Jeffrey Green of MDNR spoke of conduit flow in the St. Lawrence.



E Calvin Alexander of the University of Minnesota discussed the impact of karst on agriculture.

— continued on page 10

Spring Conference, cont.



Bob Tipping of MGS spoke on vertical travel times to the upper bedrock aquifers of the Twin Cities.

Lanya Ross (not pictured) of the Metropolitan Council discussed groundwater and the Clean Water Fund.

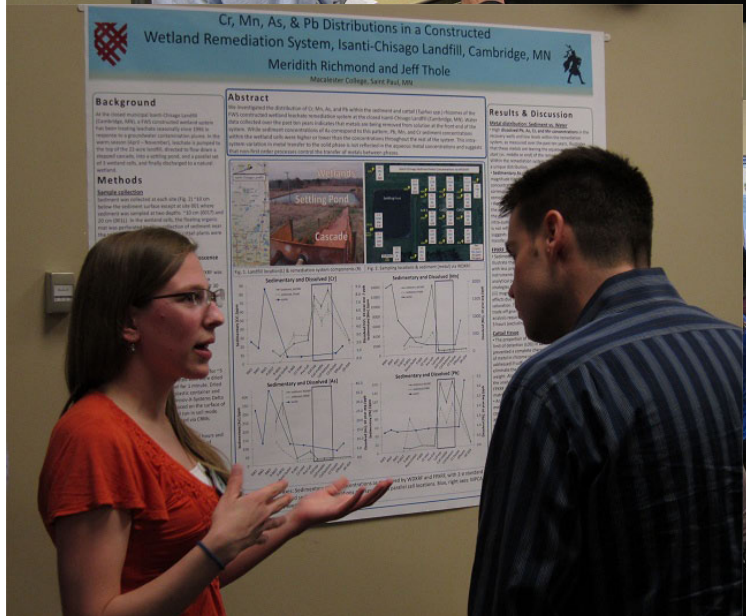
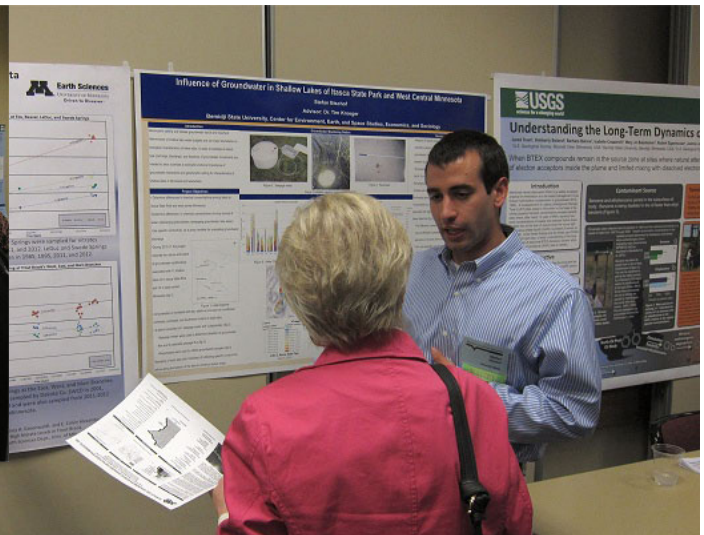
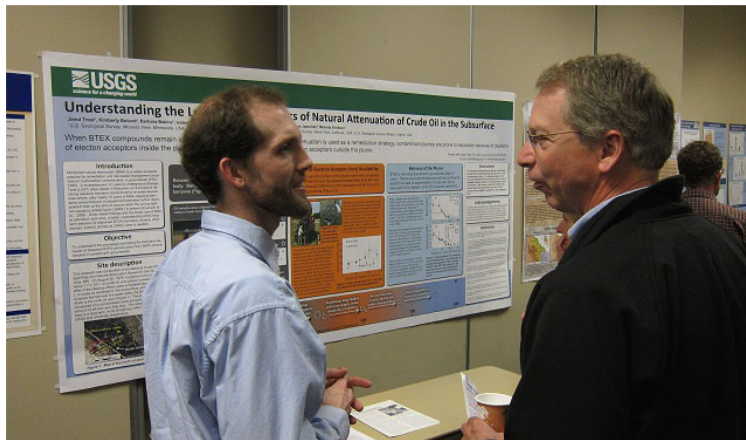
Perry Jones of USGS described a recent study of White Bear Lake levels.



Mindy Erickson of USGS discussed emerging contaminants in Minnesota.

The poster session continues to grow in popularity - look for more at the Midwest Ground Water Conference.

by Kurt Schroeder, Newsletter Team





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QUESTION OF THE QUARTER

Question of the Quarter!

Test your knowledge!

