

## **California's air quality is the worst in the nation right now. How to protect yourself**

By Monica Vaughan

Fresno Bee and Sacramento Bee, Wednesday, September 9, 2020

Californians are experiencing the worst air quality in the nation Tuesday, as wildfires across the West produce dangerous levels of smoke that can damage developing lungs and increase risk of heart attack and stroke.

Over a million acres in the state are on fire or have recently burned, according to a CalFire incident map. Those send plumes of thick smoke wafting across large regions of California and neighboring states.

Air quality monitors have registered levels of particulate matter and ozone that are unhealthy or hazardous to public health, with more Californians experiencing dangerous concentrations of air pollution than residents of any other state in the nation, based on United States Environmental Protective Agency maps on AirNow.gov.

The risk to health is heightened in some areas of the state, particularly in the Sacramento and Central San Joaquin valleys. Residents in Mendocino County and parts of the Central Valley should stay indoors with an air filter or leave the area to protect their health from a dangerous combination of air pollution.

Air quality from PM 2.5 and ozone was considered hazardous Tuesday afternoon in Sacramento, Antioch, Stockton, Modesto and Victorville, for example, meaning there is a health risk for everyone who breathes the air without precaution.

Wildfire smoke is particularly risky for children, seniors, adults with existing heart or lung problems, and those who are pregnant.

A review of international, population-level studies of the public health effects of exposure to wildfire smoke found growing evidence of increased mortality and hospitalizations in the days and weeks following wildfires, according to a summary published in Environmental Health Perspectives in 2016.

While the review suggested that the full health risks of wildfire smoke are unknown, the research reviewed suggests there is increased risk of repeated exposure. Meaning people living in a state or region prone to wildfire may experience respiratory and cardiovascular events from the cumulative effect of repeated exposure.

Based on that growing evidence, California emergency departments and hospitals may see an increase in patients suffering from asthma, chronic obstructive pulmonary disease, and heart attack in the near future.

Is the air quality safe where you live?

Some towns experience worse air quality than others depending on wind patterns and additional sources of particulate matter.

Central California is impacted by smoke from the 144,000-acre Creek Fire in Fresno County and several fires burning about 400,000 acres south and east of San Jose.

Swaths of Northern California are under a plume of smoke from the uncontained Hull Fire burning forestland near Mendocino, as well as another lightning complex that's burned 375,000-acres in several smaller fires between Fairfield and Clearlake.

To view the air quality in your region or town based on data from government monitors, visit [gispub.epa.gov/airnow](https://gispub.epa.gov/airnow).

To see air quality and smoke patterns specifically from wildfire smoke, visit [fire.airnow.gov](https://fire.airnow.gov).

To see real-time air quality measurements at a neighborhood level, visit [www.purpleair.com/map](https://www.purpleair.com/map).

How to protect yourself and family from bad air quality

Poor air quality can have short-term effects, or effects that last a lifetime.

Particulate matter is tiny particles small enough to travel past your upper respiratory system into your lungs and cardiovascular system. Pollution considered PM 2.5 can cause permanent damage in developing lungs, or can trigger heart or respiratory incidents.

Here's what public health officials recommend as protection:

If faced with heavy smoke and ash from a nearby fire, consider leaving the area.

If the air is unhealthy from wildfire smoke and the sky looks hazy, avoid strenuous activity outside. That means don't let the kids play outside and don't go running.

Stay indoors and close all the doors and windows. Consider purchasing a portable air cleaner or efficient HVAC system. Or, consider the cheaper DIY alternative with a homemade filtered fan.

If you must go outside, wear an N95 respirator mask.

Learn more at [www.epa.gov/indoor-air-quality-iaq/wildfires-and-indoor-air-quality-iaq#\\_What\\_Can\\_I](https://www.epa.gov/indoor-air-quality-iaq/wildfires-and-indoor-air-quality-iaq#_What_Can_I).

## **Massive wildfires set the skies ablaze with vivid sunsets and sunrises. Here's why**

By Brooke Wolford

In the Fresno Bee, Wednesday, September 9, 2020

Wildfires have burned millions of acres across the western U.S. this summer and the smoke has had far reaching effects.

During the day, the haze reduces visibility and creates a fog-like appearance. But as the sun rises and sets, it creates a brilliant canvas of oranges, yellows, reds and pinks.

Why?

The same reason we can see a rainbow — the light from the sun goes through “refraction,” the Idaho Statesman reported. It's a process where light bends through a “transparent substance into another,” according to the Science Learning Hub.

“When there are smoke particles in the air, the particles distribute light differently than a cloud would,” said Meteorologist Sheena Parveen, according to KNSD. “So with smoke particles, we tend to see more orange and red colors scattered across the sky.”

The sky's color depends on how close the wildfire producing the smoke is to you, the Statesman reported. The closer it is, the less brilliant the sunset, according to the newspaper.

But from farther away, the smoke creates a dazzling sight.

“Certain colors of light will interact with [the particles] and scatter in a random direction,” Kevin Davenport, an experimental physicist, told CPR News. “Longer wavelengths of light, like reds and oranges, don't interact with them and they can just pass through.”

California has recorded 7,563 wildfire incidents in 2020 as of Tuesday, which have burned nearly 2.2 million acres statewide, according to Cal Fire. Some parts of the state have reported “unhealthy” or “hazardous” air quality due to the smoke, AirNow shows.

Washington state has reported eight active wildfires that have burned nearly 240,000 acres as of Tuesday, according to the Washington Department of Natural Resources. Smoke across the state has reduced the air quality in some areas to “hazardous,” the Washington Smoke Blog shows.

## **Where is the ash in Stanislaus County coming from, and how long will it be here?**

By Erin Tracy

Modesto Bee, Wednesday, Sept. 9, 2020

A giant plume of smoke detached from the Bear Fire in Orville overnight, creating what is known as a pyrocumulus cloud, according to National Weather Service Meteorologist Eric Kurth. The smoke cloud

blew south where it hovered over parts of Stanislaus County for several hours Wednesday morning, causing ash to fall from the sky.

Kurth said high winds and low humidity fueled the Bear Fire, which is part of the North Complex. The lightning-ignited group of fires has been burning for three weeks in the Plumas National Forest area but the western side of the complex flared up dramatically Tuesday, prompting evacuations for at least 20,000 residents.

The Air Quality Index in Modesto was 153 through early Wednesday afternoon, which is considered unhealthy. That means experts urge people to remain indoors or wear a mask if they must go outside, keep their windows and doors closed and run air purifiers when possible.

The air quality could be worse than what the monitors are detecting, said Heather Heinks, spokeswoman for the San Joaquin Valley Air Pollution Control District.

“It is possible that a plume will travel through an area and not hit the monitor,” she said, adding that if you can smell smoke, you can be certain it’s unhealthy to be outside.

Heinks said the cloth masks that people are wearing to help slow the spread of the coronavirus can help keep out the larger pieces of ash but not the microscopic fine particles in smoke.

“The best plan of action is to stay hunkered down (indoors),” she said. “We are literally surrounded by wildfires. It doesn’t matter which way the wind shifts, it will bring smoke from a wildfire.”

And the high pressure systems we’ve been seeing are acting as a lid over the valley, holding all the smoke in.

While smoke is in our foreseeable future, Kurth said wind would push the pyrocumulus cloud south out of Stanislaus County by mid-morning. Offshore winds expected for Wednesday afternoon might help improve air quality for a short time but smokey conditions will remain throughout the week.

According to the National Weather Service, onshore winds might return Monday, which could again bring the same fire weather concerns that caused flareups Tuesday and early Wednesday.

“Wind conditions allowed many fires to grow significantly with extreme fire behavior. While containment on many of last month’s lightning fires grows closer, several new wildfires ignited and were fanned by strong gusty winds,” according to a press release from the California Department of Forestry and Fire Protection.

About 14,000 firefighters were battling 28 major wildfires across California, according to the agency.

A new fire started in Stanislaus County Wednesday near Interstate 5 and Sperry Road. As of Wednesday morning, it was 45 acres with no containment. The SCU Lightning Complex fire, which has been burning in Del Puerto Canyon in western Stanislaus County since Aug. 18, is 96 percent contained. It had consumed 396,624 acres as of Wednesday morning.

## **Air quality in San Joaquin County is ‘unhealthy’ as wildfires surround Valley**

By Sheyanne N Romero and Joe Goldeen

Stockton Record, Wednesday, September 9, 2020

Air quality is “unhealthy” in San Joaquin County as wildfires burn across California.

Several large wildfires continue to burn in Northern and Central California, and as winds picked up Tuesday, county residents woke up to smoky skies and ash raining down. Air quality is expected to worsen in parts of the Valley as temperatures rise and smoke continues to roll in, according to the San Joaquin Valley Air Pollution Control District.

An “excessive heat” advisory was issued for San Joaquin County by the National Weather Service on Monday. Temperatures were expected to reach 112 in parts of the Valley this week.

“High pressure is continuing to build over the San Joaquin Valley, causing a lack of smoke dispersion. That pressure acts as a ‘lid’ over the bowl of the Valley and, when coupled with winds out of the

northwest, has the potential to continue bringing smoke into the northern Valley,” air pollution control officials stated in a news release.

The increasing wind is also picking up more dust that mixes with the smoke particles, making the unfiltered air especially hazardous for sensitive groups. This kind of particulate pollution can trigger asthma attacks, aggravate chronic bronchitis and increase the risk of heart attack and stroke.

By midday Tuesday, the temperature around Stockton was in the high 80s to low 90s and was not expected to reach triple digits. The winds blowing in smoke and dust out of the northwest reached 18 miles per hour, creating an air quality index reading of 166 (in the unhealthy range).

Central and southern portions of the Valley were experiencing smoke impacts from the Sequoia “SQF” Complex burning in Tulare County and the Creek Fire in Fresno and Madera counties.

The fires have charred a combined 135,800 acres as of Tuesday.

Smoke impacts will likely continue until the fires are extinguished, and will be more noticeable during the night and early morning, officials said.

Those with existing respiratory conditions, including COVID-19, young children and the elderly, are especially susceptible to this form of pollution, according to air quality officials.

