

## Rain aids in fight against California wildfire that killed 2

Rainy, cloudy weather has helped firefighters battling a Northern California wildfire that killed at least two people and burned 100 homes and other buildings

By Noah Berger and Christopher Weber - Associated Press  
Bakersfield Californian, Tuesday, Aug. 2, 2022

YREKA, Calif. (AP) — When ash began to fall and his throat was burning from the smoke, Franklin Thom decided it was time to leave the city where he grew up on the edge of the national forest in California.

He made it to a shelter with his daughter and just his medicine, some clothes and his shower shoes. Unlike some others, he was told that he had escaped California's largest fire of the year with his home still standing.

"Keep your prayers out for us," said Thom, 55.

At least two people have died and more than 100 homes, sheds and other buildings have burned in the McKinney Fire since it erupted last Friday. Rain on Sunday and Monday helped firefighters as they worked to control the spread of the fire, but the blaze remained out of control, authorities said.

Two bodies were found inside a charred vehicle Sunday in the driveway of a home near the remote community of Klamath River, the Siskiyou County Sheriff's Office said in a statement. Other details weren't immediately released.

The blaze in Northern California near the state line with Oregon has burned nearly 87 square miles (225 square km), and is the larger of two wildfires burning in the Klamath National Forest. The smaller fire near the tiny community of Happy Camp forced evacuations and road closures as it burned out of control Tuesday. Still more fires are raging in the Western U.S., threatening thousands of homes.

In northwestern Montana, a fire that started Friday afternoon near the town of Elmo on the Flathead Indian Reservation measured 20 square miles (52 square km), fire officials said. Some people were forced to flee their homes as gusting afternoon winds drove the fire.

The Moose Fire in Idaho has burned more than 85 square miles (220 square km) in the Salmon-Challis National Forest while threatening homes, mining operations and fisheries near the town of Salmon. It was 23% contained Tuesday, according to the National Interagency Coordination Center.

And a wildfire raging in northwestern Nebraska led to evacuations and destroyed or damaged several homes near the small city of Gering. The Carter Canyon Fire began Saturday as two separate fires that merged. It was more than 30% contained by Tuesday.

California's McKinney Fire grew to become the state's largest fire so far this year after it was fed by weekend winds gusting to 50 mph (80 kph).

Cloudy weather and rain helped firefighters Sunday night and Monday as bulldozers managed to ring the small and scenic tourism destination city of Yreka, with firebreaks. Crews carving other firebreaks in steep, rugged terrain also made progress, fire officials said.

The blaze was holding about 4 miles (6.4 km) from Yreka, population about 7,500.

"We've got the weather," said Todd Mack, an incident fire commander with the U.S. Forest Service. "We've got the horsepower. And we're getting after it."

But lightning over the weekend also sparked several smaller fires near the McKinney Fire. And despite the much-needed moisture, forests and fields in the region remained bone-dry.

The temperature in Yreka could reach nearly 90 degrees Fahrenheit (32.2 Celsius) on Tuesday and the National Weather Service issued a red flag warning of extreme fire danger into Tuesday night because of the chance of lightning starting new fires and gusty outflowing winds from thunderstorms powering the flames.

Among those waiting out the fire at the shelter in Yreka on Monday was Paisley Bamberg, 33. She arrived a few months ago from West Columbia, South Carolina, and had been living in a motel with her six children, ranging in age from 15 to 1-year-old twins, when she was told to evacuate.

"I started throwing everything on the top of my truck," but had to leave many things behind, she said.

Bamberg said she had just been hired at an Arby's restaurant and wondered if it will survive the fire.

"There might not be much there when we get back," she said. "I don't know if I have a job. The kids were supposed to start school and I don't know if the school is still standing."

Bamberg added: "I'm trying to keep up my spirits. I have six little humans that are depending on me. I can't break down or falter."

About 2,500 people were under evacuation orders but Thom said he knew many people remained in Yreka.

"There's still a lot of people in town, people who refused to leave," he said. "A lot of people who don't have vehicles and can't go. It's really sad."

Thom has lived in Yreka all his life but said it was the first time he had been threatened by a wildfire.

"I never thought it would ever happen," he said. 'I thought, 'We're invincible.' ... This is making a liar out of me."

Scientists have said climate change has made the West warmer and drier over the last three decades and will continue to make weather more extreme and wildfires more frequent and destructive.

The U.S. Forest service shut down a 110-mile (177-km) section of the famed Pacific Crest Trail in Northern California and southern Oregon. Authorities helped 60 hikers in that area evacuate on Saturday, according to the Jackson County Sheriff's Office in Oregon.

Weber reported from Los Angeles. Associated Press reporters Amy Hanson in Helena, Montana; Margery Beck in Omaha, Nebraska; and Keith Ridler in Boise, Idaho, contributed to this report.

## **Valley CAN, State of California issue preloaded, reloadable contactless debit cards for low-income EV owners to use at any charging station**

By Alexander Guendulain

Huntington Beach News, Monday, August 1, 2022

**SACRAMENTO**...One hundred low-income electric vehicle owners in the San Joaquin Valley are receiving reloadable contactless debit cards to use at EV charging stations as part of a demonstration project launched today by Valley Clean Air Now (Valley CAN) and the State of California.

Funded by the California Governor's Office of Business and Economic Development (GO-Biz), this nine-month Universal ZEV (zero-emission vehicle) Equity Charging Card demonstration project plans to increase equitable access to electric vehicle (EV) charging stations and help remove barriers to EV ownership while building off the efforts of Valley CAN, a nonprofit organization that works to improve air quality and quality of life in disadvantaged communities in the San Joaquin Valley, stretching from Lodi to Bakersfield.

"Valley CAN is committed to reducing carbon emissions in our region, which has some of the worst air quality in the United States," Valley CAN Executive Director Tom Knox said. "We know the average EV driver saves money by driving electric, from lower fuel costs to lower repair and maintenance costs. But not everyone can install a charging station at home. Helping our EV-owning low-income residents access the public EV charging infrastructure with a prepaid contactless debit card is an equitable way to ensure the success of Drive Clean in the San Joaquin and Clean Cars 4 All."

The initial participants purchased their EV through the Valley Air District's Drive Clean in the San Joaquin vehicle replacement program and qualify for the state's \$1,000 EV public charging credit — funds that could be used for installing a residential charger or for using public charging stations, but only if a participant has a contactless bank card that works at any charging station. Valley CAN is sending each participant a Mastercard debit card preloaded with \$50 in charging credit issued by Prepaid Technologies. Each card is reloaded with an additional \$50 per week, up to a total of \$1,000 in benefits, and carries a maximum balance of \$250 at any time.

“The Universal ZEV Equity Charging Card demonstration project bridges the equity gap, enabling participants to have more choice and convenience in how they receive their state benefits as an EV owner,” GO-Biz Assistant Deputy Director of ZEV Market Development Gia Vacin said. “Each EV helps us reach the state’s goals of 5 million ZEVs on California roads by 2030 and 100% of new cars sales by 2035; a healthy, equitable used ZEV market is also key to achieving these.”

As the implementing agency of the California Air Resources Board’s successful Clean Cars 4 All initiative to take older gas-powered vehicles off the road, the Valley Air District works with program administrator Valley CAN to match low-income residents with up to \$9,500 toward the purchase of a used plug-in battery electric vehicle or plug-in hybrid electric vehicle. To qualify for Clean Cars for All, an applicant’s household income must be at or below 400% of the federal poverty level.

Drive Clean in the San Joaquin is one program under the state’s Clean Cars 4 All program. Clean Cars 4 All is part of California Climate Investments, a statewide initiative that puts billions of cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment, and providing meaningful benefits to the most disadvantaged communities, low-income communities, and low-income households.

Caltrans’ California Integrated Travel Project (Cal-ITP) — a statewide initiative to ensure that all Californians have access to mobility options and a contactless open-loop way to pay for them using a credit or debit card or mobile wallet—serves as project manager for this demonstration, having successfully led contactless open-loop payment demonstrations with public transit agencies in Monterey-Salinas, Sacramento, and Santa Barbara County.

The contactless debit cards help fill a gap for the more than a quarter of Californians who do not have a bank account (unbanked) or do not regularly use checks, debit, or credit cards for purchases (underbanked)—and who would have no easy way to pay at EV charging stations. In 2019, 7% of California residents were estimated to be unbanked and 19% were estimated to be underbanked, statistics that mirror the national average of 25% of U.S. residents being unbanked or underbanked. Cal-ITP has been developing an approach to providing payment accounts to underbanked and unbanked Californians, effectively using the need to pay for EV charging as well as public transit as a catalyst for addressing financial inclusion in low-income and other target communities.