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Question of the Quarter

The Question of the Quarter is an occasional feature of your newsletter in which a question is posed, and all members are invited to respond. This quarter's question is:

“What is new name for the formation that MGS has adopted for the Ironton-Galesville and in what county can you find the type section?”

Send your answers (and any ideas for ‘Question of the Quarter’) to: editor@MGWA.org



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MGWA BOARD MINUTES

Minnesota Ground Water Association Board Meeting Minutes

Meeting Date: March 2, 2012

Location:	Fresh Grounds Café 1362 West 7th Street, St. Paul, MN
Attendance:	Kelton Barr, President; Mindy Erickson, Past President; Audrey Van Cleve, Treasurer; Julie Ekman, Secretary; Sean Hunt, WRI; Jeanette Leete, WRI; Bob Tipping, President-Elect; Gil Gabanski, MGWA Foundation President.
Past Minutes:	February minutes approved as amended.
Treasury:	Van Cleve handed out a budget summary. Cash on hand: \$36,700. Major expenses are database management and time on the spring conference and brochure. Errors in coding will be corrected. Van Cleve, Leete, and Hunt are conducting an internal audit.
Newsletter:	Newsletter will be published in mid-March.
Web Page:	Hunt sent member reminder emails. Spring Conference page is updated. The 30th Anniversary logo is on the MGWA website. Hunt is working on the layout for the Midwest Ground Water Association Conference page; a layout is drafted and content is currently being created. This site will be linked from the MGWA website. Barr suggested that photos of karst or other geologic features related to the conference theme be posted on the site; he will write a request for photos that Hunt will email to MGWA members.
WRI Report:	Leete reported that the MGWA Spring Conference brochures have been distributed. Dues reminders have been mailed. Those present at this meeting discussed ideas on how to engage more student interest in MGWA. One idea was that professors could be contacted to encourage their students to read the MGWA Newsletter and to contribute posters for conferences.
Foundation:	Erickson reported that there will be a meeting in May on advertising scholarships and developing the process for awarding. Gabanski reported that interest, not Scholarship Endowment funds, will be used for scholarships. Cathy Villas-Horns will chair the scholarship committee. A student will be selected prior to fall 2012 so that the name can be announced at the fall conference. The H O Pfannkuch Scholarship Fund is at approximately \$20,000. The Foundation is the manager of this Fund, but is not its fundraiser. The plan is to only use the interest on the Fund; to date there aren't enough interest funds available.
Old Business:	<u>Spring Conference</u> — the Conference agenda was presented and reviewed. To encourage participation in aquifer renaming, examples from the Benton County Geologic Atlas will be presented on a poster. This will provide a case study to start the conversation on aquifer renaming. Barr started a discussion on ideas for engaging more student interest in MGWA. It was suggested that professors could be contacted to encourage their students to read the MGWA Newsletter and to contribute posters for the conference. <u>Midwest Ground Water Conference</u> — there is room for 1400 people. Session topics were reviewed. The conference will incorporate the Fracking conference being planned by UMD/UofM and the Society for Mining, Metallurgy & Exploration. The end of March is the deadline for invited speaker confirmations. Presenters will need to pay the registration fee. Hunt can start creating the web page. Discussion ensued on what incentives to offer corporate sponsors. Tipping reported that field trip planning is progressing. We still need a title for this conference!
New Business:	<u>MGWAF Director appointment</u> — Stu Grubb has been approved by the Foundation to be its director; this needs MGWA Board approval. Tipping made the motion to approve the appointment of Stu Grub to Foundation Director; motion carried. <u>The Freshwater Society</u> is interested in developing more ties with ground water issues. <u>2013 Spring Conference</u> will be April 24, 2013.

Meeting Date: April 2, 2012

Location:	Fresh Grounds Café, 1362 West 7th Street, St. Paul, MN
Attendance:	Kelton Barr, President; Mindy Erickson, Past President; Julie Ekman, Secretary; Sean Hunt, WRI; Jeanette Leete, WRI; Bob Tipping, President-Elect; Tedd Ronning, Newsletter Editor.
Past Minutes:	March minutes approved as amended.
Treasury:	Leete summarized the treasury report. Spring conference fees are coming in and have exceeded the minimum needed to pay for expenses.
Newsletter:	Ronning is following up on others who might be interested in joining the newsletter team. The deadline for articles for the next issue is May 4th.
Web Page:	no report
WRI Report:	Leete distributed a handout on activities since the last meeting. Ads and corporate sponsorship renewals are low. Barr will follow up with renewals we are waiting for.
Foundation:	Leete reported that two Children's Water Festival proposals are in; one has been approved. Erickson reported that the Foundation will be meeting in May to formalize a process for granting scholarships; a team will be formed and scholarship

The MGWA Board of Directors meets once a month.

