

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

Strong action to reduce global warming

For well over 20 years scientists have warned that climate change would increase the risk of extreme bushfires in Australia. This warning was accurate.

The Climate Council of Australia briefing paper, '*This is Not Normal*': *Climate change and escalating bushfire risk*, published in November 2019 outlines 5 key findings relevant to the frequency, intensity, timing, and location of, bushfires in NSW in the 2019-20 bushfire season.

Their research finds that:

1. The catastrophic, unprecedented fire conditions that affected NSW and Queensland were aggravated by climate change. Bushfire risk was exacerbated by record breaking drought, very dry fuels and soils, and record-breaking heat.
2. Bushfire conditions are now more dangerous than in the past. The risks to people and property have increased and fire seasons have lengthened. It is becoming more dangerous to fight fires in Australia.
3. The fire season has lengthened so substantially that it has already reduced opportunities for fuel reduction burning. This means it is harder to prepare for worsening conditions.
4. The costs of fighting fires are increasing. Australia relies on resource sharing arrangements between countries and states and territories within Australia. As seasons overlap and fires become more destructive, governments will be increasingly constrained in their ability to share resources and the costs of tackling fires will increase, and
5. The government must develop an urgent plan to prepare Australian communities, health, and emergency services for escalating fire danger and must **rapidly phase out the burning of coal, oil and gas which is driving more dangerous fires.**

Making forests more resilient to continued Climate Change and wildfire

Nightcap National Park in the Northern Rivers is one of the oldest forests in the world and was decimated by the 2019-21 fires. Continually wet since the time of the dinosaurs, these forests once covered the supercontinent Gondwana. Nightcap National Park harboured many endemic and evolutionarily unique plants and animals and their loss from the 2019 fires is irreplaceable. More than 11 million hectares of rainforest in Eastern Australia was ravaged by the 2019-20 fires. More than 50% of the Gondwana Rainforests World Heritage Area has gone up in flames and the long-term viability of these globally significant forests is now in doubt.

Despite recent calls from the logging industry to thin forests as a way of reducing fuel loads and to prevent fires in NSW, the scientific community outright rejects this. The fires that raged through Nightcap National Park were canopy fires so intense and so hot that they created their own weather cycles within their firestorms! Fire teams spoke to me of having never seen anything like what they saw in the National Park. No amount of undergrowth management would have altered the trajectory that Nightcap National Park was on due to a warming planet. Rainforests typically are somewhat insulated from bushfires, particularly at night, due to moisture in the forests. The fires that swept through in November 2019 defied all logic because there simply was no moisture in the rainforest.

The high intensity fires that killed millions of trees has resulted in an ecosystem change that scientists predict will take centuries to recover, if at all.

Australian National University landscape ecology expert Professor David Lindenmayer says that the kind of forest thinning being proposed by the logging industry will make forests more fire prone. Thinning trees allows stronger winds access to fires burning beneath trees and the more open a tree canopy is the more fire is able to spread because the leaf litter is drier from more light coming through. Thinned canopies also mean more dense shrub layers due to increased light for plants – all making for far more intense fires.

World renowned ecologists like Robert Kooyman say that one of the best things to do to help forests bounce back is to leave them to regenerate naturally and not to disturb them further. Clearing burnt vegetation and disturbing soils full of seeds ready to resprout can slow recovery. In places where there are small patches of habitat left unburnt, making sure that those areas continue to be protected and can form nuclei for onward regeneration is vital.

The government needs to as part of the NSW Resilience Commissioner's new role look at best practice for engendering fire resilience in forests such as ours in NSW. This cannot be separated from the issue of warmer temperatures and longer and more intense fire events such as we saw in Nightcap. Ecologists and pyrogeographic experts need to be at the forefront of that study and advice moving forward, not industries with vested interest in the outcome.

Further we need:

- comprehensive and transparent assessment of the impacts of the fires on species and habitat
- logging operations in all native forests paused until an impact assessment is completed and logging operations are amended in accordance with recommendations from the assessment
- logging stopped and ruled out in the National Parks Reserve system
- increased resource allocation to National Parks and Wildlife to employ local ecologists and pyrogeographic experts to provide advice and ongoing management of all regeneration projects

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

A radical increase in resourcing for planning and managing fires in NSW needs to be implemented immediately.