“As the state transitions to more secure contactless payment technologies, it is important that access and support during this transition is equitable. Our goal is to unlock this market, helping set the standard that contactless bank cards can be the payment method for all, including 10.3 million unbanked and underbanked California residents,” says Caltrans California Integrated Mobility Program Manager Gillian Gillett, who leads Cal-ITP. “The demand and the need are evident, and we’re excited to be working with payment solutions program managers and financial services companies to meet these needs for all Californians.”

“At Prepaid Technologies, we’re focused on helping our customers solve their payments challenges,” said Stephen Faust, CEO, Prepaid Technologies. “We’re proud to partner with Mastercard to provide Valley CAN a financially inclusive, contactless payment solution for these EV owners.”

Funding for this project is a part of the state’s \$5 million investment from the 2021–’22 budget meant to accelerate implementation of the ZEV Market Development Strategy, which focuses on increasing awareness and access to ZEVs in the hardest to reach communities and expanding tools that help convert this awareness into decisions to drive or ride in ZEVs. In total, California is investing more than \$10 billion to expand ZEV access and affordability and support the build-out of infrastructure across the state.

## **California Falls Short of Its Claims about Methane Tracking**

By AP

GV Wire, Monday, August 1, 2022

California claims to know how much climate-warming gas is going into the air from within its borders. It’s the law: California limits climate pollution and each year the limits get stricter.

The state has also been a major oil and gas producer for more than a century, and authorities are well aware some 35,000 old, inactive oil and gas wells perforate the landscape.

Yet officials with the agency responsible for regulating greenhouse gas emissions say they don't include methane that leaks from these idle wells in their inventory of the state's emissions.

Ira Leifer, a University of California Santa Barbara scientist, said the lack of data on emissions pouring or seeping out of idle wells calls into question the state's ability to meet its ambitious goal to achieve carbon neutrality by 2045.

### **Leaking Wells in Bakersfield**

Residents and environmentalists from across the state have been voicing concern about the possibility of leaking idle or abandoned wells for years, but the concerns were heightened in May and June when 21 idle wells were discovered to be leaking methane in or near two Bakersfield neighborhoods. They say that the leaking wells are "an urgent public health issue," because when a well is leaking methane, other gases often escape too.

Leifer said these "ridealong" gases were his biggest concern with the wells.

"Those other gases have significant health impacts," Leifer said, yet we know even less about their quantities than we do about the methane.

In July, residents who live in the communities nearest the leaking wells protested at the California Geologic Management Division's field offices, calling for better oversight.

"It's clear that they are willing to ignore this public health emergency. Our communities are done waiting. CalGEM needs to do their job," Cesar Aguirre, a community organizer with the Central California Environmental Justice Network, said in a statement.

Robert Howarth, a Cornell University methane researcher, agreed with Leifer that the amount of methane emissions from leaking wells isn't well known and that it's not a major source of emissions when compared with methane emissions from across the oil and gas industry.

Still, he said, "it's adding something very clearly, and we shouldn't be allowing it to happen."

### **Methane 83 Times Worse for Climate Than Carbon Dioxide**

A ton of methane is 83 times worse for the climate than a ton of carbon dioxide when compared over 20 years.

A 2020 study said emissions from idle wells are "more substantial" than from plugged wells in California, but recommended more data collection on inactive wells at the major oil and gas fields throughout the state.

Robert Jackson, a Stanford University climate scientist and co-author on that study, said they found high emissions from some of the idle wells they measured in the study.

In order to get a better idea of how much methane is leaking, the state of California is investing in projects on the ground and in the air. David Clegern, a spokesperson for CARB, said the agency is beginning a project to measure emissions from a sample of properly and improperly abandoned wells to estimate statewide emissions from them.

### **State Funds Methane Tracking Project**

And in June, California Governor Gavin Newsom signed a budget that includes participation in a global effort to slash emissions called the Methane Accountability Project. The state will spend \$100 million to use satellites to track large methane leaks in order to help the state identify sources of the gas and cap leaks.

Some research has already been done, too, to find out how much methane is coming from oil and gas facilities. A 2019 Nature study found that 26% of state methane emissions is coming from oil and gas. A new investigation by the Associated Press found methane is billowing from oil and gas equipment in the Permian Basin in Texas and companies under report it.

Howarth said even if methane from idle oil and gas wells isn't a major pollution source, it should be a priority not just in California, but nationwide, to help the country meet its climate pledges.

"Methane dissipates pretty quickly in the atmosphere," he said, "so cutting the emissions is really one of the simplest ways we have to slow the rate of global warming and meet that Paris target."

A new Senate proposal would provide hundreds of millions dollars to plug wells and reduce pollution from them, especially in hard-hit communities.

## **Oil industry skeptical of Newsom's focus on leaky wells**

By John Cox

Bakersfield Californian, Monday, August 1, 2022

As repair work finishes up on dozens of idle oil wells found recently to be leaking methane in Bakersfield, the industry is criticizing a recent effort by Gov. Gavin Newsom to characterize the emissions as a risk to public health and safety as well as a climate-change priority.

The governor on July 22 proposed new targets and actions to speed up the fight against climate change. As part of that, he asked that the California Air Resources Board and the state's primary oil regulator, the state Geologic Energy Management Division, form a task force to identify and fix methane leaks at oil facilities near residences.

Saying leaky oil infrastructure can threaten communities' health and safety, and that such greenhouse gas emissions can have an outside impact on global warming, he called on the proposed task force to "seek the input of community members, air districts and local government entities to take action to address these leaks."

Newsom's request earned a mention the same day in CalGEM's update on efforts to fix the leaky wells around Bakersfield. The agency said it looks forward to putting together the task force with CARB, and that it appreciates \$200,000 in state money the governor also mentioned "to permanently plug orphan wells and address the danger they pose to communities and the environment."

But the problem isn't as urgent as the state is making it sound, said Mark Nechodom, a top state oil regulator under former Gov. Jerry Brown who works now as vice president for upstream strategies at the Western States Petroleum Association trade group,

Methane leaks at idle wells are problematic but they do not present a public health threat, Nechodom said in a phone interview Thursday. He added that it makes more sense to focus state resources on larger methane emission sources, such as landfills and dairies.

CARB already has an oil and gas rule addressing short-lived climate pollutants as a regulatory action, Nechodom noted, and the San Joaquin Valley Air Pollution Control District has been working to gauge the problem of leaky wells and is looking at options for mitigating them.

He said Newsom's call for a task force on the matter looks like a "campaign piece."

"My sense is the governor's trying to make some political hay for this rather than actually having his own regulatory and local government regulatory processes do what (they're) already doing," Nechodom said.

Generally speaking, he said, large oil producers make sure to properly plug and abandon old wells so they do not leak or present other risks. But like in other states, he said, some marginal operations fall out of economic viability and their owners don't always have the money to fix them.

Regulators have tried over the years to address the problem, including by increasing bonding requirements designed to make sure there's money set aside to address idle and orphan wells.

"Somehow it's gotten into people's heads that the industry and the regulator have been in cahoots to run things in really crappy ways," he said. "And that's simply not true."

Still, climate action and environmental justice organizations see well leaks as a serious problem that should be prioritized by the state. A small protest earlier this month in Bakersfield called attention to the local leaks as further reason to impose a buffer zone between oil operations and sensitive sites like homes and schools.

The state has proposed a 3,200-foot standard buffer zone, together with certain other conditions on existing equipment, but work toward formalizing such a rule has fallen behind schedule and CalGEM has declined to say when it might move forward.

Multiple studies have shown a correlation between proximity to oil and gas wells and health problems including adverse birth outcomes, heart disease and respiratory diseases including asthma. The idea of establishing the setbacks at 3,200 was put forward by a 15-member public-health panel selected by the University of California, Berkeley together with Physicians, Scientists and Engineers for Health Energy.

In its update July 22, CalGEM noted 44 wells around Bakersfield that were previously found to have been leaking methane or which had high-pressure building have been fixed. The agency added it has been inspecting the repairs.

It released these details:

- CalGEM was continuing to work with Griffin Resources LLC to fix one of its wells; it said 13 other formerly leaky wells owned by the company in the Fruitvale Oil Field have been repaired;
- Repairs have been made to 10 Kern Bluff Oil Field wells owned by Citadel Exploration Inc., including three that were emitting methane at low concentrations;
- All six Sunray Petroleum wells discovered emitting methane in Kern Bluff have been fixed;
- All seven Zynergy LLC wells found leaking in Kern Bluff have been repaired; and,
- All eight wells found to have accumulated high pressure, including one with a methane leak, have been fixed.

