## When the wells run dry: California families cope in drought

By Scott Smith August 30, 2015

TULARE, Calif. (AP) — Looking for water to flush his toilet, Tino Lozano pointed a garden hose at some buckets in the bare dirt of his yard. It's his daily ritual now in a community built by refugees from Oklahoma's Dust Bowl. But only a trickle came out; then a drip, then nothing more.

"There it goes," said Lozano, a 40-year-old disabled vet, masking his desperation with a smile. "That's how we do it in Okieville now."

Millions of Californians are being inconvenienced in this fourth year of drought, urged to flush toilets less often, take shorter showers and let lawns turn brown. But it's dramatically worse in places like Okieville, where wells have gone dry for many of the 100 modest homes that share cracked streets without sidewalks or streetlights in California's Central Valley.

Farming in Tulare County brought in \$8.1 billion in 2014, more than any other county in the nation, according to its agricultural commissioner. Yet 1,252 of its household wells today are dry, more than all other California counties combined.

Lozano, a 40-year-old disabled vet and family man, has worked with his neighbors to rig lines from house to house, sharing water from a well deep enough to hit the emptying aquifer below. County trucks, funded with state drought relief money, fill 2,500-gallon tanks in many yards. Residents also get containers of drinking water, stacking them in bedrooms and living rooms.

These "Third-World-type conditions" are hidden from plain sight, says Andrew Lockman, of Tulare County's Office of Emergency Services. "It's not an earthquake or flood where you can drive down the street and see the devastation."

Okieville is quiet, dry and hot. Close your eyes and you're likely to hear a rooster crow or a dog bark. Agriculture is the main employer, and for miles around, dense fields of deep green cornstalks grow as feed for dairy cows. Alfalfa, almond, oranges and grapes abound. Residents express pride in their town, and support the need for irrigation.

"They need water for the cows," said Okieville resident and tire salesman Gilbert Arredondo. "Without dairies we wouldn't have jobs. They produce cheese."

For 150 years, surface canals and underground aquifers turned semi-arid regions of California green, and even in drought, the state produces most of America's fruit, vegetables and nuts.

But the meager Sierra Nevada snowpack doesn't replenish the rivers like it used to, and farmers are drilling ever-deeper wells to compensate for the plunge in surface water. One farm bought its own \$1 million drilling rig just to ensure its supply.

So far, 15 shallower wells used by 23 homes in Okieville are depleted.

Maria Marquez, a 50-year-old widow, panicked when her shower abruptly ended in June 2014. They couldn't afford to move, and who would buy a house without running water? Drilling her own new well would cost more than years of earnings from the food truck where she works.

Unlike Lozano, who rents his home, Marquez was eligible as a homeowner to get a tank installed for washing and flushing, to be filled each Monday by a county truck, as well as bottled water for drinking and cooking through California's \$3.7 billion drought relief program, which includes \$38 million for drinking water and tanks.

"It's our home," said her daughter Judy Munoz, 26. "She doesn't want to leave it behind."

Her neighbor Christine Dunlap, 72, is among the few left with Dust Bowl roots. As with other "Okieville" communities in California, the hundreds of thousands of Midwesterners who migrated west in the 1930s were mostly replaced by migrants from Mexico after the camps evolved into permanent communities.

"We've got used to it," said Dunlap, whose 170 foot-deep well ran dry in February. She's still got family, she said, so "we consider ourselves lucky."

California became the last state in the West to regulate groundwater when Gov. Jerry Brown signed legislation ending a Gold Rush-era policy that generally let property owners take as much as they wanted. A \$7.5 billion water bond measure also approved in 2014 includes \$2.7 billion to boost water storage.

But sustainable alternatives remain years away, and the groundwater supplying nearly 60 percent of the state's needs in dry years is being used up like never before.

Seeking a solution for problems in Okieville, 5 miles outside of Tulare, Maria Marquez welcomed Maria Herrera, an organizer for the nonprofit Self-Help Enterprises, who brought a team of engineers and a lawyer to address about 50 people gathered in her dirt yard. "We have a lot of important items to talk about tonight," began Herrera.

As the night wore on, consensus seemed to grow around forming their own water district, and applying for state and federal grants to pay for two 500-foot deep wells costing about \$2 million. Monthly water bills would be about \$50, and everyone would get reliable water — at least until the surrounding farms dig deeper.

It would take at least two years to design and build it before water flows, engineer Owen Kubit explained.

"I don't think we can last this summer without no water," Arredondo said.

Others nod in frustration.