Anyone experiencing poor air quality due to wildfire smoke should stay inside and keep the windows closed. Cloth and paper face masks may not protect from wildfire smoke.

Agricultural workers and others who must work outside should have proper respiratory protection equipment such as disposable filtering respirators (dust masks), other half facepiece respirators or full facepiece respirators, according to Cal/OSHA.

If you smell smoke or see falling ash in your immediate vicinity, consider air quality “unhealthy” (RAAN Level 4 or higher) even if Real-time Air Advisory Network displays lower level of pollution.

## **A High Sierra Creek Fire Rescue Fit for an Opera**

By David Taub

GVWire, Wednesday, September 9, 2020

Harlan Hays wanted to unwind and disconnect from society for the weekend.

“I looked forward to not having cell phone service,” Hays said.

The COVID-19 pandemic hasn’t been kind to his job as a singer with the San Francisco Opera.

With friend and fellow opera singer Reid Delahunt, the pair planned a five-day hike on the John Muir Trail.

The men met six years ago at the San Francisco Conservatory of Music and have been “best buds ever since.”

The Creek Fire forced a change of plans and an emergency evacuation. The pair returned to Fresno on Tuesday morning in a Chinook helicopter.

### **Seeing Smoke**

Hays and Delahunt were two of hundreds airlifted Tuesday by the California Army National Guard. Several families and friends of those rescued gathered at the base in east-central Fresno near the airport to reunite with loved ones.

Rescue choppers pulled out 164 people from the Sierra National Forest through the morning and were working to rescue 17 others, Gov. Gavin Newsom said during a briefing on Tuesday. The governor described pilots wearing night-vision goggles to find a place to land in the darkness of the early morning hours for the initial evacuation.

“We noticed the big cloud of smoke out to the west. We figured, oh, that’s probably pretty close to where our car is, we should probably hike out. So we did. On the way, we met many people saying it’s time to evacuate. This whole area is going to be evacuated. You have precious little time to make it to the boat to get out,” Hays recalled.

Hays and Delahunt were directed to shelter at the Vermilion Valley Resort on the western shore of Lake Edison.

“Thank you, Vermilion Valley Resort for everything you’ve done for us,” Delahunt said.

From there, Hays made the most of the experience.

“We made a whole bunch of friends. It was a wonderful bonding experience,” Hays said. “Being deprived of any type of community for the past seven months because of COVID-19 — finally being able to be around people again and make friends — it was wonderful.”

Hays put to use his new ukulele skills, taught to him by his fiancée. He also regaled the trapped campers with his opera singing.

Hays said he wasn’t scared but on edge.

“We’re all working together. We all knew that the worst could happen and hoping it didn’t, and it didn’t. We were able to get here from the help of our wonderful fire department, and our fire department and Fresno sheriff’s department,” Hays said.

### **Reunited with Fiance**

Hays’s fiancée, Emily Shumway, drove from San Francisco to reunite with her loved one and his friend.

“I did not sleep much for the last few days,” she said. She said friends and family helped keep her calm.

While sheltering at the resort, Hays was finally able to contact Emily.

“That was the hardest part, not being able to call,” Hays said.

### **A Helicopter to the Rescue**

Seeing the Chinook land provided great relief for Hays and Delahunt.

“It’s a dream come true. I’ve always wanted to be in a helicopter, flying into the Sierras in an emergency evacuation. Like, that’s so epic. I can tell the story forever now,” Hays said.

Because the smoke obscured the sky, the hikers experienced cold conditions. Even the exhaust from the helicopter provided a relief.

“It just felt amazing. Exhaust kind of smelled nice after all the forest fires,” Hays joked.

### **Battling Poor Air**

The smoke diminished the air quality.

“It was getting harder to breathe. There was some ash falling from the sky and they made it a little hard to be in the moment,” Delahunt said.

Hays said the air was so dry and smoky it gave him bloody noses.

“The Sierras are no joke. You got to be on your toes,” Hays added. “It’s a dangerous place. That’s why I go.”

## **Creek Fire grows into raging monster: What you need to know**

By Amy Graff

SFGATE, Wednesday, September 9, 2020

Tearing through the parched Sierra National Forest in Central California, the Creek Fire exploded into a fierce inferno over the weekend, devouring forest land and trapping hundreds of people. Below is an overview of this monstrous blaze.

**Location:** The fire started near Big Creek and Huntington Lake in Fresno County, about 300 miles north of Los Angeles, on Friday, Sept. 4, just after 6:30 p.m.

On Saturday afternoon the blaze exploded in size, jumping the San Joaquin River and cutting off the only road into the Mammoth Pool Campground trapping some 200 people. The fire also cut off an exit route to Shaver Lake where a group at the boat ramp was escorted to safety.

The blaze continues to rage around Shaver and Huntington lakes, and these areas are under mandatory evacuation orders.

Officials hope to keep the fire from pushing west toward Yosemite National Park.

**Acreage and containment:** Since starting Friday, the Creek Fire has consumed 152,833 acres as of early Wednesday morning, Cal Fire officials said. The fire has zero containment.

The blaze is one of many recent major fires that has displayed terrifyingly swift movement. The fire moved 15 miles and burned 56 square miles in a single day during the weekend.

**Potential full containment date:** In its most recent incident update posted Tuesday morning, Cal Fire said it expected to have the Creek Fire fully contained by Oct. 15, 2020.

**Cause:** Under investigation

**Damage update:** Three hundred and sixty structures have been destroyed as of Wednesday morning; of those, 60 are single-family homes. Firefighters are trying to protect 5,296 threatened structures.

Firefighters working in steep terrain saved the tiny town of Shaver Lake from flames that roared down hillsides toward a marina. About 30 houses were destroyed in the remote hamlet of Big Creek, resident Toby Wait said.

“About half the private homes in town burned down,” he said. “Words cannot even begin to describe the devastation of this community.”

A school, church, library, historic general store and a major hydroelectric plant were spared in the community of about 200 residents, Wait told the Fresno Bee.

**Casualties and rescues:** There have been no fatalities.

Early Tuesday, California National Guard and Navy helicopters rescued 13 people from the China Peak area and 22 from Lake Edison and flew them to Fresno Air Terminal, the Guard said. The rescue flights were thwarted earlier by heavy smoke Monday night.

On Saturday, National Guard rescuers in two military helicopters airlifted 214 people to safety after flames trapped them in a wooded camping area near Mammoth Pool Reservoir. Two people were seriously injured and were among the 12 total individuals hospitalized.

Chief Warrant Officer Joseph Rosamond, the pilot of a Chinook helicopter, said visibility was poor and winds increasingly strong during the three flights he made into the fire zone during the operation that started late Saturday and stretched into Sunday. His crew relied on night-vision goggles to search for a landing spot near a boat launch where flames came within 50 feet of the aircraft.

The injured, along with women and children, took priority on the first airlift, which filled both helicopters to capacity, he said.

“We started getting information about how many people were out there, how many people to expect, and that number kept growing. So we knew that it was a dire situation,” Rosamond said.

**Evacuations:** Find the latest evacuations for Fresno and Madera counties on the Cal Fire Twitter feed.

**Air quality:** The Creek Fire is pumping out massive amounts of smoke spreading throughout California.

The National Weather Service shared a satellite image Tuesday showing nearly all of California blanketed in wildfire smoke. This is due to the Creek Fire and multiple other blazes around the state. The air quality in a large area stretching from north to south along the Sierra Nevada was at a "hazardous" level Tuesday morning.

Smoke from the Creek Fire is expected to impact the Bay Area. The Bay Area Air Quality Management District has a Spare the Air Alert in effect through Wednesday, which makes it illegal to burn wood or wood products.

For air quality updates visit [AirNow.gov](https://www.airnow.gov).

## **Massive smoke clouds, thick air darken Western US skies**

By Daisy Nguyen, the Associated Press

In the Merced Sun-Star, Wednesday, Sept. 9, 2020

SAN FRANCISCO - People from San Francisco to Seattle woke Wednesday to hazy clouds of smoke lingering in the air, darkening the sky to an eerie orange glow that kept street lights illuminated into midday, all thanks to dozens of wildfires throughout the West.

"It's after 9 a.m. and there's still no sign of the sun," the California Highway Patrol's Golden Gate division tweeted, urging drivers to turn on their headlights and slow down.

Social media was filled with photos of the unusual sky and many people complained their cellphone cameras weren't accurately capturing the golden hues.

Despite the foreboding skies, there was little scent of smoke and the air quality index did not reach unhealthy levels. That's because fog drifting from the Pacific Ocean was sandwiched between the smoke and surface. Meanwhile, smoke particles above the marine layer were only allowing yellow-orange-red light to reach the surface, said Ralph Borrmann, a spokesman for the Bay Area Air Quality Management District.

He said conditions were expected to remain until Friday; by then the district expects to issue its 25th consecutive Spare The Air alert requiring residents to cut pollution — the longest stretch since the program began in 1991.

The previous streak was a 14-day alert issued in 2018 when the Bay Area was choked by smoke from a fire that devastated the town of Paradise and killed 85 people.

This time, strong winds from the north and northeast pushed smoke from devastating wildfires in Oregon and Washington state into lower elevations, said Roger Gass, a meteorologist with the National Weather Service Bay Area.

"The sheer amount of smoke, the multiple layers of smoke above us in the atmosphere are combining to darken our sky," he said.

The darkened skies also prevented California's largest utility, Pacific Gas & Electric, from doing some aerial inspections needed to restore power to about 167,000 customers because of poor visibility, said spokesman Jeff Smith. The power was proactively cut Monday in an effort to prevent power line-sparked wildfires.

Air quality warnings were issued throughout the Pacific Northwest, and people in communities from southern Oregon to north of Seattle have seen blood red skies and choking smoke.

"It was scary. Especially as red as the sky was," said Patricia Fouts, who evacuated from a senior living center due to a massive fire east of Salem, Oregon.

Gass said winds coming from the Pacific Ocean will likely continue to push the smoke across the West, worsening air quality.

In Denver, a thick blanket of haze covered the skyline Wednesday, obstructing mountain views typically visible from the city. The haze from fires across the West, including a blaze in western Colorado that is the largest in state history, led Colorado's state health department to issue an air quality alert on Labor Day.

