Submission to the Parliamentary Inquiry into Australia's Recent Fires

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This submission is in two parts, commencing with an analysis of the error of traditional European burning practices for fire mitigation, followed by an exploration of these issues in the forestry context; some examples are situated in Northern NSW and Bellingen Shire in particular.

In summary, forestry operations, land-clearing, and hazard and fuel reduction burning all contribute directly to bushfires. A new management strategy is required, recognising the real and present threat of climate change. The ongoing calls for more clearing and burning will only exacerbate the current environmental crisis. Native forest logging should be ended, and current unburnt forest areas protected for habitat conservation, notably for the koala. Above all, Australia must increase its ambition under the Paris Agreement. A focus on adaptation and resilience, when there is still an urgent need for mitigation of climate change (through decarbonisation of the economy, as per Article 4.1 of the Agreement) is a distraction. Climate change has arrived, and this changes everything.

1) Why Australia should stop burning its forests to save them

The ongoing fires in Australia, which are now approaching 6 million hectares in extent, have been exacerbated by human intervention. In an emergency, traditional practices are no longer relevant and 'hazard reduction' burning, followed (if the situation requires it) by 'back-burning' ahead of the fire front must be re-evaluated.

In the context of climatic tipping points and extreme weather events, we can see that this season's initial 'hazard' burns were largely responsible for the fires. Some fires originated on public land, as a consequence of mandatory 'fuel reduction' and targets, forcing agencies like the Parks Service to burn. The agencies started their burning in the traditional period (end of winter), but of course (on account of climate change) this was the wrong season. But because our governments and their coalition partners generally don't believe in climate change, the burn period has not been adjusted. Agencies kept on doing the same old thing, and when the fires got out of control, they extended 'hazard reduction' burning to private property (as they have compulsory powers) under the guise of 'protecting assets' (such as plantations). This was when a significant part of the remnant rainforest on the New England Tableland in New South Wales was destroyed. Once all these fires got out of control, the agencies switched to 'back' burning, exacerbating the problem. This in turn emboldened local landowners to burn their properties (as was the case with the 30,000 hectares burnt at Ebor, NSW).
On a broader, ecological/environmental level, quite a few scientists have argued that we should not be burning natural areas. This is because we are increasing fire-loving plants and converting forests to more fire-loving states. In combination with the reduction in age of most forests, and leaving logging slash on the ground, fuel loads have been increased. This is all a consequence of human activity.

Consequently, some ecologists argue that we should allow our forest communities to return to their natural state and age-class, and permit them to burn according to their natural condition, and focus on securing property in residential areas – not undertake broad-scale burning. Given these observations, we need to accept that all our forests and grasslands are extremely dry, and any burning is simply going to result in more intense fires, earlier in the fire season, which will be made worse by human intervention. And there is mounting evidence to support this claim, with homes destroyed in the Blue Mountains as a result of a supposedly 'crucial' back-burn that got out of control.

The correct strategy should be:

1) Immediate implementation of the Paris Agreement, including the target of keeping rising global temperatures to the 'tolerable' increase of 1.5 degrees centigrade above pre-industrial levels;
2) Immediate protection of all high conservation value natural ecosystems;
3) Restoration of all degraded natural areas, according to ecosystem type;
4) A shift to alternative agricultural practices such as regenerative farming and massive de-stocking of rangelands;
5) Restoring natural (environmental flow) levels to all water systems, notably the Murray Darling (no more irrigation);
6) Respecting and reintroducing the Indigenous approach to fire management, which is highly site-specific and relevant to the appropriate ecosystem (i.e grasslands, not rainforests).

If we don't, then no amount of burning will work. Fire is a tool to be used extremely sparingly, in the appropriate ecosystems; the best examples we have of appropriate fire management are those traditionally used by Australia's Indigenous peoples. Like clear-felling of forests to 'regenerate' forests, we are using one tool, for one context, and applying everywhere, because it seems like a magic bullet. It isn't.

Supporters of burning claim that a cool burn must be preferable to a hot burn, and back burning is only done when it's cool and humid.

We no longer have cool and humid periods. We are living climate change, right now. To undertake any burning in the current context this summer is little more than ecocide. Every unburnt area needs to be protected to allow for species' recovery. Enough has burnt already; now we have a higher priority: to protect our biodiversity, because there is a link between biodiversity and climate change. The more we reduce our biodiversity, the more we are exposed to the impacts of climate change (the rangeland fires we have witnessed are a case in point: our soils are so impoverished they no longer hold moisture).

