

# Submission to the NSW Bushfire Inquiry

Submitted via: <a href="https://www.nsw.gov.au/nsw-government/projects-and-initiatives/make-submission-to-bushfire-inquiry">https://www.nsw.gov.au/nsw-government/projects-and-initiatives/make-submission-to-bushfire-inquiry</a>

Submission from:

David McEwen (Sydney Organiser) Marie Carvolth (Director) Suzie Brown (Director)

Australian Parents for Climate Action c/o Environmental Leadership Australia Level 2, 69 Reservoir Street Surry Hills NSW 2010

Email: AP4CA@Outlook.com

#### **About Australian Parents for Climate Action**

Australian Parents for Climate Action (AP4CA) is a registered charity supported by more than 6,000 parents and carers from around Australia who are advocating for a safe climate for our children's future.

We are focused on pushing Australian governments and business to take urgent action to cut Australia's carbon emissions to net zero as quickly as possible.

We encourage Australia to take a leadership role on the world stage, leading by example and calling for other nations to take the necessary action to protect our children's futures.

For more information, visit AP4CA.org.

# **Scope of Submission**

AP4CA thanks the NSW Government for the opportunity to make a submission to its Bushfires Inquiry. Our submission includes responses to the following Terms of Reference sections:

- 1.1 Causes and contributing factors
- 1.2 Preparation and planning
- 1.3 Response to bushfires

Our submission contains experiences and requirements of families and children affected by the NSW bushfires, with objective of:

- 1. Reducing the likelihood and/or intensity of future climate-related natural disasters; and
- 2. Ensuring that appropriate measures are in place to minimise the impacts of future climate-related natural disasters, particularly with regard to the physical and mental health of families and children affected by such disasters.

# Recommendations<sup>1</sup>

AP4CA recommends that the Inquiry:

# 1.1 Causes and Contributing Factors

- 1. Clearly acknowledge that the 2019/20 bushfires were the worst in NSW's history, and that **the combination of unprecedented drought, extreme heat and other factors that made them possible was unequivocally driven by anthropogenic climate change** (caused primarily by consumption of fossil fuels and other human activities that lead to greenhouse gas emissions as defined by the UN Framework Convention on Climate Change<sup>2</sup>).
- Clearly acknowledge that without strong, urgent global and local action to reduce anthropogenic greenhouse gas emissions, it is highly likely that climate-related natural disasters in Australia will become more frequent and/or intense, with significant repercussions for our economy and our population's physical and mental health.
- 3. Clearly recommend strong, urgent government action to reduce NSW and Australia's anthropogenic greenhouse gas emissions in line with science-based targets that have been recommended by the UN Intergovernmental Panel on Climate Change (IPCC) in order to limit average global warming to 1.5 degrees C and, therefore, limit the frequency and intensity of future climate-related natural disasters.
- 4. Acknowledge that **current and past emissions within NSW and from our fossil fuel products exported abroad contributed to the global climatic changes that made the unprecedented 2019/20 bushfire season possible.** Climate change is a borderless issue, and while Australia remains one of the top per-capita emitters<sup>3</sup> and a significant exporter of fossil fuels (currently estimated to be the third largest in the world<sup>4</sup>), we cannot claim to be taking strong action on climate change or holding other countries to account. Policies must be enacted that lead to a rapid decrease in domestic consumption of fossil fuels and which halt development of new export supply.
- 5. In particular, the so-called "**Scope 3 Amendment**" bill to weaken existing provisions in the *Environmental Planning and Assessment Act 1979* and *State Environmental Planning Policy (Mining, Production and Extractive Industries) 2007* that was proposed on 22 October 2019 **must not proceed**. On the

<sup>&</sup>lt;sup>1</sup> Note: source references supporting these recommendations are included in the Discussion section of this document to avoid duplication, unless not used elsewhere.

<sup>&</sup>lt;sup>2</sup>https://unfccc.int/files/essential\_background/background\_publications\_htmlpdf/application/pdf/conveng.pdf

 $<sup>{}^3\</sup>underline{\text{http://climatecollege.unimelb.edu.au/facts4paris-australias-capita-emissions-remain-highest-among-its-key-trading-partners}$ 

<sup>&</sup>lt;sup>4</sup>https://www.tai.org.au/content/new-analysis-australia-ranks-third-fossil-fuel-export

contrary, laws must be strengthened in the opposite direction, to prohibit future fossil fuel extractive developments in NSW, thereby reducing our global contribution to global heating, which is increasing the likelihood and intensity of extreme weather in NSW (including the recent drought, bushfires and flooding), while also causing sea level rise that is already causing significant coastal erosion issues.

### 1.2 Preparation and Planning

- 6. Commission research into the **medium to long term effects of sustained exposure to bushfire smoke** (and other small particulate pollutants such as from dust storms) on children and adults, such as was seen during the 2019/20 bushfire season.
- 7. Assuming such research confirms health risks from elevated particulate exposure, ensure that schools and preschools are provided financial and other support to deliver improvements that will ensure the safety of children in their care given future bushfire smoke events like the circumstances that blanketed huge swathes of the state with choking smoke for days on end. Educational facilities should be equipped with:
  - a. mechanisms to keep smoke out of buildings (positive pressure, airlock doors, effective air filtration on air intakes);
  - b. clear and consistent guidance from Health, Education and Environment departments about how to manage smoke and dust risks: when to curtail physical activities; outdoor activities; and activities in buildings that cannot be protected from smoke (such as halls); how to manage smoke inside; etc.
- 8. While it is beyond the scope of our submission to comment on government and institutional preparation and planning, our members' stories emphasise the importance of personal planning for people living in bush fire areas, down to details such as having spare hose fittings on hand at home in case of damage by fire while repelling ember attacks. We noted this is not clearly mentioned in the Rural Fire Service guide to preparing property.<sup>5</sup> Another clear message was the importance of emergency communications including substitutes for the internet and people on the ground to relay safety messages. Another story noted an issue where a suburban road had been recently resurfaced and firefighters could not find a hydrant connection because the road signage had not been replaced. Property on that road was damaged. A number of our members also supported the adoption of indigenous bushfire hazard management techniques.

AP4CA Submission to the NSW Bushfire Inquiry, May 2020

<sup>&</sup>lt;sup>5</sup> https://www.rfs.nsw.gov.au/\_\_data/assets/pdf\_file/0005/36599/Plan-Step2-Prepare.pdf

#### 1.3 Response to Bushfires

- 9. Acknowledge that anthropogenic climate change and the extreme weather and related natural disasters it is creating (including both the recent drought and bushfires, but also the rapid collapse of ecosystems such as the Great Barrier Reef), is having a **deleterious impact on the mental health of both adults and children**, who will be living with the consequences for far longer. Australian children have experienced emotions of grief, anger, anxiety, hopelessness and fear. Some may be experiencing symptoms of clinical depression as they have watched Australian governments over many years for the most part ignore strident and repeated warnings by climate scientists, and fail to take meaningful, science-aligned action on emissions reduction.
- 10. Clearly recommend that **resilience measures implemented to reduce the impacts of natural disasters include consideration for the physical and mental health, safety and welfare needs of children.**
- 11. Recognise that **solutions to climate change may also contribute positively to improved natural disaster resilience for communities,** such as distributed community renewable energy.
- 12.Build back better: ensure rebuilding efforts following natural disasters and indeed all future development is equipped to accommodate the broad range of emerging climate change risks over the expected lifetime of infrastructure and buildings. This is particularly imperative as the deployment of COVID-19 stimulus funding is assessed. Under no circumstances should stimulus funding be used for new coal, oil or gas developments, due to the climate impacts of their emissions.
- **13.Help ensure the Australian Broadcasting Corporation is adequately funded** to ensure it can continue to provide and enhance its vital, trusted emergency broadcasting services.

## **Discussion**

# 1.1 Causes and Contributing Factors

The 2019/20 bushfire season was the most intense and destructive on record<sup>6</sup>, and came amidst the worst drought in the history of European settlement of Australia<sup>7</sup>. In early 2020 it became apparent that the Great Barrier Reef was suffering its third mass coral bleaching event in the past five years due to high sea surface temperatures<sup>8</sup>. We are living in an era of unprecedented destructive climatic events.

In 2019 average land and ocean temperatures, globally, were 0.88 degrees C above the long term average, contributing to the third hottest year in 140 years of records<sup>9</sup>. The top 10 hottest years (since modern record-keeping began in the late 1800s) have all occurred since 2005<sup>10</sup>. Australia was 1.52 degrees C above average in 2019, recording its warmest year on record<sup>11</sup>.

The current global heating is unequivocally caused by human activities, primarily the consumption of fossil fuels (coal, oil and gas)<sup>12</sup>. Climate science is clear that hotter land and ocean temperatures are contributing to more frequent and/or more intense extreme weather events including making conditions for significant bushfires more likely<sup>13</sup>.

The fact that we are seeing such unprecedented impacts with only around one degree of global heating should in itself be of grave concern to NSW and its citizens. Indeed climate change was identified as a "critical threat" by 64% of Australian adults in a 2019 Lowy Institute poll (taken before the 2019/20 bushfire season), topping the list of concerns that included international terrorism and cyber attacks<sup>14</sup>.

However, Australian governments' current emissions reduction targets and actions fall far short of the recommended science-based target to limit global heating to ideally no more than 1.5 degrees, as the Australian government

 $<sup>^{6}\</sup> https://www.csiro.au/en/Research/Environment/Extreme-Events/Bushfire/preparing-for-climate-change/2019-20-bushfires-explainer$ 

<sup>&</sup>lt;sup>7</sup> https://www.farmonline.com.au/story/6281386/drought-now-officially-our-worst-on-record/

<sup>&</sup>lt;sup>8</sup> <a href="http://www.gbrmpa.gov.au/the-reef/reef-health/coral-bleaching-101">http://www.gbrmpa.gov.au/the-reef/reef-health/coral-bleaching-101</a>. It is acknowledged that coral bleaching does not necessarily in and of itself kill the coral, but frequent bleaching, such as is being currently experienced, reduces the resilience of the corals to recover from such events. For example: <a href="https://www.nationalgeographic.com/news/2017/06/coral-reef-bleaching-global-warming-unesco-sites/">https://www.nationalgeographic.com/news/2017/06/coral-reef-bleaching-global-warming-unesco-sites/</a>

<sup>9</sup> https://www.ncdc.noaa.gov/sotc/global/201901

 $<sup>^{10}\</sup> https://www.climat\underline{ecentral.org/gallery/graphics/the-10-hottest-global-years-on-record}$ 

<sup>11 &</sup>lt;a href="http://www.bom.gov.au/climate/current/annual/aus/">http://www.bom.gov.au/climate/current/annual/aus/</a>

<sup>12</sup> https://www.ipcc.ch/site/assets/uploads/2018/02/AR5\_SYR\_FINAL\_SPM.pdf

<sup>13</sup> https://www.ipcc.ch/site/assets/uploads/2018/03/SREX-Chap3\_FINAL-1.pdf

 $<sup>^{14}\ \</sup>underline{https://www.lowyinstitute.org/publications/media-release-2019-lowy-institute-poll-australian-attitudes-climate-change}$ 

agreed to as part of the 2015 Paris Climate Agreement (article 2, para 1. (a))<sup>15</sup>. The science recommends global emissions reductions currently in the order of 7.6% per annum (from current levels) between 2020 and 2030 and net zero by 2050<sup>16</sup>. (Each year we do not achieve the requisite global reduction, the "required run rate" increases and the task becomes more daunting).

NSW's stated target of 35% reduction from 2005 levels by 2030<sup>17</sup> is insufficient to claim that the state is pulling its weight, particularly given our moral obligation as a wealthy state that has benefitted hugely over many decades from our climate-wrecking fossil fuel resources; and as a state at enormous risk from the many impacts of climate change as the recent drought and bushfires have demonstrated. Rather, NSW should be leading the pack, with aggressive emissions reduction policies that a) provide a "climate buffer" that helps compensate for under-performance on emissions reduction by other countries; and b) positions the state as a global leader in emissions reduction to, in turn, improve the attractiveness of a nascent clean energy export industry.

In particular we strongly recommend NSW introduces a moratorium on new fossil fuel extraction developments (including coal, oil and gas) by recommitting to and strengthening the current provisions of the *Environmental Planning and Assessment Act 1979* and *State Environmental Planning Policy (Mining, Production and Extractive Industries) 2007*. Current draft legislation<sup>18</sup> to remove key provisions that prevented developments from proceeding following two Independent Planning Commission rulings in 2019 should be abandoned. This would send a strong signal to global markets that NSW is serious about climate action.

In summary, we live in a state that is already beset by well-predicted, anthropogenic climate-change-exacerbated natural disasters that will only get worse as global heating intensifies<sup>19</sup>, yet Australia's and for the most part NSW's climate policy has not responded to the urgency of this threat and the environmental, economic and social toll that unabated climate change will wreak on Australia.

<sup>&</sup>lt;sup>15</sup> https://unfccc.int/sites/default/files/english\_paris\_agreement.pdf

<sup>&</sup>lt;sup>16</sup> https://www.unenvironment.org/interactive/emissions-gap-report/2019/

<sup>&</sup>lt;sup>17</sup> https://climatechange.environment.nsw.gov.au/About-climate-change-in-NSW/NSW-Government-action-on-climate-change

 $<sup>\</sup>frac{18 \text{ https://www.theguardian.com/environment/2019/oct/22/nsw-to-try-to-stop-mine-projects-being-blocked-because-of-their-overseas-emissions}$ 

<sup>&</sup>lt;sup>19</sup> The 2008 Garnaut Climate Change Review clearly "predicted that without adequate action, the nation would face a more frequent and intense fire season by 2020." https://www.abc.net.au/news/2020-01-08/economic-bushfires-billions-ross-garnaut-climate-change/11848388

#### 1.2 Preparation and Planning

We observed that NSW's educational institutional responses to the bushfires fell far short of what might be considered desirable or responsible for a wealthy nation such as Australia. For example:

- While short term health effects of exposure to bushfire smoke is known to be harmful, particularly to those with pre-existing respiratory conditions <sup>20</sup>, there is a lack of scientific consensus on medium to long term effects of exposure to bushfire smoke due to a lack of research. <sup>21</sup> Australian children both within and remote from the fires themselves were subjected to hazardous levels of small particulate matter (PM2.5), up to 26 times the Air Quality Index (AQI) level deemed hazardous, for months on end in some areas<sup>22</sup>.
- As parents we observed confusion, inconsistency and sometimes ignorance from our pre-schools, schools, Education Department and relevant ministers in terms of at what specific levels certain activities at schools (such as sports, general outdoor activities, etc.) should be curtailed. For example, an information page provided by the NSW Education Department provided for school principals and staff was extremely vague, with no reference to specific AQI levels (or acknowledgement of the differing measurements within the AQI system (e.g. the differences between poor visibility levels and high PM2.5 levels)<sup>23</sup>. Similarly, the NSW Health Department's "guidance" for pre-schools was of poor quality<sup>24</sup>.
- School buildings are generally not designed to provide protection from poor outdoor air quality. For example, we saw photos of school presentation assemblies where the smoke was so thick in hall buildings that it was difficult to see across the room. There is little in the way of smoke management (such as double door airlocks and positively pressurized buildings) and ventilation and air conditioning systems in school buildings seldom includes air filtration at a level that would effectively exclude smoke particles.
- In the absence of effective indoor and outdoor smoke management, educational institutions should also have had a clear policy regarding the use of P2/N95 masks. It is very difficult to obtain child or infant sized P2 masks, and younger children may find it distressing to wear a mask, even if one can be found that fits. The Federal Health Department's advice for people who

AP4CA Submission to the NSW Bushfire Inquiry, May 2020

<sup>&</sup>lt;sup>20</sup> https://www.hri.org.au/health/your-health/lifestyle/bushfire-smoke-affects-our-health

 $<sup>^{21}\</sup> https://www.mja.com.au/journal/2020/212/8/bushfire-smoke-urgent-need-national-health-protection-strategy$ 

 $<sup>\</sup>frac{22}{https://www.theguardian.com/environment/ng-interactive/2020/feb/20/the-toxic-air-webreathe-the-health-crisis-from-australias-bushfires}$ 

<sup>&</sup>lt;sup>23</sup> https://education.nsw.gov.au/content/dam/main-education/inside-the-department/health-and-safety/media/documents/Factsheet-Air-quality-considerations-during-bushfire-V2.pdf

<sup>&</sup>lt;sup>24</sup> https://www.health.nsw.gov.au/environment/air/Pages/child-care-centres.aspx

could not wear a mask was to "reduce exposure to the smoke"<sup>25</sup>; somewhat impractical for children in the care of schools, pre-schools or other institutions.

