Australia's Prime Minister Scott Morrison has expressed regret over his handling of the bushfire crisis ravaging the country.
The PM has faced mounting criticism over his government's response to the bushfires and its climate policy.
Since September, bushfires have killed at least 28 people and destroyed thousands of homes.
On Sunday, Mr Morrison conceded there were "things I could have handled on the ground much better".
In recent weeks, Mr Morrison has been heckled by locals when visiting fire-hit communities in the states of New South Wales and Victoria, where the worst blazes are concentrated.

Angry residents berate PM in blaze-ravaged town
Australia bushfire crews battle mega blaze
A visual guide to Australia's bushfire crisis

In the town of Cobargo in New South Wales, one woman demanded more resources for the fire service, while others called Mr Morrison an "idiot" and said "you won't be getting any votes down here".
"These are sensitive environments, they are very emotional environments," Mr Morrison said in a TV interview with ABC.
"Prime ministers are flesh and blood too in how they engage with these people."
Acknowledging the pressure fire services were facing, Mr Morrison said there was a "new appetite" for the government to take a more direct role in responding to the disaster.
The PM said he would seek a royal commission review - a type of public inquiry - into the country's response to the bushfire crisis.

What did the PM say about climate change?

Mr Morrison's government has been accused of not doing enough to address climate change, which experts say could increase the intensity, frequency and scale of bushfires.
But in the interview, the PM defended his government's approach, which he said took into account the effect of climate change on the bushfires.
"We're living in longer, hotter, drier summers," the PM said. "This is obviously affected by the broader changes in climate."

Pressed on his plan to reduce carbon emissions, Mr Morrison insisted his government was on track to "meet and beat" its targets.

Under the Paris climate agreement, Australia has pledged to cut emissions by 26% to 28% by 2030 compared to 2005 levels.

However, Mr Morrison said a "global solution" was needed to tackle climate change.

Tens of thousands of people across Australia took part in climate change protests on
Friday.
In cities including Sydney, Melbourne and Canberra, demonstrators turned out to press Mr Morrison's government to make a quick transition away from fossil fuels.

**What is the current situation with the fires?**
Bushfire conditions eased on Saturday, giving firefighters temporary respite in areas where blazes are still raging. But with more hot weather expected next week, the risk was far from over, authorities warned. Authorities have warned that the huge fires, spurred by high temperatures, wind and a three-year-drought, will persist until there is substantial rainfall.
More than 123 fires are still burning across New South Wales, with 50 said to be uncontained.
According to NSW Rural Fire Service, more than 2,000 homes have been destroyed so far during this fire season. In Victoria, there were 32 bushfire warnings in place as of Saturday. A firefighter died while tackling a blaze in the state on Saturday, bringing the death toll from this season’s bushfires to 28.

Tens of thousands protest Australian PM's climate policies amid bushfire crisis

By Helen Regan and Jessie Yeung, CNN

Updated 1732 GMT (0132 HKT) January 10, 2020

Thousands protest...
Source: CNN

Thousands of activists marched in several major cities across Australia on Friday, calling on the government to act on the climate crisis and do more to stop the bushfires that continue to ravage large swathes of the country.

The protests, organized by national student organization Uni Students for Climate Justice, were set to take place in nine cities including Melbourne, Sydney, Brisbane and Perth, indicating widespread public discontent after months of increasingly deadly fires. New South Wales police told CNN more than 30,000 people attended the climate change protest in Sydney. Organizers put the number between 50,000 and 60,000 people.

"The bushfires are devastating communities and our government is not
doing enough to stop it," Ambrose Hayes, 14, told CNN at a rally in Sydney. "The Morrison government needs to act before it's too late, before we reach a tipping point, before these impacts get worse than they already are."

Protesters carried signs that read "Koalas Not Coal," "Change the System, Not the Climate" and "Sack ScoMo," with many directing their anger at Prime Minister Scott Morrison, who has faced heavy criticism for what they see as a lackluster response to the fires and for his climate policies, as well as support for coal mines.

Tens of thousands of Australians rallied across cities as deadly climate-fuelled bushfires swept across the continent.

