

Excess rains could mean excess wildfire fuel in Sonoma

Vegetation management programs aim to keep rural properties safe when the extra grass and growth dries out this summer.



In work sponsored by the Grove Street Fire Safe Council, worker drags tree branches on Grove Street in Sonoma to the chipper after trimming back overhanging limbs and other potential fire fuel on Tuesday, August 10, 2021. (Photo by Robbi Pengelly/Index-Tribune)

[CHASE HUNTER](#)

INDEX-TRIBUNE STAFF WRITER
March 7, 2023, 1:53PM

While rain has dampened drought concerns and painted the hills evergreen, with excess water comes the potential for excess fire fuel. Sonoma Valley's environmental leaders are already looking ahead to the added vegetation management that could be needed to reduce the threat of wildfires this summer.

As of March 7, Sonoma Valley had received 50% more rainfall at this point in the year than in 2022, which will soon sprout new growth that will require close monitoring, according to Sonoma Valley Stewardship Program Manager Chris Carlson of the Sonoma Land Trust.

"There are ways that wet winters and wet springs contribute in small ways for increased fire risk," Carlson said, "And that's mainly through that increased growth of grass. Once that grass grows up and dries out, there's more fuel there than there would have been in a drier year."

Carlson said a fire requires three things in order to ignite: Oxygen, which is abundant on Earth; heat, which can be sparked by utility poles, humans or lightning; and fuel, which usually takes the shape of dried grass, dead trees and fallen leaves.

The correlation between increased rainfall and increased wildfire risk is not perfect — Sonoma Ecology Center experts said high wind, ignition sources and drought-stressed vegetation are also contributing factors — but taller grasses can cause a fire to spread more quickly and burn hotter.

Come late July and August — barring any late summer storms — Sonoma's rolling green hills will turn into golden brown waves of combustible dried grass.

This added fuel is important to manage thoughtfully, said Dave Duncan, the president of the [Grove Street Fire Safe Council](#), a community-led effort to organize neighborhoods and communities to prepare for wildfires. Much of his responsibility is communicating the importance of [defensible space](#), the buffer zone between a building and the vegetation that surrounds it, with Grove Street residents.

"An acre of grass can be the equivalent of 358 gallons of gasoline per acre," Duncan said. "An acre of grass is equal to about 44.8 million BTUs (British Thermal Units)." BTUs are defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

In a typical year, an acre of grass contains approximately 2,000 pounds of fuel, Duncan said. But in heavy rain years like 2018, an acre of grass may contain 5,600 literal pounds of fuel.

"So what we tell people is, 'Do you want 358 gallons of gasoline sitting out on your front lawn during fire season?'" Duncan added.

Duncan compared the proactive measures of vegetation management against wildfires as akin to the public health measures required during the COVID-19 pandemic.

"Everybody was wearing masks during the main part of COVID-19 because of a sense of being a community member," Duncan said. "So I would just point out to people the extreme risk posed by uncut grasses — not only to the individual home but to the entire neighborhood around them."

Creating defensible space against fire is crucial for state parks, too.

Deputy director and director of operations for Jack London State Historic Park, Eric Metz, manages the ongoing maintenance of vegetation in the park, including [Jack London's famed Wolf House](#) and its accompanying House of Happy Walls museum.

"It's our responsibility to do the defensible space maintenance around structures and vegetation management around the ranch itself," Metz said. "That's clearing brush in the under story in the 100- to 130-foot defensible space around all the historic structures and non-historic structures."

Jack London park coordinated two prescribed fires since 2020 to reduce amount of dried out vegetation and maintain the health of the forest and the safety of structures. Officials also partner with California State Parks and Cal Fire to develop an enhanced fire mitigation program to expanded areas of the park that had not been managed previously, Metz said.

Cal Fire brought forestry equipment, including a masticator and mulcher, to Jack London State Historic Park and went to work taming some of its 1,400 acres of vegetation, Metz said. The masticator knocked down dead and overgrown trees while the mulcher chopped, cut and ground the tree matter into removable mulch.

"About 10 years worth of work was done in a year because of Cal Fire's support on that. And the reason they were willing to support it is because it really ties in with their kind of regional strategy for firefighting."

The National Weather Service expects more than two inches of rain to fall over Sonoma Valley in the coming week, adding to a rainy season that has already diminished or removed drought levels across the state. In Sonoma County, the [U.S. Drought Monitor lowered the drought levels](#) from "severe" three months ago to "abnormally dry" on Feb. 28.

Still, sunnier and drier days always lie ahead on Sonoma Valley.

"Regardless of how much rain you get in the winter," Carlson said, "it's going to be very dry come fall."

Contact Chase Hunter at chase.hunter@sonomanews.com and follow [@Chase_HunterB](#) on Twitter.

<https://www.sonomanews.com/article/news/excess-rains-could-mean-excess-wildfire-fuel-in-sonoma/?artslide=0>