

Wisconsin Groundwater Coordinating Council
Draft Minutes of Meeting held August 2, 2013, 10:00 – 12:00
Wisconsin Department of Natural Resources, Madison, WI

Members Present: Ken Johnson (DNR); Henry Anderson (DHS); James Robertson (WGNHS); John Petty (DATCP); and Trina McMahon for James Hurley (UWS).

Others Present: Stan Senger (DATCP); Jon Meiman, Rob Thilboldeaux, Mark Werner, Roy Irving, Ryan Wozniak, Megan Christenson, and Jeff Phillips (DHS); Steve Loheide (UW-Mad); Michael Timm (UW-Mil); Mel Vollbrecht, Bill Phelps, Dave Johnson, Brian Austin, and Jeff Helmuth (DNR).

1) General Business –The minutes of from the May 3rd, 2013 meeting were approved as written.

2) Presentation: *Climate Change Exacerbates Rain-related Disease Risk*

(<http://dnr.wi.gov/topic/Groundwater/documents/GCC/Minutes/talkTimm201308.pdf>) - Michael Timm (Science Communication Specialist, Center for Water Policy, UW-Milwaukee, School of Freshwater Sciences) summarized probable climate-change scenarios, the increased potential for water-borne disease outbreaks, infrastructure problems, and recommended policy solutions. Timm also shared 10 recently-compiled science policy briefs based on the research of a Center for Disease Control Climate Hazard Workgroup on the impacts of climate change to public health with respect to waterborne disease risks in Wisconsin (<http://home.freshwater.uwm.edu/mcLellanlab/736-2/>). There was discussion of the magnitude of the infrastructure problem and potential stormwater solutions.

3) Technical Presentation: *Development and Application of a User-Friendly Interface for Predicting Climate Change-Induced Changes in Evapotranspiration*

(<http://dnr.wi.gov/topic/Groundwater/documents/GCC/Minutes/talkLoheide201308.pdf>) – Steve Loheide (Civil and Environmental Engineering, UW-Madison) reported on this UW-funded project from 2010-2011. Loheide discussed the effects of forecasted increased evapotranspiration (ET) on groundwater recharge, noting that the effects would be greater on groundwater than on surface water. An innovative approach was used to incorporate stomatal response to climate factors into ET calculations. Loheide’s ET model was calibrated by Eddy covariance flux measurements at Ameriflux Sites. Subsequent modeling supports conclusions that: 1) ET is expected to increase across the state, unless precipitation decreases substantially; 2) Precipitation changes will drive ET changes; and 3) Water availability will likely decrease.

4) 2013 Report to the Legislature –Helmuth gave an overview of comments and changes made since the third draft of the report, including addition of detail regarding health impacts of pesticides. Henry Anderson moved that the report be approved. The motion was seconded and passed. Subsequent discussion focused on improving the report format for FY 2014. There was agreement to continue moving towards a “dashboard” approach with simple graphics comparing past and present groundwater indicators. The Nitrate Data Workgroup was asked to brainstorm on how to present available data in this format. It was suggested that the topic of health effects of groundwater contaminants be addressed in a separate section of the report. DHS will coordinate a new look at this topic for next year. It was also suggested to change from separate pdf files to more web-based content.

5) Agency Updates

DHS – Anderson reported that DHS sent DNR a letter recommending an interim health advisory level for individual drinking water advisories for molybdenum on this day.

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WGNHS – Robertson reported:

- The Dane County groundwater flow model is in the finishing stages
- The Madison virus study is on-going
- The Geothermal Resources study is concluding
- Long-term questions on frac sand mining are not answered and need more work.

DATCP – Petty and Senger reported:

- Isoxaflutole regulatory talks are on-going with Bayer CropScience who would like to market it for the 2014 season, but problems remain due to its toxicity to other plants including potatoes.
- Field edge monitoring, targeted sampling, and exceedence sampling are on-going. A new hydrogeologist on staff will make expanding this work possible.
- A swimmer's rash complaint in Manitowoc County appears to have been caused by misapplication of 2-4-D to a lake.
- UK researchers are initiating a symbiosis between cereal crops and bacteria to help cereals access nitrogen from the air to improve yields. If successful this could have large impacts on nitrogen application and groundwater quality.

DNR – Johnson reported:

- A recent Supreme Court decision that the public trust doctrine does not apply to areas above the ordinary high water mark impacts how DNR regulates high-capacity wells. The ruling is a change from the 2011 Lake Beulah decision that the DNR must consider the impact on the state's groundwater when considering issuing a permit for a high-capacity well.
- A collaborative modeling study on the Little Plover River Area by the DNR, WGNHS and USGS is moving forward with input from local groups. The goal of the modeling is to predict how seasonal and climate variations, and management options affect water resources in the basin. The effort is essential for cost-benefit analyses and formulating trade-offs between competing demands.
- The Water Division is developing a strategic analysis for water management and protection in the Central Sands Region which will address the cumulative impacts of groundwater pumping.
- DNR is working with WGNHS and UW-Milwaukee investigators to understand the occurrence and transport of molybdenum in the problem areas in Waukesha and Racine Counties.
- More wells have been found impacted by the Town of Jackson gasoline pipeline spill as the plume spreads.
- The nitrate demonstration project continues in Sauk and Rock Counties with a recent series of expert meetings to help refine the groundwater modeling and monitoring plan. Selection of the final sites should occur in the next month.

6) Adjourn and Next Meeting – The meeting was adjourned at 12:10. The next meeting will be on November 22nd at DATCP (2811 Agriculture Drive, Madison, WI).

Respectfully submitted by Jeff Helmuth