

Gaps in US wildfire smoke warning network leave many exposed

By Matthew Brown and Padmananda Rama Associated Press
Bakersfield Californian, Thursday, Aug. 26, 2021

BILLINGS, Mont. (AP) — Huge gaps between air quality sensors in the western U.S. have created blind spots in the warning system for wildfire smoke plumes sweeping North America this summer, amid growing concern over potential health impacts to millions of people exposed to the pollution.

Government programs to alert the public when smoke pollution becomes unhealthy rely on about 950 permanent monitoring stations and dozens of mobile units that can be deployed around major fires.

Those stations are heavily concentrated around major cities on the West Coast and east of the Mississippi River — a patchwork that leaves some people unable to determine local risks from smoke, including in rural areas where air quality can quickly degrade when fires ignite nearby. The problem persists far beyond fire lines because wildfire smoke travels for thousands of miles and loses its tell-tale odor yet remains a danger to public health.

The monitoring gaps underscore what officials and public health experts say is a glaring shortage of resources for a type of pollution growing worse as climate change brings increasingly long and destructive wildfire seasons to the U.S. West, southern Europe and eastern Russia.

Microscopic particles in wildfire smoke can cause breathing issues and more serious problems for people with chronic health conditions. Long-term effects remain under study but some researchers estimate chronic smoke exposure causes about 20,000 premature deaths a year in the U.S.

“It’s a very frustrating place to be where we have recurring health emergencies without sufficient means of responding to them,” said Sarah Coefield, an air quality specialist for the city of Missoula, Montana. “You can be in your office just breathing smoke and thinking you’re OK because you’re inside, but you’re not.”

Missoula, perched along the Clark Fork River with about 75,000 people, is surrounded by mountains and has become notorious as a smoke trap. All across the region are similar mountain valleys, many without pollution monitors, and smoke conditions can vary greatly from one valley to the next.

Montana has 19 permanent monitoring stations. That’s about one for every 7,700 square miles (20,000 square kilometers) or an area almost as big as New Jersey. New Jersey has 30.

Data on air quality is particularly sparse in eastern Montana, where smoke from a 266-square-mile (690-square-kilometer) fire on the Northern Cheyenne Indian Reservation got so bad this month that officials closed a health clinic when air filters couldn’t keep up with the pollution.

The smoke prompted tribal authorities to shield elders and others who were at risk by extending an evacuation order for Lame Deer, a town of about 2,000 people that sits beneath fire-scarred Badger Peak and is home to the tribal government complex.

But on the same day, Lame Deer and surrounding areas were left out of a pollution alert from state officials, who said extremely high smoke particle levels made the air unhealthy across large areas of Montana and advised people to avoid prolonged exertion to protect their lungs. A pollution sensor on the reservation had burned in the fire, and the nearest state Department of Environmental Quality monitor, about 30 miles (48 kilometers) away, showed an air quality reading of “good.”

That left tribal officials to judge the pollution hazard based on how far they could see — a crude fallback for areas without monitors. On a scale of one to 20, “I would say the smoke was a 19,” tribal spokesperson Angel Becker said.

“What makes it difficult is that Lame Deer is sitting in between a couple of ravines,” she added. “So when you get socked in (with smoke), it just sits here and that’s not good for elders or kids that have asthma or any breathing issues.”

Doug Kuenzli, who supervises Montana’s air quality monitoring program, said regulators recognize the need for more data on smoke but high-grade monitors can be prohibitively expensive — \$10,000 to \$28,000 each.

Oregon expanded its network over the past two years with five new monitors along the state's picturesque coastline where smoke only recently became a recurring problem, said Tom Roick with the Oregon Department of Environmental Quality.

"We're seeing more prevalence of wildfire smoke and increased intensity," Roick said. "It's not because we have more monitoring; it's getting worse."

Throughout the West, public health officials have struggled to get the message about dangers of smoke to at-risk communities, such as migrant workers who spend lots of time outdoors, people in houses without air filters and the elderly. Children, too, are more at risk of health problems.

That's no small subset of society: People over 65 and children under 18 make up 40% of the population, said Kaitlyn Kelly, a wildfire smoke pollution specialist with the Washington Department of Health.

Rapid technological advancements mean households can buy their own monitoring equipment for around \$250. The equipment is not as reliable as government stations, officials said, but the data from many of the privately-owned sensors is now displayed on an interactive smoke exposure map by the U.S. Environmental Protection Agency and Forest Service.

Although inaccurate readings have been reported for some consumer-grade sensors, officials said they can help fill blind spots in the government's network. The number in use is fast increasing — from about 6,000 private sensors last year to more than 10,000 currently, according to EPA.

"There's still gaps," said Kelly. "The low-cost sensors are the first step in filling in the gaps where we don't have (government) monitors."

In Missoula, a small non-profit group founded to bring attention to global warming is going beyond warning people about smoke. It's providing makeshift air filters and portable air cleaners to the homebound elderly and impoverished households.

Vinette Rupp, a 74-year-old Missoula woman who received a portable air cleaner, said she "can almost taste it" when the smoke gets thick in town. Neighbor Maureen Fogarty, 67, who has lung cancer and suffers from breathing problems, said her coughing has eased since she got one of the filters.