Scott Landes, chief air quality meteorologist for Colorado's health department, said a cold front improved air quality but he said the state may start getting a new wave of out-of-state smoke over the weekend because of drier, warmer temperatures.

In Phoenix, the skies were finally blue on Wednesday after a cold front swept through the region, keeping the wildfire smoke west and southwest of Arizona. In Reno, Nevada, the skies were also blue for the first time in days after air quality reached the hazardous level a day earlier, prompting the Washoe County School District to cancel all in-classroom lessons.

The smoky skies, which have also plagued Salt Lake City, Seattle and cities in Oregon, brought one silver lining that has filled social media feeds: Spectacular sunsets with a reddish-orange sun popping amid grainy skies.

"Everybody wants to know, when is this going to get better," Gass said. "We have to remember as long as the fires keep burning they're going to continue to produce smoke."

## **Wildfires have burned record acreage in California. Here's where the biggest fires are**

Sacramento Bee, also in Modesto Bee, Wed., Sept. 9, 2020

Wildfires raged unchecked in California and other western states on Wednesday, with gusty winds forecast to drive flames into new ferocity.

Diablo winds in Northern California and Santa Ana winds in the south state were stoking unprecedented numbers of fires that have already grown explosively.

"Yesterday, and overnight, wind conditions allowed many fires to grow significantly with extreme fire behavior," said Cal Fire spokesman Daniel Berlant in a Wednesday morning statewide update. "While containment on many of last month's lightning fires grows closer, several new wildfires ignited and were fanned by strong gusty winds."

On the coast near Big Sur, more than a dozen firefighters trying to protect a mountain station were overrun by flames Tuesday, with several being hurt. In the mountains above Fresno, military helicopters continued to rescue campers trapped by the Creek Fire.

California has already set a record with nearly 2.3 million acres burned this year, and the worst part of the wildfire season is just beginning.

"This is historic," Gov. Gavin Newsom said in a briefing from Sacramento on Tuesday.

Lynne Tolmachoff, spokeswoman for the California Department of Forestry and Fire Protection, known as Cal Fire, said it's "unnerving" to have reached a record for acreage burned so soon. September and October usually are the worst months for fires because vegetation has dried out and high winds are more common.

While the two mammoth Bay Area fires were largely contained after burning for three weeks, firefighters struggled to corral several other major blazes ahead of the expected winds. Evacuation orders were expanded to more mountain communities Monday as the so-called Creek Fire burned through the Sierra National Forest in Central California.

On Tuesday night and through Wednesday, focus once again shifted to the north half of the state where the previous acreage record was set just two years ago and included the deadliest wildfire in state history, which swept through the community of Paradise and killed 85 people.

That 2018 blaze, the Camp Fire, was started by power lines amid strong winds and tinder-dry conditions.

About 20 miles away from Paradise in the same county of Butte, sheriff's officials issued a flurry of mandatory evacuation orders and advisory warnings late Tuesday and early Wednesday morning after more gusty winds caused a severe flare-up on the Bear Fire, a wildfire that had been burning more than three weeks in Plumas National Forest.

More than 20,000 residents of Butte, Yuba and Plumas counties are under evacuation orders, the Forest Service says — and virtually the entire city of Oroville, the seat of Butte County where another 20,000 people live, is under a warning issued by sheriff's personnel at 2 a.m.

### **PG&E power shutoff latest**

Liability from billions of dollars in claims from the Camp Fire and other fires forced the state's largest utility, Pacific Gas & Electric, to seek bankruptcy protection. To guard against new disasters, the company last year began preemptive power shutoffs when fire conditions are exceptionally dangerous.

That's the situation now in Northern California, where high and dry winds were expected until Wednesday. PG&E said it has learned from past problems and will seek this year to make the outages "smaller in size, shorter in length and smarter for customers."

The company cut power to 172,000 customers in 22 counties to try to prevent more blazes. By 5 p.m. Tuesday, 159,209 homes and businesses remained out across 18 counties.

On Wednesday morning, PG&E announced winds had died down enough to give the weather "all clear" and start the process of inspecting power lines to restore power from those deliberate outages, which will take hours. At 8 a.m. Wednesday, only 65,854 customers were still under a Public Safety Power Shutoff in parts of 12 counties — Butte, El Dorado, Kern, Lake, Napa, Placer, Plumas, Shasta, Sonoma, Tehama, Tuolumne, Yuba.

### **California wildfires by the numbers**

According to Cal Fire, more than 14,000 firefighters were fighting 28 major fires and lightning complexes across California as of Wednesday. In a little over three weeks, there have been eight fatalities and more than 3,700 structures have been destroyed, with 400 new reports of destroyed structures in the last 24 hours.

In all, 2.5 million acres have burned across the state this year, wrote Berlant, the Cal Fire assistant deputy director.

"While firefighters are gaining ground on many of the lightning-caused fires in Northern California, firefighters are aggressively battling wildfires up and down the state," he wrote Tuesday. Cal Fire estimates that in two rounds of lightning storms on back-to-back weeks in August, the state had nearly 14,000 lightning strikes.

Now, extreme heat and high winds are the main culprit behind fires' fierce spread. Most of California remains under red flag warning, Berlant said, through Wednesday: "This includes most of Northern California, including portions of the Bay Area. There is also a warning for the Eastern Sierras, the Mojave Desert, the Santa Barbara, Ventura and Los Angeles mountains, as well as the Inland Empire down into San Diego county."

"Winds are expected to weaken as we go through (Wednesday)," Berlant said in Wednesday's update. "Wind gusts are possible up to 55 mph in mountain and foothill areas. Minimum humidity will be mainly in the single digits and teens through Wednesday and will likely increase Thursday."

He added that wind conditions are expected to improve, bringing seasonal but dry conditions into the weekend.

California was not alone: Hurricane-force winds and high temperatures kicked up wildfires across parts of the Pacific Northwest over the holiday weekend, burning hundreds of thousands of acres and mostly destroying the small town of Malden in eastern Washington.

"Existing fires are displaying extreme fire behavior. New fire starts are likely. Weather conditions are worsening, and we simply do not have enough resources to fully fight and contain every fire," said Randy Moore, a forester for the Forest Service's Pacific Southwest region that covers California.

### **Active fires**

Here's a roundup of the major fires burning across the state as of Wednesday morning.

#### **North Complex and Bear Fire**

**Updated:** 4:30 a.m. Wednesday | **Size:** 150,140 acres (234 square miles) | **Containment:** 38%

Strong winds fueled explosive growth at the North Complex Fire, which began Aug. 17 in the Plumas National Forest. In a Wednesday morning update, firefighters said the blaze tripled in size overnight.

The largest fire in the complex, the Bear Fire, rapidly grew to 80,000 acres around Lake Oroville, forcing mandatory evacuations in the communities of Bangor, Berry Creek, Brush Creek, Forbestown, Clipper Mills, Feather Falls, Kelly Ridge and Copley Acres. Deputies said the volume of web traffic coming to its evacuation map is causing delays.

Fire crews on Tuesday said the rate of spread had topped 2,000 acres an hour. On Tuesday, the complex swelled from about 40,000 acres and 51% containment Tuesday afternoon to 58,000 acres and 37% containment Wednesday morning and grew rapidly from there.

Around 2 a.m., most of the city of Oroville, with the exception of the immediate vicinity of the airport, was placed under an evacuation warning. As of 7:30 a.m., the warning hadn't been upgraded to become mandatory, but authorities are essentially advising that all residents of Oroville should be ready to go at a moment's notice.

That's not far from the area that was eviscerated by the 2018 Camp Fire. Authorities issued a voluntary warning for areas of Concow, on the Paraside side of Highway 70, but as of 8 a.m. have not issued evacuation orders or warnings for Paradise or Magalia. And extreme smoke from the Bear Fire, mixed with the morning sun, have turned the skies orange or even blood red in those areas, as well as near Chico, as seen on multiple cameras with the AlertWildfire network.

A temporary evacuation point has been established at Oroville Church of the Nazarene, 2238 Monte Vista Ave., Oroville. Butte County officials added: "Please stay in your vehicle, a representative from Butte County or Red Cross will assist you with further information and sheltering needs." They urged residents to take animals along with food, water and bedding for the animals to animal shelters. A small animal shelter has been established at Old County Hospital, 2279 Del Oro Ave., Suite E, at Mono Avenue, in Oroville.

Additional evacuations are in Plumas and Yuba counties.

### **Willow Fire**

**Updated:** 6 a.m. Wednesday | **Size:** 300 acres | **Containment:** 0%

The Yuba County wildfire that started just after midnight Wednesday forced the evacuation of about 3,000 residents, authorities said Wednesday morning. It was burning at Marysville and Willow Glen roads in the community of Loma Rica, about 16 miles southeast of Oroville, and 55 miles north of Sacramento.

Around 4 a.m., Cal Fire tweeted that the fire was burning "300 acres with rapid rate of spread," including a threat to buildings.

The Yuba County Sheriff's Office issued a mandatory evacuation order overnight for the entire Loma Rica community, where about 3,000 people live, and numerous road closures. Detailed evacuation and closure updates can be found on [the sheriff's Facebook page](#).

Loma Rica is about 15 miles northeast of Marysville, a few miles off of Highway 20 at Browns Valley.

### **Creek Fire**

**Updated:** 7 a.m. Wednesday | **Size:** 163,138 acres (254.9 square miles) | **Containment:** 0%

The Creek Fire has continued its tremendous growth through dense stands of trees in Fresno and Madera counties and has no containment after four days. The fire, which started Friday in the Sierra National Forest, started 20 miles southeast of Bass Lake, 43 miles northeast of Fresno and 155 miles southeast of Sacramento. The effort to battle the flames is under unified command with Cal Fire's Fresno County Fire Department, the U.S. Forest Service and the Fresno County Sheriff's Office.

The Creek Fire is the most "aggressive" to spark in the region, and state officials have deployed two teams of "Type 1" firefighters to battle the blaze in remotes areas of Fresno and Madera counties.

China Peak sustained partial damage Tuesday but the resort's owner remained hopeful crews can prevent the rest of the ski area from burning down. The situation was worse at Huntington Lake, one fire official told The Fresno Bee, describing "a terrible loss" of property at the Dowville tract on the lake's west end and that the fire "decimated the area" between Billy Creek and Camp Silver Fir, among the destruction.

