INQUIRY INTO LONG TERM SUSTAINABILITY AND FUTURE OF THE TIMBER AND FOREST PRODUCTS INDUSTRY

Name: Date Received: Name suppressed 27 May 2021

Partially Confidential

Submission to

The NSW Inquiry into the Long-Term Sustainability and Future of the Timber and Forest Products Industry

The devastating and unprecedented bushfires of the Summer of 2019/2020 should serve as a big wake-up call to all Australians, and in particular those with the power to make important critical changes to combat climate change.

While years of drought have clearly made our forests more vulnerable than ever, the management of our forests – both logged and unlogged – has bordered on criminal neglect. Crime against biodiversity, the environment and humanity.

At the time of European settlement - everybody who went to school knows this - the forests consisted of very large old trees with wide open spaces in between. The understory was not covered in scrubby undergrowth. This was not untouched wilderness. This was forest that was *managed* in a way that made it resilient in the face of fire. Large old trees are resistant to burning, and the fire doesn't get to the crown of these forests.

I live within South Brooman State Forest. I have only lived here a few years, but I have neighbours that grew up here. Within living memory, the forest had large widely spaced trees. The air within the forest was moist, and the temperature within the forest was several degrees cooler than outside the forest. A generation earlier, people could drive a horse & buggy through the forest from Braidwood to the coast.

As a result of logging, the forest in my area (south Brooman State forest) before the fires consisted of densely packed young trees with scrub in between them – just how you would want it to be if you were intending to set fire to it! The fires devastated this forest – with swathes of hundreds of acres burnt through the crown. The earth was left blackened. This depleted, damaged soil washed away in the floods shortly afterwards.*

We've all heard the statistics of the millions of animals that died directly or as a result of habitat loss. I have witnessed the reduction in native fauna on our own property, which fortunately did not suffer the fire intensity of other areas. I have noticed huge reductions in kangaroos, wallabies, wombats, and smaller creatures such as echidnas and lyrebirds. Glossy Black Cockatoos used to be almost permanent residents here. We don't see those birds at all any more, because there is not a living casuarina tree – their primary food source – for miles around. Driving through the forest, the dead skeletons of casuarinas are clearly visible all through the forest. And although we hear a lot about the iconic animals and birds, it is the myriad tiny creatures and microscopic lifeforms that form the basis of our healthy ecosystem, and give the soil its moisture-holding capacity. These creatures are killed by the baking and blackening of the soil.

*I have attached a short essay I wrote after logging recommenced in South Brooman State Forest shortly after the fires (See appendix).

Sustainability?

When Forestry and government bodies talk about sustainability of the industry, they mean "Can we keep taking logs out of the forest for a long time?" When most people talk about sustainability, they mean "Can the Earth sustain this kind of activity?" The answer to that question is a resounding "No!" We need to stop thinking of forest timber as a renewable resource. *Trees* are a renewable resource, native forest ecosystems are *not* a renewable resource. That is, not within two human lifetimes at least!

Climate Change

Let us talk about climate change. Australia is an embarrassment amongst other nations in our stubborn disregard for the urgency of addressing climate change. It is shocking that leaders in Australia are not doing everything in their power to reverse climate change. We are not even doing the minimum – i.e. moving away from fossil fuels. We need to be doing more than that – we should be working towards *reversing*, atmospheric carbon, not merely working towards net zero - which we are not.

While the fires were caused by the drought, the prolonged drought was caused by climate change, which the vast majority of scientists agree will cause more droughts, severe storms, floods, and all kinds of extreme weather events.

"These future projections will be avoided only if the global community succeeds in achieving the deep, rapid and enduring reductions in greenhouse gas emissions needed to limit global warming to well below 2°C above pre-industrial levels, in line with the Paris Agreement on climate change"

UNEP, 2019

Talk of building 'resilient communities' sounds very hollow to those of us who live within or near forests. What we really need is a resilient environment that will lessen the impact of climate change, and reduce the frequency and severity of fires. Mature, well managed, native forests are a key aspect of that aim.

A review of 51 peer-reviewed publications, conducted by the Griffith Climate Change Response Program (a partnership between the ANU and Griffith University), found that:

- The key contributor to increased bushfires and resultant damage is climate change;
- Native forest logging increases the severity at which forests burn, beginning roughly 10 years after logging and continuing at elevated levels for another 30+ years;
- The likelihood of "crown burn" [is] about 10% in old growth forest versus **70% in forest** logged 15 years ago. [This] remains elevated for decades;
- The likely mechanism is that after logging, **removal of the forest canopy** means thousands of young trees regrow, creating an increased fuel load. Many of those young trees then die, becoming dry and highly flammable, and
- The lack of canopy also results in increased **drying of the young plants and soil**, and greater **wind speeds** on days with extreme fire danger.

