



Blue Mountains Greens

SUBMISSION TO NSW INDEPENDENT BUSHFIRE INQUIRY MAY 2020

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INQUIRY TERMS OF REFERENCE:

The Inquiry is to consider, and report to the Premier on, the following matters.

1. The causes of, and factors contributing to, the frequency, intensity, timing and location of, bushfires in NSW in the 2019-20 bushfire season, including consideration of any role of weather, drought, climate change, fuel loads and human activity.
2. The preparation and planning by agencies, government, other entities and the community for bushfires in NSW, including current laws, practices and strategies, and building standards and their application and effect.
3. Responses to bushfires, particularly measures to control the spread of the fires and to protect life, property and the environment, including:
 - immediate management, including the issuing of public warnings
 - resourcing, coordination and deployment
 - equipment and communication systems.
4. Any other matters that the inquiry deems appropriate in relation to bushfires.



INTRODUCTION

The Blue Mountains Greens (BMG) is part of an incorporated association, The Greens NSW, and affiliated with The Australian Greens. All office bearers and active members are volunteers. This submission was prepared by members of the BMG Climate Action Working Group.

As members of Blue Mountains Greens we would like to express our personal sense of grief and loss that has arisen from the Australian Bushfire Crisis of 2019-20. We grieve for the loss of human life and property and for the loss of our beloved forests and wildlife, experienced on a shocking and devastating scale.

Current residents of the Blue Mountains community located around the Great Western Highway, with its City Council based in Katoomba, have experienced bushfires going back decades into the 1950s and earlier. Many of us have grown up in the mountains. We are familiar with the stories of homes lost, evacuations of children and elderly neighbours, fires impacting street to street, and the familiar pathways followed by bushfires through the years.

As the megafires of 2019-20 swept through the forests and communities of southern and eastern Australia we watched in horror, well aware that this impact on farms, homes and townships could easily be repeated here, and that we would be relatively helpless if it were. We were (and still are) extremely grateful for the bravery and tireless work of our local and interstate RFS in saving our villages from the unimaginable.

Tragically, the Greater Blue Mountains World Heritage Area (which incorporates the Blue Mountains National Park) was massively impacted by the 2020 bushfires with over 75% “fully or partly burnt... impacting an estimated 135 million mammals, birds and reptiles.” (The Blue Mountains Conservation Society Inc., *Submission to the NSW Independent Bushfire Inquiry April 2019.*)

Policies of the Australian Greens

This submission is solidly based in and supports the policies of the Australian Greens, particularly those related to bushfire and hazard reduction, climate change and the Green New Deal.

Philosophy of “Deep Ecology” – We subscribe to the belief that humans are a part of nature rather than nature existing for the use of humans. This philosophy informs our desire to see the bushfire toll on indigenous flora and fauna given equal consideration alongside damage to human lives and settlement. We would like to see significant resources put into research into the role played by human activity (individuals and institutions) in causing these megafires, including the relationship with climate change.

Never more do we want to hear media reports such as: “The fire covered hundreds of hectares of bushland but thankfully no lives and properties were lost.”



For too long our affluent way of life has depended on the exploitation of Australian natural resources which we found intact 200 years ago and have diminished irreparably. We have failed to acknowledge the contribution which our natural environment makes towards human survival, both locally and globally. The evidence and research is available, if we just look for it. We are now paying the price of this failure.

INQUIRY TERMS OF REFERENCE: 1

The causes of, and factors contributing to, the frequency, intensity, timing and location of, bushfires in NSW in the 2019-20 bushfire season, including consideration of any role of weather, drought, climate change, fuel loads and human activity.

Climate Change and the History of Bushfires in Australia

This is no place to debate the current science of climate change. The Australian Greens have always supported the science around the existence of climate change and particularly how it relates to the increasing incidence and ferocity of bushfires occurring in south eastern Australia over the decades since the 1970s.

“It is now well known that southern Australia has become hotter and drier since the 1950s. ...Research in bushfire weather trends has shown a rapid increase in the FFDI (MacArthur Forest Fire Danger Index) since the 1970s. We have seen an increase in extreme fire weather, and a longer fire season, especially in southern and eastern Australia.” (Sunburnt Country. Joelle Gergis. Melbourne University Press. 2018).

There is anecdotal evidence of climate change in the lived experience of long-term Blue Mountains residents, who have observed the increasing incidence of high temperatures and decreased rainfall during the summer months.

