Farmers say, ‘No apologies,’ as well drilling hits record levels in San Joaquin Valley

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WOODVILLE -- Drive through rural Tulare County and you’ll hear it soon enough, a roar from one of the hundreds of agricultural pumps pulling water from beneath the soil to keep the nut and fruit orchards and vast fields of corn and alfalfa lush and green under the scorching San Joaquin Valley sun.

Well water is keeping agriculture alive in Tulare County – and much of the rest of the San Joaquin Valley – through five years of California’s historic drought. Largely cut off from the supplies normally delivered via canals by the federal and state water projects, farmers have been drilling hundreds of feet into the ground to bring up the water they need to turn a profit.

Two years after Gov. Jerry Brown signed a bill designed to limit groundwater pumping, new wells are going in faster and deeper than ever. Farmers dug about 2,500 wells in the San Joaquin Valley last year alone, the highest number on record. That was five times the annual average for the previous 30 years, according to a Sacramento Bee analysis of state and local data.

The new groundwater law won’t kick in until 2020, and won’t become fully implemented for another 20 years. In the meantime, farmers say they will continuing drilling and pumping. It’s their right, they say, and their only practical choice given the government’s limited surface water deliveries.

“Just like a guy that owns a hardware store who sells nothing but shovels, say I cut you off and decide not to supply you with shovels, are you going to close your store or are you going to get shovels from somebody else?” said Wayne Western Jr., a wine grape grower near Firebaugh in the parched west side of Fresno County.

“It’s a business. I’ll make no apologies for trying to stay in business and being successful,” said Western, who’s been relying almost exclusively on well water the past three years. “That’s what we do here.”

Part of what’s driving the well-drilling frenzy is a kind of groundwater arms race. Aquifers don’t respect property lines, and in many cases farmers with older, shallower wells are afraid of losing water to neighbors who are digging deeper wells and lowering the groundwater table. So they invest hundreds of thousands of dollars to drill new wells of their own. All told, farmers are expected to spend $303 million this year alone to pump groundwater, according to UC Davis researchers.

“Business is good; we’ve got plenty of work to do,” said driller Steve Arthur, who runs Arthur & Orum Well Drilling Inc. in Fresno.

On a recent weekday, Arthur was overseeing the drilling of a massive 1,200-foot well beneath an almond orchard in the tiny Tulare County community of Poplar. A few years ago, the typical well was only half as deep.

“These farmers, they’re learning if they go deeper, they’re going to get more water and they won’t have to drill as often,” Arthur said, shouting over the din of a drill rig. “If the government don’t give us any water, what’s the farmer supposed to do?”

The new well in Poplar cost about $260,000.

Arthur said he expects to drill about 260 new wells this year throughout the San Joaquin Valley. That's about the same as last year, although the well-drilling industry isn't quite as frantic now. Prices for new wells are off slightly, and some of Arthur's Johnny-come-lately competitors – the so-called "drought chasers" – have left town. But Arthur, who farms 200 acres of almonds, said he thinks the well-drilling business won't sputter anytime soon.

"When the farmer gets up in the morning, the last thing he wants to do is spend $200,000, $300,000 on a well," Arthur said. "But if he wants to stay in business, that's what he's got to do."

From 2012 through 2015, San Joaquin Valley farmers dug more than 5,000 wells, more than were dug cumulatively over the previous 12 years.

In Fresno and Tulare counties, where most of the drilling occurred, officials issued an average of almost 10 agricultural well permits every business day in 2015, though not all of those permits were used. That pace has fallen some in the first few months of 2016, but remains well above pre-drought levels. Tulare and Fresno are two of the three largest agricultural counties in the state, as measured by farm revenue.

As farmers ramp up drilling and install larger, more powerful pumps, aquifers that had quietly flourished beneath the soil for thousands of years are dropping at dangerous rates. It's accelerating a phenomenon known as subsidence, in which some parts of the valley floor are sinking.

The problems of groundwater overdraft are most pronounced in the San Joaquin Valley, but they're not limited to there.

"It's a five-alarm fire in the San Joaquin Valley," said Jay Ziegler of the Nature Conservancy, which has pleaded for stricter statewide restrictions on pumping. "But it's a four-alarm fire in other areas around the state."

The well drilling has exacted a substantial human cost in some of California's poorest rural communities – the ones populated by workers who tend the fields kept green by all that groundwater.

Falling water tables mean underground pollutants become more concentrated, and in some cases municipal drinking-water wells fail altogether. By one estimate, about 30 percent of the communities in Tulare County have had problems with failing wells.

In East Porterville, hundreds of residents lost water in recent years. Tomas Garcia remembers the day in April 2014 when his shallow well failed. At work at a local tire shop, he got a call from his wife when their shower suddenly stopped working. What followed was a year of hauling water in 5-gallon buckets, to the point that the shocks on the family van blew out.

"No church, nothing. I was just hauling water," he said. "I had no time for my family." He also didn't have the $55,000 necessary to drill down to reach the receding groundwater.

In April 2015, Garcia's house was connected to a 2,500-gallon water tank that's refilled by tanker truck once a week. Like hundreds of other homes in East Porterville, where some streets are unpaved and the sounds of barking dogs and braying livestock mingle with mariachi music, the black tank now takes up most of the Garcia family's small front yard, an obelisk-like monument to the drought.

