

## Your details

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Title

First name

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## Submission details

I am making this submission as

A member of the general public

Submission type

I am making a personal submission

Consent to make submission public

I give my consent for this submission to be made public

## Share your experience or tell your story

Your story

I am a veterinary scientist and enjoy spending leisure time in the rich bushland of our state. The 2019-2020 bushfires had a drastic impact on NSW and I am extremely concerned about the future of our ecosystems, wildlife and threatened species.

Like many Australians I was deeply affected by the suffering of wildlife burnt in the recent bushfire crisis. The scale of their tragedy is still difficult for me to comprehend.

In January 2020 I volunteered as a veterinarian in the wildlife search, rescue and triage operations carried out around Lithgow and Oberon. The World Heritage Area was home to at least five very special koala populations, having high genetic diversity and some being chlamydia free. This area was devastated by the fires and, sadly, we suspect few animals survived. Our team was fully equipped but were not permitted to search in public burnt areas; our efforts focused on treating and humanely euthanasing

the surviving animals on private land.

I have personal experience fighting bushfires. I was an active volunteer firefighter with the NSW RFS in the 1990s. I have stood on the end of hoses saving houses while watching others burn. I have sheltered in a vehicle as fire raged across the road. Today, I cannot imagine facing the ferocious fire fronts which climate change has given us. It's hard to comprehend this new reality of large fires that we just can't put out.

The severity of drought and climate change-induced bushfires makes our mitigation and preparation efforts so important. Without a science based approach and government action these climate impacts will continue to endanger our lives, damage our native forests and fauna, waterways and agricultural land, our homes and livelihoods.

## Terms of Reference (optional)

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The Inquiry welcomes submissions that address the particular matters identified in its [Terms of Reference](#).

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### 1.1 Causes and contributing factors

The bushfires were a wake up call for all of us - that the impacts of climate change are here and they will hit Australia hard. This fact was recognised by the broader community during the bushfire crisis and there is a clear mandate for strong government leadership on climate change. And for real action - cutting domestic emissions and ceasing to export emissions.

Australia's temperature has risen by around 1 C since 1910 due to climate change. Australia has also experienced a drop-off in cool season rainfall across mainland southern Australia in recent decades, and this is linked to climate change. These trends have contributed to an increase in dangerous bushfire weather over recent decades (as measured by the McArthur Forest Fire Danger Index). That's why it's imperative that we respond to this emerging threat immediately and with science.

Australia is the world's sixteenth biggest greenhouse gas emitting country and if we account for the fossil fuels we export (which are twice our domestic emissions) Australia contributes 3-4% of the world's greenhouse gases. To have any hope of preventing another summer like this one, and indeed more broadly catastrophic climate change, we must restrict the export of fossil fuels - just arguing that another country will meet the demand is not morally defensible; we will be implicated in the future harm these exports will bring.

NSW can lead the nation in rapidly deescalating our reliance on fossil fuel exports. Ross Garnaut, in his 2019 book *Superpower: Australia's low carbon opportunity* clearly demonstrates the prosperous and bright future Australia can have in a low carbon future. This is a future of energy security for both industry and households. This is a future where we process our own minerals using renewable energy and export the high-value finished products. NSW needs to move into this new economy now.

It is entirely possible for NSW to reduce greenhouse gas emissions to net zero by 2025. Any weaker target will see repeats of the tragedy of the 2019-2020 summer. Our ecosystems can't sustain these events, nor can the national psyche. NSW must commit to a strong target and demand the federal government do the same - we need a whole of government shift towards real action on climate change.

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Like others, I believe a citizens assembly can break the political deadlock on strong climate change action. Citizens' assemblies are used to address important issues that electoral politics can't fix on its own. In recent years, Ireland's Citizens' Assembly broke the deadlock on two controversial issues: same-sex marriage and abortion. The recommendations of the Citizens' Assembly informed public debate and provided politicians cover to make the necessary changes. A subsequent Citizens' Assembly on Climate Change produced a series of recommendations that were incorporated into the Irish government's action plan.

Australia is extremely vulnerable to the future impacts of climate change and it is undoubtedly in our interests to leave all remaining fossil fuels in the ground.

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### **1.2 Preparation and planning**

As an RFS member I participated in many hazard reduction burns. In the years since I was an active firefighter the window of opportunity for conducting safe burns has become shorter due to hotter temperatures, drier conditions in southern Australia, and fewer days of low/moderate fire danger. This has been driven by climate change. Unless we address climate change and urgently reduce our emissions as part of a global effort, the window of opportunity for prescribed burning will continue to shrink. And as bushfire weather worsens, the effectiveness of hazard reduction will diminish.

Hazard reduction is one way of preparing for bushfires, and is an important aspect of bushfire management, but it doesn't remove the threat of bushfires. In fact, hazard reduction can have very little effect on the spread of fire in severe, extreme or catastrophic fire danger conditions – like we've experienced in Australia this bushfire season. This is because fires caused by extreme conditions do not rely on the forest undergrowth for propagation of the fire. The aim of an HR burn is to reduce the fuel load in the undergrowth only. No amount of hazard reduction will protect human lives, animals and properties from catastrophic fires.

