Dozens of homes burn as California wildfire siege continues

By Brian Melley and Terence Chea Associated Press Bakersfield Californian, Thursday, Aug. 19, 2021

GRIZZLY FLATS, Calif. (AP) — A small wildfire swept through a mobile home park, leaving dozens of homes in ashes, the latest in a series of explosive blazes propelled by gusts that have torn through Northern California mountains and forests.

The drought-parched region was expected to see red flag warnings for dangerously high winds and hot, dry weather through Thursday.

Those conditions have fed a dozen uncontrolled wildfires, including the month-old Dixie Fire and the nearby Caldor Fire in the northern Sierra Nevada that incinerated much of the small rural towns of Greenville and Grizzly Flats.

No deaths have been reported despite the speed and damage of the blazes.

On Wednesday, a grass fire driven by winds up to 30 mph (48 kph) destroyed dozens of mobile homes in Lake County and injured at least one resident before firefighters stopped its progress, fire officials said at an evening briefing.

Rows of homes were destroyed on at least two blocks and television footage showed crews dousing burning homes with water. Children were rushed out of an elementary school as a field across the street burned.

Some 1,600 people were ordered to flee, with Lake County Sheriff Brian Martin warning of "immediate threat to life and property."

Lake County has experienced repeated wildfires in the past decade that have destroyed hundreds of homes.

At least 16,000 other homes remain threatened by California wildfires, which are among some 100 burning throughout a dozen Western states, fire officials said.

Tens of thousands of people remain under evacuation orders.

No deaths have been reported, despite the speed and ferocity of the blazes, which have at times created their own erratic winds from heated air swirling into smoke clouds. Flames also have leapfrogged miles ahead of the front lines as winds scattered embers, hot ash and chunks of wood into dry vegetation, said Thom Porter, chief of the California Department of Forestry and Fire Protection.

"This is not going to end anytime soon," he said of the Dixie Fire. "Everybody's going to be sucking smoke for a long time."

Fire crews were able to make some progress on the Dixie Fire Wednesday, increasing containment to 35%, and some evacuation orders were lifted in Plumas and Tehama counties, where some people hadn't seen their homes for a month.

But the Dixie and Caldor fires still menaced many small clusters of homes within and around national forests along with larger communities, including Pollock Pines, with a population of 7,000 and Susanville, population 18,000, which is the seat of Lassen County.

Eldorado National Forest and Lassen Volcanic National Park were closed.

The Dixie Fire is the first on record to have burned all the way across the Sierra Nevada, starting on the western slopes of the mountain range and moving over the crest to the eastern side. It had burned more than 1,000 square miles (2,590 square kilometers) and was only a third contained.

On Wednesday, dozens of fire engines and crews were transferred from that battle to fight the Caldor Fire, which exploded through heavy timber in steep terrain since erupting over the weekend southwest of Lake Tahoe.

The fire has blackened nearly 220 square miles (570 square kilometers) and on Tuesday ravaged Grizzly Flats, a community of about 1,200.

Dozens of homes burned, according to officials, but tallies were incomplete. Those who viewed the aftermath saw few homes standing. Lone chimneys rose from the ashes, little more than rows of chairs remained of a church and the burned out husks of cars littered the landscape.

Chris Sheean said the dream home he bought six weeks ago near the elementary school went up in smoke. He felt lucky he and his wife, cats and dog got out safely hours before the flames arrived.

"It's devastation. You know, there's really no way to explain the feeling, the loss," Sheean said. "Maybe next to losing a child, a baby, maybe. ... Everything that we owned, everything that we've built is gone."

California's wildfires are on pace to exceed the amount of land burned last year — the most in modern history. The blazes also have destroyed areas of the timber belt that serve as a centerpiece of the state's climate reduction plan because trees can store carbon dioxide.

"We are seeing generational destruction of forests because of what these fires are doing," Porter said. "This is going to take a long time to come back from."

Most of the fires this year have hit the northern part of the state, largely sparing Southern California, which was expected to see clouds and even a chance of drizzle in some areas Thursday. Fire conditions in the region are expected to get worse in the fall.

