



JOEL KITCHENS

STATE REPRESENTATIVE • 1ST ASSEMBLY DISTRICT

TO: The Assembly Committee on Environment and Forestry
FROM: Representative Joel Kitchens, 1st Assembly District
DATE: February 4, 2016
RE: Testimony in Support of Assembly Bill 822

The karst geo-region of Wisconsin is characterized by shallow soils over limestone bedrock. Underground streams flow within the bedrock, and sinkholes and fractures in the bedrock act as conduits to the surface, allowing pollutants to flow freely into the groundwater. The Karst region forms a “V” on the map of Wisconsin and includes all of Eastern Wisconsin. It is particularly problematic in Northeastern Wisconsin where there is a very high concentration of dairy cattle and very little soil to act as a filter to remove contaminants from manure before they reach the groundwater. Kewaunee County has the highest concentration of dairy cattle per square mile in the state and has faced the most severe problems. Four townships- Red River, Lincoln, Casco and Luxemburg have a very high percentage of the private wells contaminated with fecal material.

Access to clean water is a basic right that most of us take for granted, and many people in this area are extremely distressed that they cannot feel safe drinking the water from their faucets. If this hearing were held in Kewaunee County, we would likely be here all day hearing the personal stories of people affected by this crisis.

Over the past 18 months, countless meetings have been held and the help of DATCP, DNR, USDA, EPA and other agencies have been enlisted to attack the problem. The DNR invested \$80,000 in conducting scientific testing of wells in the area to document the extent of the problem. Russ Rasmussen, the Administrator of the DNR Water Division, has organized and facilitated five workgroups that have met numerous times over the past six months in the county to attack various aspects of the problem. These workgroups are made up of DNR personnel and local government officials and stakeholders. The six workgroups are:

1. Short-term Solutions Workgroup: This group has the most urgent task. We must assure that every citizen in Kewaunee County has access to clean water while we work on a long-term solution to the problem.
2. Sensitive Areas/Best Management Practices Workgroup: This group is charged with organizing a set of guidelines for farmers to implement to avoid groundwater contamination. The work of this group is perhaps the most important and we expect these recommendations to be made public within the next month.
3. Compliance Workgroup: This group is working to assure that the Best Management Practices are implemented. The local government of Kewaunee County has made it clear that they wish to enlist the local farm community to adhere to these Best Management Practices voluntarily as opposed to forcibly. Several agricultural leaders are stepping forward to encourage the farm community to voluntarily comply with these recommendations. I support the will of the local government and the farm community to



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enact these practices voluntarily. If this effort fails, however, I believe we need to use other means to assure compliance.

4. **Communications Workgroup:** This group is charged with communicating this information to the public and encouraging cooperation.
5. **Alternative Technologies Workgroup:** This group is charged with exploring new technologies that might be a large part of the solution to this problem. The county has received a \$50,000 grant from the Energy Group at PSC to do a feasibility study for Project Phoenix, a hub-and-spoke treatment system whereby there would be communal manure digesters in several areas of the county that would receive manure via pipeline from multiple farms for treatment. The digesters would remove the great majority of the water from the waste along with the pathogens and the majority of the phosphorous. These digesters would produce energy and eventually the phosphorous and nitrogen would be able to be taken out of the area and sold commercially. These digesters would be privately owned and already at least two CAFO owners have committed to investing in this technology. A \$70,000 grant is available to assist in the implementation of Project Phoenix.

In addition to the work coming out of these workgroups, the county has taken several steps toward solving the groundwater contamination problem in Kewaunee County. Last April the citizens of every township in Kewaunee County passed by referendum the Groundwater Protection Ordinance which prohibited manure spreading between January 1st and April 15th in sensitive areas. This referendum passed with an 87% approval. Winter spreading is probably the most dangerous practice for our groundwater, as the manure tends to flush down the sinkholes when the snow melts.

