### California heat builds as crews protect Yosemite sequoias

A heat wave is developing in much of California but winds are light Monday as firefighters battle a wildfire that poses a threat to a famous grove of giant sequoias and a small community in Yosemite National Park By AP

Bakersfield Californian and other papers, Monday, July 11, 2022

YOSEMITE NATIONAL PARK, Calif. (AP) — A heat wave was developing in California on Monday but winds were light as firefighters battled a wildfire that poses a threat to a grove of giant sequoias and a small community in Yosemite National Park.

The Washburn Fire on the western flank of the Sierra Nevada had scorched about 3.6 square miles by Monday morning, an increase of about 300 acres (121 hectares) overnight, according to an incident update.

The fire was a threat to more than 500 mature sequoias in the park's Mariposa Grove and the nearby community of Wawona, which has been evacuated.

The area in the southern portion of Yosemite was closed to visitors but the rest of the national park remained open.

Mariposa Grove and Yosemite Valley have been protected since President Abraham Lincoln signed legislation in 1864.

A sprinkler system was set up within the grove to maintain moisture, and there were no reports of severe damage to any named trees, including the 3,000-year-old Grizzly Giant.

"Fortunately, the Mariposa Grove has a long history of prescribed burning and studies have shown that these efforts reduce the impacts of high-severity unwanted fire," a National Park Service statement said.

A heat advisory was issued for the Central Valley sprawling below the Sierra while up in the fire area a high of 88 degrees (31 Celsius) was forecast for Wawona.

The giant sequoias, native in only about 70 groves spread along the western slope of the Sierra Nevada, were once considered impervious to flames but have become increasingly vulnerable as wildfires, fueled by a buildup of undergrowth from a century of fire suppression and the impact of drought exacerbated by climate change, have become more intense and destructive.

Lightning-sparked wildfires over the past two years have killed up to a fifth of the estimated 75,000 large sequoias, which are the biggest trees by volume and a major draw for tourists.

There was no obvious natural spark for the fire that broke out Thursday next to the park's Washburn Trail. Smoke was reported by visitors walking in the grove.

A fierce windstorm ripped through the grove more than a year ago and toppled 15 giant sequoias, along with countless other trees.

The downed trees, along with massive numbers of pines killed by bark beetles, provided ample fuel for the flames.

In Utah, smoke and ash emanating from a growing wildfire in rural Tooele County blew into Salt Lake City on Saturday. By Sunday afternoon, the Jacob City Fire had grown to 5.9 square miles (15.3 square km), with zero containment, officials said.

Elsewhere in Utah, firefighters contending with heavy winds battled the 12.4-square-mile (32.2-square-km) Halfway Hill Fire in Filmore. Law enforcement on Saturday arrested four men who investigators said abandoned a campfire that ignited the blaze.

So far in 2022, over 35,000 wildfires have burned nearly 4.7 million acres (1.9 million hectares) in the U.S., according to the National Interagency Fire Center, well above average for both wildfires and acres burned.

# Firefighters race to defend ancient sequoias from 2,300-acre Washburn fire in Yosemite

By Hayley Smith

LA Times and other papers, Monday, July 11, 2022

Firefighters on Monday were racing to protect a grove of ancient sequoia trees from the 2,340-acre Washburn fire in Yosemite National Park.

The fire, which more than doubled in size over the weekend, was within striking distance of the park's Mariposa Grove, home to more than 500 mature sequoias including the Grizzly Giant, a 209-foot behemoth estimated to be about 3,000 years old.

"We really don't want to leave this one to chance because this really is such an iconic tree," forest ecologist Garrett Dickman said in a recent video showing sprinklers spraying water around the base of the Grizzly Giant.

"We're trying to give it some preventative first aid, really, and make sure that when the fire — if the fire — comes over here, that this tree is protected," he said. "That is, to cool flames and to increase the relative humidity and decrease the fire behavior around this tree."

But crews had their work cut out for them: The fire on Monday morning remained 0% contained, officials said.

The blaze, which ignited Thursday near the park's Washburn trail, was feeding on "heavy dead and down fuels," according to the U.S. Forest Service, including vegetation dried by the West's worsening drought.

"They're dealing with complicated terrain and there's not a lot of natural barriers we can use — things like lakes and roads that the fire won't cross," said Forest Service spokesman Stanley Bercovitz.