"Well it's a lifesaver because I can breathe easier now," Fogarty said. "The way it is, you know, you've got to come and go and you're bringing in the unhealthy air, and it's gonna affect you."

Climate Smart Missoula, which provided the portable air cleaner, also makes and distributes filters through a local food bank. Costing about \$30 apiece — versus \$150 or more for a manufactured unit — the do-it-yourself purifiers are endorsed by public health officials. They're crafted from box fans with high-efficiency furnace filters duct-taped to the back to trap pollution particles as air passes through.

Climate Smart Missoula director Amy Cilimburg said she and a colleague have built roughly 200 of them, paid for largely with donations.

"Our strategies for dealing with wildfire smoke were pray for rain, or leave town, or suffer — and that seemed inadequate," Cilimburg said "It's kind of caught up with us, even though scientists have told us it's coming. I felt like we needed to get to work."

California wildfire dangers may be spreading to the south

By Christopher Weber and John Antczak Associated Press
Bakersfield Californian, Thursday, Aug 26, 2021

LOS ANGELES (AP) — A wildfire that burned several homes near Los Angeles may signal that the region is facing the same dangers that have scorched Northern California this summer.

The fire in San Bernardino County erupted Wednesday afternoon, quickly burned several hundred acres and damaged or destroyed at least a dozen homes and outbuildings in the foothills northeast of Los Angeles, fire officials said. Crews used shovels and bulldozers and mounted an air attack to keep the South Fire from the tiny communities of Lytle Creek and Scotland.

About 600 homes and other buildings were threatened by the blaze along with power transmission lines and 1,000 residents were under evacuation orders.

By nightfall, firefighters appeared to have gained the upper hand and few flames were seen. But the blaze was worrying because Southern California's high fire season typically comes later in the year when strong, dry Santa Ana winds blast out of the interior and flow toward the coast.

After a few cooler days, California's southern region was expected to experience a return of hot weather into the weekend that could boost wildfire risks. In addition to dangerously dry conditions, the region faces firefighting staffing that is increasingly stretched thin, said Lyn Sieliet, spokeswoman for the San Bernardino National Forest.

"Some of our firefighters that we normally have on our forests are working on fires in Northern California, or Idaho and Washington," she told KTLA-TV. "We don't have the full staff that we normally do."

The largest fires in the state and in the nation were in Northern California, where they have burned down small mountain towns and destroyed huge swaths of tinder-dry forest.

The Caldor Fire has destroyed 500 homes since Aug. 14 in the Sierra Nevada southwest of Lake Tahoe, including much of the tiny hamlet of Grizzly Flats. It was 12% contained and threatened more than 17,000 structures.

Buck Minitch, a firefighter with the Pioneer Fire Protection District, was called to the fire lines last week while his wife fled their Grizzly Flats home with their two daughters, three dogs, a kitten and duffel bag of clothes, the San Jose Mercury News reported.

Hannah Minitch evacuated to her parents' property and the next morning received a text from her husband showing only a chimney where their house once stood. The two wept briefly during a telephone call before he got back to work.

"We've got nothing left here," she recalled him saying. "I've got to go protect what's left for other people."

At times the wind-driven fire was burning 1,000 acres (405 hectares) of land per hour and on Wednesday it was less than two dozen miles (37 kilometers) from Lake Tahoe, an alpine vacation and tourist spot that straddles the California-Nevada state line.

There weren't any evacuations in Tahoe but the fire continued to cast a sickly yellow pall of smoke over the scenic region.

The communities of South Lake Tahoe and Tahoe City on the lake's west shore had the nation's worst air pollution at midmorning Wednesday, according to AirNow, a partnership of federal, state and local air agencies.

Meanwhile, California's Dixie Fire, the second-largest in state history at 1,160 square miles (3,004 square kilometers), was burning only about 65 miles (104 kilometers) to the north. It was 45% contained. Some 700 homes were among nearly 1,300 buildings that have been destroyed.

In the southern Sierra Nevada, there was growing concern as the French Fire expanded near Lake Isabella, a popular fishing and boating destination. About 10 communities were under evacuation orders. The fire has blackened 32 square miles (83 square kilometers) since Aug. 18.

Smoke from the fires had fouled air farther south. The South Coast Air Quality Management District issued an advisory through Thursday morning for large portions of Los Angeles, Riverside and San Bernardino counties.

Nationally, 92 large fires were burning in 13 mainly Western states, according to the National Interagency Fire Center in Boise, Idaho.

Climate change has made the West warmer and drier in the past 30 years and will continue to make the weather more extreme and wildfires more destructive, according to scientists.

The delta variant. Wildfire smoke. Now is the time to break out the N95s, experts say

By Danielle Echeverria

San Francisco Chronicle, Thursday, August 26, 2021

With revived mask mandates in place to combat the delta variant surge, face coverings have once again become a common sight across the Bay Area. But especially with wildfire smoke compounding the need for protection, should you upgrade to an N95 mask?

Many seem to think so — public health experts are increasingly tweeting about N95s, and Google searches for the term in the Bay Area spiked this month.

N95s are respirators, which means they filter out particles from the air before you can breathe them in. Commonly used in health care settings, the masks are designed to fit tightly, creating a seal around the nose and mouth — distinguishing them from looser-fitting surgical masks or cloth ones.

