"Water is the new oil" as Texas cities square off over aquifer pipeline plans

Fast-growing Georgetown plans to pump 89 million gallons a day from the Carrizo Wilcox Aquifer but the project is being fought by Bryan, College Station and Texas A&M University, which depend on the same water.

BY DYLAN BADDOUR, INSIDE CLIMATE NEWS MARCH 31, 2025 5 AM CENTRAL

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In Central Texas, a bitter fight over a \$1 billion water project offers a preview of the future for much of the state as decades of rapid growth pushes past the local limits of its most vital natural resource.

On one side: Georgetown, the fastest-growing city in America for three years straight, which in 2023 signed a contract with an investor-funded enterprise to quickly begin importing vast volumes of water from the Simsboro Formation of the Carrizo Wilcox Aquifer, 80 miles to the east.

On the other side: the cities atop the Simsboro that rely on its water. Bryan, College Station and the Texas A&M University System, a metro area with almost 300,000 people, have sued a local regulator to stop the project. A trial is set for the first week of May.

"We're going to fight this thing until the end," said Bobby Gutierrez, the mayor of Bryan. "It effectively drains the water source of the cities."

The pump and pipeline project to Georgetown, developed by California-based Upwell Water, is the largest of at least a half dozen similar projects recently completed, under construction or proposed to bring rural Carrizo Wilcox aquifer water into the booming urban corridor that follows Interstate 35 through Central Texas.

It would eventually pump up to 89 million gallons per day, three times the usage of the city of Bryan.

"That basically stops all the economic development we have," Gutierrez said. "We're talking about our survival."

The fight over the Upwell project could well be a prelude for the broader battles to come as cities across Texas outgrow their water supplies. Lawmakers in the state Capitol are pushing to avert a broad scarcity crisis with funding to desalinate seawater, purify salty groundwater and treat oilfield wastewater to add to the supply. But all of these solutions remain years from realization. In the near term, only import projects from freshwater aquifers will continue to meet the growing water demands of thirsty Texas cities.

Regulation of such projects falls to a patchwork of small, rural agencies called groundwater conservation districts, which might not be fully equipped or empowered to manage plans for competing regional water needs that can affect entire cities for generations to come.

Texas law offers limited clarity, generally preferring a landowner's right to pump their own groundwater over regulations on private property. Despite fierce denunciations of the Upwell project from nearby city leaders, no one has alleged that its developers have broken any laws.

"We're following the rules. Why are we being vilified?" said David Lynch, a managing partner at Core Capital investment firm in Houston and a partner in the Upwell project. "I think they feel uncomfortable about what's coming and their reaction is to make us go away."

After all, he's not the only one doing this. Five years ago, San Antonio started pumping up to 49 million gallons per day through a 140-mile pipeline from the Carrizo Wilcox Aquifer. Another pipeline was completed last year and will soon begin pumping to the

city of Taylor and the new Samsung microchip manufacturing complex there. Another, scheduled for completion this year, will take water into the cities of Buda and Kyle.

After the lawsuit delayed the Upwell project's tight timeline, Georgetown commissioned two other pipeline projects from the same aquifer.

"People are starting to pay enough for water to make these sorts of projects work," Lynch said, driving his black Ford Super Duty Platinum truck down the dirt roads of Upwell's 9,000-acre farm property and well field in Robertson County. "There's no cheap water left in Texas."

In the middle of all this is the little Brazos Valley Groundwater Conservation District, based in the small town of Hearne and the defendant in the lawsuit.

District manager Alan Day feels for the cities of Bryan and College Station. To an extent, he said, they are right. The more pumping from the aquifer, the sooner everyone will reach conditions of scarcity, though he doesn't think it will happen as quickly as city leaders say.

At the same time, he said, "Bryan can't claim the water." Groundwater is a private property right in Texas as sacred as any other. Everyone is allowed to pump whatever their land produces.

"Water is the new oil," said Day, a former ranch manager of 27 years. "They have a commodity that can be sold and they have every right to sell it."

At this time, he said, he has no authority to stop landowners from pumping as long as they fulfill the requirements of the permitting process, which Upwell did. Even if he could do it, Day chuckled at the notion that state leaders would let his tiny office put the brakes on development along the I-35 corridor, home to manufacturing campuses of Tesla, Samsung and Apple, and offices of Amazon, Meta and Google, as well as one of the nation's largest clusters of data centers and its fastest growing cities.

However, Day said, there will come a day when that changes. The laws for his district, like all others in Texas, specify a threshold at which new rules kick in. It's called the "desired future condition," or DFC, a level below which the district is not willing to go.

When they get there, everyone will face restrictions on pumping and the days of groundwater abundance will be over for the Simsboro portion of the aquifer. To date, no district in Texas has hit its DFC.

