Florez, Valley air district leader debate ag burning

By E.J. Schultz, Bee Capitol Bureau
In the Merced Sun-Star and the Fresno Bee, Wed., July 28, 2010

SACRAMENTO -- State Sen. Dean Florez held what could be his last legislative hearing Wednesday doing what he has done for most of his Capitol tenure -- grilling Valley air regulators over their pollution-fighting policies.

Florez, D-Shafter, who terms out after this year, spent more than two hours arguing with the head of the San Joaquin Valley Air Pollution Control District over how the district is enforcing a ban on farm burning.

The burn ban, contained in a law Florez wrote in 2003, started taking effect in 2005 and is aimed at cleaning up the Valley's notoriously bad air. The law was scheduled to ban all burning this year. But the district delayed the final phase for some crops, saying alternatives to burning are too costly, such as sending waste to biomass plants.

Florez says the district is applying the exemption too broadly. At Tuesday's hearing, he said regulators should require farmers to seek waivers only after they make their case before the district armed with financial justification.

"I think a lot of farmers would be very hesitant, if they could pay for this, to go before your board and say I can't pay for it," he said. That way, he said, "you start to weed out farm-by-farm those who need really the exemption."

District executive director Seyed Sadredin shot back that such a process would be "hugely inefficient and unnecessary," possibly forcing the district to hire a load of new staff members.

The district says the no-burn rules it has put in place so far have reduced by 80% the amount of acreage burned annually and that the region is on pace for a 90% cut. The exemptions allow burning of crop waste such as uprooted citrus orchards and grape vineyards -- but only on good air days when the pollution would not produce air violations.

The state Air Resources Board in May approved the exemptions, but set a 2012 expiration date. State board members said they could intervene sooner if Florez brought more information to light.

The district based its exemptions on how much the nonburning alternatives would cost over a 10-year period. Officials exempted crops for which the alternatives would eat into profits by 10% or more.

Florez questioned the methods. He suggested, for instance, that the district use longer time frames that correlate with the life span of a crop. He also pounced on a formula error the district admitted making that underestimated the price of table and raisin grapes.

The district said it fixed the error and that the correction did not change the need for an exemption. Officials also defended the 10-year time frame, saying using longer periods is too speculative.

Florez plans to submit a transcript of the hearing to the state board in hopes that members take a second look at the exemptions. The item is scheduled for a hearing in September

Valley poll: Bad air still a threat — for the most part

Residents here less likely to back stiffer cleanup regulations

By The Record
Stockton Record, Thursday, July 29, 2010

Most San Joaquin Valley residents still believe air pollution is a serious threat to their health, but the majority is shrinking.

Fifty-four percent of Valley dwellers see air pollution as a very serious or somewhat serious health risk. That's the narrowest majority since at least 2003.

The percentage of those who say it's a serious threat peaked at 69 percent in 2008.

And while the majority of Valley residents support stricter rules to control air pollution from vehicles, farms, businesses and industry, support for those rules tends to be stronger in other regions of the state.

The snapshot is part of the latest statewide environment poll, released Wednesday by the Public Policy Institute of California.

The poll also finds that support for offshore drilling in California has "plunged," as the institute put it, and that residents have little confidence in the federal response to the disaster in the Gulf of Mexico.

Meanwhile, two-thirds of Californians favor upholding the state's greenhouse gas reduction law.

Proposition 23 on the November ballot seeks suspension of the law, AB32, until the unemployment rate drops.

About 54 percent of the state's residents say climate change already is affecting California. That's down from 61 percent in 2009.

Sixteen percent say climate change will never have an impact.

Wildfire smoke affecting foothill communities in Kern and Tulare counties

Bakersfield Californian, Blog Posting, Tuesday, July 27, 2010

Smoke from the Bull wildfire in Kern County is affecting foothill communities in Kern and Tulare counties, and foothill communities in Fresno and Madera counties may become affected midweek as wind patterns shift, Air District officials said.