The County Board of Supervisors recently approved the hiring of an additional staff person for the Land and Water Department. This person has extensive experience in reviewing Nutrient Management Plans. In the past, due to short staffing, the Kewaunee County Land and Water Department did not review the plans submitted by farmers for manure application. I believe this hiring will go far to assure that manure is applied to fields correctly.

As stated previously, the recommendations of the Short-term Solutions Workgroup are considered the most urgent of all the DNR workgroups. A kiosk has been set up at Algoma High School to provide clean water free of charge to those with unusable wells. AB 822 is the next step in the recommendations to come out of the workgroup. The Well Compensation Program provides assistance for owners of wells that have been contaminated by toxins as well as livestock fecal material. In the case of Kewaunee County, these owners must prove that their wells have been contaminated by feces by the presence of E. Coli in two well samples. Additionally, an MST sample is required to demonstrate that livestock is the source of the fecal contamination. These funds may be used by owners to replace, rebuild, treat or seal contaminated wells.



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AB 822 would raise the income level below which a family may be eligible for a grant from the Well Compensation Program from \$65,000 to \$90,000. Currently the grant is reduced by 30% of the amount that a family income exceeding \$45,000. This bill would raise that threshold to \$60,000. Currently the grant may not exceed 75% of the eligible expenses up to a maximum of \$9000. This bill would raise that limit to \$12,000.

Make no mistake, AB 822 is not a solution to the problem of groundwater contamination. It is merely a step in treating the symptoms as we work toward the ultimate solution. It will not be the last bill that I bring before this body to deal with this problem. It is a complex problem that will not be remedied by one simple bill.

We have a clear plan to deal with the groundwater contamination in Kewaunee County. We will implement the Best Practices that come out of the DNR workgroup. To the extent that it is possible, we will do that voluntarily, but it *will* be done. Additionally, the county will begin a thorough review of all Nutrient Management Plans so that we can be assured that overspreading in sensitive areas does not occur. If these changes do not result in dramatic improvement in our water quality, we will seek tougher restrictions on the Nutrient Management Plans, specific to the Karst region. We also believe that advances in technology will be invaluable in helping to solve this problem.

There is widespread acceptance that, for various reasons, Kewaunee County has not utilized current law to the extent possible to deal with groundwater contamination. Door County, to the immediate north, has a much larger conservation staff and much more strict enforcement. It would be premature at this point to request tougher laws dealing with manure management, when the current laws have not been used fully.

As previously stated, this is a complex problem that has built up over decades. When I began practicing veterinary medicine in Door County over 30 years ago, I heard stories from people whose tap water regularly ran brown in the spring when the snow melted. It will not be solved quickly, but it *will* be solved. For those who cannot drink the water from their faucet, it is very difficult to be patient. I ask you to please support AB 822 to help bring relief to the people of Kewaunee County. Beyond that, I hope that you will work together with me in the future to help solve this problem. While Kewaunee County is currently under the microscope, clean, abundant groundwater is important throughout our state. I beg you to please put politics aside and work in a bipartisan manner to address this vital issue. The health of the people of Kewaunee County depends on us.



Kewaunee County

LAND & WATER CONSERVATION DEPARTMENT

Good morning members of the Environment and Forestry Committee. My name is Davina Bonness and I am the County Conservationist for Kewaunee County testifying regarding Assembly Bill 822 and I encourage you today to support this legislation that addresses groundwater contamination.

I am here today as a voice for Kewaunee County landowners who currently cannot drink their water because of bacteria and nitrate contamination. I am here today as a voice to the ongoing research and progressive agricultural movement that has been occurring in Kewaunee County and ultimately, to be the voice for groundwater protection.

Kewaunee County is located in Northeast Wisconsin and is one of the leading dairy producing counties in the state. With approximately 167 dairies, we are home to 98,000 cattle, which produce over 650 million gallons of liquid manure annually. Currently, Kewaunee County ranks among the top 5 in Nutrient Management implementation with approximately 80% of the cropland having plans.