"We've had decades to deal with it and successive governments have done nothing. The Earth is a finite resource. You can't have an economy on a dead planet," said Kris Stevens, who traveled to Sydney from the city of Dubbo in New South Wales (NSW).

Friday’s protests pushed for five main demands: funding for firefighters, relief and aid for affected communities, land and water sovereignty for
indigenous communities, an immediate transition toward renewable energy, and a "just transition" for workers in the fossil fuel industry. A total of 27 people have died this fire season, around 2,000 homes have been destroyed and an estimated billion animals have been affected. State and federal authorities have been scrambling to respond, with thousands of firefighters on the ground and billions of dollars allocated in federal aid. But climate activists say it's not enough. "We’re protesting this Friday because we’re outraged about our government’s criminal negligence about the bushfire crisis, exacerbated by climate change," said Uni Students for Climate Justice on its Facebook page. "We are protesting to give a voice to the tens of thousands of people who want real action on climate change and real funding for relief services."

Authorities had urged protesters to postpone the marches due to dangerous fire conditions and limited resources. Victoria Police Acting Assistant Commissioner Tim Hansen said on Wednesday that the police force was already stretched thin and fatigued, and the protests would be a "distraction" and a "resource drain" on a day forecast to be hot and dangerous. The organizers pushed back, posting on Facebook that the police, the media and the state government were "trying to paint ordinary people -- who are fed up with their lies, theft and criminal negligence -- as being a drain on emergency services."

**Pressure on Morrison**

Morrison has faced growing anger and frustration from the public as the fires continue to spiral out of control. He was widely criticized for taking a vacation to Hawaii as fires raged in
NSW last month. During a visit last week to the fire-ravaged town of Cobargo, the Prime Minister was heckled by furious residents who had lost their homes. "You're an idiot," one resident shouted at him.

He has also been accused of initially playing down the severity of the fires.

"The strategy up until Christmas was to downplay importance of the emergency, to make it seem like another episode of fires ... nothing to see here, move on," said Frank Jotzo, Director of the Centre for Climate and Energy Policy at Australian National University's Crawford School of Public Policy. "That really jarred with the very obvious never before seen dimensions of this disaster and it would really grate with anyone who had a direct experience of these fires."

"The government has simply looked uncaring, and it looked like the political position of the government, including with regards to its position on climate change, seemed to be more important than even the acknowledgment of the magnitude of the disaster," said Jotzo.

Morrison has defended his government's response to the fires and set up a National Bushfire Recovery Agency to coordinate the response to rebuilding communities.

His administration has allocated 2 billion Australian dollars ($1.4 billion) in federal aid, to help rebuild vital infrastructure like schools and health facilities struck by fire.

The Prime Minister earlier said up to US$4,200 will go to each of the volunteer firefighters battling blazes for more than 10 days. Other relief measures include compensated pay and extra leave for volunteer firefighters. Cash payments of 1,000 Australian dollars ($690) are also available to those who have lost homes or loved ones in the fires.

The federal government has also sent in military assistance like army
personnel, air force aircraft and navy cruisers for firefighting, evacuation, search and rescue, and clean-up efforts.

"The tone and nature has really changed over the last week or so. There is now a clear acknowledgment that it is the absolute top priority for the federal government in Australia," said Jotzo.

Activists on Friday, however, said the recovery fund was "totally inadequate" and called for the fire service to be fully funded.

"It’s scandalous that we have to rely so heavily on volunteers and charity to stop whole towns from being wiped out! We demand full funding for our fire services," Uni Students for Climate Justice said on Facebook.

Climate policies under scrutiny

Morrison has also been accused of not doing enough to address the climate crisis, which experts say is making natural disasters like fires go from bad to worse. Summers in Australia are always hot and dry -- but fire seasons have been arriving earlier and spreading with greater
"The science is telling us ... these extreme heat conditions we've seen this year might occur naturally once every 350 years," said climate scientist and former federal climate commissioner Tim Flannery. "But once you add in the influence of the human-emitted greenhouse gases, we're likely to see those conditions once every eight years."

Flannery added that coal was "a national addiction," and the link between government and the fossil fuel industry was "almost complete."

Critics of the Morrison administration have pointed to his history of climate skepticism and support for coal mines. In 2017, Morrison -- then treasurer -- made his position clear when he brought a lump of coal into Parliament.