Sadly, by burning the natural environment in the misguided belief we are securing property, we are adding to the fuel load. The more you burn, the more fire-prone natural ecosystems become. Many farmers know this, which is why they have been burning ahead of containment lines, to destroy the 'scrub' (rainforest), in the belief they will promote eucalyptus species, for logging, and increasing 'green pick' (grass). And so the cycle starts over again.

In NSW, the Kalang River catchment in the shire of Bellingen is now one of the last strongholds for koala and other endangered 'apex' species (species which help maintain ecological integrity). There were plans to log the catchment, which were resisted by local residents. Now instead, there is a proposal to burn the catchment to protect the town. But if we kill apex species, we convert ecosystems (let alone undermine the quality of our municipal water supply). A good example is the destruction of Bison in North America. The Bluegrass prairie, which once covered millions of acres is now reduced to a few tiny fragments; it can no longer regenerate, as it was dependent of the buffalo, and has disappeared. In the case of the Kalang these forests must be protected from fire, not burnt, and this should be done by:

a) Not back burning;
b) Allowing natural ecosystems to recover;
c) Water, not fire; and
d) Targeted human intervention (manual, not mechanical, responses).

Supporters of burning claim it's better to stop a hot burning fire consuming everything in front of it, even if that means creating a narrow corridor of low level burnt material, as this means the fire runs out of fuel.

We cannot stop these fires. They are a consequence of climate change. Therefore, the best response is to change our behaviour in the face of the inevitable, and not deny its reality (adaptation). We also do this by giving the planet a break from extractive and destructive human activities, particularly the combustion of fossil fuels, and the degradation of the natural environment, and preventing further exacerbation of the problem (mitigation).

Those living within semi-natural environments have to take responsibility for their own properties; those of us living in towns need to have a secure municipal perimeters – and we all need to implement other measures, such as sprinkler systems. We can no longer afford to lay waste to everything around us in the vain hope things will get better.

This is the context I believe this debate is missing. I admire and respect all our firefighters, and I hope they get the resources they need to extinguish the fires, not make more.

2) The Bellinger Valley is an island of green amidst a sea of bushfires due to forest conservation and habitat protection

The Bellinger Valley is an island of green amidst a sea of bushfires, and the Kalang headwaters are at the very epicentre of that island. The reason why our shire is so verdant, and so free of fire and drought, is because our water catchments are largely being managed for protection purposes.

Sustainable development recognises that the economy, ecology, and society are inter-dependent, and you can't have one without the other. Sustainable forest management, or SFM, acknowledges the same. Our governments, of all political colours, support SFM, and recognise the 1992 Statement of Forest Principles, which is part of Agenda 21, negotiated at the 1992 Rio Earth Summit.

SFM recognises that the environment also has economic value. The Upper Kalang and Middle Bellinger River catchments are still filled with ancient, old-growth forests, and

rainforests. Such high conservation value forests provide and regulate water quality and quantity. Young forest does not make water, it takes water. The headwater forests of the Kalang River are an important source of what are called 'ecosystem services', or 'natural capital', and are worth far more than the individual trees or timber within them, which can easily be sourced elsewhere.

In the Upper Kalang in particular, Bellingen Shire has one of the largest and healthiest populations of koala left on the eastern seaboard. Imagine the economic potential that lies at the heart of this shire, if these forests are managed for their natural values. To undertake extractive management for a few poles that can easily be sourced elsewhere, at no cost to jobs or the economy, would be a bit like grinding up the Taj Mahal to make marble benchtops.

Finally, I would like to stress the third dimension of sustainability, namely society. SFM also accepts the role of the community in determining how forests should be managed. All of us who live here love Bello shire, we love our forests, and we love our community. We live in a very special place. Let's keep it that way by managing our natural resources responsibly, for water quality and quantity, habitat and recreation, and let's keep agriculture and forestry where they belong, which is outside high conservation value forests. Over one hundred years ago the NSW Lands Protection Board set the Kalang forests aside, recognising their extreme potential for erosion. All that stands between shire residents and the soils of the Kalang are its forests, so it is essential to keep them there, and maximise their benefits, instead of minimising their value, and compromising the future.

Tim Cadman has been a ratepayer in Bellingen Shire since 1997. He is not, nor has he ever been a member of the Green Party. He is a research fellow at Griffith University in forest governance, sustainable development, and climate change. He works in countries and places as diverse as the Amazon, Nepal, Papua New Guinea, and India helping local communities, Indigenous people, governments, non-governmental organisations, and all stakeholders to create plans for the sustainable management of their forests. He has been recognised by the Federal Government for his commitment to sustainable forest management in Australia.