## **August 1st marks World Lung Cancer Day**

By Leslie Valle

Fox 58, Monday, August 1, 2022

BAKERSFIELD, Calif. (KBAK/KBFX) — August 1 is acknowledged as World Lung Cancer Day.

It is the leading cause of cancer deaths in the U.S. according to public health officials.

According to the CDC, Lung Cancer affects both men and women relatively the same.

Health Experts say lung cancer could be caused by several risk factors such as smoking, exposure to secondhand smoke, being near gas emissions, and poor air quality.

Just living here in Kern County may put you here at a slight risk. According to Cassandra Melching from San Joaquin Air Pollution and Control District, Kern County is at a disadvantage, "Kern County does have a little bit of a tougher time with air quality gave the location here down by the base down at the bottom of the grapevine you're surrounded by mountains, at a lot of pollution that comes through most of California makes its way down south hovers in Kern County area."

Melching said people feel the physical effects of being in poor air quality, "They feel lightheaded, get a cough, chest starts to hurt."

Experts say people between 55 through 80 years old, who have had a history of smoking throughout their years and continue to be current smokers are at more high risk of developing lung cancer.

There is now a new screening available to detect cancer along with low doses of CT-Scans. Experts say this new scan has dramatically improved lung cancer survival rates.

Another way you can prevent lung cancer is by reducing your carbon footprint to improve air quality.

Melching says people doing their part makes a difference, "We are seeing change so as long as folks, businesses and organizations are doing their part we'll slowly get there".

The San Joaquin Valley Air Pollution Control District has more information on how you can reduce your carbon footprint and how to apply for a grant to get an electric vehicle or lawn equipment.

## **Western flames spread, California sees its largest 2022 fire**

Crews battling the largest wildfire so far this year in California braced for thunderstorms and hot, windy conditions that created the potential for more fire growth as they sought to protect remote communities

By Noah Berger - Associated Press

Bakersfield Californian, Sunday, July 31, 2022

YREKA, Calif. (AP) — Crews battling the largest wildfire so far this year in California braced for thunderstorms and hot, windy conditions that created the potential for additional fire growth Sunday as they sought to protect remote communities.

The McKinney Fire was burning out of control in Northern California's Klamath National Forest, with expected thunderstorms a big concern Sunday just south of the Oregon state line, said U.S. Forest Service spokesperson Adrienne Freeman.

"The fuel beds are so dry and they can just erupt from that lightning," Freeman said. "These thunder cells come with gusty erratic winds that can blow fire in every direction."

The blaze exploded in size to more than 80 square miles (207 square km) just two days after erupting in a largely unpopulated area of Siskiyou County, according to a Sunday incident report. The cause was under investigation.

The blaze torched trees along California Highway 96, and the scorched remains of a pickup truck sat in a lane of the highway. Thick smoke covered the area and flames burned through hillsides in sight of homes. The fire Sunday cast an eerie, orange-brown hue, in one neighborhood where a brick chimney stood surrounded by rubble and scorched vehicles.

A second, smaller fire just to the west that was sparked by dry lightning Saturday threatened the tiny town of Seiad, Freeman said. About 400 structures were under threat from the two California fires. Authorities have not confirmed the extent of the damage yet, saying assessments would begin when it was safe to reach the area.

A third fire, which was on the southwest end of the McKinney blaze, prompted evacuation orders for around 500 homes Sunday, said Courtney Kreider, a spokesperson with the Siskiyou County Sheriff's Office. The office said crews had been on the scene of the fire since late Saturday but that the fire Sunday morning "became active and escaped its containment line."

Several people in the sheriff's office have been affected by evacuation orders due to the fires "and they're still showing up to work so, (a) very dedicated crew," she said. A deputy lost his childhood home to fire on Friday, she said.

The McKinney fire "remains 0% contained," the Siskiyou County Sheriff's Office said in a Facebook post late Sunday night.

As the McKinney fire threatened, some residents chose to stay behind while others heeded orders to leave.

Larry Castle and his wife, Nancy, were among about 2,000 residents of the Yreka area under evacuation orders. They left Saturday with some of their prized possessions, including Larry's motorcycle, and took their dogs to stay with their daughter near Mount Shasta.

Larry Castle said he wasn't taking any chances after seeing the explosive growth of major fires in recent years.

"You look back at the Paradise fire and the Santa Rosa fire and you realize this stuff is very, very serious," he told the Sacramento Bee.

In northwest Montana, a fire sparked in grasslands near the town of Elmo had grown to about 17 square miles (44 square km) after advancing into forest. Crews were working along edges of the fire Sunday, and aircraft were expected to continue to make water and retardant drops to help slow the fire's advance, said Sara Rouse, a spokesperson with the interagency team assigned to the fire. High temperatures and erratic winds were expected, she said.

A section of Highway 28 between Hot Springs and Elmo that had been closed was reopened with drivers asked to watch for fire and emergency personnel. Visibility in the area was poor, Rouse said.

In Idaho, the Moose Fire in the Salmon-Challis National Forest has burned on more than 75 square miles (196 square km) in timbered land near the town of Salmon. It was 21% contained by Sunday morning. Pila Malolo, planning operations section chief on the fire, said in a Facebook video update that hot, dry conditions were expected to persist Sunday. Officials said they expected fire growth in steep, rugged country on the fire's south side.

California Gov. Gavin Newsom declared a state of emergency Saturday as the McKinney Fire intensified. The proclamation allows Newsom more flexibility to make emergency response and recovery effort decisions and access federal aid.

California law enforcement knocked on doors in the towns of Yreka and Fort Jones to urge residents to get out and safely evacuate their livestock onto trailers. Automated calls were being sent to land phone lines as well because there were areas without cell phone service.

Scientists say climate change has made the West warmer and drier in the past 30 years and will continue to make weather more extreme and wildfires more frequent and destructive.

The Pacific Coast Trail Association urged hikers to get to the nearest town while the U.S. Forest Service closed a 110-mile (177-km) section of the trail from the Etna Summit to the Mt. Ashland Campground in southern Oregon.

In Hawaii, the Maui County Emergency Management Agency said a brush fire was 90% contained but a red flag warning was in effect for much of Sunday.

And in north Texas, firefighters continued in their effort to contain the 2-week-old, 10 1/2-square-mile (27 1/3-square-kilometer) Chalk Mountain Fire. The crews now report 83% containment of the fire that has destroyed 16 homes and damaged five others about 50 miles (80 kilometers) southwest of Fort Worth. No injuries have been reported.

Associated Press journalists Becky Bohrer in Juneau, Alaska; Christopher Weber in Los Angeles; Sam Metz in Salt Lake City; and Terry Wallace in Dallas contributed to this report.

## **Opinion: California can fight fire with prescribed fire by funding jobs in the field**

By Tom Gardali,  
Stockton Record, Sunday, July 31, 2022

California is awash in well-prepared planning documents that strive to achieve ambitious environmental, public health and safety, and equity goals. A key thread connecting them is prescribed fire — setting controlled fires to maintain the health of the land and its people and reduce the danger of wildfire.

By now, it is accepted that prescribed fire is needed to conserve and restore biodiversity, prevent catastrophic fires, stabilize carbon and promote public health and safety. The science corroborates the longstanding practices of Indigenous peoples — for them, fire is culturally and environmentally important, and its use was widespread before the devastating effects of colonization and fire-exclusion policies.

In March, California released a strategic plan for expanding the use of beneficial fire. The plan acknowledges the importance of the tribes and the private sector to achieve its goals, and calls for workforce development through the Prescribed Fire Training Center concept.

The plan falls short, however, on committing to creating prescribed-fire careers.

While the state has poured resources into careers in fire suppression, no such financial investment exists for careers in prescribed fire. This is because, in part, there still exists an antiquated mindset that only those with decades of fire suppression experience have the expertise to conduct safe prescribed burns.

California must move beyond this mindset by recognizing, empowering and funding independent prescribed-fire experts. Here's how:

- Prescribed-fire careers should not only be at existing government agencies but must include institutions with expertise and missions to steward California's landscapes for multiple benefits.

