

Skip to main content



[e-Edition](#)

Most Popular

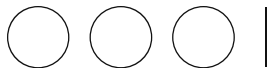
- | | | | |
|--|---|--|-----------|
| 1. Houston Metro draws backlash over Rosa Parks tribute seats | 2. GOP candidate complains students can't make fun of trans kids | 3. Following Texas, Oklahoma may pay some teachers \$100K | 4. |
|--|---|--|-----------|

OPINION // EDITORIALS

Editorial: Permian earthquakes should jolt Texas officials into action on shale drilling

The Editorial Board

Updated: Jan. 19, 2022 6:28 a.m.





Latshaw drilling rig #19 operates near a wind farm in Stanton, Texas, on Monday, Dec. 27, 2021. According to the United States Geological Survey, at approximately 7:55 p.m. on Monday, the Texas Seismological Network detected a 4.5 magnitude earthquake 11 miles north of Stanton. (Eli Hartman/Odessa American via AP)
Eli Hartman, MBI / Associated Press

On the evening of Dec. 28, Sally Poteet was driving home after dropping off her granddaughter at her daughter's house when her husband called to ask if she had just accidentally crashed their Bronco Sport into the carport.

In another town, this might be a strange question. But on this night in the tiny town of Stanton, about 100 miles south of Lubbock, quite a few people were asking something similar.

“When I got home,” Poteet recalls, “Everyone was out on their front yards because they thought people had crashed into their homes.”

Poteet, the town’s mayor, knew better. She hadn’t noticed anything herself when she was driving but when her daughter had called a bit earlier to ask if she had felt a jolt, Poteet knew instantly what it was: an earthquake.

The 4.6-magnitude quake that struck Stanton that evening might have been “the worst one that we had,” as Poteet told the editorial board recently, but these sudden tectonic shifts are hardly anomalous these days in the fracking boom towns of West Texas.

In fact, three days later on New Year’s Eve, the city registered a 4.2-magnitude quake, capping a year in which scientists cataloged more than 4,000 earthquakes across Texas in 2021, according to TexNet, the earthquake monitoring network operated by the Texas Bureau of Economic Geology. People reported feeling more than 150 of these quakes, with 17 registering at a “significant” magnitude of 4.0 or higher, enough to crack walls and building foundations. The vast majority occurred in the Permian Basin region, that natural oil and gas goldmine that has kept cities such as Stanton afloat for decades.

From the Editorial Board

Editorial: Josh Flynn in GOP primary for Texas HD 138

[Read Now](#)



Editorial: Danielle Keys Bess in Dem primary for Texas HD 147

[Read Now](#)



Research strongly links the increase in the rate of earthquakes in Texas over the last decade – the number of temblors has risen 74 percent from 2020 and is eight times more than in 2017, according to TexNet – to oil and gas operations, mainly the deep injection of oilfield wastewater into disposal wells thousands of feet below the earth. When well operators pump gas and oil through production wells, they separate the groundwater that comes up with it. That water is then pumped down an even deeper set of wells into a porous layer of rock. Decades of these injections has built such intense pressure along ancient fault lines that they trigger earthquakes with alarming frequency.

In essence, Texas' unending quest for the cheap energy Americans demand has led to drilling practices that have turned our state's once-benign subterranean geology into a powder keg. It's not that these tremors are expected to pack the kind of wallop more commonly associated with giant quakes in, say, Northern California, but they have fundamentally altered the geology of land beneath communities all over Texas where the extraction of oil and gas, and the associated wastewater disposal, has continued. That's brought increased risk to property and lives, as even the most ardent oil and gas evangelists, such as Poteet, acknowledge.

"We still need to drill for oil, we need the oil," Poteet says. "It is kind of scary, though. You think, 'Well if they just keep drilling and keep doing whatever's causing it, is it just gonna get worse and worse?'"