While they may not be the most comfortable option due to their close fit, N95s are your best bet for protection at this stage in the pandemic and fire season, experts said. Approved by the National Institute for Occupational Safety and Health, N95 masks, when worn correctly, block out at least 95% of airborne particles — including those from the coronavirus and smoke.

That extra seal of protection from the close fit is key in preventing the spread of the delta variant, which is twice as infectious as previous strains of the coronavirus, experts said. While cloth and surgical masks certainly still help prevent the spread of infectious droplets, they aren't quite as effective, especially in more risky situations like crowded indoor spaces.

“Any mask is better than nothing,” UC Berkeley infectious disease expert John Swartzberg said, but “the more barriers the mask has, the more protection is afforded.”

On top of the extra protection from the virus, N95s are the best mask to protect you from harmful particles in smoky air. Surgical and cloth masks don't filter out such particulate matter, known as PM2.5, experts say.

“Any mask that is not an N95 or higher will not do anything to protect you from PM2.5 particles from wildfire smoke,” Kristina Chu, a spokeswoman for the Bay Area Air Quality Management District, told The Chronicle last fire season.

Through much of the pandemic, N95s were in short supply, so experts and the Centers for Disease Control and Prevention recommended that they be saved for health care workers, who were exposed to the virus the most. But in May, the CDC updated its stance, saying that supply had improved significantly and conservation of N95s was no longer needed.

“There is no shortage. There are plenty of N95 respirators,” said Anne Miller, who volunteers as the executive director for Project N95, a nonprofit partnered with medical associations, universities and other organizations that verifies and sells medical equipment like personal protective equipment and COVID-19 diagnostic tests.

She added that with the increased supply, prices have come down, making the extra-protective masks even more accessible — some go for as little as 80 cents apiece, while \$2 to \$5 each is more standard. While N95s are disposable and designed for single use, the CDC changed its recommendation during the pandemic to allow for limited reuse.

Last year, many people turned to KN95 masks when N95s were being kept for health care workers — but the two are not exactly interchangeable.

N95 masks with NIOSH approval — which signals an ongoing evaluation process by the CDC agency with multiple audits — are held to U.S. standards for fit and filtration. NIOSH is the occupational health and safety agency of the CDC.

KN95 masks are certified under Chinese standards, which are not as stringent as U.S. standards that include NIOSH certification. When they meet the right requirements and are not counterfeit, KN95s can filter up to 95% of particles in the air, according to the CDC.

While masks without NIOSH approval may still be effective, there's no guarantee that they work as well, Miller said.

The more snug fit of an N95 also means that it can withstand more pressure from breathing, according to Krutika Kuppalli, a Palo Alto infectious disease doctor and a biosecurity fellow with the Johns Hopkins Center for Health Security.

People should still be on the lookout for counterfeit N95s and KN95s, experts said. The CDC has a list of trusted N95s as well as a guide for spotting fakes.

Because of the virus, you should avoid N95s with a respirator valve, according to the CDC. The valve allows unfiltered exhaled air — potentially carrying the coronavirus — to escape from the mask.

Update: Evacuations ordered for 1,000-acre fire near New Melones Lake in Calaveras County

By Lydia Gerike

Merced Sun-Star, Thursday, August 26, 2021

7:40 p.m. update

The blaze has been named the Airola fire. According to the Cal Fire Tuolumne-Calaveras Unit in a 7:30 a.m. update on its Facebook page, the fire is about 700 acres.

Crews will construct fire line throughout the night, and there is currently 0% containment, Cal Fire reported.

5:40 p.m.

Evacuations have been ordered in Calaveras County as firefighters battle a fast-growing blaze near New Melones Lake.

The fire began around 3:30 p.m. Wednesday and reached 1,000 acres in about two hours, the Calaveras County Sheriff's Office said. It is located in the Stanislaus River Canyon near the Parrotts Ferry Bridge.

Evacuations are in place for all of Parrotts Ferry Road between Parrotts Ferry Road, near the county line with Tuolumne, and Highway 4, the sheriff's office said. This includes Moaning Cavern and Camp Nine Road areas and areas east of Red Hill Road to Parrotts Ferry Road.

Douglas Flat and Murphys were under evacuation warnings only as of 5:40 p.m.

Mark Twain Elementary School in Angels Camp is serving as an evacuation center.

We will have more on this story as it develops.

Caldor Fire, Dixie Fire still active as other new fires erupt

By Michael McGough

The Sacramento Bee, Thursday, August 26, 2021

Firefighters across California are contending with major existing wildfires and some new incidents that got off to rapid starts Wednesday, as they also brace for worsening weather conditions later this week.

One new blaze, the Airola Fire, prompted evacuations in Calaveras County. Another smaller fire in Nevada County led to evacuations for some Grass Valley residents for a few hours before crews got a handle.

In Southern California, new fires started in San Bernardino and Riverside counties, each torching a few hundred acres within hours.

All the while, thousands of fire personnel remain assigned to the Caldor Fire in El Dorado County, which continues to displace nearly 25,000 residents; the Dixie Fire burning near Lassen and Plumas national forests, which is California's second-largest wildfire ever recorded; the French Fire, which has evacuated

thousands from Kern County; a pair of lightning-sparked blazes in Trinity County, the Monument and McFarland fires, that continue to threaten thousands of homes; and more.