California farmworkers face risks from heat, smoke. Regulations offer little protection

By Nadia Lopez Fresno Bee, Thurs., Aug. 19, 2021

Another surge of hot weather is hitting Fresno and the surrounding area this week, as smoke from nearby wildfires continues to engulf the region. These extreme conditions are leaving hundreds of thousands of farmworkers at especially high risk for heat-related illness and death, according to a recent study from UC Davis.

The danger heat illness poses to farmworkers has been a major concern for decades, but increasingly higher temperatures, a deepening drought and a longer fire season due to climate change have worsened outdoor working conditions in recent years, said Dr. Marc Schenker, founding director of the UC Davis Western Center for Agriculture Health and Safety and coauthor of the study. Farm labor is often strenuous work, which can also greatly accelerate the rate at which a person develops a heat-related illness, he added.

"Agricultural workers are the most vulnerable to heat stress," Schenker said. "Over the past two decades, the rate of occupational heat stress fatalities has increased coincident with the rising ambient temperature. And if you're doing heavy work, you're increasing your risk of heat stress substantially."

The UC Davis researchers monitored the core body temperature and work rate of 587 Latino farmworkers on 30 farms throughout the Central and Imperial valleys during the summers of 2014 and 2015. With the use of thermistors, accelerometers and weather stations, they tracked how the environmental temperature over work shifts contributed to the likelihood of heat illness.

The researchers found that workers' risk for heat-related illness was exacerbated by work rate and environmental temperature, even when farms followed regulations mandated by the California Division of Occupational Safety and Health, also known as Cal/OSHA.

The researchers suggested that future revisions of the state's regulations include more robust protections for farmworkers, including limiting the type of tasks farmworkers perform on exceptionally hot days, adjusting work rates, hydration recommendations and rest breaks according to the weather and requiring heat illness training "tailored to the cultural and behavioral needs of the workforce." They said it is critical that supervisors also model these behaviors.

The study was published in June in the Journal of Occupational and Environmental Medicine.

Though the study was conducted several years ago, Schenker said it's even more relevant now, due to the shift in weather patterns that have not only caused severe outdoor temperatures, but also a prolonged drought.

Just last month, Fresno hit an all-time high during a record-shattering heatwave, becoming the hottest midsummer month in history. Twenty seven of July's 31 days saw triple-digit highs, with the highest temperature in Fresno reaching 114 degrees on July 11, breaking the previous record of 110 degrees set in 1961.

August has brought little relief.

Temperatures in Fresno this week are expected to hover around 95 degrees through Friday, according to the National Weather Service. Highs are forecast to reach 100 degrees, while lows are expected to be near the mid-60s.

The peak harvest season, which involves arduous outdoor labor for long hours at a time, coincides with the hot summer, creating "serious occupational health risks" for the outdoor workforce, the study shows.

California has about 800,000 employed farmworkers across the state, according to a separate UC Berkeley study. The state's agricultural industry produces about \$50 billion in revenue each year. Amid the pandemic, frontline agricultural workers have faced unprecedented hot weather, a surge of COVID-19 infections and unsafe exposure to wildfire smoke.

FARMWORKERS MORE LIKELY TO DIE FROM HEAT ILLNESS

According to the study, heat illnesses such as heat exhaustion and heat stroke occur when an individual's body temperature rises too quickly due to environmental exposure to heat.

Prolonged exposure to heat can produce a range of symptoms including "headaches, dizziness, cramps, fainting, rapid heartbeat, disorientation," and in more severe cases, shock and death, it said.

California is one of four states that has existing safety standards for those working in extreme heat. The state set a precedent in 2005 when it became the first to establish a standard to protect outdoor workers from heat exposure. When temperatures exceed 80 degrees, Cal/OSHA requires employers to provide shade structures, water stations and sufficient rest breaks from the sun. In addition, employers are required to take immediate action, such as offering onsite first aid or emergency medical services, if a worker is displaying signs of heat illness.