- Legislators should recognize there are already institutions to do the prescribed-burning work. Nongovernmental institutions with the expertise to help include Audubon Canyon Ranch's Fire Forward program, The Nature Conservancy, Cultural Fire Management Council, The Watershed Research and Training Center, Mid Klamath Watershed Council and the Prescribed Burn Associations, to name a few.
- California's policymakers should attend a prescribed burn to see firsthand the expertise these institutions bring not only to wildfire resilience and public safety but also to ecosystem stewardship.
- The Legislature should implement and expand the new Prescribed Fire Liability Pilot Program. A major obstacle to increasing the use of prescribed fire is the inability to obtain liability insurance. This program establishes a source of funding to pay for damages if a fire escapes and causes damage. The \$20 million allocated last year is fine for a pilot program but not nearly enough to increase the pace, scale and ongoing use of prescribed fire.
- The state should consider establishing a new agency focused on land stewardship that includes prescribed fire.

One hundred years of fire suppression, together with climate change, has caused the problem of catastrophic megafires we now need to fix. Prescribed fire also could help connect the state's many plans to advance justice, equity, diversity and inclusion, strengthen tribal partnerships, and sustain the state's economic prosperity, clean energy resources and food supply.

Gov. Gavin Newsom has set California on a track to conserve the state's biodiversity, to use nature-based solutions to fight climate change and to create resilience in our forests and communities. Because there is no option for no fire in California, let's invest in good fire and the people who are skilled to bring it.

*Tom Gardali is the CEO of Audubon Canyon Ranch, a nonprofit conservation organization that trains land managers and others to use prescribed fire.*

## **Oak Fire update: Containment inches higher, as firefighters gain ground on blaze near Yosemite**

By Brianna Vaccari

In the Fresno Bee, Modesto Bee and other papers, Sun., July 31, 2022

Firefighters continued to make gains containing the Oak Fire burning in Mariposa County near Yosemite National Park over the weekend, reporting no new growth and containment improvement to 67% Sunday evening.

The fire that started more than a week ago near Yosemite has burned 19,244 acres, destroyed over 180 residential and commercial structures and damaged 10 others.

Firefighters will continue to work overnight to secure containment lines in the steep, rugged terrain near Devil's Gulch. They will continue responding to hazards and restoring fire perimeter infrastructure.

Weather conditions in the area were cooler and more humid Sunday. The National Weather Service forecasts a 20% chance of showers and thunderstorms Monday near Mariposa, with high temperatures expected to be in the low 90s.

Nearly 3,800 fire personnel are working on the Oak Fire, and fire officials estimate the blaze has cost \$38.6 million.

### **PG&E CREWS WORK TO RESTORE POWER**

Pacific Gas & Electric was able to restore power to 122 customers on Sunday, though 357 remain without power.

Those customers are mostly in areas served by infrastructure damaged by the fire. PG&E poles and equipment sustained extensive damage along Triangle Road, Darrah and Jerseydale roads. Crews over the past three days have replaced 170 poles and pulled 3.7 miles of wire, according to the Sunday evening update from Cal Fire.

Around 720 PG&E personnel are working in response to the Oak Fire.

To receive updates from PG&E, customers can call 1-800-743-5000 to update their contact information.

#### LOCAL ASSISTANCE AND EVACUATION CENTERS

A multi-agency support center will be open from 9 a.m. to 7 p.m. Aug. 1-3 at the Mariposa High School Gymnasium, located at 5074 Old Highway North in Mariposa.

The center will provide assistance to any residents affected by the Oak Fire.

An evacuation center has been set up at Mariposa Elementary School, located at 5044 Jones Street in Mariposa.

Animal evacuation centers are at the following locations:

- Small Animals: Mariposa Elementary School, 5044 Jones St.
- Large Animals: Mariposa County Fairgrounds, 5007 Fairgrounds Rd.
- Large Animals: Coarsegold Rodeo Grounds, 44777 Rodeo Grounds Lane

Residential spoiled food will be collected for free at the following temporary locations. No other waste will be accepted. The Mariposa County landfill will be open its regular hours for other waste.

Monday and Tuesday

- Bootjack Market - 3939 Bootjack Lane
- Old Lushmeadows Store Site - Meadow Lane

#### ROAD CLOSURES

- Triangle Road is closed at Darrah Road. Triangle Road cannot be accessed via Darrah Road. Lushmeadows area and Triangle Road toward Highway 140 cannot be accessed.
- Silva Road and Carleton Road at Triangle Road access will be for residents only. No through traffic will be allowed.
- Jerseydale Road is open to residents only.
- Carstens Road is open to residents only.

### **Oak Fire update: Wildfire grows little as fire crews reinforce containment lines**

By Robert Rodriguez

In the Fresno Bee, Modesto Bee and other papers, Sun., July 31, 2022

UPDATE: Cal Fire announced Saturday night that there are no uncontrolled fire growths to the Oak Fire, which has been burning just beyond Yosemite National Park.

In fact, the Oak Fire grew by just four acres from Saturday morning to the evening, now at 19,244 acres. Containment, meanwhile, improved by seven percentage points and is now 59% contained.

There have been 116 single resident structures destroyed and 66 outbuildings destroyed, and six structures damaged. No fire fighters have been injured.

ORIGINAL STORY: Crews battling the Oak Fire in Mariposa County continued to gain an upper hand Saturday in what is the largest wildfire in California this year.

Containment was listed at 52% in the Saturday morning report from Cal Fire, signaling half the fight is over. Full containment was expected by Aug. 6.

The fire that started a week ago near Yosemite National Park has burned 19,240 acres, up 19 from Friday evening's Cal Fire report. On Saturday, fire crews focused on establishing a fire line in a steep area known as Devil's Gulch.

The fire has destroyed 109 homes and 59 outbuildings. Another 585 structures remain threatened.

Cal Fire public information officer Remberto Aguirre said that other than the Devil's Gulch area, there was little to no growth in other areas of the fire.

"The firefighters are doing a great job," Aguirre said.

Crews from Pacific Gas & Electric are also working to restore power to the more than 3,100 customers who were affected by the fire. Of those customers who lost power as a result of the fire, 730 remain out. PG&E officials did not have an estimate of when power will be fully restored.

#### \$90,000 DONATION TO RELIEF EFFORTS

To help ease the misery of the fire, PG&E gave \$90,000 to two organizations dedicated to helping with the recovery process.

The Mariposa Community Foundation received \$50,000 to support wildfire relief efforts in the area and assist residents who were displaced by the fire, said Joshua Simes, vice president of PG&E's Central Valley Region.

The utility company also donated \$40,000 from the PG&E Red Cross Disaster Holding Fund to the Red Cross Northern California Coastal Region to support services for residents effected by the ongoing Western wildfires.

"Many of our coworkers responding to this fire and their families and friends live and work in the Mariposa area. And we all know the impact wildfires have on communities we serve," said Simes.

Cal Fire officials said there are nearly 4,000 personnel involved in fighting the fire. The cost of the fight so far is \$34.4 million, according to the National Interagency Fire Center.

The cause of the fire is under investigation.

#### ROAD CLOSURES, EVACUATED AND LIFTED AREAS

Cal Fire listed areas still affected by the fire including these road closures:

- Jerseydale Road
- Silva Road from Van Ness to Triangle Road open to residents only, be prepared to show identification
- Darrah Road from Deer Springs to Triangle Road open to residents only, be prepared to show identification

Evacuation orders also remain in effect for the following areas:

- Jerseydale Road and all side roads
- Sweetwater Ridge/Mine area
- Feliciana Mountain Road
- Ferguson/Apperson Mine Road area
- Savage Lundy Trail
- Carter Road Including all side roads
- Hites Cove Road
- Footman Ridge area
- Devil's Gulch area

Evacuation orders lifted for the following areas:

- Carstens Road
- Triangle Road from Highway 140 to Darrah Road including all side roads

- Carter Road
- Plumber Creek Road
- Buckingham Mountain Road
- Memory Lane
- Butterfly Ridge Road
- Merrill Mill Road

#### HELP WITH DOCUMENTS

The Mariposa County Health and Human Services will host a three-day local assistance center beginning Monday at Mariposa High.

The event is for people affected by the Oak Fire and need help replacing important documents that were lost or destroyed. It also will help those who need food and other things.

The event is in the gymnasium from 9 a.m. to 7 p.m. from Aug. 1-3. The school is at 5074 Old Highway.

#### GOFUNDME FOR VICTIMS OF OAK FIRE

GoFundMe established a centralized hub to help identify all verified fundraisers created for those who have lost businesses and homes in the Oak Fire.

The "Trust & Safety" team reviews fundraisers related to the Oak Fire, according to the fundraising site. They are collected at a hub.

The hub can be found at [gofundme.com/c/act/wildfire-relief/california/central](https://gofundme.com/c/act/wildfire-relief/california/central).

