California wildfires reach historic scale and are still growing

Governor appeals for firefighting help nationally as tens of thousands are displaced; Trump declares 'major disaster'



Firefighters produce the Friday in Napa County, Calif., against flames from the LNU Lightning Complex fires. (Noah Berger/AP)

By Andrew Freedman, Heather Kelly, Hannah Knowles and Jeanne Whalen August 22, 2020 at 5:40 p.m. PDT

It was all hands on deck at Cal Fire's headquarters in Sacramento on Saturday, where the agency's top lawyer was pitching in answering phones.

"I can't sit at home and watch what's going on. I have to do something," said chief counsel Bruce Crane, 61, who was a firefighter in the 1980s. Back then, he and his colleagues thought a

50,000-acre fire was big, so the current 314,207-acre fire across Napa, Lake, Solano and Sonoma counties is "just mind-bogglingly huge," Crane said.

The heat wave and lightning-sparked barrage of California wildfires continues to escalate, with one of the blazes now ranking as the second-largest fire in state history, while another also occupies a spot in the top five. The fires have claimed hundreds of homes and threaten tens of thousands more, forcing more than 100,000 to

flee amid a coronavirus pandemic that vastly complicates evacuation decisions.

Cal Fire is directing a force of 13,700 firefighters battling the blazes, Crane said. That includes pilots dropping water or fire retardant, and 250 teams using chain saws, shovels, bulldozers and hand tools to cut wide dirt paths through the landscape to remove vegetation, he said.

"You want to make a mini road of bare dirt right next to the advancing fire. The fire will hit that mini road of bare dirt and run out of fuel," Crane said. "That's great unless you have a strong wind and then the wind will blow embers" across the dirt lanes, he said.

Beyond Cal Fire's immediate force, specialists from the U.S. Forest Service, the California National Guard, and county and local fire departments also are pitching in, Crane said. And about 80 fire engines have arrived or are on the way from out of state to help.

"We've got a large fighting force, but you just can't have enough for this large of an incident," Crane said. "The governor has thrown a lot of money at Cal Fire; he's really given us a lot of support, but this is unprecedented."

Although firefighters have seen a letup in the high winds and heat that plagued Central and Northern California for much of the week, another round of thunderstorms that will deliver little rain but lightning that could start even more blazes is anticipated beginning early Sunday and lasting through Tuesday.

The fires have been blamed for <u>at least six</u> <u>fatalities</u>.

President Trump <u>declared</u> a "major disaster" in California on Saturday and ordered federal aid to areas affected by wildfires since Aug. 14.

The president has clashed publicly with the Democrat-led state and has repeatedly suggested that he might not put federal money toward wildfire measures there, faulting California as not adequately clearing its forest floors.

Aid related to the major disaster declaration could include "grants for temporary housing and home repairs, low-cost loans to cover uninsured property losses, and other programs to help individuals and business owners recover from the effects of the disaster," a White House news release said.

Federal funding also could go toward "hazard mitigation measures" across the state and toward government and nonprofit entities for "emergency protective measures" in seven counties: Lake, Napa, San Mateo, Santa Cruz, Solano, Sonoma and Yolo.

In seven days, the California blazes have charred nearly 1 million acres, according to Cal Fire, more than tripling the area burned during a typical fire season (a little more than 300,000 acres). The area burned is larger than Rhode Island.



²am, who declined to give her last name, examines the remains of her partner's home in Vacaville, Calif., on Aug. 21. The 'esidence burned as the LNU Lightning Complex fires ripped through the area on the night of Aug. 18. (Noah Berger/AP)

The largest set of blazes in the state, known as the LNU Lightning Complex, had spread to a staggering 314,207 acres across Napa, Lake, Solano and Sonoma counties by Saturday morning. It was only 15 percent contained, and firefighters reported that "extreme fire behavior" s making battling the blaze difficult.

The size of the blaze puts it behind only the Mendocino Complex Fire of 2018, which burned about 459,000 acres, on the state's list of largest fires on record since 1932. The fire complex, composed of several blazes burning in proximity, has destroyed 480 structures and threatens 30,500 more, according to Cal Fire, the state firefighting agency.

<u>California wildfires send evacuees scrambling</u> toward another threat: covid-19

Blazes burned through Big Basin Redwoods State Park, the state's oldest and home to treasured redwood trees that are between 800 and 1,500 years old. California State Parks wrote that the park, which officials closed, suffered "extensive damage."

A second large set of fires, known as the SCU Lightning Complex, now ranks as the third-largest blaze in state history, at 291,968 acres. This beats the Rush Fire of 2012, which burned about 272,000 acres.

More than 500,000 acres have been charred within a 100-mile radius of San Francisco, which is twice the land burned during the entire 2019 California fire season, according to <u>climate scientist Daniel Swain</u> of the University of California at Los Angeles.

All of the <u>top 10 fires in state history</u> have occurred since 2003.

