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Oil Creates New Demand In Water-Stressed New Mexico

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Audio Clip

Oil Industry Creates A New Demand In Water Stressed New Mexico

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In Southeast New Mexico water is scarce and oil is plentiful. Yet both are in high demand. A barrel of oil will fetch a handsome profit at today's prices. But producing it takes plenty of water.

Drive down almost any rural highway in Southeast New Mexico and you'll see a landscape dotted with pumpjacks.



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An older vertical pump jack sucks up crude oil outside Hobbs, New Mexico.

Glenn Brewster supervises a team of oilfield workers who service these pumpjacks. On a recent afternoon he inspected an older vertical well.

"This is probably 5,000 feet, close to a mile down," he said.

The vertical pumpjack sucks up about 20 barrels of crude oil a day. That's nothing compared to newer wells, which can bring up 500 barrels per day.

At his office in Hobbs, lifelong oilman Larry Scott picked up a marker and drew a long line on a white board sideways. "Here's what we're doing today," Scott said. "We're going down into the oil zone, we're turning a corner and we're drilling that well horizontally."

Horizontal drilling is the new technology that's propelled a fierce industrial comeback.

"It's about the longest run of good price and high-activity level that I've seen in my career," Scott said.

Horizontal drilling allows producers to reach 100 times farther into an oil reservoir. But to



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These tanks contain water belonging to an old ranching family outside Hobbs, New Mexico now selling it to oil and gas companies.

release the oil, they need to create cracks in the underground rock. That's done by a blast of sand, chemicals and water. The process is called hydraulic fracturing, or fracking.

"Most fracks are done today with fresh water from one of the local sources," said Scott.

On average, he said, fracking a well from start to finish takes 2 million gallons of water. In a year, production from that well could yield between 200,000 to 400,000 gallons of gasoline. By comparison, a farmer could take that same amount of water and grow six bales of cotton. Those six bales could make roughly 1,300 pairs of jeans.

But the water supply Southeast New Mexico is under tremendous stress.

"From our point of view, the number-one issue associated with hydraulic fracturing is water demand," said Dave Herrell, a hydrologist with the Bureau of Land Management in Carlsbad.



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These water stations are a common sight in Southeast New Mexico. Trucks drive up and fill their rear tanks with water which is used for oil well drilling.

During the ongoing drought, the Pecos River, a principle water source in this region, has gone bone-dry for several dozen miles. The aquifers beneath Southeast New Mexico only contain drinkable water in a few spots and those are being depleted faster than they are being replenished.

"We don't have a quantified idea how long the water will last and we need that in order to manage the resources." Herrell said.

According to Herrell, the BLM processed about 900 applications last year from oil producers seeking to lease land for drilling. Almost all were approved. The BLM is in the process of updating its regulations on fracking, which were last revised in 1988. Its proposal has been met by protests from both environmental groups and industry advocates.

On a desolate ranch outside Hobbs a leaky tank spilled water onto the ground. The water belongs to an old ranching family who now sells it to oil and gas companies. Local farmer Charlie Jurva, said this has become very common.

"I know a water truck will pay \$100 dollars for a truck load of water. That's far greater than what it could be used to grow crops," Jurva said.



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Steve West, a retired biologist who lives in Carlsbad, bird watches at Rattlesnake Springs just outside town.

Statewide the amount of water used by agriculture exceeds industrial use. Still the scare water supply across the Southwest doesn't guarantee anyone will be able to meet long-term demands. That's reflected in multiple lawsuits, including a water battle between Texas and New Mexico under consideration by the U.S. Supreme Court.

"I don't think we've really grasped in New Mexico just how vital it is that we protect our water supplies," said Steve West, a retired biologist who lives in Carlsbad. "This resource that's in front of us right now is the most endangered resource that we have in the state."

Oil companies are actively looking for ways to recycle water, but so far the available methods are too expensive.