In the 2019 NSW Government state budget expenses were cut by \$26.7 million to the Office of the NSW Rural Fire Service and by \$12.9 million to Fire and Rescue NSW. At the same time, capital expenditure to Fire and Rescue NSW declined by \$28.5 million relative to 2018-19 and by \$49.9 million relative to 2018-19 for the Office of the NSW Rural Fire Service (NSW Government, 2019).

It is extremely hard to understand those funding cuts given the bushfire danger forecasts for the 2019-20 fire season, the longest drought in NSW in living memory and the long-term increase in fire danger driven by climate change. In the 2008 Garnaut Climate Change Review Professor of Economics, Ross Garnaut predicted that without adequate action we would face more frequent and more intense fire seasons by 2020. In the \$1.2 trillion losses predicted in Australia in cumulative damages from a global temperature increase of 3,8-4C by 2100, the cost of bushfires on infrastructure and resulting increases in insurance premiums was not part of that equation. Neither was the cost to human health and our healthcare system estimated due to pollution and smoke-related illnesses, losses in tourism, losses of major environmental assets or the cost of emergency management, recover and relocation. **How will the State of NSW afford the billions it is spending in the fire recovery effort from 2019-20 every few years?**

Resourcing constraints in NSW were further compounded in drought-stricken regions where dams were dry and fire tanks were depleted following the extended drought. It is noted that Victoria's Country Fire Authority sent around 300 members and a fleet of fire tankers and operational support vehicles to help NSW during the 2019-20 fire crisis. New Zealand also sent specialist firefighters to the NSW/QLD emergency as did the United States with tragic results.

These kinds of resource sharing arrangements will become increasingly challenged as climate change causes fire seasons in states and territories within Australia, the northern hemisphere, and the southern hemisphere, to overlap. As a result, governments will be increasingly constrained in their ability to share resources and deal with larger, more destructive bushfires.

As has come into sharp relief with the Covid-19 Pandemic, preparing for extreme weather and health events needs to become part of the NSW Government's priorities and should have contingencies in place for when resource sharing is not possible.

Accredited BPAD Practitioners and Local Government oversight of planning applications, particularly for Dual Occupancies in Rural and Regional areas

It came to my attention after the Bushfires that the role of accredited BPAD practitioners is highly compromised when it comes to the approval processes for secondary dwellings in fire prone areas. I have been told anecdotally that if a developer wants to get approval in a High risk fire area they simply need to shop around for the right BPAD Assessor.

Stakeholders have raised with me concerns that despite multiple points of non-compliance with Planning for Bush Fire Protection 2006 regulations, including unmet and unexplained

performance criteria for bushfire assessments, that secondary dwellings are being approved in high fire risk areas. This was also confirmed to me by members of the Rural Fire Service.

The current model of assessing planning developments for fire risk under the Fire Protection Association Australia (FPAA) is a set and release model that poses risks to regional communities. It is also a business model as opposed to a public safety model and that also poses risks to regional communities. Public safety and fire hazard should either be the purview of responsible government OR responsible government insists on an oversight mechanism through audits or a complaints process for residents and other stakeholders to raise concerns and red flags about assessment reports in high fire risk areas.

Whilst there is no suggestion that Bushfire Planning and Design (BPAD) practitioners are not suitably qualified or accredited to assess risk, there is no actual oversight of those individual reports against objective criteria. Where is the oversight from a party that has no vested interest in the outcome?

