



No More Piggyback Rides: Groundwater Extraction from Industrial Facilities Under City Water Appropriation Permits Poses a Threat to Local Water Resources

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Impact of Industrial Groundwater Extraction on Private Well Owners in Elko New Market

In 2021, the City of Elko New Market began considering a [proposal for a new industrial facility](#) that would draw from the city's water supply. The proposed facility, a [bottling plant operated by](#) California-based bottled water company [Niagara Bottling](#), would extract ~[310](#) million gallons of water per year from the Prairie du Chien-Jordan aquifer, more than doubling the city's previous extraction rate.

The project has faced strong local opposition. The Prairie du Chien-Jordan aquifer is not only the main water source for the City of Elko New Market, but also for many surrounding communities who use private well systems that tap into the aquifer. As such, in December 2022, locals petitioned for the preparation of "[an Environmental Assessment Worksheet \(EAW\)](#)" to evaluate the potential environmental impacts of facility's proposed pumping.

Nevertheless, in February 2023, the Minnesota Department of Natural Resources (DNR), the agency assigned to decide if an EAW was necessary, found that [environmental review was not](#) required. DNR reasoned that there was insufficient evidence "[to demonstrate the project may have the potential for significant environmental effects](#)" — the standard for requiring an EAW under [Minn. R. 4410.1100, subp. 6](#). Part of DNR's justification ([mentioned in paragraph 33 of the decision](#)) was that the agency expected to "look closely" at the environmental impacts of the "proposed pumping" as a part of the "water appropriations permit application review" for the City of Elko New Market.

This referred to the request made by the city to amend its groundwater appropriation permit, increasing the amount of water the city could extract from the Prairie du Chien-Jordan aquifer from [135 to 365 million gallons per year](#) (to accommodate the increased demand from the proposed Niagara facility). However, the environmental review of the city's requested amendment appeared to justify many locals' concerns.

As a part of the review of the city's amended appropriation permit, DNR ordered [a four-week pump test](#) be conducted for the Prairie du Chien-Jordan aquifer. Such tests are important because they provide "[critical information about the capacity of the aquifer to provide the](#)

[required water without impacting surrounding wells.](#)” However, shortly after the pump test started, residents with private well systems in Elko New Market and Eureka Townships reported [“\[d\]irty gray water, thick with sediment”](#) coming from their pipes. Local nonprofits state that [“over 75 private well owners reported water quality issues”](#) resulting from the pump test. Some residents have even been forced to install [“costly filtration systems that require ongoing maintenance”](#) to remove sediment and ensure their water remains usable.

Before [authorizing the City of Elko New Market’s amended groundwater appropriation permit](#), DNR added conditions requiring the city [“to create a response plan”](#) to remedy local well owners’ water quality problems resulting from the test and [“investigate water quality issues within two miles and water quantity issues within one mile”](#) of any wells being used to extract groundwater for the Niagara facility.

Nevertheless, the [Niagara facility was allowed to begin operations, and residential well owners remain frustrated](#) by the process that allowed the facility to avoid DNR review of its water use.

Water Use Permit “Piggybacking” by Industrial Facilities

The strategy used by Niagara to secure its water needs from the city of Elko New Market is commonly used by industrial facilities in Minnesota to avoid DNR scrutiny of their water use. Sometimes referred to as [piggybacking](#), an industrial facility will tie its water use needs onto a locality’s water appropriation permit, allowing it to avoid DNR review of the facility’s water extraction.

Usually, the DNR requires water appropriation permits [“for all users withdrawing more than 10,000 gallons of water per day or 1 million gallons per year.”](#) However, a facility can avoid this by drawing from a city’s water supply and then making the city apply for an amendment of its appropriation permit to accommodate the increased demand from the proposed facility.

A key concern about this strategy is that the permit conditions must be followed by the city, not the industrial user. When an industrial facility piggybacks, the city is the one that goes through DNR review and is required to follow any conditions the agency attaches to the water appropriation permit (not the industrial facility). For Elko New Market, although DNR conducted a review of the city’s amended water appropriation permit and attached conditions for mitigation and monitoring, the onus was (and still is) on the city to take action, not Niagara.

