

New Mexico Project Would Pipe Rural Groundwater 150 Miles to Big City

An absentee property owner aims to tap ancient groundwater for delivery to Albuquerque, but ranchers in the arid valley worry it will dry up their livelihood and the water will never return.

<https://www.newsdeeply.com/water/articles/2017/09/05/new-mexico-project-would-pipe-rural-groundwater-150-miles-to-big-city>

A wealthy Italian family hopes to serve future water demand in urban New Mexico by pumping ancient groundwater from an arid plain some 150 miles (240km) away.

The plan is uncannily similar to California's [Cadiz](#) project, where a wealthy landowner plans to pump ancient Mojave Desert groundwater to serve the Los Angeles metropolitan region. That project recently won an important [policy rollback](#) from the Trump administration, which could make construction much more likely.

In New Mexico, [Augustin Plains Ranch](#) proposes to pump groundwater from rural Catron County north to sprawling Albuquerque, the state's population hub. Its [application](#) with the state engineer calls for pumping 54,000 acre-feet annually from depths of some 1,500ft (46 meters) in the aquifer. That's enough to meet the annual needs of 110,000 average households.

The \$600 million project includes 37 new wells and a 54in (137cm) pipeline running 140 miles to the Albuquerque region.

Catron County has fewer than 4,000 residents, many of whom depend on the livestock industry for their livelihoods. The industry, in turn, depends on relatively shallow groundwater wells to serve homes and animals.

As a result, residents like Anita Hand see a distinct threat in the groundwater extraction project. Hand, a cattle rancher whose land borders the Augustin Plains property, fears it will rapidly drain the water table, leaving their small wells dry.

"Some of these water wells we've had since the 1920s, and some even earlier than that," said Hand, also a Catron County commissioner and board member of the [San Augustin Water Coalition](#), which opposes the pumping plan. "All of a sudden this foreign entity can come in and pump out the water and we're left with nothing. Without water, our livelihood is done."

[New Mexico Tech University](#) is in the midst of a major study of the Augustin Plains groundwater basin. A final report is expected by the end of the year.

[Preliminary work](#) found that the water in the aquifer is 11,000 years old, on average. It accumulated at a time when the climate was different – when heavy snowfall in the region was common. It also found there's been little to no recharge of the aquifer since then.

Hand said this suggests there won't be any second chances if the project drains the aquifer significantly.

"One of their big, deep wells is just over the fence from us," she said. "It's a big drilling application that's never been seen before in New Mexico."

Michel Jichlinski, project manager for Augustin Plains, said the company will compensate neighbors if their water levels drop after the project is built.

Asked if the project would affect neighbors' wells at all, Jichlinski said: "When you say 'at all,' no one could answer not at all. If some are affected, it should be very easy to mitigate, probably by compensating them so they can drill a little bit deeper. And that will be the end of that."



The Augustin Ranch LLC project proposes to divert groundwater from Catron County, New Mexico, near the town of Datil, via pipeline to the Albuquerque, NM, metro area 140 miles away. (Image courtesy Augustin Ranch LLC)

The 18,000-acre (7,285-hectare) Augustin Plains Ranch was purchased in the early 1970s by Bruno Modena, an Italian investor. An absentee owner, Modena has leased the land to local cattle ranchers ever since.

Jichlinski said the family became interested in tapping the water resources when the value of water started to skyrocket about a decade ago as a long drought began to grip the Southwest.

The company has been circumspect about its partners in the project. Jichlinski, however, named one investor, Advance Investments Unlimited. He called it a "family office" located in the Channel Islands, an independent nation off the French coast that is known as a tax haven.

Modena family investments have also stirred concern on the coast of Maine. There, the family owns 3,000 acres on a forested peninsula where a golf course and eco-resort have been proposed.

The company also touts an environmental component in its New Mexico groundwater extraction project.

Once pumped from the Augustin basin at an elevation of 7,000ft, the water would flow by gravity to the Albuquerque region, said Jichlinski. Along the way, the company would build a hydroelectric generating facility that would produce 75 percent of the electric needs for the well field. A planned solar photo-voltaic installation would deliver the remaining 25 percent.

As a result, the project would be entirely powered by renewable energy. Jichlinski said this would make the water substantially cheaper, and less vulnerable to energy market swings, than other new water sources available in the Albuquerque region, such as importing Colorado River water or retiring farmland.

“Right now, municipalities that need to grow and acquire water rights, they have no idea how much these water rights are going to cost – if they find them,” said Jichlinski. “What this project would do is provide a lot of certainty for a lot of people.”

But John Fleck, director of the [Water Resources Program](#) at the University of New Mexico, said there is no clear need for the water – not now or in the foreseeable future.

“Growth no longer necessarily demands more water because conservation is happening more quickly than growth is,” said Fleck. “That decoupling is the central feature of water management in the West right now that we need to come to terms with. Population is going up and water use is going down in absolute terms.”

Perhaps illustrating this fact, Augustin Plains has yet to find buyers for its water. Fleck said this creates a Catch-22 under state law: it can’t win a water diversion permit without proving a “beneficial use,” such as an agreement to sell water to a city; and it is unlikely to get such an agreement without a diversion permit.

Jichlinski acknowledged this conundrum, but said the company would be able to get interim commitments to sell water that may satisfy the law.

“The contention is – and we completely agree with it – no state engineer wants to be in the business of giving water rights to entities that then will sell them to the highest bidder when there’s some kind of emergency,” he said. “That’s the speculative use of water that some people are afraid of.”

Augustin Plains has asked the state engineer for an unusual two-part hearing process.

The first part would address only the hydrologic aspects of the proposal: Is there enough groundwater available to satisfy their diversion request? The second part would consider whether the planned “place and purpose of use” for the water satisfies state law.

Presumably, the first step would help secure commitments from buyers by demonstrating the company has water available. Then the company might be ready to prove, in the second step, that it has a legitimate use for the water.

“It’s definitely a strategy to address the problem of a lack of buyers,” Fleck said.

Augustin Plains has been stymied by this law before. Its first application to the state engineer in 2007 was denied because the company could not identify specific water users. A new application was filed in 2014. Opponents asked the New Mexico Supreme Court to block the state engineer from considering the new application. The court declined.

“There is a certain circularity in the sense that we need people to understand the resource more for them to put pen to paper,” Jichlinski said.

The state engineer set a hearing date of July 17 on the proposal. It was canceled only the week before, with no explanation given. Even Jichlinski said he did not know why it was canceled.

Melissa Doshier, spokeswoman for the state engineer, did not respond to numerous requests for comment.

Another element of the Augustin Plains project is rainwater capture. The plains receive an estimated 12in of precipitation annually, and Jichlinski said nearly all of this evaporates before it can reach the aquifer below.

To capture some of this, the company plans to build “berms and basins and dry wells,” Jichlinski said, to direct runoff into the aquifer. Calling this a “concept,” he said more analysis is needed before he can estimate how much recharge is possible.

“What we do know is that we can definitely enhance the recharge, and we believe we can enhance it significantly,” he said.