Making matters worse, the National Weather Service has issued a fire weather watch, in place Friday morning through Saturday morning, for a stretch of the northern Sacramento Valley. The warning mainly covers Shasta, Tehama, Glenn and Colusa counties, where gusts could reach 35 mph. But gusty conditions are also likely in the rest of the valley and parts of the foothills, forecasts show.

The extremely active 2021 fire season comes as California's historic drought has produced dangerous fuel loads in many parts of the state. Nine national forests that cover millions of acres are closed to the public due to wildfire impacts.

Gov. Gavin Newsom announced Tuesday evening that the Biden administration approved a presidential major disaster declaration specific to the Dixie, Antelope, McFarland, Monument and River fires that have burned in parts Lassen, Nevada, Placer, Plumas, Shasta, Siskiyou, Tehama and Trinity counties.

The declaration will assist with support programs including housing assistance, food aid, medical and legal services and more for wildfire victims. It also offers funds to state, local and tribal governments.

A subsequent declaration for the Caldor Fire will likely be requested after officials are able to more fully assess the scope of destruction.

Here is the latest on major incidents currently burning in Northern California:

Caldor Fire

The Caldor Fire burning near Pollock Pines in El Dorado County is now 136,643 acres (214 square miles) with 11% containment, Cal Fire and the U.S. Forest Service said in a Thursday morning update.

The fire grew more than 10,000 acres over the course of Wednesday, with more active fire behavior following relatively calm conditions Monday and Tuesday. The fire continues to grow in steep terrain, with spot fires being found on southwest and northeast perimeters of the fire.

The fire has destroyed at least 465 homes, 11 businesses and 167 minor structures, though damage assessment is still in progress. About 17,500 more structures are considered at risk.

The Caldor Fire ignited the evening of Aug. 14, then exploded to life early last week, spreading north into the town of Grizzly Flats and continuing upward to force evacuations for the Pollock Pines, Sly Park and Kyburz areas.

The fire largely destroyed Grizzly Flats, and two civilians there had to be airlifted to hospitals with injuries described as serious.

Caltrans over the weekend closed a 46-mile stretch of Highway 50 in both directions between Pollock Pines and Meyers, which remains closed with no estimated time of reopening. The fire spotted across the highway near Kyburz on Saturday, but it is still burning primarily south of it.

Highway 50 remains closed with no estimated time of reopening. There is also no estimate on repopulation for evacuees, as nearly 2,900 firefighters are now battling to boost containment on the fire.

Caldor is currently the No. 1 priority for resources out of any fire in entire United States, Cal Fire Director Thom Porter said during a Monday news briefing at the Governor's Office of Emergency Services headquarters in Mather.

Dixie Fire

Cal Fire and the Forest Service now report the Dixie Fire at 747,091 acres, or about 1,167 square miles. The massive blaze grew nearly 16,000 acres Wednesday, and containment is unchanged at 45%.

The Dixie Fire "remained active well into the night," the two agencies wrote in a Thursday morning incident update.

The blaze has destroyed nearly 1,300 structures, almost 700 of them homes, since igniting July 13. Another 11,800 are considered threatened, Cal Fire and the Forest Service report.

Severe drought is contributing to extreme conditions at the Dixie Fire and other incidents across the state. "Firefighters are experiencing conditions never seen before, such as increased spread rates, spotting and active nighttime burning," Cal Fire officials wrote in a Monday update.

Some evacuation orders have been lifted or reduced to voluntary warnings, but emergency officials urge residents to remain vigilant, prepared and aware of smoke impacts.

A substantial number of evacuation orders remain in place across numerous communities and campgrounds in Plumas, Lassen and Tehama counties, along with evacuation warnings in Butte County. More details are available from Cal Fire as well as from those counties' sheriff's offices.

Nearly 4,900 fire personnel are assigned to the blaze, down from about 6,000 earlier in the week.

The cause of the Dixie Fire remains under investigation by Cal Fire, but Pacific Gas and Electric Co. in a filing to the state's utility regulator acknowledged that a troubleman inspecting blown fuses found a tree leaning up against one of the utility company's power poles.

French Fire

The French Fire, burning northwest of Lake Isabella in Kern County, is now 22,030 acres with containment still at 19%.

Mandatory evacuations remain in place for communities including Keysville, Dutch Flat, Willow Flat and part of Wofford Heights, all north of Highway 178 and west of the reservoir.

An evacuation warning was expanded to the northeast Wednesday to include most of the town of Kernville.

The Governor's Office of Emergency Services said Tuesday that about 7,150 people are evacuated from Kern County due to the fire, displacing more residents than any other incident in the state except the Caldor Fire.

Airola Fire

The Airola Fire started Wednesday afternoon near Vallecito in Calaveras County, and stood at 700 acres with 10% containment as of Thursday morning, Cal Fire said.

The fire displayed "extreme" behavior Wednesday afternoon, with rapid runs up hills, according to Cal Fire. The agency called the fire "terrain driven."

Numerous evacuations are in place and some schools in Vallecito are closed.

The cause of the fire remains under investigation.

Trinity County fires

A pair of lightning-sparked wildfires, the Monument and McFarland fires near Trinity County, have each surpassed 100,000 acres since igniting in late July.