According to the CSIRO the bushfires of 2019 saw the highest annual accumulated FFDI on record. It was also the driest year on record (since 1900), and Australia’s hottest year ever with an annual mean temperature 1.52 degrees Centigrade above average. (Australian Bureau of Meteorology - <http://www.bom.gov.au/climate/change/>)
The 2019-20 Bushfires: a CSIRO Explainer

The growing danger and frequency of extreme bushfires in South-Eastern Australian has been forecast for some time. For example, a 2009 study concluded that we faced a “20%-84% increase in potential ignition days for large (>1000 ha) fires in the Blue Mountains and Central Coast regions by 2050”

(F Bradstock et al. (2009), in “Be Prepared: Climate change and the Australian bushfire threat” by Prof. Lesley Hughes and Prof. Will Steffen, Climate Council of Australia 2013)

It is not only the increasing severity and frequency of bushfires that alarms those tasked with dealing with such disasters, but also Australia’s relative lack of preparedness to respond to the worsening situation.



“We need urgent emissions reductions, and a coordinated national effort on coping with worsening extreme weather disasters” - Greg Mullins, Climate Councillor, member of the Emergency Leaders for Climate Action and Former NSW Fire and Rescue Commissioner”. (This is not normal: Climate change and escalating bushfire risk” Climate Council Briefing paper 12 Nov. 2019)

Carbon Emissions – persistence in atmosphere

While the role played by the existence of greenhouse gases in the atmosphere is widely acknowledged in Australian public discourse, what is equally relevant but less widely known is the extent to which these gases persist over time. The four gases – Carbon Dioxide (CO₂), methane, nitrous oxide (NO₂) and chlorofluorocarbons (CFCs) vary in their persistence from “months to millennia.” CO₂, the main greenhouse gas, itself dissolves into the ocean between 20 – 200 years.

(“How long do Greenhouse gases stay in the air?”) The Guardian Australia “The Ultimate climate change FAQs.”

Thus, the climate effects which we are experiencing today are the result of emissions from the past century, whilst today’s increasing levels of greenhouse gases will continue to heat up the earth well into the future.

Future climate projections

It is therefore no surprise that the latest research into climate change predicts a “near-unliveable” future, should emissions continue to rise at the present rate. An international study, reported by *The Sydney Morning Herald* (5/5/20) and published in the journal *Proceedings of the National Academy of Sciences*, has predicted average global land temperature rises of up to 7.5 degrees by 2070. This is far in excess of currently expected levels of heating, of around 2-3 degrees Celsius, in line with current levels of emissions reductions (or lack thereof).

Reducing carbon emissions: The Australian Greens and Scientific Opinion

The time will come when the dire effects of climate change on bushfire incidence and ferocity in Australia become obvious even to climate sceptics. Unfortunately, due to the time lag in the persistence of greenhouse gases, it will then be too late. We must act now.

Australia is a laggard on the international stage. While Coalition “policies” have brought Australia on track to meet the Kyoto target of a 5% reduction in emissions by 2020, Australia is the only country to rely on (1997) Kyoto Protocol credits to halve the emissions reductions it needs to reach the Paris Agreement 2030 targets. Most analysts believe that, in spite of government claims, we will not meet our 2030 target.

(Graham Readfearn & Adam Morton, “Australia is the Only Country using Carryover Climate Credits, Officials Admit”. The Guardian Australia, October, 2019.)

At any rate, scientific opinion estimates that cuts to emissions of 45%- 63% by 2030 will be essential to enable Australia to reach the target of zero by 2050. Due to federal Coalition government inaction, Australia has little chance of achieving this.



The Australian Greens Climate Change and Energy Policy advocates the achievement of “Net zero or net negative Australian greenhouse gas emissions no later than 2040” This would be achieved through the transition to a net zero carbon economy sourcing “100% of stationary electricity from renewables as soon as possible.” This would be consistent with Australia’s obligations under the Paris Climate Agreement of 2015 to work to limit the global temperature rise to 1.5 degrees, which would reduce the significant risks and dangers. (The Climate Change Election: Where do the Parties Stand on the Environment?” The Guardian Australia, May 2019)
(Peter Hannam, “Safe Climate Niche Closing Fast, with billions at risk.” *The Sydney Morning Herald*, 5 May 2020)

The Australian Greens say this could be achieved by policies such as :

- Phasing out coal exports by 2030
- Building a clean energy exports industry
- Closing down coal power stations over time
- A ban on new coal mines, gas fracking and onshore and offshore gas and oil drilling
- Restoring a price on carbon
- Boosting the storage of clean energy
- Clean power investments through a refunded Renew Australia
- Urban and transport energy efficiency