“All of Huntington is still very much threatened so the next few days will be difficult and information will remain scarce,” Huntington Lake Volunteer Fire Captain Pete Donnelly said.

On Tuesday, Navy and Army National Guard helicopters rescued dozens of people trapped overnight and brought them to safety in Fresno, officials reported. Three flights took place, according to Maj. Jason Sweeney, a spokesman for the California National Guard.

About 1,060 firefighters are attacking the fire from opposite sides of the San Joaquin River, with one team focusing on Madera County and the other on Fresno County.

“Our goal is to, first and foremost, protect citizen and firefighter safety,” he said. “It’s not unprecedented to have a Type 1 incident in the nation or in California ... but more than one doesn’t happen very often.”

While the exact cause is still under investigation, firefighters have suspected lightning strikes coupled with arid, windy conditions and record-setting heatwaves as likely factors to the fire’s rapid spread.

The Creek Fire has destroyed 60 residences, two commercial structures and 20 minor structures.

### **Dolan Fire**

**Updated:** 7 a.m. Wednesday | **Size:** 73,089 acres (114.2 square miles) | **Containment:** 20%

The Dolan Fire has charred more than 70,000 acres in the Los Padres National Forest in Monterey County and was 20% contained, National Forest officials said in a Wednesday morning update that cut the containment figure in half from the previous day. The fire, which started Aug. 19, was burning 15 miles southeast of Big Sur, 37 miles southeast of Monterey and 170 miles south of Sacramento.

The fire has led to injuries of fire personnel after the flames more than doubled Tuesday. New evacuations have been ordered for Santa Lucia Memorial Park east of Lucia, while many existing orders have stayed in place.

Firefighters who were defending a structure in the southern area near Big Sur were injured Tuesday morning, according to the U.S. Forest Service. The blaze, which has raged for three weeks, overran them and destroyed the Nacimiento Station in the Los Padres National Forest, the U.S. Forest Service said. The firefighters suffered from burns and smoke inhalation, and three were flown to a hospital in Fresno, where one was in critical condition.

Fourteen firefighters resorted to a “shelter deployment” while defending the Nacimiento Station before they sustained injuries, according to the U.S. Forest Service.

More than 700 remain assigned to the blaze as of Wednesday.

### **El Dorado Fire (Yucaipa)**

**Updated:** 10 p.m. Tuesday | **Size:** 11,259 acres (17.6 square miles) | **Containment:** 19%

The El Dorado Fire has burned more than 11,000 acres (17.6 square miles) in San Bernardino County and was 19% contained, Cal Fire said. The fire, which started Saturday, was burning in the San Bernardino National Forest 4 miles east of Yucaipa, 23 miles east of Riverside and 401 miles southeast of Sacramento. Cal Fire’s San Bernardino Unit, the San Bernardino National Forest and San Bernardino County Fire Department are in unified command.

The flames were sparked by a device used at a gender reveal party Saturday morning, before quickly spreading.

The El Dorado Fire may spread due to winds on Tuesday until Thursday, prompting Cal Fire to ask residents to listen to any upcoming evacuation orders or warnings.

“With Santa Ana winds predicted this afternoon through Thursday morning, there is the potential for the fire to spread into neighborhoods and communities,” Cal Fire’s incident report said.

### **Fork Fire**

**Updated:** Midnight Wednesday | **Size:** 500 acres | **Containment:** 0%

The Fork Fire has burned at least 500 acres in the Eldorado National Forest in El Dorado County and has no containment, officials said in an update. The fire was burning 25 miles west of South Lake Tahoe, 51 miles southwest of Reno, and 63 miles northeast of Sacramento.

The flames are spreading toward the burn scar from the 2014 King Fire in the Georgetown Ranger District. Evacuation orders are in effect for Loon Lake, Gerle Creek and Rubicon Trail Area.

The El Dorado County Sheriff's Office has issued evacuation orders due to changes in the Fork Fire's behavior. "All residents and visitors in the areas of Stumpy Meadows, Quintette, and Volcanoville are required to evacuate," deputies said in a news release. "This is a mandatory evacuation for your safety. Please leave immediately and proceed in an orderly manner toward Georgetown."

A temporary evacuation point has been set up at Cool Community Church, 863 Cave Valley Road, Cool.

### **LNU Lightning Complex**

**Updated:** Tuesday | **Size:** 375,209 acres (586.3 square miles) | **Containment:** 91%

On Tuesday, strong winds spread flames in the LNU Lightning Complex, igniting previously unburned areas in the Walbridge Fire. A spot fire caused by the wind grew outside of containment lines, prompting evacuation orders in areas of Sonoma County. The spot fire has stopped growing.

A red flag warning due to the high winds remains in effect, with strong winds predicted through Tuesday evening. Cal Fire warned that smokey conditions would persist with the flames and the wind, warning sensitive groups to avoid outdoor activity during the poor air quality.

The series of fires, which was sparked by lightning Aug. 17, has two distinct zones: the eastern zone, made up of the Hennessey and other smaller fires burning in Napa County, and the western zone, primarily the Walbridge Fire west of Healdsburg. Santa Rosa is between the two fire zones and the eastern zone is 47 miles west of Sacramento.

### **SCU Lightning Complex**

**Updated:** Monday | **Size:** 396,624 acres (619.7 square miles) | **Containment:** 94%

The SCU Lightning Complex has burned 396,624 acres (619.7 square miles) in Santa Clara, Alameda, Contra Costa, San Joaquin, Stanislaus County and was 94% contained, Cal Fire said in an update Monday. The series of fires, which was sparked by lightning Aug. 18, had come as close as 22 miles southwest of Modesto and 79 miles south of Sacramento.

The fire has broken up into two branches and a red flag warning for heat remained in effect. High temperatures over Labor Day weekend, combined with low humidity, led to minimal suppression repair activity.

As of Tuesday evening, the complex had destroyed 224 structures, damaged another 26 structures and injured five people. Over 600 personnel have been assigned to fight the flames.

### **CZU Lightning Complex**

**Updated:** Tuesday | **Size:** 86,509 acres (135.2 square miles) | **Containment:** 81%

The CZU Lightning Complex, a series of fires sparked by lightning in Santa Cruz and San Mateo counties, has burned 86,509 acres (135.2 square miles) in Santa Cruz, San Mateo County and was 81% contained, Cal Fire said. The fire, which started Aug. 16, had gotten as close as 16 miles northwest of Santa Cruz. It was burning Tuesday about 30 miles southwest of San Jose and 120 miles south of Sacramento.

While many road closures and evacuations remain in effect, Cal Fire has reduced many evacuation orders to warnings as containment increases. The agency has also allowed re-population of areas in Boulder Creek and portions north of Bonny Doon. Cal Fire advises that residents continue to take evacuation orders and warnings seriously, with a full list found on [the incident page](#).

### **August Complex**

**Updated:** 6:30 a.m. Wednesday | **Size:** 421,899 acres (659.2 square miles) | **Containment:** 24%

The August Complex (including the Doe Fire) has burned in and around Mendocino National Forest in Mendocino County and is now the second-largest wildfire by acreage in California history. Its acreage leapfrogged over the LNU and SCU Complexes after growing by nearly 100,000 acres Tuesday and was 24% contained, forest officials said in Wednesday morning's update.

The fire, which started Aug. 16, was burning 25 miles west of Orland, 58 miles south of Redding and 104 miles northwest of Sacramento. It has charred acreage across five counties: Glenn, Mendocino, Lake, Tehama and Trinity.

Crews cautioned that actual acreage is "subject to change as fire activity progresses throughout the day." The newest blaze, the Hopkins Fire at 19,782 acres, is 25 miles northeast of Covelo but has spread further into the Yolla Bolly-Middle Eel wilderness.

A red flag warning for wind was issued through Wednesday morning, with gusts posing a threat of increased fire activity and high smoke production. The August Complex was initially 37 different fires, but many have been contained or have merged.

Evacuation orders remain in effect for the Glenn County and portions of Mendocino and Lake counties, with a full list found on [the incident page](#).

### **Sheep Fire**

**Updated:** Tuesday | **Size:** 29,570 acres (46.2 square miles) | **Containment:** 95%

The Sheep Fire, which was for a time managed with the North Complex, has burned in the Plumas and Lassen national forests, in Plumas County, and was at nearly full containment, forest officials said. The fire, which was sparked by lightning Aug. 22, had come as close as 11 miles southwest of Susanville, and was burning Tuesday about 125 miles north of Sacramento.

It has remained within existing containment lines for several days, crews said in a Labor Day update. All areas, roads, campgrounds, and trails within the Plumas and Lassen wilderness are closed for safety. The dirt portion of Gold Run Road remains closed and the dirt portion of Wingfield Road is open to residents only.

### **Butte/Tehama/Glenn Lightning Complex**

**Updated:** Tuesday | **Size:** 69,735 acres (109.0 square miles) | **Containment:** 58%

The Butte/Tehama/Glenn Lightning Complex is two distinct zones.

The western zone, known as Tehama/Glenn, has burned 69,735 acres (109.0 square miles) in Tehama, Glenn County, Cal Fire said in an update at 8:01 a.m. Acreage had changed overnight due to better mapping. The series of fires, which started Aug. 19, was burning 12 miles southwest of Red Bluff, 34 miles south of Redding and 117 miles northwest of Sacramento.

All fires burning within the Butte Zone, the eastern zone of the complex some 40 miles away, are in mop-up and patrol status, Cal Fire said on Sept. 1. It burned 2,782 acres before nearing containment.

### **Valley Fire**

**Updated:** Tuesday | **Size:** 17,565 acres (27.4 square miles) | **Containment:** 11%

Containment improved on the Valley Fire, which has charred parts of eastern San Diego County including the Cleveland National Forest. The fire, which started Saturday, was burning 6 miles southeast of Alpine and 27 miles east of San Diego.

After four days, the fire has already destroyed nearly a dozen homes and 25 other structures and was expected to flare up Tuesday night, the San Diego Union-Tribune reported.

"I want to be very clear in my message," said Cal Fire San Diego Chief Tony Mecham at a news conference at Viejas Casino and Resort. "We have a sleeping giant in the backcountry."