"We can pray for rain," Kubit said.

Marguez does pray, kneeling alongside one of her granddaughters after the girl's nightly bath.

"God, give us water so we don't have to move," the 4-year-old says, pressing her palms together. "God, please fill up our tank, so we don't run out of water

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In this June 30, 2015 photo, Gilbert Arredondo, left, looks down as he talks about his town's water crisis, standing in front of his tenant's sons, in the community of Okieville, on the outskirts of Tulare, Calif. Arredondo had just informed his tenant, Tino Lozano, that the well connecting their houses had gone dry. The water is disappearing at a particularly alarming pace in their neighborhood, forcing neighbors to rig lines from house to house to share what underground water is still reachable from the deepest wells. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, rancher Steve Drumright looks toward his cattle, grazing on a barren hillside in Tulare County, outside of Porterville, Calif. Drumright's herd is forced to search the parched Tulare County hills for the dwindling vegetation as California endures a fourth year of drought. (AP Photo/Gregory Bull)



In this June 30, 2015 photo, Tino Lozano looks into a bucket as the last of his available well water drips from a hose in front of his home in the community of Okieville, on the outskirts of Tulare, Calif. "There it goes. That was all," said Lozano, masking his desperation with a smile. "That's how we do it in Okieville now." Millions of Californians are being inconvenienced in this fourth year of drought, but it's worse in places like Okieville, where wells have gone dry for many in the Central Valley community which was built by refugees from Oklahoma's epic Dust Bowl drought. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, Billy Dunlap, 21, hauls in boxes of bottled water as his son, Brandon, 3, walks alongside at their home in the community of Okieville on the outskirts of Tulare, Calif. Four generations of Dunlaps share the white house with blue trim Christine Dunlap's father-in-law built in the 1940s, and little changed in all those years, until her 170-foot well ran dry in February. (AP Photo/Gregory Bull)



In this July 2, 2015 Elias Trejo, center, throws a ball with his sister, Celeste, left, on the dry dirt where the family's lawn once stood in the community of Okieville, on the outskirts of Tulare, Calif. As California endures a fourth year of drought, water scarcity has become the new normal, inconveniencing millions of people who are urged to flush toilets less often, take shorter showers and let lawns turn brown. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, a man rides a bike down one of the dirt roads of the community of Okieville, on the outskirts of Tulare, Calif. Here, 100 modest homes share narrow, cracked streets without sidewalks, stop lights or streetlights in the arid southeast corner of California's Central Valley. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, four generations of the Dunlap family look on as bottled water is delivered to their home in the community of Okieville on the outskirts of Tulare, Calif. Christine Dunlap, second from left, was relieved to see the truck arrive - her family missed a month's supply after she made a mistake on a form, and she could hardly afford to buy her own. The state pays for drinking water. (AP Photo/Gregory Bull)



In this July 1, 2015 photo, Christine Dunlap sits on her couch in front of her collection of dolls in her home in the community of Okieville on the outskirts of Tulare, Calif. Dunlap suspected trouble was coming when her neighbors' wells failed. She let her grass die after noticing sand in the water. Then, when she got up to make coffee one morning, her faucet ran dry. (AP Photo/Gregory Bull)



In this photo, a canal along a corn field is flooded on the outskirts of Tulare For miles around the community of Okieville, dense fields of deep green cornstalks are grown, to be chopped up as feed for dairy cows. Alfalfa, almond, oranges and grapes abound. Industrial agriculture is the main employer, providing jobs in surrounding farms and dairies. Yet at least 1,300 wells have gone dry - which state figures show is almost twice as many as all other California counties combined. Gregory Bull — The Associated Press



In this July 2, 2015 photo, Grecia Marquez kisses her daughter, Yaritza Pizano, 4, in front of their home in the community of Okieville, on the outskirts of Tulare, Calif. As temperatures finally begin to drop in the summertime evenings, the family heads out to the steps in front of what was once a green lawn. (AP Photo/Gregory Bull)



In this June 30, 2015 photo, the Rangel family takes a ride on their ATV along an embankment along one side of the community of Okieville, on the outskirts of Tulare, Calif. As California endures a fourth year of drought, water scarcity has become the new normal, inconveniencing millions of people who are urged to flush toilets less often, take shorter showers and let lawns turn brown. But the situation is dramatically worse in places like Okieville, where water seems to be disappearing at a particularly alarming rate.