The fire is also threatening the community of Wawona, where mandatory evacuation orders remain in place and Highway 41 is closed from the South Entrance to Henness Ridge Road.

Sequoias are known to withstand heat, and in fact have long relied on fire for reproduction. But California's new breed of hotter, faster and more frequent fires fueled by climate change have proven a formidable foe for the giants, with last year's KNP Complex and Windy fires destroying about 3,600 of the trees in Sequoia National Forest and Sequoia and Kings Canyon National Parks — an estimated 3% to 5% of the world's sequoia population.

The year prior, the Castle fire in Sequoia National Park wiped out an estimated 10% of the world's sequoias, with experts warning that extreme heat and drought were sapping moisture from the trees and impairing their defenses.

Bercovitz on Monday said the Washburn fire was "bumped up against" the northern line of Mariposa Grove, where firefighters were laying hand lines and lining up for defense.

"The grove is threatened but it's not imminent," he said. "Now it's just a matter of getting as many resources on it as possible."

Nearly 550 personnel have been assigned to the blaze with more on the way, he said.

"They've ordered a lot of engines and a lot of crews, so that'll start bumping up. This is getting high priority," he said.

The KNP Complex last year led to one of the most indelible images from the 2021 fire season: the massive General Sherman tree wrapped in protective foil.

Crews battling the Washburn fire have not yet turned to foil to defend the Grizzly Giant, but Bercovitz said some of the sprinklers wetting it on Monday were the same ones used on the General Sherman last year.

So far, at least, the fire is staying close to the ground and is "mainly terrain driven," he said.

But while crews were not expecting to see strong wind at the fire on Monday, they will be contending with increased heat and reduced relative humidity, according to Andy Bollenbacher, a meteorologist with the National Weather Service in Hanford.

Bollenbacher said Monday could be the hottest day on the blaze so far, with temperatures slated to climb into the mid-80s and humidity projected to drop as low as 15%.

He said there may be a slight midweek reprieve before the heat picks back up on Friday and into the weekend, but cautioned that any relief would be minimal.

"It'll go from being extremely hot to being really hot," he said. "It's going to start cooking again by Friday, Saturday."

The fire has created large plumes visible from miles away, and Bollenbacher said smoke was affecting Yosemite Valley as well as portions of the Sacramento Valley and the Bay Area, where air quality advisories have been issued.

"The smoke is going west, northwest of the fire — that whole area is being polluted quite a bit," he said.

The plume was so intense that on Saturday, a tree branch was "sent into the air from the powerful updraft produced by the fire," the Forest Service said, and "as it dropped back to earth, it narrowly missed two firefighting aircraft."

One Twitter user captured an audio recording of the pilot communicating with a dispatcher after the incident.

"Just wanted to let you know a branch went right over the top of us — pretty good size, probably 50 feet above us coming down, and fell right in between Tanker 103 and myself," the pilot can be heard saying.

A public community update on the fire will be held at 7 p.m. on Monday at the Oakhurst Community Center, officials said.

The cause of the fire remains under investigation.

# Washburn Fire in Yosemite: Crews battle to save historic Mariposa Grove as hot weather expected to fuel fire growth

By Jordan Parker

San Francisco Chronicle, Monday, July 11, 2022

A <u>fire</u> in the southern part of <u>Yosemite National Park</u> continued to grow Monday morning, threatening giant seguoias and the historic Wawona community.

The Washburn Fire, which sparked Thursday, stretched across 2,340 acres with 0% containment, park officials said.

The fire was moving near Highway 41, and an estimated 1,600 people staying in a campground, cabins and a historic hotel in the Wawona area were evacuated Friday, according to park officials.

As flames continued spreading, the park service and firefighters were working to <u>save the historic</u> <u>Mariposa Grove</u>, home to about 500 centuries-old giant sequoias, the world's most massive trees. As of Monday morning, there were no reports of injuries or damage to the well-known sequoias, some believed to be more than 2,000 years old, such as the Grizzly Giant.

Officials said they are working to remove combustible vegetation around the trees to prevent further burning. The park service said they expected the fire to continue spreading for at least the next 72 hours as hot and dry weather hits the region. Monday's forecast called for high temperatures in the mid-80s with limited humidity.

The southern entrance to Yosemite on Highway 41 remained closed to the public, as did the Mariposa Grove, but the rest of the park, north of Henness Ridge Road on Highway 41, was open. Visitors should expect smoky conditions.

