

CITIZENS (WOOD COUNTY) GROUNDWATER GROUP MEETING

DATE: Monday, October 18, 2021
TIME: 2:00 p.m.
LOCATION: In-Person (Wood County Courthouse, Room #114) & Teleconference via WebEx

Present: Scott Bordeau, Sandy Cain, Colette Camerano, Rhonda Carrell, Catherine Christenson, Bill Clendenning, Bruce Dimick, Russ Groves, Tamas Houlihan, Grafton Hull, Keith Iverson, Ben Jeffrey, Kim Keech, Karen Knotek, Bill Leichtnam, Matt Lippert, Robert Sorenson, Carla Romano, Ken Winters and Tim Wuebben.

1. **Call Meeting to Order:** Chair Bill Leichtnam called the meeting to order at 2:02 p.m.

2. **Public Comment:** None.

3. **Speaker – Catherine Christenson, “UW-Madison Progress Report: Nitrate Testing in Wood & Juneau Counties”**

Catherine Christenson is a UW-Madison Grad Student in the Department of Geoscience in Hydrogeology.

Highlights of “UW-Madison Progress Report: Nitrate Testing in Wood & Juneau Counties”:

- Water Security in Armenia, WI: Modeling for informed decision-making in a Nitrate-impacted watershed.
- Funded by Wisconsin Department of Natural Resources (DNR) Groundwater Research and Monitoring Program in cooperation with the Armenia Grower's Coalition (AGC).
- Project Goals: Establish groundwater level and multi-level Nitrate data collection network. Build a 3-dimensional groundwater model to understand depth of Nitrate contamination and flow path directions called MODFLOW. Create a geospatial database that allows well-owners in a nitrate-impacted watershed to view recommendations that are customized to the location of their well.
- Recommendations made to the Wisconsin Department of Natural Resources (DNR) who are the funding and regulatory agency. Final project completion report targeted for completion in late summer 2022.
- Test wells installed in fall 2020. Sampled in late spring 2021 and will continue quarterly. Data is on each well. Well depth taken at shallow, intermediate and deep.
- Early Data Collection: Geoprobe water-sample collection and analysis at various depths. Geoprobe drilling at two locations: ML1 (Armenia Town Hall) and ML3 (North). ML1 found low-level nitrates all the way down to 80' depths. ML3 found nitrates up to 35 ppm all the way down to 80' deep.
- Monitoring Infrastructure (collection network): Eight (8) water table (WT) wells (8'-40' deep). Water table wells are located just below the surface of groundwater. Five (5) multilevel (ML) wells (20'-120' deep). Multi-level wells are 2 or 3 wells in that location drilled at various depths (shallow, intermediate & deep) collecting nitrate samples. The standing wells give you the highest quality of data if you have separate wells screened at these different levels.
- Nitrate Measurement Trends: Nitrates consistent at each multilevel well so far. Higher nitrate level in eastern portion versus western wells. Trends match those seen during drilling.
- Other field data collection (Campaign: June 7-11): Interaction with surface water: stream elevations and flows. Interaction with pumping, precipitation: Long-term well pressure measurements. Speed of flow: Aquifer property determination via slug tests.
- Water Table Measurements: General regional decreases in water table elevation the South and East. Locally flow appears affected by Petenwell shoreline. Caution: Water table elevation contours are for visualization purposes only and not from a hydraulic model.
- Groundwater Flow Model (in progress): Software called MODFLOW is the U.S. Geological Survey modular finite-difference flow model, which is a computer code that solves the groundwater flow equation. Hydrogeologists to simulate the flow of groundwater through aquifers use the MODFLOW program incorporating groundwater levels and aquifer information. Boundary conditions: Wisconsin River, Yellow River and Hemlock Creek. Recharge model (soil-water-balance) include precipitation, land use, soil type and temperature.

Discussion comments:

- Groundwater flows downhill. Nitrates elevated more downhill.
- High capacity wells impact flow direction temporarily.
- Pesticides not part of research.
- Nitrate levels generally higher in the fall versus the spring.

