

Study confirms La Cienega residents' fear: Water decline threatens area

By Staci Matlock
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South of Santa Fe and visible from Interstate 25, wetlands fed by natural springs create a cool oasis of green each summer in La Cienega. Centuries-old irrigation ditches and their farmers depend on water from the springs. Ducks, geese and herons rest at spring-fed ponds on their annual migratory treks.

These wetlands are the only source of water for La Cienega (which means “the marsh” in Spanish) and other communities on Santa Fe’s southern edge. But the wetlands and springs are slowly drying up, besieged by periodic drought and steady well-water pumping by hundreds of homes built in the last 20 years around the area.

Rey Romero, the ditch boss or mayordomo of the 300-year-old La Acequia de la Cienega, is among those who’ve fought the county over development for decades. Romero, 80, a farmer all his life, said he’s worried. “I feel like I’m watching it disappear. It just makes me sad,” said Romero, watching water flow down the acequia near the headwaters on Friday. “It’s a lot of my life.”

A new study confirms his worries. Since at least 1973, the groundwater that feeds the wetlands and springs has been steadily dropping, according to the hydrogeology study released this week by scientists with the New Mexico Bureau of Geology and Mineral Resources at the New Mexico Tech. The report is the first comprehensive analysis of the geology and hydrogeology of wetlands and springs near La Cienega, according to Peggy Johnson, who conducted the study along with Daniel J. Koning and Stacy S. Timmons.

There are ways to keep the plumbing healthy and flowing, but that will take some changes and collaboration between residents pumping wells in the region and Santa Fe County, Johnson said.

Romero said the water used to flow at about 450 gallons a minute in the 1960s. He said now it flows more often between 180 and 200 gallons a minute. Even though the acequia has sought funding to install pipes to stretch the water for the 33 farmers on the ditch, there isn't enough to irrigate fields and gardens well during the growing season.

Carl Dickens, president of La Cienega Valley Association, agrees the water decline started about 40 years ago. He blames the more than 400 homes and wells that have been built in the area in the last 15 years and a steady increase in population.

The drought in the last four years hasn't helped.

The county requires meters for new houses and mandates limited water use in some, but not all, areas of the valley. "But there's no one to enforce the rules," Dickens said. "I know one guy who bought a meter and just keeps it in his garage in case the county asks if he has one."

Dickens said some people are growing small orchards, gardens and "little forests. It's pretty apparent those people are using more water than they're allowed."

"This is one of those things that, if we don't pay attention, we'll be sitting in a dust bowl," Dickens said, leaning against his red Ford F-250, bearing a faded "Keep It Rural" bumper sticker, in the dirt parking lot of the Sunrise Springs resort.

The new study provides science that could help preserve the springs and wetlands. The study describes how water that feeds the wetlands is the end product of a complex and largely unseen kind of natural plumbing system. The plumbing gathers snowmelt and rain that seeps underground. The system channels deep groundwater upwards toward the shallower Ancha aquifer. Buried valleys in the region act as underground drains, gathering up and directing water to La Cienega and determining where springs appear.

One buried valley called El Dorado drains water to upper La Cienega, Las Lagunitas and the lush vegetation at the Leonora Curtain Wetland Preserve.

Another valley, following the buried ancestral Santa Fe River path, directs water to Sunrise Springs and to wetlands along Arroyo Hondo's western slopes.

The buried valleys are sensitive to well-water pumping. But while pumping can drain the water in the valleys, the system also can recover. Stormwater, for example, can rapidly recharge the wetlands, at least for a short time.

“Understanding of the hydrology and geology gives us a picture that this is a resource that’s very vulnerable.

But Johnson said she doesn’t think it would take a lot of changes to protect the wetlands. “It’s within the ability of the broader community, if they choose to,” she said.

The community is trying.

Water attorney Kyle Harwood, who lives in La Cienega with his family, said with help from Sen. Peter Wirth, D-Santa Fe, and the county, a well at the old state penitentiary that was a major water hog was capped in the last year, and its users were shifted onto the county water system. “That well was seen as one of the most aggressive wells as far as affecting La Cienega springs,” Harwood said.

Harwood offered his well to Johnson’s team for an intense monitoring project that will measure water levels every five minutes for two years. Soon a dozen more wells could be part of a monitoring project, funded in part by El Rancho de las Golondrinas. “The springs are critical to Las Golondrinas, Sunrise Springs and our ranch,” Harwood said.

Dickens, Harwood and others in the community hope to add dozens of wells to the monitoring program as they raise funds.

Another key will be hooking more of the homes scattered in the valley and dotting the hills to the Santa Fe County water system as pipelines are constructed nearby. But the county’s water hookup policy is mixed, just as it is for metering the wells. Some homeowners will be required to hook into the county system when it comes within 200 feet of their property, but not all of them, said Penny Ellis-Green, growth management planner with the county.

Johnson said La Cienega isn’t the only wetlands area suffering declines. “Wetlands all around the West are being affected. Most are groundwater fed. When wells are pumping and depleting the aquifers, the wetlands are the first affected.”

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Rey Romero, 80, says the natural spring feeding this pond on his Los Pinos property is doing better than other springs around La Cienega. Romero has farmed all his life and is worried about drought and well water pumping from a growing number of houses in the area drying up other springs in the area. Photo by Staci Matlock