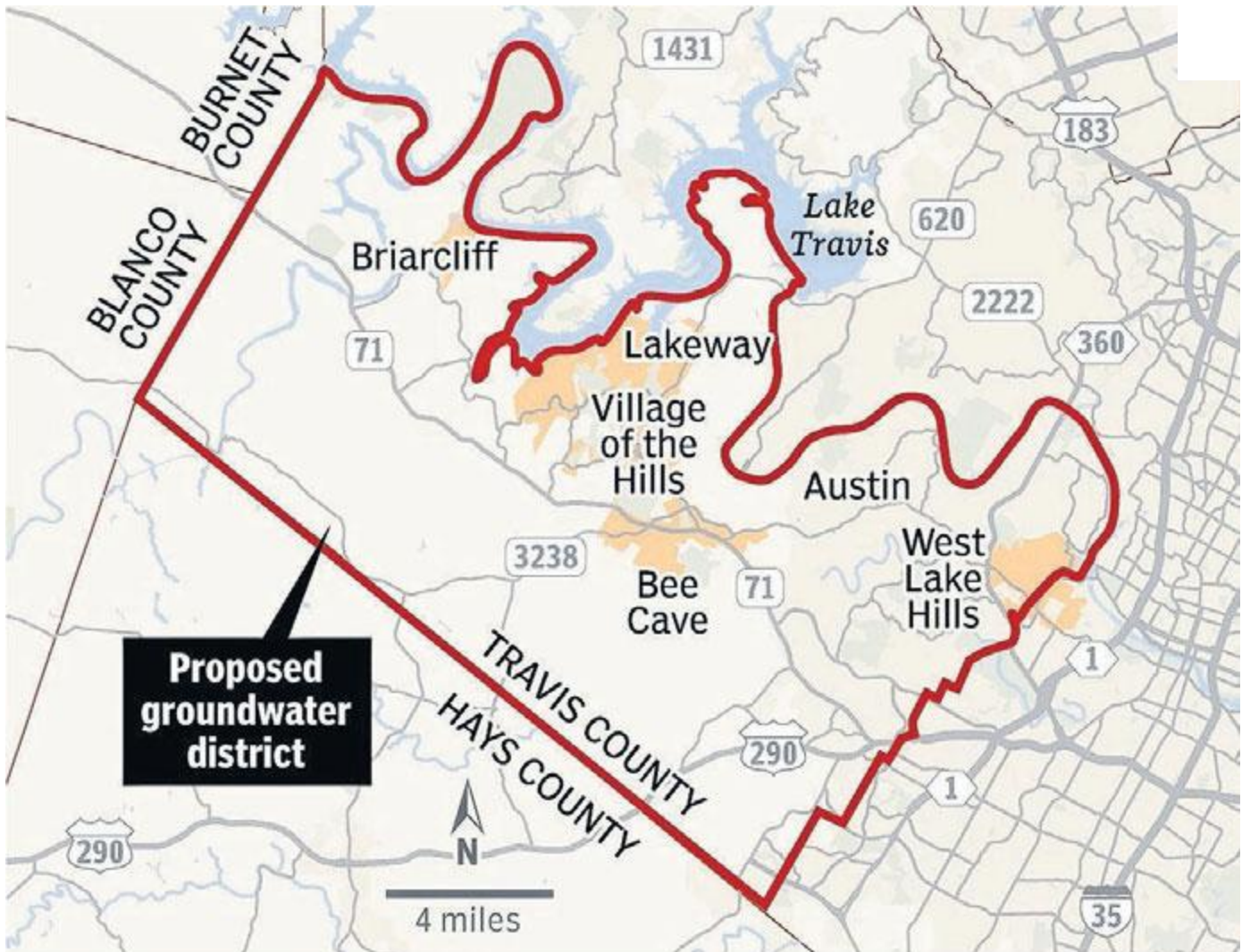


A tale of two aquifers

COMMENTARY



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GATEHOUSE MEDIA



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Upon hearing results from a new Southwestern Travis County Groundwater study on Oct. 1, Travis County Commissioner Brigid Shea said: “This trend is alarming. If the Middle Trinity is depleted and the Lower Trinity data show long and progressive water level declines – and that trend will likely continue – I think it is important that this information be widely disseminated so people understand the threat.”