"This is coal. Don't be afraid, don't be scared," he said, to jeers from the opposition. "It's coal that has ensured for over 100 years that Australia has enjoyed an energy-competitive advantage that has delivered prosperity to Australian businesses."

Since then, his climate rhetoric has softened a little -- he has acknowledged the link between climate change and extreme weather, and asserted his commitment to reduce emissions. But he also said the government would only pursue "sensible" policies, and that there wasn't "a single policy, whether it be climate or otherwise," that can fully protect Australia against the fires.

Jotzo said climate change has been a "really poisonous issue politically for about a decade in Australia."

"Morrison took a very decisive stance against climate change policy in the election campaign in 2019," he said. "He was subsequently locked into a position by his government of not doing much on climate change." That policy of inaction is threatening to divide Australian society, said
Flannery, "because people are deeply angered by the betrayal of one government after the other on this issue."

"We have a significant minority of Australian parliamentarians who are welded-on climate skeptics. And even if the seas were lapping at their chins and their hair was on fire as a result of climate change, I don't think they would change their mind," he continued.

Anger over government inaction on the climate crisis was evident at the march in Sydney.

"This is unacceptable, we want our Prime Minister to listen to the youth. He hasn't been listening to his voters. This is not what a Prime Minister should be doing," said 14-year-old Hayes, who spoke at the rally.

Scientists have been warning for years that a disaster of this magnitude could happen, but government agencies failed to take heed and prepare, Jotzo said, adding that there is now enormous domestic and international pressure on the Australian government to make meaningful climate change policies.

"The fires are a wake up call to that, and I am optimistic that it will result in a real shake up in how we think about these extreme weather events,"
Extreme weather returns

The protests come as wildfires across Australia’s southern states were expected to worsen on Friday, as hot, dry winds gust into the area, New South Wales Rural Fire Service (NSW RFS) Commissioner Shane Fitzsimmons said in a press conference.

There were 137 fires burning in New South Wales as around 3,300 firefighters battled conditions that the fire service described as "difficult and erratic."

On the border between Victoria and NSW, two fires -- the Green Valley fire and Dunns Road fire -- have connected, making a combined fire covering 545,785 hectares (1.3 million acres).

In Victoria, emergency fire warnings were in place for several areas, telling people to evacuate. The Victorian Country Fire Authority warned residents still in Combienbar town, "You are in danger and need to act immediately to survive. The safest option is to take shelter indoors"
immediately. It is too late to leave."

Strong winds southwesterly winds of 70 to 100 kilometers per hour (43-62 miles per hour) were expected to hit the region overnight, complicating firefighting efforts.

"These next few hours are going to be very, very challenging," Premier of Victoria Daniel Andrews said, according to CNN affiliate Nine News.

A ‘megafire’ measuring 1.5 million acres forms in Australia as bushfires merge
Australia’s bushfire crisis worsened Thursday night into Friday as hot, dry and windy conditions redeveloped across the country’s hard-hit southeast, causing two large blazes to merge into one. The new “megafire” measures about 1.5 million acres, about the size of the state of Delaware or roughly eight times as large as New York City.

“What we’re really seeing with a number of these fires merging is a number of small fires started by lightning
strikes, across the landscape,” New South Wales Rural Fire Service spokesman Anthony Clark told the Sydney Morning Herald. “And as they grow, we see fires merging,” Clark said.

Separately, an emergency warning was issued for a blaze in the Southern Highlands region, known as the Morton Fire, that threatened populated areas.

As of midday Friday, firefighters were battling 147 fires in New South Wales, with one at the emergency level, the highest warning category, as a wind shift moved from south to north along the coast.

The strong winds were reaching speeds of up to 55 mph, lofting embers out ahead of fires to start new spot fires, and propelling the front edges of fires forward at high rates of speed, breaching containment lines.

The emergency warning issued for the Morton Fire near Bundanoon advised residents to seek shelter, noting, “It is too late to leave.”

“Protect yourself from the heat of the fire,” the Rural Fire Service said.
Emergency warnings were also issued for fires in parts of Victoria.

Conditions were so extreme Friday morning that weather forecasters issued a severe thunderstorm warning for a fire-generated thunderstorm in northeastern Victoria, specifically for damaging winds.