Still, no federal standards exist. And while the UC Davis researchers found California's safety measures alone don't protect farmworkers from heat illness and death, the state's regulations have helped lower the fatality rate among its farmworkers. Meanwhile, in other states where no protections exist, farmworkers are subject to die at much higher rates.

On average, the researchers found that crop workers are 20 times more likely to die from heat illness than a civilian worker.

Tracking the number of farmworkers who get sick or die from heat-related illness is difficult to measure because these occurrences are not systematically recorded in workplace settings, the researchers found. But the lack of federal rules also make it challenging to quantify, they said. Farms with fewer than 11 employees are not required by the federal government to report heat illness, for example, while the U.S. Bureau of Labor Statistics "only counts incidences of heat illness when there has been at least one day's work lost."

Cal/OSHA confirmed 17 deaths and 193 injuries of agricultural workers due to heat illnesses between 2005 and 2020, according to agency data. The agency is still investigating suspected cases of heat-related deaths this year, according to agency spokesperson Frank Polizzi.

Immigrant farmworkers, many of whom are also undocumented, regularly fear retaliation from their employers if they report feeling ill on the job, the study found. The researchers also examined surveys of farmworkers in other states. About 40% of farmworkers in North Carolina, 31% in Washington and 84% in Florida said they experienced symptoms related to heat illness.

Schenker said it's "frustrating" federal protections haven't been mandated, despite conditions growing more dangerous.

"Only four states have a standard — none are perfect, but that's only a fraction of the U.S. farmworker population," he said. "Absolutely there should be a federal standard... but the reality is that federal OSHA is just not very effective."

SMOKE FROM CALIFORNIA WILDFIRES THREATEN WORKERS' HEALTH

But protecting agricultural workers from heat illness could require more than safety regulations.

Leydy Rangel, UFW Foundation's national communications manager, said the pay structure on some farms also affects how susceptible farmworkers are to heat illness.

Some workers are paid by the hour, while others are paid by how much they produce over the course of a shift. She said the workers who get paid "piece-by-rate" wages are often encouraged to push themselves past their limits to receive a higher payment, rather than focusing on their health and well-being.

"Piece-by-rate wages really create an incentive for workers to not slow down, to not take breaks, to not adequately hydrate and to really push their bodies beyond what it's meant to endure so that they can earn a little bit more money at the end of the day," she said. "That's also why it's important that employers are communicating to their workers what they need to do to protect themselves."

The researchers agreed, noting that the "power structure dynamics" on farms, especially piece-rate pay, "make self-care decisions difficult and expensive for farmworkers."

Farmworkers also face greater risk to their health due to exposure from wildfire smoke.

A thick layer of haze from nearby wildfire smoke has created hazardous air quality conditions across the entire San Joaquin Valley, according to the San Joaquin Valley Air Pollution Control District. The agency this week issued a health caution for the region until the fires are extinguished and the air quality improves.

Valley air officials warn poor air quality can cause asthma attacks, aggravate chronic bronchitis and increase the risk of heart attack and stroke among vulnerable groups. Individuals with heart or lung disease and those with respiratory conditions like COVID-19 are especially susceptible to experiencing complications and difficulty breathing in the heat and smoke.

Farmworkers, who were already disproportionately affected by COVID-19, are at even more risk of developing chronic conditions due to wildfire smoke, Rangel of the UFW Foundation said. That's why it's important employers provide farmworkers with N95 masks and enforce their use, she said.

"It's so vital that they wear these masks and it's important that they protect themselves," she said. "There are many farmworkers who have a shorter average life expectancy and it's because of all of these different elements of the hazardous working conditions that they have to labor under."

What data shows about Dixie Fire's rapid growth and how it's different

By Yoohyun Jung

San Francisco Chronicle, Thursday, August 19, 2021

The Dixie Fire started as a single blaze from a fallen tree near the Cresta Dam in Plumas County, but a perfect storm of bad conditions — low humidity, high winds, warm temperature and inaccessible terrain — fueled its growth into a massive fire sprawling across four counties.