Just recently the town got a lifeline when officials announced it would be hooked up to the municipal water supply in nearby Porterville. All told, the state estimates it has spent more than $148 million bringing

drinking water to Tulare County communities where municipal wells failed because of dropping groundwater levels.

One of the more recent crises flared in August in Woodville, a largely agricultural town of 1,700 surrounded by farm fields and irrigation pumps. One of its two drinking water wells suffered a mechanical failure that the utility district attributed to fluctuations in the water table.

Without enough flow to stave off bacterial contamination, town officials issued an advisory urging residents to boil water. It stayed in place for nearly three weeks before the well could be repaired. At the elementary school, across the street from a fruit and nut processing plant, signs on doors and above drinking fountains warned students, “Don’t drink the water.”

During the crisis, Ralph Gutierrez, manager of Woodville’s utility district, said that because there wasn’t enough pressure in the town’s waterlines, he had no choice but to cite residents he caught spritzing lawns and landscaping with garden hoses.

He noted with irony that even as he was fining residents for their water use, he recently counted 60 new agricultural wells just outside town during one week of his daily commute.

But the response he got was icy when he suggested to farmers at a recent community meeting that they accept limits on groundwater pumping.

“If looks could kill, I would have been crucified,” said Gutierrez, a familiar figure around town with his bushy mustache, weathered Dodgers cap and pack of smokes in his shirt pocket.

Others have pushed for local pumping limits, with similar results.

Kristin Dobbin, who works at a Visalia nonprofit advocacy group called the Community Water Center, has been pushing the Tulare Board of Supervisors to adopt a county ordinance that would put limits on groundwater. Supervisors have yet to cast a vote more than a year later.

Steve Worthley, one of the supervisors, said he’s wary of limiting groundwater pumping, given agriculture’s importance to Tulare County. Besides, there’s always the possibility that the rains might return and the groundwater pumping will taper off.

“There might become a weather pattern where we might be like Louisiana, where we might get more water than we know what to do with,” Worthley said. “So we want to be careful we don’t put into place laws that hamstring our ability to be the fruit basket of the nation.”

In conversations throughout the valley, it’s also clear that farmers seethe with anger at the government for not sending more surface water their way. While much of California remains unusually dry, precipitation levels returned to normal in Northern California last winter, bringing key reservoirs back to relatively healthy levels.

Farmers feel they haven’t gotten their fair share of that water. The reason? State and federal officials allowed more water to flow through the Sacramento-San Joaquin Delta and out to the Pacific Ocean during portions of winter and spring to try to revive the native fish species, including salmon and smelt, whose numbers have plummeted in the drought.

“The farmers need the water, you know,” said Kulwant Gadri, a Tulare County almond grower who’s

spending more than $1 million this year on new wells. If an almond orchard goes longer than two months without it, “the orchard is gone.”

The situation is getting so dire, said Arthur, the Fresno well driller, that he questions whether the 2014 state law placing limits on pumping will ever get implemented.

“They stop drilling wells, they’re going to kill this valley,” he said. “They may never get this law going.”

State officials say the Sustainable Groundwater Management Act will take effect. But, by design, it’s a go-slow approach and doesn’t directly put limits on drilling.

Instead, starting in 2020, newly formed groundwater management agencies overseeing basins deemed critically overdrafted must develop plans for making their aquifers sustainable within 20 years. “Sustainable” generally means districts must ensure groundwater basins don’t drop below their January 2015 levels, said David Gutierrez, who is supervising the rollout of the new law at the state Department of Water Resources.

Gutierrez defends the gradual approach, arguing that bringing a swift halt to groundwater pumping would cripple a farm economy that’s already struggling. After a string of record years, farm revenue last year fell by $9 billion statewide, in part because of water shortages but also because of declining prices in key commodities.

“We can’t afford to swing so quickly and so fast,” Gutierrez said. “We’re not going to turn it on a dime. ...We have to understand the social ramification of what we’re doing, too.”

The go-slow concept was driven home in the state Legislature this year. Sen. Lois Wolk, D-Davis, introduced a bill sponsored by the Nature Conservancy that in effect would have put the Sustainable Groundwater Management Act on a faster track. Her bill, SB 1317, would have prohibited counties from issuing permits for new wells that would have contributed to “undesirable impacts” in critically overdrafted groundwater basins.

The bill narrowly passed the Senate, but failed to get a hearing in the Assembly amid significant opposition. Among those weighing in: the California Chamber of Commerce, California Farm Bureau Federation and associations representing rice, tomato, cotton and citrus growers.

Back in Woodville, utility manager Ralph Gutierrez says officials need to act soon to prevent more wells from failing in other impoverished communities. He fears regulators are forgetting that farmworkers in these towns play as important a role in California agriculture as the groundwater farmers are pumping into their crops.

“Without farming, would this community be here? No,” he said. “Would the farming happen if we didn’t have farmworkers? No. So, you know, I don’t know what the answer is, but we’ve got to find a happy medium somewhere, because we can’t exist without the other.”