### **Oil industry skeptical of Newsom's focus on leaky wells**

By John Cox

The Bakersfield Californian, Sunday, July 31, 2022

Jul. 31—As repair work finishes up on dozens of idle oil wells found recently to be leaking methane in Bakersfield, the industry is criticizing a recent effort by Gov. Gavin Newsom to characterize the emissions as a risk to public health and safety as well as a climate-change priority.

The governor on July 22 proposed new targets and actions to speed up the fight against climate change. As part of that, he asked that the California Air Resources Board and the state's primary oil regulator, the state Geologic Energy Management Division, form a task force to identify and fix methane leaks at oil facilities near residences.

Saying leaky oil infrastructure can threaten communities' health and safety, and that such greenhouse gas emissions can have an outside impact on global warming, he called on the proposed task force to "seek the input of community members, air districts and local government entities to take action to address these leaks."

Newsom's request earned a mention the same day in CalGEM's update on efforts to fix the leaky wells around Bakersfield. The agency said it looks forward to putting together the task force with CARB, and that it appreciates \$200,000 in state money the governor also mentioned "to permanently plug orphan wells and address the danger they pose to communities and the environment."

But the problem isn't as urgent as the state is making it sound, said Mark Nechodom, a top state oil regulator under former Gov. Jerry Brown who works now as vice president for upstream strategies at the Western States Petroleum Association trade group,

Methane leaks at idle wells are problematic but they do not present a public health threat, Nechodom said in a phone interview Thursday. He added that it makes more sense to focus state resources on larger methane emission sources, such as landfills and dairies.

CARB already has an oil and gas rule addressing short-lived climate pollutants as a regulatory action, Nechodom noted, and the San Joaquin Valley Air Pollution Control District has been working to gauge the problem of leaky wells and is looking at options for mitigating them.

He said Newsom's call for a task force on the matter looks like a "campaign piece."

"My sense is the governor's trying to make some political hay for this rather than actually having his own regulatory and local government regulatory processes do what (they're) already doing," Nechodom said.

Generally speaking, he said, large oil producers make sure to properly plug and abandon old wells so they do not leak or present other risks. But like in other states, he said, some marginal operations fall out of economic viability and their owners don't always have the money to fix them.

Regulators have tried over the years to address the problem, including by increasing bonding requirements designed to make sure there's money set aside to address idle and orphan wells.

"Somehow it's gotten into people's heads that the industry and the regulator have been in cahoots to run things in really crappy ways," he said. "And that's simply not true."

Still, climate action and environmental justice organizations see well leaks as a serious problem that should be prioritized by the state. A small protest earlier this month in Bakersfield called attention to the local leaks as further reason to impose a buffer zone between oil operations and sensitive sites like homes and schools.

The state has proposed a 3,200-foot standard buffer zone, together with certain other conditions on existing equipment, but work toward formalizing such a rule has fallen behind schedule and CalGEM has declined to say when it might move forward.

Multiple studies have shown a correlation between proximity to oil and gas wells and health problems including adverse birth outcomes, heart disease and respiratory diseases including asthma. The idea of establishing the setbacks at 3,200 was put forward by a 15-member public-health panel selected by the University of California, Berkeley together with Physicians, Scientists and Engineers for Health Energy.

In its update July 22, CalGEM noted 44 wells around Bakersfield that were previously found to have been leaking methane or which had high-pressure building have been fixed. The agency added it has been inspecting the repairs.

It released these details:

—CalGEM was continuing to work with Griffin Resources LLC to fix one of its wells; it said 13 other formerly leaky wells owned by the company in the Fruitvale Oil Field have been repaired;

—Repairs have been made to 10 Kern Bluff Oil Field wells owned by Citadel Exploration Inc., including three that were emitting methane at low concentrations;

—All six Sunray Petroleum wells discovered emitting methane in Kern Bluff have been fixed;

—All seven Zynergy LLC wells found leaking in Kern Bluff have been repaired; and,

—All eight wells found to have accumulated high pressure, including one with a methane leak, have been fixed.

## **Opinion: Wildfire season is here. California needs to fight back smarter**

By Dave Winnacker and Donnie Hasseltine  
San Francisco Chronicle, Saturday, July 30, 2022

With the Oak Fire now blazing across over 19,000 acres of Northern California, it is clear: Fire season is here — and with it, comes the very real potential for life and property loss.

Although technological advances are improving firefighting capabilities, most innovations focus on identifying and responding to fires after they start. But given wildfires will only get worse in the hotter, drier future, solely being reactive to them isn't a winning strategy.

California needs to fight fire smarter.

Currently, 11.2 million people and 4.5 million homes in California are on land adjacent to wilderness lands, a region firefighters refer to as the wildland urban interface, or WUI. As recent years have shown, the risk to those who live in WUI and their property is potentially catastrophic.

So what can be done? Communities, government agencies and the insurance industry must work together to establish consistent standards and align economic incentives to encourage people to meet them.

Fire mitigation standards have never been consistently established or enforced across California's WUI. Even though we've long known, for example, that creating defensible space — a buffer between a building and any wildland surrounding it — and home hardening measures — which prevent sparks and embers from infiltrating a home's walls — are effective fire prevention tactics, WUI residents do not implement them uniformly. Why? Look no further than the divide between local and state government.

Depending on which government agency or department is responsible, fire mitigation requirements are different. Two homes that share a property line, for example, can be inspected to different standards if one home is in a "local responsibility area" and the other in a "state responsibility area." If a home in a state responsibility area is also included in a specific fire district, it can be inspected by both the local fire department and Cal Fire — again, with each using a different standard. On top of that, an insurance inspector then shows up using yet another standard unique to that a specific carrier. The result is confusing directives, which only discourages residents from implementing any measures at all.

Another contributing factor is that even with these numerous standards, government enforcement has only so much reach. With limited resources, any government agency's capacity to enforce standards is restricted to only a few thousand of the at-risk properties — nowhere near the scale required to make an impact on its own. And while there are valiant fire mitigation education efforts from Cal Fire, local government, California Fire Safe Councils, Firewise USA groups and others, these efforts cannot compel enough people to improve their fire safety practice at the scope or pace that is needed.

All of this confusion around standards and their implementation makes it nearly impossible then for the insurance industry to accurately price fire risk. According to a 2019 white paper from the management consulting firm Milliman, California homeowners insurers lost 26 years of profit just in 2017 and 2018 due to wildfires, resulting in a net loss of \$10 billion. Losses this big create market instability: Insurers are beginning to leave the California market and for those that remain, they are either increasing their nonrenewals or increasing the premiums on those they still insure.

As for those who can't find an insurer, they're left with the California FAIR Plan, the "insurer of last resort," which has high premiums and limits on coverage. In 2020, the number of consumers forced to obtain a policy through FAIR increased by 49,049 policies.

But neither shifting consumers to FAIR nor increasing premiums on current insurance policies makes progress toward the ultimate goal of limiting losses or lowering fire risk.

A far more effective approach to decreasing fire risk would be to financially incentivize homeowners to implement effective measures like fuel mitigation and home hardening. The annual need to find or renew property insurance creates an opportunity for the rapid adoption of these and other techniques.

Currently, insurance companies determine risk based upon the general characteristics of a landscape, the area's firefighting capacity and conditions on the individual parcel being assessed. But since carriers use their own standards and lack a mandate to understand parcel-level conditions throughout a given landscape, they cannot accurately characterize the fire-safety conditions around any given parcel — particularly ones located in high- to moderate-density neighborhoods where fire has the potential to spread quickly.

A consistent and accessible common standard of parcel-level wildfire risk reduction measures addressing both defensible space and home hardening retrofits can reduce wildfire losses and make insurance policies more accessible. If government agencies can adhere to a standard implementation of science-backed mitigation techniques and create a common verification process, insurers will be able to accurately assess fire risk in California's WUI and integrate that information into their underwriting decisions. Homeowners who meet those standards at community scale will then be rewarded with

average annual loss calculations which accurately price the residual risk encouraging further community-wide adoption of best practices.

As long as wildfire continues to create large losses for insurers, we will continue to face a volatile insurance market where many Californians will experience increased premiums, policy nonrenewals, and decreased options, regardless of whether they experience direct wildfire loss. Stabilizing this situation must start with a better understanding of wildfire risk on a property by property and neighborhood basis, combined with greater reliance on mitigating that risk to protect lives.

Life and property loss have become hallmarks of our state's fire season. To stave off catastrophic loss, we need a holistic approach with established standards and that incentivizes Californians to meet them. That is our best shot.