#### Washburn Fire threatens Yosemite, 0% contained

By Les Hubbard The Sun, Sunday, July 10, 2022 For the fourth-straight day, firefighters are battling a blaze in the heart of Yosemite – dubbed the Washburn Fire – aiming to protect key elements of the national park and nearby Valley.

A spokesperson for Yosemite National Park reported more than 500 firefighters from across from California are on-hand to bring the fire under control.

The fire ignited Thursday afternoon, near the Washburn Trail in the Mariposa Grove of Yosemite.

As of Monday morning, the fire spread to more than 2,044 acres, officials announced. The fire is 0 percent contained.

Firefighters have spent considerable time attempting to mitigate fires within the Mariposa Grove of Giant Sequoias, Federal firefighting officials said.

Aiding the spread of the blaze are a number of dead trees, largely collapsing from 2013 to 2015, that have increased available fuel for the fire.

Fire officials issued evacuation orders for Wawona and Wawona Road south of Yosemite West.

Mariposa Grove is currently closed.

An up-to-date map of closures is available here.

The remainder of Yosemite National Park remains open to visitors.

#### Yosemite fire grows as crews protect iconic sequoias

A wildfire threatening the largest grove of giant sequoias in Yosemite National Park has more than doubled in size since Saturday afternoon By AP

Bakersfield Californian and other papers, Sunday, July 10, 2022

YOSEMITE NATIONAL PARK, Calif. (AP) — A wildfire threatening the largest grove of giant sequoias in Yosemite National Park more than doubled in size in a day, and firefighters were working in difficult terrain Sunday to protect the iconic trees and a small mountain town as the U.S. weathers another very active year for fires.

Campers and residents near the blaze were evacuated but the rest of the sprawling park in California remained open, though heavy smoke obscured scenic vistas and created unhealthy air quality.

"Today it's actually the smokiest that we've seen," Nancy Phillipe, a Yosemite fire information spokesperson, said Sunday. "Up until this morning, the park has not been in that unhealthy category, but that is where we are now."

More than 500 mature sequoias were threatened in the famed Mariposa Grove but there were no reports of severe damage to any named trees, including the 3,000-year-old Grizzly Giant.

A sprinkler system set up within the grove kept the tree trunks moist and officials were hopeful that the steady spray of water along with previous prescribed burns would be enough to keep flames at bay, Phillipe said.

The cause of the Washburn Fire was under investigation. It had grown to nearly 2.5 square miles (6.7 square kilometers) by Sunday morning, with no containment.

Beyond the trees, the community of Wawona, which is surrounded by parkland, was under threat, with people ordered to leave late Friday. In addition to residents, about 600 to 700 people who were staying at the Wawona campground in tents, cabins and a historic hotel were ordered to leave.

Temperatures were expected rise and reach the lower 90s in the coming days, but fire crews working in steep terrain were not contending with intense winds, said Jeffrey Barlow, senior meteorologist with the National Weather Service in Hanford.

The giant sequoias, native in only about 70 groves spread along the western slope of California's Sierra Nevada range, were once considered impervious to flames but have become increasingly vulnerable as

wildfires fueled by a buildup of undergrowth from a century of fire suppression and drought exacerbated by climate change have become more intense and destructive.

Phillipe, the park spokesperson, previously said some of the massive trunks had been wrapped in fireresistant foil for protection, but she corrected herself on Sunday and said that was not the case for this fire. However, crews have wrapped a historic cabin in the protective foil, she said.

Lightning-sparked wildfires over the past two years have killed up to a fifth of the estimated 75,000 large sequoias, which are the biggest trees by volume and a major draw for tourists to the national park that's the size of the state of Rhode Island.

There was no obvious natural spark for the fire that broke out Thursday next to the park's Washburn Trail, Phillipe said. Smoke was reported by visitors walking in the grove that reopened in 2018 after a \$40 million renovation that took three years.

A fierce windstorm ripped through the grove over a year ago and toppled 15 giant sequoias, along with countless other trees.

The downed trees, along with massive numbers of pines killed by bark beetles, provided ample fuel for the flames.

Meanwhile, most evacuation orders were lifted Saturday in the Sierra foothills about 80 miles (128 kilometers) to the northwest of the Yosemite fire, where a fire broke out on July 4. The Electra Fire that began near Jackson was mostly contained, and only areas directly within the fire's perimeter remained under evacuation orders, according to the California Department of Forestry and Fire Protection.