Activity is slowing because of improving weather conditions and increased humidity, according to the Forest Service, but there are still large amounts of extremely dry fuel that are receptive to burning.

The Monument Fire as of Thursday morning had reached 157,287 acres, with containment still at 20% as it has been since Tuesday. The blaze continues to threaten about 10,000 structures south of Del Loma near the Trinity River, according to Cal Fire and the Forest Service. At least 32 structures have been destroyed.

Some evacuation orders for the Monument Fire were reduced to warnings Monday, including parts of Junction City, Big Flat, Big Bar and Del Loma. Orders remain in place for other communities including Hayfork, and a stretch of Highway 299 is closed between Sky Ranch and Ammon roads. Detailed evacuation information is available via the Trinity County Sheriff's Office page on Facebook.

The McFarland Fire is 122,598 acres and 84% contained as of Thursday, according to the Forest Service. The fire grew minimally Monday and Tuesday. The fire has destroyed at least 24 homes, and the Forest Service says damage assessment is complete.

Evacuation orders remain in place for the Shasta County community of Platina, where about 200 people live, as well as areas west of Vestal and Weemasoul roads in Tehama County along the Tehama-Shasta county line.

More evacuations along Highway 50 near summit as Caldor Fire blazes toward Tahoe

By Michael McGough

The Sacramento Bee, Thursday, August 26, 2021

Authorities on Thursday expanded evacuations for the Caldor Fire to include the Twin Bridges and Echo Summit areas as the blaze grows closer to the Lake Tahoe basin.

El Dorado County Sheriff's officials issued new mandatory evacuation orders from Twin Bridges through Echo Summit, extending north of Highway 50 to Flagpole Peak and south of the highway to the Amador-Alpine county line.

The nearly 50-mile Highway 50 closure, which begins at Sly Park Road in Pollock Pines on the west end, has also been extended on the east end.

A small stretch of the highway had previously been open only to residents between Twin Bridges and Meyers, but is now fully closed through Meyers at the Highway 89 junction, as those locals must evacuate. Those evacuating using Highway 50 should head east, emergency officials said in an update.

Evacuation warnings, voluntary at this time, have also been issued for Christmas Valley — a cluster of homes and cabins west of Highway 89 and east of Highway 50 at Echo Summit — and parts of Alpine County, including west of Highway 88 up to Kirkwood.

The Caldor Fire ignited Aug. 14, exploding in size and mostly destroying the town of Grizzly Flats in its first few days. The fire prompted urgent evacuations up through the Pollock Pines, Sly Park and Kyburz area. The fire has spread more slowly but very steadily this week toward the northeast, toward Lake Tahoe.

Cal Fire and the U.S. Forest Service reported the fire Thursday morning at 136,643 acres, an increase of nearly 10,000 acres overnight, with containment holding at 12%.

Officials at the Lake Valley Fire Protection District, headquartered in South Lake Tahoe, have been on high alert this week.

"To say Lake Valley Fire is concerned is an understatement," said Brad Zlendick, chief of the fire protection district, during a community meeting Tuesday. "We're concerned about it affecting our cabins, our homes up on top of Echo Summit."

The fire is also burning near ski resorts including Sierra-At-Tahoe and Kirkwood.

Fast-growing Airola Fire forces evacuations in Calaveras County, quickly tops 1K acres

By Elizabeth Roberts

Recordnet.com, Thursday, August 26, 2021

12:10 p.m. Thursday update: 10% containment, man arrested behind evacuation zone

The Airola Fire, which is burning just west of the Stanislaus National Forest in Calaveras County, was estimated at 700 acres and was 10 percent contained today, Cal Fire reported.

These evacuations in Vallecito are still in effect: All of Parrots Ferry Road from the Tuolumne/Calaveras County line at Parrots Ferry Bridge to Highway 4 including Moaning Cavern and Camp Nine Road areas as well as East of Red Hill Road to Parrots Ferry Road.

Cal Fire offered more details about the wildfire today, saying "firefighters observed extreme fire behavior yesterday afternoon as the fire made uphill runs and is terrain driven. Critically dry fuels and steep terrain

challenged fire crews overnight. Firefighters will continue to establish direct and indirect containment lines today.

“Hotter and drier temperatures are forecasted today through the weekend with poor humidity recovery overnight.”

On Wednesday night, deputies arrested a man who breached the evacuation zone, the Calaveras County Sheriff’s Office reported today.

The man, identified as Richard Serva, 32, of Avery, “approached the roadblock irate and yelling profanities,” the agency said in a news release. He “became increasingly agitate” but eventually walked away at about 11:40 p.m. About 10 minutes later, patrolling deputies discovered Serva on Parrots Ferry Road behind the roadblocks. He allegedly began shouting for the deputies to “take him to jail,” the Sheriff’s Office said, and he was subsequently arrested without incident on suspicion of making an unauthorized entry into an emergency area, public intoxication, and delaying a peace offer in performance of duties, all misdemeanors.

“Looting and or trespassing during evacuations will not be tolerated,” the Sheriff’s Office said. “Persons entering evacuation areas will slow and at times stop firefighting progress and the flow of other emergency equipment and personnel from entering to stop or slow the fire. Evacuations are put into place to save lives and protect property. If you are caught interfering with those efforts in Calaveras County you will go directly to jail.”