 As such, Australian education institutions may unwittingly have either exacerbated existing respiratory issues in the short term amongst the children in their care, and potentially - subject to further research - exposed children to irreparable long term health damage, which may – like asbestos or respirable crystalline silica related diseases – only become evident in middle adulthood.

Of course, smoke exposure applies to private and commercial buildings as well, and it is important that construction codes are modified to adequately address the emerging risk of prolonged indoor exposure to bushfire smoke.

In another example, Save the Children has noted that the needs of children were "systematically overlooked" during the bushfires, with affected communities lacking necessary services to avoid deleterious mental health and other welfare outcomes for children<sup>26</sup>. This echoes the issues highlighted by the UNICEF report on drought impacts on children, potentially exposing a common weakness in Australia's response to natural disasters.

#### 1.3 Response to Bushfires

The juxtaposition discussed above between the clear evidence of anthropogenic climate change and apparent government inaction and indifference is already causing significant mental health issues amongst children and adults, as evidenced by a recent UNICEF investigation into the impacts of the drought. Children interviewed said that being caught up in "the natural disaster has meant they have had to prematurely 'grow up', facing difficulty in balancing increased farm work with their education, as well as experiencing escalating levels of stress and other adverse psychological outcomes"<sup>27</sup>.

Similarly, the 2019/20 bushfire season and the emotions felt upon hearing about mass coral reef bleaching (which itself should be treated as a natural disaster) are having a profound impact on how children and their parents feel about their future. Eco-anxiety has been identified as an emerging mental health issue, with 87% of Australian 'tweens' identifying climate change as something to be worried about in a 2018 study<sup>28</sup>.

<sup>&</sup>lt;sup>25</sup>https://www.health.gov.au/sites/default/files/documents/2020/01/statement-from-the-acting-chief-medical-officer-and-state-and-territory-chief-health-officers-advice-on-the-use-of-masks-for-those-exposed-to-bushfire-smoke.pdf

<sup>&</sup>lt;sup>26</sup> https://www.sbs.com.au/news/rights-group-says-children-were-systematically-overlooked-during-australian-bushfires

<sup>&</sup>lt;sup>27</sup> <a href="https://www.unicef.org.au/Upload/UNICEF/Media/Documents/Drought-Report-2019-Media-Release.pdf">https://www.unicef.org.au/Upload/UNICEF/Media/Documents/Drought-Report-2019-Media-Release.pdf</a>

<sup>&</sup>lt;sup>28</sup> https://www.hcf.com.au/health-agenda/body-mind/mental-health/eco-anxiety-children

While we note that the Australian and NSW governments announced programs to deliver mental health support to bushfire affected people and communities<sup>29</sup>, a lack of strong and urgent action on emissions reduction (and a failure to provide strong protections to our unique fauna and flora due to weak environmental protection legislation<sup>30</sup> and a current developer-friendly policy to reduce green tape<sup>31</sup>) is manifestly contributing to NSW children's and citizens' suffering of eco-anxiety<sup>32</sup>.

Action to reduce greenhouse emissions can make a positive contribution to natural disaster resilience beyond simply reducing the underlying extreme weather risk. For example, implementation of distributed renewable electricity generation (both rooftop and community-scale systems and in conjunction with battery or other storage) could help overcome several issues experienced by towns suffering bushfire damage, including<sup>33</sup>.

- Power outages due to damage to transmission networks (which in turn affected communications)<sup>34</sup>.
- Widespread deployment of electric vehicles, which could alleviate fuel shortages hit by regional and remote communities during the bushfires particularly if distributed energy options are available to facilitate charging<sup>35</sup>.

Rebuilding after natural disasters should take into account the increasing likelihood and impact of particular disasters based on the best future regional climate projection models, including expectations for temperature, rainfall, wind speed, evapotranspiration, etc.; and in turn implications for bushfires, droughts, heat waves, cyclones and other major storms, and of course sea level rise and its impact on coastal storm surges. This may mean that government support or approval for rebuilding is limited unless emerging climate risks are adequately addressed in planned repairs or redevelopments and may need to consider the relocation of structures or even entire communities to less risky areas. Review of construction codes, State environmental planning instruments and development control plans is also recommended to ensure all future development is "climate ready".

Our members reported on the vital importance of the ABC as a reliable, accurate and *trustworthy* emergency broadcasting service and lamented the government's

 $<sup>^{29}\ \</sup>text{https://www.health.nsw.gov.au/mentalhealth/resources/Pages/bushfire-mental-health-support.aspx}$ 

 $<sup>\</sup>frac{30}{\text{https://www.theguardian.com/environment/2020/mar/27/nsw-land-clearing-approvals-increased-13-fold-since-laws-relaxed-in-2016}$ 

<sup>&</sup>lt;sup>31</sup> https://www.theguardian.com/australia-news/2020/apr/23/coalition-is-aiming-to-change-australias-environment-laws-before-review-is-finished

<sup>32 &</sup>lt;u>https://theconversation.com/youre-not-the-only-one-feeling-helpless-eco-anxiety-can-reach-far-beyond-bushfire-communities-129453</u>

<sup>33</sup> https://www.nrel.gov/docs/fy17osti/68296.pdf

 $<sup>^{34}\ \</sup>underline{\text{https://www.abc.net.au/news/2020-01-23/power-prices-rise-blackouts-increase-bushfire-season-intensifies/11890646}$ 

 $<sup>^{35}</sup>$   $\underline{\text{https://www.abc.net.au/news/2020-01-06/fire-cuts-food-supplies-to-nsw-south-coast-towns-and-families/11842382}$ 

progressive defunding<sup>36</sup>. We urge the NSW government to use its influence to preserve and enhance its funding.

This submission does not specifically seek to address other issues of natural disaster emergency management, hazard reduction, authority coordination or other matters that are doubtless being explored by the inquiry, beyond broad support for the reintroduction of indigenous voices and practices in hazard management and a few specific anecdotes mentioned above in recommendation 8.

As citizens, taxpayers and parents of a wealthy nation and prosperous state, we have a right to expect that our governments are acting professionally and responsibly on our and our children's behalf in this regard. That Australia and state governments have failed to adequately anticipate and plan for such events despite numerous expert warnings (from those of the 2008 Garnaut report to those of respected former fire chiefs such as Greg Mullins in early  $2019^{37}$ ) - as was amply demonstrated by the lack of adequate preparations, shortages of firefighting equipment, and late government responses to support stretched volunteer brigades during the 2019/20 bushfire season - is extremely concerning.

In terms of improving NSW's resilience to climate-related natural disasters, *prevention*, through climate action focused first on demonstrable greenhouse emissions reduction, should be the government's top priority. Prevention must include action to urgently phase out the state's fossil fuel sector, including coal and gas exports, and development controls should be adapted to restrict new developments and expansions.

It has been amply demonstrated that NSW and Australia are well placed to transition to an economy underpinned by a prosperous clean energy export market, and that workers and communities dependent on affected industries should be supported to transition to alternative industries. The steps that Australia and NSW needs to take, including policy and expenditure, are well-researched and set out in the following, among other leading reports<sup>38</sup>:

- 1. Ross Garnaut's book, Superpower<sup>39</sup>
- 2. PWC, The Future of Energy Report<sup>40</sup>
- 3. ClimateWorks, *Decarbonisation Futures*<sup>41</sup> report

 $<sup>^{36}</sup>$  https://www.theguardian.com/media/2020/mar/03/bushfires-add-3m-to-abc-emergency-broadcasting-costs-as-coalition-cuts-funding

 $<sup>^{37}\,</sup> https://www.theguardian.com/australia-news/2019/apr/09/former-fire-chiefs-warn-australia-unprepared-for-escalating-climate-threat$ 

<sup>&</sup>lt;sup>38</sup> Ursula Hogben, contribution to AP4CA's Submission to the NSW Bushfire Inquiry.

<sup>&</sup>lt;sup>39</sup> https://www.blackincbooks.com.au/books/superpower

 $<sup>{}^{40}\,\</sup>underline{\text{https://www.pwc.com.au/power-and-utilities/future-of-energy-australian-energy-outlook-report.html}$ 

 $<sup>\</sup>frac{41}{https://www.climateworksaustralia.org/resource/decarbonisation-futures-solutions-actions-and-benchmarks-for-a-net-zero-emissions-australia/$ 

# **Summary of AP4CA Members' Stories**

The following pages contain 22 stories submitted by members of Australian Parents for Climate Action who were affected by the NSW bushfires. Contributors include parents from a range of professions and family types.

Some stories concentrate on direct experiences and feelings of the fires, others offer specific recommendations of relevance to the Inquiry's Terms of Reference. A selection of quotes drawn from the stories is included below (these extracts are bolded in the full stories):

#### Sarah Graham, Sancrox NSW:

Fires in our region resulted in loss of lives, homes, prolonged periods of evacuation for families in locations at threat, and severe smoke pollution leading to school closures. As the weeks turned into months, my five year old began showing signs of increased anxiety.

"If we see a fire mum, you slow down and I'll pull the koalas in through the window to rescue them". My two year old piped up beside him "and me the kangaroos"

A lack of clear advice during this period resulted in children being unnecessarily exposed to air pollution. Children were regularly allowed to play outside even when the AQI was in the hazardous range.

Climate change science needs to be a cornerstone of all policy decisions going forward, such that the risks to our community are not ignored, and that adequate preparations can be made for ongoing threats. These bushfires are unprecedented but not unexpected, climate scientists, and bushfire experts have been warning our community about these risks for years.

*Mental health first aid training [is needed].* 

Communication mechanisms need to be developed to facilitate the sharing of important information in crisis situations. Over-reliance on the internet by government bodies resulted in those most affected by the fires being unable to access the information they needed to make safe decisions

Our built environment needs to be managed with a regulatory framework that accounts for the changing and increasing risks due to global heating.

#### Gretchen Miller, Erskineville NSW:

Daily exposure to smoke meant we could not enjoy our usual summer exploits

the flames consuming our precious landscape... the animals... it was just horrendous. I worried and grieved for our wildlife.

I want our governments to take genuine action on climate change. I want them to step up

and stop with the jobs for the boys. I want the corruption to end, and the perceived corruption to end. I want brave, bold action that makes me and my community, my immediate community and my larger community of Australians feel valued and honoured in that we are heard and we are acted for in a decisive manner.

#### **Elizabeth Cowan, Kingston ACT:**

Our house was uninhabitable during the 40+ degree days when we couldn't open the windows to let in a cool breeze at night due to the suffocating smoke.

Instead of taking our new baby home we spent his first three nights in a hotel, taking refuge in the air conditioning to protect our tiny baby's lungs from the smoke. On his 2nd night the thickest smoke yet rolled in from the [NSW] coast & the hotel's fire alarms were triggered. This was not the joyful home coming or introduction to the world that we wanted for our son.

#### Peter Owen, Darlinghurst NSW:

We are renters in an old workers cottage in Sydney which due to age is impossible to seal off. This meant we were living with smoke haze in the house for weeks.

My husband and I felt (and feel) an incredible sense of grief, which was magnified by the denial of climate science by parts of the government and the delay in taking national and decisive action in response to the bushfires.

#### Anneliese Alexander, Holsworthy NSW:

Never in my life do I recall children having to stay inside during their lunch and recess breaks due to hazardous smoke.

I remember bunkering down in my room as a 9 year old, fearful because burnt leaves were falling at my front door step. For my children, this happened so frequently over the summer, they are no longer fearful of it. Is this the kind of future they have to look forward to? Where fire and smoke and ash falling from the sky is a normal experience of summer? Without action on climate change, my fear is that it is

Is there something to be said for indigenous methods of burning the bush? Probably. Could we reduce the ability of local politicians to cancel planned HR's for political advantage? Perhaps. Could we put more money and resources into local brigades? Absolutely. Could we also, as a nation, decide that the change in climate poses the greater risk, and has an even more obvious solution? Definitely.

#### Dr Michelle Hamrosi, Eurobodalla NSW:

After weeks of burning to the north of us, it finally skipping the highway and sent its ferocious all consuming fire tendrils out our way in the early hours of Friday morning, the

31st of December. We were woken to an RFS phone call urging us to evacuate. Thinking back to this time, is like reflecting on a living nightmare. The nightmare didn't end there...it continued for weeks. Over the course of this summer period, we were evacuated three times.

I saw countless patients suffering the impacts of smoke exposure. Some which have not yet recovered now 4 months down the tract. I saw countless patients suffering from psychological trauma, anxiety, panic attack and/or grief from the loss of their homes or businesses or from the stressful impact of the emergency itself. Many too have not recovered and need much more support. Many children have been traumatised. There is very little mental health support available for them.

My 7-year-old daughter said, "I just want it to be normal again." I replied that I did too. Moments later, she was still looking pensively into the distance, her food going cold on her plate. I asked her what she was thinking. She replied: "I'm just imagining the future. Everything is dead and brown. There is no food. There is mountains of plastic and the air is filled with pollution."

I don't want things to go back to normal. Normal wasn't working. Normal was destroying our environment and our health. We need to build back a better normal. A normal where we prioritise having clean air, clean water and a livable climate. These basic needs underpin our very survival.

#### **Estelle Dollfus-Gates, Hornsby NSW:**

My daughter developed a cough in January, which is not going away despite increased preventer medication and investigation. While I cannot prove that the smoke is to blame, I believe the prolonged exposure was a factor.

The communication by governments on the effect of air quality was also poor and lacked clarity as many went on their normal daily routines despite hazardous air quality.

As a family we suffered from anxiety and bad sleep, we experienced grief at the loss of lives, livelihoods, the devastation brought onto our unique flora and fauna and places we cherish.

The lack of preparedness by both State and Federal governments however is hard to comprehend given the warnings they had received.

Governments of all levels must listen to the science. Scientists are telling us bushfires will become increasingly common in the decades to come due to the climate emergency. Not only must we prepare our communities for these, increase our resilience but we must also cut our reliance on fossil fuels and move towards a low-carbon future as a matter of urgency. I don't accept the summer we just had as "the new normal", this would mean we give up and we don't fight for a safe future for our children and I'm certainly not doing that.

#### Dr. Liisa Donald, Forestville, Sydney NSW:

I could not protect my child as these masks can't safely or effectively be worn by toddlers.

I watched with heartbreak as friends and strangers had property threatened with fire, some

losing their homes, their animals, their family. I watched as the body toll of native wildlife climbed to a staggering 480 million and will likely never recover, with irreparable damage to our biodiversity. I mourn these losses for our community and the future of our children.

Australia could have been much better prepared and the effects would likely not have been as disastrous; lives, property, forests and wildlife could have been saved.

An education campaign [should] occur about the dangers of this smoke inhalation, should a similar situation arise in future. The government was advised how dangerous the smoke was but did little to educate or protect the general public.

The government should acknowledge climate change as a key factor in the precipitation of these unprecedented but not unpredicted fires. I request they make a policy that all government decisions must document how they will contribute to climate change. If the effects are negative, permissions and funding should be reviewed.

The government should fund renewable energy systems and new technologies that support this. They should facilitate and fund workers in non-renewable industries to move to more sustainable jobs. They should cease financial subsidies that prop up an unsustainable coal industry.

#### Jakub Dworniczak, Naremburn NSW

We would have spent a couple thousands dollars on vacation supporting local businesses, but we ended up staying in Sydney and have not spent as much as usual. We also had to limit our time outside the apartment (limiting spending in cafes, restaurants, museums) when air quality was bad.

Child care where my daughter was going was not sure when they should not allow children to go outside and how often they should check during the day.

#### Melissa Harrington, Moruya, NSW

Because there was no power, we also had no internet for updates. We were able to use our mobile internet, until that went out too. So that left us with only the radio... When the news radio stations also went out, I was very scared. I had no idea if the fire was close or coming, if I should stay inside or evacuate with my kids.

The drive was scary with dark orange sky looming west of Bodalla... My 7 year old was too scared to fall asleep. It was windy, and every time she heard the wind or a twig fall etc she cried out and asked if we were safe. I assured her we were safe, but in all honesty, I didn't know if we were.

My 7 year old daughter had a friend over a couple of weeks after school went back in February, and I heard them playing 'evacuation'. They were collecting some toys and tying them together so they wouldn't get 'left behind and be burned'. They 'evacuated' to the cubby house outside and 'seeked shelter'. It was upsetting to hear.

I want the government to have a better plan for the future. I want them to work with the indigenous people who live here and come up with a management plan. I want them to listen to the people, like experienced firefighters, and work with them to come up with a plan. I want them to have systems in place to keep people safe and informed on a real time basis if things go wrong again.

