



## MINNESOTA WATER WELL ASSOCIATION

Representing Minnesota's Water Well Drilling Industry

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September 6, 2023

To: Subcommittee on Water Policy

Fr: Minnesota Water Well Association

Re: Smart Water Policy and future Sustainability of Deep Aquifers

The Minnesota Water Well Association has for over 100 years been the Association of groundwater professionals providing water to the citizens of Minnesota. This industry has worked with, and at times in conflict with, policy from the state in regards to our most precious resource, groundwater.

As Minnesota continues to pursue growth in population and agriculture, we find ourselves in a time where focus is changing to “future sustainability” in the face of climate change, reduced reliance on fossil fuels and turning to the emerging green technologies. We as an industry and State must look at how our resources are used so they continue to be available, reliable, and affordable. We should also consider how we can be thought of as leaders in policy and application for others to follow.

For some time, the MWWA has been looking at how aquifers are used and defined in State Statute and has determined the current practices relating to deep aquifers are not practical nor sustainable.

To help improve the longevity of these precious aquifers, we need to take a more holistic approach when deciding which water resources we should be allocating from which aquifer. Does it make sense to use our highly treated, deep aquifer water for lawn irrigation, car washes and other high volume, non-potable water uses? Are there other, more suitable resources to use for these applications?

Using groundwater from the deeper aquifers for non-potable uses has several negative impacts:

### ***Environmental***

- 1. Excess energy, water treatment chemicals, and resources required to make potable water produces a large carbon footprint*
- 2. Depleting the deeper cleaner aquifers for non-potable water use is wasteful and not a smart use of our most precious resource.*

### **Economic**

- 1. Treating water to potable standards is expensive and resource intensive for municipalities. Water treatment facilities have incredible upfront expenses and with the changes in the constituents we treat can become obsolete quickly. As more water passes through the infrastructure, the cost of operation and expansion can increase significantly.*
- 2. Once a municipality depletes a deep aquifer, the existing wells, treatment plants, and infrastructure will be obsolete as they're forced to drill deeper (if possible) to find different quality and quantity of water to maintain usage levels.*
- 3. Municipalities may begin to experience a water war amongst each other and with nearby private well owners.*

We have an opportunity to be smarter about our groundwater consumption. For high density populations, municipal water systems are required to deliver safe potable drinking water to homes and businesses. However, the process of extracting, treating, and piping water for potable use is energy intensive and costly. One primary cost driver is how extensive the treatment process is to remove contaminants from the groundwater and to ensure that water is safe after it travels through miles of pipelines to homes and businesses.

To preserve our most valuable resource for ALL Minnesotans, the Minnesota Water Well Association (MWWA) strongly recommends:

1. Municipalities should use shallow aquifers for non-potable use within their boundaries (green space irrigation, golf course, etc.) to reduce the demand on deeper aquifer use and allow for quicker recharge after summer demand.
2. Municipalities should uniformly allow its citizens and businesses to use shallow wells for non-potable uses.
3. Encourage the DNR to educate municipalities on how they can enact groundwater resource plans that focus on proper resource allocation.
4. Use shallow aquifers for non-potable use, which will dramatically lower our carbon footprint, protect deeper aquifers, reduce the aquifer recharge cycle and reduce vertical contaminant migration.

Guidance must come from the State Agencies and legislative action to ensure Minnesota and her citizens continue to have sustainable POTABLE water.

The MWWA is asking the Subcommittee on Legislative Water Policy to work with the DNR to begin looking at the introduction of Green Technology and reduced carbon exposure when implementing and enforcing water policy. That the DNR begin encouraging shallow aquifer use for non-potable irrigation rather than Deeper Aquifers.

### ***About the Minnesota Water Well Association***

*The Minnesota Water Well Association (MWWA) is a nonprofit organization that has been a principal custodian of Minnesota's ground water since 1922. The MWWA is a member of the National Ground Water Association and other national associations focused on protecting our groundwater resources. The organization's members consist of water well drilling and pump contractors, geologists, hydrologists, engineers, state and local government employees and groundwater industry suppliers and manufacturers. Beyond maintaining high standards in the ground water industry, the MWWA is devoted to providing continuing education to its members and furnishing*

*accurate information to the public regarding the quantity, quality and availability of Minnesota ground water resources. The MWWA works with government agencies, communities, landowners and industry to identify and solve problems associated with ground water use.*