

Hazard reduction burns are not a 'panacea' for bushfire risk, RFS boss says

theguardian.com/australia-news/2020/jan/08/hazard-reduction-is-not-a-panacea-for-bushfire-risk-rfs-

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The boss of the [New South Wales Rural Fire Service](#) says hazard reduction is important but not a panacea for bushfire risk and has “very little effect at all” on the spread of fire in severe or extreme weather.

Commissioner Shane Fitzsimmons on Wednesday addressed the organisation’s hazard reduction activities as bushfires fuel debate over preparation for the NSW fire season.

The federal Nationals MP Barnaby Joyce told the Seven Network that “green caveats” were hampering firefighting capacity.

But Fitzsimmons said hazard reduction burning was challenging and the biggest impediment to completing burns was weather.

▼ Details

The link between rising greenhouse gas emissions and increased bushfire risk is complex but, according to major science agencies, clear. Climate change does not create bushfires, but it can and does make them worse. A number of factors contribute to bushfire risk, including temperature, fuel load, dryness, wind speed and humidity.



The [Bureau of Meteorology and the CSIRO](#) say Australia has warmed by 1C since 1910 and temperatures will increase in the future. The [Intergovernmental Panel on Climate Change](#) says it is extremely likely increased atmospheric concentrations of greenhouse gases since the mid-20th century is the main reason it is getting hotter. The [Bushfire and Natural Hazards research centre](#) says the variability of normal events sits on top of that. Warmer weather increases the number of days each year on which there is high or extreme bushfire risk.

Dry fuel load - the amount of forest and scrub available to burn - has been linked to rising emissions. Under the right conditions, carbon dioxide acts as a kind of fertiliser that increases plant growth.

Dryness is more complicated. Complex computer models have not found a consistent climate change signal linked to rising CO2 in the decline in rain that has produced the current eastern Australian drought. But higher temperatures accelerate evaporation. They also extend the growing season for vegetation in many regions, leading to greater transpiration (the process by which water is drawn from the soil and evaporated from plant leaves and flowers). The result is that soils, vegetation and the air may be drier than they would have been with the same amount of rainfall in the past.

The year coming into the 2019-20 summer has been unusually warm and dry for large parts of Australia. Above average temperatures now occur most years and 2019 has been the fifth driest start to the year on record, and the driest since 1970.

Not a significant one. Two pieces of disinformation, that an "arson emergency", rather than climate change, is behind the bushfires, and that "greenies" are preventing firefighters from reducing fuel loads in the Australian bush have spread across social media. They have found their way into major news outlets, the mouths of government MPs, and across the globe to Donald Trump Jr and prominent right-wing conspiracy theorists.

NSW's Rural Fire Service has said the major cause of ignition during the crisis has been dry lightning. Victoria police say they do not believe arson had a role in any of the destructive fires this summer. The RFS has also contradicted claims that environmentalists have been holding up hazard reduction work.

He said there was a "shrinking window of opportunity" for more favourable burning periods as fire seasons lengthened.

"Hazard reduction is absolutely an important factor when it comes to fire management and managing fire in the landscape but it is not the panacea," Fitzsimmons told ABC News on Wednesday.

"When you're running fires under severe, extreme or worse conditions, hazard reduction has very little effect at all on fire spread.

"It's only when the conditions back off a bit ... that you've actually got some prospect of slowing the fire spread."

Fitzsimmons said the RFS was now achieving up to 90% of its annual burn program.

The NSW environment minister, Matt Kean, earlier this week told Nine newspapers this season's fires showed more hazard reduction was needed but wasn't a silver bullet.

Kean said a NSW government review after the conclusion of the bushfire season would consider fire management issues.

Bushfire and Natural Hazards Cooperative Research Centre chief executive Richard Thornton on Tuesday said hazard reduction was part of the whole picture.

"With climate change we know that the fire seasons are starting earlier, they're finishing later," he said. "The cumulative fire danger during a fire season is higher.

"We know that means that we'll get more of these types of weather events that we've seen over the last few months ... so we need to consider every part of the whole fire management process."