It's hard to say how bad things might get. For years, the Texas Railroad Commission, the agency that regulates oil and gas production in the state, refused to acknowledge scientific evidence linking fracking with the earthquakes, going as far as hiring a seismologist to disparage the work of scientists studying the issue, [the Dallas Morning News reported in 2016](#). Even as the commission now acknowledges the scientific evidence linking fracking and earthquakes, they have largely let injection well drilling – and the related disposal of wastewater – continue unabated. [The Wall Street Journal reported](#) that Texas oil producers pumped about 342 million barrels of water into saltwater disposal wells in 2020.

SHARE YOUR OPINION

Here's how to submit letters and op-eds to the Chronicle

That's beginning to change, as the constant tremors around the Permian Basin have finally shaken the commission out of its regulatory stupor. Last month, the commission ordered the suspension of deep saltwater injections in a particularly seismic area of the Midland basin, including Stanton, pulling permits for 33 disposal wells indefinitely. The Chronicle's Paul Takahashi reported that this action stripped 14 companies, including Houston-based ConocoPhillips and Midland-based Rattler Midstream, of the ability to dispose of nearly 1 million barrels of saltwater.

Environmentalists and operators applauded the pause on saltwater injections, but the measure is only a temporary solution, with few clear, cheap alternatives that would win over the industry. Trucking the water to disposal wells elsewhere is expensive. Other methods such as treating and discharging wastewater into surface waters or using it to make road salt – which can then leach chemicals into groundwater – could be environmentally calamitous.

The most promising and safe method – recycling wastewater and reusing it to fracture shale and produce crude oil and natural gas – is still years away from becoming the industry standard. Only about 9 percent of the saltwater produced in

shale fields was recycled last year and analysts say there is not nearly enough pipeline capacity for recycled water to make up for the use of disposal wells. Last year, the Legislature created a task force to identify ways to reduce the industry's reliance on freshwater aquifers, given the state's vulnerability to drought.

But we can't sit idly waiting for ideas to smack us in the face before an earthquake does. Scientists maintain that as long as wastewater continues to exert pressure on fault lines, earthquakes are likely to continue for the foreseeable future. When fracking states such as Oklahoma and Ohio were presented evidence linking fracking and earthquakes, regulators in both states acted responsibly to shut down wastewater disposal wells indefinitely or issue new permitting rules for injection well drilling. After the well shutdowns, Oklahoma actually saw a decrease in the frequency of earthquakes for three years straight through 2018, though the region still experiences seismic activity.

While it is imperative that the industry come up with a cleaner, safer method for wastewater disposal, the Railroad Commission should also toughen its rules for injection well drilling to ensure that water isn't being continually blasted into already over-saturated bedrock in the Permian Basin. We should count ourselves lucky that cities such as Stanton have not been truly battered by a serious earthquake but we can't keep counting on that good fortune.

Sign up for the SaysHou newsletter

Get thought-provoking editorials, columns and letters from the opinion team

Email

SIGN UP

By signing up, you agree to our Terms of use and acknowledge that your information will be used as described in our Privacy Policy.

Written By
The Editorial Board

INVESTIGATIONS

How Harris County commissioners hide source of their political cash

Harris County commissioners hide where most of their campaign cash comes from: Donors whom they award hundreds of millions of dollars' worth of no-bid contracts each year.

BY ZACH DESPART

MOST POPULAR

**Houston Metro draws backlash over
Rosa Parks tribute seats**

**GOP candidate complains students can't
make fun of trans kids**

**Following Texas, Oklahoma may pay
some teachers \$100K**

**Mother of man killed by Houston police
said he was 'ambushed'**

ABOUT

- | | |
|--|------------------------------------|
| Our Company | Interest Based Ads |
| Newspaper Delivery Safety Procedures | Terms of Use |
| Privacy Notice | Advertising |
| Your California Privacy Rights | Careers |

CONTACT

- | | |
|----------------------------------|--|
| Subscribe | Frequently Asked Questions |
| e-Edition | Newsroom Contacts |
| Archives | Corporate Subscriptions |
| Customer Service | |