I want our local council to listen to the people who live here and hear their concerns and address them appropriately. I know the issue was raised about their bush fire plan being out of date before all this happened, and I can't help but wonder what would have happened differently if they had listened and addressed it before it was too late.

#### Amy and Danny Jowers Blain, Canberra, ACT (holidaying in NSW):

Bertie is 6 months old; in his short life they've lived through unprecedented bushfires, an epic dust storm, months of being stuck inside because of the smoke, and now because of Covid19. This was far from the world and life I imagined for them

Why was it so dark outside? It was 7 in the morning. Why was it so dark?" It was summer, it was 7am; it shouldn't look like the dead of night.

The water in Bermagui was contaminated, the filtration plant was fire damaged, the power went and then the signal, the supermarket was out of bottled water. We had no way of contacting people or finding out what was happening, we just had to wait

Our hearts broke when our 6 year old said "This is the worst day of my life" (ours too), all she wanted for 2020 was for there to be no more fires.

Facemasks can't be used on children because it can cause more harm to their developing respiratory functions; there was short supply anyway in Canberra and the mail was cancelled because it was too dangerous for posties to do their job

The Federal government came across as uncaring, unsupportive, disinterested and irresponsible. A government that was happy to spread misinformation about hazard reduction and back burning and dismiss any discussion on climate change action

We're seeing now with Covid19 that we can shut the world down just like that. We can see the impact that it has on the environment and how it's improving the living conditions outside of our homes. It can be done.

#### **Kathryn McCarthy, Broulee, NSW:**

Eighty percent of our shire – a favoured holiday destination for Canberrans, known for its beautiful beaches and laid-back living – was burnt, and irreversibly altered. Birdsong has stopped, wildlife has vanished. Those areas of the forest where we used to look for bounding kangaroos are still, black and silent. In our shire alone, three people lost their lives, more than 500 homes were destroyed and almost 300 damaged.

I still weep as I drive through our blackened forests, but not just for our present. I weep with a crushing fear for my daughters' future.

I have personally experienced mental health impacts in the form of anxiety and depression. My youngest daughter (aged 4) developed extreme separation anxiety and has struggled emotionally, her mental state mirroring my own. She developed a severe chest infection during February, and our doctor's assessment was that smoke inhalation likely played a part.

the greatest mental strain has come from the obfuscation around climate issues from all levels of government (local, state and particularly, federal). At every turn, our leaders have downplayed, minimised or outright denied the role climate change has played in this disaster – leading to insufficient crisis planning, an insufficient crisis response and a wholly insufficient approach to mitigating climate change. Our leaders, and particularly Mr Morrison, have gaslighted the Australian public, and continue to do so. For those of us who have seen communities destroyed by fire, and who are anxious about the future safety of our children, this has severely impacted our mental health.

Governments of all levels should put in place policy measures to urgently implement the emissions reductions solutions already available:

- Transition to renewable energy and improve energy efficiency
- Shift transport systems to shared and electric vehicles
- Prioritise a fair transition for those impacted by the climate crisis (including fossil fuel communities and Indigenous communities)
- Commence rapid drawdown of emissions using natural climate solutions
- Develop and implement programs to end food waste
- *Undertake crisis/disaster planning under the guidance of experts.*

Those of us in bushfire-affected communities have relied on the ABC for information that was literally life-saving. Our national broadcaster and its staff must be protected.

#### Nathalie Swainston, Moss Vale NSW:

Trying to explain this situation to a toddler was heartbreaking. Naturally, he couldn't understand why he couldn't go outside, why his father was wearing a mask every time he went to clear debris in the gutters and garden, why we had bags packed by the door, that he wasn't allowed to touch, why he was kept home from daycare and his friends on really smoky or high danger days, or why we all had to sleep in the one room with the air purifier through so much of January.

I feel a great deal of anger towards past and current governments that have consistently ignored advice and evidence from national and global experts on extreme weather, emergency services requirements and the worsening climate crisis.

I want to see our political leaders listening to evidence and experts, and supporting affected communities and citizens not just with emergency relief, but with policies that will reduce the likelihood of these fires reoccurring again and again.

We were also severely affected by smoke, with one of my children vomiting once because the smoke was so bad, and we had to cancel many outings and stay home over most of our holidays.

#### Ursula Hogben, Mosman NSW:

The smoke affected people who work outside and children's ability to play outside and do sport. it affected people's ability to earn their livelihood, and it affected our physical and mental health.

Rebuild property in a more resilient way. This includes where buildings and infrastructure are located, what they are made from, and how these are built. We need more fire-resilient buildings, and we need localised water, food and energy sources.

The steps that Australia needs to take, including policy and expenditure, are well-researched and set out in the following, among other leading reports:

- 1. Ross Garnaut's book, Superpower
- 2. PWC, The Future of Energy Report
- 3. ClimateWorks, Decarbonisation Futures report

#### Elliat Rich, Alice Springs, NT (holidaying in NSW):

I want the Government to put in place a Climate Change Act to make sure that any activity that takes place in Australia has to take Climate Change into account and not add to its effects. This will begin the work to reducing mega-fires in the future. Protecting all remnant native forests to provide safe places for endemic flora and fauna, and working with Indigenous land managers to use their knowledge to best protect people and places.

Our family lost their holiday home in the fires, we felt unsafe and vulnerable when travelling within NSW and feel increasingly let down by a Government not willing to take the necessary actions to work towards a safe future.

#### Rachel Schofield, Bega Valley, NSW:

On the high danger days my partner and I would be constantly checking updates, listening to the radio, watching the council FB live briefings. It was impossible to protect my children from exposure to our anxiety. They also got exposed to more indepth media coverage than was healthy/age appropriate because we had to keep up to date. This lead to my to both my children being scared and my 8yo had difficulties sleeping through the night having previously been a good sleeper.

The clear up work he did involved dangerous activities e.g. cutting flaming trees as the exhaust from the chainsaw fanned their smouldering trunks. Also a lack of proper protective equipment e.g. no masks.

The out of area companies contracted to do the clean up work e.g. Lang O'Rourke were inefficient and poorly organised. Much time wasting and standing around doing nothing.

#### Deanna and Jed Hayes, Sydney, NSW:

We constantly checked the Fires near me app, and listened to the ABC radio (which was amazing at keeping us informed). We had chosen Jindabyne with so many outdoor activities available, but of course we were stuck indoors the entire time. The smoke was even inside the house so I was constantly worried about my mum and also the effects on my family of the smoke.

But worst of all, the horror bushfires were a reality check about climate change and how it is real and it is here. Our frustration then and now is that our government barely admits that climate change is happening let alone taking measures to address it. Most importantly we need to decarbonise and lose our dependence on fossil fuels.

#### Patti Wilkins, Ainslie ACT

My daughter was so affected by anxiety about the fires that I had to take her and my grandson to Tasmania to spend some time with family for the sake of her mental health.

We need to prepare better by listening to our Indigenous fire managers. We know that areas where they had done their traditional burning were not affected by the bush fires while areas that were back burned did. It is a matter of urgency that we put money into facilitating the training of more Indigenous fire managers.

#### Kath Naish, Randwick, NSW:

Every time there was heavy smoke in Sydney from bushfires, my son needed an inhaler to help his acute coughing fits. He was 9 years old and was very distressed. I felt completely helpless and overwhelmed by the smoke. It depressed and agitated me. I was traumatised by this experience and it felt like the end of the world was coming.

As a parent and an Australian citizen I am dismayed by Government inaction on climate change and the unacceptable failure of leadership both at state and federal level. We cannot continue to support coal and gas. We should not switch our reliance on coal to a reliance on gas or any other fossil fuels. We must move to fully support clean, sustainable and renewable energy technologies now. We cannot wait any longer.

Please stand up for our kids. Please do not continue supporting coal and gas. We need strong leadership and clear planning to transition our economy in the right direction.

#### Siobhain O'Leary, Liverpool, NSW:

There are a lot of calls for the adoption of Indigenous fire practices in the help to prevent future catastrophes of this scale. I think this is an important focus and the knowledge of Indigenous land management has been sidelined for too long and needs to be respected and preserved. However Indigenous people's fire practices are not done in isolation from other land care practices, it is part of a whole ecosystem protection approach. We cannot just adopt fire practices but continue land clearing, logging, monoculture agriculture and river depletion and expect the fire practices to save us. We need to deeply listen to Indigenous people about what it is to be part of the land and care for it.

We need to dramatically reduce our carbon emissions now and plan for the likely increase of fire seasons like this. Global temperatures are rising, increasing the likelihood of fires and other natural disasters. We have not even accounted for impacts such as the release of massive amounts of carbon into the atmosphere from these fires that is unclear will ever be recaptured due to ongoing deforestation, in NSW some of the worst in the world.

As the next fire season starts soon, sooner than ever before and overlapping the Northern Hemisphere season because of climate change, I fear for all the communities, those where my families and friends have been impacted and all others, that the lessons from this terrible fire season have not yet been learned. I fear for my children's future in a climate changed world. I hope the lessons of covid-19 can be taken into consideration, those of listening to experts and taking decisive collective action to keep communities safe. Unlike covid-19 we have more warning, more opportunity, and more technology to respond but it must be now.

#### **Anonymous, Tumut, NSW:**

The bush, while I know it is resilient, has changed significantly over huge areas. I wasn't going to write anything for this because I thought my situation wasn't anything unique. But that's the point, it's not unique.

Overall I think the firies and emergency services did an amazing job with what they had. But there certainly seemed to be a feeling that resources were stretched too thinly across the state, especially in the early days. Community members stepped in when something was missing, for example, by live streaming, recording, and sharing videos of community meetings.

I get frustrated by simplistic arguments over fire regimes. I'm not going to argue for more or less burning off, because I don't know the answer. But I would like to see greater recognition of the complexities and expertise of fire management.

What is most concerning, though, is that warnings to government of the severity of this fire season were ignored.

#### Heather McGregor, ACT (with holiday home in Rosedale, NSW):

I inadvertently dragged a hose across some burnt ground and damaged it and Andrew calmly repaired it. We made sure we had a heap of spare fittings, but I couldn't believe he would have the calm in the circumstances to actually do a repair on a hose.

A fireman asked Andrew and Joe to look for a hydrant. I assumed they would have that knowledge readily available. (We realized much later that the road had recently been resealed and the painted arrows indicating the location of the hydrants had not been replaced).

She assessed that we had followed our plan, stayed focused and calm, been resourceful, sensible, and safety conscious.

We still had water but no power or news or contact. We had lost ABC radio before the firestorm hit us. No power, no news, no internet therefore no access to helpful apps.

Seventy houses were lost in North Rosedale. About forty houses were lost in Yowani Road and Dale Place, including all those to the north of us, on both sides of the road – perhaps a dozen. Ours was the first house in the path the fire front that did not succumb.

On 15 January 2020 when the Kings Highway reopened and again on 21 January I went back to our house. The drive down the Clyde was deeply traumatizing. The beautiful forest destroyed. Such widespread tragic destruction. I sobbed most of the way.

Full stories are included overleaf with attribution.

#### **AP4CA Members' Stories in full**

Sarah Graham Sancrox NSW 2446 Children 4 and 2 at time of the fires

The closest fire to our house, the Lindfield Park Road fire burned for 210 days, from 18<sup>th</sup> July 2019, causing prolonged periods of hazardous air pollution in our town, and risk to property as well as frequent road closures. Our child's early education lessons were moved due to the location being at direct threat from the fire. Other **fires in our region resulted in loss of lives, homes, prolonged periods of evacuation for families in locations at threat, and severe smoke pollution leading to school closures.** 

As the weeks turned into months, my five year old began showing signs of increased anxiety. This started as we made urgent preparations to our home should the fires come closer. Though it made monitoring conditions difficult, we turned off the radio to reduce his distress. Both he and my 2yo showed increasing reluctance to separate from me. As we passed burnt out patches of bushland on our drive into town we repeatedly talked through a 'social story' about the fire fighters who stood to protect us, and the steps we could take to protect ourselves. Like many in our community, we opened our home to another family who were unable to return to theirs due to fire damage. While having another family staying in our house was fun at times, sharing space unexpectedly with a large family was also difficult for the children, particularly as the unpredictability of available emergency accommodation for our friends made it difficult to prepare the kids for arrivals and departures. The children were clearly distressed by reports of injured animals. One day, caught out driving through a roundabout when a story about burned koalas came on the radio and unable to mute it in time, he declared that "If we see a fire mum, you slow down and I'll pull the koalas in through the window to rescue them". My two year old piped up beside him "and me the kangaroos". The mental health impact on our children is not insignificant. Despite my family not being directly affected by the fires, his concern for the animals has persisted. Just today (22/4/20) driving home from town past our local zoo we saw flames behind the property from a hazard reduction burn. I was caught unawares by the sense of threat I felt personally when seeing the smoke and flames, I wasn't surprised at all that the first thing he expressed was worry for the animals in the zoo only a short distance away.

A lack of clear advice during this period resulted in children being unnecessarily **exposed to air pollution.** My experience as a parent of 2 children, attending 2 different early childhood centres in Port Macquarie, NSW, was that the centres either did not have a policy to guide educators decision making, or where a policy had been developed, it did not adequately take into account the risks from elevated air pollution levels. Children were regularly allowed to play outside even when the AQI was in the hazardous range. I recall dropping my children to day care one morning when the smoke was visible, and I had myself experienced minor symptoms from exposure in the car on the way to the centre, and being surprised to see that babies were being cared for outdoors. After discussing my concerns with the educators, they quickly responded by bringing the children indoors, however during this conversation it became clear that the educators had received no formal guidance about how to respond to this situation. After raising my concerns, the centre undertook to develop a policy for addressing an air pollution hazard, however this was hindered by a lack of clear information from reputable sources. In fact, guidance to schools and early education centres regarding air pollution was delayed until such a time that larger population centres in Sydney and the

Central Coast were affected by hazardous pollution levels. Even now, information on the NSW Health website lacks specific clear advice to educators regarding when to keep children indoors, and under what circumstances centres should be closed. The webpage "Bushfire smoke information for childcare centres" fails to clearly identify the heightened risks for infants exposed to bushfire smoke, and would be improved by specifying clearly the types of behavioural and care modifications that should be undertaken by educators at each level on of Air Quality Index or where smoke is visible or able to be smelled.

Moving forwards, there are clearly lessons to be learned. The simplest and most important lesson is that climate change science needs to be a cornerstone of all policy decisions going forward, such that the risks to our community are not ignored, and that adequate preparations can be made for ongoing threats. These bushfires are unprecedented but not unexpected, climate scientists, and bushfire experts have been warning our community about these risks for years.

With respect to moderating the impacts of future bushfires, preparations need to start with a baseline reckoning of the risks that honestly takes into account the scientific evidence. This needs to be done at all levels of government, and a framework needs to be developed for businesses and community organisations to do the same.

Communities need to be supported with resources to help them plan for and respond to these risks proactively, rather than waiting until the fire is at our door to respond. The types of resources required could include

- Guidelines for managing air pollution risks in a range of work, educational and community settings
- Guidelines for managing extreme heat risks, noting that extreme heat events often occur simultaneously with periods of elevated bushfire risk
- Mental health first aid training
- Adequate funding for volunteer training and PPE for the RFS
- Planning and funding for safe evacuation zones
- Training for parents around how to support the mental health of children in emergency situations
- Rating of bushfire prone areas needs to be updated regularly as global heating continues, so that new areas of risk can be identified and assisted to prepare
- Communication mechanisms need to be developed to facilitate the sharing of important information in crisis situations. Over-reliance on the internet by government bodies resulted in those most affected by the fires being unable to access the information they needed to make safe decisions.

Our built environment needs to be managed with a regulatory framework that accounts for the changing and increasing risks due to global heating. With respect to fire, building standards should consider the physical risk of fire but also risks from poor air quality. It was evident during the crisis that variation in building methods resulted in a more or less well sealed building and therefore more or less capacity to manage air pollution hazards. Changing regulation to require buildings to be able to provide safe shelter from the new threats we are facing is important for residential housing, and essential for public spaces such as hospitals, schools and childcare centres.

Most importantly, mitigating the impacts of natural disasters without addressing the underlying drivers of human production of greenhouse gases is wholly inadequate. The reason for this is that measures to increase resilience and facilitate adaptation are limited in their capacity to respond to disaster events, which by their very nature are characterised by extreme risks and unpredictability. Urgent reduction of greenhouse gas

emissions is critical to stop these fires becoming more severe and frequent over the coming decades.

#### Gretchen Miller Erskineville 2043

Son: 15.

