

# Submission to the NSW Independent Bushfire Inquiry

21 May 2020

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## The Morton Fire

We are the owners of "[REDACTED] [REDACTED]" a 40ha property at the end of [REDACTED] [REDACTED] Penrose, NSW. We bought the property more than 40 years ago, at which time around half of the land had been cleared and cultivated, principally as an apple orchard. Over the years, we have actively assisted the return of the property to native bushland. We are bounded on the South, East and West by rugged Crown land and, beyond that to the South and East, by Morton National Park.

On 4 January 2020, the huge Morton fire burned the southern third of our land before, most fortunately, the wind turned and the fire came no further north along our ridge. Over the three weeks following, the fire continued to burn in the gullies around us, creeping along the sides of our ridge and eventually up onto the ridge on our northern side. Between this creeping fire and a hot containment burn performed by NPWS and the RFS on our property in the last week of January, another half of our land was burned before the rain arrived in February. The area left unburned is mainly the cleared area around our house and sheds, as well as the last of the open paddock from the earlier orchard. That said, the fires left unburned patches scattered through our bush. Most of the burned bush is recovering well, but the third of our land burned in the first, very hot Morton fire and the hot containment burn is struggling to recover.

We thank the Inquiry for this opportunity to comment on matters 1 and 3 of the Terms of Reference and to make recommendations.

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.*

Before the fire and subsequent rains, our property had been very much affected by the prolonged drought. Our bush was peppered with dying eucalypts and the understory had all but died off. The fuel load on the bush floor was dry. Drought stress was evident from wildlife behaviour, too, with our dam being visited seemingly around the clock by birds, eastern grey kangaroos, wombats and other animals.

### **Climate change and the bushfires**

The New South Wales bushfires of 2019-2020 were the worst on record, burning more than 5.4 million hectares, destroying more than 2,400 homes and killing 25 people. Across Australia, more than one billion animals were killed. The bushfires have had an enormous ecological, human and economic cost. An estimated 80% of the Blue Mountains Heritage Area was burned, many businesses and organisations were forced to close for extended periods due to smoke pollution and the tourism and agricultural industries were badly affected. Public health was also affected as a result of the fine particle air pollution caused by bushfire smoke.

Climate change contributed to the bushfires through a number of pathways, particularly through increasing the intensity of the fires. The fire season was particularly dangerous due to severely below-average fuel moisture, record-breaking temperatures and drought associated with long-term trends of warmer and dryer weather in Australia. The World Weather Attribution Network found that the fire danger conditions were four times more severe due to climate change.<sup>1</sup> The fire danger risk facing NSW more broadly will continue to escalate as climate change intensifies. New analysis indicates that the hot and dry conditions that led to the 2019-2020 bushfires will be eight times more likely to happen if global warming reaches 2°C.<sup>2</sup>

The Intergovernmental Panel on Climate Change has noted that, although some of the potential impacts of climate change now appear to be very difficult to avoid entirely, some impacts - including damage to ecosystems and settlements, loss of life and economic loss due to bushfires in Australia - have the potential to be substantially reduced by effective global action.<sup>3</sup> In order to reduce the risk of these impacts, the IPCC urged that “rapid, far-reaching

<sup>1</sup> World Weather Attribution, ‘Attribution of the Australian bushfire risk to anthropogenic climate change’ (10 January 2020) available at <https://www.worldweatherattribution.org/bushfires-in-australia-2019-2020/>.

<sup>2</sup> Graham Readfern, ‘Bushfire crisis conditions eight times more likely under 2C warming, analysis shows’ (5 March 2020) *The Guardian* <https://www.theguardian.com/australia-news/2020/mar/05/bushfire-crisis-conditions-eight-times-more-likely-under-2c-warming-analysis-shows>.