In this July 2, 2015 photo, Yaritza Pizano, 4, left, prays alongside her grandmother, Maria Marquez, in their home in the community of Okieville, on the outskirts of Tulare, Calif. As Yaritza's family began to run out of available water in 2014, she began to pray for it during her nightly prayer. "God, give us water so we don't have to move," the 4-year-old says, pressing her palms together. "God, please fill up our tank, so we don't run out of water," she said in a recent prayer. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, Tree Dunlap holds a photo of her Oklahoma ancestors as she returns it to the family house, background, after her mother posed for a picture with it in their community of Okieville, on the outskirts of Tulare, Calif. The Dunlap family have lived in Okieville since it was an Okieville - a term used for migrant camps set up for Midwesterners fleeing drought to California in the 1930s. (AP Photo/Gregory Bull)



In this June 30, 2015 photo, Elias Trejo squirts himself from a water balloon in front of his home in the community of Okieville, on the outskirts of Tulare, Calif. Despite pleas from his family to stop wasting water, Trejo couldn't resist, as temperatures in dusty Okieville hovered in the high 90s. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, groves of citrus trees sit below a barren hillside in Tulare County, outside of Porterville, Calif. Farming in Tulare County brought in \$7.8 billion in 2013, more than any other county in the nation, according to the agricultural commissioner here. But with little water now from the meager Sierra Nevada snowpack, some farmers are getting only a tiny fraction of their historic surface water, and so are drilling ever-deeper, draining the groundwater. (AP Photo/Gregory Bull)



In this July 3, 2015 photo, tomatoes are harvested below dry hills in California's Central Valley near Mettler, Calif. There is a sharp contrast between the Central Valley's bald hills and the verdant crops below. In a state suffering a fourth year of drought, California still produces most of America's fruits, vegetables and nuts. (AP Photo/Gregory Bull)



In this June 30, 2015 photo, Serenity Palomera, 3, laughs as she shares a bath with her cousin in ankle-deep water at their home in the community of Okieville, on the outskirts of Tulare, Calif. At play in the water, the girls often drag out their bath time, opting to slosh around for a long as possible before bedtime. (AP Photo/Gregory Bull)



In this June 30, 2015 photo, Maria Marquez, left, holds her granddaughter, Serenity Palomera, 3, after a bath with her cousin, Yaritza Pizano, 4, right, at their home in the community of Okieville, on the outskirts of Tulare, Calif. As with other "Okieville" migrant camps - there's one in Stockton, another in Bakersfield - the hundreds of thousands of Midwesterners who fled drought to California in the 1930s were replaced by migrants from Mexico as the camps developed into permanent communities. (AP Photo/Gregory Bull)



In this July 1, 2015 photo, Tree Dunlap stands behind the family's dry well in their community of Okieville, on the outskirts of Tulare, Calif. Since the well dried up, the Dunlap family has been forced to find water elsewhere, including applying for programs that provide bottled water. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, Maria Marquez and her granddaughter Yaritza Pizano, 4, run inside for cover as fireworks burst in front of their home in the community of Okieville, on the outskirts of Tulare, Calif. The family's once-verdant lawn has been reduced to a brown swath cut by a concrete pathway. (AP Photo/Gregory Bull)



In this July 2, 2015 photo, Brandon Dunlap, 3, sits on the lap of his grandmother, Tree Dunlap, as he holds a bottle of water in their home in the community of Okieville on the outskirts of Tulare, Calif. The Dunlaps are one of the few families left with roots in Okieville's namesake, Oklahoma. (AP Photo/Gregory Bull)



In this July 1, 2015 photo, Jeff Smith, center, listens with other members of the community of Okieville as they meet to hear plans on confronting the drought on the outskirts of Tulare, Calif. As more wells run dry in Okieville, a growing concern is uniting neighbors on the idea something must be done. (AP Photo/Gregory Bull)



In this July 1, 2015 photo, Maria Herrera of Self-Help Enterprises, left, leads a meeting of members of the community of Okieville on plans to confront the drought on the outskirts of Tulare, Calif. "We have a lot of important items to talk about tonight," began Herrera. She switched between English and Spanish as about 50 people, the largest crowd yet, settled into folding chairs, benches and barstools in Maria Marquez's dirt yard. (AP Photo/Gregory Bull)



In this July 1, 2015 photo, members of the community of Okieville meet to hear plans on confronting the drought crisis outside the home of Maria Marquez on the outskirts of Tulare, Calif. Marquez never saw herself as an activist, but she has paid half of a 30-year loan on a house she loves. She began urging neighbors to attend meetings in her yard. Some whose wells still deliver won't come, but the numbers are growing. (AP Photo/Gregory Bull)