The health caution is in effect until the wildfire is extinguished.

Smoke from wildfires contains particulate matter, a form of pollution that is dangerous to human health. High readings of particulate matter – small pieces of airborne material such as soot and ash – can cause serious health problems, aggravate lung disease, trigger asthma attacks and acute bronchitis, and increase risk of respiratory infections.

In the event of exposure to smoke, people with heart or lung diseases should follow their doctors' advice for dealing with episodes of unhealthy air quality. Additionally, older adults and children should avoid prolonged exposure, strenuous activities or heavy exertion. Everyone else should reduce prolonged exposure, strenuous activities or heavy exertion.

— *San Joaquin Valley Air Pollution Control District*

West Fire grows near Tehachapi

By Steve Swenson, Californian staff writer
Bakersfield Californian, Thursday, July 29, 2010

The initial swiftness of the devastating West Fire in rugged tree, brush and dry grass terrain southeast of Tehachapi was stunning and terrifying to residents who evacuated to save themselves.

The blaze that began Tuesday afternoon continued to burn all day Wednesday, growing to 1,400 acres and destroying an estimated 25 to 40 structures ranging from trailers to large homes with spectacular views. Exact damage was unavailable Wednesday as crews were expected to survey the loss Thursday, fire officials said.

Kern County fire officials said they don't keep track of the largest loss of homes in a wildfire, but the 2002 Deer Fire in Bodfish was the worst in recent history with 47 homes destroyed or damaged, as well as the loss of 84 sheds, 63 vehicles, eight boats and 22 trailers.

The inferno that sent flames more than 100 feet high was on Old West Ranch, a community of about 200 homes where people have to develop their own water and electrical power sources, residents said.

The homes are spread out among the canyons and ridges about four to six miles south of Highway 58 at the Lehigh Southwest Cement plant. The wind farm on the hills leading to Mojave is a couple of miles northeast of the ranch.

One resident, George Plesko, was near the start of the fire. "I watched it burn everything around," he said. "It's crazy how fast it burned." He lost his home in the blaze.

More than 1,000 firefighters — aided by a fleet of bulldozers, eight helicopters and nine retardant-dropping planes — worked on preventing further loss and carving fire lines to hold the fire at bay, officials said.

They were blessed with light winds of less than 14 mph, relatively high humidity (21 percent) and daylight with up to 94-degree temperatures to continue their assault, establishing a 25 percent containment by mid-day, Kern County Fire Department spokesman Brandon Smith said.

Officials expected full containment by Friday, he said.

He noted that even though the Bull Fire that started Monday near Kernville had huge resources devoted to it, there was no delay in getting resources to the West Fire. One resident, Brent Scheibel, agreed, saying of the firefighters, "They were very quick and very efficient."

CalFire spokesman Mike Mohler said the fire pushed east on Wednesday, but crews held it behind Tehachapi-Willow Springs Road to protect the wind farms.

But there were higher winds Tuesday when it started off Blackburn Canyon Road just north of Middlebrook Road — among the many all-dirt streets on the ranch — as the fire took off on dry grass, thick shrubs and dry oak and pine trees that gave the fire a fury of flames consuming vegetation and homes.

Dead trees that were infested by bark beetles, killing them and leaving them dry and easily flammable, just added to the wind-aided spread, Smith said.

"It's Tehachapi. We have windmills up here," Smith said. "That's what made it move really fast."

It moved so fast and with so much destruction that Gov. Arnold Schwarzenegger declared a state of emergency to free up resources to fight both the West Fire and the Bull Fire that continued for a third day to burn north of Kernville.

Schwarzenegger conducted a news conference at Tehachapi High School, command central for West Fire operations. He praised firefighters for "quick and decisive action" and said, "People who created defensive space around their homes saved their homes."

A few miles away, helicopters lowered hoses into dip tanks by the glider airport off Dennison Road to douse flare-ups of flames that kept the fire active Wednesday.