At over 635,000 acres in size and still growing, Dixie has become the second largest fire in California's recorded history. The fire, which has destroyed about 1,200 structures thus far, originated and initially spread in a steep and inaccessible area near Feather River Canyon where firefighters struggled to contain the fire. It quickly grew to become the largest fire in state history that is not a complex fire, which are fires that start as multiple separate fires that merge into one.

An analysis of Dixe's growth path shows that Dixie's biggest growth spurts happened during days with high temperatures, low humidity, and strong winds. The National Weather Service calls days with these conditions "red flag warning" days because of the increased fire danger in these conditions.

Dan McKeague, a U.S. Forest Service spokesperson for the east zone of Dixie Fire, says that Dixie's rapid size increase is the result of a combination of dry weather and the difficulty of fighting fires in this part of California due its unusual topography.

"Any time you have conditions like this, it's going to test our containment lines and create a challenge for firefighters," McKeague said. And that's what happened between Aug. 4 and 5 when a red flag warning was in effect from 1 p.m. on the fourth until 8 p.m. the following evening. During that time, there was about a 100,000-acre jump in the total acreage burned.

Under extremely dry conditions, the flames can get as tall as 200 feet high, the Forest Service spokesman said. Firefighters can't directly attack flames like that. Typically, firefighters can only directly tackle flames that are 2 to 4 feet high.

The red flag warning returned Aug. 16, when fire officials observed more big jumps in fire growth and extreme fire behavior, McKeague and others said. Nearly 50,000 acres burned between Aug. 16 and the morning of Aug. 18. Cal Fire Chief Thom Porter said Wednesday that Dixie is "exceedingly resistant to control."

Dixie's uncontrollable growth is surprising, said Brandon Collins, a researcher at the UC Berkeley Stephens Lab for Research and Education in Wildland Fire Science. It originated in an area that has experienced several different wildfires since 2000, meaning there shouldn't be much of the dead vegetation exacerbate fire growth left to burn, he said.

But Collins said there was clearly still enough vegetation to fuel Dixie, and that's like a result of the exceptionally dry and hot summers. "If I had to start putting my finger on something here, I think it's the live vegetation that is a heck of a lot drier than it's probably used to being," Collins' opinion is supported by data from federal agencies indicating the moisture levels in the area around the fire are historically low.

he Dixie Fire has also grown past what Collins says are "natural breaks" in wildfires' growth, such as roads, rocky ridges, and bridges. Firefighters often guide fires in the direction of these breaks to contain them. In the case of the Creek Fire in 2020, which burned about 380,000 acres in Fresno and Madera counties, the fire began to stabilize after hitting a natural break, he said.

"It could have gotten a heck of a lot bigger, but it just ran out of fuel because it was getting up into the high Sierra's," he said. But Dixie appears to have ploughed through similar natural breaks, including roads and ridges, gaining force on particularly bad weather days.

Even though Dixie is a single-start fire and not a complex fire, its exponential growth resembles the August Complex Fire in 2020 — the largest fire in California history — rather than that of the Creek Fire, which is the next largest single-start fire in the state. The August Complex Fire was a combination of 38 different fires and burned over 1 million acres of land.

The extreme drought conditions in the state are also fueling other major fires right now, the largest ones being the Beckwourth Complex, McFarland and Monument fires. Collins of UC Berkeley said fire experts initially watched Beckwourth Complex closely, as that fire seemed to show greater growth potential, but none of those fires have grown at the same explosive rate as Dixie thus far.

It's hard to say what exactly needs to be done to control this fire, Collins said. Dixie has been unpredictable and resistant. "We're just really hoping for some change in the weather that's going to cool things down a little bit," the researcher said.

But what science has shown again and again is that forest management practices, including prescribed burns, and conducting them at a meaningful scale, are critical in preventing massive wildfires like Dixie, he added. "There's no new solution here. It's really an issue of commitment from leadership and scale."