My immediate family consists of two adults and a 15 year old boy. The summer of 2019/20 was a horrendous shock for us. **Daily exposure to smoke meant we could not enjoy our usual summer exploits** - sailing, walking, swimming. One day I went down to the water to try snorkelling, imagining that while it was hell above, I could at least encounter the fish below and gain some psychological relief. It was a nightmare. The water in Sydney was speckled with ash. The smoke was so low as to be breathed in by my snorkel - there was just no escape. The effect on us all was ultimately deeply depressing as we heard about the stories of fellow Australians losing homes, fleeing for their lives, **the flames consuming our precious landscape... the animals... it was just horrendous. I worried and grieved for our wildlife.** 

I want our governments to take genuine action on climate change. I want them to step up and stop with the jobs for the boys. I want the corruption to end, and the perceived corruption to end. I want brave, bold action that makes me and my community, my immediate community and my larger community of Australians feel valued and honoured - in that we are heard and we are acted for in a decisive manner.

I want to stop feeling like I'm being ripped off and abused for the sake of a few mining magnates and jobs for the boys. I want community councils supported in their frontline action against climate change. I want forests protected and Reefs protected. I want water for environment to be guaranteed above the profits of cotton companies and big irrigators. I want real action, I want bipartisan action and I want it now.

# Elizabeth Cowan Kingston, in Canberra.

My son was born on 2 January at Canberra Hospital. This was during the peak of the bushfires & Canberra was shrouded in thick smoke. We were living in a townhouse at the time with no AC or air purifiers. Our house was uninhabitable during the 40+ degree days when we couldn't open the windows to let in a cool breeze at night due to the suffocating smoke.

We were discharged from hospital on 3 January - one of the worst weekends of the bushfires season. Instead of taking our new baby home we spent his first three nights in a hotel, taking refuge in the air conditioning to protect our tiny baby's lungs from the smoke. On his 2nd night the thickest smoke yet rolled in from the coast & the hotel's fire alarms were triggered. This kept happening throughout the night, until we eventually decided to head to our own house to try to get some sleep. Driving through inner Canberra felt like driving through the apocalypse. We couldn't see more than 5m or so in front of the car. We arrived home with our infant in a state of high stress, my partner & I both in tears of despair at the state of the world that we had brought our baby into. This was not the joyful home coming or introduction to the

**world that we wanted for our son**. We spent that night on a mattress on our kitchen floor - the coolest room in the house - our bedroom being to hot to inhabit with the windows closed against the smoke.

# Peter Owen Darlinghurst, Sydney NSW

We had our first child, a son, in February 2019, and he was 9 months old when the first major fires hit.

We spent the majority of summer in a state of anxiety - about his exposure to the smoke and what it was doing for his lungs, and his general health. We are renters in an old workers cottage in Sydney which due to age is impossible to seal off. This meant we were living with smoke haze in the house for weeks. Our portable aircon unit works by drawing in air from the outside and circulating it back in which meant that we had to make the choice between cooling the house on extreme heat days and inhaling smoke. Whilst we could wear masks if needed, there are no P2 masks available that would fit a baby, and regardless, he would have become agitated and pulled it off anyway. In December 2019 I commenced full time care of my son, and the smoke haze and fires marred the beginning of this special time with him - my son and I were often stuck indoors and feeling trapped by the smoke haze. I felt helpless, with no means of protecting our son from the smoke. This was magnified by our feelings of powerlessness, knowing that the predictions are that we will face more and more extreme climate events, and a deterioration of the quality of life for ourselves and our son if no immediate and urgent action is taken on climate change.

My wife and I felt (and feel) an incredible sense of grief, which was magnified by the denial of climate science by parts of the government and the delay in taking national and decisive action in response to the bushfires.

# Anneliese Alexander Holsworthy, NSW 2173

It has been 4 months now since the worst of the bushfire season affected my family. Prior to that, we had two months of affects, including hazardous levels of smoke, risk of asthma, and children who were unable to play outside. Spring and early Summer is often the peak of fun for families, enjoying the sunshine, running around the playground in their summer uniforms at school, walking to swimming lessons and riding to the local shops. But we were unable to do any of this due to the smoke. **Never in my life do I recall children having to stay inside during their lunch and recess breaks due to hazardous smoke**. It was certainly nothing like my husband nor I had experienced growing up, but now, our children have experienced weeks of it.

We are no strangers to fire. We live in Holsworthy which was affected by a large fire through the Army base and the Royal National Park in 2018. Our children fled to their grandparent's house that night while my husband and I stayed behind. As a member of the RFS, he wanted to protect his property if it came to that. But this summer, there was no escaping the smoke. It was in our clothes. It was in our house. It seeped into the cracks and crevices of windows and doors. There was no avoiding it when you went

outside. It was in our lungs. Our eyes stung all the time. Ash blew out of our nose. At times, it felt like it was in your blood. Research tells us, it probably was.

We had a trip planned this summer, a road trip to Tasmania which required us to drive down to Melbourne. We avoided the coast and went via Golbourn and Wangaratta. As we drove, the visibility was so poor that as we passed the wind turbines, we didn't see them until they were right in front of us. The heat and the smoke remained until we were at Melbourne, but we had blessed relief over the Christmas and New Year period in Tasmania. We did experience one day in Tasmania where fire flared up during an intense, but short lived storm, and once again, we were blanketed in smoke.

Unfortunately, our plan to return via the coast was abandoned and we once again went through the centre of both Victoria and NSW, where we experienced unsettling winds and temperatures of 46 degrees. Fire affected children and their families were stationed in the holiday parks we stayed at. Our experience was across three states in NSW, but we know that no state was unscathed by this bushfire season.

Our family is aware of the effect that climate change is having on the risk of fire. This summer was unlike any summer I have experienced, and I have many memories of bush fire growing up. I remember bunkering down in my room as a 9 year old, fearful because burnt leaves were falling at my front door step. For my children, this happened so frequently over the summer, they are no longer fearful of it. Is this the kind of future they have to look forward to? Where fire and smoke and ash falling from the sky is a normal experience of summer? Without action on climate change, my fear is that it is.

The climate is changing, we are all aware of that. As a member of the RFS, my husband tells me that the window in which they are able to perform hazard reductions is shrinking. Planned HR's don't go ahead a lot of the time due to unfavourable conditions, be it wind, rain, or an unstable atmosphere.

Is there something to be said for indigenous methods of burning the bush? Probably. Could we reduce the ability of local politicians to cancel planned HR's for political advantage? Perhaps. Could we put more money and resources into local brigades? Absolutely.

Could we also, as a nation, decide that the change in climate poses the greater risk, and has an even more obvious solution? Definitely. Without meaningful reductions in our burning of fossil fuels, we will continue to see the dangerous conditions we saw this summer, regardless of any other "solutions" discussed in this royal commission. Incentives for solar, greater uptake of wind and battery storage, investment into green hydrogen, and an electrification of the transport industry in the long run, will not only make the Summer of 2020 an unrepeated piece of Australia history, but will mark Australia as leaders in the transition to a cleaner and safer future for our children.

#### Dr Michelle Hamrosi Eurobodalla NSW

In the latter part of Spring 2019, I watched with disbelief as the Currowan fire gathered momentum to the north of my Shire (Eurobodalla). After weeks of burning to the north of us, it finally skipping the highway and sent its ferocious all consuming fire tendrils out our way in the early hours of Friday morning, the 31st of December. We were woken to an RFS phone call urging us to evacuate. Thinking back to this time, is like reflecting on a living nightmare. The nightmare didn't end there...it continued for weeks. Over the course of this summer period, we were evacuated three times. I have three young children and a husband who was an on call GP/anaesthetist for the local hospital during 2 of the state emergency periods. We evacuated while he went to sleep at the hospital. Needless to say, when we returned home from being evacuated each time we were grateful to find our home still standing and the kids grateful to be reunited with their Dad. Our property, up along the Deua River, however, was not so lucky. It was burnt through twice in different parts. Despite the rain, regeneration is slow. They say our bush is adapted to fires, but I'm not so sure the bush that remains, after 200 of colonisation degrading and plundering it, is that adaptable, especially to the type of fire we had - intensive, extremely hot, fires that produced their own storms and weather systems. Along many parts where native bush was present, only weeds have shot up, quickly filling what once was native grasses. We have a long road ahead to regeneration.

I work as a General Practitioner in our rural community. After the fires, we were closed for a week. We opened our practice on Monday 6th Jan 2020, still without power, phones or internet and operated a walk in clinic. I saw countless patients suffering the impacts of smoke exposure. Some which have not yet recovered now 4 months down the tract. I saw countless patients suffering from psychological trauma, anxiety, panic attack and/or grief from the loss of their homes or businesses or from the stressful impact of the emergency itself. Many too have not recovered and need much more support. Many children have been traumatised. There is very little mental health support available for them.

After the first time we returned home from evacuating, that night, around the dinner table, my 7-year-old daughter said, "I just want it to be normal again." I replied that I did too. Moments later, she was still looking pensively into the distance, her food going cold on her plate. I asked her what she was thinking. She replied: "I'm just imagining the future. Everything is dead and brown. There is no food. There is mountains of plastic and the air is filled with pollution."

I think about what she said. This was not our future, this was our current reality. A vast part of our shire's forests were black and smoldering, along with it hundreds of homes and properties. We had food shortages and half of our shires water was unsafe to drink. The beaches were unsafe to swim in. Our air was thick with hazardous pollutants from the fires. Months down the track, yes the smoke has gone and the beaches are finally clean again, we certainly have not returned to 'normal'. I don't want things to go back to normal. Normal wasn't working. Normal was destroying our environment and our health. We need to build back a better normal. A normal where we prioritise having clean air, clean water and a livable climate. These basic needs underpin our very survival.

As for me personally, I feel I am suffering a form of Pre Traumatic Stress Disorder - an underlying anxiety and fear for what is coming next. At times I feel deeply depressed. At other times I need to avoid reading any further bad news because my coping systems

are overwhelmed, my empathy running empty; the feeling of helplessness all consuming. Worrying about my children's future, for them living in a time of climate breakdown would see their hopes and dreams never to be realised, led to a period of insomnia. I think about the coming summer with trepidation. I check the weather and with no signs of rain for a week I feel despondent. I fear the bushfires are just the beginning. What we have just lived through has solidified a theoretical risk into a lived reality. It is a wake up call, if ever we had one. And 80% of Australians were directly or indirectly involved in the bushfire crisis. We are some of Australia's newest victims of climate change. And we want to see our leaders, who so far have ignored expert advice, decade after decade, acknowledge they have failed their duty of care to the Australia people. They must show a new resolve to never make that mistake again. Australia's future depends on it. We cannot afford to have another bushfire crisis like this again. For the majority of Australians who want to see climate action, for the growing number of people suffering eco-anxiety, seeing our leader act on the science would give us hope. Australia's response to the coronavirus crisis has shown us that our leaders can listen to the scientists and act in the best interests of all Australians; so we must do the same when it comes to the greatest public health crisis of the 21st century - the climate crisis.

A quote Poppy told a friend who also took this photo and shared her story in the Guardian...



"When the fires came I felt really scared of what might happen, I was really worried about Lulu (Poppy's little sister), I thought ash would come down and catch her clothes on fire. I decided if there is another fire we pack Lulu first and meet at the letterbox."

### Estelle Dollfus-Gates Hornsby 2077 NSW

Family of 4 – children aged 9 (year 4) and 12 (year 7)

The dreadful 2019-2020 bushfire season affected my family in many ways. While our home was never in the path of the fire, we live in a bushfire prone area in the North-West of Sydney and the Gospers Mountain mega fire was not very far, as the crow flies. We suffered day after day of very poor air quality, from early November until the end of January.

For my children aged 9 and 12, it meant missing out on planned end of year school excursions (including a year 6 surfing day, which had been booked six months ahead), staying inside at school, missing out on regular sports (swimming training for example), not going out for walks in the neighbourhood, not playing outside.

Both my children suffer from asthma and while their asthma is well controlled, this summer meant they had to stay on their preventer medication rather than come off it for the summer season, which is what we normally do.

My daughter developed a cough in January, which is not going away despite increased preventer medication and investigation. While I cannot prove that the smoke is to blame, I believe the prolonged exposure was a factor.

The downplaying of the effect of the smoke on people's health by the Prime Minister in early December was very troubling. When checking the air quality daily online, I realised that the air quality monitoring in the Sydney basin could be improved greatly with more stations. The communication by governments on the effect of air quality was also poor and lacked clarity as many went on their normal daily routines despite hazardous air quality.

As a family we suffered from anxiety and bad sleep, we experienced grief at the loss of lives, livelihoods, the devastation brought onto our unique flora and fauna and places we cherish. We also wondered whether we could keep living here or whether we should move to a safer place.

I knew well before the fire season started in earnest that it would be a bad fire season (although what happened was well beyond my fears), I had read about it and was aware of how dry the landscape was, exacerbated by years of drought and higher than average temperatures. I am not an expert, simply an informed citizen.

The lack of preparedness by both State and Federal governments however is hard to comprehend given the warnings they had received - the reliance on volunteers for weeks on end, the fact that volunteers didn't have proper equipment at times (including protective breathing equipment, working trucks), the lack of air fire-fighting capabilities.

The Prime Minister repeatedly refused to meet with the ex-fire chiefs, who had warned from April 2019 of the coming danger and advocated for the purchase or lease of additional waterbombing aircraft. I would like to know what could have been saved if we had been better prepared, maybe the Gospers Moutain fire wouldn't have become the mega fire it became, maybe our unique Gondwana rainforests would have been saved?

We are forever grateful to the firefighters for the immense work they put in this summer and for their selfless courage, and I must mention how Commissioner Fitzsimmons was a steady shining light in these difficult times.

My final observation is that **governments of all levels must listen to the science**. Scientists are telling us bushfires will become increasingly common in the decades to come due to the climate emergency. Not only must we prepare our communities for these, increase our resilience but we must also cut our reliance on fossil fuels and move towards a low-carbon future as a matter of urgency.

I don't accept the summer we just had as "the new normal", this would mean we give up and we don't fight for a safe future for our children and I'm certainly not doing that.

# Dr. Liisa Donald Forestville, Sydney 2087 NSW

I live with my husband and my now 23 month old son. I wanted to write to let the government know how the bushfires affected our family.

Over the past months of the most recent bushfire season, checking the air quality index became part of our daily life. On the worst days, we woke up not needing to check it, with a headache and burning in our eyes and throat from the visible smoke outside our house, seeping in through every crevice. At times when we had no choice but to leave the house in these conditions, wearing a P2 mask became the norm, just to try and prevent the worst of these symptoms. I could not protect my child as these masks can't safely or effectively be worn by toddlers.

On the worst day of smoke, even with all our doors and windows shut with towels sealing the crevices, it was still uncomfortable to breathe. We held our breath as we ran to the car and drove 40 minutes to Macquarie Centre, the nearest indoor shopping centre, in the hope it would help protect us. The centre was only slightly better, with smoke still visible in the air and the smoke alarms eventually being triggered due to the hazardous conditions. It was after this day that our family made the decision to buy a \$700 air purifier, an extreme privilege, and one I know that many families with more limited financial means could not afford. When did breathing clean air become a privilege and not a right? Will we become like some other countries where this smoke is our new normal and the health of the population doesn't matter as long as business is booming?

We spent half the summer indoors, too worried about the effects of smoke on my child's developing lungs, to risk taking him outside. We won't fully understand the effect of this horrific exposure for years but smoking what was some days the equivalent of 16 cigarettes a day is already shown to be terrible for anyone's health, let alone a toddler. I watched family and friends, with poorer understanding of how dangerous the smoke was, continuing to take their children outside on these days. I watched childcare centers and schools let their kids run around and do heavy exercise outdoors in the smoke, even on the most hazardous days, because of the lack of direction and leadership from government to properly warn and educate centers and the public about the dangers of this smoke. I worried as friends and family with jobs outdoors had no choice but to face these health hazards every day or risk financial penalties and job loss.

I watched with heartbreak as friends and strangers had property threatened with fire, some losing their homes, their animals, their family. I watched as the body toll of native wildlife climbed to a staggering 480 million and will likely never recover, with irreparable damage to our biodiversity. I mourn these losses for our community and the future of our children.

The government was warned by former Fire and Rescue Commissioner NSW Greg Mullins about the huge risks of this bushfire season. **Australia could have been much better prepared and the effects would likely not have been as disastrous; lives, property, forests and wildlife could have been saved.** The government should be held responsible and should issue an apology.