The megafire formed when part of the East Ournie Creek blaze collided with the Dunns Road Fire near the Clarkes Hill Nature Reserve, near the border between the two states. This blaze will be even harder to put out and illustrates the scale of the disaster facing Australia.

This is not the first megafire to form during Australia’s nightmarish bushfire season. The Gospers Mountain Fire near Sydney is also the result of multiple fires merging into one, and it has repeatedly sent thick, hazardous smoke into highly populated areas.

While Australia has had fire seasons that have burned more acreage overall, these fires are unprecedented for their locations. According to Australia’s Bureau of Meteorology, the fires in New South Wales are the largest in state history, and the burned area is the
most extensive ever documented in eastern Australia.

Ecosystems that typically don’t see major fires, such as rainforests, have been scorched, and these fires are affecting the most populous reaches of the already hot and dry continent.

Scientists have published numerous studies showing that Australia’s climate is becoming hotter and drier because of human-caused climate change, and these trends are dramatically amplifying the risk of bushfires and lengthening the fire season.

This season, blazes first broke out in September, making for a grueling slog for thousands of firefighters and weary residents, many of whom have evacuated multiple times.

At least 25 people have died in the fires, which have destroyed at least 14.5 million acres. Up to 1 billion mammals, birds and reptiles nationwide, many of them unique to Australia, may have been affected or killed by the fires sweeping across Australia, according to a University of Sydney estimate.

The fires themselves are exacerbating global warming, too, with fire-induced thunderstorms pumping soot, ash
and chemicals into the upper atmosphere. Satellite-based estimates of greenhouse-gas emissions from the fires show they may be contributing the equivalent of a typical year’s worth of Australia’s emissions from burning fossil fuels.

**Australia fires: Employee brands News Corp coverage 'irresponsible'**

2 hours ago

An employee of Australian media organisation News Corp has lashed out at the company for "irresponsible" coverage of the current bushfires engulfing parts of the country.

News Corp owns The Australian, Sydney's Daily Telegraph and the Herald Sun. Emily Townsend, a commercial finance manager at the organisation, said coverage of the crisis had diverted attention away from climate change.

Bushfires have ravaged many parts of the country for weeks.

At least 27 people have died.

Ms Townsend sent the email after an all-staff message was sent from executive
chairman Michael Miller sharing bushfire-related incentives. She said the email regarding fundraising and other support initiatives did not "offset the impact News Corp reporting has had over the past few weeks".

"News Corp's decision to take this approach in such a devastating time for our country, communities and the environment is a step too far for any of us stakeholders to ignore and continue with our daily tasks without thinking for a minute about what we are contributing to," she added.

News Corp is owned by media tycoon Rupert Murdoch.

Inaccurate reporting of police figures has fuelled arson claims around Australia's fires

The Australian has been criticised for its coverage of the fires. In one article it said the blazes were "nothing new". It did say that climate change could not be ruled out as a cause before adding: "Climate change or no, these are some of the costs of being in one of the most fire prone regions in the world."

It also was supportive of Prime Minister Scott Morrison's decision to take a holiday to Hawaii. A commentary piece said: "We can't blame him for wanting to take a well-earned break with his family, skip Monday's Mid-Year Economic and Fiscal Outlook surplus backtrack or escape the smoke from the bushfires surrounding Sydney."

Mr Miller told the Sydney Morning Herald Ms Townsend resigned in December and was due to leave shortly.

"The dedication and professionalism of our journalists and photographers have kept the community - particularly those Australians affected directly - informed and supported," he added.

What is the current situation with the fires?

On the New South Wales (NSW) and Victoria border, fires have merged to create a
mega-blaze, covering more than 640,000 hectares of land. More than 174 fires are still burning across NSW with 65 said to be uncontained. According to NSW Rural Fire Service, more than 2,000 homes have been destroyed so far during this fire season. In Victoria, residents of Wodonga were evacuated overnight. There is one emergency warning in place in the state.

In South Australia, firefighters are still tackling bushfires on Kangaroo Island. On Thursday, the island's mayor Michael Pengilly described the situation there as "hell on earth". At least 25,000 koalas are estimated to have died on the island. David Bowman, a professor of pyrogeography from the University of Tasmania told the BBC that the implications of the current fires in Australia could not be underestimated.