BUSHFIRE RECOVERY PROJECT (2020)

So while we may blame climate change and drought for the fires, we can also blame the mismanagement of our forests for the severity of the Black Summer fires, and logging has to shoulder much of that blame.

Mature forests are part of the solution

We must not throw up our hands with helplessness in the face of the impact of climate change. We must recognise the contribution that deforestation makes to climate change, and address that.

<u>Carbon Sequestration</u>. Mature forests contribute greatly to addressing climate change. Everybody knows that trees sequester carbon. But do they know that most of that carbon sequestration (70%) is realised in the latter half of its of its life? So, if a tree has a 200-year life span, most carbon sequestration takes place *after* 100 years.

<u>Rainfall, Cooling and Water supply</u>. While we all know the value of forests as a carbon sink, they play another important role in addressing climate change: A healthy forest also stores water, creates rainfall and cools the air. Figure 1 demonstrates this process.

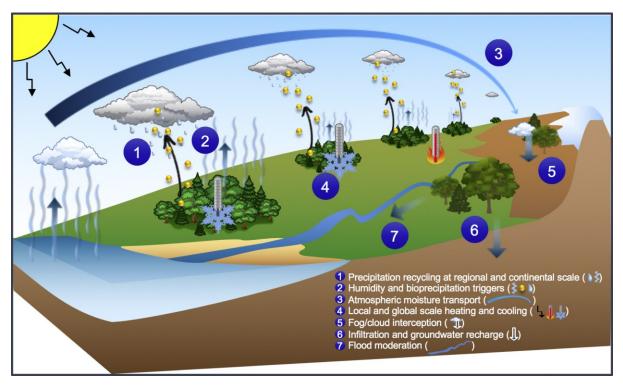


Fig. 1. Effects of forests on water and climate at local, regional and continental scales through change in water and energy cycles. (1) Precipitation is recycled by forests and other forms of vegetation and transported across terrestrial surfaces to the other end of continents. (2) Upward fluxes of moisture, volatile organic compounds and microbes from plant surfaces (yellow dots) create precipitation triggers. (3) Forest-driven air pressure patterns may transport atmospheric moisture toward continental interiors. (4) Water fluxes cool temperatures and produce clouds that deflect additional radiation from terrestrial surfaces. (5) Fog and cloud interception by trees draws additional moisture out of the atmosphere. (6) Infiltration and groundwater recharge can be facilitated by trees. (7) All of the above processes naturally disperse water, thereby moderating floods.

Ellison et al (2017)

As can be seen in Figure 2, forested areas can be many degrees cooler than cleared areas. Forest, in the bottom corner, is 10 - 20 degrees cooler than cleared or built-up areas.

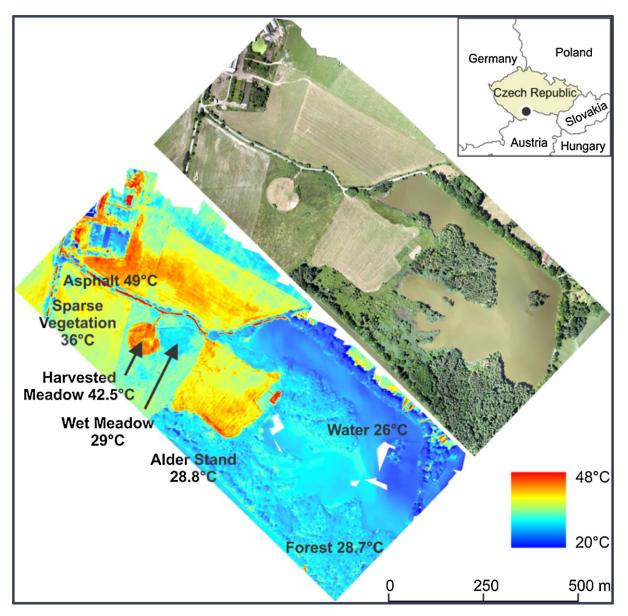


Fig. 2. Surface temperature distribution in a mixed landscape with forest. Source: adapted from (Hesslerová et al. 2013).

The future of the timber industry

The NSW Forestry Corporation has proven to be a cynical organisation when it comes to maintaining our precious forests. To have a corporation in charge of our natural assets - which has its main aim as profit - with no repercussions for mismanagement, is beyond belief. I feel certain the committee will be regaled with numerous examples of how the corporation and the forestry contractors cannot be trusted with the most meagre forms of habitat conservation. Forestry makes no serious attempt to follow the guidelines of the EPA, and the contractors break the rules whenever they think they can get away with it – which appears to be always. The EPA try to do their best, but they are underresourced and have no real teeth. Fines in the tens of thousands of dollars are useless against a corporation which is propped up by taxpayer's money (see NSW forestry Commission 2018/19 Annual Report). The EPA needs more resources, and Forestry Corporation needs to be held to account for the damage it causes to habitat.