Intertwined with this agricultural dominant landscape are a growing urban sprawl and a unique Silurian dolomite "karst" bedrock aquifer that contains a complex system of cracks, sinkholes, fracture traces, and thin soils directly connecting surface water and land-use activities with the groundwater which residents solely rely on for drinking.

A number of research efforts have been done in Kewaunee County to evaluate the level of groundwater contamination. Some of these include:

- 2004 to Present, Kewaunee County started an ongoing voluntary testing program that shows a trend of approximately 29% of "tested" wells unsafe for drinking. However, in Lincoln and Red River Townships where a large percent of the landscape is karst bedrock, the percentages increase to 40% of "tested" wells.
- 2013-Present, Kewaunee County along with UW-Stevens Point are Investigating Intra-Annual Variability of Well Water Quality in Lincoln Township. In the first phase of this research, we found that changes in well water quality measured in individual wells and increased variability between wells seemed to coincide with the snow-melt and spring recharge periods when manure spreading is occurring.
- 2015-Current: The Department of Natural Resources funded an \$80,000 two year research study focusing on a randomized well sampling study and virus source testing. The first round of randomized samples was done in November 2015, of which 34% of tested wells were unsafe for drinking from either bacteria (coliform and/or E-Coli) and/or high nitrates. Virus testing will occur in spring 2016.

This research clearly demonstrates the well contamination issue Kewaunee County citizens are facing. This issue did not occur over night and will not be solved with a single solution. We need to work together to develop short-term and long-term solutions as well as utilizing to the full extent all the laws and regulations currently available to protect our groundwater aquifer, including NR 151 compliance and Nutrient Management planning.

Along with the strong local commitment of our County Board, Land Conservation Committee and local citizens to solving the groundwater issues in our County, we have been proactive in developing partnerships with the Wisconsin Department of Natural Resources, the Environmental Protection Agency, and Natural Resources Conservation Service to assemble state and federal workgroups to initiate planning processes to identify, define, and implement best management practices to work towards manure management and clean drinking water.

One of the top ranked Short-Term Solutions from the DNR local workgroup was to make revisions to the Wisconsin Well Compensation program, which included raising or removing income limitations so that homeowners can replace, rebuild, and/or treat their contaminated wells.

Furthermore, in 2014, the County Board unanimously passed the Public Health & Groundwater Protection Ordinance, which residents voted to approve on April's ballot by an overwhelming 87%. That Ordinance prohibits the mechanical application of wastes on less than 20 feet to bedrock from January 1st to April 15th. The County Board also developed a local Groundwater Task Force and increased funding in the Land & Water Conservation Department to hire a new employee who will be devoted to reviewing Nutrient Management Plans. In 2016, Kewaunee County received a \$50,000 grant to develop a comprehensive feasibility study regarding the development of a community based approach to manure management and methane recovery and are looking at numerous manure treatment systems to further reduce nutrient concentrations of manure that is land applied.

The Well Compensation program is not the end all solution to the groundwater contamination problem in Kewaunee County. I have often been quoted saying "digging a deeper well is an expensive experiment". In Karst topography, digging deeper does not always solve the problem; it too often only provides landowners with a temporary "band aid approach" to a safe source of drinking water while State, Local, and Federal agencies work together to implement on the ground Best Management Practices that will forever protect our groundwater from contamination sources.

I have personally sat in many houses testing homeowner's water for research in which they cannot drink because of bacteria or high nitrates. These people struggle daily to buy bottled water to make coffee, brush their teeth, or cook dinner. They constantly worry that while their children take a bath they do not put a wet washcloth in their mouth or accidentally ingest some water.

In conclusion, Kewaunee County has been extremely proactive in working on both short-term and long-term solutions and working with Government officials including Mr. Kitchens; however, they take time, money, and science.

I am encouraging all of you to support our efforts in Kewaunee County and vote for those who cannot drink the water and approve Assembly Bill 822.