In Utah, smoke and ash emanating from a growing wildfire in rural Tooele County blew into Salt Lake City on Saturday. By Sunday afternoon, the Jacob City Fire had grown to 5.9 square miles (15.3 square km), with zero containment, officials said.

Elsewhere in Utah, firefighters contending with heavy winds battled the 12.4-square-mile (32.2-square-km) Halfway Hill Fire in Filmore. Law enforcement on Saturday arrested four men who investigators said abandoned a campfire that ignited the blaze.

So far in 2022, over 35,000 wildfires have burned nearly 4.7 million acres in the U.S., according to the National Interagency Fire Center, well above average for both wildfires and acres burned.

This story has been corrected to fix inaccurate information from a park spokesperson and reflect that the tree trunks are not wrapped in protective foil.

# Washburn Fire in Yosemite: Crews fight to save sequoias as blaze doubles in size, threatens Wawona

By Danielle Echeverria, Jessica Flores, Lauren Helper San Francisco Chronicle, July 10, 2022

Washburn Fire update: <u>Crews battle to save Historic Mariposa Grove as hot weather expected to help fuel fire growth</u>

A Yosemite National Park wildfire grew quickly over the weekend, threatening the park's largest grove of giant sequoia trees and the historic Wawona community, Cal Fire reported. Dangerous smoke settled over world-renowned Yosemite vistas.

The <u>Washburn Fire</u> stretched across 2,044 acres by Sunday evening, Cal Fire officials said, swelling from 466 acres on Friday afternoon. Three days after the blaze began, it remained at 0% containment. Air pollution in some areas shot to hazardous levels, with smoky haze obscuring the sweeping Yosemite Valley views that draw millions of visitors each year.

Firefighters battled the blaze Sunday through tough conditions that were drier and warmer than they had been earlier, said Nancy Phillipe, a Yosemite fire information officer. Crews reported isolated "group tree torching" and fire spots outside of the overall current fire boundary, but much of the park remained open to visitors beyond its shuttered southern entrance, she said late Sunday afternoon.

"This is the first day that really we're seeing the unhealthy, higher air-quality numbers throughout the park," Phillipe said. "We really do want to message to visitors that we are open, but there are smoke impacts."

The fire was moving near Highway 41 and threatened the Wawona and El Portal communities, officials said. An estimated 1,600 people staying in a campground, cabins and a historic hotel in the Wawona area were evacuated Friday, according to park officials.

"As you drive along Highway 41 you see the fire just from the road," Phillipe said Sunday. "It's moving toward the community, but we're working the best we can to keep the community safe."

As flames continued spreading, firefighters were working to <u>save the historic Mariposa Grove</u>, home to about 500 centuries-old giant sequoias, the world's most massive trees. As of Sunday evening, there were no reports of injuries or damage to the well-known sequoias, some believed to be more than 2,000 years old, such as the Grizzly Giant.

Crews activated sprinkler systems and began other ecological mitigation efforts. Phillipe said they were not wrapping the trees in aluminum insulation, as officials <u>have done in some previous fires</u>, so as to avoid a "baked potato effect" that could further endanger the trees.

Temperatures in Yosemite Valley reached the low 80s on Sunday, and forecasters said a warming trend was predicted to bring triple-digit temperatures across the San Joaquin Valley this week. Blistering high temperatures in the fire region to the south and declining humidity did not help firefighters trying to stop the blaze from galloping across more dry vegetation build-up.

Cal Fire expected the blaze to continue "actively spreading" over 72 hours after "growing moderately" overnight on Sunday. It was projected to reach fire scars from previous burns in the coming days, with forecasters anticipating the flames then will spread at "reduced intensity."

The blaze as of Sunday had exhibited "moderate fire behavior," officials said, including long-range spotting, when sparks carried by the wind start new fires.

Some 545 firefighters were working to keep the fast-moving blaze from advancing toward the historic community of Wawona where evacuations were ordered late Friday. The Wawona area, added to Yosemite National Park in 1932, had a population of 169 in the 2010 census. The Wawona Hotel was established in 1856.

Billowing gray and white smoke was visible from far outside the park, pouring relentlessly into the sky. Yosemite Valley webcams captured the hazy skies. As forecasters reported heavy smoke moving north, toward the Lake Tahoe area, air quality readings in South Lake Tahoe were still in the "good" category Sunday, according to the U.S. Environmental Protection Agency, which manages the AirNow tracking service. Air quality index levels above 301 are considered "hazardous."