#### I request that:

- an education campaign occurs about the dangers of this smoke inhalation, should a similar situation arise in future. The government was advised how dangerous the smoke was but did little to educate or protect the general public.
- government bodies give clear directives to educational institutions and workplaces about how to safely continue to operate and what activities should be ceased for the health and safety of their children, students and employees. These decisions should prioritize human safety, not economic interests.
- the protections on our forests be strengthened and the new government endorsed logging of these areas be ceased immediately to facilitate recovery of wildlife populations. Environmental protections from industrial concerns should be strengthened, not delayed, as is the governments current plan.
- the government listens to scientific consensus, not industrial concerns, to guide policy making around bushfire prevention in future.
- the government should acknowledge climate change as a key factor in the
  precipitation of these unprecedented but not unpredicted fires. I request they
  make a policy that all government decisions must document how they will
  contribute to climate change. If the effects are negative, permissions and
  funding should be reviewed.
- the government should fund renewable energy systems and new technologies that support this. They should facilitate and fund workers in non-renewable industries to move to more sustainable jobs. They should cease financial subsidies that prop up an unsustainable coal industry.
- those affected with loss of property or the lives of family members should receive ongoing government support until recovered
- firefighting funding should be significantly boosted and ongoing funding should be guaranteed to departments
- volunteer firefighters should receive adequate compensation in the case of service that lasts more than 3 days, with fewer exemptions to qualify for this compensation. They are risking their income, jobs and lives to provide a service to Australia.

All these actions should be taken as a matter of urgency before the next bushfire season.

#### Jakub Dworniczak Naremburn NSW 2065

My family is living in metropolitan Sydney, but despite not living very near directly affected areas we were impacted by the 2019-2020 bushfire season. We had my parents-in-law visiting us from Poland, with one person suffering (mild) asthma.

One of the first things we did after they arrived was to install an air quality monitoring application and inform them to check it every time before leaving home and during the day to reduce risks.

We planned to go for a short trip and vacation during Christmas - New Year break, we wanted to go to NSW South Coast, but we decided not to go when the situation deteriorated there.

We would have spent a couple thousands dollars on vacation supporting local businesses, but we ended up staying in Sydney and have not spent as much as usual. We also had to limit our time outside the apartment (limiting spending in cafes, restaurants, museums) when air quality was bad.

My pregnant wife got unwell a couple of times when air quality was bad, she has not visited the doctor, but had to rest - this impacted her productivity at work as well as forced us to return early from paradoxically an event organised by Polish migrant community to gather funds for bushfire victims!

Child care where my daughter was going was not sure when they should not allow children to go outside and how often they should check during the day.

NSW environment website was crashing during days with bad air quality - possibly because of too much load it could not handle.

So for as it was more inconvenience, productivity loss, some health risks, issues with accessing information about air quality - but it was financial loss for businesses we could not support as well as redirection of our charity donations to emergency funds instead of usual giving recipients.

In regards to potential recommendations I think it could be useful to have a fleet of large firefighting aircraft on the national level (despite firefighting being a state responsibility) and possibly using military C130 aircrafts with MAFFS (https://en.wikipedia.org/wiki/Modular\_Airborne\_FireFighting\_System) as additional firefighting capability.

It would be better to provide accurate and up to date information about the air quality risks to child care providers.

# Melissa Harrington Moruya, NSW, 2537

I live in Moruya with my two young daughters, age (just turned) 8 and 3. In September last year, my husband and I separated, so the children and I were looking forward to having a big happy Christmas with my parents, siblings and nieces and nephew. This unfortunately was unable to happen, as they all live in Canberra and were unable to come down to visit with us. My daughter was very upset that our Christmas was mostly just us three, as we had been so looking forward to having a day full of family. It was sad for all of us, because it was not what we had planned, and Christmas is one of our favourite holidays.

Happily for us, my parents decided to come down a few days after Christmas to spend New Years with us and in their house they had just bought in Moruya. On New Years Eve, that happiness was quickly replaced with fear, when we heard the news of the fires coming down through Mogo and then the power went out. We had not planned for the fires to be a risk to us, as they were not close to us at all the previous day. **Because there was no power, we also had no internet for updates. We were able to use our mobile internet, until that went out too. So that left us with only the radio.** We packed as much of our precious things as we could into our car just in case we needed to evacuate. My daughter, 7 at the time, had a large duffle bag and was walking around the house packing all of her things into it that she couldn't bear losing. She was stressed and upset, thinking about what things she would need to leave behind because it would not fit in the car. I was also stressed and upset, and as the fire was just over the bridge, I didn't know if I should be staying in my home or going to the evacuation centre. There were reports on the radio that the evacuation centres were very full, so we stayed at home, but not knowing if we were safe.

When the news radio stations also went out, I was very scared. I had no idea if the fire was close or coming, if I should stay inside or evacuate with my kids. The only thing I cared about what keeping my children safe, but I didn't know how to do that with no information and with no way to even contact anybody. We went to my parents' house to spend the night, so at least we were together. We stayed up to see the New Year in, but with no tv to watch the fireworks, no way to ring or text our family and friends, and not even a countdown on the one radio station we were able to tune into, it was a pretty sad affair. After my children went to sleep, I went outside into the dark, and saw the orange glow in the distance. I could see a line of fire near the horizon and hoped with everything I had that it didn't come closer overnight.

The next day, I decided to take my kids to Canberra so we could stay at my parents' house. It took us 9 hours to get from Moruya to Belconnen. The air quality in Canberra was so bad we couldn't go outside, but at least we weren't at risk of being burnt down anymore. I heard on the news that the following weekend was predicted to be even worse than the day before, and then again the weekend after, so we stayed in Canberra for a week and a half, hoping we would have a home to come back to.

When we came back home, our house was okay. We still had to drive the long way home, but without all the extra traffic on the road, it wasn't as bad. I tried to get some normal back into the kids lives, and so we planned to go camping at Narooma. We had booked two nights, and the first night was awesome, even though it was incredibly windy! The next day it was still windy, and the sky began getting an orange tinge to it. I tried to remain calm and keep informed, I checked the Fires Near Me app regularly. The fire danger rating was severe, but the fire seemed to be up north of Moruya so I figured we were safe. We swam in the pool and then ice cream truck came. While we were eating

our ice creams, I got a phone call from the kids dad saying we should leave right now because the fire is coming. He came past and helped us quickly pack up our tent. I asked for a refund for the second night, but the park refused because I was choosing to leave, I hadn't been told to. We drove back to Tuross Head, where the kids Dad lives. The drive was scary with dark orange sky looming west of Bodalla. I was scared we would get stopped on the road and made to turn back, or worse, get stuck. After a stressful trip, we arrived at the Tuross Country Club. There were a few other families there who has evacuated also. My mum and sister were in Moruya, and they were thinking about staying to protect the property. Someone near me had the scanner app on their phone and were updating me with what was happening. I was worried about my mum and sister and trying to keep my kids calm and entertained. My mum eventually decided to leave, and the 15 minutes between her telling me she was leaving, and them arriving at Tuross Head Country Club were the scariest 15 minutes of my life! The sky was dark and orange, I couldn't tell where the fire was. I was worried they were going to get caught on the road. I was relieved when I saw their car pull into the carpark. The sky remained dark and I heard that the road just past Tuross Head turnoff had been closed because there was a fire at the highway at Turlinjah. We stayed the night at Tuross Head at my kids Dad's house. My 7 year old was too scared to fall asleep. It was windy, and every time she heard the wind or a twig fall etc she cried out and asked if we were safe. I assured her we were safe, but in all honesty, I didn't know if we were.

The next day we went home and our home was fine. The fire had come into my Mums backyard though, and we were told the fires had been there and had protected her home. Everything was covered in a layer of ash. At our home, everything was also covered in a layer of ash. The fires had come to the hill behind us, about 500m away.

When school went back, we heard that the first weekend was going to be bad again. I packed the car and went to my parents holiday house with the kids in Bawley Point. My 7 year old daughter was sad and didn't want to go, but I was scared. Both girls were upset over the weekend and wanted to go home. We came back after the danger had passed, and again our home was okay.

This Summer was the worst of my life, even though our house was always okay and so were we. The emotional stress I was under, being responsible for two young children on my own, and not knowing what I should do or if we were safe, was intense. My 7 year old daughter had a friend over a couple of weeks after school went back in February, and I heard them playing 'evacuation'. They were collecting some toys and tying them together so they wouldn't get 'left behind and be burned'. They 'evacuated' to the cubby house outside and 'seeked shelter'. It was upsetting to hear.

It is hard to explain the feeling of closing the door to your home, and not knowing if it will be there on your return. Deciding which things you can live without or can be replaced if they get burnt down. The eerie feeling of dread when the sky is orange and you don't know if you're safe. Or if your friends are safe. And you can't reach anyone to find out.

I want the government to have a better plan for the future. I want them to work with the indigenous people who live here and come up with a management plan. I want them to listen to the people, like experienced firefighters, and work with them to come up with a plan. I want them to have systems in place to keep people safe and informed on a real time basis if things go wrong again. I didn't use an evacuation centre, but I did hear that they weren't run incredibly well and the local council said it had nothing to do with them. I want our local council to be involved in

that sort of emergency service to the public, and be held accountable to the people they are meant to be representing and looking after. I want our local council to listen to the people who live here and hear their concerns and address them appropriately. I know the issue was raised about their bush fire plan being out of date before all this happened, and I can't help but wonder what would have happened differently if they had listened and addressed it before it was too late.

Amy, Danny, Evie (now 6 years) and Bertie (now 6 months) Jowers Blain Canberra, ACT, 2602

Bertie is 6 months old; in his short life they've lived through unprecedented bushfires, an epic dust storm, months of being stuck inside because of the smoke, and now because of Covid19. This was far from the world and life I imagined for them. Only the global response to Covid19 has given me a glimmer of hope there is a brighter future.

Evie, my 6 year old took two months to be ok with going into a room, or going downstairs by herself, and as long to be ok in her own bed without us. That's because of the fires and then the smoke that kept her inside for months. We slept all together in our clothes on New Year's Eve because we needed to be prepared for the sirens and a slow convoy to Narooma from Bermagui. And then we all needed to sleep in the same room when we got back to Canberra because we only had one air purifier to manage the toxic smoke that still seeped into our sealed home.

2020 has been filled with unimaginable horror, full of pressing anxiety for us as parents and trying to minimise the very real disasters that our children are living through.

New Year's Eve 2020 should have been a beautiful day for our family down at the coast. We go every year. This year changed that.

Why was it so dark outside? It was 7 in the morning. Why was it so dark?" It was summer, it was 7am; it shouldn't look like the dead of night.

Fires travelled fast overnight and were headed our way. We didn't have a plan. We'd never needed one before. The road back to Canberra was shut.

The sky brightened and we we're relieved, except then it was bright red and we could hear thunder. It was hard to stay calm. What did we need for a 6 year old and 10-week-old when we evacuate? How long would it take for the fires to reach us? How close would they get? When would they burn out? How could we keep our kids safe? We had no way of knowing what was going to happen.

And then it went pitch black again. It was 9am. The fires were close enough that ash was falling from the black sky, we evacuated to the beach. It felt post-apocalyptic. We were terrified. We could see the glow of fire and it wasn't far enough away. But it was still cool, so we weren't in danger. The wind picked up, ash was blowing everywhere and then it was suddenly daylight and our relief was palpable.

The water in Bermagui was contaminated, the filtration plant was fire damaged, the power went and then the signal, the supermarket was out of bottled

water. We had no way of contacting people or finding out what was happening, we just had to wait. We packed up the car ready to leave as soon as we could. We bought disposable nappies because we couldn't properly wash and dry modern cloth ones and took a bottle of water. We were struck by how futile our individual action and commitment to save the planet looked in the face of devastating bush fires.

Our hearts broke when our 6 year old said "This is the worst day of my life" (ours too), all she wanted for 2020 was for there to be no more fires.

New Year's Day 2020: We abandon our 10-day coast holiday and head back to Canberra as soon as the road opened. We drove on a busy road back through smoke-filled coastline. There was nowhere without smoke in a 300km stretch, there was a fire crew putting out fires on recently burnt land. Cooma was choking on smoke; it was so thick it was an impenetrable fog.

Canberra started 2020 with the worst air quality in the world. The air we were breathing was hazardous; well above dangerous levels. Back home in Canberra our 6 year old had to get ash out of her eye and we cleaned ash from our newborn's ears.

Our 6 year old's bedroom was smoky. We were quarantined in the house for the first time this year.

The new year started with masking taping the house, smoke-proofing our home and how we'd live with the smoke predicted to last for months. Facemasks can't be used on children because it can cause more harm to their developing respiratory functions; there was short supply anyway in Canberra and the mail was cancelled because it was too dangerous for posties to do their job. We wanted to escape the smoke but galleries and activities for kids were closed because of the smoke too. We escaped to Sydney because their air quality was dangerous, not hazardous and we wanted to get an air purifier and Canberra stores had extensive waiting lists. We attempted another holiday, escaping in a campervan and drove away from the fires but still encountered an epic dust storm, but luckily missed the damaging hailstorm back in Canberra.

The ACT declared a state of alert; so we made our fire plan and got ready. We prepared for fires hitting and losing power, losing connection, coping without services and supplies. My midnight pre-bed and early morning routine included checking the latest alerts on Emergency Services ACT social media and Air Quality data to see if we'd be able to go out. Australia was a country on its knees. If it wasn't burning, it was smokefilled. Schools were advised to make judgements on the air quality based on what they could see and smell – and still let children out and held assemblies outside when you could see and smell smoke. And those of us lucky enough to have air purifiers know that the air can be hazardous even when you can't see and smell the smoke and keeping the smoke out is really difficult, virtually impossible in a school setting. So we worried about sending our 6 year old to school and whether they'd be playing outside and how much damage it would cause her longer term.

The ACT Government communications, Chief Minister Andrew Barr and Emergency Commissioner Georgeina Wheelan, were incredible, keeping the community informed and reassured throughout the state of alert and state of emergency. The ACT has also declared a climate change emergency and is actively working towards emission reductions. A stark contrast to the Federal government and Prime Minister constantly denying the impact of climate change on the bushfires, and talking about the cricket. The Prime Minister's physical absence from the country was poor leadership, which

barely improved on his return with insensitive handling of people who had experienced trauma. The Federal government came across as uncaring, unsupportive, disinterested and irresponsible. A government that was happy to spread misinformation about hazard reduction and back burning and dismiss any discussion on climate change action.

We're trying to keep our children safe and making choices between a rock and a hard place. We saw nothing compared to those that hunkered down on beaches who felt the fire's heat on their faces. We weren't in boats on the water escaping the flames. We didn't stare fire in the face. And we were horrified. The trauma that Australians experienced will run deep; it has run deep. Our 6 year old always has a hint of panic in her voice, "Is that fire?" if she even sees a picture with a flame. She says she hates red, orange and yellow, because they're the colour of fire.

As parents we feel hopelessly powerless. 2020 was when we felt our country on fire, when we felt scared. It was hell on earth. We can't bear that we might not do enough, soon enough, to protect our children's future.

We don't know how we build 'resilience' in our children if this becomes their new normal. We'll teach them how to shelter from fire and that they need an N95 facemask to protect them from smoke, how to seal their house and how to purify the air. But we can't reassure them that they will be safe, that their future will be habitable and that breaks our heart. We're seeing now with Covid19 that we can shut the world down just like that. We can see the impact that it has on the environment and how it's improving the living conditions outside of our homes. It can be done. When we emerge from this third crisis for 2020, hoping it's the last disaster we have to face this year, we need to look at how we build a better future than the one we were heading for. Because it was a living nightmare, just as, if not more terrifying, as Covid19.

# Kathryn McCarthy Broulee, NSW 2537 (Far South Coast)

I have two daughters, aged 4 and 7

For folks on the NSW Far South Coast, 2020 can be summed up in one phrase: *living in a state of emergency.* 

COVID-19 has moved the conversation on from our horrific black summer of bushfires, but in the Eurobodalla Shire, we have not forgotten the most devastating bushfire season in Australia's history. We cannot shake the memories of the menacing blazes that bore down upon our villages. We have not forgotten fearing for our safety; for the lives of our loved ones.

Eighty percent of our shire – a favoured holiday destination for Canberrans, known for its beautiful beaches and laid-back living – was burnt, and irreversibly altered. Birdsong has stopped, wildlife has vanished. Those areas of the forest where we used to look for bounding kangaroos are still, black and silent. In our shire alone, three people lost their lives, more than 500 homes were destroyed and almost 300 damaged.

But the changes brought by the fires go far beyond the devastating loss of our forests, animals and property. We've had months of living in either grim anticipation (while

inhaling bushfire smoke for several weeks); life-threatening emergency; service-scarce recovery; or a traumatic recall of all of the aforementioned. This has taken a significant toll on the mental health of our community members, who have now been shunted into the next emergency: the threat of Coronavirus (and associated lockdowns).