At times it seemed like the smoke was reduced to a wispy white cloud, but minutes later heavy dark brown smoke — indicative of dense wood or structures — rose nearly straight up from the ground.

Fire trucks — red, green, yellow and white depending upon which agency was represented — climbed up Blackburn Canyon Road, the main road into the ranch, and then fanned out to bring firefighters to spots to protect or to attack.

Hot shot crews with shovels and cutting tools went off in groups to remove vegetation in a path of dirt firebreaks.

Meanwhile, the evacuation that began Tuesday remained in effect all day Wednesday, though some residents went back to their homes for a look-see.

Some structures in the area date to the late 1800s, before building permits or development standards, said Chuck Lackey, director of Kern County's Engineering and Survey Services Department.

"Some areas are so remote they do not have any utilities," including electricity or telephone service, he said.

Deeds from the 1880s show people acquired property from the United States government — probably settlers, Lackey said, as there was a lot of mining in the area then.

The oldest "roads" are dirt and so narrow they look more like trails, he said. Some are overgrown.

Some development took place in the 1970s and 1980s, but the newer, wider roads are still dirt. Maps show lots start at 2.5 acres, though many are much larger. Newer homes have electricity and phones, but everyone in Old West Ranch uses a septic tank and water is supplied by wells, Lackey said. There is no community water system. Propane is used for heat and cooking.

Newer houses are also required to have water tanks for fire protection. But those tanks, which typically hold about 3,000 gallons, aren't useful in a big wildfire like the West Fire, Lackey said. They're meant more for single-home incidents.

— Californian staff writer Gretchen Wenner contributed to this report.

AIR QUALITY
Bakersfield Californian, Thursday, July 29, 2010

Air quality officials advised east Kern residents to restrict outdoor activities where there's wildfire smoke.

The Eastern Kern Air Pollution Control District said communities in and adjacent to the Kern River Valley are expected to see smoke from the Bull Fire at or near ground level for part of each day for the rest of this week. Other areas of east Kern could be hit with smoke intermittently for the rest of the week, depending on wind patterns.

The Tehachapi area may be heavily affected by smoke from the West Fire until it is controlled, the district said. Fire officials said they expect containment Friday.

The air district recommended people limit normal outdoor activities when they smell smoke or can see smoke near ground level in their immediate area. It urged children and the elderly to take special precautions and said people with pre-existing heart and lung problems shouldn't do any activity in smoky conditions.

The district also recommended people stay in air-conditioned buildings with windows and doors closed. It said those who are inside where there's a mechanical ventilation system that brings in outdoor air should set the system to "re-circulate" mode if possible.

For more information call the air district at 862-5250.

Bull Fire 12 percent contained, no more residences threatened Wednesday

By Courtenay Edelhart, Californian staff writer
Bakersfield Californian, Thursday, July 29, 2010

Fire crews working through Tuesday night successfully established a fire line on the southern flank of the 15,982-acre Bull Fire, which was about 12 percent contained as of Wednesday night, according to the Kern County Fire Department.

The fire is classified as "human caused, under investigation," according to a California Interagency Incident Management Team news release. Authorities couldn't be reached late Wednesday to elaborate.

The fire is burning in grass and brush on both sides of the Kern River, north of Kernville. Crews worked overnight to clean up islands of unburned fuels between the Kern River and Mountain Highway 99.

But crews working the northern flank of the fire, to the west of the Kern River, were pulled back Tuesday due to “a significant increase in fire activity,” authorities said.

Eight residences and six outbuildings burned Monday, the first day of the fire. A force of 2,249 personnel is fighting it.

Two firefighters were injured. One suffered a scratch to the eye; the other was dehydrated, officials said.

Evacuation orders were lifted at 8 a.m. Wednesday.

The American Red Cross had opened an emergency shelter for evacuees at the Lake Isabella Senior Center, but only one person checked in. The lone resident declined to be interviewed.