This leaves the responsibility for covering monitoring and mitigation costs on the city, while the industrial facility is shielded from any liability for its extractive operations. As such, when issues arise, such as those faced by residential well owners around the City of Elko New Market, the local government [and its taxpayers will foot the bill, rather than the owner of the industrial facility whose activities are responsible for causing the problems.](#)

This is concerning because municipalities do not always have the resources to effectively compensate the impacted residents. For example, in Elko New Market, the city’s response to the

water quality issues resulting from the pump test provided [limited to no compensation](#) to many well owners, leaving residents on their own to cover the costs of the filtration equipment needed to keep their water usable.

While well owners around Elko New Market continue to “[explore legal options](#)” against the city and Niagara, there are similar concerns being raised over other water-intensive industrial facilities being proposed across Minnesota: hyperscale data centers.

Water Impacts of Data Centers

Similar to the Niagara facility, data centers can have extremely high water use demands. Part of this [demand is direct \(on-site\) uses](#), primarily needed for the cooling systems that prevent processing equipment from overheating. These cooling systems require large volumes of water, usually [extracted from local water supply systems](#) near the data centers. This extraction can [put a strain on local resources](#). For example, on average, “[a mid-sized data center consumes around 300,000 gallons of water a day](#)” for on-site water needs.

Furthermore, this demand has increased over time, as more hyperscale data centers have become operational. A report from the Berkeley Lab Energy Analysis & Environmental Impacts Division found that direct (on-site) water usage by data centers in the US grew [from 21.2 billion liters of water per year in 2014 to 66 billion liters in 2023](#). As such, more communities are seeing data centers draw from their local water supply systems.

Extraction from local water resources has caused problems for certain residents near newly constructed data centers. For example, in Newton County, Georgia, near the site of a recently built Meta data center, locals with private wells have experienced issues such as [brown water from sediment buildup in their water systems, as well as reduced water pressure and, in some cases, completely dry taps](#). Recently, Representative Alexandria Ocasio-Cortez brought similar issues to light in a congressional hearing, where she showed jars of [polluted drinking water coming from the private wells of Morgan County, Georgia residents](#) located near a Meta data center.

The Response from Minnesota Legislature

The Minnesota legislature has taken certain actions to prevent residents near proposed data centers from facing the same fate as those in Georgia. In 2025, the legislature passed laws that allow DNR to [“request preapplication information from the data center ... to assess the factors affecting the ability of a water source to meet a project's water use needs at a proposed location”](#) and which prevent groundwater appropriation permits from being approved or expanded for data centers [with “once-through” cooling systems using more than “5,000,000 gallons” of water per year.](#)

However, there are limitations to these laws. The DNR is not mandated to request preapplication information for data centers, and the provision does not apply to facilities [using less than 100 million gallons per year](#). Additionally, although once-through cooling systems are the most water-intensive, other [cooling systems still require water](#). As such, in areas with sensitive or impaired water supplies, data centers using alternative cooling systems or using less than 5 million gallons of water per year [could still pose a threat to local water resources](#).

Without effective environmental review and a public process to ensure that everyone has an opportunity to voice their concerns about a proposed data center's water use, well owners throughout Minnesota could face problems similar to those of residents in Elko New Market.

In the 2026 legislative session, several bills ([H.F. 3793](#), [H.F. 2862](#), and [S.F. 4379](#)) were proposed, seeking, among other things, to:

- Make DNR's pre-application consultation for proposed data centers with "[consumptive water use exceeding 100,000,000 gallons per year](#)" mandatory and "[applicable to all industrial or consumptive uses exceeding 100,000,000 gallons per year](#)" or "[more than 50 percent of a municipality's authorized water use](#)."
- Create [permitting guidelines for environmental review of data center proposals](#) and,
- Prevent local governments from "[signing non-disclosure agreement\[s\]](#)" that hinder the public's access to information about proposed data center projects

However, [none of these measures passed](#). As such, Minnesotan well owners continue to face uncertainty over the impact that proposed data centers could have on their local water supplies.

In the future, requiring industrial facilities to receive a separate water appropriation permit will ensure the situation in Elko New Market does not repeat itself. This will prevent permit piggybacking by industrial users and place the costs for remedying any water quality issues, that arise from the facilities' proposed extraction, on the facilities themselves. Although this approach may be a little less convenient for industrial facilities, it ensures Minnesotans are properly protected from any water quality problems resulting from the operations of industrial facilities, such as hyperscale data centers.