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California's rural poor hit hardest as groundwater vanishes in long drought

Darryl Fears

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Delivery driver Sebastian Mejia delivers water to a tank in the front yard of the home of Elvira Gutierrez while working for Jim Brough's 'Aqua-man' water delivery services on June 24 in Porterville, Calif. The rural poor depend on groundwater and with farmers digging deep to water their fields, communities relying on groundwater struggle.

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MECCA, Calif. — Whenever her sons rush indoors after playing under the broiling desert sun, Guadalupe Rosales worries. They rarely heed her constant warning: Don't drink the water. It's not safe. The 8- and 10-year-olds stick their mouths under a kitchen faucet and gulp anyway.

There is arsenic in the groundwater feeding their community well at St. Anthony Trailer Park, 40 miles south of Palm Springs. In ordinary times, the concentration of naturally occurring arsenic is low, and the water safe to drink. But during California's unrelenting drought, as municipalities join farmers in sucking larger quantities of water from the ground, the concentration of arsenic is becoming more potent.

A recent laboratory test found that water in St. Anthony's shallow well has twice the concentration of arsenic considered safe.

For many Californians, the state's long drought has meant small inconveniences such as shorter showers and restrictions on watering lawns. But in two rural valleys, the Coachella southeast of Los Angeles and the San Joaquin to the north, farmworkers and other poor residents are feeling its impact in a far more serious and personal way.

Tulare County, in southern San Joaquin Valley, is a land without water, a real-life example of a future many Californians fear as scientists warn of a possible decadeslong megadrought.

State politicians, county officials and community activists have scrambled to place water tanks at about 1,200 homes, but that is only slightly more than half of the households that do not have water. Every day, the county puts 3,000 gallons of nonpotable water in two tanks at different locations in Porterville so some of those residents can fill drums and buckets for basic uses such as flushing toilets.

"This whole thing with the tanks was intended to be an interim solution" but has continued for a year as the drought drags on, said Paul Boyer, director of community development for Self-Help Enterprises, a group that asks water agencies in the area for as many gallons as they can spare.

"We need rain. We need snow in the mountains. We need to recharge groundwater," Boyer said. "We're coming up on the driest part of the year."

On a hot Wednesday afternoon in early June, Rosales stepped out of her trailer to offer an opinion about the water that pours out of her faucet.

"It doesn't smell too good," she said, echoing the assessment of other residents.

Amalia Ceja, who lives nearby, will not drink the water, but she said she uses it to bathe herself and her 4-year-old son.

He developed "bumps on his head," Ceja said. "At first, we thought it was dandruff. After a doctor visit, they said it was arsenic."

Arsenic, natural or not, can be frightening. It has been linked to various cancers of the bladder, lungs and skin when consumed in high doses. It is also known to cause birth defects and attack the nervous system.

Near agricultural fields, its levels can be increased by fertilizers and animal waste that run off farms. Mineral mining operations in the area contribute to the problem.

Three years ago, officials in Riverside County helped a community nonprofit group, Pueblo Unido, take ownership of St. Anthony Trailer Park and its toxic well after a business that owned it went bankrupt.

The county also provided funds for Pueblo Unido to build a reverse-osmosis water treatment facility that filters water through a membrane to remove arsenic for the park's 850 residents. Pueblo Unido took the additional step of providing filters that remove arsenic from water directly at the faucets of some trailers.

A sign wired to a gate at the treatment center by Pueblo Unido says the water is safe to consume. But it offers no proof from a lab test.

As sweat beaded on his head under a late-afternoon sun, Boykin Witherspoon III, director of the Water Resources Institute at California State University, San Bernardino, read the sign with skepticism.

"A notice like that is usually from the department of health, but this is something the owner put up," Witherspoon said. "I couldn't get away with doing that at the university. I have to produce proof, based on peer-reviewed science."

A lab report ordered by the county in May found no arsenic in groundwater treated at the reverse-osmosis plant, but Rosales and other residents did not know that. A website for the Department of Environmental Health says the information is available upon request.

The treated groundwater sits under the sun in large, milky-white plastic water tanks. "It smells like plastic, like it's been stored there forever," Rosales said. "It foams a lot when you pour it out, and that concerns us."

Rosales said her trailer is not among those that received a filter for its faucet. Pueblo Unido's director, Sergio Carranza, declined to return several emails and telephone calls to his office requesting an interview.

"We don't have confidence in [the water]," said Rosa Magullon, who has lived at the park 20 years. "It was never great," she said, but after three full years of drought, "it's even worse."

The women said they drive 10 miles to a grocery store to buy bottled water rather than walk a few hundred yards from the trailer to the treatment plant to fill five-gallon containers with water they do not trust.

Witherspoon's eyes darted from the plastic tanks that hold the water to Pueblo Unido's sign saying it was safe, without proof.

"I wouldn't trust it either," he said.

In November last year, near the end of California's third year of drought, pastor Roman Hernandez got on his knees and prayed. "How can I help the community?" he asked.

Thousands of people around his 50-member church in Porterville couldn't take baths or wash dishes because their individual wells stopped pumping water. Children didn't play outdoors because they didn't want to attend school in dirty clothes that could not be laundered. Entire neighborhoods were living on bottled water.

As his story goes, Hernandez's phone rang as the prayer ended. The county offered to install portable showers, which are still at Iglesia Emmanuel Assembly of God today.

"It was the perfect place," said Melissa Withnell, a county spokeswoman. "It's a neutral space where residents can go without fear. It's right in the middle of the community. And the pastor is bilingual."

Trailers with 16 portable showers operate from 5 a.m. to 9 p.m., seven days a week, costing the county about \$30,000 per month, Hernandez said. "We get people here all day long," the pastor said.

Volunteers and donors, including corporations such as Budweiser and Bridgestone Tires, have sent pallets of drinking water in thousands of cans. Hernandez said he sympathized with people who had no water. The church's 45-foot well went dry, too.

He paid \$7,000 to drill an extra 45 feet to reach the declining groundwater, money his small church didn't have, he said. "And now we're getting there again," Hernandez said. "I can tell the symptoms of a well going dry. It picks up sand, and the water has a certain smell."

On a Tuesday in June, when temperatures reached 105 degrees, community organizer Yolanda Chacón-Serna knocked on the doors to check the health of farmworkers and others in Porterville whose wells in some cases haven't pumped water for two years.

"Can you imagine two years without having water?" said Chacón-Serna, who works with the Porterville Area Coordinating Council. "These are families with five to seven children. The houses don't have air-conditioning."

Families use swamp coolers that suck air across a wet pad to lower indoor temperatures, but without water, they are useless.

Their 35-foot to 45-foot wells did not reach as far into the ground as farm wells nearby, many of which are twice as deep. As crops get watered, homes of low-wage workers in Tulare County go dry.

But, Chacón-Serna said, residents without water are not pitting themselves against farmers, some of whose wells have also gone dry. "Everyone eats the fruits and vegetables produced by those farms," she said.

At the Cecelia Packing House, where farmworkers box citrus in nearby Orange Cove, David Roth, the company president, is searching for water, drilling five new deep wells at more than \$30,000 each in the next three weeks.

Water is needed to pressure-wash and treat citrus before it goes to market, as far as China. "All the water here is pumped from the ground," Roth said. "Surface water from lakes and reservoirs is no longer available."

If the drought goes on, Roth said, California's citrus industry, which recently plowed 10,000 acres of dry trees, will be in deep trouble.

"Anything out of the sky is an asset," because now, he said, there is nothing.