The current model where Bushfire Planning and Design (BPAD) practitioners and their Fire risk assessment decisions receive no oversight opens the process up to corruption. Developer A gets a favourable Fire risk assessment for a secondary dwelling in a high-risk area that raises red flags with the local RFS, Police and residents, but nobody has standing to ask for a second opinion or to challenge the assessor's findings. Councils do not question the assessors and subsequently developments in areas that will certainly put occupants and first responders in harm's way are being approved. Add the fact that we will get longer and more frequent fire events, **the whole model of the Fire Protection Association Australia needs to be reviewed and improved.**

FPAA do not seem to have any power to reject a DA and instead focus on advising the developer how they can minimise fire risk on the property. Who is overseeing this process to ensure the safety of the broader community? I am told that when assessing difficult sites with existing developments, that the key criteria is to improve the situation by developing a package of bushfire protection measures that will ensure the site is safer than first proposed. This suggests that non-adherence to the standards can just be waived.

Considering increasing residential density in high bush fire areas with very poor access and egress surely FPAA need to be authorised to reject and meet a broader public safety good OR the NSW Government should re-think the whole process and provide oversight from the relevant Minister.

The following questions should be addressed by this Inquiry:

1. What is the mechanism to trigger oversight and/or review of a bush fire assessment where there is non-compliance with performance criteria that are unexplained in a bush fire assessment?
2. Does the FPAA uphold that making a site safer as opposed to ensuring strict adherence to Planning for Bushfire Protection performance criteria is a reasonable outcome when assessing projects in complex, high fire danger situations?
3. What systematic steps are taken by FPAA to prevent problematic unmet performance criteria for specific applications are not swept under the carpet or ignored? Particularly since there appears to be a wide scope of interpretation among BPAD practitioners in relation to performance criteria?

4. Are the anti-competition clauses in the Code of Conduct preventing BPAD practitioners from criticising the findings of other BPAD practitioners?
5. What checks and balances are there for work undertaken by BPAD practitioners in order to provide protection against corruption, incompetence, and human error?
6. Why is it so difficult for members of the public and other stakeholders to obtain copies of bushfire assessments given that they are produced under private commissions and may not be exhibited by planning authorities until a public meeting is called, or not at all in other cases?
7. What processes can be established for Government to provide adequate oversight and scrutiny of assessments by FPAA to ensure against omissions, inaccuracies, and errors?

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

Technology for Real Time Fire Warnings

Public warnings of a general nature were effective but the lack of real time information for regional communities was devastating and contributed to loss of life and loss of property. The Fire Near Me NSW App was an excellent general source of information and was particularly useful for people to look at if they were about to travel to a region that was affected by bushfires. But in my electorate and I know from other MPs in fire affected areas, there was a false sense of security with the information on the app for people in fire affected areas. People mistakenly believed that the information was in real time and were checking the app and relying on information as if it were in real time. My office told everyone to listen to local ABC radio for the most up to date information about where fires were and their categories.

Evacuations compulsory not merely recommended

False belief that a fire crew will evacuate you. On 10 and 11 November 2019 my office and I helped door knock with the Salvation Army and the Tweed/Byron Police in the area around Huonbrook, Federal, Main Arm and Rosebank as the fire in Nightcap National Park was out of control and expected to head east to those areas. We were asking people to evacuate or what their plan was given the proximity to the fire and the extreme warnings. I was shocked at the cavalier approach of so many we spoke to. One image in particular that I will never forget is being at a house on a ridge in Rosebank with a young family, including a baby and 2 small children and we were literally standing and watching flames in the distance less than 1 km away. The husband was reluctant to leave and said that, "...the fireys will evacuate us if things get bad." We explained that given that there was only one road in to their property and the multiple sites of fire in the area that there was not going to be a fire team coming up to their property to evacuate them.

We were one of the first hit areas and I honestly think the attitudes of folk in my electorate would now be quite different given the scenes witnessed from across the state. I would like to see that evacuation is mandatory not merely recommended when an evacuation order is made for an area. It is simply not fair on our Emergency Service personnel and what I saw was another layer of disadvantage for women unable to evacuate without reliance on their partners.

Non-punitive audits of illegal dwellings for Emergency Evacuation purposes

People living in unapproved dwellings was also a major concern we identified during our door knocking for the evacuation in November. Part of the reason the Police asked me to assist with the doorknocking was because of concerns about uniformed police doorknocking in areas where people were living illegally or growing illegal cannabis. Councils need to be encouraged to develop ways to get an honest audit of dwellings without punishing people.