"We've got fires that are still burning, transforming landscapes, wiping out wildlife - Australia's not going to be the same after this. The consequences of this will be around for hundreds of years," he said.

**Australia fires: Murdoch's son criticises News Corp coverage**

6 minutes ago
Rupert Murdoch’s son James has said he is "disappointed" with the ongoing "denial" in his father’s news outlets as Australia’s wildfires burn. James and his wife Kathryn Murdoch told The Daily Beast of their frustration with News Corp and Fox coverage of the climate issue. Murdoch columnists have described linking the fires to climate change as "hysterical" and "silly". Rupert Murdoch has described himself as a climate sceptic. He denies employing climate deniers. But critics of News Corp have pointed to its comment articles and reporting of the alleged role of arson in the wildfires as minimising the impact of a changing climate. Murdoch-owned titles account for about 70% of newspaper circulation in Australia’s major cities. Last week a News Corp employee in Australia lashed out at the company's "irresponsible" coverage of the bushfire crisis.

On Monday News Corp announced it was donating A$5m (£2.7m; $3.5m) to bushfire relief. The pledge is in addition to donations from members of the Murdoch family personally.

Fire detections / hotspots
• In given week • Previously
James Murdoch remains on the board of News Corp but is not otherwise employed by his father's businesses. He runs a private investment company. On Monday Kathryn Murdoch, a longstanding environmental advocate, tweeted a link to an article on Vice which criticised the Murdoch outlets for attempting to blame arsonists for the fires.

Skip Twitter post by @KathrynAMurdoch

Kathryn Murdoch
@KathrynAMurdoch

https://apple.news/AVYXE_UK8T4OGZo2X2xAu_Q

It's Clear Who's to Blame for Australia's Fires, and It's Not Arsonists
Make the oil companies pay, says an expert who studies the world's worst polluters.

Australia fires: Smoke to make 'full circuit' around globe, Nasa says
Smoke from the massive bushfires in Australia will soon circle the Earth back to the nation, says Nasa.
Massive infernos have raged along the nation's east coast for months, pushing smoke across the Pacific.
Nasa said plumes from blazes around New Year's Day had crossed South America, turning skies there hazy, and moved "halfway around Earth" by 8 January.
"The smoke is expected to make at least one full circuit around the globe," the US space agency said.

Australia's indigenous people have a solution for the
country's bushfires. And it's been around for 50,000 years

By Leah Asmelash, CNN

Updated 1517 GMT (2317 HKT) January 12, 2020

(CNN) The fires in Australia have been burning for months, consuming nearly 18 million acres of land, causing thousands to evacuate and killing potentially millions of animals.

They're showing minimal signs of slowing down. The Australian state of New South Wales, where both Sydney and Canberra are located, declared a state of emergency this week, as worsening weather conditions could lead to even greater fire danger.
But a 50,000-year-old solution could exist: Aboriginal burning practices.

Here's how it works.

Aboriginal people had a deep knowledge of the land, said historian Bill Gammage, an emeritus professor at Australian National University who studies Australian and Aboriginal history. They can feel the grass and know if it would burn well; they knew what types of fires to burn for what types of land, how long to burn, and how frequently.

"Skills like that, they have but we don't know," Gammage said.

Aboriginal techniques are based in part on fire prevention: ridding the land of fuel, like debris, scrub, undergrowth and certain grasses. The fuel alights easily, which allows for more intense flames that are harder to fight.

The Aboriginal people would set small-scale fires that weren't too intense and clear the land of the extra debris. The smaller intensity fires
would lessen the impact on the insects and animals occupying the land, too, as well as protect the trees and the canopy.

A firefighter manages a controlled burn near Tomerong, Australia, set in an effort to contain a larger fire nearby.

And though current fire fighters on the ground still use some fuel control and hazard reduction techniques, Gammage said it’s not enough. "Some of it is being done, but not skillfully enough," he said. "We don’t really take into account plants and animals that might be endangered by fire. And secondly, we don’t really know what’s the best time of year, how much burn, how to break up a fire front."