Parts of the Yosemite Valley on Sunday morning were reporting readings at 217 — or "very unhealthy" — with smoke impacts expected to continue in the coming days, weather officials said.

In the Bay Area, the Air Quality Management District issued an air quality advisory for Monday, anticipating Washburn Fire smoke coming into the North and East Bay regions. However, pollutant levels were not expected to exceed the federal health standard, and a Spare the Air Alert was not in effect. Air quality was expected in the moderate range, the district said.

Crews at the park's southern entrance cleared vegetation Friday night and created fire lines around the giant sequoias, including the Grizzly Giant, which is one of the world's largest and is estimated to be about 3,000 years old. Though the trees, which grow only in the Sierra Nevada, have long been naturally resistant to fire, California's increasingly intense blazes have <u>challenged that resistance in recent years</u>. An estimated 20% of mature sequoias died in flames over the past two years.

The cause of the fire, which began Thursday, remained under investigation. There was no obvious natural spark, such as lightning, spokesperson Phillipe said. Smoke was reported by visitors walking in the grove, which reopened in 2018 after a \$40 million renovation that took three years.

#### Yosemite wildfire threatens grove of iconic sequoia trees

The largest grove of giant sequoias in Yosemite National Park is still closed as firefighters battle a blaze that threatens the trees and has forced hundreds of campers to evacuate By AP

Fresno Bee and other papers, Sunday, July 10, 2022

YOSEMITE NATIONAL PARK, Calif. (AP) — The largest grove of giant sequoias in Yosemite National Park remained closed Saturday as firefighters battled a blaze that threatened the gathering of the iconic trees and forced hundreds of campers to evacuate.

The rest of the park in California remained open, though smoke that hung in the air obscured some of the most scenic vistas and views.

More than 500 mature sequoias were threatened in the Mariposa Grove but as of Saturday afternoon there were no reports of severe damage to any named trees, including the 3,000-year-old Grizzly Giant.

The cause of the fire was under investigation.

Beyond the trees, the small community of Wawona, which is surrounded by park and a campground, was under threat, with people ordered to leave their homes and campsites on Friday night.

The fire was proving difficult to contain, with firefighters throwing "every tactic imaginable" at it, said Nancy Phillipe, a Yosemite fire information spokesperson. That included air drops of fire retardant as well as the planned use of bulldozers to create fire lines, a tactic that's rarely used in a wilderness setting like Yosemite, Phillipe said.

The bulldozers would primarily be used to put in fire lines to protect Wawona, she said. About 600 to 700 people who were staying at the Wawona campground in tents, cabins and an historic hotel were ordered to leave.

Though firefighters were facing hot and dry conditions, they didn't have to contend with intense winds on Saturday, said Jeffrey Barlow, senior meteorologist with the National Weather Service in Hanford. Given the relatively small size of the fire and minimal winds, smoke impacts were not expected to stretch far beyond the park, he said.

The giant sequoias, native in only about 70 groves spread along the western slope of California's Sierra Nevada range, were once considered impervious to flames but have become increasingly vulnerable as wildfires fueled by a buildup of undergrowth from a century of fire suppression and drought exacerbated by climate change have become more intense and destructive.

Lightning-sparked wildfires over the past two years have killed up to a fifth of the estimated 75,000 large sequoias, which are the biggest trees by volume.

There was no obvious natural spark for the fire that broke out Thursday next to the park's Washburn Trail, Phillipe said. Smoke was reported by visitors walking in the grove that reopened in 2018 after a \$40 million renovation that took three years.

The fire had grown to about 1.9 square miles (4.8 square kilometers) by Saturday evening.

A fierce windstorm ripped through the grove a year-and-a-half ago and toppled 15 giant sequoias, along with countless other trees.

The downed trees, along with massive numbers of pines killed by bark beetles, provided ample fuel for the flames.

The park has used prescribed burns to clear brush around the sequoias, which helps protect them if flames spread farther into the grove.

Meanwhile, most evacuation orders were lifted Saturday in the Sierra foothills about 80 miles (128 kilometers) to the northwest of the Yosemite fire, where a fire broke out on July 4. The Electra Fire that began near Jackson was mostly contained, and only areas directly within the fire's perimeter remained under evacuation orders, according to the California Department of Forestry and Fire Protection.

