

Wisconsin Groundwater Coordinating Council
Minutes of meeting held November 22nd, 2013, 10:00 – 12:00
Wisconsin Department of Agriculture, Trade and Consumer Protection
Board Room, 2811 Agriculture Drive, Madison.

Members Present: Ken Johnson (DNR); James Robertson (WGNHS); Dan Scudder (DOT); Chuck Warzecha for Henry Anderson (DHS); John Petty (DATCP); Jim Hurley (UW-System), George Kraft – on conference phone (Gov. Rep.).

Others Present: Ken Bradbury (WGNHS); Lori Bowman, Stan Senger, Cody Cook, Trevor Bannister, Steve Martin, Rick Graham, (DATCP); Cheryl Buchwald (USGS), Mike Kakuska (Capitol Area RPC); Jill Jonas, Eric Ebersberger, Mat Diebel, Bob Smail, Mary Ellen Vollbrecht and Jeff Helmuth (DNR).

1) Minutes of August 2nd, 2013 Meeting – After an amendment clarifying that the Health Advisory Level (not the groundwater standard) for molybdenum is changed, the August 2013 meeting minutes were unanimously approved (motion by Warzecha, 2nd by Robertson).

2) Technical Presentations

Agricultural Irrigation in Wisconsin: Where, What, How Much and Why It Matters – Bob Smail, DNR Water Use Section (PowerPoint presentation at:

<http://dnr.wi.gov/topic/Groundwater/documents/GCC/Minutes/talkSmail201311.pdf>) Total groundwater use in Wisconsin in 2012 was just shy of 300 billion gallons. Agricultural irrigation surpassed municipal water supply as the largest volume groundwater user. After reviewing amounts and trends in groundwater use by economic sector, Smail described the Central Sands Strategic Water Analysis. The effort will summarize the state of the science of water use, existing management efforts and future scenarios. The analysis includes a public process beginning with a public comment period on the project scope this December. Water Use information including 2011 and 2012 water use reports is available on-line by typing “water use” in the search box at dnr.wi.gov or going to <http://dnr.wi.gov/topic/WaterUse/WithdrawalSummary.html>. Through follow-up questions, members heard about DNR and the U.S. Geological Survey (USGS) coordination of data sharing and analysis.

Ecological Limits of Hydrologic Alteration in Wisconsin Streams – Matt Diebel, DNR Science Services Bureau (Powerpoint presentation at:

<http://dnr.wi.gov/topic/Groundwater/documents/GCC/Minutes/talkDiebel201311.pdf>). Diebel presented the results of model development work to help determine water temperature, stream flow, and fish community response to changes in stream flow. With adequate data, the model predicts the presence or absence of fish species in stream reaches. Hydrogeologic models are still needed to predict the groundwater-surface water relationship. Insufficient stream gauge data, particularly for small streams, does not allow prediction of flow changes as a result of groundwater withdrawals. The model is useful as a screening tool to identify stream reaches where the groundwater withdrawal impacts on surface water, and physical habitat features, should be analyzed in greater detail to avoid significant impacts. The product will be available in the future on the Surface Water Data Viewer at dnr.wi.gov. Diebel’s work is funded by the DNR through the Joint Solicitation.

3) Joint Solicitation Update – Jim Hurley reported that based on early submissions about 20 groundwater research proposals are expected by today’s deadline for response to the 2015 Joint Solicitation.

4) Dashboard Approach Update – Jeff Helmuth shared color-coded maps of the rate of increase in groundwater nitrate levels produced by Kevin Masarik and statistics experts at UW-Madison that could be used as reporting dashboards. Options include clickable-county state maps, and example well histories

were discussed. Helmut described similar approaches that could be used for groundwater levels and rate of use, as well as wells constructed, sampled and abandoned. GCC members supported the overall approach and requested mock-ups of dashboards for the Report to the Legislature for review at the February 2014 GCC meeting.

5) Agency Updates

DATCP – Lori Bowman reported that DATCP expects to complete its response to BayerCrop Science on isoxaflutole by year-end. She notes that agricultural groups continue to express interest in review of atrazine prohibition areas. Bowman described the potential groundwater impacts of proposed changes to load limits for roads set by DOT. Smaller loads will result in storage and mixing outside of protective sites that are designed for storage and mixing, increasing the potential for spills and leakage. DATCP and DOT agreed to review the issue.

WGNHS – Jamie Robertson reported that a Little Plover River modeling effort examining the groundwater-surface water interaction with USGS for DNR is underway. A 1000-foot-deep well in Price County has yielded substantial quantities of good-quality water, indicating that groundwater flow through deep fractures may be more significant than previously thought. Ken Bradbury noted that Dr. Chunmiao Zheng, a professor of hydrogeology at The University of Alabama, received the 2013 M. King Hubbert Award from the National Ground Water Association for major science contributions to the knowledge of groundwater. Dr. Zheng began his work leading to the development of the industry standard contaminant transport groundwater model through interagency groundwater efforts as a student in Wisconsin.

DOT – Dan Scudder reported that normal permitting and wetland banking work continues.

DHS – Chuck Warzecha reported that DHS is reviewing potential refinements to the advisory language in response to new studies on health effects of nitrate (not changes to the standard itself). He also asked GCC members to consider a new GCC strategic priority to encourage work analyzing the linkages between groundwater-related data sets and modeling results similar to the earlier technical presentations.

UWS – Jim Hurley reported on a new web page of consolidated information on water scientists throughout the UW System. It can be found at <http://water.wis.edu>. In addition, he named new water scientists who are filling several Sea Grant staff positions.

DNR – Ken Johnson reported that DNR's nutrient reduction strategy was approved by the Natural Resources Board. The strategy has already showed some success; the state is about half-way to its goal of 40% reduction of phosphorus loading in the Mississippi Basin. Guidance on spray irrigation is planned to be completed by the end of the year. Mary Ellen Vollbrecht described upcoming work on the groundwater annex to the Great Lakes Water Quality Agreement, indicating that she will keep GCC members posted.

6) Dates for 2014 GCC meetings –All meetings will be on Fridays starting at 10:00 a.m.

- February 28th at UW Aquatic Sciences Center, Goodnight Hall
- May 2nd at DOT
- August 8th at DNR
- November 21st at DATCP

6) **Adjourn and Next Meeting** - Robertson moved (Scudder 2nd) to adjourn. The next meeting will be on February 28th at the UW Aquatic Sciences Center in Madison.

Respectfully submitted by Jeff Helmut