Anxious for rain: Drought may mean shortage of water for irrigation, cattle

By Cory Golden | Enterprise staff writer | January 14, 2009 08:40



Farmer Robert Ramming of Pacific Star Gardens checks the ground at his walnut orchard, only to find far too many drought-tolerant weeds instead of the ground cover of grass and clover he planted. Grass, however, needs lots of water. Sue Cockrell/Enterprise photo Day after day, Scott Stone checks the weather forecast.

Over and over, yellow cartoon suns appear as if taunting him.

More dry weather.

'I watch (the weather report) in the morning. I watch it at night. I check the Internet during the day, just to see if it'll tell me something different,' said Stone, whose family ranches and farms in Yolo County. 'It's frustrating -Washington and Oregon are getting deluged, and we can't seem to get anything.'

Unless the rest of the winter produces aboveaverage rainfall, the county's farmers may go without surface water deliveries for irrigation for the first time since 1990. Ranchers, meanwhile, are facing an already bad situation growing worse.

For now, high pressure is pushing rain north, said meteorologist Felix Garcia said. There may be some on the way in about a week, but it's no sure bet. Indeed, long-range models show a 50-50 chance of above- or below-average precipitation, he said. For the year, rainfall stands at 59 percent of normal.

In short, 'We're not in good shape,' said Tim O'Halloran, the general manager for the Yolo County Flood Control and Water Conservation District.

Normally, the district provides surface water, which moves down Cache Creek, then through canals, to about 200 customers who use it to irrigate about 60,000 acres.

In such a normal year, about 57 percent of the county's farmers receive all their water that way or from the Sacramento River. Thirty-two percent of the county relies on groundwater exclusively to irrigate crops. Another 11 percent uses a mix.

Right now, however, the district's supplies are dismal.

Its water comes from Clear Lake and the Indian Valley Reservoir. At Indian Valley, about 20,000 acre feet remain (out of a 300,000 acre feet capacity). A minimum of 20,000 acre feet is needed to support the fish population - leaving none, as it stands, available for irrigation.

To legally use water from Clear Lake, a gauge at Lakeport must read 3.22 feet in elevation (7.56 feet represents a full lake). Right now, the gauge reads 1.2 feet. Again, no water available.

Unless there are 90,000 acre feet available between the two sources, O'Halloran said, no surface water

will be moved this season. The district could also limit allocations if there's enough water for irrigation, but not the 225,000 acre feet typically needed for a full season.

'We could get a March miracle, we could get a late storm, but if we don't then we won't deliver surface water,' he said.

Last year the irrigation season was cut short by a month. Prior to that, water supplies were sufficient for full irrigation seasons as far back as 1995. There was no water at all available in 1990, followed by limited supplies for the next four years.

Both growers and the district have been bracing for bad news in a variety of ways. But 'there's no way to prepare yourself for a complete lack of water,' said farmer Blake Harlan. 'It's not something that happens very often.'

Beginning last year, County Ag Commissioner Rick Landon said, many farmers began digging new wells or rehabilitating old ones.

Typically, the district charges about \$17.50 per acre foot of surface water. That compares to \$20 to \$60 per acre foot to operate a well, assuming it's already up and running.

So plentiful and so cheap were the surface water supplies, for so many years, that many local farmers disconnected the electricity from their pumps rather than pay to keep them hooked up. Some switched to cheaper diesel engines, if they used the wells at all.

Many wells, dug as far back as the 1950s, have degraded. PG&E also disconnected some of its idle equipment.

Now there's a three-month waiting list for hook-ups, according to PG&E. And new regulations mean upgrading wells at great expense or registering diesel-powered pumps, Harlan said.

'Frankly, we're playing catch-up.'

Harlan farms about 5,000 acres near Davis and between Madison and Winters. In a normal year, about 80 percent of his irrigation would be done with surface water. He does have wells on a good portion of his farms, but, in some spots, like on the land near Madison, groundwater supplies aren't as good.

'If we lose the surface water there, we may be in jeopardy of not farming there at all.'

Farmers will also be altering their mix of crops and adjusting where they plant them.

For example, because of contractual obligations with processors, Harlan will plant tomatoes in fields with wells first. On other ground without wells, he may plant wheat or oats, then hope there's enough winter water to sustain it.

The district, meanwhile, started a voluntary, incentive-based groundwater pumping pilot program last year. It took water from underutilized wells and pumped it through the district's canal network, which allowed the irrigation season to be extended.

The program is only in its early stages, however, and won't be able to offset a zero supply of surface water.

Robert Ramming, whose farms sits on about 40 acres between Davis and Woodland, has been able to use a small household well to support berries, melons and apricots. He's also added a second, deeper

well.

His concern lies with 15 acres of young walnut trees. He will be able to 'limp along' with drip irrigation from the wells, but without water from the canal the grass and clover he's planted among the trees will die for the second straight year.

Working with the Natural Resource Conservation Service, Ramming just last month created two new ponds for irrigation, trapping sediment and wildlife habitat. Without surface water, the ponds, covering a little over an acre, will stay dry.

For ranchers, the drought has already been responsible for a 45 percent loss of rangeland - about a \$600,000 loss - last year, Landon said. That doesn't count cattle ranchers were forced to sell off.

A portion of the Stone family farming operations are irrigated with reclaimed water from the Campbell's Soup plant in Dixon. But the Stones' 7,500-acre ranch on the county's western edge needs rainwater to fill up the ponds their 800 head of cattle rely on.

In areas where grass should be growing back, it's not. That means cattle can't be rotated back to those fields.

Stone counts himself lucky his family installed solar-powered pumps, providing power to wells in areas without electricity.

Other ranchers, he said, 'are in pretty tough shape.'

Cattle prices are poor. Without water, ranchers reach a point where feeding cattle with hay, instead of grass, no longer makes financial sense, he said.

'There's nothing worse than selling off your herd when that price is low.'

Similar droughts have taken place in each of the past three decades. There appears nothing remarkable about this one, Garcia, the meteorologist, said.

Said O'Halloran, 'We're kind of due for this, but it's never fun.'

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