“He’s emotionally pretty upset and kind of in shock, as you can imagine,” said Red Cross volunteer David Hurley.

It’s not surprising that only one person showed up, he said.

“I wasn’t sure we’d get even that many,” Hurley said. “Most people are staying with friends or family. This community takes care of its own.”

There were no additional residences in immediate danger Wednesday, but two historic structures were threatened: Cannell Cabin, a ranger guard station built in 1905; and Baker Point Lookout, a structure that ironically was constructed in 1950 as a vantage point to watch for wildfires.

“The local staff is concerned about these buildings because they’re a part of us,” said Tim Kelly, an archeologist with the U.S. Forest Service.

The buildings are special to the community, too. When staff arrived at Cannell Cabin to brace it for a possible firestorm, two cattlemen had beat them there and offered assistance. The men helped firefighters cover the cabin in a fire-resistant wrap and clear dry brush nearby.

Although there have been no human casualties thus far, officials are deeply concerned about wildlife.

The last known community of a near-extinct plant is located in the remote, mountainous region, and the loss of brush will take a toll on area animals, said Wendy Rannals, a wildlife biologist with the Sequoia National Forest Kern River Ranger District.

“Usually a mother will hide her young — lion cubs or deer fawns or what have you — in the brush while she gets food or drinks from the river, but now the habitat is all burned so they have no cover from predators,” she said. “And animals use their sense of smell to locate their young, but with all the smoke in the air their sense of smell is diminished, which increases the likelihood they’ll be separated.”

Deborah Dishington, 59, is a Kernville artist who helps pay the bills by cleaning houses. She stopped into the Sequoia ranger station Wednesday to get information for clients who own vacation homes in the area.

“They’re calling me to find out if their homes are OK,” she said.

Dishington said the fire has been devastating. “I don’t have any human children. All of these trails up here are like my babies,” she said. “I’m so afraid that the regeneration will never be the same. More and more of these areas are burned away or being lost to development. I don’t know if it will be as beautiful again in my lifetime, and this area is one of the last unspoiled jewels left in California.”

Wednesday, crews constructed fire lines directly along the southern, southwestern and southeastern perimeter of the fire’s edge, supplemented by air support. Mop-up activities

continued around structures in Kernville and River Kern to make sure there were no hot spots that could reignite a blaze.

The western edge of the Bull Fire will likely peter out on its own as it bumps into the aftermath of the 1990 Stormy Fire, which left little fuel behind, said Scott Williams, a fire management specialist with the U.S. Forest Service.

What is most worrisome is the northwest perimeter below Baker Point, because the last time it burned was 1942, Williams said.

Mountain Highway 99 is closed from Headquarters Campground to Brush Creek, but the Kern County Sheriff's Department allowed residents of Riverkern and Camp Owens to return to their residences.

The fire is being managed under a unified command of the California Interagency Incident Management Team 4 and the Kern County Fire Department, with cooperation of the Bureau of Land Management.

Resources dispatched to the fire included 67 hand crews, 124 engines, three dozers, 16 water tenders and eight helicopters.

Stanford Researchers Debunk Popular Myths

The Valley Voice, Thurs., July 29, 2010

Tulare County - Farmers have always advocated that they are good stewards of the land, but for many years have taken hits from environmentalists and politicians that their practices hurt the land.

Now, a study by Stanford University researchers has found that advances in high-yield agriculture over the latter part of the 20th century have prevented massive amounts of greenhouse gases from entering the atmosphere – the equivalent of 590 billion metric tons of carbon dioxide – according to the study led by two Stanford Earth scientists.

Basically, farmers are good stewards of the land and advances in farming have been good for the environment.

"It was nice to see for a change," said Marilyn Kinoshita, Tulare County Agricultural Commissioner of the report that was actually positive for ag.

According to the report, the yield improvements reduced the need to convert forests to farmland, a process that typically involves burning of trees and other plants, which generates carbon dioxide and other greenhouse gases. But, there are other benefits from farming today.