This story was first published on July 9, 2022. It was updated on July 10, 2022, to correct inaccurate information from a park spokesperson. Trees at the park were not wrapped in fire-resistant foil.

## Yosemite fire explodes, threatens iconic giant sequoias in Mariposa Grove, Wawona

By Alex Wigglesworth, Diana Marcum LA Times, Saturday, July 9, 2022

FISH CAMP, Calif. — The first that Michael Gilbert, a 67-year-old rock climber and bellman, heard of the fire in Yosemite National Park was from a mother and daughter who drove up breathless on Friday.

They had been near the park's famed Mariposa Grove of giant sequoias. They saw a fire "this big," the mother said, stretching her arms wide, indicating a few feet. They ran for a few seconds and looked back. Two trees were on fire. Twenty seconds later, she said, more trees than she could count.

As she told the story, fire planes were already crossing overhead, Gilbert recalled Saturday from his post at Tenaya Lodge.

By Saturday morning, the Washburn fire had ballooned to about 1,190 acres and was threatening some 500 giant seguoias, along with the community of Wawona.

The blaze was the latest to menace the ancient giants, which are found in the wild only on the western slopes of the Sierra Nevada. Although they are adapted to thrive in fire, the sequoias are increasingly no match for high-severity wildfires driven by climate change, drought and decades of aggressive fire suppression that has resulted in a buildup of dense vegetation in some forested areas.

"Because of that combination, we are having these fires that are large and intense and last longer than what anybody's seen in any part of their experience," said Nancy Phillipe, a Yosemite fire information spokesperson.

Crews were spraying down trees in Mariposa Grove and scraping the ground to bare mineral soil to try to slow the fire's spread, she said. They were also wrapping some of the sequoias in protective foil, prioritizing the oldest named trees like the Grizzly Giant.

"This 2,000- to 3,000-year-old tree has a rich, vast history that goes back to Abraham Lincoln," Phillipe said. The president signed legislation protecting the grove and Yosemite Valley in 1864, a precedent that paved the way for the creation of national parks and which some say marked the beginning of the modern conservation movement.

"There's this amazing feeling that you get as you're with those giant trees — it just kind of consumes you," Phillipe said. "It's such a powerful connection to history and nature and the park."

On Saturday, Gilbert appointed himself comforter-in-chief to the many tourists who had traveled from around the world to see Yosemite's wonders and were blocked by the fire.

He directed a family of five from Australia to the south to Sequoia National Park.

"You still have a chance to see the giants," he told them.

DeAnne Smith, who was visiting from Texas, showed him a photo she took driving out of the park Friday evening.

"The fire was literally right in front of us," she said.

Her family was among the last out before the road south from Wawona closed. About 1,600 residents and visitors were evacuated, according to Phillipe.

"I'm just sad for the sequoia," Smith said. "I desperately want them to save the sequoia trees."

The fire started about 2 p.m. Thursday in the grove off the Washburn trail, Phillipe said. The cause remains under investigation, but she noted the weather was clear and there were no obvious indications that the fire began naturally.

No containment had been reported as of Saturday afternoon. Officials were concerned that lower humidity and higher temperatures forecast for the weekend could help drive the fire's spread.

"We're just really hitting it hard with the aerial resources and the ground resources that we have," Phillipe said. "The next 48 hours will be critical for us."

About 95% of Yosemite National Park is wilderness and fire plays a natural role in its ecosystem, so officials often manage fires for resource benefits rather than immediately extinguishing them. This blaze is different because of the threat it poses to Wawona and the Mariposa Grove, so crews are taking an allout suppression approach that includes using bulldozers to create a barrier around the community, Phillipe said.

"We normally don't have dozers coming in to dig line," she said. "We don't normally have retardant being dropped in the park. But that's how important these resources are and why we're using everything we can, from sunup to sundown."

Authorities were hoping that a history of prescribed burns in Mariposa Grove would help mitigate the damage there. The forest is adapted to frequent, low-intensity fires sparked by lightning and intentionally set by Indigenous people. The Park Service has sought to mimic this regime by regularly setting fires that burn along the forest floor to clear out brush and so-called ladder fuels that could otherwise help carry flames up into the canopy and kill trees.

Research has shown that landscapes that have been regularly treated with prescribed burns can help slow wildfires, giving firefighters a better chance to get the upper hand.

"What we've discovered is that as we've received unwanted fires, when they come into the prescribed burn areas, it does slow down that rate of spread and really helps us work toward containment," Phillipe said.

