What's at Stake?

The Onslow Water and Sewer Authority, known as ONWASA, wants to dump treated sewage down into our groundwater. This proposal, if allowed statewide, is a risky scheme that can easily contaminate vital drinking-water sources for millions of North Carolinians.

Because of the risks, ONWASA's proposal is currently illegal in North Carolina. But Rep. Russell E. Tucker, a Democrat from Pink Hill who represents Onslow and Duplin counties, has introduced a bill in the N.C. General Assembly that would allow ONWASA and others to dump potential pollutants into our aquifers. If House Bill 643 passes, any operator of a sewer system in the state could apply for a permit to inject treated sewage – the bill artfully calls it "reclaimed water" -- into the ground where it can be stored "temporarily" for "beneficial reuse" later.

The Risks

As water usage increases, depleting groundwater sources, injecting aquifers with chemically treated water has become more popular as a way to recharge aquifers and store usable water. Treated surface water or drinking water is usually used. Forty-eight states either ban or discourage using treated sewage for that purpose.

Even using treated water from rivers or drinking water presents risk, studies have found.

- The National Research Council, which is part of the National Academies of Sciences, found in 2001 study that that a proposal in south Florida that used surface waters posed significant risks to groundwater, including potentially increasing the concentrations of heavy metals such as mercury. This report also found that treated surface water could still contain more bacteria and pathogens and contaminate the groundwater.
- The Army Corps of Engineers found levels of arsenic that exceeded safe drinking-water levels in areas using groundwater recharge in South Florida.
- An analysis of a project in South Carolina by the U.S. Geological Survey found that less than a quarter of the water pumped into an aquifer would be available to reuse. That study also found that pumping water down into the ground didn't help to increase groundwater levels in wells near the injection site.

These studies indicate that the use injection wells may risk contaminating drinking water for very little recovery capacity.

What's Next

The legislature needs to kill this flawed bill. If they intend to embark on this hazardous path, legislators should first appoint a study committee to answer several critical questions:

- What type and degree of water treatment is necessary to ensure that no pathogens will survive in groundwater?
- Will disinfectants such as chlorine lead to the formation of carcinogenic compounds that will move to broader groundwater areas?
- What information is needed to ensure that the water being recharged is geochemically and microbiologically "compatible" with native groundwater? Unanticipated reactions may lead to poor-quality water, biomass formation, pathogen growth and well clogging.

- What monitoring is required to ensure that unforeseen water quality problems don't affect broader groundwater resources? Who will pay for it?
- What are the impacts of on property values? On land-use patterns?

Until questions such are those are answered, we should assume that pumping treated sewage into our aquifers poses a significant health risk.

What You Can Do
Contact your state representative and tell him you don't want treated sewage in your drinking water.

For More Information Contact:

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