

**Wisconsin Groundwater Coordinating Council**  
**Minutes from meeting held November 13<sup>th</sup>, 2009**  
**Board Room, Department of Agriculture, Trade & Consumer Protection**  
**2811 Agriculture Drive, Madison.**

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

**Others Present:** Joel Creswell (UW-Madison); Ken Bradbury (WGNHS); Jim Vanden Brook & Sara Walling (DATCP); Jon Heberer (COMM); Steve Gaffield (Montgomery & Associates); and Eric Ebersberger (DNR);

**1) Introductions and General Business** – The meeting began at 10:00 AM. Jamie Robertson chaired the meeting. Introductions were made. The August meeting minutes were approved.

**2) Update on the Legislative Groundwater Workgroup** – Eric Ebersberger reported that the Groundwater Work Group held a series of public meetings from September 2009 through early November 2009 on a variety of groundwater quantity related issues. The Work Group also organized a field trip in October to various sites (including: the Town of Oxford in Marquette County to the site of a proposed bottling facility; to the Del Monte Foods plant in Plover; the Little Plover River; and to the Rural Water Association office in Plover.) The Work Group chairs (Sen. Miller & Rep. Black) are preparing a "discussion paper", which they will release and discuss at a future work group meeting (potentially in December). Presumably, the discussion paper will describe suggested "next steps" in groundwater quantity regulation beyond the provisions in 2003 Wisconsin Act 310. Some topics to be addressed in the discussion paper and potential future legislation include:

- Groundwater Management Area (GMA) designation;
- Development of water budgets for designated GMAs
- Groundwater Management Plan development in GMAs
- Additional regulation of withdrawals within GMAs
- Monitoring and enforcement of water withdrawal regulation within GMAs
- Designation of Groundwater Attention Areas (GAAs)
- Monitoring within GAAs
- Potential additional regulation of water withdrawals outside GMAs
- Additional data gathering and groundwater model development

The discussion paper will likely identify a role for the Groundwater Coordinating Council in several areas, including: GMA designations; GAA designation; and water budget development.

Eric commented that he would keep the GCC posted of any new developments that he becomes aware of.

**3) Technical Presentation: Methylmercury production in a groundwater-dominated wetland** – Joel Creswell presented research on methylmercury production in the Allequash Creek Wetland, near Boulder Junction, WI. Methylmercury is produced primarily in the hyporheic zone, the several centimeters of sediment just below the streambed where there is active exchange of surface and groundwater. Sulfate-reducing bacteria, the microbes primarily responsible for methylating mercury, require a set of chemical conditions that do not exist in surface water or groundwater, but are provided by the mixing that occurs in the hyporheic zone.

The data presented represents the past year's field campaigns, showing measurements of methylation and demethylation rates, methylmercury and total mercury concentrations, dissolved organic carbon, and mercury speciation by ionic charge. These data reveal several trends: 1) methylation rates vary by season and peak in the summer, when water temperatures are highest; 2) the system is highly dynamic, with chemical conditions, and also methylation rates changing frequently; 3) the majority of the methylmercury present in the system was produced in situ; and 4) groundwater fluctuation is the primary driver of the hyporheic zone chemistry that controls methylation.

In future work, microcosms will be constructed in the laboratory that will mimic the conditions in the wetland. Variations of the geochemical drivers of methylation will be changed in order to see their effect on methylmercury production. In addition, probing the bacterial community to determine whether sulfate-reducing bacteria, iron-reducing bacteria, or some other community are primarily responsible for methylation at this site will occur.

**4) Update on FY 11 Joint Solicitation** – Jim Hurley reported that the Joint Solicitation request for proposals has been distributed. The deadline for electronic proposal submission is December 2<sup>nd</sup>. There is approximately \$350,000 that could be used for groundwater research and monitoring funding this year - \$155,000 from UW-System funds and possibly \$190,000 from DNR funds. In addition, \$70,000 of the UW Water Resources Institute's USGS 104(b) money for climate change work will also be included under a separate call for proposals within the Joint Solicitation. The USGS funding is also in the last year of a five year cycle and will have no overhead costs associated with it. The hope for this funding use is to act as a pilot for future years of climate-related water resources funding. Projects funded with USGS funds will have a startup date of March 1, 2010.

## 5) Agency Updates

DATCP – Kathy Pielsticker reported:

- The Clean Sweep program has been reinstated by the Legislature (\$750,000) for 2010.
- Atrazine has seen a fair amount of press nationally. The agency is reviewing if any new prohibition areas should be proposed.

UWS - James Hurley reported:

- \$6.5 million in funding was set for the national Water Resources program for the upcoming year. This includes base funding and \$1 million for the national competitive grants program (for which UW-WRI coordinates peer and technical review).
- For Sea Grant, the conference committee funding mark has not been set. If there is an increase for FY 2010 it appears that most of the increase will come in aquaculture.

DHS – Henry Anderson reported:

- EPA's Great Lakes Restoration Fund has approximately \$475 million available. DNR is the probable lead with other agencies collaborating.
- Staff are involved in the proposed revisions to NR 140 and expect more work as the DNR moves forward with the proposal.

WGNHS – Jamie Robertson reported:

- The website has now added Wisconsin Open File Reports. These reports represent previous studies that were only partially published or never published.
- Jamie also commented that WGNHS has also been involved in the Groundwater Quantity meetings.

DNR – Mike Lemcke reported:

- Proposed revisions to NR 140 Groundwater Standards will be taken out to public hearings in mid December.
- Proposed revisions to NR 151 regarding Runoff Management was approved to go out to public hearing. Presently, no hearings have been scheduled.

**6) Meetings for 2010** - Members discussed the current format of the meetings and start time. All agreed that the current format should be used for future meetings. Meetings will start at 10am.

- February 19, hosted by DATCP
- May 7, hosted by WGNHS
- August 27, hosted by DNR
- November 12, hosted by DOT

**7) Adjourn and Next Meeting** – The meeting was adjourned at 12:10. The next meeting will be held at 10:00 on February 19 at the Department of Agriculture, Trace and Consumer Protection, 2811 Agriculture Drive, Madison.

Respectfully submitted by Mike Lemcke