<sup>3</sup> Reisinger, A., Kitching, R.L. et al, ‘Australasia’ in Barros, V.R., Field, C.B. et al (eds) *Climate Change 2014: Impacts, Adaptation, and Vulnerability - Part B: Regional Aspects (Working Group II Contribution to the Fifth*

and unprecedented changes in all aspects of society” are required to limit warming to 1.5<sup>0</sup> instead of 2<sup>0</sup> or more. Global net human-generated emissions of carbon dioxide will need to fall by 45% by 2030, and by 100% by 2050, to avoid severe, irreversible consequences.<sup>4</sup>

The NSW Government needs to take a leadership role within Australia to ensure that the necessary strong action is taken to mitigate climate change. Currently, the Federal Government does not provide that leadership. In December 2019, Australia was ranked worst in terms of policy, and sixth worst overall, out of 57 nations assessed on the Climate Change Performance Index. The Federal Government was described as ‘an increasingly regressive force’.<sup>5</sup> Australia has been identified as a global deforestation hotspot by WWF, and is the only developed country on the list.<sup>6</sup>

To take this leadership role, the New South Wales Government will need to address all aspects of climate change mitigation, including changing some of its policies. For example, the Government has introduced legislation over recent years to make land clearing and deforestation easier, even though deforestation is a primary driver in climate change. Land-use changes are second only to fossil fuel production in causing climate change. NSW land-clearing approvals have increased 13-fold since laws were relaxed in 2016.<sup>7</sup> More than 38,000ha were approved to be cleared last financial year.<sup>8</sup> The NSW Government is seeking to expand coal seam gas production, despite the fact that the methane emissions contribute to dangerous levels of greenhouse gases in the atmosphere<sup>9</sup> and that the Government is failing to implement recommendations from the chief scientist.<sup>10</sup>

The Intergovernmental Panel on Climate Change has reported that global emissions of greenhouse gases must reach zero by about 2050 in order to keep global warming down to 1.5°C.<sup>11</sup>

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*Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2014) 1371-1438, 1375.

<sup>4</sup> Reisinger, A., above.

<sup>5</sup> Sarah Martin, ‘Australia ranked worst of 57 countries on climate change policy’ (Guardian Australia, 11 December 2019) <https://www.theguardian.com/environment/2019/dec/11/australia-ranked-worst-of-57-countries-on-climate-change-policy>.

<sup>6</sup> Michael Slezak, ‘Global deforestation hotspot’: 3m hectares of Australian forest to be lost in 15 years’ (The Guardian Australia, 5 March 2018) <https://www.theguardian.com/environment/2018/mar/05/global-deforestation-hotspot-3m-hectares-of-australian-forest-to-be-lost-in-15-years>.

<sup>7</sup> Adam Morton, ‘NSW land-clearing approvals increased 13-fold since laws relaxed in 2016’ (The Guardian, 27 March 2020) available at <https://www.theguardian.com/environment/2020/mar/27/nsw-land-clearing-approvals-increased-13-fold-since-laws-relaxed-in-2016>.

<sup>8</sup> A Morton, above.

<sup>9</sup> Michael Slezak, ‘Australia’s coal seam gas emissions may be vastly underestimated – report’ (26 October 2020, The Guardian) available at <https://www.theguardian.com/environment/2016/oct/26/australia-coal-seam-gas-emissions-may-be-vastly-underestimated-report>.

<sup>10</sup> Anne Davies, ‘Scathing report into NSW coal seam gas could create new hurdles for Santos Narrabri project’ (27 February 2020, The Guardian) available at <https://www.theguardian.com/environment/2020/feb/27/scathing-report-into-nsw-coal-seam-gas-regulation-could-create-new-hurdles-for-santos-project>.

<sup>11</sup> <https://www.abc.net.au/news/science/2018-10-08/ipcc-climate-change-report/10348720>

**For all the above reasons, we urge the Inquiry to recommend in the strongest terms that the New South Wales Government take urgent, ambitious and determined action to mitigate climate change, so as to reduce the destruction and loss from more frequent and severe bushfire seasons similar to, or worse than, the 2019-2020 bushfire season.**

*3. Responses to bushfires, particularly measures to control the spread of the fires and to protect life, property and the environment*

**Communications**

The administrative and management resources devoted to fighting the Penrose fires were patently deficient.