Crews were busy setting back fires to try to deprive the advancing fire of fuel. Navy helicopters are assisting helicopters and fixed-wing planes already making water and fire retardant drops.

San Diego Gas & Electric officials warned that some residents near Alpine they may have their power turned off because of elevated fire weather conditions and winds, much like those in threatened PG&E territory.

### **Woodward Fire**

**Updated:** Tuesday | **Size:** 4,895 acres (7.6 square miles) | **Containment:** 95%

The Woodward Fire has burned 4,895 acres near Point Reyes National Seashore in Marin County and was 95% contained, fire officials said. The fire, which was sparked by lightning on Aug. 18, was burning 4 miles southwest of Point Reyes Station, 28 miles northwest of San Francisco and 82 miles southwest of Sacramento.

The Inverness and Silver Hills communities remain under evacuation warnings, which could soon be lifted, KRON 4 reported.

### **Bobcat Fire**

**Updated:** 8 a.m. Wednesday | **Size:** 11,456 acres (17.9 square miles) | **Containment:** 0%

The Bobcat Fire jumped by 1,000 acres overnight in Los Angeles County, U.S. Forest Service officials said. The fire, which started Sunday, was burning 6 miles east of Mount Wilson, 21 miles northeast of downtown Los Angeles and 358 miles southeast of Sacramento.

The fire is located near the Cogswell Dam and West Fork Day Use area, Angeles National Forest officials said, and is burning in heavy vegetation in steep, remote terrain that hasn't burned in 60 years, officials said.

"The canyons that this fire has lined up with — Monrovia Canyon, Santa Anita Canyon, Little Santa Anita Canyon — those canyons have not burned since 1957 in the Monrovia Peak Fire," Angeles National Forest Chief Robert Garcia told CBS Los Angeles.

Evacuation warnings are in place for northern neighborhoods of the San Gabriel Valley foothill cities of Monrovia, Duarte, Arcadia, Sierra Madre, Bradbury, Altadena and Pasadena.

### **Slater Fire**

**Updated:** Tuesday | **Size:** 22,000 acres (34.4 square miles) | **Containment:** 0%

The Slater Fire has exploded from 150 acres at 8:30 a.m. Tuesday to 22,000 acres by 4 p.m. Tuesday in the Klamath National Forest in Siskiyou County and has no containment, forest officials said in an update. The fire, which was first spotted two hours before from the Slater Butte Fire Lookout, was burning 12 miles northeast of Weed, 23 miles southeast of Yreka and 210 miles north of Sacramento.

"The fire is fast approaching!" said the Siskiyou County Sheriff's Department in a 4:30 p.m. update on Facebook. The agency issued urgent evacuation orders for the entire Happy Camp community including "residents on both west and east sides of East Fork, Indian Creek, Doolittle Creek and FS roads 17N11, 18N13 and 17N17A." It also gave evacuation warnings to the east side of Highway 96, Curly Jack, Elk Creek and China Grade roads.

A shelter is set up at Seiad Fire Department, 44601 Highway 96. An overnight shelter is at Karuk Tribal Wellness Center, 1403 Kahtishraam, Yreka. An evacuation center for large animals is available at the Siskiyou County Fairground in Yreka. An information line has been set up at 530-356 9434.

### **SQF Complex Fire**

**Updated:** 6 a.m. Wednesday | **Size:** 64,258 acres (100.4 square miles) | **Containment:** 7%

The SQF Complex Fire, which includes the Castle and Shotgun fires in Sequoia National Forest, grew by 2,000 acres overnight in Tulare County and remained 7% contained, forest officials said. The fire, which started Aug. 21, was burning 28 miles east of Porterville, 49 miles northeast of Bakersfield and 243 miles southeast of Sacramento.

The fire is the southern hot spot in a trail of fires stretching more than 30 miles along the Sequoia forest's deep backwoods, just west of the Kern Canyon. The larger of the complex's two fires, the Castle Fire,

was pushed by winds on the eastern flank towards Little Horse Meadows. The smaller Shotgun Fire is holding at 498 acres, “slowly burning in a rocky drainage and being monitored by aircraft.”

### **Rattlesnake Fire**

**Updated:** Tuesday | **Size:** 1,060 acres (1.7 square miles) | **Containment:** 0%

The Rattlesnake Fire has burned 1,160 acres in Sequoia and Kings Canyon national parks in Tulare County and has no containment, officials said in an update Tuesday afternoon. The fire, which started last week, was burning 8 miles east of Mineral King, 77 miles east of Fresno and 224 miles southeast of Sacramento.

It is the middle of a line of three fires burning not far from the Kern River Canyon. “The fire is burning in steep inaccessible terrain with sparse ground fuels and pockets of dead and down trees,” firefighters said. “While the size of the fire has increased, as it is moving through the Rattlesnake Creek drainage, there are no current threats to life or property.”

### **Moraine Fire**

**Updated:** Tuesday | **Size:** 575 acres | **Containment:** 70%

The Moraine Fire was burning in Sequoia and Kings Canyon national parks in Tulare County and was 70% contained, officials said in an update Tuesday afternoon. The fire, which started Aug. 21, was burning 18 miles northwest of Mount Whitney, 68 miles east of Fresno and 206 miles southeast of Sacramento.

It is the northern hot spot of a chain of three fires burning in Sequoia-Kings Canyon wilderness, just south of the Tulare-Fresno county line and near Cedar Grove. It was spotted “after substantial lightning occurred over the area,” fire officials said.

“The fire is creeping and smoldering with some isolated tree torching through large dead and down ground fuels and continuing to burn in areas with standing dead trees. Firefighters are using minimum impact suppression tactics,” officials said in a Tuesday update.

### **Oak Fire**

**Updated:** Tuesday | **Size:** 863 acres (1.3 square miles) | **Containment:** 10%

The Oak Fire has burned 863 acres in Mendocino County and was 5% contained, Cal Fire said in an update. The fire, which started Monday, was burning 6 miles north of Willits, 81 miles northwest of Santa Rosa and 120 miles northwest of Sacramento.

According to Cal Fire spokesman Daniel Berland, the fire erupted quickly, forcing evacuations.

### **Red Salmon Complex**

**Updated:** 7 a.m. Wednesday | **Size:** 66,108 acres (103.3 square miles) | **Containment:** 17%

The Red Salmon Complex grew by nearly a third overnight in Shasta-Trinity National Forest in Humboldt County, forest officials said in an update. The fire, which started Aug. 18, was burning 39 miles northwest of Weaverville, 56 miles southwest of Yreka and 206 miles northwest of Sacramento.

### **Slink Fire**

**Updated:** 8 a.m. Tuesday | **Size:** 21,755 acres (34 square miles) | **Containment:** 36%

The Slink Fire continues to burn inside Humboldt-Toiyabe National Forest in Mono County. The fire, which started Sept. 1, was burning 14 miles southeast of Markleeville, 68 miles south of Reno and 104 miles east of Sacramento.

In a Tuesday evening update, firefighters said “gusty winds and low humidity were accompanied by a cold front that lowered the temperatures.” The FAA also established temporary flight restrictions for the areas after recreational drones were spotted in the area, causing aerial firefighting operations to cease. “The public must heed these restrictions and refrain from flying drones anywhere near fire operations for the safety of our aviators and the crews,” they wrote.

## **Air quality unhealthy as wildfires continue to burn**

Turlock Journal, Wednesday, Sept. 9, 2020

The heatwave may have broken but the horrible air conditions and wind are still driving people indoors and continuing the wildfire danger.

The Creek Fire and other wildfires burning around California are causing smoke impacts to all counties of the Valley air basin, the San Joaquin Valley Air Pollution Control District reported.

The District is reissuing the current health caution (originally issued on Aug. 17), which will remain in place until the fires are extinguished. The District anticipates unhealthy air quality to affect various parts of the Valley through the week and into the weekend and warns residents to stay indoors.

The Creek Fire, located in the mountain and foothill regions of Fresno and Madera counties, is producing smoke that is infiltrating into the San Joaquin Valley and bringing unhealthy air quality conditions. As winds shift Tuesday and Wednesday, smoke from the Creek Fire will continue to blow directly into the Valley, causing increased particulate matter pollution and potential for high-levels of ozone. These same winds are predicted to be gusty throughout today into the evening, causing blowing dust and elevated levels of particulate matter 10 microns and smaller (PM10) throughout the Valley. Air pollution officials caution Valley residents to reduce exposure to the particulate matter (PM) emissions by remaining indoors in affected areas.

PM pollution can trigger asthma attacks, aggravate chronic bronchitis, and increase the risk of heart attack and stroke. Individuals with heart or lung disease should follow their doctor's advice for dealing with episodes of PM exposure. Those with existing respiratory conditions, including COVID-19, young children and the elderly, are especially susceptible to the health effects from this form of pollution. Anyone experiencing poor air quality due to wildfire smoke should move indoors, to a filtered, air-conditioned environment with windows closed. The common cloth and paper masks individuals are wearing due to COVID-19 concerns may not protect them from wildfire smoke.

Residents can use the District's Real-time Air Advisory Network (RAAN) to track air quality at any Valley location by visiting [myRAAN.com](http://myRAAN.com). District air monitoring stations are designed to detect microscopic PM 2.5 particles that exist in smoke. However, larger particles, such as ash, may not be detected. If you smell smoke or see falling ash in your immediate vicinity, consider air quality "unhealthy" (RAAN Level 4 or higher) even if RAAN displays lower level of pollution.

As of Tuesday, nearly 14,000 firefighters remain on the line battling 25 major wildfires across California. While firefighters are gaining ground on many of the lightning-caused fires in Northern California, firefighters are aggressively battling wildfires up and down California.

This year, wildfires have now burned over 2.2 million acres across all fire jurisdictions. This is a record for the number of acres burned in California, and this year's fire season has another four months to go. There have been eight fatalities and more than 3,300 structures destroyed. Most of California remained under Red Flag Warning on Tuesday and the warning is expected to continue Wednesday.

The SCU Lightning Complex, which includes parts of Stanislaus and San Joaquin counties, is 95% contained. It's burned more than 396,000 acres and destroyed 224 structures.