These measures are incorporated into the Australian Greens announcement of a Green New Deal in November 2019 which would tackle the “overlapping crises of climate destruction and economic inequality.”
(Australian Greens Policy Platform – Renew Australia, November 2019)

Emissions reduction in the Blue Mountains

In 2018, Blue Mountains City Council (BMCC) joined the Cities Power Partnership (CPP) scheme created by the Australian Climate Council to foster the creation of “regional climate solutions.” The CPP is becoming a significant element in the reduction of the nation’s emissions given the policy vacuum and inaction in the Federal political sphere.

Blue Mountains Council has also joined the Western Sydney Energy Plan under the aegis of WSROC (Western Sydney Regional Councils), which aims to reduce emissions in Western Sydney in 4 key areas: renewable energy, transport, building and precinct design, and communities.

In March, 2019, at the instigation of Greens Councillors, BMCC became the third local Council in NSW to declare a Climate Emergency.



INQUIRY TERMS OF REFERENCE: 2

The preparation and planning by agencies, government, other entities and the community for bushfires in NSW, including current laws, practices and strategies, and building standards and their application and effect.

Bushfire risk in the Blue Mountains

There are several key elements which increase the risk faced by suburban communities in the Blue Mountains.

Firstly, there is only one main road along the central ridge, the Great Western Highway, which links the mountains' villages from east to west. While some villages are also linked by alternative routes, north or south of the highway, others have no other way in or out. Unfortunately, this is an accident of history as well as geography, and cannot be easily reversed.

Secondly, in spite of all that has been said and written following bushfires in the past, new homes continue to be built on western-facing ridges, most often with only one road leading in and out, towards the highway. New homes also continue to be built adjacent to bushland, which then leads to pressure for further clearing or hazard reduction.

We support the strengthening of building standards following recent bushfires in the mountains, but view this as being of limited value compared with the need to restrict further settlement in bushfire prone areas.

Water resources

At present there are very few householders in the Blue Mountains with water tanks sufficiently large to make a contribution to the fire-fighting effort. We would like to see the development of financial incentives and changes to the BCA (Building Code of Australia), mandating tanks with greater capacity, utilising storm water and attached to petrol pumps and roof-sprinkler systems. We realise that the RFS has mapped the existence of water tanks in Blue Mountains villages, but also that most of these tanks are relatively small and useless for fire-fighting.

Further, the installation of a parallel grey water system throughout the greater Sydney area would make available further water resources for fire-fighting. This should be regarded as essential job-creating infrastructure for a future when reduced dam levels are a given, owing to climate change, drought and the demands of an increasing population. The spread of city suburbia further into bushland areas also increases bushfire risk.

There should be strict limits on further residential development in the Blue Mountains due to bushfire risk, as well as environmental concerns. This reflects the fact that even built-up central areas of Blue Mountains villages are close to fingers of bushland which often reach to the central ridge (containing the only way out!) There is no beach for refuge in the Blue Mountains; only small "Safer" areas around shopping centres. We would all appreciate it if more thought were given to the provision, location and publicising of Bushfire "Safer" Areas.



With the trend towards further increases in the FFDI of 21st century bushfires, all settled areas of the Blue Mountains must now be regarded as high risk.

We support efforts by the RFS to educate and communicate with the population of the mountains, and to publicise the zoning of areas according to bushfire risk.

Hazard Reduction

There is a common assumption that fuel loads are the main factor that fire management has to deal with to prevent bushfires. The forestry industry (Forest Products Association) is now lobbying to be able to conduct more “selective logging” in national parks and public land, claiming this will make forests more “fire resistant” and protect homes, water catchments and infrastructure. They apparently have some support in this campaign from the Construction, Forestry, Maritime, Mining and Energy Union, supporting extra jobs for their members. (“Bushfire danger returns: Plans for forest thinning could backfire: experts”, by Mike Foley, et al., SMH 10/1/20).

However, the debate about hazard reduction burns as a major strategy to reduce the danger occurring in the first place, is often fraught with misunderstanding, misinformation and political opportunism.

The current Federal Government, apparently trying to distract attention from their lack of effective climate policy, and from the inescapable fact that a warming climate is the main cause of bushfires, has attempted to put the full burden of blame on the State governments’ ineffective land and forest management. At the height of the bushfire crisis, in December 2019, the Morrison government called its second inquiry in two years into the states’ management of land-clearing and controlled burn-offs.