The researchers estimate that if not for increased yields, additional greenhouse gas emissions from clearing land for farming would have been equal to as much as a third of the world's total output of greenhouse gases since the dawn of the Industrial Revolution in 1850.

However, more efficient farming techniques are also reducing that carbon footprint.

The researchers calculated that for every dollar spent on agricultural research and development since 1961, emissions of the three principal greenhouse gases – methane, nitrous oxide and carbon dioxide – were reduced by the equivalent of about a quarter of a ton of carbon dioxide – a high rate of financial return compared to other approaches to reducing the gases.

"Our results dispel the notion that modern intensive agriculture is inherently worse for the environment than a more 'old-fashioned' way of doing things," said Jennifer Burney, lead author of a paper describing the study that will be published online by the Proceedings of the National Academy of Sciences.

Tulare County Farm Bureau Executive Director Patricia Stever said the report was not a surprise to her.

“Farmers have always been good stewards of the land,” said Stever, adding they continue to get smarter.

She said many practices today, by both big and small farms, reduce the carbon footprint of agriculture.

“No till farming is an example,” she noted. No till farming is a practice were tilling the soil is greatly reduced, meaning fewer passes in a field by equipment and less dust put into the air. It also means less fuel is used.

“More precise land managing using GPS technology makes farming less polluting as well,” she said, noting that also means less hours of mechanized farm equipment needed.

She also noted that chemical management has gotten much better over the years, with not only less use of chemicals, but safer chemicals are being used. “Farmers are applying them in smaller amounts and chemicals are more efficient. That's really important,” she said.

Kinoshita said because farmers are always looking to improve their bottom line, that in turns leads them to be more efficient and that means less of a carbon footprint. “Especially when you are paying for your water. You're using every last drop wisely,” she said, adding that farmers also look for ways to reduce the amount of chemicals they use and fuel their equipment burns, including genetically modified crops that produce a higher yield.

And, she noted, a higher yield means fewer acres are needed to produce a crop.
“Without water, we can't do high-yield ag,” she noted.

A threat to high-yield farming, she noted, is the reduction in water available for irrigation. Not only does a lack of water mean more dust, but it lowers yields, meaning more acres will be needed to grow crops.

Adding Up The Impact

The researchers calculated emissions of carbon dioxide, methane and nitrous oxide, converting the amounts of the latter two gases into the quantities of carbon dioxide that would have an equivalent impact on the atmosphere, to facilitate comparison of total greenhouse gas outputs.

Burney, a postdoctoral researcher with the Program on Food Security and the Environment at Stanford, said agriculture currently accounts for about 12 percent of human-caused greenhouse gas emissions. Although greenhouse gas emissions from the production and use of fertilizer have increased with agricultural intensification, those emissions are far outstripped by the emissions that would have been generated in converting additional forest and grassland to farmland.

"Every time forest or shrub land is cleared for farming, the carbon that was tied up in the biomass is released and rapidly makes its way into the atmosphere – usually by being burned," she said. "Yield intensification has lessened the pressure to clear land and reduced emissions by up to 13 billion tons of carbon dioxide a year."

"When we look at the costs of the research and development that went into these improvements, we find that funding agricultural research ranks among the cheapest ways to prevent greenhouse gas emissions," said Steven Davis, a co-author of the paper and a postdoctoral researcher at the Carnegie Institution at Stanford.

To evaluate the impact of yield intensification on climate change, the researchers compared actual agricultural production between 1961 and 2005 with hypothetical scenarios in which the world's increasing food needs were met by expanding the amount of farmland rather than by the boost in yields produced by the Green Revolution.

"Even without higher yields, population and food demand would likely have climbed to levels close to what they are today," said David Lobell, also a coauthor and assistant professor of environmental Earth system science at Stanford.

"Lower yields per acre would likely have meant more starvation and death, but the population would still have increased because of much higher birth rates," he said. "People tend to have more children when survival of those children is less certain."