The Creek Fire is currently 0% contained and has charred more than 143,000 acres.

## **Creek Fire update: 365 structures damaged or destroyed in 162,800-acre blaze**

By Sheyanne N Romero

Visalia Times-Delta, Wednesday, September 9, 2020

More than 365 structures have been damaged or destroyed by the fast-growing, 162,833-acre Creek Fire.

A damage inspection team has only assessed the southern portion of the fire and more damage is expected in the coming days.

"(Tuesday) a structure inspection team did arrive," said Dean Gould, Sierra National Forest supervisor. "Just know, we are pursuing that as quickly as we can."

However, the areas that the team needs to access are considered "high-risk." Fallen trees and fire activity are hindering teams from reaching certain areas.

In the last three days, over 30,000 people were evacuated from Fresno and Madera counties, according to Fresno County Sheriff's Office. Each day, more evacuation orders and warnings go into effect.

"We understand what you're going through," said Incident Commander Marty Adell. "A lot of us come from fire-prone areas. We've been in this business for a long time. We recognize the blunt force you're taking on right now...We are going to try everything in our power to get you back into the areas you call home."

With resources limited, and extreme fire activity, the primary focus is on life and property.

Gould did point out during a virtual Tuesday briefing that there was a 50% drop in overall growth from the previous days, which he took as a positive trend.

Another highlight from Tuesday was the more than 140 people rescued from Lake Edison and China Peak. Over the last few days, roughly 200 people have been safely transported out of four "temporary areas of refuge," located above Shaver Lake.

The most recent rescue missions began around 3 a.m. Tuesday.

The California National Guard and Navy pilots completed eight trips to the wilderness bringing dozens of people back each time. Fresno County deputies and Fresno police officers were also among those evacuated by the National Guard, according to Fresno County Lt. Brandon Purcell.

Unfavorable weather conditions are expected to last until Thursday.

Northeast to east winds continued to cause havoc for firefighters through Tuesday night with speeds between 25 to 35 mph, and gusts above 50 mph.

Compared to last year, California has seen roughly 2,650 more fires and a nearly 2,000% increase in the acres burned year-to-date (Jan. 1 to Sep. 7), across all jurisdictions. according to Cal Fire.

#### **Creek Fire Evacuation Orders:**

- Humphrey's Station to Tollhouse Road
- Humphrey's Station to Pittman Hill Road to Sample Road
- Bass Lake Basin
- The town of North Fork and surrounding areas - Rd. 221, Rd. 222, Rd. 226, and Rd. 200 and all tributary roads are included.
- Shaver Lake down to Cressman Road, including Cressman Road
- Big Creek
- Huntington Lake
- Camp Sierra
- High Sierra areas, which include: Florence Lake, Ward Lake, Portal Forebay, Edison Lake, Mono Hot Springs, Kaiser and all campgrounds.
- The area west of Tollhouse, along Auberry Road west to Powerhouse Road.
- Alder Springs, Mile High, Meadow Lakes, Big Sandy, Mono Wind Casino, Jose Basin and Italian Bar.
- Dinkey Creek, Wishon & Courtright Reservoirs.
- Tollhouse Road at Peterson Road down to Lodge Road

- Beal Fire Road
- Powerhouse Road to the San Joaquin River
- Entire town of Auberry, which extends from the San Joaquin River on Powerhouse Road to Auberry Road in both directions out to Hwy. 168. This includes the points next to Prather and next to Cressman's General Store.
- Cascadel Road (and all off-shoots), Peckinpah Rd., Mission Rd., Douglas Rd., South Fork, Tu Nobi, Rd. 225 from Cascadel to Italian Bar.
- Sycamore Road and Burrough Valley
- Watts Valley from Maxon Road to Pittman Hill Road
- Maxon Road to Trimmer Springs Road.

#### **Creek Fire Evacuation warnings:**

- Areas east of Highway 41 in Oakhurst, Coarsegold, O'Neals
- All residents living in the Prather/Auberry areas

The temporary evacuation point at Oakhurst Community Center closed Tuesday night. A new evacuation point is located at Mariposa County Fairgrounds. Clovis North High School, 2770 E. International Ave., remains open.

Red Cross has established a hotline for shelter information at 571-595-7401. Text your zip code to 888-777 for text alerts.

The Clovis Rodeo Grounds are open to large animals displaced by the Creek Fire. The rodeo grounds are located at 748 Rodeo Drive in downtown Clovis.

For missing persons call:

- Fresno County Sheriff's Office - (559) 600-3111
- Madera County Sheriff's Office - (559) 658-2555

#### **Creek Fire, high winds bring poor air quality**

By The Business Journal Staff

The Business Journal, Tuesday, Sept. 8, 2020

The Creek Fire and other wildfires around the state are causing smoke impacts to all counties of the Valley air basin.

As a result, the San Joaquin Valley Air Pollution Control District is reissuing the current health caution from last month, which will remain in place until the fires are extinguished. The District anticipates unhealthy air quality to affect various parts of the Valley through the week and into the weekend.

The Creek Fire, located in the mountain and foothill regions of Fresno and Madera counties, is producing smoke that is infiltrating the Valley and bringing unhealthy air quality conditions. As winds shift Tuesday and Wednesday, smoke from the Creek Fire will continue to blow directly into the region, causing increased particulate matter pollution and potential for high levels of ozone.

Residents can use the District's Real-time Air Advisory Network at any Valley location by visiting [myRAAN.com](http://myRAAN.com). If smoke is smelt or falling ash is seen, the District recommends staying indoors, even if the RAAN pollution level is low.

#### **Helicopters pull more people from burning California forest**

By Marcio Jose Sanchez and Christopher Weber, Associated Press

The Business Journal, Tuesday, Sept. 8, 2020

Helicopters flew through dense smoke Tuesday to rescue scores more people from wildfires as wind-fanned flames kept chewing through bone-dry California after a scorching Labor Day weekend that saw a dramatic airlift of more than 200.

Rescue choppers pulled another 164 people from the Sierra National Forest through the morning and were working to rescue 17 others, said Gov. Gavin Newsom, who described pilots wearing night-vision goggles to find a place to land.

"It's where training meets the moment, but it always takes the courage, the conviction and the grit of real people doing real work," Newsom said.

California has already set a record with nearly 2.3 million acres (930,776 hectares) burned this year, and the worst part of the wildfire season is just beginning.

"This is historic," Newsom said in a briefing from Sacramento.

The previous acreage record was set just two years ago and included the deadliest wildfire in state history, which swept through the community of Paradise and killed 85 people.

That 2018 blaze was started by power lines amid strong winds and tinder-dry conditions. Liability from billions of dollars in claims from that and other fires forced the state's largest utility, Pacific Gas & Electric, to seek bankruptcy protection. To guard against new disasters, the company last year began preemptive power shutoffs when fire conditions are exceptionally dangerous.

That's the situation now in Northern California, where high and dry winds are expected until Wednesday. PG&E said it has learned from past problems and will seek this year to make the outages "smaller in size, shorter in length and smarter for customers."

Over the weekend, the company cut power to 172,000 customers to try to prevent more blazes.

More than 14,000 firefighters are battling more than two dozen fires around the state. Two of the three largest blazes in state history are burning in the San Francisco Bay Area.

California was not alone: Hurricane-force winds and high temperatures kicked up wildfires across parts of the Pacific Northwest over the holiday weekend, burning hundreds of thousands of acres and mostly destroying the small town of Malden in eastern Washington.

In Southern California, fires burned in Los Angeles, San Bernardino and San Diego counties, and the forecast called for the arrival of the region's notorious Santa Ana winds. The U.S. Forest Service on Monday decided to close all eight national forests in the region and to shutter campgrounds statewide.

"Existing fires are displaying extreme fire behavior. New fire starts are likely. Weather conditions are worsening, and we simply do not have enough resources to fully fight and contain every fire," said Randy Moore, a forester for the Forest Service's Pacific Southwest region that covers California.

Lynne Tolmachoff, spokeswoman for the California Department of Forestry and Fire Protection, known as Cal Fire, said it's "unnerving" to have reached a record for acreage burned so soon. September and October usually are the worst months for fires because vegetation has dried out and high winds are more common.

While the two mammoth San Francisco Bay Area fires were largely contained after burning for three weeks, firefighters struggled to corral several other major blazes ahead of the expected winds. Evacuation orders were expanded to more mountain communities Monday as the so-called Creek Fire burned through the Sierra National Forest in Central California.

It was one of many recent major fires that displayed terrifyingly swift movement. The fire advanced 15 miles (24 kilometers) in a single day during the weekend. Since starting Friday from an unknown cause, it has burned 212 square miles (549 square kilometers). Forty-five homes and 20 other structures were confirmed destroyed so far.

Debra Rios wasn't home Monday when the order came to evacuate her hometown of Auberry, just northeast of Fresno. Sheriff's deputies went to her ranch property to pick up her 92-year-old mother, Shirley MacLean.

They reunited at an evacuation center.

"I hope like heck the fire doesn't reach my little ranch," Rios said. "It's not looking good right now. It's an awfully big fire."

Mountain roads saw a steady stream of cars and trucks leaving the community of about 2,300 on Monday afternoon.

Firefighters working in steep terrain saved the tiny town of Shaver Lake from flames that roared down hillsides toward a marina. About 30 houses were destroyed in the remote hamlet of Big Creek, resident Toby Wait said.

"About half the private homes in town burned down," he said. "Words cannot even begin to describe the devastation of this community."

A school, church, library, historic general store and a major hydroelectric plant were spared in the community of about 200 residents, Wait told the Fresno Bee.

Sheriff's deputies went door to door to make sure residents complied with evacuation orders. Officials hoped to keep the fire from pushing west toward Yosemite National Park.

On Saturday, National Guard rescuers in two military helicopters airlifted 214 people to safety after flames trapped them in a wooded camping area near Mammoth Pool Reservoir. Twelve people were hospitalized, two of them with seriously injuries.

One of the Southern California fires closed mountain roads in Angeles National Forest and forced the evacuation of the historic Mount Wilson Observatory. Late Monday night, the Los Angeles County Fire Department told residents of Duarte, Bradbury and Monrovia near the forest to get ready for a possible evacuation.