I still weep as I drive through our blackened forests, but not just for our present. I weep with a crushing fear for my daughters' future. Relentless fires, blackened forests, bone-dry land and villages destroyed were stuff of nightmares that existed inside my head, but early in 2020, they could be seen, smelt and touched. This reality – our reality – is a symptom of a warming planet.

My husband, my daughters and I weren't at home when the fire front approached our village on New Year's Eve – we'd left for Victoria a few days earlier and once fire engulfed the region, we couldn't return. On that heartbreaking final day of 2019, our friends and family watched the sky turn red as the Currowan fire bore down on our village. We anxiously awaited news that our loved ones were safe; that our home was still standing. A last-minute change in wind direction saved most of our village that day, but the surrounding villages were not so lucky. Fire ripped through nearby Mogo, Rosedale and through several areas of Batemans Bay, including my sister-in-law's suburb.

After a brief reprieve, fire conditions again worsened. My husband returned to support his family and defend our home, and theirs. As our friends and family went for days without power or communications, with food and fuel supplies cut, my daughters and I awaited news as the fires once again approached our village (that was intermittently without a water supply and blanketed in smoke).

We returned home to a new reality. To a community still on high alert as fires blazed to the west. To our loved ones recalling the trauma of fire threatening their families' lives. To news of children suffering from nightmares of fire approaching. To distraught local growers who lost everything. To a tourism trade destroyed; beaches covered in ash; air thick with smoke. In the weeks that followed we had two more days of severe fire threat, one of which resulted in more loss of life and property in nearby Moruya. Our terrified friends again fled for their lives.

As a family, we're grateful that our home's intact and our loved ones are safe. And the crisis has brought out the best in humanity – the love and support shown by locals, and folks concerned from afar, has been truly incredible. But our collective psyche is yet to recover.

In the wake of the fires, I have personally experienced mental health impacts in the form of anxiety and depression. Many of my friends have dealt with similar challenges. My youngest daughter (aged 4) developed extreme separation anxiety and has struggled emotionally, her mental state mirroring my own. She developed a severe chest infection during February, and our doctor's assessment was that smoke inhalation likely played a part. In the weeks following the fires, community members greeted each other with tears and stories of trauma. Whether at the local farmers' markets, at community events or at the school gate, we held each other through tearful recollections of fleeing from the flames.

Scientists agree that 1.1 degree of warming (global average) contributed to Australia's worst ever drought, and that the drought created the conditions for the unprecedented fires. Emergency experts warned Prime Minister Scott Morrison of the impending disaster, but he refused to meet with them and would not listen. As fires raged up and

down the East Coast, and approached our communities, Mr Morrison insisted they were 'normal' and would run their course. He himself, and senior members of his government, lashed out at those suggesting it was important to discuss the role that climate change had played.

After months minimising the bushfire emergency, Mr Morrison was – in the face of irrefutable expert assessment – compelled to talk about the accepted links between climate change, the drought and the fires. So he pivoted his messaging, urging communities like ours to accept that the 2019/20 bushfire season will be our new normal. He signalled the need to 'prepare practically' for 'longer, hotter, drier summers'. He flagged 'resilience and adaptation' as top priorities, over the need for stronger mitigation measures.

The mental anguish in relation to the fires is multifaceted, but I can honestly say that the greatest mental strain has come from the obfuscation around climate issues from all levels of government (local, state and particularly, federal). At every turn, our leaders have downplayed, minimised or outright denied the role climate change has played in this disaster – leading to insufficient crisis planning, an insufficient crisis response and a wholly insufficient approach to mitigating climate change. Our leaders, and particularly Mr Morrison, have gaslighted the Australian public, and continue to do so. For those of us who have seen communities destroyed by fire, and who are anxious about the future safety of our children, this has severely impacted our mental health.

Australia's (so far) successful COVID-19 response has been underpinned by an apolitical approach, and one closely aligned to the recommendations of scientists. The risks of the virus have been appropriately acknowledged by (most) leaders and the global shutdown has shown that swift, widespread social and economic change – for the good of public health and safety – is possible. Experts agree that a similar approach to mitigating climate change must be taken. This is our best chance of reducing the likelihood of catastrophic bushfire seasons in the future.

Our elected representatives have a duty to protect the physical and mental wellbeing of their constituents, by reducing the risk of catastrophic fire seasons and appropriately planning to minimise impacts. I'd like to see this happen in the following ways:

# 1. Implementation of urgent emissions reductions measures in line with scientific recommendations:

- <u>The Australian Academy of Science recommended</u> a holistic response to the bushfire crisis, highlighting the need to strengthen Australia's climate ambition.
- The UN Environment Program <u>has confirmed</u> that global emissions must reduce by 7.6 percent every year for a decade to keep warming to safe levels (below 1.5C).
- The federal government continues to insist Australia is 'doing its bit', yet assessments show we won't hit our 2020 emissions reduction target until 2030. And <u>analysis</u> of the government's own projections show the Department of Environment currently expects no emissions reduction progress this coming decade. As a result, Australia's climate policies were <u>ranked last among 57 nations</u>.
- Despite this, the federal government's approach to COVID-19 recovery appears
  to rebuke the idea of a green recovery it includes the expansion of Australia's
  gas sector (despite evidence that the contribution to warming from gas as
  industrial fuel <a href="https://has.been.underestimated">has been underestimated</a>) and relaxing regulations in the oil
  sector, including already weak fuel standards.

- Governments of all levels should put in place policy measures to urgently implement the emissions reductions solutions already available:
  - a. Transition to renewable energy and improve energy efficiency
  - b. Shift transport systems to shared and electric vehicles
  - c. Prioritise a fair transition for those impacted by the climate crisis (including fossil fuel communities and Indigenous communities)
  - d. Commence rapid drawdown of emissions using natural climate solutions
  - e. Develop and implement programs to end food waste

## 2. Undertaking crisis/disaster planning under the guidance of experts:

- Governments of all levels should undertake strategic crisis planning with emergency experts to develop plans for catastrophic fire seasons. This could include:
  - Military deployment plans;
  - o Expansion of firefighting aircraft capabilities;
  - o Plans for better national coordination;
  - Appropriate funding of fire services (including the RFS) and National Parks.
- State and territory governments should development bushfire preparedness/ response plans for schools, to ensure a consistent response. This could include:
  - o Planning for proactive communication to parents;
  - Development of smoke management strategies, including clarity on safe AOI levels for school activities;
  - o Planning for mental health support for families during community crises.
- Federal, state and local governments should coordinate to develop policy measures to support more self-sufficient communities. This could include:
  - Contingency planning/heatwave planning for vulnerable community members (continuity planning re access to health and other services);
  - Support for widespread uptake of renewable energy systems and electric vehicles (would ensure continuity of energy supply and transport when fossil fuel-based energy infrastructure and fuel supplies are impacted by bushfires):
  - Measures to support the development of local food economies (would ensure continuity of food supply when transport routes are cut due to bushfires).

# 3. Appropriate funding of our national broadcaster:

- During the Far South Coast fires, power and internet access was cut or unreliable for long periods (weeks). At times, our only source of emergency information was ABC Emergency (sometimes via battery-powered transistor radio).
- Yet, our federal government has systematically cut funding to the ABC and continues to undermine its vital role as Australia's national broadcaster, via inquiries/reviews, proposed changes to the ABC's charter, complaints and other measures. In 2018, the Liberal Federal Council also voted to privatise the ABC.
- Those of us in bushfire-affected communities have relied on the ABC for information that was literally life-saving. Our national broadcaster and its staff must be protected.

Thank you for considering my story and submission.

#### Nathalie Swainston Moss Vale NSW 2577

I - along with my husband and our two young children - am a resident of Moss Vale in the Southern Highlands of New South Wales. Like so many others, we had a traumatic and challenging summer, having to navigate toxic smoke, extreme heat and the threat of fires to our North (the Green Wattle Creek fire) and South (The Morton and Currawon fires).

Trying to explain this situation to a toddler was heartbreaking. Naturally, he couldn't understand why he couldn't go outside, why his father was wearing a mask every time he went to clear debris in the gutters and garden, why we had bags packed by the door, that he wasn't allowed to touch, why he was kept home from daycare and his friends on really smoky or high danger days, or why we all had to sleep in the one room with the air purifier through so much of January. The evening of the fourth of January was particularly harrowing, with erratic winds and extreme heat bringing embers all around our house. My husband and I were glued to ABC radio and the RFS sites waiting for notification that we should evacuate, incredulous that our relatively suburban area of the Highlands was even at risk. Luckily, we were spared. But friends, and many others in our community were not. Their pain is real; it is ongoing; and fear for the summers to come has become a permanent fixture.

To be honest, it is unacceptable to me that the summer we just lived through should be the standard he my three-year old expects from the coming Summers of his childhood - and I do not accept that we should settle for this as normal. I feel a great deal of anger towards past and current governments that have consistently ignored advice and evidence from national and global experts on extreme weather, emergency services requirements and the worsening climate crisis. As the bushfires unfolded, the effect of politicians dismissing or downplaying the links between climate change and the bushfires, ignoring the advice of experts, and belittling the very real concerns of countless young people and their parents who were terrified and crying out for real action of climate change in order to prevent more and more summers like this was truly damaging - both to the mental health of the community and on people's trust in our political leaders. Were it not for the (embarrassingly underfunded) emergency services and their leadership,

Unfortunately, we know that even if we are to dramatically reduce our emissions and implement aggressive climate policies, there are still likely to be more horrific Summers ahead - as a certain about of climate change is already baked in from our past actions. However, in an effort to turn things around as quickly as possible and ensure that our children have at least some summers that resemble the ones we were lucky enough to have, I want to see our political leaders listening to evidence and experts, and supporting affected communities and citizens not just with emergency relief, but with policies that will reduce the likelihood of these fires reoccurring again and again. I want to see our emergency services properly funded and resourced. And I want to see our political leaders respond to affected communities with empathy, and action. Not political spin.

#### Ursula Hogben Mosman 2088

Primary school aged children

My family lives in Sydney, we often travel to the South Coast in school holidays, we were not able to go, and we understand that the South Coast was badly affected by loss of tourism revenue. We have friends who live and work in the South Coast, and who suffered greatly in the fires. They felt very under-prepared for the speed and ferocity of the fires. Several friends' houses were in the path of fires, and were saved by firefighters putting out or diverting those fires. All of them suffered sleeplessness and anxiety for some time after the fires.

Like many people across Australia, we were directly affected by the smoke from the fires. In Sydney, there were 28 days where the air quality was hazardous, 21 where it was very poor, and 32 where it was poor. This is 81 days in total in 2019. This is nearly 3 months, or one-quarter of the year. This is nearly 5 times the effects compared to 2018 where there were 18 days in total (hazardous, very poor and poor) (Source: NSW Department of Planning, Industry and Environment). The smoke affected people who work outside and children's ability to play outside and do sport. it affected people's ability to earn their livelihood, and it affected our physical and mental health. Being at risk if we are outside for work, or doing outdoor sport or play is mentally and physically debilitating. Harmful smoke affects the economy, and affects physical and mental well-being.

I ask the government to please do the following for the economy and biosphere - human, animal and plant life in Australia:

- 1. Listen to and work with land management, fire and health experts to (i) reduce the risk of catastrophic fires affecting Australia in the future and (ii) manage the fires better once they start, to keep them contained, and put them out quicker.
- 2. Rebuild property in a more resilient way. This includes where buildings and infrastructure are located, what they are made from, and how these are built. We need more fire-resilient buildings, and we need localised water, food and energy sources.
- 3. Most importantly, the fires were exacerbated by climate change and we need to urgently reduce the causes of climate change, including urgently reduce Australia's fossil-fuel emissions (in Australia and from exported coal). We need a net zero emissions target, we need plans on how we will achieve this, and we need action. We need to swiftly transition from mining and burning and/or exporting fossil-fuels, to use our abundant renewable resources for renewable energy production. We have abundant land, wind, sun, coastline and internal water, for renewable energy including solar, wind and wave energy and pumped hydro storage. We also have high-quality education and expertise including in science, innovation and commercialization. Australia has the renewable resources we need, and we have the technology we need, to reach net zero emissions. Australia has the potential to be a leader in developing renewable energy, and an economic superpower as the world transitions to renewable energy.

The steps that Australia needs to take, including policy and expenditure, are well-researched and set out in the following, among other leading reports:

- 1. Ross Garnaut's book, Superpower
- 2. PWC, The Future of Energy Report
- 3. ClimateWorks, Decarbonisation Futures report

#### Elliat Rich East Side, Alice Springs, NT

Mother to three children; 10, 6 and 3.

We left Alice Springs for our summer school holidays, two days later we saw the smoke haze on the horizon, we were near Hay in Western NSW. Once we'd entered the smoke it only got thicker, moving from something seen to something we could smell, then feel in our lungs, then it embedded in our hair, clothes and skin. When we got to Bathurst to stay with family we began checking in with relatives who were on the South coast. It was terrifying to hear the news and correlate that with where people were. The end of 2019 was terrifying; to think about people we loved being in danger, sorrowful; to think of the bush and animals being burnt, and despairing; to know the fire was made so much worse due to Climate Change. The despair cut deeply because at both a Territory and Federal level our representatives are not doing all they can to reduce and prepare for the effects of Climate Change.

I want the Territory and Federal Government to put in place a Climate Change Act to make sure that any activity that takes place in Australia has to take Climate Change into account and not add to its effects. This will begin the work to reducing mega-fires in the future. Protecting all remnant native forests to provide safe places for endemic flora and fauna, and working with Indigenous land managers to use their knowledge to best protect people and places.

I am more than happy to talk more about this issue. Our family lost their holiday home in the fires, we felt unsafe and vulnerable when travelling within NSW and feel increasingly let down by a Government not willing to take the necessary actions to work towards a safe future.

## Rachel Schofield Bega Valley, NSW

I live on a bush block in the Bega Valley and my family was impacted by bush fires although thankfully our property wasn't directly affected. I have lived here for 10 years and we're used to there being fires. We have never before experienced a fire season like this one.

From January to March under varying degrees of direct threat from bush fire. This meant life could not go on as normal.

I'm a sole-trader and had to downsize my operations to do all that needed to be done to keep my family safe. That led to a drop in income.

For weeks we drove round with our car packed with belongings. We had to evacuate our property 3 times. One time we evacuated to our boat as it seemed like the only safe place. The smoke was horrendous particularly in early January when we had to wear P95 masks to be outside. My son who gets asthma was worst affected.

On the high danger days my partner and I would be constantly checking updates, listening to the radio, watching the council FB live briefings. It was impossible to

protect my children from exposure to our anxiety. They also got exposed to more indepth media coverage than was healthy/age appropriate because we had to keep up to date. This lead to my to both my children being scared and my 8yo had difficulties sleeping through the night having previously been a good sleeper.

My partner is an arborist and had to cut our family Christmas holiday short to go help with the clean up efforts. The clear up work he did involved dangerous activities e.g. cutting flaming trees as the exhaust from the chainsaw fanned their smouldering trunks. Also a lack of proper protective equipment e.g. no masks. He's still doing clean up work and sometimes comes home looking like he's been down a coal mine he's so black from the smoke.

The out of area companies contracted to do the clean up work e.g. Lang O'Rourke were inefficient and poorly organised. Much time wasting and standing around doing nothing.

## Deanna and Jed Hayes Sydney, NSW

Children: Ambrose 15, Leila 13 and Cormac 10

This past Christmas holidays my extended family, mostly from interstate, decided early in the year we should have a rare get together around New Year. We booked a large house (large enough for 14 of us) in Jindabyne, in the Snowy Mountains. As the date approached we watched the developing bushfires and smoke enveloping our cities with alarm. My elderly mother has poor lungs and i know she was worried about the impacts of the smoke and considered cancelling her trip from Perth. But we decided to go ahead as our plans to be together was very special for us all.

Initially we thought we were going to be lucky in our choice of destination as the Snowys at that stage had been spared, but alas after one lovely day by Lake Jindabyne, the smoke rolled in from the fires developing on the south coast. For the rest of our time away then we could hardly see across the road from our balcony the smoke was so thick. Everybody tried to keep spirits up and nobody complained about our situation as we knew that there were many people worse off than us. My teenage son kept us informed with frequent updates of the terrible fires around the state and we listened in horror to the size of the fires and the enormous loss of animals and forest. We were also disappointed and dismayed to watch Scott Morrison's poor handling of the whole crisis, firstly treating his family to an overseas holiday then downplaying the scale of the disaster, refusing to listen to experienced retired fire chiefs.