Fewer Acres Required

The researchers found that without the advances in high-yield agriculture, several billion additional acres of cropland would have been needed.

Comparing emissions in the theoretical scenarios with real-world emissions from 1961 to 2005, the researchers estimated that the actual improvements in crop yields probably kept greenhouse gas emissions equivalent to at least 317 billion tons of carbon dioxide out of the atmosphere, and perhaps as much as 590 billion tons.

Without the emission reductions from yield improvements, the total amount of greenhouse gas pumped into the atmosphere over the preceding 155 years would have been between 18 and 34 percent greater than it has been, they said.

To calculate how much money was spent on research for each ton of avoided emissions, the researchers calculated the total amount of agricultural research funding related to yield improvements since 1961 through 2005. That produced a price between approximately $4 and $7.50 for each ton of carbon dioxide that was not emitted.

"The size and cost-effectiveness of this carbon reduction is striking when compared with proposed mitigation options in other sectors," said Lobell. "For example, strategies proposed to reduce emissions related to construction would cut emissions by a little less than half the amount that we estimate has been achieved by yield improvements and would cost close to $20 per ton."

The authors also note that raising yields alone won't guarantee lower emissions from land use change.

"It has been shown in several contexts that yield gains alone do not necessarily stop expansion of cropland," Lobell said. "That suggests that intensification must be coupled with conservation and development efforts.

"In certain cases, when yields go up in an area, it increases the profitability of farming there and gives people more incentive to expand their farm. But in general, high yields keep prices low, which reduces the incentive to expand."

The researchers concluded that improvement of crop yields should be prominent among a portfolio of strategies to reduce global greenhouse gases emissions.

"The striking thing is that all of these climate benefits were not the explicit intention of historical investments in agriculture. This was simply a side benefit of efforts to feed the world," Burney noted. "If climate policy intentionally rewarded these kinds of efforts, that could make an even bigger difference. The question going forward is how climate policy might be designed to achieve that."

Bakersfield Californian, Editorial, Wednesday, July 28, 2010:

Future of electric cars getting a charge

The electric-car revolution appears to be gaining momentum as we wait for the debut of Chevrolet's Volt and Nissan's Leaf, both expected to hit showroom floors later this year.

Nissan and Chevy hope to grab a chunk of the electric market held most firmly by Toyota and its highly popular Prius.

We hope such competition will spur manufacturers to continue pushing the envelope on design, choice, practicality and price -- the latter three serving as obstacles for many would-be buyers.

Chevy's Volt sedan will have a sticker price of $41,000, but a federal tax credit of $7,500 would bring the figure down to $33,500.

Not bad, but not exactly in the "affordable" camp for many drivers.

For Californians, Nissan's Leaf hatchback ($32,780 sticker price) could be more attractive after the federal credit and a state rebate of $5,000 brings its base price to $20,280.

Buyers of the Volt reportedly will not be eligible for the state rebate.

Price won't be the only factor in determining which car to buy. The Leaf is an all-electric affair with a range of 70 to 120 miles, while the Volt -- General Motors Co.'s first stab at a mass-market electric vehicle -- features a 4-cylinder, Prius-like combustion engine that's being touted as the driver's backup when the battery system, good for about 40 miles, runs out of juice.

That means the Volt's range is extended by about 300 miles, but it doesn't quite kick the petrol habit. GM is also offering an eight-year, 100,000-mile guarantee on the battery.

Thus, the Leaf will likely appeal to those who want a small electric car for zipping around town, while Volt buyers will have a bit more reassurance for longer trips with the battery guarantee and the gas motor.

Experts say there is a market for both.

"We are just at the very beginning of the learning curve for selling electric vehicles and how people will use them," said James Bell, an analyst with pricing database Kelley Blue Book.

This is only the beginning. We need giant advances in battery technology, convenience, affordability and, perhaps most importantly, a larger selection.

If the Volt and Leaf provide a model of success that compares to the Prius, expect to see electric power race toward ubiquity.