

November 15, 2023

To: Members of the Legislative Subcommittee on Water Policy

From: Jeffrey S. Broberg, LPG, Director of the Minnesota Well Owners Organization

Thank you for devoting so much time to the drinking water problems and the potential for agriculture to help solve our nitrate problems in the karst. It was good to hear the potential for progress. Still the focus must be on Public Health, and on addressing the imminent threat and the needs for thousands of households in Minnesota to have safe drinking water at their kitchen tap every day.

The USEPA demands are predicated on the Safe Drinking Water Act (SDWA) a public health regulation. Minnesota accepted all the responsibilities as the “Delegated Authority”, with “Primacy” for administering the act. We receive millions in Federal Funds for the work and must comply and provide the necessary services to protect drinking water for Minnesotans.

USEPA found ample evidence that Minnesota is in default of their SDWA responsibility to protect our underground sources of drinking water (UCDW) in the karst. We believe this is also true in the Central Sands and we have a similar risk from Arsenic in drinking water over a third of Minnesota. This gap is largely from a lack of capacity and funding that has left tens of thousands of households at risk without the protections afforded to community water supplies.

It should be noted that this is not an unfunded mandate because Minnesota already agreed to provide the actions demanded by the USEPA. The action before us now requires Minnesota to address the karst aquifers and those who rely on it's water.

The historic data trends tell a confusing story about declining water quality at the same time we have increased efforts to minimize nutrient loss on farms. The conflicting trends are hard to unravel until people recognize five factors:

- Drinking water quality is an immediate, everyday health concern. In our water screening clinics we find few will knowingly drink bad water.
- The age of groundwater is a function of the landscape and the rapid infiltration and flashy hydrology in the karst, and the land use legacy of 60-80 years of history. Some places in the karst infiltrate ALL the surface water in hours or days, in others the water is stored for centuries or millinea.

Minnesota geologists have measured some karst groundwater to be 5000 years old; this water that is pristine. In other areas the water in some kitchens turns muddy a few days after a rain and the water is polluted.

- Because every farm is different the combined scientific knowledge needs to be used, understood and used to adopt better management of private wells and the surrounding farms. Projects like the Root River Field to Stream Partnership use this approach, but they are our of resources.
- There is no groundwater measurement to show that recent conservation efforts are working to protect drinking water. We simply don't measure to see if green cover and perennial crops improve drinking water quality. All the groundwater, spring and drinking water quality data shows higher nitrates.
  - MNWOO is finding that most people never test their water and assume it is OK. The fact is that 80-90% of households with private wells do not know their water quality. All the karst data shows continuing decline. We hope that the Ag-sector can provide proof that the new efforts are working.
- Minnesota is now told to recognize and act on our imminent threat. The State response is due in just 17 more days. This plan must include coordination, a census of the wells and impacted households, public communication, routine water screening and testing, water treatment or alternative water supplies and risk management plan to protect, enhance and restore our drinking water aquifers. These public health measures need support of the Legislature, funding from the Federal Government, leadership from state agencies, and the resources in building capacity and funding for Public Health and continuing conservation.
- SE Minnesota is not the only area where our Public Health efforts to protect drinking water have fallen behind; the Central Sands suffer similar problems with nitrate and pesticides, and 1/3 of the state has high levels of Arsenic in drinking water. By some estimates 20% of private well owners are at risk in these areas.
  - This public health initiative needs to move drinking water in to a triage and find the best way to help households have safe drinking water at the kitchen sink.

Thank You

J. S. Bohm