## **House approves bill to help West fight wildfires, drought**

By Matthew Daly, Associated Press

In the Fresno Bee, Modesto Bee and other papers, Sat., July 30, 2022

The House on Friday approved wide-ranging legislation aimed at helping communities in the West cope with increasingly severe wildfires and drought — fueled by climate change — that have caused billions of dollars of damage to homes and businesses in recent years.

The measure combines 49 separate bills and would increase firefighter pay and benefits; boost resiliency and mitigation projects for communities affected by climate change; protect watersheds; and make it easier for wildfire victims to get federal assistance.

“Across America the impacts of climate change continue to worsen, and in this new normal, historic droughts and record-setting wildfires have become all too common,” said Rep. Joe Neguse, D-Colo., the bill's chief co-sponsor. Colorado has suffered increasingly devastating wildfires in recent years, including the Marshall fire last year that caused more than \$513 million in damage and destroyed nearly 1,100 homes and structures in Boulder County.

“What once were wildfire seasons are now wildfire years. For families across the country who have lost their homes due to these devastating wildfires and for the neighborhoods impacted by drought, we know that we need to apply a whole-of-government approach to support community recovery and bolster environmental resiliency,” Neguse said. “This is a bill that we believe meets the moment for the West.”

The bill was approved, 218-199, as firefighters in California battled a blaze that forced evacuation of thousands of people near Yosemite National Park and crews in North Texas sought to contain another fire.

One Republican, Pennsylvania Rep. Brian Fitzpatrick, voted in favor of the bill, while Oregon Rep. Kurt Schrader was the only Democrat to oppose it.

The bill now goes to the Senate, where Sen. Dianne Feinstein, D-Calif., has sponsored a similar measure.

Both the House and Senate bills would permanently boost pay and benefits for federal wildland firefighters. President Joe Biden signed a measure last month giving them a hefty raise for the next two years, a move that affects more than 16,000 firefighters and comes as much of the West braces for another difficult wildfire season.

Pay raises for the federal firefighters had been included in last year's \$1 trillion infrastructure bill, but the money was held up as federal agencies studied recruitment and retention data to decide where to deliver them. The raise approved by Biden was retroactive to Oct. 1, 2021, and expires Sept. 30, 2023.

The House bill would make the pay raises permanent and sets minimum pay for federal wildland firefighters at \$20 per hour, or nearly \$42,000 a year. It also raises eligibility for hazardous-duty pay and boosts mental health and other services for firefighters. The bill is named after smokejumper Tim Hart, who died fighting a wildfire in New Mexico last year.

"The West is hot — hotter than ever — it is dry and when it is windy, the West is on fire," said Rep. Kim Schrier, D-Wash. "And we are seeing this every year because of climate change. That's why this bill is so important."

House Speaker Nancy Pelosi, D-Calif., called the bill "a major victory for Californians — and for the country." The Oak Fire, the largest wildfire so far this year, "is ravaging our state," she said. "At the same time, countless of our communities regularly suffer lack of rainfall that can kill crops and further fuel fires."

The House bill would deliver "urgently needed resources" to combat fires and droughts, "which will only increase in frequency and intensity due to the climate crisis," Pelosi said. The bill includes \$500 million to preserve water levels in key reservoirs in the drought-stricken Colorado River and invest in water recycling and desalination.

Republicans denounced the measure as "political messaging," noting that firefighters' hourly pay has already been increased above \$20 in most cases. The House bill does not appropriate additional money for the Forest Service or other agencies, and without such an increase, the Forest Service says it would have to lay off about 470 wildland firefighters.

Rep. Bruce Westerman of Arkansas, the top Republican on the House Natural Resources Committee, called it "egregious" that Democrats would seek to enact provisions that could lead to firefighter layoffs in the midst of a devastating wildfire season.

"Democrats are finally waking up to the wildfire and drought crises, exacerbated by years of forest mismanagement and a lack of long-term water storage. Unfortunately, Democrats' proposals are anything but solutions," Westerman said. He accused Democrats of failing to follow science showing the need to manage forests before fires begin, and said Democrats "fail to construct the kind of long-term infrastructure needed to make communities resilient to drought" while prioritizing "liberal talking points" about climate change.

Neguse called that accusation outrageous and noted that many of the bills included in the wildfire/drought legislation are Republican proposals.

House Majority Leader Steny Hoyer, D-Md., said the bill was important to the whole country — not just the West, where wildfires and drought are a daily reality.

"We are one nation indivisible and if one part of us is burning, we are all burning," Hoyer said.

Besides boosting firefighter pay, the bill enhances forest management projects intended to reduce hazardous fuels such as small trees and underbrush that can make wildfires far more dangerous. It also establishes grant programs to help communities affected by air pollution from wildfires and improve watersheds damaged by wildfire.

Republicans called the thinning projects — which also include prescribed burns and removal of vegetation — meaningless without waivers of lengthy environmental reviews that can delay forest treatment by years.

The White House said in a statement that it supports efforts to address climate change, wildfires and drought, but wants to "work with the Congress to ensure the many provisions in the (bill) avoid duplication with existing authorities and administration efforts."

## **Wildfire smoke is polluting the air. Here are ways to protect your health**

By Gregory Weaver

Fresno Bee, Sat., July 30, 2022

This summer's stretch of low-intensity wildfires that did not significantly degrade the Valley's air quality ended with the explosive growth of Mariposa County's Oak Fire.

Dry forests in the Sierra Nevada mean a higher likelihood of more large wildfires with heavy smoke impacts on San Joaquin Valley air quality in the next several months.

People under the age of 18 and pregnant women are especially vulnerable to the effects of wildfire smoke exposure. Experts say breathing in wildfire smoke can lead to health emergencies and premature death.

FresnoLand has compiled everything you need to know about wildfire smoke and how to protect your health during this wildfire season.

## WHAT ARE THE HEALTH IMPACTS OF WILDFIRE SMOKE?

Wildfire smoke contains PM2.5 particles, which include chemicals that cause damage to every organ in the human body. Breathing PM2.5 pollution is linked to brain inflammation, impaired cognitive functioning, emergency-room visits, early-onset Alzheimer's and premature death.

A study estimated that wildfire pollution is 10 times more toxic than regular air pollution, and even short-term exposure to smoke was found to cause hard-to-reverse changes to how DNA is expressed in young adults.

Breathing in wildfire smoke can also make you more vulnerable to other ailments and diseases. For example, a recent study from *Science*, one of the world's top science journals, estimates that 2020's Creek Fire caused a 45% increase in COVID deaths in Fresno because wildfire smoke stresses and weakens the body's immune system.

Pregnant women and children are especially sensitive to the toxic effects of wildfire smoke and should take protective measures whenever possible.

Due to their higher exposures and developing bodies, children suffer lifelong consequences from PM2.5 pollution, including altered brain structure, increased risk for autism, depression, schizophrenia and suicide later in life, obesity, and asthma. Even small increases in PM2.5 exposure can increase children's risk for self-harm by 42% later in life.

Brain health is probably even more impacted by wildfire smoke than regular air pollution. A study by the California Air Resources Board also found that in addition to PM2.5, wildfire smoke contains other toxic chemicals such as high levels of lead, which is catastrophic for the brain development of babies and children.

Pregnant women should avoid exposure to wildfire smoke whenever possible. Maternal exposure to toxic air has serious health impacts on the fetus. The tiny particles in PM2.5 pollution have been found to sediment in the placenta and increase the risk for fetal death.

Women who breathe high pollution levels during pregnancy give birth to children with higher rates of health problems like pediatric leukemia, kidney cancer, eye tumors and heart malformations.

## HOW TO PROTECT YOURSELF FROM WILDFIRE SMOKE

Reducing the amount of smoke you breathe is the main goal of any protective measure. This can be done through three actions:

### INDOOR AIR FILTERS

Air filters are rated by so-called MERV levels. A MERV-13 filter, for instance, captures more pollutants than a MERV-11.

According to experiments conducted over the last year by the Central California Asthma Collaborative, your filter should be rated at least a MERV-11. "Any filter rated under a MERV-11 is simply not going to keep you safe from wildfire smoke in your home," said Kevin Hamilton, co-director of the Central California Asthma Collaborative.

While MERV-11 filters are OK at filtering wildfire smoke, Hamilton says MERV-13/14 filters offer superior protection.

Replace these filters once a month during wildfire season.

- If your AC motor is older than 10-15 years old, buy a MERV-11 filter.
- If your AC motor is less than 10 years old, buy a MERV-13/14 filter.
- Adding a HEPA filter to your car can be helpful too. Run AC on recirculate and replace every three months.