Day said he's only following the rules. He'll honor the property rights of landowners who want to pump, and when they hit the DFC, he'll implement restrictions district-wide.

"What does that do to the growth of Bryan and College Station and Texas A&M and anyone else who is depending on Simsboro?" Day asked. "It stops it."

The Texas miracle

This situation follows a generation of steep growth and development that state leaders have dubbed the "Texas Miracle." The population of Williamson County, seated in Georgetown, 28 miles north of Austin, doubled in 17 years to 700,000 people while its median household income increased by more than 90%. Neighboring counties share similar stories, where sprawling subdivisions and shimmering tech campuses now cover former ranchlands.

Georgetown needs to add millions of gallons per day to its water supply within the next several years. When it signed the pipeline contract in 2023 that stipulated deliveries beginning in 2030, it was acting on a much tighter timeline than decades that are typically considered for large scale water planning.

"Based on hyper growth that we've seen in our water territory, we've seen the need for higher levels of contracted water sooner than we originally anticipated," said city manager David Morgan.

Most of the new water will serve new residential areas, he said, and will be used primarily to irrigate lawns and other neighborhood landscaping. Williamson County is also courting a cluster of five large data centers that it expects would bring another 100,000 people to the county.

But what if Bryan, and the cities of the Brazos Valley, want data centers, too? The region is currently pursuing ambitious opportunities in semiconductors, nuclear energy,

aerospace, defense and life sciences, said Susan Davenport, president of the Greater Brazos Partnership, an economic development group.

"These sectors, along with the growing workforce and families who support them, are directly dependent on access to our local water resources," she said.

Gold rush on water

Although many major projects importing groundwater into Central Texas are just now being realized, the plans have been in the works for decades, according to Michelle Gangnes, a retired finance lawyer and co-founder of the Simsboro Aquifer Water Defense Fund.

In 1998 Gangnes moved from Austin to rural Lee County. That same year, San Antonio, 140 miles away, announced plans to import 49 million gallons per day from wells in Lee County on the site of an old Alcoa aluminum smelter. A prolonged fight ensued and the project was never realized, but many others would follow.

"That's what started the whole gold rush on water," Gangnes said. "It resulted in all these groundwater districts being formed, trying to resist the water rush on the Simsboro."

The groundwater districts were formed by an act of the Texas legislature in 2001. But, when the time came to make groundwater rules, powerful interests kept them loose, according to Ken Kramer, who previously directed the Texas office of the Sierra Club for 24 years. Chief among them was T. Boone Pickens, the iconic Texas oilman who also wanted to export groundwater from his land holdings in the Panhandle.

"There was heavy lobbying by groundwater exporters to make sure that groundwater districts could not stop exports," Kramer said. "Groundwater then became more of the target for moving water to growing areas and populations."

Under a principle in Texas called the "right of capture," landowners are allowed to pump from their land whatever they are able to. Changes made to the Texas Water Code in 2001 stipulated that withdrawals are allowed so long as they don't affect other permit

holders "unreasonably," which lacks a firm legal definition. That leaves lots up to interpretation for the groundwater districts of Texas.

"They live in a difficult world where it's unclear exactly what their power is to tell somebody no," said Robert Mace, executive director of the Meadows Center for Water and the Environment at Texas State University. "If you tell somebody no you're almost guaranteed to get sued."

In recent years, several major pipeline projects into Central Texas came online. San Antonio eventually got its Carrizo Wilcox Aquifer water through a 6-foot-wide, 140-mile long Vista Ridge pipeline which began drawing water from Burleson County in 2020, causing levels in neighboring landowners' wells to plummet.

The old Alcoa wells in Burleson County were also put to use. A developer called Xebec Holdings bought the 50-square-mile property in 2022 and signed deals to pipe almost 18 million gallons per day to the City of Tyler.

"There's constantly people out there trying to lease water rights to see if they could do a project to sell water," said Gary Westbrook, general manager of the Post Oak Savannah Groundwater Conservation District. "We're going to have to find a way to regulate. You can't just say no."

A Gatehouse Pipeline is currently under construction to Georgetown, with another one called Recharge in development. Morgan, the Georgetown city manager, said those two projects were identified and accelerated after the lawsuit challenged the Upwell project.

"We believe the lawsuit is going to likely delay getting that fully resolved," he said.

The Upwell project

Upwell Water, a San Francisco-based financing firm, announced in 2020 that it had raised \$1 billion from investors "to monetize water assets."

Upwell partnered with CoreCapital investors in Houston, which bought its 9,000-acre Robertson County farm property in 2021. Lynch, the managing partner at CoreCapital, said he expected to sit on the property for 10 years until the economics of water made it

attractive to develop a major export project.

But as soon as he entered the market, he found eager buyers willing to pay well.

