



Fox Valley copes with new water woes

As aquifer rises, so does contamination threat

Krista Ledbetter , krista.ledbetter@dailyreporter.com
June 18, 2008

The Fox Valley's underground aquifer is rebounding, but the rising water carries with it a greater chance of arsenic contamination.

"For every action, there is an equal and opposite reaction," said Eric Fowle, executive director of the East Central Wisconsin Regional Planning Commission.

The aquifer below the region that stretches from Fond du Lac north to Green Bay was losing about 3 feet of water per year, forcing municipalities and organizations to search for ways to conserve water, Fowle said. The alternative was spending big money on pipelines to draw water from Lake Winnebago or Lake Michigan, he said.

But Green Bay opted to dig a pipeline to Lake Michigan, and the city and its neighboring communities began using that water instead of the aquifer.

That project took the pressure off the aquifer, giving it a chance to recover, Fowle said.

In some areas, the aquifer rose more than 50 feet since the pipeline was put in, he said. While that could be considered a happy outcome, Fowle said the rising water brings contamination concerns, and each municipality will have to monitor wells.

"There will be some quality concerns like this in the short term," Fowle said. "It's just a side effect people don't consider."

Wendy Anderson, water supply engineer for the Wisconsin Department of Natural Resources Northeast Region, said arsenic is the biggest contaminant concern in that region.

The problem begins when aquifer levels decrease and the arsenic minerals in the aquifer are exposed to air. Once that water table begins to rise, the arsenic minerals can enter the water, Anderson said.

She said the standard for arsenic in groundwater used to be 50 parts per billion, but that number was reduced to 10 parts per billion after chronic health problems popped up.

"If arsenic is discovered in groundwater, the municipality needs to either look for another source or treat the water," Anderson said, adding water treatment is costly.

Fox Valley communities dependent on the aquifer could lose their use of groundwater due to a depleted source or a contaminated source.

So did the communities on the north end of the Fox Valley have the right idea, opting for Lake Michigan instead of the aquifer?

Dave Vaclavik, manager of the Central Brown County Water Authority, a collaboration of several Brown County communities using the pipeline, said he would like to think the communities were proactive in switching water sources. But the truth is, he said, they were facing a situation similar to what could lie ahead for the remainder of the Fox Valley

communities — contamination.

When the state changed its radium standards for groundwater in 2006, many Brown County communities were in noncompliance with the new rule, Vaclavik said. Those communities could either find a new source or treat the water.

“We essentially opted for the pipeline for two reasons,” he said. “The major one was that we didn’t think we could get enough water out of the aquifer with what was happening with the growth of the communities in our area.”

The other reason was the radium. Community leaders decided they needed a steady, reliable water source.

Vaclavik said the Central Brown County Water Authority began using the pipeline in September. It’s a work in progress, he said, but there is progress.

“Everyone is getting good quality water,” he said. “That’s what’s important.”

The water issues, however, have not affected development in Fox Valley communities. Both Vaclavik and Joellyn Dahlin, principal planner for Fond du Lac, said water quality never hindered project plans.

In Fond du Lac, where groundwater is treated to meet radium standards, developers have yet to question the city’s water quality or halt a project because of it, Dahlin said.

“When developers come in, they generally ask us about things like public service availability, the cost of utilities and water and sewer, the cost of driveways, things like that,” she said. “They know about our water. And if they ask how our water is, we tell them it’s just fine.”

© 2008 Daily Reporter Publishing Co., All Rights Reserved.