

Underground water storage plan stokes rancor in Seco

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A proposal to store surface irrigation water by pumping it 1,000 feet underground has divided an acequia association and raised questions about the implementation of the Abeyta Water Settlement.

The settlement — a massive agreement between Taos Pueblo, acequia users and domestic water users in the Taos Valley — is meant to resolve disputes over water.

But a small piece of the deal is causing a rift among acequia users in Arroyo Seco.

Under the agreement, the Acequia Madre del Rio Lucero y del Arroyo Seco would receive funding to install two “aquifer storage and retrieval” (ASR) wells.

These wells would take treated surface water — diverted during the winter — and pump it underground, where it would be “stored” until irrigation season.

The water would be diverted from the Rio Lucero at a point on Taos Pueblo land between Nov. 1 and May 1 and piped more than a mile to the wells located near the tribe’s northern border.

ASR equation

The wells are meant to resolve a decades-old dispute between Taos Pueblo and non-Native American irrigators in Arroyo Seco over how much water each is entitled to.

By storing winter flows, the idea is to give Taos Pueblo the bulk of the river’s natural flow during irrigation season. Meanwhile, non-Native American irrigators will be able to tap into stored water to augment their own acequias.

“The idea of ASR is to use the aquifer as a place to store water that you would like to use a little later,” hydrologist John Shomaker told *The Taos News*.

Shomaker’s firm was hired as a technical consultant by the Taos Valley Acequia Association (TVAA), which was part of the Abeyta Water Settlement negotiations. He said he and another hydrologist with the Office of the State Engineer proposed the ASR as a way to resolve the dispute.

According to Shomaker, the ASR has two clear advantages: The wells and treatment facility require a smaller footprint than a reservoir, and there’s no loss of water to evaporation.

Shomaker wasn’t aware of any operational ASR wells in New Mexico, though some larger cities have considered them. Big cities, like San Antonio and El Paso, have been using the technology for years.

Palemon Martinez, president of the TVAA, says the ASR seemed to be the best solution during negotiations. Without it, he said, irrigators in Seco will never be made whole.

The settlement itself calls it the “preferred alternative,” though the settlement also says the acequia can build a reservoir if the ASR proves “unfeasible.” It’s not clear who would make that determination.

No test wells have yet been drilled for the project, Shomaker said.

Contention in Seco

While the negotiating parties all agreed to the ASR as part of the bigger settlement, the plan has become increasingly controversial in Seco. Martinez was ousted last year after serving for 50 years as a commissioner on the acequia.

Chris Pieper, a current commissioner, said the pressure has been so tough that another commissioner recently resigned, and the ditch’s *mayordomo* has threatened to step down as well.

Pieper says his opposition to the ASR partially comes from the fact that surface water will have to be filtered, chlorinated and might need to have its pH altered before it is injected underground.

Sediments can clog the wells. Bacteria in stream water can contaminate the groundwater. And water with mismatched pH can cause contaminants to precipitate or dissolve underground. When the water is brought back to the surface, it will probably need to be treated again.

Money issues

Those treatments raise environmental concerns for Pieper. They also raise financial ones.

A generic cost estimate provided by Pieper shows it could cost more than \$50,000 a year to operate and maintain the well and do the necessary treatments.

“That’s more than the acequia’s annual revenue,” Pieper said. “It would bankrupt us.”

At the start, it’s possible the acequia would have to cover much of that cost. The settlement specifically allocates up to \$8.1 million for construction of the ASR or a reservoir, but allows “up to” \$121,000 for operation and maintenance costs.

The settlement also provided up to \$2 million for the purchase of 100 acre-feet of consumptive water rights to offset the amount of water to be diverted and stored.

That water rights purchase sparked its own controversy when it was made public that the Seco ditch planned to buy the rights from an acequia in Questa.

At the moment, it’s not clear how the ASR debate will be resolved. Pieper said the current acequia commission is refusing to sign a check to buy the Questa water rights. He also said a recent meeting to discuss the issue was canceled over concerns that it would become too hostile.

Pieper dismissed the alternative of constructing a reservoir, saying he wasn’t aware of a suitable location.

If any project does go forward, it would be subject to an environmental assessment because of the federal funding involved.



The map shows the general location of the proposed wells.

Map by J.R. Logan

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