All members are welcome to attend and observe.

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MGWA BOARD MINUTES

MGWA Minutes, cont.

MGWA 2012 Membership Dues

Professional Rate:	\$35
Full-time Student Rate:	\$15
Newsletter (printed and mailed)	\$20
Directory	\$7

Membership dues rates were revised at the October 1, 2010 meeting of the MGWA Board. The Board intends to balance the membership services budget.

- Old Business: winners will be announced at the Fall conference. Barr reported that all abstracts for the Spring conference are in and all have been acknowledged. Nine of the posters will be from students. There will be a poster on aquifer naming. The County Well Index is to be changed July 1st to update stratigraphy names. The fall, Midwest Groundwater Conference, will be held October 1st & 2nd. Leete has talked with Jim Miller about the frac-sand co-conference and how to share costs; the frac sand conference will be on the 2nd.
- New Business: Barr requested suggestions for three people with the right skills to help with underwriting MGWA activities. Ideas were discussed: leaders of large consulting groups could form an informal group to help with this and other support work. We could connect with other professional groups to keep their members informed of MGWA and ways to be supportive and involved. Tipping made a motion "to approve expenses for a meeting with heads of professional consulting firms. The purpose of the meeting is to encourage ongoing underwriting activities of MGWA." Motion carried.

Meeting Date: May 4, 2012

- Location: Fresh Grounds Café, 1362 West 7th Street, St. Paul, MN
- Attendance: Kelton Barr, President; Mindy Erickson, Past President; Audrey Van Cleve, Treasurer; Julie Ekman, Secretary; Sean Hunt, WRI; Jeanette Leete, WRI; Tedd Ronning, Newsletter Editor.
- Past Minutes: April minutes approved.
- Treasury: Van Cleve reported that most of the income shown in the report is from the spring conference. The Association finances are looking good.
- Newsletter: Today is the deadline for submittals. Andrew Streitz has joined the newsletter team. The due date for fall conference abstracts will be changed to after the publication of the MGWA newsletter. Barr will write a president's letter.
- Web Page: Hunt reported that the spring conference is posted on the website and updates have been made; old editions of the MGWA newsletter are available to the public; employment opportunities are posted. Visits to the website can be counted. Everything is ready for fall conference information to be uploaded.
- WRI Report: Leete brought examples of the bags that could be purchased for handing out to fall conference attendees. The folders for participants will be clear, blue tinged, and will have a closure. The contract went through for the conference; pricing options need to be developed for one day, two days, the frac conference, and students.
- Foundation: Erickson reported that the Foundation will meet on May 22nd to develop the scholarship process.
- Old Business: Hunt reviewed the spring conference comments. The poster session was well attended and the room was pretty crowded; maybe next year the posters could be in the lobby area by the railings; the session could be continued after the conference with refreshments. Leete pointed out that the posters would need to be mounted and that fees would be different if they are moved to the lobby area. Barr will follow up with the poster subcommittee to see if we can get pdf's for the MGWA conference website. Hunt mentioned another option would be to provide a link to their school's/work's website. There were comments on the arrangement of two screens for speakers and that participants on one side of the room couldn't see what the speaker was pointing to on the screen on the opposite side of the room. It was suggested that maybe the speakers could have the laptop in front of them and use a mouse to point to things so that it would be visible on both screens. Barr mentioned that the University of Minnesota – Morris is establishing a hydrology and environmental studies course and he is encouraging their students' participation in MGWA. Also, St. Cloud State eliminated their Geology degree but added Environmental Studies which includes geology courses.
- New Business: Barr reported on the Midwest Groundwater Association conference; The room for vendors is large (12-20 tables) and there's room for refreshments. The 2-day conference rate will include the banquet and will be less than twice the single day rate. On the 1st the single day rate will include the banquet. Registration rates will be discussed in a meeting May 8th. A date for abstract submission is likely to be late July. Barr met with Jim Aiken, Midwest Ground Water Association marketing director, and will be talking to members to form a ground water leadership council and provide underwriting. Other groups have requested that MGWA post information about their events on our website: we often add related conferences to our calendar for which there is no fee. For non-profit organizations we may choose to send out an informational email to our members; if it is a for profit organization we can choose to email our membership, but there is a fee. Barr made a motion to donate old MGWA laptops to educational purposes. Motion carried.

FOUNDATION UPDATE

Brown-Nicollet Children's Water Festival

The Brown-Nicollet-Community Health Board Children's 14th Water Festival was held at South Central College in North Mankato. Approximately 800 students from Brown, Nicollet and Cottonwood counties were in attendance along with teachers and chaperones. The list of contributor of time and money is very impressive. The MGWA Foundation supported the event with a \$1,000 grant. Congratulations to all involved!