This has led to some division within the NSW Government with some ministers supporting the Federal government approach on hazard reduction burns, while NSW Environment Minister, Matt Kean warned that hazard reduction burning “is not a silver bullet”. He pointed out that:

“Last year we did one of the three highest levels of hazard reduction burning in the Blue Mountains on record and yet we've still seen about 960,000 hectares burn in bushfires in that area - In comparison, since 2000 the next highest year saw 260,000 hectares burn”.(‘Adapting to the new normal’: NSW to review land management (SMH, 6/1/20)

Forestry and fire experts, such as ANU landscape ecology expert David Lindenmayer, and Philip Zylstra of Curtin University, have pointed out that multiple studies show hazard reduction burning is not always an effective tool and can even be counter-productive, as the thinning out of forests can make them dry out and become even more flammable. More open tree canopy allows in more light, drying out the leaf litter and undergrowth, while thinning trees allows strong winds more access to any fires – making them more intense. (“Bushfire danger returns: Plans for forest thinning could backfire: experts”, by Mike Foley, et al., SMH 10/1/20).



Dr Zylstra has said that plant diversity within a forest, rather than fuel load, is a better predictor of fire behaviour, and that longer rotations between fire makes some forests less prone to burning. After fire, given enough rain, new growth will create another bush fire hazard in as little as three years. Under a full tree canopy, on the other hand, the shrub layer thins out and fire can't spread so easily.
(<https://www.theland.com.au/story/6604988/using-nature-to-fight-fires-by-keeping-the-blaze-away/>)

Furthermore, a 2010 study from Wollongong University, *The Effect of Fuel Age on the Spread of Fire in Sclerophyll Forest in the Sydney Region*, found there was only a 10 per cent chance a fire would be stopped by a hazard-reduction burn. It found that road barriers were most effective at halting fires.

Dr Zylstra agrees that following Aboriginal traditional knowledge of fire management could be useful, but points out that such burns involved much planning, and were less frequent and smaller in scale than many assume. In fact, the evidence of charcoal fire scars in native forests, over millennia, shows that there was a huge jump in the amount of burning after white settlement (“There is a case for burning some forests less often – as they did before settlement”, by Jamie Brown, *The Land*, 2 Feb. 2020).

What is now clear to all is that in Australia the bushfire season is commencing earlier and lasting longer, due to climate change, reducing the opportunity to carry out safe and effective hazard reduction burning.

Taking all this into account, NSW Greens policy on bushfire management states in part:

3. Hazard reduction, including manual, mechanical and hazard reduction burning activities should be strategically planned to protect the community and vulnerable assets while minimising the adverse impacts of these activities on the environment;

4. Bush fire risk management should be informed by the knowledge of Indigenous Australians.

5. Strict controls are required to reduce the amount of rural burning that is not required for essential asset protection;

6. Prescribed burning is only one method of fuel management and should be considered in the context of other available options and the management objectives of the land in question;

7. Many vegetation communities and plants cannot survive frequent fire; for this reason frequent fire has been listed as a key threatening process by the NSW Scientific Committee under the Threatened Species Conservation Act;



Furthermore, one of the Greens aims in bushfire risk management states:

28. Ensuring that all bush fire hazard management works proposed under bush fire management plans are prepared using the best available data, are available for public comment, and are adequately assessed to ensure that proposed works and prescriptions are ecologically sustainable and appropriate for implementation with an appropriate audit and compliance program.

<https://greens.org.au/nsw/policies/bushfire-risk-management>

INQUIRY TERMS OF REFERENCE: 3

Responses to bushfires, particularly measures to control the spread of the fires and to protect life, property and the environment, including:

- *immediate management, including the issuing of public warnings*
- *resourcing, coordination and deployment*
- *equipment and communication systems*

Regarding the issuing of public warnings, the improved role of the ABC during the 2019-20 fires must be applauded and recognised. The continuation of cuts to funding and staffing for the ABC is difficult to understand, particularly in view of the continuation of this role into the COVID era. The “Emergency Broadcaster” role must be expanded and resourced outside of the official “bushfire” season, which now extends into both Spring and Autumn.

The issuing of public warnings in text form on mobile phones has recently been put into practice. However, while this is beneficial for those who own and use mobile phones, such as the young and middle aged, is it not appropriate for the frail aged living alone, who may well not own or use a mobile phone. It will be necessary to explore the use of community neighbourhood networks to issue warnings and assist with emergency evacuations for this group.