We stuck it out at Jindabyne for another few days, trying to make the most of us actually being together, but the smoke was a constant reminder of the suffering elsewhere. We constantly checked the Fires near me app, and listened to the ABC radio (which was amazing at keeping us informed). We had chosen Jindabyne with so many outdoor activities available, but of course we were stuck indoors the entire time. The smoke was even inside the house so I was constantly worried about my mum and also the effects on my family of the smoke.

We aborted our holiday early as the smoke became unbearable and the fires were spreading into the Snowy Mountains.

Our holiday was not the one we had hoped for. But worst of all, the horror bushfires were a reality check about climate change and how it is real and it is here. Our frustration then and now is that our government barely admits that climate change is happening let alone taking measures to address it. Most importantly we need to decarbonise and lose our dependence on fossil fuels. Before we have to endure another horror fire season like the one just past.

#### Patti Wilkins Ainslie ACT 2602

During our summer bushfires we experienced the worst air quality in the world here in Canberra. This was due to the NSW bush fires initially then the ACT fires.

I am a Fitness Professional and usually conduct 10 outdoor sessions per week. I had to put these on hold and pay top price for some indoor venues which really weren't successful in keeping out the bad smoke from the fires. I was greatly concerned for the health of my clients and for my own health.

As this progressed and became long term **my daughter was so affected by anxiety about the fires that I had to take her and my grandson to Tasmania to spend some time with family for the sake of her mental health.** So, not only was my income affected but I incurred extremely high airfare costs.

We know that these fires were so intense and unstoppable due to the effects of climate change and the associated drought. For our future physical and mental health and the survival of our planet we need to urgently address the causes of climate change with the biggest of those being the mining and burning of fossil fuels. When we have the technology to use clean renewable sources of energy, when we know it it cheaper and healthier, it beggars belief that our current government continues to encourage and subsidise fossil fuels.

We need to prepare better by listening to our Indigenous fire managers. We know that areas where they had done their traditional burning were not affected by the bush fires while areas that were back burned did. It is a matter of urgency that we put money into facilitating the training of more Indigenous fire managers.

## Kath Naish Randwick, NSW

On 21 November 2019, I woke in my home in Randwick to thick smoke for the third time in 10 days. Every time there was heavy smoke in Sydney from bushfires, my son needed an inhaler to help his acute coughing fits. He was 9 years old and was very distressed.

As a cancer survivor and ex-smoker, every breath of dirty air made me anxious for my health and that of my family. I felt completely helpless and overwhelmed by the smoke. It depressed and agitated me.

I moved to Sydney from the UK in 2007. I love Sydney and I love Australia. My children were born here and I believe that Sydney is the best place to live in the world, not least due to its relatively clean air and beautiful beaches.

I never, ever expected to experience the daily inhalation of thick, toxic, nauseating bushfire smoke, together with a frightening red sun and deepening fear for the lives and wellbeing not just of the countless animals at risk but my fellow humans too. I was traumatised by this experience and it felt like the end of the world was coming.

The disappearance of our Prime Minister on holiday overseas and the fact that he had ignored expert advice from fire chiefs to prepare for the coming fire season of summer 2019/20 absolutely enraged me. I remain deeply angry at the politicisation of such events as devastating bushfires.

We know that climate change (global warming) is caused by burning fossil fuels. We know that Australia contributes 5% of global emissions including our coal burned overseas. Add to that the emissions from recent bushfires. We know that the extensive drought throughout 2019 worsened conditions for bushfires. We know that last year was the hottest on record. We know that the bushfires over 2019/20 were unprecedented in their extent and severity. Hundreds if not thousands of homes and countless animals were lost. The precise amount of forest and bush burned is unknown. Parts of Sydney experienced hazardous air conditions for days on end.

We know that the selling, exporting and burning of Australian coal is a contributing factor directly or indirectly to global warming, drought and bushfires.

As a parent and an Australian citizen I am dismayed by Government inaction on climate change and the unacceptable failure of leadership both at state and federal level. We cannot continue to support coal and gas. We should not switch our reliance on coal to a reliance on gas or any other fossil fuels. We must move to fully support clean, sustainable and renewable energy technologies now. We cannot wait any longer.

In light of the recent COVID pandemic we have an even greater need to focus on acting decisively and responsibly to direct public money to renewable energy projects. Our ability to produce electricity for Australia and beyond from solar and wind alone is well established. We must do this now.

Please stand up for our kids. Please do not continue supporting coal and gas. We need strong leadership and clear planning to transition our economy in the right direction. We do not want or need more coal mines or gas fields. We want to see plans to transition jobs into clean energy projects such as the new solar project in the NT to provide electricity to Singapore. And production of green hydrogen to produce steel. If we can provide solar electricity to Singapore, why can't we provide solar electricity to all Australians?

## Siobhain O'Leary Liverpool, NSW

The bushfire season of 2019 and 2020 was distressing for so many reason. It started in September with the bushfires in Northern NSW, I have friends and family in Angourie, Yamba and Shark Creek – at opposite ends of a fire front. Every time the wind changed a different person I cared about was in danger or needed to evacuate. The thing was it felt like it never ended.

Pretty soon my family in the Blue Mountains were evacuating or preparing to, friends in Ashby fled and family in Maclean watched across the river a glow they'd never seen before and stayed awake to watch for embers. In nearly 40 years of living in and knowing that part of Northern NSW this had never been a reality. Then friends on the South Coast and the beautiful towns and national parks of my holidays in the Southern Highlands were threatened. I thought about all the people I knew impacted from Queensland to Canberra and beyond as I drove down a smoke filled highway and sat in an office full of smoke and wondered about how my kids were doing in their school classrooms that lack air-conditioning to filter out the particulates.

This was indeed unprecedented but the calls to not discuss the causes of this, climate change and climate change fuelled drought, made it extremely frustrating. The Garnaut report of 2008 laid out in stark detail that we were to expect these events and even provided a clear timeline which was prophetic and accurate, it gave us a date to work towards but for ideological reasons was ignored by governments who failed to plan for it and to mitigate the causes. The lack of a national plan, risk assessments for communities cut off from roads, petrol, food and communications was avoidable.

Hazard reduction burns were made the only point of discussion by certain parties with no acknowledgement of this as one tool only and the fact that climate change was making this type of fire mitigation increasingly challenging due to limited seasons for safe hazard reduction.

My children did not have a safe summer, the air at times was so bad I kept them indoors often. The very first day of their school holidays when Sydney had the worst air quality in the world, I said to them "you can't go outside today, it's not safe" and I could hardly believe I was saying it and it made me think of their future with trepidation if nothing is done to combat climate change. They had school lunchtime indoors, although the lack of air-conditioned classrooms in public schools made this a less than adequate safety measure, they had all sports cancelled and long awaited camps and holidays cancelled. So many lost so much more but these are the childhoods we are taking away if we don't address the issues.

I had many colleagues who had to leave workplaces due to unsafe work conditions in the smoke. The disruption to communities and businesses was felt well beyond the fire fronts.

In the aftermath of the fires there is still no galvanising around the actions required to prevent the same happening again. Logging continues despite massive loss of habitat and the devastating loss of animals in the fires. Logging is also found to make bushfires more extreme but on this too experts are being ignored over agenda.

There are a lot of calls for the adoption of Indigenous fire practices in the help to prevent future catastrophes of this scale. I think this is an important focus and the knowledge of Indigenous land management has been sidelined for too long and

needs to be respected and preserved. However Indigenous people's fire practices are not done in isolation from other land care practices, it is part of a whole ecosystem protection approach. We cannot just adopt fire practices but continue land clearing, logging, monoculture agriculture and river depletion and expect the fire practices to save us. We need to deeply listen to Indigenous people about what it is to be part of the land and care for it.

We need to dramatically reduce our carbon emissions now and plan for the likely increase of fire seasons like this. Global temperatures are rising, increasing the likelihood of fires and other natural disasters. We have not even accounted for impacts such as the release of massive amounts of carbon into the atmosphere from these fires that is unclear will ever be recaptured due to ongoing deforestation, in NSW some of the worst in the world.

As the next fire season starts soon, sooner than ever before and overlapping the Northern Hemisphere season because of climate change, I fear for all the communities, those where my families and friends have been impacted and all others, that the lessons from this terrible fire season have not yet been learned. I fear for my children's future in a climate changed world. I hope the lessons of covid-19 can be taken into consideration, those of listening to experts and taking decisive collective action to keep communities safe. Unlike covid-19 we have more warning, more opportunity, and more technology to respond but it must be now.

## Anonymous Tumut, NSW

My family lives in Tumut. We were not directly impacted by the 2020 fires. But it's fair to say they still had an impact. I've seen friends having faced emotional trauma and impacts on families. I, and several friends, have seen our jobs impacted by the fires, and face uncertain futures in farming, forestry, and tourism (I have been very lucky so far, as I still have a job - I was lucky to have an adaptable employer). My kids spent the summer holidays unable to play outside because of thick smoke, and had to deal with stressed adults for weeks. The bush, while I know it is resilient, has changed significantly over huge areas. I wasn't going to write anything for this because I thought my situation wasn't anything unique. But that's the point, it's not unique.

I will touch briefly on what I saw of the emergency response, keeping in mind I was not directly involved. Overall I think the firies and emergency services did an amazing job with what they had. But there certainly seemed to be a feeling that resources were stretched too thinly across the state, especially in the early days. Community members stepped in when something was missing, for example, by live streaming, recording, and sharing videos of community meetings.

I also remember when the 2003 fires passed through. I had only just finished school in Tumut and was off to uni in Canberra. My environmental science degree understandably had a heavy emphasis on Australian fire ecology, and I learnt enough from that to know that I don't know much - fire ecology and management is a specialty all of its own. I get frustrated by simplistic arguments over fire regimes. I'm not going to argue for more or less burning off, because I don't know the answer. But I would like to see greater recognition of the complexities and expertise of fire management.

What is most concerning, though, is that warnings to government of the severity of this fire season were ignored. We as a nation continue to ignore warnings that fires will get worse as the climate changes, and continue to ignore warnings to reign in human activities which are causing the climate to change. It's deeply worrying. We do need to put a lot of work into trying to improve fire management, fire resilience, and emergency fire responses, which we will need because a certain amount of warming and increased fire risk will be unavoidable. But we also know that, with continued greenhouse gas emissions, the climate will keep changing, droughts and fires are going to keep getting worse, and the trade-offs and decisions that will have to be made will get harder and harder. This is what my kids are going to be facing in their lives. It's saddening how few acknowledge the role we must play today in mitigating it.

#### Heather McGregor, ACT (with holiday home in Rosedale, NSW):

The following is a narrative of a member's detailed experience of protecting her home in the path of the fires. It includes useful lessons about the importance of having a clear bushfire plan and being well prepared.

New Year's Eve Bushfire Crisis at Rosedale, 31.12.2019 Here is my story - Heather McGregor

From early November in Canberra, we were troubled by smoke from bushfires. We had toxic air for weeks. We wore masks to go outdoors. Visibility was seriously reduced. We all focused on air quality apps, which gave disturbing reports about our air being many times above hazardous. Yet we had to go on breathing it.

Thus for me the threat of a bushfire was more disturbing than ever, with the obvious impact of climate change upon us, and the volatile context of the dreadful drought. Braidwood had been under threat from fire since mid-November. The Currowan forest fire closed the Kings Highway, and fires raged on the coast between Nowra and Batemans Bay, closing the Princes Highway. So from early summer, we had been clearing our block at Rosedale of dead leaves, bark and debris from the trees, and pruning shrubs, with our green bin always full and small truck loads going off to green waste.

On 14 December 2019 I drove to Rosedale with a small water pump I had bought to attach to our water tank, along with fire protective equipment for both Andrew and me, spare hose fittings, and fuel for the water pump. I wanted to be able to manage on my own, given Andrew was overseas so much. I employed a yardman to clear out the leaves from under the low, front part of the house, a back breaking job I didn't want to do. Andrew had also cleared leaves from the gutter when he was there, and we both spent a weekend in early December more deeply clearing our block. I drove down on 14th December via the Kings Highway, however it was closed two days later and I had to return via the burnt out Princes Highway and Nerriga, 4.5 hours instead of 2 hours.

We travelled via Cooma to our house on Xmas day for a planned six week stay, and Tamar and Norah arrived on 26 December for 2 weeks, and even though it had only been two weeks since I had done a yard clean up, we needed to do it all again. At least the air was clear, and we could see the sky, unlike in Canberra. We took a full green bin and a final trailer load to green waste on 27 December, dismayed by how much bark was still falling. Andrew slaved in the yard cutting down the native grass clumps and

pruning shrubs. I removed the plumbago from under our deck, a potential ladder for flames, and together we cleared the block as much as we could, leaving the fire-retardant pittosporums. I removed attached bark from around the base of our large spotted gums and cleared the ground around them.

The day of 30 December 2019 could not have been more pleasant and summer normal on our beach. Norah and I spent time on the beach in the morning, and Norah went down again in the afternoon with Tamar. The beach was alive with families having fun and kids doing their beach and ocean things happily. There was a sense of a common Australian beach holiday. Norah made a friend on the beach and had such a wonderful time she didn't want to leave. She begged each of us to stay on the beach with her, well after 5pm when all adults were ready to relax and was seriously disappointed to have to come up to the house. A plan was made for her to meet up with her friend the next day. We were oblivious to the disaster ahead.

When we went to bed on 30 December there was no indication of imminent danger for us. We considered nights to generally be much more benign, so we went to bed expecting to reassess in the morning as we had every other day. We had all become obsessed with checking the "fires near me" website and in particular watching the progress of the Deua River fire which we assumed to be our greatest threat. We were also at this stage watching our news apps. We had discussed our fire plan, and Tamar decided that she and Norah would stay with us and retreat to the beach if necessary, rather than go to Malua Bay We were confident that we were as prepared as we could be. Norah had a running joke, "its adults check their fire apps time!" [At 10pm Tamar received a text from a friend that contained a predicted ember and fire attack for 31st. Rosedale was not within the predicted area.]

However, at 6am on 31 December we received a text alert from the RFS and we leapt into action. The text read, "NSWRFS EMERGENCY BUSH FIRE WARNING – Mogo- Leave now to East towards the beach and shelter in place." We could see from our app that the Clyde Mountain fire had extended two long fingers south-east from the main fire and we were stunned by how quickly it had raced towards us. Rosedale and Nick's house were directly south-east of one of those fingers. We followed our plan and by 8am we had supplies for about three days down on our beach, towels, a large blanket for cover and lots of drinking water and food. I went to the occupied houses in our part of the street to make sure people had received the text. People at 67, 71 and 73 were all gone well before 8am. I met up with Joe from 63 who was staying, and together we established a plan that we would look out for each other and decide together when we had to go to the beach.

Between 8 and 9 we tried to eat, I put Norah in front of ABC kids, Tamar and Andrew took our cars to the south Rosedale car park near the beach as planned. At 9am the power went out and Tamar, Norah and Symbol went to the beach.

Our fire plan was to stay, if possible, to defend our house against ember attack. We only contemplated this because we had the beach to retreat to if safety became an issue. We were prepared with the water pump and hose connected to our water tank, two hoses connected to taps, a fire fighting backpack and buckets and a bin filled with water. We had smoke masks, goggles, gloves, all our skin covered and a wet towel tied around our necks. We had moved everything that might blow into windows of the house and cause damage.

Andrew and I then prepared to put out spot fires. Andrew cleared the gutter yet again, and we left the ladder there to make access quick and easy (however later we

discovered the ladder had been blown over the deck well to the east of our house). I started hosing the house but it was dry in minutes. I used the small water pump attached to our water tank to wet the ground between our carpark and the house. We had three hoses ready to go. I hosed the ground under the deck, the underside of the deck and posts, the upper deck, the wooden ramp and then I got the idea of hosing our garden blocks as they retained moisture better than the house walls and saturated the path of stone steps along our northern fenceline.

It very soon became obvious that the fire storm would make a mockery of our plans to put out flying embers. We talked with Joe and he was surprised that we had no assistance from the RFS water bombers. We realized we were on our own and should go to the beach. There were no flames yet in sight, but we experienced extreme, unbearable heat and a black wall of cloud was building rapidly and the wind was gale force. So we put our hoses inside and left for the beach believing we would lose the house. We felt an unusual calm. We think this was about 10.30am. Andrew took his fire-fighting backpack and I took an extra bucket of water. Norah and Tamar were sitting in the waves of the rising tide sheltering under a wet towel.

We soon realised that Boatshed Beach was not the best place to be so we set about moving our supplies and bags etc to the south Rosedale beach. This was not easy. The wind was ferocious and we were being showered with embers ahead of the front. I was actually blown over and realised that I just had to sit down. The south Rosedale beach was much better. A number of people, children and dogs arrived on the beach, all seeking a sense of togetherness, watching out for each other, and comforting each other.