It’s true. Travis County and Barton Springs Edwards Aquifer Conservation District hydrogeologists joined forces for a yearlong study. Their findings are sobering.

It’s a tale of two aquifers. A fault that runs from north of Lago Vista, down Lake Travis’s Bee Creek tributary and along RM 12 into Hays County splits the district into two regions.

West of the fault, erosion has cut down into the Middle Trinity Aquifer. Isotopic analysis of the groundwater tells us that, on the west side of the fault, water in the Middle and Lower Trinity aquifers is recent. It actively recharges as surface water percolates into it.

However, east of the fault, water in these Middle and Lower Trinity aquifers is hundreds to thousands of years old. They are not being recharged. Here, Upper Trinity rocks blanket the Middle Trinity Aquifer, and the fault cuts off most of the flow of fresh rainwater recharge from the west, confining both aquifers. Re-supply of water occurs in a few places along the lake at imperceptibly slow rates, it doesn’t keep pace with water well production rates. Consequently, around Bee Cave and Lakeway, water levels in both aquifers have dropped more than 300 feet since 1978. We are essentially draining these two aquifers. Extracting this ancient water is called “mining” it because it is a limited resource that cannot recover through natural recharge inhuman time frames.

But there is something we can do about it. On Nov. 5, voters in southwestern Travis County will have the opportunity to vote to confirm the Southwestern Travis County Groundwater Conservation District. The simple purpose of a groundwater conservation district is to maintain a balance between protecting the rights of private landowners and the responsibility to protect the water resource from irreparable harm. In Texas, groundwater districts are the only agencies with the authority and tools to study, monitor and protect

the aquifer while allowing for responsible growth and helping communities to plan for the future.

But, given that the vast majority of residents within the district receive their drinking water from the Colorado River (Lake Austin or Lake Travis) via municipal services, why should we care about the Trinity aquifers?

A reliable supply of groundwater benefits everyone in our community, helping to support the natural beauty and economic vitality of our Hill Country communities. In the last 20 years, the population in southwestern Travis County has doubled. Some water utilities use groundwater and others use surface water, but the Texas Water Development Board estimates that about a third of Hill Country surface water originates from underground sources. Rural southwestern Travis County residents who don't have the luxury of municipal water supply absolutely depend on their wells for water and are experiencing intermittent to permanent interruption of reliable water supply. This impacts both their quality of life and their property values. Regardless of the source of your water, all of us have a stake in protecting the Trinity aquifers. We can do without a lot of things but water isn't one of them.

Commissioner Shea continued: "It's important to remind people of the drought of 2011 when Lake Travis and other drinking water supply reservoirs largely dried up. If the groundwater is also being depleted, people need to know both those water supplies are being stressed. And the projection for our region is hotter and drier.... There needs to be aggressive education for reducing unnecessary water use."

In 1990, the Texas Commission on Environmental Quality declared this area and parts of eight other Hill Country counties a Priority Groundwater Management Area because of concerns about Trinity Aquifer vulnerability. They were absolutely right about southwestern Travis County, but it remains the last area within the PGMA without a groundwater district. This is why the Southwestern Travis County Groundwater Conservation District has bipartisan support from state Sen. Dawn Buckingham, state Reps. Paul Workman and Vikki Goodwin, County Judge Sarah Eckhardt, County Commissioner Gerald Daugherty, local mayors and other elected officials.

But voters must vote yes to confirm the district so we can move forward. You can help your rural neighbors while supporting the economic vitality and environmental stewardship of our area. And it won't increase your tax bill at

all because, by law, the groundwater district cannot levy taxes. This is one of those rare chances to do the right thing without having to write a check. Early voting begins Oct. 21 and Election Day is Nov. 5.

For more information, go to www.swtcgcd.org, bseacd.org or traviscountytexas.gov Juli Hennings is one of seven board members of the Southwestern Travis County Groundwater Conservation District.