It’s not like they know nothing, Gammage said, especially the firefighters on the ground. But he said it’s not enough to make Australia safe.

Why Aboriginal techniques are so difficult to implement

Setting smaller, low-intensity fires to prevent larger bushfires may sound like common sense. In practice, though, it’s really hard.

It comes down to knowledge, Gammage said. When do you start a fire? What time of the year? What time of day? How long you want it to burn? What plants are there? What’s the weather like — is there a drought like now?

"You have to have a lot of local skill," Gammage said.
A firefighters backs away from the flames after lighting a controlled burn near Tomerong, Australia.

He cited an example. In Australia, fires that are too hot actually allows the flammable undergrowth to germinate more. When early Europeans tried to copy Aboriginal techniques by lighting fires, they made the fires too hot, and got even more of the flammable scrub. So, they tried again. And again.

"Even though people can see the Aboriginese doing the fire control, and could see the benefits, they couldn't copy it," he said.

Now, the juxtaposition is clear.

"Where the Aboriginal people are in charge, they're not having big fires," Gammage said. "In the south, where white people are in charge, we are having the problems."

As climate change worsens, so will the fires

The bushfires in Australia are never going to go away but will get worse. That's according to Justin Leonard, a researcher dedicated to understanding bushfires and land management. Bushfires are ignited both naturally and by humans, but Leonard called them "inevitable."

Climate change only worsens the conditions for fires, he said. Droughts and hotter weather only make for more intense fires and longer fire seasons — changes that are already being observed, he said.

Under worsening conditions, fires are harder to put out: They grow too big to get to safely, and even aerial suppression isn’t necessarily
possible because of the wind.
So, what does that mean for indigenous fire techniques?
They’ll still help, Leonard said. Areas that have undergone preventative burning lead to less intense fires. But the problem is, under the worst of conditions, the fire will still be able to burn straight through the land, despite any preventative measures.

A resident throws a bucket of water onto a smoldering tree on his property in Wingello, Australia.

Which means that towns are still in danger.
"We need to solve that inevitability by effective township design," Leonard said.
In other words, indigenous burning techniques aren’t enough on their own. Communities will need to properly manicure adjacent forests, landscape their own private property, and have effective house design and maintenance, Leonard said.

**Aboriginal techniques require more money. The cost might be worth it**

The most common way fires are handled now is with medium-intensity fires, Leonard said. It’s similar to these smaller, more frequent fires, except it burns a little hotter, covers more land and is just a little more intense.
Basically, it’s more bang for your buck. And that’s what this comes
You have to "use limited budget on what will be the most prolific way" to prevent fires, Leonard said.

It takes a lot of labor to ignite small frequent fires everywhere — even just using these tactics near towns can be labor intensive, Leonard said. Gammage noted that cost is a common concern when it comes to transitioning completely to Aboriginal fire practices. But he said he’s not impressed by that argument.

"It’s costing much more (to fight these fires)," he said. "Fires that destroy 2.5 million acres, which is what’s happening now, it’s shameful. It’s a disgrace that anyone could let such terrible fires run amok."

What Australians should really learn from the Aboriginal people is custodianship over the land, Leonard said. The way Aboriginal people deeply know and care for the land is something Australians should
ponder and embrace. Gammage pointed to an incident on Tuesday, when a local fire brigade managed to steer a bushfire around their community, despite being told their town was "undefendable," according to the Sydney Morning Herald.

The brigade, using their knowledge of the land, stayed behind while others evacuated. And rather than burn right through their town, the brigade was able to save houses and prevent deaths. It just shows the importance of knowing local fire conditions, Gammage said. Knowing the land -- just as the Aboriginal people do.

**Australia fires: Aboriginal planners say the bush 'needs to burn'**

By Gary Nunn
Sydney
12 January 2020

Aboriginal people have long used techniques to manage fires.

For thousands of years, the Indigenous people of Australia set fire to the land.
Long before Australia was invaded and colonised by Europeans, fire management techniques - known as "cultural burns" - were being practised. The cool-burning, knee-high blazes were designed to happen continuously and across the landscape. The fires burn up fuel like kindling and leaf detritus, meaning a natural bushfire has less to devour.

Since Australia's fire crisis began last year, calls for better reintegration of this technique have grown louder. But it should have happened sooner, argues one Aboriginal knowledge expert.