At the same time, she said, parts of the grove still have dense concentrations of dead plant material due to bark beetle kills that have plagued the Sierra Nevada. These infestations can become more destructive during droughts because trees are unable to produce enough sap to fight them off. And last year, a Mono wind event that tore through the grove felled at least 15 sequoias, which remain on the forest floor and could help fuel the fire.

The 78 giant sequoia groves scattered across the Sierra amount to just 25,000 acres, said Joanna Nelson, director of science and conservation planning at the nonprofit conservation group Save the Redwoods League. The species has lived alongside fire for millions of years, with thick bark and branches adapted to reach above flames. The trees rely on low- to moderate-intensity fire to reproduce, as bursts of heat prompt their cones to open and flames clear duff from the forest floor so the seeds can better germinate in the soil below, Nelson said.

But wildfires have decimated sequoia populations in recent years due to a federal policy of fire exclusion and the outlawing of cultural burning combined with an era of warming and drying that together have made it easier for fires to ignite and burn while providing an abundance of fuel to stoke them, she said.

"The fires that we're getting now are incredibly intense and destructive and they're killing large mature trees for the first time on record," she said. "In any recorded history we have through tree rings, we don't see this kind of mortality until now."

The pattern began to emerge in 2015, when the Rough fire that started in Sierra National Forest killed at least 100 large, mature sequoias as it burned into seven different groves. That was followed by 2017, when the Pier fire in Sequoia National Forest and the Railroad fire in Sierra National Forest together killed about 120.

Three years later, the Castle fire in Sequoia National Forest and Giant Sequoia National Monument killed an estimated 7,500 to 10,600 mature sequoias — 10% to 14% of the world's natural population. Then last year, up to 3,630 sequoias were killed by the KNP Complex fire in Sequoia and Kings Canyon National

Parks and the Windy fire in Sequoia National Forest, which together are estimated to have claimed another 5% of their numbers.

"If you lose an estimated 19% of giant sequoias in 14 months — and you've definitely lost 20% of them in six years — that's just by the numbers not sustainable," Nelson said. "We can't just keep going like this."

If the trend continues, she said, there's a chance that the trees will be found only in a greenhouse or seed bank rather than the Sierra Nevada.

What's required to save them is a combination of a reduction in greenhouse gas emissions to slow warming and an increase in on-the-ground stewardship such as thinning and prescribed fire to reduce fuel, she said.

"Having these large, incredibly grand trees out in the mountains where people can walk under them is important to me," she said.

In the meantime, those in Yosemite were bracing for another summer of destructive fires. Visitors to Tenaya Lodge splashed in the hotel pool and looked unnaturally tan from the orange reflection of smoke. All around were dead and dying trees.

"The Railroad fire, the Junction fire," said Rebecca Casey, who runs recreational activities, counting off the reasons on her fingers. "The drought. The bark beetles."

She has been through four pre-evacuations and two lengthy evacuations.

"It always seems like it is going to be OK until they say it's time to leave," she said.

### Yosemite wildfire is latest threat to giant sequoia trees

Officials say part of Yosemite National Park has been closed and hundreds of people evacuated nearby as a wildfire rages near a grove of California's famed giant sequoia trees

By AP

Bakersfield Californian, Friday, July 8, 2022

YOSEMITE NATIONAL PARK, Calif. (AP) — The largest grove of giant sequoias in Yosemite National Park was closed Friday and hundreds of people ordered evacuated nearby as a wildfire burning through dense forest became the latest in recent years to threaten the world's largest trees.

A team was being sent to the Mariposa Grove to wrap some of the massive trunks in fire-resistant foil to protect them as the blaze burned out of control, said Nancy Phillipe, a Yosemite fire information spokesperson.

More than 500 mature sequoias were threatened but there were no reports of severe damage to any named trees, such as the 3,000-year-old Grizzly Giant.

The cause of the fire was under investigation and the rest of the park remained open as nearly 300 firefighters tried to control the flames with the help of two water-dropping helicopters and an air tanker dumping flame retardant, Phillipe said.

The giant sequoias, native in only about 70 groves spread along the western slope of California's Sierra Nevada range, were once considered impervious to flames but have become increasingly vulnerable as wildfires fueled by a buildup of undergrowth from a century of fire suppression and drought exacerbated by climate change have become more intense and destructive.