We were so hot we wet our clothes and towels and covered our belongings to protect them as well. Tamar cuddled poor frightened Norah the whole time and Symbol stayed close to them. I had planned for us to shelter under a blanket but I was unable to control it in the wind so I got the not so bright idea to wet it to make it stay down, but then it was too heavy to move. So I now have a new insight into what being a "wet blanket" means ....

Embers started falling on the dunes. From the beach the first flames became visible as a burst of fire in the shrubs on the middle of South Rosedale beach erupted around 10.40am. It was as if a ball of fire had flown there from the North. Shortly afterwards flames became visible on the ridge above Boatshed Beach (our beach).

The fire came over the top of the ridge from the northern end of Yowani road and began consuming the first houses at that end. At the same time embers landed at the bottom of the cliff setting it alight and fire raced up the cliff face. In no time the whole of north Rosedale ridge was ablaze. Our house was enveloped in black smoke and was very difficult to make out. We watched the horror in absolute disbelief. It was surreal. When I decided our house was destroyed I walked back to Tamar and Norah calmly thinking we are all safe. I realised that when we retreated to the beach I had resigned myself to losing our house.

By this time the fire had jumped to South Rosedale and within seconds had raced to the headland, across from Jimmy's island. It was like watching vertical lightening speed ever so quickly from our ridge to Jimmy's Island with a trail of smoke, flames and embers threatening destruction of all in its path.

We also heard explosions which appeared to come from the carpark in which we had left our cars and we assumed both our cars were destroyed. (In fact we later

discovered that all these cars had survived but that cars in another parking area a bit to the south had been destroyed)

Then the southerly arrived, apparently at 11.15am, bringing a dramatic drop in temperature. And we froze. Because our clothes were wet we were all shivering, and the towels and blanket which might have helped were all wet. We had bags with dry clothes and jumpers and Tamar had a jacket but she in particular didn't ever get warm. This was her worst thing. Norah was warm but frightened and held firmly in Tamar's arms throughout with Symbol lying close to them. Norah at some point fell asleep. When we were settled in our huddle we tried to eat and drink. Then Andrew and I went and took some photos from our beach at 11.18 and 11.35am respectively.

I think the next thing that happened following the wind change was that Andrew walked over to the carpark and came back with the astonishing news that our cars were both ok. Tamar and I looked at him in disbelief. We couldn't get the idea to sink in. Andrew also said he thought our house might be ok.

So Andrew and I walked back to our beach and looked up at the ridge. The wind change was blowing smoke to the north in the opposite direction of the firestorm and we saw the A line roof of the top of our house with flames on the ground all around. Again I couldn't believe what I was seeing. I thought I must have imagined it. I said to Andrew that we must get up there, but I didn't know how this would be possible.

When it was clear that the first frenzy of destruction from the firestorm was over, we think at about 12 noon, Tamar saw Joe climb up his cliff steps to start protecting his house. He wrapped himself in wet towels as he had to get through flames. Andrew decided we could try to get up to our street from above the lagoon so we told Tamar what we intended and climbed up the nearest fire-free path between 57 and 59, to Yowani Road. This was my worst thing. The sheer exertion of the frantic climb nearly did me in. I tripped over a stupid piece of pipe and nearly lost it. When I stood up I saw our house still standing. This was a heart in my mouth moment. Andrew and I had a very desperate hug, maybe with relief, or maybe he was relieved I got up after having fallen.

The Reid houses across the road from us, 56 and 58, had both been flattened by fire. Number 60 and 62 were still standing and not on fire. As far as we could see to the north along the west side of Yowani Rd the rest of the houses were all destroyed. All the houses to the north of our house on the east side of Yowani Rd, including number 71 next door, were already destroyed although still burning, and the four to the south of us were not on fire.

Andrew started work on putting out fires at the Yowani Rd side of our house and I realised immediately the role our own carpark on Yowani Road had had in acting as a fire break. I went through the house checking for embers inside, under the house and the roof, but it was incongruently all ok. The reality was somehow distant, and hard to believe.

I grabbed a hose from inside the house and saw flames outside, close to our front windows. I set about putting these spot fires out. I remember getting really cranky, and having to calm myself, because the hose had kinks from being quickly bundled inside. The steps to the beach were partially in flames and the railings along the path to the beach steps were flaming and smouldering so I hosed it all, fearing the southerly would blow fire towards our house. There was also fire along the fenceline between us and our northern neighbours. The spot fires I put out came very close to the front of

our house. Then we put out fires on the property to the south (67). There was a significant woodheap fire to the east, another to the west near our gate, and I hosed burning embers in leaf litter on the southern side of our boundary fence, between us and 67, adjacent to a kindling pile and wooden boxes under their house. We believe we saved 67 from destruction from the southerly as well, as there were no flames left to be fanned, yet so much potential for fire to catch and burn the house down, thus threatening our house from the southerly.

I went up onto the deck to check inside the house again, and I noticed Tamar on the beach looking up at our house so I was able to give her the thumbs up from the deck, hoping she understood my message. (Tamar did understand and was so incredulous that when she got back to South Rosedale beach she gave a stranger a big hug of disbelief and shock! Norah was asleep at this point).

I then worked uphill from our house using the pump to douse fallen trees across the road and Andrew worked between us and the northern house, now demolished and smouldering. Our wood pile there had caught fire and the fire was beginning to accelerate. We caught it just in time.

I inadvertently dragged a hose across some burnt ground and damaged it and Andrew calmly repaired it. We made sure we had a heap of spare fittings, but I couldn't believe he would have the calm in the circumstances to actually do a repair on a hose.

Fortunately, most our property remained free of fire because we had largely eliminated the ground fuel by clearing leaves and cutting down long grasses. This became obvious to us as our minds started working outside a focus on immediate demands.

A small emergency services vehicle arrived, perhaps doing a quick reconnaissance, and was about to leave so I ran up to the driver and after acknowledging how stretched they must be, asked if he could get us some help to deal with the leftovers of the firestorm like burning trees at risk of falling and starting more fires. He said he could see what he could do. There hadn't been a sign of aerial assistance or fire trucks.

Joe's house (63) had been well prepared, protected by a sprinkler and surrounded by concrete. He worked hard to save the house next door to his at 61, using his hose and water pump. He shared the same fears about the southerly threatening his house.

At 1.34pm number 62 on the west side of Yowani Road burst into flames, yet number 60 was not alight. However at 2.30 both houses at 60 and 62 exploded. We realized that these houses were victims to flames fanned by the southerly.

Then things changed again. The two houses between which we had found a path up to our house, 59 and 57, ignited, followed by 55. They eventually exploded at around 2.24pm. The southerly had pushed the flames back up the cliff above the lagoon. I shall never forget the noise buildup to the explosions. It was like a jet engine screaming for about 15 minutes then a massive explosion. I had no fear. Maybe I was numb. I certainly felt safe where I was. The southerly which had cooled the unbearble hot air, allowing us to breathe freely, given us strength to climb up the cliff, and pacified the firestorm, caused its own wave of destruction as we powerlessly watched on.

Two fire trucks arrived at 2.36pm and water bombing helicopters started dumping water around 2.40pm, first on the boatsheds, then on these three house 59, 57 and 55. I asked a fireman what the noise was and he said it was gas bottles releasing streams of

gas that then ignited and roared like a jet engine. The water bombing went on for a short time and then stopped and the fire truck disappeared. Houses at 59, 57 and 55 were lost and 53 and 61 were saved probably as a result of the water bombing.

One thing that disappointed me greatly was that a fireman asked Andrew and Joe to look for a hydrant. I assumed they would have that knowledge readily available. (We realized much later that the road had recently been resealed and the painted arrows indicating the location of the hydrants had not been replaced). The fire trucks did not provide any assistance, hydrants or hoses were not used, it was all too late.

Everything slowed down and was calm. I just kept going around and around putting out spot fires and dousing smouldering embers. We didn't run out of stored water and the supply wasn't cut off. Andrew decided to go to the beach to get Tamar and Norah, probably around 3.30pm, and I stayed doing spot fire duty. It was good to be able to get the hose spraying across the road using our pump, as trees there were threatening us.

I became worried that Andrew had been gone a long time, fearing he had been trapped on the way to the carpark, so I spoke to Joe and discovered his path to the beach was still passable, so I went looking for Andrew. I eventually found Andrew, Tamar and Norah feeling much warmer in the car, having laboriously carted all our emergency supplies off the beach to the cars. We all drove up to the house and marvelled at the situation, especially our beloved house, next door to the burnt ruins a few metres away. It was a quite bizarre sight, unreal and unimagineable. I still hadn't truly believed what had happened.

We sat down in the security of our house, somewhat stunned survivors, glad we didn't have to sleep on the beach, and had New Year's Eve dinner. With candles. Andrew had smoked trout, Tamar and I had oyster entree and a prawn sandwich, and Norah had a cheese and avocado sandwich. Not quite put together in the way we imagined but good food nevertheless, (all of which had been with us on the beach in an esky). And Andrew and I had one glass of wine. We just felt exhausted and greatly relieved.

We were further gratified and relieved when Tamar gave us a particularly pleasing analysis of what we had just been through, being very pleased to have been part of a survival story, and participated in a well-managed crisis. **She assessed that we had followed our plan, stayed focused and calm, been resourceful, sensible, and safety conscious,** and that she and Norah had had a good experience of dealing with a disaster. This was music to our ears. There was not a moment when our lives were at risk. We were all at once euphoric and exhausted. Norah was happy and in great shape and went to bed peacefully.

We kept vigilant and used our hoses to deal with minor flames next door, down the cliff and across the road. I eventually took buckets and put out a persistent and significant fire next door. We went to bed with alarms set so that we could share doing regular checks around our house during the night. Everything was very calm all night. We still had water but no power or news or contact. We had lost ABC radio before the firestorm hit us.

In the morning, 1 January 2020, the owners of the now burnt down house next door arrived and through talking to them we were told that all the roads out were closed so we assumed we couldn't leave.

Nick and Heike arrived at our place and we had water and Xmas cake, and Tamar made cold coffee out of half a cup left in the pot. Three of us enjoyed the taste. They were stunned to see Rosedale and we commiserated inadequately with them about their devastating loss. At 3.10 on 31.12.19 I received a text from Nick telling us that their house had burnt to the ground, but despite receiving the text, I had been unable to get a response to him to send.

Nick, Tamar and I walked up to Dale Place to see if we could get any coverage and there was a news crew there. Nick knew a few of the people in Dale Place and we heard a story about a separated couple who both thought the other had died for about 3 hours before finding each other again.

A very lovely media man let me use his sat phone and I tried to call Andrew McG but got through to Anthony on a very poor connection. I asked Anth to send info re roads in a text to see if there was a way out for us, and to tell as many people as possible that we were ok. I explained over a very patchy connection our predicament, **no power, no news, no internet therefore no access to helpful apps.** I said we would drive to Batemans Bay to try to get coverage. I also told Anth that Nick and Heike's house had burnt to the ground. And there were no houses left to the north of us in Yowani Road.

Seventy houses were lost in North Rosedale. About forty houses were lost in Yowani Road and Dale Place, including all those to the north of us, on both sides of the road – perhaps a dozen. Ours was the first house in the path the fire front that did not succumb. Among the losses were the four Reid houses, Keiko Schmeisser's, Collete Dinnigan's, Bruce Kent's, the Pentony's and the Falks – some of whom we had known for many decades.

Tamar and I decided to drive into BB to see if we could get coverage but first went to the fire station. The traffic going into BB prevented us from going further. When we passed through Malua Bay we were shocked by the number of cars and people seeking refuge and queues into the IGA. The scenes were psychologically silent, numbing and deafening.

When we got to the fire station my phone began receiving texts so Tamar was able to use my phone to send some texts and call Anne, (her Optus coverage was nonexistent) while I asked firies for an update, but they seemed quite flummoxed themselves. Then, when I went back to the car, my mobile received another number of texts including useful screen shots of apps from Kelli (which unfortunately wouldn't download) and then a route home in words, devised by Anthony and Andrew McG. We tried to make sure that everybody knew we were ok as we received several messages from a number of very concerned people. It had been horrible and upsetting not being able to tell people we were ok.

I was able to phone Anthony and heard the concern in his voice about a very threatening weather forecast and his advice that we should get out as soon as possible. Andrew McG was wanting to come to us to help so I called him as well and told him we were coming home and he explained the route to me. Their help and advice was so valuable and empowering as we were without access to information of any kind. Not even ABC radio. We would have just been left with "no way out".

We drove back to Rosedale through swarms of dismayed people along with signs offering free food. The journey made us realise that North Rosedale really suffered near annihilation in the firestorm, but there was fire damage everywhere.

It took us a while to pack up as we were in a chaotic mess but we left our house at 2pm. We took coast roads to avoid highway closures and headed to Moruya, Narooma, Bermagui, Tathra, all towns without power therefore no available fuel. Lots of people were riding around on bikes and Tamar wondered if their cars were out of petrol. It was like travelling three sides of a rectangle to get home.

Every time we got phone coverage Anthony called and so I reported our progress. When we got to Bega and saw traffic lights we celebrated, and even more so when we found a petrol station without a long queue. We filled both cars and bought coffee to address withdrawal headaches, (no coffee or tea for two days) Andrew inexplicably lost his, grabbed some chocolate, and set off for Cooma. Andrew drove Tamar's car to give her a break. There were more abandoned cars on the road than usual. We felt so fortunate to be able to leave without a problem. Without the information Anth and Andrew had provided us about which roads were still open allowing us to leave, we might not have been able to get out. It was like escaping from an unfolding disaster area.

Richard phoned while we were in Bega to kindly offer for us to stay with them in Cooma, but once we got fuel we desperately wanted to get home.

The road up the Brown Mtn was very smokey but the traffic was moving along quite well. I found the beautiful Brown Mtn forest very therapeutic. The road all the way from Cooma was clouded in thick brown smoke. We took 6.5 hours to get home. And what a welcome reception we got. Anthony and Kelli had cooked dinner for us and provisioned our fridge and pantry. Our kitchen was restored to a useful state, having all been packed away for our kitchen renovation starting on 14 January. Andrew McG had made a vegan chickpea curry for the freezer. He and Christine and the girls were here waiting for us, along with Anth, Jye and Ash and Anne. So hugs of relief all around and we have rarely felt so loved.

On 15 January 2020 when the Kings Highway reopened and again on 21 January I went back to our house. The drive down the Clyde was deeply traumatizing. The beautiful forest destroyed. Such widespread tragic destruction. I sobbed most of the way.

Yowani Road was closed to traffic but was busy with heavy vehicles and workers cutting down trees and others spraying suspected asbestos amongst the rubble. I was greeted by kindly people from the RFS, the Council and the Red Cross. The power was still out and telecommunication sporadic and unreliable. There was a hard-working horticulturist from Tasmania, brought up to provide advice about which trees could be saved, and he came to tell me I wouldn't be able to drive out for a while. I asked him did he think our trees would survive, given the scorched leaves. He loves spotted gums and was so admiring of ours and noticed that we had had work done on them. He started to tell me how they heal themselves, so I showed him how the tree near our deck had healed wondrously where we had a branch removed and he was as moved and impressed by this as Andrew H has been.

I made some interesting observations on these return visits.

The paint on the north wall of our house above the ramp had blistered in places and as well, some of the H joiners holding the hardy-plank in place had melted. The paint on the backs of our deck chairs was badly blistered. All of this describes the severity of the heat attack on our house from the NW firestorm.

I found some unconnected patches of burnt ground under the deck. These must have been caused by flying embers but didn't progress because there was so little fuel on the ground.

I noticed that the small trees between our house and 67 were burnt at the top, especially at the east and west corners of the house. There was no burning at the base of these trees indicating the fire from the NW had come over our roof and burnt the treetops.

There were burnt patches on the ground on the 67 side of the fence between our house and 67. On the day of the fire, I had hosed live embers in leaves accumulated along this fence line. These burnt patches were very close to a house post at the NE corner of 67, and nearby, kindling and wooden boxes were under the house.

Our house was the first of five houses in a north-south row that survived. It appeared that the other four had been to some extent sheltered from the northerly firestorm by our house, and Joe's solid preparation and efforts enhanced the reprieve. The Yowani row of five.

I noticed the low hedge running between the third and fourth of these houses, 65 and 63, (Joe's house) was unburnt, still with flowers, immediately between the houses, protected from the north wind by number 65. However the sections of hedge protruding to the east and west beyond the protection of number 65 were burnt in both these areas. This was clear evidence that the effects of the fire had extended well to the south of our place before the southerly arrived.

Passers by all want to say how lucky we were. Only we know the whole story.