Sequoia National Forest's Walkers Fire continues to grow

By Sheyanne N Romero Visalia Times-Delta, Wednesday, August 18, 2021

As several major wildfires incinerate large portions of Northern California, one Tulare County wildfire is steadily growing.

The Walkers Fire was discovered Sunday and is burning in the Golden Trout Wilderness in the Western Divide Ranger District in Seguoia National Forest, U.S. Forest Service officials reported on Tuesday.

The fire is located roughly 18 miles northeast of Springville, within the burn scar of the 2015 Cabin and 2011 Lion fires. It's ballooned to nearly 2,000 acres and is zero percent contained.

The fire is spreading in all directions through drought-stricken brush, standing dead trees and a lot of dead and down vegetation, stated Denise Alonzo, spokeswoman for forest service.

On Monday, four air tankers were sent to the area to slow the spread. Due to the remote location, crews are being shuttled in by helicopters.

No structures are immediately threatened, according to crews. However, firefighters are planning to protect wilderness structures located farther from the fire's edge as the fire is expected to grow.

"The forest service always prioritizes the safety of its firefighters and surrounding communities," Alonzo stated. "During difficult seasons such as this one, firefighting resources are limited, requiring risk assessment of multiple fires that are competing for limited resources."

Over the last decade, several fires have burned in the area. The northern perimeter of the 2020 Castle Fire is located south of the Walkers Fire and is expected to stop fire from threatening communities south of the wilderness boundary, Alonzo said.

There are three interagency hotshot crews, two hand crews, three helicopters, an air attack plane, and several overhead personnel are assigned to the fire. A total of 150 firefighters are at the incident.

Wilderness trailheads in the area remain closed under the Castle Fire Area, Roads, and Trails Closure. To receive emergency notifications regarding evacuations and critical events in Tulare County, sign up at alerttc.com.

Devastating wildfires advancing through Northern California

By Ethan Swope and John Antczak Associated Press, Terence Chea The Business Journal, Wednesday, August 18, 2021

GRIZZLY FLATS, Calif. (AP) — Wind-driven wildfires raged Wednesday through drought-stricken forests in the mountains of Northern California after incinerating hundreds of homes and forcing thousands of people to flee to safety.

A reversal of wind direction was expected to test some previously quiet fire containment lines, but also push flames back in other areas, authorities said.

The newest inferno, the Caldor Fire, continued to grow explosively in the Sierra Nevada southwest of Lake Tahoe, covering 84 square miles (217.5 square kilometers) after suddenly ravaging Grizzly Flats, a community of about 1,200.

At least 50 homes burned there but tallies were incomplete because officials had not been able to make thorough assessments of the damage in Grizzly Flats. Two people were hospitalized with serious injuries on Tuesday and about 5,900 homes and other structures were threatened by the fire.

In the Sierra-Cascades region about 100 miles (161 kilometers) to the north, the month-old Dixie Fire expanded by thousands of acres to 993 square miles (2,572 square kilometers) — two weeks after the blaze gutted the Gold Rush-era town of Greenville. About 16,000 homes and buildings were threatened by the Dixie Fire, named for the road where it started.

"It's a pretty good size monster," Mark Brunton, a firefighting operations section chief, said in a briefing.

"We're not going to get this thing overnight," he said. "It's going to be a work in progress — eating the elephant one bite at a time kind of thing — and it's going to be a long-haul mindset. It's a marathon and not a sprint."

The Caldor and Dixie fires are among a dozen large wildfires in the northern half of California. In contrast, Southern California has had few wildfires recently. Very moist ocean air even ushered in occasional drizzle or light rain on Wednesday.

But Northern California's wildfires have left scenes of utter devastation.

Few homes were left standing in Grizzly Flats, where streets were littered with downed power lines and poles. Houses were reduced to smoldering ash and twisted metal with only chimneys rising above the ruins. A post office and elementary school were destroyed.

Hulks of gutted vehicles littered the ruins and the skeletons of chairs stood in rows among the ashes of a church.