"We bought it and all of a sudden we had everybody calling saying we need water," Lynch said. "Then we said, we have more demand than we can supply, let's talk to the neighbors."

Upwell recruited seven neighboring landowners to put company wells on their property and contribute to the export project.

These aren't regular irrigation wells, which in this area can tap water 40 feet down. These are 1,400 feet deep, cased in 2-foot-wide steel pipe, able to produce large volumes.

"It's a million-dollar hole," said Mark Hoelscher, one of the neighboring landowners involved in the project, as he looked up at one of the diesel-powered well installations. "It's big time."

In October 2022, Upwell received permits for 16 wells to pump nearly 45 million gallons per day without any challenges in the hearing process. Four months later it received its permit to export the water out-of-district. Then in September 2023, the district issued permits for another 32 wells belonging to the seven adjoining landowners to produce an additional 45 million gallons per day.

Until that point, authorities in the Bryan-College Station metro area, some 30 miles south, apparently remained unaware of the project transpiring in Robertson County. Not until September 2024, when the district considered applications for updated permits to export the combined 89 million-gallon-per-day production of all 48 wells, did Texas A&M University enter into the proceedings, filing a request for review by the State Office of Administrative Hearings.

Texas A&M University declined to comment for this story.

"No one has questioned the fact that we own the land and we have rights to the water underneath it," said Hoelscher, a third generation landowner in the Brazos River Valley.

"The fact of the matter is the water is ours."

Texas A&M sues to review permits

One week later, A&M filed a lawsuit in state district court seeking a temporary injunction stopping the groundwater district from recognizing any of the permits associated with the Upwell project until a hearing is held.

A&M argued that the previously issued permits should be open for re-examination because some board members of the groundwater district were ineligible for service at the time the permits were originally approved.

In November, Bryan and College Station filed papers to join the lawsuit. It said their "ability to produce groundwater from their Simsboro wells and the economic vitality of the region will be adversely affected if the Contested Applications are granted."

College Station Mayor John Nichols, a former professor of agricultural sciences at Texas A&M, said in a statement: "The transfer of groundwater from our district to users in other areas is one of the most significant issues facing the College Station/Bryan area. I'm a staunch proponent of private property rights, but we are deeply concerned about the long-term impact of excessive extraction on our community."

He called on lawmakers to adopt statewide groundwater regulations ensuring the rights of current permit holders over new water users.

None of that, however, matters to the trial that will take place in early May. All the judge will decide is whether or not A&M and the cities have rights to challenge the previously issued permits.

In court filings, Upwell argued A&M's petition "demands that the Court turn back time and recognize a non-existent 'right' to administratively contest final groundwater permits that the Brazos Valley Groundwater Conservation District properly noticed and issued to Intervenors months and years prior — all without any complaint or contest by any party, including Plaintiff."

If the judge denies A&M's request, the permits will be issued and work will begin on the

Upwell project pipeline.

If the judge grants A&M's request, the permits will head into a potentially yearslong process of state administrative hearings that could threaten the viability of the project and its promised returns to investors.

A race to pump before restrictions kick in

Whether or not the pipeline gets built, other similar projects are likely to follow. The situation is headed in one direction: toward the DFC, the threshold at which restrictions begin.

In the Brazos Valley and surrounding districts, that threshold is a 262-foot drop in water wells from levels measured in 2000. In the 25 years since then, pumping has led the wells' water to drop by one quarter of that allotted reduction, according to district manager Day, suggesting ample water supplies remain.

But, that remains to be seen. In total, Day said his district has issued permits for up to 291 million gallons per day of pumping from the Simsboro Formation, averaged yearly, of which 89 million gallons per day are associated with the Upwell project. However, only a fraction of that permitted volume is actually pumped.

If all permitted pumping were to suddenly come online, Day said, computer models showed they would hit the DFC in six years.

In reality it won't happen quite that fast. The Upwell project plans to scale up its pumping gradually over years. And many farmers hold irrigation permits to pump much more water than they ever actually will, unless they also encounter the opportunity to join an export project.

When the aquifer hits the DFC, the rules say it mustn't fall further. That means all users would face mandatory curtailment. It's unclear how such unprecedented measures would be enforced in Texas.

For Gutierrez, the mayor of Bryan, this management method creates a contest for investors to tap the water-wealthy Simsboro Formation and sell off its bounty before

time runs out.

"They want to exploit everything we have for their personal benefit," he said. "It's a race of who can take the most amount of water in the least amount of time to deplete a resource for their pocketbooks."

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Correction, April 2, 2025 at 10:55 a.m.: A previous version of this story incorrectly described Upwell's involvement in the lawsuit challenging the pipeline project. Only the Brazos Valley Groundwater Conservation District is a defendant. Upwell is an intervenor in the lawsuit.

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