

**Wisconsin Groundwater Coordinating Council
Minutes from meeting held May 7th, 2010
Wisconsin Geological and Natural History Survey
3817 Mineral Point Road, Madison.**

Members Present: Todd Ambs (DNR); Kathy Pielsticker (DATCP); George Kraft (Governor's Representative), Ken Bradbury for James Robertson (WGNHS); Chuck Warzecha for Henry Anderson (DHS); and Jim Hurley for Anders Andren (UW-System).

Others Present: Emily Stanley (UW-Madison); Jim Vanden Brook and Jason Lowery (DATCP); Steve Gaffield (Montgomery Associates); Jeff Helmuth (DNR).

- 1) **Introductions and General Business** – The meeting began at 10:00 AM. The February 19th, 2010 meeting minutes were approved.
- 2) **DNR Water Division Leadership Change** – Todd Ambs reported that he would be leaving DNR and start at his new position heading up the River Network starting May 17th. The group assists local watershed groups with organizational development and substantive policy issues such as water conservation. Todd will be based in Madison but traveling much of the time. After 7 ½ years leading DNR's Water Division Todd said he will bring an appreciation of often under-valued public servants to his work with a wide range of advocacy groups. Todd noted that Bruce Baker will be the new Division Administrator.
- 3) **Technical Presentation: Occurrence and Generation of Nitrite in Ground and Surface Waters in an Agricultural Watershed** - Emily Stanley from UW-Madison's Center for Limnology presented results from her recently completed UW-funded project. The talk included an explanation of the forms (nitrate, nitrite, ammonium, dissolved organic), amounts typically found in Wisconsin streams and a discussion of how the forms and amounts of N vary across a land-use gradient. Ms. Stanley showed results from Mud Branch that showed NO₂-N levels often above the sub-lethal level of 0.1 mg/l. Nitrate is more dangerous to human health and aquatic life than is nitrite and is of great concern in streams. Emily's work in the East Branch Pecatonica River looked at two possible nitrate-generating processes; 1) aerobic ammonium nitrification; and 2) anaerobic nitrate reduction by using sediment assays with and without oxygen. The results showed an increase in nitrite production from nitrate without oxygen and no increase from ammonium with oxygen. Furthermore, assays done with silt produced much more nitrite than those with gravel or mixed sediment. Emily concluded that nitrite isn't likely to be produced until very late in the flowpath where NO₃-rich water enters the hyporheic (and possibly riparian) zone where there is a predominance of post-settlement silty sediments. This reinforces the benefits of restoration efforts that seek to remove cultural sediment from streambanks and adjacent areas thus reducing the amount of silty soils and also allowing more aerobic conditions near the streams.

Ken Bradbury noted that sediment removal could also reduce nitrate and phosphorus sinks. Todd Ambs noted that a numeric standard for nitrogen might be proposed for surface water in the future and asked how such a standard would be set. Emily replied that a standard could be set but it would be very difficult to achieve. She thanked the UW for funding and DNR's Bob Hansis for his help on the East Branch Pecatonica work.
- 4) **Joint Solicitation: FY 11 update, plans for FY 12** – Jim Hurley and Jeff Helmuth reported that contracts were being written for FY 11 projects. Jim anticipates a somewhat earlier timeline for the FY 12 solicitation process. Jeff will begin the DNR research and monitoring priority revision process in July.

- 5) **Subcommittee Activities Report** – Jeff Helmuth reported that none of the subcommittees had met since January. The Education Subcommittee is planning to meet in late May and will address the “Pathogens in Groundwater” fact sheet as well as other issues.
- 6) **Plans for 2010 GCC Report to the Legislature** - Jeff Helmuth presented a proof-of-concept document demonstrating a proposed new format for the Report to the Legislature. The proposed report document is much shorter than in past years and features numerous links to Internet sites containing background information. Todd Ambs suggested using prominently displayed maps (e.g. to show project locations), and short videos on specific topics. George Kraft suggested more discussion of programmatic gaps and also suggested giving a more solid assessment of the condition of the resource rather than focusing on recent project results. Jim Hurley suggested trying to tie together successful resource evaluation and policies efforts. Todd also suggested using GovDelivery, a digital communication provider that maintains lists of government-to-citizen email addresses, as a mechanism for distributing the report to the public. The new format for the report was unanimously approved. [Note: since this meeting I’ve received positive feedback on the concept of the web-based report from the Clerks of the Assembly and the Senate]

7) **Agency Updates**

DATCP – Kathy Pielsticker and Jim Vanden Brook reported:

- Kathy continues to fulfill duties as both Director of the Bureau of Land and Water and Division Administrator.
- DATCP is issuing a special order for simazine for an area near Spring Green that is within an atrazine prohibition area.
- ATCP 34 (Clean Sweep) is going to the board.
- Nutrient Management funds were lapsed to fill budget shortfalls but nutrient management planning is still occurring. It is required for about 18,000 farms. There is a growing need to understand the effects of nutrient management.
- The Working Lands Program is implementing the new Purchase of Agricultural Conservation Easements (PACE) program to provide up to 50% of the cost of purchasing agricultural conservation easements. Land with an agricultural conservation easement cannot be developed for any purpose that would prevent its use for agriculture. DATCP is working with local governments to purchase easements from willing landowners. Application forms are due June 1, 2010.

DHS – Chuck Warzecha reported:

- Staff are working with DNR on Cycle 9 of the NR 140 groundwater standard setting process. This cycle’s proposed revisions were tabled by the Natural Resources Board (NRB) until not later than August 2010 due to discussion at the NRB focusing on development of the aluminum standards.
- Work continues on the Environmental Health Tracking project where there is a need for background levels of specific contaminants in groundwater.
- DHS will also be working on projects related to climate change, viruses in groundwater, and a follow-up study of wells contaminated during the 2008 floods.

WGNHS – Ken Bradbury reported:

- The survey’s website traffic spiked as a result of interest in the recent meteorite.
- An NSF grant has been received for downhole physical imaging.
- The Dane County groundwater flow model is being updated with the regional planning commission and USGS. The new model will be state-of-the-art including features such as lakes,

transient recharge and automated parameter estimation.

- Groundwater is becoming increasingly scarce in Taylor County where crystalline bedrock is close to the surface. Recent droughts have exacerbated groundwater quantity problems. Now the water needs of the proposed North Breeze Dairy with 4,000 cows south of Medford has county residents concerned that they may need to consider a pipeline to Wausau to meet their water needs.
- Studies are occurring in Iowa and Columbia Counties. Deep coring is being carried out in Sheboygan County.

UW –WRI – Jim Hurley reported:

- WRI staff have been heavily involved with the Water Resources Working Group of the The Wisconsin Initiative on Climate Change Impacts (WICCI). The Working Group is producing the water resources part of the state’s first adaptive assessment report to be released in Fall 2010.
- The WRI will be producing their 5 year report this year. The budget will be about \$1 million.
- The national Sea Grant budget will increase about \$5.8 million due to aquaculture being absorbed. There will be an effort to build outreach on urban aquaculture and aquatic invasives.
- There will also be Sea Grant work on costal adaptation to climate change.

Governor’s representative – George Kraft reported:

- Groundwater Center staff have developed a tool for displaying private well test results geographically. They plan to offer a version on their website soon. [Note: the GCC Education Subcommittee saw a presentation on this tool and offered input at their 5/26/2010 meeting.]
- George has completed his “Understanding the Effects of Groundwater Pumping on Lake Levels” project report and has given groundwater quantity presentations to several groups including the Waushara County Board. Some positive press has resulted.

DNR – Todd Ambs reported:

- Staff are preparing seven rule packages to support the Great Lakes Compact. [Note: The following were on the May 26th NRB agenda to request hearing authorization: 1) Creation of Chapter NR 850 and revisions to Chapter NR 142 relating to water use fees; 2) Request authorization for public hearing for creation of Chapter NR 852 related to water conservation and water use efficiency for water users; and 3) Request authorization for public hearing for creation of NR 856 and revisions to NR 142 relating to water use registration and reporting.]
- New drinking water rules will require all municipal systems to disinfect. This is a direct result of research by Mark Borchardt and others in the state.
- The Groundwater Legislation failed to pass before the Legislature ended its session. Todd hopes the framework can be salvaged for another attempt next year. Todd noted that the concept of GCC involvement was well received across party lines in the Legislature.
- EPA is looking at requiring more monitoring at water systems with potential contaminant sources in source water areas.
- EPA will implement a Phosphorus water quality standard in 2011 if DNR doesn’t implement one in 2010. As an example of how this might be done, EPA split Florida into ecoregions and implemented different standards in each ecoregion.
- Waukesha’s water diversion application is expected to be delivered to the DNR [The application arrived on May 20th]. The review will take approximately 90 days.

8) Adjourn and Next Meeting – GCC members wished Todd well. The meeting was adjourned at 12:10. The next meeting will be on August 27th at DNR.

Respectfully submitted by Jeff Helmuth