"The bush needs to burn," says Shannon Foster. She's a knowledge keeper for the D'harawal people - relaying information passed on by her elders - and an Aboriginal Knowledge lecturer at the University of Technology Sydney (UTS).

Much of the ancestral information she shares relates to the bush, says Ms Foster. "It's the concept of maintaining country - central to everything we do as Aboriginal people. It's about what we can give back to country; not just what we can take from it."

'Naive' techniques of today

Country is personified within Aboriginal culture. "The earth is our mother. She keeps us alive," Ms Foster says. This relationship shifts priorities around precautionary burning.

While modern-day authorities do carry out hazard reduction burning, focusing on protecting lives and property, Ms Foster says it's "clearly not working". "The current controlled burns destroy everything. It's a naive way to practise fire management, and it isn't hearing the Indigenous people who know the land best. Whereas cultural burning protects the environment holistically. We're interested in looking after country, over property and assets. "We can't eat, drink or breathe assets. Without country, we have nothing."
Indigenous cultural burns work within the rhythms of the environment, attracting marsupials and mammals which Aboriginal people could hunt. "Cool burning replenishes the earth and enhances biodiversity - the ash fertilises and the potassium encourages flowering. It's a complex cycle based on cultural, spiritual and scientific knowledge."

They also create a mosaic of ecologies, Ms Foster says, and this can lead to beneficial micro-climates.

"Soft burning encourages rain - it warms the environment to a particular atmospheric level, and once the warm and the cool meet, condensation - rain - occurs, helping
mitigate fires."
Her Aboriginal elders in Sydney have been assessing the overgrown bush and
extremely dry kindling for some time, warning that a huge fire is coming: "They
compared it to a kid with unkempt hair, saying it needs nurturing."
But local authorities have forbidden them from cultural burning when they've asked
for permission.

Where cultural burning is used
There's no one-size-fits-all approach to precautionary burning because the
Australian landscape is so diverse from place to place.
Nonetheless, some states do integrate cultural burning with other strategies,
according to Dr Richard Thornton, CEO of the Bushfire and Natural Hazards
Cooperative Research Centre.
"There's a stark difference in northern Australia, where Indigenous cultural burning
happens substantially. In southern states, it's sometimes done according to the
needs and wishes of local communities."

Since Australia was colonised in 1788, cultural burning was slowly eradicated. But
recent years have seen moves to reintegrate it.
Associate Prof Noel Preece, a former national parks ranger, wrote the first fire
manual for central Australian park reserves.
He says cultural burning is still practised in parts of Melbourne, but largely stopped in
south-eastern Australia because vegetation built up in "precarious areas" where cool
burns don't work.
"That said, Indigenous people had extremely detailed knowledge of 'dirty country'
that needs a good burn," says Associate Prof Preece, now of James Cook
University.

Drawbacks of the ancient practice
Cultural burning, Prof Preece says, can reduce fuel on the ground from 10 tons to 1
ton. But it's only effective protection for moderate fires, so it needs to be done in
conjunction with hazard reduction burns.
Even then, it only reduces hazards: "With the recent catastrophic conditions of
humidity and high winds, nothing could stop these fires."
"Aboriginal people were taken off their country so there's a re-learning process which
is very useful and important. But it's still early days and by itself, it's not enough," he
says.

Experts agree that cultural burning has limitations, partly because colonisation led to
development and human-created climate change, presenting us with a very different
landscape now to hundreds of years ago.
Prof Preece has been in areas where, day after day, the conditions for cooler cultural
burning weren't right.
"It'd be too moist, too cool, too hot, too dry - you have a narrow window. And with many firefighters in Australia being volunteers, they're working during the week, and you could go four Saturdays till the conditions are right."

For thicker shrub running up tree canopies, he says a hot burn is required because cool burns won't get rid of such layers of fuel.

In addition, Dr Thornton says individual Indigenous burns, undertaken by specific agencies such as Firesticks, absolutely have their place, but need to fit within community expectations if done on a larger scale by others. "We need to ensure fire doesn't escape and burn down somebody's property. It'd undermine community views of the entire practice so we need to ensure we operate within a safety framework which is defendable."