

Half Their Land Burned in a Decade: The California Counties Constantly on Fire

By Elena Shao Aug. 15, 2024

The Park fire started in late July outside Chico, Calif., and in just 10 days exploded to become the fourth largest in the state's history.

Three years before, the Dixie fire grew so large that it became the first fire to leap over the Sierra Nevada mountains.

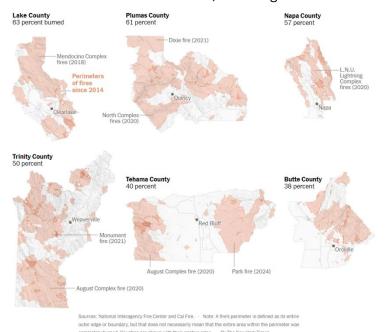
In 2020, the North Complex fires, sparked by

lightning in Plumas National Forest, destroyed more than 2,300 structures and killed more than a dozen people.

And in 2018, the Camp fire razed the town of Paradise and killed 85 people, becoming the state's deadliest fire to date.

These four historic California fires burned in Butte County, which, along with neighboring counties near the foothills of the Sierras, has in the past decade seen much of its land engulfed in flames.

Since 2014, fires have burned through nearly forty percent of Butte County, according to a New York Times analysis of wildfire perimeters. An even larger share has burned in two neighboring counties, Plumas and Tehama, and in counties farther to the west, including in the heart of wine country.



Fires, of course, don't know or stick to county lines. But

(https://www.sfchronicle.com/california-wildfires/article/butte-county-fire-california-19613151.php) calculating the share of counties affected by wildfires can provide insight into the growing wildfire risk statewide and across the American West.

The area that burned in Butte and Plumas Counties is more than four times as large as the area that had burned in the previous decade, the Times analysis shows, and the area burned in Tehama is more than five times as large. Over the past decade, most California counties have seen double the area burned compared with the area burned in the previous decade.

It's not necessarily the case that more large fires are burning now than in previous decades, but the ones that do ignite are charring through much more land, according to Tirtha Banerjee, a professor and wildfire researcher at the University of California, Irvine. "What that says to me is that fires are getting more intense and more severe, and behaving in more unexpected ways," he said.

A warming climate has fueled bigger and hotter wildfires, with increasingly intense spells of heat and drought turning forests into tinderboxes. The fire season arrives earlier in the year and lasts longer.

https://www.nytimes.com/2024/06/24/climate/extreme-wildfires-have-doubled-in-2-decades-study-finds.html https://www.nature.com/articles/s41598-021-88131-9

In California, decades of fire suppression policies have exacerbated the issue, leaving behind overgrown thickets of vegetation. Much of the area in the Park fire's path, for example, hadn't been burned for decades or longer, said

Taylor Nilsson, the director of Butte County's Fire Safe Council. That allowed large amounts of dense vegetation to accumulate, providing ample fuel for the fire.

Climate change and forest management are not the only risk factors. There is inevitably a bit of luck involved: High wind speeds can enable fires to spread farther and more rapidly.

All fires also require a spark in order to ignite. The movement of people into fire-prone areas near forests, grasslands and shrublands has bent that element of luck, making it more likely that a fire will spark.

https://www.nytimes.com/interactive/2022/09/09/climate/growing-wildfire-risk-homes.html

20 Largest Fires in California History

	Fire	Year	Acres	Official cause	Counties
1	August Complex	2020	1,032,648	Lightning	Mendocino, Humboldt, Trinity, Tehama, Glenn, Lake and Colusa
2	Dixie	2021	963,309	Power lines	Butte, Plumas, Lassen, Shasta and Tehama
3	Mendocino Complex	2018	459,123	Human related	Colusa, Lake, Mendocino and Glenn
4	Park	2024	429,259	Arson	Butte, Plumas, Shasta and Tehama
5	S.C.U. Lightning Complex	2020	396,625	Lightning	Stanislaus, Santa Clara, Alameda, Contra Costa and San Joaquin
6	Creek	2020	379,895	Undetermined	Fresno and Madera
7	L.N.U. Lightning Complex	2020	363,220	Lightning and arson	Napa, Solano, Sonoma, Yolo, Lake and Colusa
8	North Complex	2020	318,935	Lightning	Butte, Plumas and Yuba
9	Thomas	2017	281,893	Power lines	Ventura and Santa Barbara
10	Cedar	2003	273,246	Human related	San Diego
11	Rush	2012	315,577	Lightning	Lassen
12	Rim	2013	257,314	Human related	Tuolumne
13	Zaca	2007	240,207	Human related	Santa Barbara
14	Carr	2018	229,651	Human related	Shasta County and Trinity
15	Monument	2021	223,124	Lightning	Trinity
16	Caldor	2021	221,835	Under investigation	Alpine, Amador and El Dorado
17	Matilija	1932	220,000	Undetermined	Ventura
18	River Complex	2021	199,359	Lightning	Siskiyou and Trinity
19	Witch	2007	197,990	Power lines	San Diego
20	Klamath	2008	192,038	Lightning	Siskiyou
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While lightning caused several recent wildfires of historic proportions, human activity is the source for a vast majority of ignitions in the country. Of the 20 largest wildfires in California, seven were caused directly by people, and three by damaged power lines.

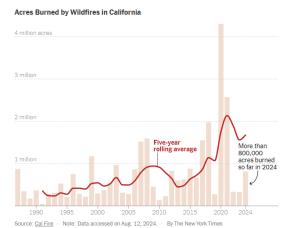
https://www.pnas.org/doi/10.1073/pnas.1617394114

California's wildfire history is punctuated by both "good" and "bad" fire seasons, but the overall size of burned areas has trended upward. In recent decades, quieter fire seasons have been followed by explosive and destructive ones. Often, a small number of extraordinarily large fires account for much of the area burned in a year.

This year, the number of acres burned by wildfires has more than doubled from the previous year. Two years of wet winters in 2022 and 2023 likely contributed to vegetation growth and the buildup of fuel, said Alex Hall, the director of the Center for Climate Science at the University of California, Los Angeles. Intense heat in the weeks before the Park fire sparked — most days in July in Chico climbed over 100 degrees Fahrenheit — greatly accelerated the drying process.

There are still several months left in this year's fire season. On Aug. 1, the National Interagency Fire Center, which helps to coordinate federal fire response, issued new warnings about fire risk for this season, saying that it expects much of

California and the Western United States to be under significant threat through at least the end of September.



Source: Cal Fire - Note: Data accessed on Aug. 12, 2024. The Park fire is still active, and its acreage count is not final. Acres burned for the Rush fire includes areas in California and Nevada.

https://www.nytimes.com/interactive/2024/08/15/us/california-fires.html