11:45 p.m. update

All schools in the Vallecito Union School District will be closed Thursday, Aug. 26, the Calaveras County Public Health Division posted late Wednesday.

School closures:

- Albert Michelson Elementary School and Extended Day Program, 196 Pennsylvania Gulch Road, Murphys
- Transitional Adult Education Program, 3670 Church St., Vallecito
- Hazel Fischer Elementary, 1605 Blagen Road, Arnold
- Avery Middle School, 4545 Moran Road, Avery

10:10 p.m. update

According to the Calaveras County Sheriff’s Office, there is no update on how many acres the Airola Fire had burned as of tonight, with containment still reported at zero percent.

Evacuation orders remain in effect for the Vallecito area and are expected to remain throughout the night, the agency posted. Parrots Ferry Road is expected to remain closed through the night, while Highway 4 remains open.

The Calaveras County Office of Education said that Michelson Elementary and Vallecito Transition schools will be closed Thursday out of caution.

The Sheriff’s Office says it will continue to patrol the evacuated area and work throughout the night.

7:45 p.m. update

A complete emergency road closure is in effect at Parrots Ferry Road at Highway 4 in Vallecito, authorities said this evening.

“The road will be reopened as soon as possible. Unfortunately we do not have an estimated time of reopening. Please use alternate routes to avoid the impacted area,” the Calaveras County Public Health Division posted on its Facebook page.

A second evacuation shelter is open at 1445 Blagen Road, Arnold. Evacuees can take their animals to Calaveras County Animal Services or the Calaveras County Fairgrounds (see below).

Residents can sign up for emergency alerts at <https://oes.calaverasgov.us/Notifications>.

Bad air: Smoke from French Fire headed to the valley floor as winds shift

By David Beasley

Kern Valley Sun, Wednesday, August 25, 2021

The French Fire could cause air-quality issues on the floor of the Kern River Valley by Thursday as the wind blows the smoke down from the mountains, Cassandra Melching, outreach and communications representative for the San Joaquin Valley Air Pollution Control District, told the Kern Valley Sun.

“For folks that do live close to the site, of course, they are naturally going to be impacted by smoke,” she said Wednesday.

By Thursday winds could blow smoke from the fire to the valley floor, said Melching.

“We’re going to have a high pressure system coming in, and the winds are going to shift,” she said. “All that smoke will blow down and kind of fumigate the whole entire San Joaquin Valley. That will be due to the high pressure system that’s rolling in tomorrow.”

Residents in the mountainous areas near the fire who have respiratory issues and can’t leave the area, should stay indoors as much as possible where there is cold, filtered air, said Melching.

Pay attention to the effect the smoke is having on you, Melcher advised.

“If your eyes start to burn, your chest is getting tight, then you’re definitely being impacted,” she said.

Residents can get the latest on air quality conditions through the Real-Time Air Advisory Network (RAAN). You can sign up for free email and text notifications when the air quality is poor in your area.

You can also download the free Valley Air app, available in the Apple store or Google Play.

The French Fire currently encompasses 20,678 acres and is 19% contained, the state of California said.

For advice on protecting yourself against smoke from wildfires, go to www.epa.gov/indoor-air-quality-iaq/wildfires-and-indoor-air-quality-iaq#_What_Can_I_2

PurpleAir vs. AirNow: How to track the air quality readings near you

By Kellie Hwang

San Francisco Chronicle, Wednesday, August 25, 2021

Hunting for air quality readings has become a familiar drill for Bay Area residents as smoke pollutes the region’s skies during Northern California’s increasingly severe wildfire seasons.

Those looking for current conditions and longer-range forecasts have several good resources to consult: the federal AirNow.gov website; the Bay Area Air Quality Management District, which is one of AirNow’s local partners; and PurpleAir.com, a website that pulls its data from sensors that people purchase and install on their own.

Because their readings are gathered from different sources using different methods, their numbers typically differ. However, all of them use the Air Quality Index, the Environmental Protection Agency’s color-coded scale for reporting air quality. Levels range from 0 to 500 — the higher the AQI reading, the greater the pollution level and associated health risk.

Here’s what you need to know about the different resources, how to use them and what they can tell you about air quality in your area.

AirNow

AirNow.gov is a federal website managed by the EPA with many federal and local state partners, including in the Bay Area. Users can enter a specific location to pull up AQI data and a five-day air quality forecast. It’s the most accurate information available, using regulator-approved air quality monitors — but sampling, analysis and quality-control steps create a lag, meaning the reported measurements are few hours old.

The agency's Fire and Smoke Map shows pollution levels from wildfire smoke, known as fine particle pollution or PM2.5. It combines data from AirNow and PurpleAir and applies some mathematical adjustments. The map includes layers that can be turned on and off to show the different types of sensors, large wildfire incidents and smoke plumes.

Bay Area Air Quality Management District

The BAAQMD is a local partner of AirNow. About 30 air district stations around the Bay Area measure two types of pollution — PM2.5 and ozone — by pulling them through a filter and weighing them to determine air quality. The agency's Air Quality Index shows hourly, daily, weekly and monthly PM2.5 readings for different areas across the Bay Area.