First, the “Fires near me” app was often wildly inaccurate. Our house (and whole property) was shown on one day as wholly destroyed, the next as untouched, and later as destroyed. At that stage, the house and much of the property was untouched. Mapping resources (especially aerial resources) were unable to cope. That should be addressed in the future, but until that is done the maps should indicate clearly the likely level of inaccuracy, area by area. Failure to do so caused unnecessary trauma for those of us who were, whether fortuitously or deliberately, not present as the fires approached.

Secondly, communication on the ground was missing. During the second part of January, while the fires were still burning, trucks patrolled twice a day, which was reassuring until we spoke to the crews. They were from different areas, or were different people on each visit. They had no local knowledge, even of hot spots to be watched. They usually drove in and drove out. Twice they came within 100m of live fire without noticing it. It was not their faults; they were, it appeared, simply not briefed as to their tasks, nor as to local conditions. At some point during the month that the fire was on our property, despite their exhaustion the Penrose RFS started sending daily text updates to the local households. These updates were the only accurate information we had.

**Managing the response to bushfires**

However, the deficiency (described above) in the communication during the 2019-2020 bushfires merely touches on one element of a much larger, complete change that needs to be made to the current system. Given the warming climate in NSW and globally, and the predicted more frequent and more extreme droughts, bushfires and other weather-related disasters, the present NSW bushfire and emergency response system is utterly inadequate. NSW needs a comprehensive, well-resourced and proactive plan for managing climate-related crises from this point on. The NSW plan must be on a much larger scale than the present system and must incorporate crisis prevention as well as crisis response.

Some of the deficiencies in the current system which became clear during January 2020 and which need to be changed in the new management plan are:

- that the NSW bushfire response was grossly under-resourced;
- that coordination and decision-making were impromptu, with insufficient advance planning;
- that no priorities seemed to have been set beyond the protection of human life and structural property, an outcome which is directly connected to reliance on insurance industry funding;
- that little value was being placed on ecological preservation;
- that evidence-based predictions made more than a decade ago by climate science experts had gone unheeded, allowing the vast bushfires to catch the NSW fire fighting system by surprise; and,
- that the situation was saved only by the freak event of heavy and persistent rain, after 9 years of severe drought.

**We urge the Inquiry to recommend that the New South Wales Government take urgent action to create a well-resourced, independent, science-based , comprehensive and transparent specialist institution to prepare for and respond to the more frequent and more intense climate-related crises predicted for this State.**

### **Protecting ecological communities and systems**

Even at 1.5°C average global warming, there is predicted to be significant species loss. With global average warming having already reached 1°C and with the extensive land clearing which has occurred in NSW, our plant and animal communities are already under pressure. We know, too, that the estimate of 1 billion animals being killed across Australia during or immediately following the 2019-2020 bushfires is a conservative one, the calculation being consciously based on low density rates and excluding invertebrates and bats.<sup>12</sup>

Minimizing the risk of destructive bushfires through dramatically reducing greenhouse gas emissions is a vital step in reducing future pressure on ecological communities, but active and aggressive protection of existing communities from bushfires is also essential. The goal of protecting ecological communities and systems needs to be given the same level of importance in bushfire policy and strategy as that of protecting structural property. As of 3 February 2020, 2.7 million hectares in NSW national parks had burned, which is 37% of the NSW national park system.<sup>13</sup>

<sup>12</sup> See <https://www.abc.net.au/news/2020-01-31/fact-check-have-bushfires-killed-more-than-a-billion-animals/11912538>

<sup>13</sup> NSW Department of Planning, Industry and Environment, <https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/fire/park-recovery-and-rehabilitation/recovering-from-2019-20-fires/understanding-the-impact-of-the-2019-20-fires>

While the ferocity and vast extent of the 2019-2020 bushfires clearly made controlling them extremely challenging, especially where the fires were burning in remote and inaccessible bushland, the fire-fighting emphasis was clearly on containing the fires in ways which would minimize risk to structural property. For example, we watched day after day as little effort was made to put out the fires on the Crown land and parts of Morton National Park near us. Water bombing only occurred as the fire approached property. We are sincerely grateful to the firefighters and volunteers who, on more than one occasion, saved our house. The point we are making is that equivalent efforts should have been made to save as much bushland as possible from burning. Keeping the destruction of bushland by fire to a minimum must be made an equal priority in a planned response to the altered climatic conditions.