Rather than waiting until bushfires reach built up areas, surely the time has come for Australia to invest in our own capacity for aerial firefighting, so that the fires can be attacked at source, thus saving our native vegetation and wildlife from large scale decimation.

Back-Burning

The Greens recognize that back-burning can be useful, in the right weather conditions and terrain, and when conducted with oversight by skilled firefighters, in slowing down bushfires and saving homes and property as well as native forest and wildlife habitats.

For example, in the recent bushfires in the Blue Mountains, carefully targeted back-burns conducted by the RFS successfully stopped the dangerous Green Valley fire from destroying huge areas of native forest north of Lake Burragorang and endangering the villages of Wentworth Falls, Bullaburra, Lawson, and others.



Looking to the future: Community preparedness, justice and the Green New Deal:

We affirm that taking immediate action to combat climate change is the key to protecting the Australian community and environment against the return of more megafires like those that devastated so much of Australia last summer.

However, measures aimed at moving to a low-carbon emissions economy can also help to tackle the "overlapping crises of climate destruction and economic inequality" in Australia. The Australian Greens announced in November 2019 a "Green New Deal" aimed at doing just this.

For example, the brunt of defending Australian communities against the recent bushfires was taken by unpaid volunteers of the RFS and related organisations in other states. Some lost their own homes in the bushfire, some lost their lives. Most of them lost income, and many risked serious injury. Apart from some meagre and very limited payouts, their contribution went largely unrecompensed. Unions have called for more resources and pay for these front-line volunteers.

In response to this situation, in February this year, Australian Greens leader Adam Bandt called for a climate disaster levy on coal, gas and oil producers of \$1 per tonne of carbon dioxide – as part of the Greens New Deal. He said this will generate an extra \$1.5 billion a year and can be used to fund almost 16,000 new regional and metropolitan fire services jobs. Mr Bandt said, "Our emergency services need to be equipped to fight the climate emergency." Creating new paid jobs would open up careers for volunteer firefighters "to serve their community, and keep our lives, property and habitat safe". ("Greens want coal levy to fund more paid firefighters", by Judith Ireland, SMH 6 February 2020)

Moratorium on Clearing: the world has changed... (David Shoebridge MLC)

Unfortunately following the 2019-20 megafires of South Eastern Australia the "usual suspects" raced to jump into the vacuum left by the devastation and shock. Carrying on with "business as usual" as if nothing special had ever happened:

- Proclamations that widespread hazard reduction should take place as well as demanding that National Parks be opened to neighbouring property owners to carry this out became commonplace around the time of the NSW mid-north coast bushfires.
- Property developers on the NSW South Coast began clearing unburnt forest for housing bordering the burnt expanse of coastal forest near the town of Manyana. (Peter Hannam & Laura Chung, "Developers may spare remnant patch of unburnt coastal forest". Sydney Morning Herald 7 May 2020.)
- NSW Forestry stepped in to continue logging in already burnt forests, and the NSW Coalition government allowed logging in the Styx river forest (proposed for the Greater Koala National Park) to compensate for quotas lost due to the fires. This when 30% of the koala population of the mid north coast may have been killed. When studies have continued to show that logging of Australian forests in fact increases the



severity of bushfires through changing the composition of forests and increasing fuel loads.

(Logging returns to NSW native forest hit by bushfires, The Guardian Australia, 15 May 2020).

(Compelling evidence logging native forests has worsened Australian bushfires, The Guardian Australia, 6 May 2020).

We do not understand this mentality, which places so little value on that which is priceless – our natural heritage of Australian flora and fauna. We can only guess that it derives from ignorance of the rarity of these treasures in an overpopulated and rapidly depleting planet.

As David Shoebridge, NSW Greens MLC, said in initiating his petition for a state wide moratorium on clearing forest and unburnt native vegetation following the Megafires:

“The world has changed, and nature must have more protection...”

(David Shoebridge, Twitter, 5 May 2020.)

We join David in calling on Matt Kean, the NSW Minister for Energy and the Environment, to provide a moratorium through a special SEPP (State Environment Planning Policy).

The climate and bushfire catastrophe of 2019-20 has given us a glimpse of the future and it is likely to be a very unpleasant one if we continue along the present path of increasing emissions and exploitation of the natural world we have had the good fortune to inhabit.

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On behalf of Blue Mountains Greens (BMG) Climate Action and Species Extinction Working Group.