The district also is responsible for issuing air quality advisories and Spare the Air alerts. Advisories indicate that events such as wildfires are affecting local air quality, but not at levels exceeding federal health-based standards. Spare the Air alerts are issued when pollutants like PM2.5 are expected to push the Air Quality Index to the unhealthy level, above 100, in any one of five reporting zones in the Bay Area. Users can sign up for alerts via text, email, phone or website notification.

PurpleAir

PurpleAir manufactures low-cost air quality sensors — ranging from about \$200 to \$300 — that anyone can purchase and install outside their home. The sensors use light scattering technology to estimate particle concentrations in the air. According to PurpleAir, about 18,000 of its sensors are in use across the U.S., with 11,000 in California, and the numbers have roughly doubled each year since the Utah-based company was founded in 2015.

The data refreshes every 10 minutes and appears on a map on the company website. You can search by address or sensor location, zoom in and out or use a drag function to see other areas. With far more sensors than the government's network, it's useful for getting a real-time sense of the air quality in a specific neighborhood — though compared to the federal data, it is lower quality. Experts say PurpleAir tends to report higher PM2.5 concentrations than regulatory monitors, so those looking for absolute values should check them against government agency data.

PurpleAir's website says its sensors may appear to "read high" in wildfire smoke conditions because the density of smoke particles differs from that of other airborne particles of similar size, affecting its calculations of particle concentration. PurpleAir sensors, paid for by individuals with the means to afford them, also tend to be concentrated in more affluent neighborhoods.

The Chronicle's Air Quality Map shows readings down to the neighborhood, and is powered by PurpleAir data. It also features functions to show the smoke forecast and wind conditions.

Two new wildfires light up Sierra as firefighters try to stop Caldor from reaching Lake Tahoe basin

By Lauren Hepler, Michael Cabanatuan
San Francisco Chronicle, Wednesday, August 25, 2021

Jen Carter Smitt didn't even know a new fire had sparked when she got the call to evacuate her Grass Valley apartment around 3:45 on Wednesday afternoon.

It's been hazy for days in Sierra communities like hers, which is sandwiched between the massive Dixie Fire burning to the north and the Caldor Fire approaching Lake Tahoe to the south.

"At this point do I smell smoke? I don't even know," said Carter Smitt, who was watching aircraft battle the fire from her car on a nearby hillside late Wednesday afternoon.

Carter Smitt was part of a wave of mandatory evacuations hastily ordered on Wednesday by emergency officials after the Bennett Fire sparked just across the highway from downtown Grass Valley.

Two hours away in the foothills of Calaveras County, another new blaze, the Airola Fire, quickly grew to around 1,000 acres and spurred more evacuations in the Gold Country town of Vallecito. All the while,

more than 2,800 firefighters and support personnel continued their days-long battle to keep the Caldor Fire out of the Lake Tahoe basin.

Hot, dry winds fueled fire conditions across the region, stoking anxiety about whether there would be more evacuations in bigger towns near Tahoe and Sierra communities like Murphys. But both fire officials and local leaders in impacted areas stressed that contingency plans are in place and crews are working diligently on containment plans.

"We are in lockstep," South Lake Tahoe City Manager Joe Irvin told residents at a public meeting about the Caldor Fire. "We will have enough notice to do what we need to do if those situations should arise."

The Caldor Fire started on Aug. 14 south of Grizzly Flats in El Dorado County and has since consumed 126,566 acres. The fire has destroyed 637 structures, including a school, two fire stations and 465 homes.

El Dorado County sheriff's officials were prepared to issue evacuation warnings for parts of the Tahoe basin should the fire get close to the area between Twin Bridges and Echo Summit and force mandatory evacuations there. The fire has not burned into Twin Bridges, but a warning has been issued for residents to prepare for a potential evacuation.

Kit Bailey, assistant fire chief with California's Office of Emergency Services, said considerable resources have been unleashed on the fire, focusing on its eastern edge near Tahoe.

"They're throwing everything they have at it," he said during a briefing at the fire's command center in Placerville on Wednesday morning. "They're making progress, albeit slow, but they've been very deliberate."

Highway 50, the main route from the Bay Area and Sacramento to South Lake Tahoe, remained closed indefinitely.

While manpower was focused on the Caldor Fire, the massive Dixie Fire continued burning in Plumas, Lassen, Butte, Tehama and Shasta counties, including Lassen National Park, half of which was ravaged by the flames.

The conflagration has consumed 742,724 acres during the 42 days since it started near the Feather River in Plumas County, and it has destroyed 682 homes and leveled the town of Greenville in Plumas County.

More than 5,600 firefighters were battling the Dixie Fire, which was 45% contained. Evacuation orders have been lifted in some areas and residents are being allowed to return to their homes, but more than 2,800 people still remain evacuated, many in Plumas County.

Elsewhere in Northern California, the Monument and McFarland fires are burning in the Shasta-Trinity National Forest. The Monument Fire in Trinity County, west of Big Bar, has consumed 154,344 acres and was 20% contained.

The McFarland Fire, west of Platina in Shasta County, has burned 119,560 acres and was 73% contained. Evacuation orders remain in place for some areas near both fires.

By Wednesday evening aggressive air operations were winding down on the new Airola Fire in Calaveras County with the blaze still 0% contained. In Grass Valley, where things were looking better for evacuees like Carter Smitt with the Bennett Fire 60% contained and emergency orders beginning to lift, a sense of unease lingered.

