

## **Sierra National Forest Bass Lake Ranger District prescribed fire program update**

By Alex Olow

Sierra Star, Thursday, October 26, 2017

North Fork - "The Sierra National Forest, Bass Lake Ranger District, is preparing for the fall, winter, and spring burning program," said District Ranger Denise Tolmie, "projects will consist of three activities: pile burning, broadcast, and underburning."

The objectives will be to reduce fuel loading from recent tree mortality, and hazard removal projects within the Wildland Urban Intermix and high use recreation areas around Bass Lake. Site preparation for reforestation within these areas, and within the French Fire footprint will also be accomplished with these burns.

Several projects proposed for the fall, winter, and spring of 2017-18, include the Source-Kinsman Underburn located south and west of Clearwater station in the upper Clearwater Creek drainage, and the Batterson and Jerseydale Administrative burns located at each of these ranger stations. Pile burning projects are dispersed throughout the Ranger District, and could begin as early as November 1, 2017. Many of these projects are located at higher elevations, with some near populated areas, and may result in a temporary reduction in air quality affecting the communities of Oakhurst, Fish Camp, Bass Lake, Ahwahnee, and North Fork. The project objectives are to remove fuels created during timber harvest, reforestation, and fuels reduction. Removal of these fuels provides a benefit by reducing the potential of extreme wildfire in the summer months that would cause damage to private property, wildlife habitat, and watershed.

Burning will be conducted on burn days as determined by the San Joaquin Valley Unified Air Pollution Control District, and the Mountain Counties Air Pollution Control District which covers Mariposa County. Burn day determinations are based on atmospheric conditions which provide optimum smoke dispersal. However, normal diurnal wind changes allow the settling of drift smoke in basins and drainages during the late night and early morning hours. By limiting the number of piles ignited at one time, and by "mopping up" (extinguishing) smoldering piles it is expected that emissions will not reach unacceptable levels.

You can learn more about air quality and daily smoke updates by visiting either [www.airnow.gov](http://www.airnow.gov) or [www.valleyair.org](http://www.valleyair.org). Actions will be taken to reduce visibility hazards include monitoring high use roads, and providing traffic control if necessary.

For questions or concerns, please contact District Fuels Specialist Gloria Smith at 559-877-2218, ext. #3103 at the Bass Lake Ranger District office in North Fork or by email [gsmith07@fs.fed.us](mailto:gsmith07@fs.fed.us).

## **Clean-air project uses hot sun to keep butter cool — on wheels**

By David Castellon

The Business Journal, Thursday, October 26, 2017

When you consider where to install solar panels, chances are your first thought is a home or other building.

The top of a truck may not come to mind, but it did to representatives of a group of business operators who had the idea of lining the top of a refrigerator truck with solar panels to help power its cooling system.

Now it's more than just an idea.

For the past five months, a 24-foot-long, solar-powered delivery truck belonging to Challenge Dairy Products' Fresno distribution center has been driven to various Valley grocery stores and other stops delivering dairy products.

Earlier this month the San Joaquin Valley Air District, which is footing a portion of the \$1.2 million cost to develop the solar-powered truck refrigeration system, held a press conference to show it to the public.

Fresno County Supervisor Buddy Mendes said the purpose of this new technology is to help the Valley reach federal clean-air standards, despite that being a nearly impossible goal.

"These are only little things we can do going forward," and this new technology is one of them, he explained.

Organizers said this is the first solar-powered refrigerated truck on the road. Most truck refrigeration systems are diesel powered, generating pollutants on top of those coming from the truck's engine.

Although testing and modifications on the Challenge truck still have more than six months to go, Tom Ditto, vice president of food service for Dublin-based Challenge, said during his presentation that initial tests have shown a 98-percent reduction of harmful emissions from the new refrigeration system compared to standard diesel systems.

In addition, based on those same initial findings, the developers of the solar-connected system — which they call “rayfrigeration” — estimated that savings on fuel and maintenance could total about \$3,100 a year per truck.

“If we're going to get change, we have to have innovation,” and the district's Technology Advancement Program is doing that by offering grants to help develop clean-air technology, said Samir Sheikh, deputy air pollution control officer for the district.

The grant used to develop the new refrigeration system totals \$400,000, with the U.S. Environmental Protection agency providing \$175,000 of it and the Valley Air District providing the rest.

The remaining investments in the product's development are coming from the four partners: Challenge; Emerson Electric, which designed and built the motor, compressor and controls for the truck refrigeration system; eNow, Inc., which manufactured the solar panels; and Great Dane Truck bodies, which constructed the truck, incorporating the new clean-energy refrigeration system into it.

Eduardo Navarro, director of business development for Great Dane, said the test truck was built at the company's plant in Wisconsin and delivered in April to Fresno. He noted that much of the technology in the truck already is available on some standard trucks, but the solar panels and the mechanical modifications to use solar energy are something new.

“What you are seeing here is a combination of technologies, some of which has been around for awhile,” he told reporters.

“We're very proud to be part of this — especially that this test is being done in the San Joaquin Valley,” Ditto said. “We are a dairy [cooperative] owned by dairy farmers who are very committed to business and the environment in California and the San Joaquin Valley.”

As such, Ditto said he had no reservations when Navarro asked if Challenge would operate the test truck.

And while clean air is an important goal, Navarro said it's important to develop technology that also makes sense for businesses, which includes pricing.

Ditto said a refrigerated truck like the test truck, but equipped with a standard diesel-powered cooling system, would cost about \$100,000, and he estimated that one equipped with solar panels and cooling system developed by the partner companies might cost a little less.

Navarro, whose company plans to build and sell the rayfrigeration trucks after the testing is done, said prices haven't been worked out yet, but his company wants to have a price tag no more than \$3,000 over the price of a standard refrigeration truck — if it ends up costing more.