Pictured activities are: Hands-on experiences with large props, "Watch it Rain", and the Enviroscape Model Watershed.



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FOUNDATION MINUTES

Meeting Date: May 22, 2012

- Attending:** Gilbert Gabanski, Mindy Erickson, Cathy von Euw, Amanda Strommer, Stu Grubb and Cathy Villas-Horns; MGWA Management Present: Sean Hunt
- Review of Minutes:** The meeting minutes for the February 28, 2012 meeting were approved on March 22, 2012.
- Treasurer's Report:** MGWA Foundation balance as of May 18, 2012 is \$117,657.54. Interest in the amount of \$721.90 was accrued since 02/27/12 and was swept into the general fund. Donations of \$22 to the MGWA Foundation endowment and \$200 to the MGWA Foundation general fund were received during this period. Total debits of \$1000 were deducted during this period for a \$1000 grant to the Brown-Nicollet Children's Water Festival.
The HO Pfannkuch Fund balance as of May 18, 2012 is \$19,559.33. Interest in the amount of \$65.22 was accrued since 02/27/12 and was swept into the fund. Total donations of \$10 were received during this period.
Cathy distributed two spreadsheets with recommendations for both the MGWAF Account and the HOP Fund.
MGWAF Account – Cathy recommends the following actions: 1) route interest generated by both the Step-Up and 60 Month CDs be routed directly to the Business Shares General Fund account; 2) transfer the Wahoo CD funds to the Step-Up CD, and 3) then close the Wahoo CD account.
HOP Fund – Cathy recommends the following actions: 1) move the Wahoo CD fund to the HO Pfannkuch checking account when the Wahoo CD matures, and 2) then close the Wahoo CD account.
Mindy moved that these recommendations be approved; Amanda seconded. Motion passed.
- New Business:** Washington County submitted a grant request for \$865 for a Groundwater Model and a 3-panel display to provide ground water education throughout the county. This model and display are used to educate students and adults in schools, at the Children's Water Festival, at the Washington County Fair, at natural resource education centers and other events.
Cathy Villas-Horns moved that the proposal be approved; Cathy von Euw seconded the motion. Amanda recused herself from voting since she is employed by Washington County. Motion passed.
Brown-Nicollet Children's Water Festival submitted a grant request for \$1000. This grant was approved via electronic mail by the MGWAF Board on March 5, 2012.
- New Business:** Scholarship Update – A committee has been formed consisting of Amanda Strommer, Joy Loughry, Jim Lundy and Cathy Villas-Horns. Cathy is the lead for the committee. The committee has reviewed the original Scholarship Policy from 2000, as well as current scholarship applications and policies for related organizations. The Scholarship Committee would like to revise several key features of the existing MGWAF scholarship policy. These proposed modifications were described by Cathy and in general the MGWAF Board expressed agreement with these proposed modifications. Cathy will contact Jennie, who was not present at the meeting, to determine the next steps.
MGWAF Fundraising – Gil and Kelton Barr, the current MGWA Board President, continued discussions on fundraising and are contemplating a more regular pledging approach.
- Next Meeting:** The next meeting will be Tuesday, September 25, 2012 at the US Geological Survey offices in Mounds View.

The MGWA Foundation is a 501(c)3 charitable organization. Donations to the Foundation are deductible on your state and federal income tax returns.



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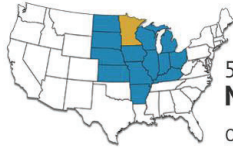
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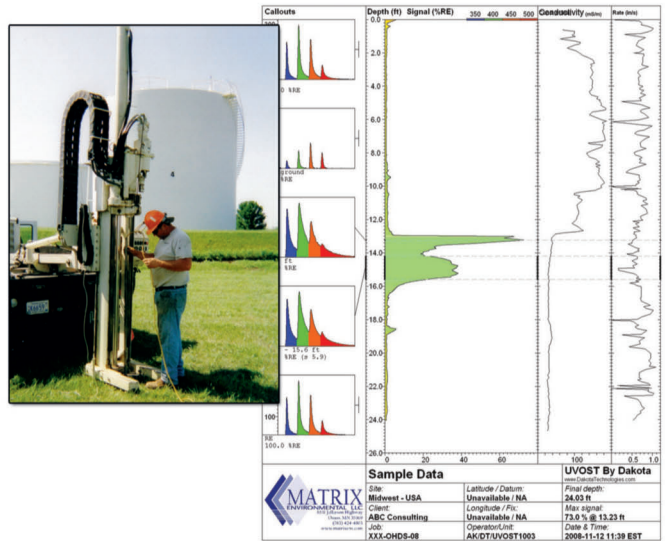
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