Here are key figures on the latest blazes:

- The LNU Lightning Complex in Sonoma, Lake, Napa and Solano counties has burned 314,207 acres, up from 46,000 acres Wednesday, and is 15 percent contained. This fire is now the second-largest on record in California. This complex includes the Hennessey Fire, which has charred 261,793 acres in Napa County. The set of fires has destroyed 480 structures and threatens 30,500 more.
- The CZU August Lightning Complex in Santa Cruz and San Mateo counties has burned 63,000 acres, up from 10,000 acres Wednesday, and is 5 percent contained. It has burned 97 structures and threatens nearly 24,000 more. About 77,000 people have been evacuated.
- The <u>SCU Lightning Complex</u> of about 20 fires, affecting locations in Santa Clara, Alameda, Contra Costa, San Joaquin and Stanislaus counties, has consumed 291,968 acres, up from 85,000 acres Wednesday, and

- is 10 percent contained. This makes the fire complex the <u>third largest in California</u> history.
- The <u>River Fire</u> in Monterey County has scorched 42,583 acres, up from 10,000 acres Wednesday, and is 12 percent contained.

California has seen a significant uptick in largewildfire activity because of a combination of climate change, land-use practices and other factors. Large fires have also increased across other parts of the West, which <u>climate studies tie</u> to <u>human-caused climate change</u> that alters the timing of precipitation, makes summers hotter and vegetation drier, and leads to more days with extreme weather that enable fires to spread rapidly.



Thousands were under evacuation orders in Central and Northern California as dozens of major wildfires continued to ravage parts of the state on Aug. 19. (Amber Ferguson/The Washington Post)

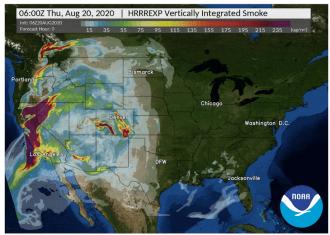
Many of the fires began when a heat wave and rare outbreak of thunderstorms produced more than 20,000 lightning strikes. The resulting fires — and "complexes" of many small fires — have merged into major conflagrations in parts of the state.

More than 100,000 people have been asked to evacuate, and they face difficult decisions about where to go. In the past, they might have stayed with friends or relatives, but now they need to calculate the risk of exposure to the novel coronavirus.

The blazes have spread smoke all the way to the Great Plains and have made air quality in parts of the Golden State deteriorate to the point where it ranks as some of the dirtiest air worldwide. Small

particles in smoke can enter people's lungs, harming those with asthma and other preexisting conditions.

The fires and their speed and thick smoke have presented a new terror amid a global pandemic — poor air quality and concerns about evacuating masses of people to crowded shelters, and that some might not heed the warnings.



A model simulation of smoke through Saturday. (NOAA)

The fires, spread across hundreds of miles, have presented an overwhelming challenge to the crews trying to corral them as California has issued a nationwide call for help. Cal Fire has said the 13,700 personnel it has deployed to fight these blazes are not enough, leading Gov. Gavin Newsom (D) to issue an urgent plea for help from the entire country.

The governor also said he was asking Canada and Australia for help. "We have more people, but it's not enough," Newsom said.

California has trained volunteer prison inmates to fight wildfires as part of its Conservation Camp Program, which was started during World War II. The inmates train and live in camps across the state, but because of the coronavirus, the number of available volunteers is down. There are usually 2,200 inmates qualified to fight fires on the front lines in the camps, but the California Department of Corrections and Rehabilitation says there are now 1,659.

"The decrease in conservation camp population is attributed to a combination of expedited and standard releases," said Aaron Francis, a CDCR spokesman.

Cal Fire says it anticipated the impacts of the coronavirus and hired additional firefighters ahead of the wildfire season.

The effects of the coronavirus and the wildfires are tangled in other ways. Bay Area residents for months have been told that outdoor spaces are safer than being indoors during the coronavirus outbreak. Now, they're being asked to stay indoors if possible.

Evacuees wait for word

Karen Moore, 60, was already struggling after the coronavirus pandemic shut down her massage business. She was stuck paying rent on a closed space downtown, and even when she started working out of a tent in her backyard, many clients feared the close contact.

Then, on Tuesday, she got evacuation orders as the CZU Lightning Fire drew nearer. She left Boulder Creek, the gateway to Big Basin Redwoods State Park, with her three cats, some clothes, electronic devices and a wooden angel from her mother, which she prays to as she waits to learn whether her home of 24 years will go up in flames.

She's spent the past four days moving from one friend's house to another.

Now she's in Morgan Hill, about to pack up for Brisbane. She's one of the lucky people with a support network to lean on, as others sleep in their cars or head to indoor shelters where people try their best to maintain social distancing.

"I'm feeling pretty blessed," Moore said Saturday. Her latest information — gleaned from the news and a network of neighbors and word from first responders — indicates that her spot on Creek Drive has been spared.

But images have emerged of a house engulfed in fire a street away. Her home is reportedly surrounded by hot spots. And she's heard that more stormy weather Sunday could bring a new

round of the lightning blitz that sparked hundreds of fires this past week across California.