One obvious benefit from making this an equal priority will be the prevention of massive amounts of greenhouse gases being emitted from otherwise more extensive and ferocious bushfires. The Australian Department of Industry, Science, Energy and Resources has estimated that the 2019-2020 bushfires released an estimated 830 million tonnes of carbon dioxide equivalent into the atmosphere. Frustratingly, the Department also said that the bushfires would not affect Australia's ability to meet its greenhouse gas emissions targets as Australia's eucalypt forests would regenerate and re-absorb sufficient carbon over coming decades to balance the carbon emitted during the fires.<sup>14</sup> This statement is profoundly misleading; it ignores the fact that we are in the late stages of a potential climate change catastrophe. The scale of the threat presented by climate change and the urgent need to move as quickly as possible to a low-carbon world render the Department's statement grossly irresponsible.

A second benefit from minimising the destruction of bushland is to enhance the multiple benefits to human life which derive from healthy ecosystems. To take but one example, there is a concern that the lengthy recent exposure to bushfire smoke experienced by a large part of the NSW population may have compromised their resistance to lung diseases, including the current pandemic. Intact ecosystems are vital to the well-being and health of human populations. Biodiversity is necessary to the material welfare, security and resilience of local economies. It is central to the production of food, fibre and water, the control of climate and diseases, nutrient cycling and crop pollination, as well as to cultural life.<sup>15</sup>

However, the dominance of insurance industry funding in the financing of the NSW Rural Fire Service is likely to work against establishing the protection of ecological systems as an equal priority. By legislation, insurers contribute 73.7% of the required revenue, local government contributes 11.7%, and the State Government contributes the remainder.<sup>16</sup> This financial dependence on the insurance industry skews the orientation of the RFS towards the

<sup>14</sup> Commonwealth Department of Industry, Science, Energy and Resources, <https://www.industry.gov.au/data-and-publications/estimating-greenhouse-gas-emissions-from-bushfires-in-australias-temperate-forests-focus-on-2019-20>

<sup>15</sup> The Millennium Ecosystem Assessment, 2005. <http://www.millenniumassessment.org/en/index.html>

<sup>16</sup> NSW Government, "Funding Our Emergency Services", 2012, p 34. <https://www.ocn.org.au/sites/default/files/documents/NSW%20Treasury%20-%20Emergency%20Services%20Levy%20Discussion%20Paper%20July%202012.pdf>

protection of property rather than of bushland, ecological communities and national parks. This funding structure needs to be replaced by a transparent and non-distorting one. NSW is now the only mainland state that does not fund its fire services via a broad-based property levy,<sup>17</sup> a system which would improve the policy independence of the RFS.

**We urge the Inquiry to recommend that the New South Wales Government acts to ensure that keeping the destruction of bushland by fire to a minimum is made an equal priority in a planned response to the altered climatic conditions, and that the planned response is decoupled financially from the insurance industry.**

## **Conclusions**

We welcome the Inquiry, and thank you for the opportunity to raise the issues set out above. If you wish to raise any queries, we will be happy to respond.

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<sup>17</sup> Local Government NSW, "Draft Submission to the NSW Independent Bushfire Inquiry" p 21.  
[https://www.lgnsw.org.au/files/imce-uploads/581/LGNSW -  
\\_Draft\\_Submission\\_to\\_NSW\\_Independent\\_Bushfire\\_Inquiry.pdf](https://www.lgnsw.org.au/files/imce-uploads/581/LGNSW_-_Draft_Submission_to_NSW_Independent_Bushfire_Inquiry.pdf)