

South Valley ag takes drought's brunt

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(Photo: David Castellon)

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California's now 4-year-old drought will cost state agriculture \$1.84 billion in 2015 along with an estimated 21,000 jobs lost, with the South Valley suffering some of the worst effects, according to University of California at Davis researchers.

And the overall effects of the drought this year, combining lost farm revenues, higher costs and declining household revenues, could total \$2.7 billion, according to the "Economic Analysis of the 2015 Drought for California Agriculture."

It's the latest in a series of reports by the university's Center for Watershed Sciences has done since last year analyzing and forecasting the economic effects on the industry from California's severe drought, now in its fourth year.

The study, released Tuesday, forecast that the biggest chunk of agricultural losses will come from fallowing of 542,000 acres, mostly due to lack of water for irrigation. That's about one-fifth more land than was forced out of production by the drought last year, researchers noted.

"Feed, grain and field crops have the largest proportional cuts in irrigated acreage under drought conditions, because they hold a lower value per unit of water," states the report.

Those crops are particularly important in Tulare County, the top dairy-producing county in the U.S., where dairies often grow their own feed for their cows.

As some are unable to grow feed because of the drought, many have taken on the added expense of buying feed produced from other areas — a major financial burden considering low milk prices paid to producers this year — or they've culled their herds or they've done both.

"Milk production in California has dropped from 2014, whereas national production outside California has remained high. This partly reflects drought, but also the greater reliance of the California dairy industry on exports to Asia, which [is] depressed as well," according to the study.

Agriculture, water and economic experts at the university stressed the extent to which farmers in California — the country's leading agriculture state — are relying on groundwater pumping to make up for dwindling stores of water in state rivers, creeks, reservoirs and mountain snowpacks.

Overall in 2015, farmers have nearly 9 million fewer acre feet of surface water for irrigation, out of the 28 million acre feet that state water officials say California agriculture uses in an average year.

A single acre foot is equal to the amount of water that would cover an acre one foot deep. It's also the average amount of water a single California household uses in yearly.

To make up for the surface water losses, farmers and ranchers are pumping an additional 6 million acre feet of water for irrigation out of underground water aquifers this year compared to an average year, Tuesday's study states.



Researchers broke their findings down to four regions of the state: The Tulare Lake Basin, which encompasses Tulare, Kings, Kern and Fresno counties, along with the and the San Joaquin Valley, while the Central Coast and Southern California were counted as a single region.

The study adds to findings — from sources ranging from overbooked drillers of water wells to groundwater studies by NASA scientists — that California, in drought, is pumping up its groundwater at an alarming rate.

In the Tulare Lake Basin — the most agriculturally rich region in California — farmers and ranchers are expected to have 4.52 million fewer gallons of surface water available to them this year compared to an average year, and they're expected to pump an additional 3.41 million gallons from wells.

And the researchers predicted similar amounts here and the other regions in the state both in 2016 and 2017, as the drought's effects continue.

The study calls the rate of pumping of groundwater in the drought unprecedented. While California lawmakers passed last year the state's first legislation to try to set limits on groundwater pumping to protect key aquifers from being pumped dry, the state's 27-year timeline for implementation likely is too long, the UC Davis researchers said.

The university findings don't appear to factor in how the forecasts might change if California has a wetter-than-average winter this year, as some meteorologists are predicting.

The drought has had an a major effect on employment in 2015, costing 10,100 seasonal farm jobs. Most of those jobs, about 5,400, are expected to occur in the Sacramento Valley region, while 3,850 job losses are expected in the Tulare Lake Basin.

Another 10,000 jobs in ag-related fields also are expected to be lost this year, the report continues.

Agriculture employs more than 400,000 workers in California, and the researchers are predicting 21,400 job losses across the state next year and 21,700 in 2017, due to the drought.

"We estimate the corresponding decrease in statewide labor income, which includes salaries and proprietor income, of \$720 million" this year, according to the report.

And these figures don't factor in workers who have retained their jobs but had their hours cut, which has been a major problem among field workers here.

As Aug. 9, FoodLink of Tulare County has distributed 161,220 food-relief baskets to drought-affected families, an increase of 1,580 from just a week earlier.

While the labor statistics aren't broken down by region, the report states that "The employment impacts of the drought in agriculture are mostly in the Tulare basin, where water scarcity and land fallowing are greatest."

The Tulare Lake Basin also leads the state in in the amount of land left fallow by farmers and ranchers, mostly because they lack enough water to irrigate them.

Of the roughly 542,000 acres of normally irrigated crops being idled this year — a 114,000-acre increase over the prior year — more than half, 288 acres, are in Tulare, Fresno, Kern and Kings counties.

That's expected to result in a \$903 loss in California crop revenues this years, and about two-thirds of those losses, \$604 million, will happen here, the researchers concluded.

On top of that, farmers and ranchers are facing significant additional costs, including higher feed prices, drilling new or deeper wells and the added costs to run pumps when they pull water from deeper underground.

The study noted one area of agriculture that is booming despite the drought.

The state's acreage of almonds and walnuts has grown by 200,000 since 2010, despite constraints on water, the study said. Economists say growing demand from consumers in China for nuts as snack food is driving the almond-orchard boom here.

And while young nut trees often are replacing more water-hungry crops, including cotton, irrigated pastures, grains and hay, the drought seem to have less to do with farmers' decision than the market, the researchers report.

Tulare County is a major nut grower in the state, and while acreage figures for this year weren't immediately available, the acreage of walnut trees harvested here increased by 8,300 acres in 2014, compared to the prior year, while walnut acreage increased by 3,800 over the same period.

Agriculture consumes about 80 percent of all water from rivers, lakes and other sources that Californians use, and it accounts for about 2 percent of the state's economy.

— Contains material from the Associated Press

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