"I'm just gonna be watching the plume," Carter Smitt said. "I know which direction to evacuate if I have to."

Evacuations underway in Calaveras County as new wildfire erupts near New Melones Lake

By J.D. Morris

San Francisco Chronicle, Wednesday, August 25, 2021

A fast-moving wildfire ignited Wednesday afternoon in the Sierra Nevada foothills of Calaveras County, forcing evacuations northeast of New Melones Lake.

The Airola Fire started about 3:30 p.m. off Parrotts Ferry Road and Airola Road, according to state and local officials.

About two hours later, the fire had grown to an estimated 700 to 1,000 acres and was 0% contained. Evacuation orders were in place in the historic Gold Country community of Vallecito, while the Douglas Flat area and the town of Murphys were under evacuation warnings, according to the Calaveras County Sheriff's Office.

Officials were setting up an evacuation center at Mark Twain Elementary School in Angels Camp.

In Vallecito, the evacuation orders extended from the Calaveras and Tuolumne county border at the Parrotts Ferry Bridge north to Highway Four, including Moaning Cavern and Camp Nine Road as well as areas east of Red Hill Road to Parrotts Ferry Road, the sheriff's office said.

The Vallecito order was expected to remain overnight, as would the closure of Parrotts Ferry Road, the sheriff's office said. Highway 4 was still open.

GET bus announces free rides because of dangerous air quality

The Bakersfield Californian, Wednesday, Aug. 25, 2021

The Golden Empire Transit District will provide free rides Thursday because the Air Quality Index will be 159, GET announced.

An AQI over 150 is considered unhealthy and hazardous to the general population. The categorization focuses on health effects a person may face after breathing polluted air, GET said in a news release.

French Fire determined to be 'human caused' as flames grow

By Ishani Desai

Bakersfield Californian, Wednesday, Aug. 25, 2021

A week into the French Fire, officials have determined the blaze that has burned more than 21,000 acres near Lake Isabella was caused by humans.

It is "suspicious in nature," Teresa Benson, a forest supervisor with the Sequoia National Forest, said Wednesday night.

The fire was around 19 percent contained as of Wednesday evening, according to the Kern County Fire Department.

John Owings, the section operation chief with team 12, said the crews shored up structure defense within Alta Sierra, and held the fire south of Highway 155, into Wofford Heights.

However, around 2 p.m. Tuesday, the wind shifted and an ember escaped. A spot fire proliferated, going into Black Mountain Saddle, Owings said. Crews encountered two fronts to the fire: up Black Mountain Saddle and another up Black Mountain Peak.

Another wind alteration caused the flames to ravage land toward the Wofford Heights area. Stationed crews jumped to protect structures within the areas of Wofford Heights, Paul Ranches and the Calgary Tract, Owings added. However, about 50 percent of the population had not yet evacuated and firefighters prioritized urging residents to depart, he said.

Once individuals left the area, personnel began building a containment line and successfully held the flames by flying helicopters throughout the night, Owings said.

The containment line around Rancheria Road is holding strong and crews will divert their attention to the western bank of the fire, near the Fulton Peak area, Owings said. Winds, blowing southwest, threaten this area.

"We've got a good plan to keep this thing corralled with the resources that we have," Owings added.

The section operating chief feels “optimistic” about staving off fire damage around Shirley and areas of Kernville. Throughout the Dutch Meadows and Hungry Gulch, fire has not re-engulfed the area, though the evacuation order remains in effect, Owings said.

Division Chief Bill Steers said issuing evacuation orders is a tough call, but ultimately crews incorporate safety risks for both residents and firefighters into their assessments.

“We're really waiting and only do it when we absolutely have to,” Steers said.

Michael Nobles, the incident management team leader, said an investigation into the number of affected structures is underway and will be released when the number is confirmed.

Areas under an evacuation order include: Wofford Heights, Pala Ranches, Shirley Meadows, Alta Sierra, Slick Rock, Dutch Flat, Isabella Highlands, Wagy Flat, Black Gulch, and Keysville North and South, according to the KFCF.

The California Highway Patrol announced that Highway 155, north of Highway 178, and Burlando Road at Plater Road is closed because of its proximity to the fire. The Bureau of Land Management has still closed the Keysville Special Recreation Management Area.

Areas under an evacuation warning include: Kernville and the community of Riverkern, near the Tulare and Kern boundary, according to the KFCF.

Benson said recreation sites from Kernville to Johnsondale will also be closed.

Gov. Gavin Newsom secured a grant from the Federal Emergency Management Agency to aid firefighting efforts. Under this policy, responding teams from local, state and tribal levels will be reimbursed 75 percent of their fire suppression costs, according to a news release by Newsom's administration.

Kern County Animal Services continues to provide help for impacted residents, helping about 30 pets, said Taylor Poisall, a spokeswoman for the Red Cross.

The Red Cross has opened two shelters, at Woodrow Wallace Elementary School and Kern River Valley High School, to house individuals evacuating from the affected region; more locations will be opened if the current locations receive an influx of people, Poisall said.

Around 5:30 p.m. Wednesday, Poisall said, about 50 people were going to sleep in the center. Many people drift through the schools, stocking up on supplies and then leaving to reside with friends or family, Poisall said. The Salvation Army provides hot meals; a nurse and a spiritual guidance counselor are also available for residents.