"We're praying it just brings moisture without the lightning," she said.

She tries not to worry about the hypotheticals: "One day at a time," she says.

On Saturday, Anita Good was still waiting for news of her neighborhood in Boulder Creek. She's found refuge at the Santa Cruz Civic Auditorium, where about 80 people are living in tents set up indoors to minimize the potential spread of the coronavirus. She has COPD, making the smoky air especially oppressive and the virus particularly worrying.

It was her 59th birthday. She had little to celebrate.

Earlier this week, despite officials' pleas, she drove back to her home to grab some of her things. She was at the hospital undergoing eye surgery when the evacuation orders came down, so she had nothing. The hospital had to give her tennis shoes.

The house was "eerie" when she arrived, she said. Ashes had come in through an open back door. It pained her to leave the vegetable plot she'd planted with tomatoes, cucumbers, zucchini and lots of peppers in memory of her late father, an avid gardener and pepper fiend.

"I said goodbye to my house," she said.

Good says fire officials were at the evacuation center Saturday. They sounded worried about the lightning expected Sunday, she said.

Back in Boulder Creek, some people are still defying evacuations, trying to save their community. One man spent Friday night digging a "fire line" that he hopes will protect multiple homes, says his neighbor Cheryl Martin.

He's part of a tightknit, resilient community where people are used to helping one another when the power goes out for days, Martin said. Many residents have lived in the area a long time. Some went through a massive 1989 earthquake.

"There are some pretty tough characters," she said.

Martin, a 61-year-old high school teacher, got out Tuesday as the smoke became so thick that she wore a mask in the house. Her husband waited until she was on the freeway, she said, to tell her he was going to stay. He left Thursday, only when the fire drew so close he could see its glow.

Even if Martin's home survives, a treasure six miles away is badly damaged by the fire: Big Basin Redwoods State Park.

Martin was just there on a camping trip; she has been going to the park since she was a teenager, long before she lived nearby, admiring the trees' grandeur.

"Redwood trees are resilient and they come back," she said. "But Big Basin as we know it is no longer."

Sarah Wells, a displaced resident of Boulder Creek, said Saturday that her boyfriend remains in Groveland despite officials' instructions, ready to evacuate if the smoke becomes unbearable. She's been texting him evacuation tips that she learned from the news, telling him to leave the lights on if he goes so that firefighters can see the building through smoke.

Don't wait until the last minute, she tells him.



RED FLAG WARNING has been issued for the entire San Francisco Bay Area and Central Coast from 5 am Sunday to 5 pm MONDAY (updated) for Dry Lightning and Gusty Erratic Outflow Winds from Thunderstorms. #cawx #cafire



Conditions for fighting these blazes are less than ideal and are predicted to deteriorate. The Weather Service issued a red flag warning for the entire Bay Area and central coast from early Sunday morning through Monday afternoon because of the likelihood of dry lightning and gusty winds up to 65 mph associated with thunderstorms.

Dry lightning, record-breaking heat wave set disaster into motion

The fires stem from an unusual confluence of extreme weather events, set against the backdrop of human-caused climate change, which is causing more-frequent and severe heat waves in the region as well as larger wildfires across the West.

Studies show that climate change is lengthening the fire season and leading to larger blazes than would otherwise occur. The 2018 National Climate Assessment, published by the Trump administration, projected that those trends are likely to continue in the next several decades.

The immediate trigger of most of the more than two dozen large fires burning in the Bay Area was an unusual August thunderstorm outbreak, which lit up the night skies above San Francisco on Sunday and Monday and moved inland, where lightning discharges struck trees and grasses at a time of year when vegetation is at its driest.

Between midnight Saturday and midnight Wednesday, there were 20,203 cloud-to-ground strikes in California, according to Chris Vagasky of the company Vaisala, which operates the National Lightning Detection Network. The total number of lightning discharges, which includes lightning that jumped from cloud to cloud without hitting the ground, was equivalent to 11 percent of California's average annual lightning activity, he said in a message on Twitter.

The storms were the result of moisture moving north from former Tropical Storm Fausto near the Baja Peninsula and the sizzling heat across the state.

The long-lasting and intense heat wave has played a key role in these blazes. Multiple monthly heat records have been set in the past 10 days, including in Death Valley, Calif., where one of the hottest temperatures on Earth, a high of 130 degrees Sunday, was recorded.

UCLA's Swain wrote online that the abundant lightning strikes in Northern California sparked more than 350 fires. "The number of fires is actually not the most problematic aspect of this event — it's the astonishing speed with which these fires grew and their relative proximity to many heavily populated areas," Swain wrote.

One measure of fire risk is known as the evaporative demand drought index, or EDDI. It measures the "thirst" of the atmosphere and can help predict fire risk. In part because of the heat's ability to speed up evaporation, the EDDI in Central and Northern California preceding these fires soared to record levels, <u>indicating a high fire risk</u>.

Other <u>fire weather indicators</u> also spiked to unusually high levels for this time of year at the time these blazes ignited.

Jason Samenow contributed to this report