Cal Fire said the so-called El Dorado Fire in San Bernardino County started Saturday morning when a smoke-generating pyrotechnic device was used by a couple to reveal their baby's gender.

## **With change in the wind, Bakersfield could see a brief respite from wildfire smoke**

By Steven Mayer

Bakersfield Californian, Tuesday, Sept. 8, 2020

Bakersfield and other communities on the east side of the San Joaquin Valley should get a break from the unhealthy wildfire smoke that has blanketed the region for days on end.

But the respite will be short-lived, said National Weather Service Meteorologist Bill South, who works out of the weather service's Hanford station.

"Winds will begin pushing the smoke from the northeast toward the southwest," South said. "Away from the east side of the valley.

"Draw a line down the center of the valley," he said. "The west side (Taft, for example) will get worse, the east side will improve."

But by Thursday, northwesterly winds — which are predominant in the valley — are expected to return, bringing the smoke back to the valley's east side.

The expected improvement in local air quality has prompted the Golden Empire Transit District, starting Wednesday, to suspend the free rides it has been offering to riders. All GET services will begin charging fares again Wednesday. But when the Air Quality Index rises above 150, free bus rides will resume.

In the meantime, all valley residents should be monitoring air quality.

According to the San Joaquin Valley Air Pollution Control District, valley residents who can smell smoke and see ash should trust their instincts by treating air quality conditions as unhealthy.

Another way to monitor air quality is to use RAAN, the air district's Real-Time Air Advisory Network. This online system helps valley residents keep track of the air quality in their communities in real time. It is easily accessible on the air district's [website](#).

But our first line of defense should include our senses, said valley air district spokeswoman Heather Heinks.

"Don't question what your eyes and nose are telling you," she said.

If you smell smoke, you should go inside. If you see ash, do the same.

"Our monitors report the tiny, microscopic stuff," she said.

That's PM2.5, microscopic particulate matter so small it is 1/30th the diameter of a human hair. When you breathe it in, these tiny particles can become lodged in the deepest parts of your lungs. They are so small they can even migrate into the bloodstream.

Limit your outdoor activities, Heinks said. Especially children and people who suffer from chronic heart and lung diseases.

"It's not a good time to be outside running," she said.

Poor air quality is already a given this time of year when high-pressure weather systems lead to summer heat waves and conditions that keep pollutants contained in the valley. The wildfire smoke adds yet another layer of concern.

According to a news release from the U.S. Forest Service, most of California remains under the threat of unprecedented and dangerous fire conditions with a combination of extreme heat, significant wind events, dry conditions and firefighting resources that are stretched to the limit.

Due to these conditions, the following temporary closures and fire restrictions are in effect and will be re-evaluated daily as conditions change.

1. Closure of the following National Forests: Stanislaus National Forest, Sierra National Forest, Sequoia National Forest, Inyo National Forest, Los Padres National Forest, Angeles National Forest, San Bernardino National Forest, and Cleveland National Forest.
2. Prohibition of the use of any ignition source on all National Forest System lands, including campfires and gas stoves, throughout California.
3. Closure of all developed campgrounds and day-use sites on National Forests in California.

"The wildfire situation throughout California is dangerous and must be taken seriously," Randy Moore, regional forester for the Forest Service's Pacific Southwest Region, stated in the release.

"Existing fires are displaying extreme fire behavior, new fire starts are likely, weather conditions are worsening, and we simply do not have enough resources to fully fight and contain every fire," he said .  
"We are bringing every resource to bear."

## **Air quality in Tulare County is 'unhealthy' as wildfires surround Valley**

By Sheyanne N Romero

Visalia Times-Delta, Tuesday, September 8, 2020

Air quality is "unhealthy" in Tulare County as wildfires burn across California.

Two large wildfires are burning in and around the county, causing smoky skies and ash raining down. Air quality is expected to worsen in parts of the Valley as temperatures rise and smoke continues to roll in, according to San Joaquin Valley Air Pollution Control District.

An "excessive heat" advisory was issued for Tulare County by the National Weather Service on Monday. Temperatures were expected to reach 112 in parts of the Valley this week.

"High pressure is continuing to build over the San Joaquin Valley, causing a lack of smoke dispersion. That pressure acts as a 'lid' over the bowl of the Valley and, when coupled with winds out of the northwest, has the potential to continue bringing smoke into the northern Valley," air pollution control officials stated in a press release.

Central and southern portions of the Valley are experiencing smoke impacts from the Sequoia "SQF" Complex burning in Tulare County and the Creek Fire in Fresno and Madera counties.

The fires have charred a combined 135,800 acres, as of Tuesday.

Smoke impacts will likely continue until the fires are extinguished, and will be more noticeable during the night and early morning, officials said.

Air pollution can trigger asthma attacks, aggravate chronic bronchitis, and increase the risk of heart attack and stroke. Those with existing respiratory conditions, including COVID-19, young children and the elderly, are especially susceptible to this form of pollution, according to air quality officials.

Anyone experiencing poor air quality due to wildfire smoke should stay inside and keep the windows closed. Cloth and paper facemasks may not protect people from wildfire smoke.

If you smell smoke or see falling ash in your immediate vicinity, consider air quality "unhealthy" (RAAN Level 4 or higher) even if RAAN displays lower level of pollution.

## **Creek Fire live updates: 163k acres burned; concerns to the south; work continues on west**

By Robert Kuwada and Joshua Tehee  
Fresno Bee, Wednesday, September 9, 2020

### **11:15 a.m.: Cal Fire update for Madera County**

Cal Fire provided an update on the Creek Fire in Madera County, noting a strong inversion is expected to continue on the west side of the wildfire. It will hold smoke over the area, providing shade and a buffer from the gusty winds at higher elevations.

Also:

Hand crews and equipment operators are making progress on a containment line from the San Joaquin River northwest toward Castle Peak.

Bulldozers continue to work to reduce vegetation in the vicinity of structures at Cascadel Woods and to the north along the western flank of the fire.

The Red Flag Weather Warning has been extended through 8 p.m. Wednesday.

The temporary evacuation center for Madera County has been relocated to the Mariposa County Fairgrounds in Mariposa.

The fire has burned more than 163,000 acres and still is 0% contained.

### **10:50 a.m.: updated evacuations from Cal Fire**

Evacuation orders

Madera County: Bass Lake Basin including Wishon, Bass Lake Annex, and Manzanita; the town of North Fork and surrounding area

Fresno County: Tollhouse, Bourrough Valley, Cold Springs Rancheria, Watts Valley Road from Pittman Hill to Maxon Road, Maxon Road to Trimmer Springs Road, Pittman Hill from Humphreys Station to Sample Road to include all tertiary roads

Evacuation warnings

Fresno County: Prather. South of Little Sandy/Lodge Road, North East of Tollhouse Road, North of Millerton Road/Nicholas Road, East Auberry Road

Madera County: Oakhurst, O'Neals, Walker Grade, Chukchansi, Indian Lakes, and the portion of Coarsegold east of Highway 41

10 a.m.: Disaster distress helpline

The Substance Abuse and Mental Health Services Administration has set up a disaster helpline to provide immediate counseling to anyone with mental or emotional effects caused by wildfires burning across the state.

The line – 1-800-985-5990 – is open 24 hours a day, seven days a week and connects callers to trained professionals from the closest crisis counseling center and will provide confidential counseling, referrals and other needed support services.

### **9:30 a.m.: Firefighters still concerned about fire's Southern area**

Firefighters at the incident command center at Sierra High School in Tollhouse were in a wait-and-see mode.

There were no new areas of concern and no new evacuations orders or warnings.

"It doesn't sound like anything happened over night," said Capt. Chris Vestal, the public information officer for the Creek Fire.

Firefighting crews are still in life safety and structure protection mode and that's partly why the containment number is at zero, he added. There are some bulldozers out working, but they are slow and hard to use in some areas.

Concerns remain about the southern area of the fire, and that the inversion layer and thick smoke have prevented firefighters from using aircraft that they normally would.

The damage inspection unit is now up and running, and Vestal said a better tally of structural damage would be available soon.

"Now you're going to start getting that detailed information," he said.

On the way up Highway 168 through the foothills, smoke hung in the air, looking like a foggy winter day. Traffic was light in both directions.

Signs warning of fire season dot the highway: "Wildfires are coming. Are you ready?"

### **9:25 a.m.: Poor air forecast for Fresno**

Wildfire smoke is impacting air quality across the state and several communities dealing with the Creek Fire are reporting some of the worst air quality ratings in the west, reaching hazardous levels.

The Air Quality Index for North Fork Wednesday morning was 492. It was as high as 449 in Oakhurst and 444 at Yosemite Turtleback Dome.

Silverton, east of Salem, Ore., had an AQI of 579.

A reading of 201 or higher is considered very unhealthy. A reading of 301 or higher is considered hazardous.

Fresno had an AQI of 159, an unhealthy level. But a forecast by IQAir is projecting it will reach a very unhealthy level on Saturday.

### **8:30 a.m. Creek Fire has burned more than 160,000 acres**

A Creek Fire status report Wednesday morning from Cal Fire now lists acres burned at 163,138 with containment still at 0%.

There have been 365 structures destroyed, and 5,296 remain threatened by the wildfire, which continues to burn on both sides of the San Joaquin River and around Shaver and Huntington lakes.

### **7 a.m.: PG&E restoring power following shutoff**

PG&E started inspecting power lines and restoring power on Wednesday morning in portions of 22 California counties that were impacted by a Public Safety Power Shutoff triggered by the significant fire risk posed by dry, hot weather and high winds.

The shutoff impacted about 172,000 PG&E customers in Alpine, Amador, Butte, Calaveras, El Dorado, Humboldt, Kern, Lake, Lassen, Mariposa, Napa, Nevada, Placer, Shasta, Sierra, Siskiyou, Sonoma, Tehama, Trinity, Tuolumne and Yuba counties.

Wind gusts as high as 66 mph were reported during the shutoff in Butte, Sierra, Sonoma, Siskiyou and Placer counties.

An “all clear” for a portion of a few remaining counties is expected by 9 a.m. Wednesday.

### **6:30 a.m.: new Cal Fire incident in Stanislaus County**

Cal Fire is working a new wildfire that has broken out west of Patterson at Interstate 5 and Sperry Road in Stanislaus County.