Derek Shaves, who fled Grizzly Flats late Monday, said he visited the next day, finding that his home and most of the houses in his neighborhood were gone.

"It's a pile of ash," he said. "Everybody on my block is a pile of ash and every block that I visited — but for five separate homes that were safe — was totally devastated."

All 7,000 residents of the town of Pollock Pines on Tuesday were ordered to evacuate because of the fire.

To the north at the Dixie Fire, numerous firefighting resources were deployed into the area of Susanville, a city of about 18,000 a few miles from the northeastern edge of the blaze, where residents have been warned to be ready to evacuate.

Fire officials said early Wednesday that the fire did not push toward Susanville overnight, and that was one location where the switch in wind direction to the northeast could push flames back on themselves.

Late Tuesday, Pacific Gas & Electric began shutting off power to as many as 51,000 customers in 18 Northern California counties to prevent wildfires for the first time since last year's historically bad fire season.

The utility said the shutoffs were focused in the Sierra Nevada foothills, the North Coast, the northern Central Valley and the North San Francisco Bay mountains and could last into Wednesday afternoon.

The nation's largest utility announced the blackouts as a precaution to prevent gusts from damaging power lines and sparking blazes.

PG&E has notified utility regulators that the Dixie fire may have been caused by trees falling into its power lines. The Dixie Fire began near the town of Paradise, which was devastated by a 2018 wildfire ignited by PG&E equipment during strong winds. Eighty-five people died.

The Dixie Fire is the largest of nearly 100 major wildfires burning across a dozen Western states, including Alaska. The wildfires, in large part, have been fueled by high temperatures, strong winds and dry weather.

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

Fire breaks out west of Lake Isabella

The Bakersfield Californian, Wednesday, Aug. 18, 2021

The Kern County Fire Department said a fire, named the French Fire, broke out west of Lake Isabella on Wednesday. By about 9:15 p.m. it had grown to 2,000 acres.

There was no containment as of 5:45 p.m., said Erica Bain, the public information officer for the KCFD. Firefighters are on the scene and determining the best course of action. Windy conditions could make controlling the fire difficult, Bain added.

Evacuation orders were issued for the Sawmill community, according to the KCFD on Twitter. Red Cross has created an evacuation center at Kern River Valley Senior Center, which is located at 6403 Lake Isabella Road, Lake Isabella.

Editor's note: A previous version of this article misidentified the direction of the fire.

How close is the fire that's causing bad air quality and thick smoke to blanket Fresno area?

By Bryant-Jon Anteola Fresno Bee, Wed., Aug. 18, 2021

The thick smoke that rolled above Fresno on Wednesday evening is expected to last through the weekend, according to the National Weather Service in Hanford.

But one might be surprised how far the fires are that generated much of the smoke.

Due to an upper-level, low-pressure system that moved into the northwest coast, winds from the north pushed down smoke that originated from fires in northern California, NWS meteorologist Jim Bagnall said.

Among the NorCal fires still actively burning is the Dixie Fire, which has torched 635,728 acres spread over Butte, Plumas, Tehama, and Lassen counties, according to Cal Fire.

That's roughly 200 miles from Fresno.

Nonetheless, smokey clouds now have blanketed much of the Fresno area with poor air quality rolling in, too. Wednesday's air quality index read at 139, which is considered unhealthy for sensitive groups.

"All the smoke from the fires to our north has steered down our way," Bagnall said. "It's not uncommon for smoke to travel that far away. There's just a lot of fires that need putting out, and a lot of smoke that's hovering and moving.

"The wind decided to blow to smoke our direction."

There was one positive from the upper-level, low-pressure system for the Fresno area: The winds helped dropped daily temperature highs below 100 degrees for just the second time in the past 23 days.

Wednesday's high was at 90 degrees. Thursday's high is forecast at 94 degrees.

And triple-degree heat isn't expected to return to the Fresno area until Wednesday, the NWS predicts.

"The cooler temperatures is one plus with this weather pattern," Bagnall said. "But with the bad air quality, it's just best to stay indoors right now as much as you can."