

Drought spinoff: Dead orchards may go up in smoke

By Mark Grossi

Fresno County's only biomass plant, Rio Bravo, is facing an uncertain future by having to compete for energy suppliers with cheaper energy sources like wind and solar. Video: Craig Kohlruss/The Fresno Bee THEFRESNOBEE

- *In the wake of the drought, many orchards now dead wood*
- *Open-field burning may increase as biomass plants close*
- *AB 590 would keep biomass plants going with millions of state dollars*

In drought-wounded Terra Bella, Kent Duysen says he has seen the plumes of smoke recently — farm-waste burning linked to both the devastating dry time and a faltering biomass energy industry.

The San Joaquin Valley's tainted air might be getting an extra dose of soot and ozone-forming gases this spring as growers wrestle with the woody waste from dead citrus orchards.

Growers don't want to burn their waste these days, but some feel they have no choice, says Duysen, who owns [Sierra Forest Products](#) and 22 acres of citrus in the Tulare County community of Terra Bella. "We're seeing a lot of trees taken out around here. We pushed ours out. They've been on the ground since last fall. We're in the queue to get them ground up, but it's not cheap."

It's more drought expense and woe in this broad farm belt where thousands of growers for the second straight year have lost river irrigation water for an area six times the footprint of Los Angeles.

Open-field ag burning has been largely outlawed for a dozen years, wiping out more than 80% of the practice. But exceptions are built into air-quality law, based on economics, farm size and protection against insect infestation.

Growers, facing hard financial times, must consider chipping their woody waste and hoping to sell it to the dwindling number of biomass energy producers. The other option is to start a plume of smoke.

Biomass production has been the go-to option for years because the energy producers help farmers reduce costs by giving them cash for their wood waste.

But three of the 10 biomass plants from Stockton to Bakersfield have closed in the last year or so. One of them was Duysen's plant in Terra Bella, though his forest products business continues with one of the few remaining sawmills in the Valley.

Other biomass plants are teetering on the brink of shutting down, says Julee Malinowski Ball, executive director of the [California Biomass Energy Alliance](#).

The reason: Prices from utilities for biomass electricity are not high enough now to make ends meet. Industry leaders say the price has been driven down by the success of the oil industry's hydraulic fracking, which has located large reserves of natural gas.

Malinowski Ball says the industry needs lawmakers this summer to pass Assembly Bill 590, authored by Assembly Member Brian Dahl, R-Redding. It would provide millions of dollars from the state's Greenhouse Gas Reduction Funds to keep biomass plants afloat.

“Biomass is a form of renewable energy, but you can’t really compare it ... with other renewable energy like solar and wind,” Malinowski Ball says. “The sun and wind are free. We spend millions of dollars on fuel, and we provide a lot of benefits for the environment.”

Biomass energy producers add a modest but steady amount of electricity to California’s grid. When a plant closed last year in Mendota, the grid lost its 25-megawatt contribution — which would light 25,000 homes. California has natural gas power plants many times larger.

Fresno County’s only biomass plant, [Rio Bravo Fresno](#) in Malaga, is expecting financial trouble soon. Its energy contract will have to be renegotiated in summer 2016, says plant manager Rick Spurlock. The going rates won’t support his business, which includes a \$6 million price tag each year for the woody wastes.

He says biomass is more than a renewable source of energy, drastically reducing open-field burning and helping to control dangerous air pollutants. Spurlock says the pollution control in biomass plants make them 98% more efficient and cleaner than open-field burning.

“About 70% of our fuel comes from agriculture in about a 50-mile radius,” Spurlock says. “The other 30% is demolition and construction waste from Fresno, Clovis and a few other cities.”

The waste from cities also includes tree trimmings and other clippings from landscaping.

“If we close, that waste will have to go into landfills,” he says. “It will raise costs of disposal in the cities and create methane greenhouse gas as it decomposes.”

A Valley environmental activist, Tom Frantz of Shafter in Kern County, says he doesn’t buy the argument. He says the industry wants subsidies to burn more waste from Los Angeles and the Bay Area, which brings more pollution into the Valley by operating diesel trucks.

“Best thing for air quality would be to shut them all down, stop burning waste from LA and the Bay Area, and return clean agricultural waste to the soil,” Frantz says.

Pollution from open-field burning has continued to dwindle over the last several years as regulations have tightened, according to state figures. But neighbors downwind of a burn could quickly be caught in a dangerous smoke cloud. Soot can trigger asthma attacks and heart problems, health researchers say.

The burning is limited by a [San Joaquin Valley Air Pollution Control District](#) program that divides the Valley into 103 separate zones. Burning is allowed in one of the zones only if it would not cause a public nuisance or cause exceeding air standards, officials say.

Exemptions for open-field burning have existed since 2003 when the state law was passed to stop the practice. Some of the burning is aimed at preventing the spread of crop disease. Orchard removals of apple, pear and quince are allowed to be burned due to the risk of spreading fire blight to other orchards during transportation.

Burning is allowed for less than 15 acres of orchard removal per calendar year. The air district says it is not economically feasible to chip such small orchard removals and send them to a biomass plant.

Open-field burning of citrus orchards is considered on a case-by-case basis, says air district executive director Seyed Sadredin. Some biomass plants won’t accept some orchard removals that require a lot of work to clean rocky, clay soils off the trees.

Sadredin says the air district is concerned about the biomass industry and supports AB 590.

“With the severe drought impact leaving dead trees and increased fuel loads, biomass is an important outlet to reduce the air quality and other impacts of catastrophic wildfire,” he says. “If we fail to find suitable options, there will be great

pressure to relax regulations that now prohibit agricultural burning.”

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