The Sperry Fire had burned 45 acres and was 0% contained.

## **‘Raining ash’: Smoke from Creek Fire is yet another blow to Fresno-area restaurants**

By Bethany Clough

Fresno Bee, Wednesday, September 9, 2020

From Fresno to Oakhurst and as far away as Lake Tahoe, smoke from the Creek Fire is swamping communities, dealing yet another blow to businesses like restaurants.

Businesses in Shaver Lake, Bass Lake, Auberry and North Fork are closed as the communities have evacuated after the fire started Friday near Big Creek. But even places not in the fire’s path are dealing with ripple effects of the fire and its smoke.

It’s a double whammy for many restaurants already coping with the coronavirus pandemic. For months, they’ve been unable to use their dining rooms, only seating customers outdoors.

### **Coarsegold/Oakhurst**

Wild Fig Kitchen in Coarsegold was busy with Sunday brunch, its busiest day of the week made even busier by campers and tourists stopping for food on their way out of town. But when the smoke and ash got too heavy, owner Marc Neff decided to close the restaurant.

“It was just raining ash on the people around noon,” he said. “This is crazy, and we can’t use the inside, of course. Now I don’t know what I’m going to do tomorrow.”

Workers posted a photo on Instagram of an outdoor table covered in flecks of ash.

Neff wanted to let his staff go home. Two of his workers, who live in Bass Lake, had already evacuated.

He was packing things up at his own home on Road 420 near North Fork, in case he needed to evacuate.

“It’s nuts, obviously, we’ve never seen anything like this year,” he said.

It was a similar story in Oakhurst, where South Gate Brewing Co. posted a photo from its parking lot of an eerie red glow of fire just over the mountain.

The brewery and restaurant closed Sunday, saying on its Facebook that it will stay closed indefinitely.

Its post said: “As the #CreekFire grows to over 140,000 acres, our prayers are with all of the firefighters and other first responders that are battling this enormous fire. We are also thinking about all of our neighbors that are being affected by this, including our South Gate team members.”

Although mountain communities are getting the worst of it, eateries in Fresno and Clovis were feeling the effects of the smoke this week too.

### **Fresno/Clovis**

Sandy’s Country Junction in Clovis has added 10 tables to its existing outdoor patio since restaurants in Fresno County are not allowed to let people dine indoors due to COVID-19 restrictions.

But they were empty Tuesday.

“Today, we’re super slow, we don’t even need the extra tables,” said manager Nancy Cruz. “We usually are busy on Tuesday and today we are not.”

Two Fresno Street Eats events with multiple food trucks were also postponed Sunday due to air quality and extreme heat.

## **Eastern Sierra/Bishop/Mammoth**

The smoke from the Creek Fire blew east and north too, filtering into Mammoth Lakes, a popular tourist destination. The community has had smoke since the fire started, and occasional strong odors of smoke and falling ash, said Lara Kaylor, director of communications at Mammoth Lakes Tourism.

And the city of Bishop on Highway 395 was socked in with smoke too.

Although the community is a five-hour drive from Fresno because of the mountains, it's only 47 miles as the crow flies from the fire. And much of the smoke blew right toward it over the weekend.

"It's just smoke all around us," said Debbie Ross, an office assistant at the busy Erick Schat's Bakkerie, a restaurant in Bishop.

"Normally even when we get some smoke, you can kinda see the outlines of the mountains," she said. "You can't even see the outlines of the mountains."

Heavy smoke from the Creek Fire was reported as far away as Lake Tahoe too.

## **Studies show wildfire smoke linked to spike in asthma, strokes and heart attacks**

By Andrew Chamings

San Francisco Chronicle, Tuesday, September 8, 2020

Smoke from the August Lightning Complex fires that ravaged Northern California led to hazardous air quality levels across much of the state and sent plumes of smoke as far as 1,500 miles away in Kansas.

As a new wave of blazes hits the state this week, after record breaking temperatures over the weekend, a series of studies reveals the damaging effect of forest fire smoke on residents' health, even when located hundreds of miles from the burn zones.

The Guardian reports that California wildfire smoke drifting over the country this summer is leading to an uptick in ailments from asthma and strokes to heart attacks and kidney problems, all while the country wrestles with the coronavirus pandemic.

A study by the University of British Columbia published in June reveals that within an hour of fire smoke hitting Vancouver, the number of ambulance calls for asthma, chronic lung disease and cardiac events spiked 10%.

Another study on the health effects of bushfires in Australia showed that 417 extra deaths occurred during 19 weeks of smoky air, and reported 3,100 more hospital admissions for respiratory and cardiac ailments and 1,300 extra emergency room visits for asthma.

The CDC states that "wildfire smoke can make anyone sick. Even someone who is healthy can get sick if there is enough smoke in the air. Breathing in smoke can have immediate health effects."

The health institute lists chest pain, asthma attacks and stinging eyes among the possible effects, and advises staying indoors and the use of air filters to minimize the risk. The harm is only exacerbated by the effects of the ongoing COVID-19 pandemic, with evacuation centers potentially becoming hotspots for disease spread.

Dr. Mary Prunicki, an allergy and asthma expert at Stanford, told the Guardian that "pollution, in general, is going to make your immune system less healthy and its responses more chaotic. It requires a healthy immune system to fight infections like COVID-19. And, if your immune system isn't working as well, it puts you at greater risk."

The American Lung Association states that "wildfire smoke can be extremely harmful to the lungs, especially for children, older adults and those with asthma, COPD and bronchitis or a chronic heart disease or diabetes."

The source of the majority of lung damage from forest fire smoke is known as PM2.5, which refers to particles that have diameter less than 2.5 micrometers (around 100 times thinner than a human hair). The association says that the particles are so small that they enter and lodge deep in the lungs.

Studies in California found that children who breathed the smoky air during wildfires experienced more coughing, wheezing, bronchitis, colds, and were more likely to have to go to the doctor or to the hospital for respiratory causes, especially from asthma.

A secondary threat for those closer to the blazes can come from the presence of carbon monoxide from wildfire smoke. The colorless, odorless gas emitted during the smoldering stages of a fire, when inhaled, can "reduce oxygen delivery to the body's organs and tissues and can lead to headaches, nausea, dizziness and, in high concentrations, premature death," per the American Lung Association.

The PM2.5 level is used in part to measure the Air Quality Index, which reached a staggering 449 in Bishop, Calif., on Sunday following the Creek Fire.

To find the current and forecasted AQI for PM2.5, go to the Environmental Protection Agency's website [www.AirNow.gov](http://www.AirNow.gov) and enter your location.

Find advice on how to prepare and mitigate smoke inhalation harm on the CDC site.

[Note: The following clip in Spanish mentions the Air District's Health Caution that was re-issued yesterday.](#)

### **Incendio Creek, fuertes vientos continúan dejando mala calidad del aire en todo el valle. Se recomienda tomar precauciones.**

By María G. Ortiz-Briones

Vida en el Valle, Wednesday, September 9, 2020

Residentes del valle, sobre todos aquellos que padecen de asma, bronquitis crónico y otras enfermedades respiratorias, se les advierte que permanezcan en el interior de sus viviendas para evitar la mala calidad del aire ocasionada por los incendios forestales.

Según el Distrito de Control de la Contaminación del Aire del Valle de San Joaquín, el Incendio Creek y otros incendios forestales en todo el estado están causando impactos de humo en todos los condados del Valle.

De acuerdo con el distrito, el Incendio Creek, ubicado en las regiones montañosas de los condados de Fresno y Madera, está produciendo humo que se está infiltrando en el Valle de San Joaquín y trayendo condiciones de calidad de aire insalubre.

El distrito anticipa que la calidad del aire insalubre afectará varias partes del Valle durante la semana y durante el fin de semana y advierte a los residentes que permanezcan adentro.

La advertencia de salud emitida por el distrito permanecerá vigente hasta que se apaguen los incendios.

El humo del Incendio Creek continuará soplando directamente hacia el Valle, causando un aumento de la contaminación por partículas y el potencial de altos niveles de ozono a medida que los vientos cambien hoy (martes) y miércoles, de acuerdo con Ana Stone, representante del distrito.

El distrito también predice que los vientos serán fuertes durante todo el día hasta la noche, provocando polvo y niveles elevados de partículas de 10 micrones y menos (PM10) en todo el Valle.

Los funcionarios de contaminación del aire advierten a los residentes del Valle que reduzcan la exposición a las emisiones de material particulado (PM) permaneciendo adentro de sus viviendas – a un ambiente con aire acondicionado y filtrado con las ventanas cerradas – en las áreas afectadas ya que pueden causar ataques de asma, agravar el bronquitis crónico y aumentar el riesgo de ataque cardíaco y ataque cerebral.

Las personas con enfermedades cardíacas o pulmonares deben seguir los consejos de sus médicos para lidiar con episodios de exposición a PM.

Aquellos con condiciones respiratorias existentes, incluyendo el COVID-19, los niños pequeños y personas de tercera edad, son especialmente susceptibles a los efectos de salud de esta forma de contaminación.

Según el distrito del aire, las máscaras comunes de tela y papel que usan las personas debido a preocupaciones de COVID-19 no protegen del humo de los incendios forestales.

El distrito recomienda a los residentes del valle a que utilicen el Sistema de Notificación de la Calidad del Aire Actual (RAAN, por sus siglas en inglés) para revisar la calidad del aire en cualquier ubicación del Valle visitando [myRAAN.com](http://myRAAN.com) o en la aplicación gratuita “Valley Air” en su teléfono móvil.

Si huele humo o ve cenizas que caen, considere la calidad del aire como “insalubre” (RAAN Nivel 4 o superior) incluso si RAAN muestra un nivel más bajo de contaminación.

El público también puede consultar la página de incendios forestales del Distrito en [www.valleyair.org/wildfires](http://www.valleyair.org/wildfires) para obtener información sobre los incendios forestales actuales y pasados que afecten al Valle.

Para más información, visite [www.valleyair.org](http://www.valleyair.org) o llame a una oficina del Distrito en Fresno (559) 230-6000, Modesto (209) 557-6400 o Bakersfield (661) 392-5500.