4. **Correspondence/Updates/Handouts/Reports:**

Bill Clendenning shared that nitrate levels found as high as 24 ppm in parts of the Town of Grand Rapids. Town of Grand Rapids is the 3rd largest community in Wood County and 11th largest town in Wisconsin. All municipalities in Wood County received funding from the American Rescue Plan Act (ARPA). Bill Clendenning feels that American Rescue Plan (ARPA) funding used for Clean Water in Wood County. "Clean Water" referendum passed in Wood County in the April 6, 2021 election.

Motion by Bruce Dimick to request Wood County Health Department and Wood County Land & Water Conservation Department investigate the extent in Grand Rapids of nitrate pollution of rural wells. Second by Rhonda Carrell. Motion carried unanimously.

A suggestion made that Bill Clendenning and Bill Leichtnam talk to Wood County Corporation Counsel and the Wood County Board Chair to tap into the American Rescue Plan Act (ARPA) funding for water testing in Wood County.

Motion by Rhonda Carrell to direct Bill Clendenning and Bill Leichtnam to talk to Wood County Corporation Counsel and Wood County Board Chair to request American Rescue Plan Act (ARPA) funding be allotted for purpose of water testing in all of Wood County. Second by Bruce Dimick. Motion carried unanimously.

Bruce Dimick shared that the Wisconsin Manufacturers and Commerce lobbying group has initiated a lawsuit to undermine the Wisconsin Spills Law. The Spills Law states, "Requires anyone who causes, possesses or controls hazardous substance that was discharged into the environment to take action to restore the affected air, land and waters. Immediate reporting the DNR is required, and the law applies equally to a recent spill or to old contamination newly discovered". The law has been in place since 1978. The Spills Law helps protect the environment.

Bill Leichtnam shared the following:

- River Alliance of Wisconsin membership dues expired 8/25/2021. The new director is Allison Werner. 2021-2022 membership dues is \$250.
- Article "Fertilizer Research Council Funds Over \$100,000 for UW Projects" – Researchers use funding to study soil management, soil fertility, plant nutrition, surface and groundwater quality that promote the correct use of fertilizer.

Website link: https://datcp.wi.gov/Pages/News_Media/20211011FertilizerResearchCouncil.aspx

5. **Action Items proposed by Citizens (Wood County) Groundwater Group**

Actions proposed by citizens that would go to the Conservation, Education and Economic Development Committee of the Wood County Board. Citizens have access to their board.

6. **Roundtable**

Ken Winters – Has a pesticide water issue. Installer suggested a carbon block filter that replaced a sediment filter for his whole house filtration system.

7. **Announcements of members / visitors (upcoming parallel events / meetings)**

Portage County Groundwater Citizen Advisory Committee – The next meeting is scheduled for Thursday, October 21st, 7:00-9:00 p.m. at Portage County Courthouse Annex in Conference Rooms 1 and 2. The

committee is comprised of one primary representative and/or one alternate from each of the municipalities in Portage County.

8. **Future Speakers:** Please contact Bill Leichtnam or Bruce Dimick with any suggestions for speakers.

November – Open

December – Dennis Hancock, USDA Researcher

9. **Agenda Items for next meeting**

- a. River Alliance of Wisconsin membership dues
- b. Wisconsin Spills Law

Agenda items should be submitted to Bill Leichtnam or Kim Keech by the second Monday of the month.

10. **Next Meeting** Meetings will be the third Monday of each month @ 2:00 p.m.

The next regular Citizens (Wood County) Groundwater Group meeting is scheduled for Monday, November 15th at 2:00 p.m. at Wood County Courthouse in Conference Room #114. A virtual WebEx option will also be available for this meeting.

11. **Adjourn Groundwater Group Meeting**

<i>Motion by Bill Clendenning to adjourn at 4:01 p.m. Second by Rhonda Carrell. Motion carried unanimously.</i>

Notes by Kim Keech, Planning & Zoning Office