## N95 MASK

When you have to go outside when smoke is in the air, wearing a well-fitting N95 mask is essential.

FresnoLand recommends N95 masks that cost between 70 cents and \$1.10 per mask. Replace your N95 mask once a week during wildfire season.

To make sure the mask is sealed on your face, see here.

## OUTDOOR ACTIVITY

Avoid outdoor activity when the AQI is greater than 80-100 or when the PM2.5 concentration is over 25. People under the age of 18 should avoid sports and recess when the AQI is over 80.

Check PurpleAir (AQI) or SJVAir (PM2.5 concentration) for real-time air quality information in Fresno before going outside.

## FAMILY COST GUIDE

Assuming wildfire season goes from August to November, keeping your family safe from wildfire smoke will cost between \$160 and \$240 for N95 masks and AC filters. Add \$100-600 if you want the extra protection of a HEPA filter.

### \$40/MONTH + \$100 UPFRONT

- Adult masks: 3M vFlex \$6/month (assumes two adults, using one mask each per week)
- Child masks: Savewo Small KN94 (2-6), Dr. Puri Sm. KN94 (6-9), Savewo Lrg KN94 (7-13) (\$19 / month) (assumes two kids, using two masks each per week.)
- AC filter: MERV-11 filter 1 / month \$15/month
- HEPA for bedroom/living room: Medify Air or Dreo Air.

### \$50/MONTH + \$200 UPFRONT

- Adult masks: Aura \$9/month (assumes two adults, using one mask each per week)
- Child masks: Savewo Small KN94 (2-6), Dr. Puri Sm. KN94 (6-9), Savewo Lrg KN94 (7-13) (\$19 / month) (assumes two kids, using two masks each per week.)
- AC filter: MERV-13 filter: 1x month \$20/month
- HEPA filter for living room: Winnix 5500-2

### \$60/MONTH + \$800 UPFRONT

- Adult masks: Flomask \$180 upfront, \$8/month for filters
- Child masks: Savewo Small KN94 (2-6), Dr. Puri Sm. KN94 (6-9), Savewo Lrg KN94 (7-13) (\$19 / month) (assumes two kids, using two masks each per week.)
- AC filter: MERV-14 filter 1 / month \$30/month
- HEPA filter for living room: Medify air MA-112 or BlueAir 680i

## **Two California fires in the Sierra Nevada have very different outcomes. Why?**

By Alex Wigglesworth

LA Times, Saturday, July 30, 2022

The two fires started just 17 miles apart in the rugged terrain of California's western Sierra Nevada — but their outcomes couldn't have been more different.

The Washburn fire, which ignited July 7 along a forested trail in Yosemite National Park, was nearly contained, with no damage to structures or to the famed Mariposa Grove of giant sequoias.

But the Oak fire, which sparked almost two weeks later in the foothills near Midpines, confounded firefighters as it exploded to four times the size of Washburn and forced thousands to flee as it destroyed at least 106 homes. At times, the wildfire's smoke plume could be seen from space.

Why was one fire so much more destructive?

Experts attribute the difference to variations in weather, vegetation and topography. The management history of each landscape also played a role: Yosemite boasts decades of active stewardship, including prescribed burns, while areas outside the park bear a legacy of industrial logging and fire suppression.

The Washburn fire started along a trail on the edge of the Mariposa Grove, just downhill from the road used by shuttle buses to ferry tourists from a parking lot.

Since vegetation along the trail was dense, and flames travel more quickly uphill, officials worried that the fire would grow hotter, gain speed and slam into the sequoia grove, said Yosemite Fire Chief Dan Buckley. That could result in a high-severity crown fire similar to those that have destroyed an estimated 20% of the world's population of the ancient giants since 2020, he said.

But luck was on the side of the fire officials: Two Yosemite battalion chiefs were teaching a chainsaw class to a sizable contingent of firefighters in the nearby Wawona area and were able to quickly respond, along with a water tender, two engines and the park's water-dropping helicopter.

As the engines sprayed burning sequoias, park rangers enlisted civilian tour bus drivers to evacuate more than 450 visitors from the grove.

"They actually had to drive through flames on both sides of the road when they were taking these people out," Buckley said. The rescue was completed in about 90 minutes, allowing firefighters to focus on the flames, he said.

When the fire spread to the Mariposa Grove, it met a prescribed burn area that crews had treated in 2017, reducing the amount of brush and duff, or decaying vegetation, that would otherwise have helped the flames travel faster. Also, the winds picked up slightly and pushed flames away from the heart of the grove and downhill toward Wawona.

Those factors allowed firefighters to build a flanking line and steer flames around the grove, said Mike Theune, fire information officer for the National Park Service's Pacific West region.

When the Oak fire started the afternoon of July 22 in a patch of oak grassland, temperatures reached the 90s, and humidity was in the single digits. It took just 16 hours for the blaze to leapfrog the Washburn fire in size as it burned through steeper, less accessible, more populated terrain.

"The Oak fire started much lower in elevation. It's much drier," said Adrienne Freeman, fire information officer with the U.S. Forest Service. "And the key thing is it's a different fuel type. There's a heavy brush component."

Parched brush and grass helped spread flames into stands of dense timber littered with conifers that had been killed by drought and bark beetles, Freeman said.

California's drought, which has been intensified by climate change, has killed upward of 100 million trees in the central and southern Sierra, said Scott Stephens, professor of fire science at UC Berkeley. Dead and fallen trees that are overgrown by shrubs burn extremely effectively. When enough ignite at once, they draw in oxygen that increases the burning rate, Stephens said. Researchers call this a "mass fire," a term that was coined to describe the effects of incendiary bombing attacks in World War II, he said.

"It actually creates a localized low-pressure system," he said.

Stephens was part of a team of researchers that documented this behavior in the 2020 Creek fire for a study published in May in *Forest Ecology and Management*. They found dead biomass, followed by live tree density, to be the two most important variables when it comes to predicting fire severity.

"Someone showed me a picture of the Oak fire, and it had a pyrocumulus cloud created above it at least 20,000 feet in height," Stephens said. "That gets me wondering if we're seeing similar behavior, at least in parts of that fire."

The density of the vegetation is tied to the history of the land, which was logged starting in the mid-1800s.

“The Oak fire is burning in areas that have had big trees removed and lots of moderate and small trees brought in, and that homogeneity is going to make it worse,” Stephens said.

Also, Mariposa County is the ancestral home of the Southern Sierra Miwuk, who regularly set controlled fires — that is, until white settlers criminalized cultural burning. Its absence has upended the balance of the ecosystems, the Miwuk and fire scientists say. The area where the Oak fire began had not burned in nearly 100 years, according to fire history maps.

“This landscape here specifically needs healthy fire,” said Clay River, director of the Miwumati Healing Center, which serves as the hub for Miwuk health and social services.

After the Miwuk were violently evicted from Yosemite Valley for the formation of the national park, they were forcibly relocated to the foothills along what is now Highway 140, where the fire began, River said. Many are now watching their homes and cultural sites burn, she said.

Acknowledging the benefits that cultural burning once offered to forest resilience, park officials have sought to bring low-intensity fire back to the landscape in the last 50 years. They have managed fires in the backcountry for resource benefits since 1972, resulting in a mosaic of small fire footprints that self-limit new starts, Buckley said. They have also performed a series of prescribed burns, including 22 in the Mariposa Grove alone.

Still, in the days that followed the Washburn fire’s initial advance, officials worried that it might circle back around and threaten the grove. The area contained dead trees and brush from a January 2020 wind event that blew down 28 mature giant sequoias and thousands of other trees.

But firefighters reported a major victory about three days into the fight, when they were able to hold the fire at Wawona Road to the west.

Officials credited a 2020 biomass removal project led by Garrett Dickman, a park forest ecologist, and the Mariposa County Resource Conservation District, with funding from a California Climate Investments grant. Teams removed close to 9,000 tons of vegetation along three miles of the road between Wawona and the Mariposa Grove, which they hope to follow with a series of prescribed fires, Dickman said.

When flames reached the site of the project, they dimmed and in some places extinguished, Dickman said. Firefighters were able to stand on the road and douse hot spots, freeing up personnel to aggressively protect Wawona and the grove.

Some models indicated that had the fire launched embers over the road, it could have burned into Wawona, Fish Camp, Ponderosa Basin or Lushmeadows, Dickman said.

“It would have been a very, very, very different fire,” he said.

## **July 29 Oak Fire Update: 116 Homes Destroyed, Minimal Growth, 45% Containment**

By Bill McEwen, News Director  
GV Wire, Friday, July 29, 2022

Favorable overnight weather conditions enabled crews to knock down more of the Oak Fire in Mariposa County, officials said Friday morning.