Hazard reduction burns are an important aspect of bushfire management. However claims that a lack of prescribed burning is behind the extreme bushfires that we have seen this bushfire season are incorrect – a cool season drying trend over recent decades in southern Australia and a general warming trend, underpinned by the worst drought on record, created the conditions we experienced.

Hazard reduction burns remain necessary but their overall impact on fire severity is reduced by the far greater impacts of climate change. HR burns must continue to be informed by science, ecologically sustainable and strategically targeted. Independent oversight would ensure this occurs. Importantly the planning and execution of HR burns must also draw on the knowledge of Traditional Owners, where this exists.

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### **1.3 Response to bushfires**

I was shocked by the sheer volume of wilderness lost to the 2019-2020 bushfires. I still have many questions about the emergency response to these fires. Why wasn't the Gospers Mountain fire contained when it was small? Was it left to burn because it was not directly impacting human life or property, only threatening World Heritage Wilderness? Why didn't aerial resources extinguish the Snowy Mountain wilderness fires when they were in grazing land not in vulnerable alpine habitats?

It is likely that we will experience catastrophic bushfire danger in NSW again. Fire management plans must prioritise protection of the natural environment from future fires, especially threatened ecosystems (including from previous fires) and vulnerable

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species habitats. We must be able to extinguish multiple fires in remote locations when they are small. For this to be possible NSW must have sufficient firefighting aircraft available for immediate deployment for the duration of the fire danger season. Sufficient numbers of Remotely Trained Fire Teams are also essential to enable more fires to be contained at a small size.

Increasing our aerial and remote firefighting capabilities will also reduce the need for backburning. Backburning negatively impacts natural environments through trapping wildlife between firefronts and increasing the total burnt area. It should not be relied upon to save property and assets at the perimeter of natural landscapes which have been allowed to burn uncontrolled.

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#### **1.4 Any other matters**

During the 2019-2020 bushfire crisis the media informed us of the huge number of animal casualties. Like most in the community I assumed there would be a coordinated approach to the rescue of wildlife and search for survivors. I was shocked to discover that this was not the case. Nor was there an organised emergency veterinary wildlife response.

More than a billion animals gone. Not vanished. Not humanely euthanised. But cooked, burnt, asphyxiated, and starved to death. Kangaroos, echidnas, koalas.... they have the same nerves and pain sensation as humans. How many 'survivors' suffered excruciating pain from burnt feet as they slowly starved to death? There was no one to help these animals.

In January 2020 I helped a veterinary colleague coordinate veterinary support to wildlife groups in the Lithgow area and to ecologists from the Blue Mountains Koala Project. They monitor five populations of koalas in the World Heritage Area - very special populations with high genetic diversity and some being chlamydia free. This area had been razed by the fires. Several live koalas have been reported near the two main target study sites in Wollemi and Kanangra-Boyd National Parks. We needed to know if there were other survivors. We had the vets, nurses, 4WDers, arborists, runners, drone pilots, licensed darters, medications and equipment. Everything we needed to safely perform search and rescue. Animals requiring medical attention would be captured, triaged, then transferred to a temporary field clinic, given immediate treatment then transferred on to care facilities. For two weeks we waited for permission to enter and search the black zones of the national parks. The permission never came.

We did track, dart and treat some kangaroos and wallabies on private land. Each rescue can take 1-2 hours. It's slow going. And we helped local wildlife volunteers with food drops on the edge of the forest, but I imagine most surviving inhabitants of the world heritage wilderness met a sad and lonely end.

With the generous support of NGOs this search, rescue and triage team set up a clinic in Bungendore and in the Cooma area. Local carers had been looking after burnt wildlife without veterinary assistance; the vet team discovered many non-viable wounds under hopeful bandages and have made many difficult decisions. The forests around Cooma were home to a large population of koalas. Thankfully the team were able to access the burnt forests situated on PRIVATE land. It is rugged terrain. Using heat seeking drones and wildlife tracking dogs they located surviving koalas. The rescue team then walked for hours through the stillness to find the survivors, sometimes clinging to the top of a tall black tree-stick. No leaves as far as the eye could see. The vets would give them fluids hoping that irreversible kidney failure had not already set in.

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This operation was small scale and new and run by volunteer vets, not experienced project managers. Search and rescue missions had to be suspended for days at a time when the holding pens and cages become full.

Trying to help wildlife affected by these horrendous fires has been an eye opener. Waiting weeks or months until burnt areas are 'safe' enough to perform search and rescue is unacceptable. The community expect animals to be treated humanely and we have the skills and knowledge to do this. NSW urgently needs a coordinated veterinary emergency response for our wildlife. To create this capability we need to involve a variety of organisations and government including RFS, SES, NPWS, RSPCA, Australian Veterinary Association, Taronga Zoo, WIRES, and the ADF.

These fires have probably caused the extinction of some mammal species. They have certainly caused some invertebrate extinctions. These fires decimated local populations and caused individual animals untold horror. These fires were so devastating because of climate change. Fires like this must never be allowed to happen again.

Thank you for the opportunity to make a submission to this inquiry.

## **Supporting documents or images**

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