Lightning-sparked wildfires over the past two years have killed up to a fifth of the estimated 75,000 large sequoias, which are the biggest trees by volume.

There was no obvious natural spark for the fire that broke out Thursday next to the park's Washburn Trail, Phillipe said. Smoke was reported by visitors walking in the grove that reopened in 2018 after a \$40 million renovation that took three years.

The grove, which is inside the park's southern entrance, was evacuated and no one was injured.

The fire had grown to 466 acres (188 hectares) by Friday evening, authorities said.

Evacuation orders were issued Friday for the grove along with the nearby community of Wawona — which is surrounded by the park — and the Wawona Campground, where about 600 to 700 people were staying in a campground, cabins and an historic hotel.

A fierce windstorm ripped through the grove a year-and-a-half ago and toppled 15 giant sequoias, along with countless other trees.

The downed trees, along with massive numbers of pines killed by bark beetles, provided ample fuel for the flames, but winds Friday were calm and the fire was not spreading rapidly.

The park has used prescribed burns to clear brush around the sequoias, which helps protect them if flames spread farther into the grove.

"When the unwanted fires hit those areas, it tends to slow the rate of spread and helps us gain some control," Phillipe said.

In the Sierra foothills, 80 miles (128 kilometers) to the northwest of the Yosemite fire, some evacuation orders were lifted as containment grew to 70% on the Electra Fire that had burned 7 square miles (18 square kilometers).

The fire broke out near Jackson on Monday and temporarily forced about 100 people celebrating the July 4th holiday along a river to seek shelter in a Pacific Gas & Electric Co. facility.

### Wildfire grows near famed Yosemite grove of sequoia trees

By Associated Press

The Business Journal, Friday, July 8, 2022

(AP) — Part of Yosemite National Park has been closed as a wildfire quintupled in size near a grove of California's famous giant sequoia trees, officials said.

The fire forced park officials on Thursday to close Mariposa Grove, which has the largest sequoia grove in Yosemite and features more than 500 mature giant sequoias. The rest of the national park is open.

The blaze grew from 46 acres (19 hectares) Thursday night to 250 acres (101 hectares) by Friday morning with no containment, said Nancy Phillipe, a Yosemite fire information spokesperson.

The sequoias are threatened by the flames, but there have been no reports of severe damage to the grove's named sequoias, such as the 3,000-year-old Grizzly Giant, Phillipe said.

Some park visitors had to be evacuated from the fire zone Thursday, but there were no injuries. Access to the grove was closed to allow firefighters easier access to the flames, Phillipe said.

"Our priorities are certainly the giant sequoias and the community of Wawona," which lies within the park, she said.

The fire was first reported on the park's the Washburn Trail — for which the fire was then named — in the Mariposa Grove's lower section on Thursday around 2 p.m. by 911 callers, Phillipe said. It's cause remains under investigation.

Crews are fighting the blaze by ground and air in hopes of preventing the fire from spreading.

"We're really hitting it hard, as much as we can," Phillipe said.

#### Extreme heat coming back to Bakersfield after early-July respite

By Steven Mayer

Bakersfield Californian, Friday, July 8, 2022

The beginning of July was something like a gift to residents of the southern San Joaquin Valley as temperatures moderated and a few forgiving breezes blew across Bakersfield.

The third and fourth days of the month topped out at just 87 degrees, according to the National Weather Service — about 10 degrees below normal — and high temps during the following three days never exceeded 93.

Not bad for a time of year when 98 is the normal high and devilish spikes commonly climb into the 100s.

It was nice. While it lasted.

According to forecasters, the coming weekend will warm into the high-90s, and local residents could see temperatures all next week flirting with 103 — hot enough to bring out the oven mitts when you first grab the steering wheel in your car.

"We're getting close to normal today," Dan Harty, a meteorologist at the weather service's Hanford station, said Friday.

And the weekend should remain in the normal range with highs around 97 and 98.

Then, on Monday, the triple-digits arrive.

"We're looking at, right now, 103 for Bakersfield on Monday," Harty said. Maximum temps are expected to hover between 101 and 103 throughout next week.

It's all due to a typical high-pressure ridge settling over the southwestern United States, "a very common pattern for this time of year," Harty said.

It means less air movement, fewer breezes and a higher likelihood for the formation and accumulation of air quality issues, such as ozone.

Around mid-week, some moisture could make its way into the mountain area, leading to a slight chance of thundershowers in the Sierra Nevada.