The fire, which broke out the afternoon of July 22 near Midpines, has charred 19,208 acres and destroyed 162 structures — including 116 homes, Cal Fire reported.

The cause of the fire is under investigation.

“Fire crews, along with cooperating agencies, are working around the clock to repopulate the areas within the fire perimeter,” Cal Fire said in its Friday morning incident report.

“Crews continue to work around communities patrolling for hot spots and providing structure defense. Firefighters are building and improving direct fire lines in extremely steep, rugged, and difficult-to-access

terrain. Persistent drought, critically dry fuels, and tree mortality remain contributing factors to the fire's spread. Damage inspection will continue until all areas of the fire have been assessed."

### **Evacuation Orders and Other Information**

You can view road closures, evacuation orders, and animal evacuation information at this link.

### **PG&E Donates \$90K for Fire Relief Efforts**

PG&E announced Friday afternoon that it was donating \$90,000 to support relief efforts and assist residents displaced by the Oak Fire and other ongoing western wildfires.

\$50,000 will go to the Mariposa County Community Foundation and \$40,000 to the Red Cross Northern California Coastal Region.

"These donations reflect the dedication that PG&E has to our hometowns," said Joshua Simes, vice president of PG&E's Central Valley Region, in a news release. "Many of our coworkers responding to this fire and their families and friends live and work in the Mariposa area. And we all know the impact wildfires have on communities we serve."

Said Mariposa Community Foundation President David Butler: "We especially appreciate the timing of this donation to allow the Community Foundation to respond and assist those residents affected by the Oak Fire."

PG&E crews are working to restore service to 730 customers affected by the Oak Fire, the utility said.

### **GoFundMe Accounts Verified**

GoFundMe announced in a news release this week that it "will identify all verified fundraisers created to help those who have lost their businesses, homes, and have been displaced by the Oak Fire in Mariposa County. "

Here is a look at two families in need of help:

- Steve Pratt made it out of his home with his dog, truck, and a small bag of clothes. He's lived in Mariposa for over 30 years. His son Kyle launched a GoFundMe to help his dad with his finances because along with his 98-year-old grandmother.
- Nearly \$7,500 has been raised to support Bud, Darcelle, and Buddy Warren. The family had lived in their homes on Jerseydale Road since 1969. Jean Warren launched a GoFundMe for her parents and brother. She writes: "My brother works for the USDA Forest Service on Signal Peak Lookout during the summer. My father is retired from the Forest Service and Yosemite National Park Service. My father was a firefighter for many years in the Sierra Nevada Forest, including at Jerseydale Fire Station. My father is 91 years old and is in feeble health, and my mother provides his care."

## **Northern California forest fire forces evacuations as heat breaks all-time records**

By Gregory Yee

LA Times, Friday, July 29, 2022

A fire burning amid all-time record heat and thunderstorms producing dry lightning has forced evacuations in Northern California's Siskiyou County.

The McKinney fire started about 1½ miles west of Walker Creek Bridge, on the south side of the Klamath River, Klamath National Forest officials said in a tweet shortly before 3 p.m.

By 8:30 p.m., it had grown to about 300 acres, forest officials tweeted.

Officials believe the blaze has grown even more, but early efforts Friday were focused on fire suppression rather than mapping, said Jennifer Erickson, a forest spokesperson.

Other agencies, including the California Department of Forestry and Fire Prevention, are assisting U.S. Forest Service firefighters with "an aggressive initial attack," Erickson said.

Air and ground resources have been deployed and more requested, although the number of firefighters assigned to the incident was not available Friday night.

"It's burning in an area with no recent recorded fire history," Erickson said. "It's extremely hot and dry. It's challenging conditions."

Another day of extreme heat was forecast for Saturday, said Dan Weygand, a meteorologist with the National Weather Service office in Medford, Ore.

A weather station at Montague-Yreka Airport has registered three straight days of its highest temperatures on record, Weygand said.

Wednesday's high at the weather station was 110 degrees, he said; highs on Thursday and Friday were 111.

The previous all-time high of 109 degrees was recorded June 27, 2021, he said, adding that the temperature records date to 1948. Normal highs for the area in late July are around 95 degrees.

Thunderstorms came through the region producing dry lightning, but none of the storms were recorded over the area where the fire is burning, Weygand said.

Officials don't know whether a lightning strike sparked the blaze.

Additional thunderstorms are forecast for the area over the weekend. Though meteorologists expect some chance of rain, storms at this time of year typically don't produce enough precipitation to prevent fires from starting.

Firefighters are pursuing a full-suppression strategy, with air resources including eight tankers, five helicopters, two air tactical aircraft and two lead planes assigned to the fire, Erickson said.

Lead planes provide initial scouting of drop zones and direct air tankers to the drops, according to the National Interagency Fire Center.

Authorities know of structures near the fire that are threatened, but an official tally wasn't available Friday night, Erickson said.

Siskiyou County officials have ordered residents in eight zones to evacuate.

A map of areas affected by evacuation orders and warnings is available at [community.zonehaven.com](http://community.zonehaven.com).

## **California not counting methane leaks from idle wells**

By Drew Costley, AP Science Writer

In the Fresno Bee, Modesto Bee and other papers, Mon., Aug. 1, 2022

California claims to know how much climate-warming gas is going into the air from within its borders. It's the law: California limits climate pollution and each year the limits get stricter.

The state has also been a major oil and gas producer for more than a century, and authorities are well aware some 35,000 old, inactive oil and gas wells perforate the landscape.

Yet officials with the agency responsible for regulating greenhouse gas emissions say they don't include methane that leaks from these idle wells in their inventory of the state's emissions.

Ira Leifer, a University of California Santa Barbara scientist said the lack of data on emissions pouring or seeping out of idle wells calls into question the state's ability to meet its ambitious goal to achieve carbon neutrality by 2045.

Residents and environmentalists from across the state have been voicing concern about the possibility of leaking idle or abandoned wells for years, but the concerns were heightened in May and June when 21 idle wells were discovered to be leaking methane in or near two Bakersfield neighborhoods. They say that the leaking wells are "an urgent public health issue," because when a well is leaking methane, other gases often escape too.

Leifer said these "ridealong" gases were his biggest concern with the wells.

"Those other gases have significant health impacts," Leifer said, yet we know even less about their quantities than we do about the methane.

In July, residents who live in the communities nearest the leaking wells protested at the California Geologic Management Division's field offices, calling for better oversight.

"It's clear that they are willing to ignore this public health emergency. Our communities are done waiting. CalGEM needs to do their job," Cesar Aguirre, a community organizer with the Central California Environmental Justice Network, said in a statement.

Robert Howarth, a Cornell University methane researcher, agreed with Leifer that the amount of methane emissions from leaking wells isn't well known and that it's not a major source of emissions when compared with methane emissions from across the oil and gas industry.

Still, he said, "it's adding something very clearly, and we shouldn't be allowing it to happen."

A ton of methane is 83 times worse for the climate than a ton of carbon dioxide, when compared over twenty years.

A 2020 study said emissions from idle wells are "more substantial" than from plugged wells in California, but recommended more data collection on inactive wells at the major oil and gas fields throughout the state.

Robert Jackson, a Stanford University climate scientist and co-author on that study, said they found high emissions from some of the idle wells they measured in the study.

In order to get a better idea of how much methane is leaking, the state of California is investing in projects on the ground and in the air. David Clegern, a spokesperson for CARB, said the agency is beginning a project to measure emissions from a sample of properly and improperly abandoned wells to estimate statewide emissions from them.

And in June, California Governor Gavin Newsom signed a budget that includes participation in a global effort to slash emissions called the Methane Accountability Project. The state will spend \$100 million to use satellites to track large methane leaks in order to help the state identify sources of the gas and cap leaks.

Some research has already been done, too, to find out how much methane is coming from oil and gas facilities. A 2019 Nature study found that 26% of state methane emissions is coming from oil and gas. A new investigation by the Associated Press found methane is billowing from oil and gas equipment in the Permian Basin in Texas and companies under report it.

Howarth said even if methane from idle oil and gas wells isn't a major pollution source, it should be a priority not just in California, but nationwide, to help the country meet its climate pledges.

"Methane dissipates pretty quickly in the atmosphere," he said, "so cutting the emissions is really one of the simplest ways we have to slow the rate of global warming and meet that Paris target."

A new Senate proposal would provide hundreds of millions dollars to plug wells and reduce pollution from them, especially in hard hit communities.