A 2018 report found that the native forest logging industry has very low levels of social license throughout Australia, for all the reasons I have mentioned (Schirmer et al, 2018).

However, I do not wish to dwell on this, as in my opinion, the logging of native forests has to stop.

I have put forward my thoughts on how native forests are of greater value as mature forests, sequestering carbon, cooling the climate and contributing to the water cycle.

There is value in our forests beyond that: Forests are important for biodiversity, from providing tree hollows for habitat, down to the microscopic soil organisms important to the health of the planet. Forests are a thing of beauty; They are important for both the physical and mental health of human beings; They provide a sanctuary and a haven for outdoor recreation.

The NSW south coast has long been a destination for people from the cities to find respite and renewal. Arguably a high percentage of jobs in this region exist because of tourism created by our beautiful natural environment. The beauty of this area is the reason we retired here a few years ago.

We should retain and maintain our native forests, and they will provide a haven for many years for wildlife and humans, and will be a valuable resource for tourism.

I believe the native logging industry is a thing of the past. It is a dinosaur. Our planet cannot sustain native forest logging any longer, in any part of the world. It is finished.

Future employment opportunities

Cessation of logging in native forests will not cause the catastrophic loss of employment implied by Forestry Corporation. First, from my own observation, many of the contractors who have been working in the local forest since the fires were not NSW residents, but had come from Victoria to work. Second, most forestry jobs – 92% - are in plantation forests (Schirmer et all 2018)

Most homes and furniture are built from plantation pine. It is a lie to say we need the trees for rebuilding, or for hardwood, as suggested by certain politicians. A large percentage – 87% - of Australia's native forest logs are chipped (ABARES, 2018) and shipped overseas to be pulped and made into paper. Is this a sensible use of a non-renewable resource?

The environmental, social and economic impacts of the native forest woodchipping industry is entirely disproportionate to the low number of jobs it supports and revenue it yields to the NSW public.

(NPANSW 2018/2020)

I will leave the options for alternative timber supply to others who have more knowledge and data on this subject, however plantation timber would seem to be a sensible path.

Employment opportunities would remain within forestry:

Maintenance of the native forest. This would involve such activities as:

- Cool burns, conducted or overseen by the indigenous people.
- Tree removal for maintenance and safety.
- Maintenance of the health of the forests, including weed removal.
- Fire safety and firefighting personnel.

Recreation and educational-related employment in native forests:

- The provision of tracks, campgrounds, and other facilities for eco-recreational opportunities; There is increasing demand for this type of holiday.
- Educational centres and activities.
- Forest rangers & guides.

Plantation forests to supply timber:

- Traditional jobs for loggers and haulers to supply timber to sawmills and chip mills.
- Forestry jobs in growing and maintaining the plantation forests.
- Fire safety and firefighting.

Timber plantations would have the added benefit of increasing our forest cover, rather than depleting it, contributing to balancing our carbon emissions.

Wider tourism benefits:

In addition to these forest-related employment opportunities, the enhancement of our forests as a recreational resource and havens of our natural world would increase the eco-tourism potential of these areas, bringing huge economical benefits to these regions. Accommodation, hospitality and recreational activities would all benefit.

In Conclusion

I see not a single reason to continue decimating our native forests, and I can see many good reasons for managing them as a valuable ecological resource. Their value in combatting climate change has to be the most pressing reason to allow them to grow into mature and healthy ecosystems.

The lives of our grandchildren may depend on it.

REFERENCES

BUSHFIRE RECOVERY PROJECT Fenner School of Environment & Society, The Australian National University; and Griffith Climate Change Response Program, Griffith University (2020)

UNEP Emissions Gap Report 2019. Nairobi. (2019).

Ellison, D. et al. (2017). Trees, forests and water: Cool insights for a hot world. Global Environmental Change, Vol 43, pp. 51-61.

Hesslerová, P. et al. (2017). Daily dynamics of radiation surface temperature of different land cover types in a temperate cultural landscape: consequences for the local climate. Ecol. Eng., 54, pp. 145-154.

Community perceptions of Australia's forest, wood and paper industries: implications for social license to operate. Jacki Schirmer, Lain Dare, Mel Mylek, August 2018.

https://npansw.org.au/wp-content/uploads/2019/02/Social-License-Report.pdf

APPENDIX

MY STORY

I live within South Brooman State Forest and I am worried and frightened.

We made our home in the bush to live our dream surrounded by nature. We were aware of the danger of bush fires - that has always been a part of living in Australia. We were also aware that we were within a State Forest, and that logging was likely to take place.

Nonetheless, we were heartbroken when large areas were logged not far from us, and our favourite "spotted gum" forest was decimated. But we were philosophical about that. After all, it is State Forest and that's what happens. (Although, we found out later, the logging was not done according to the rules).

Then came the Black Summer bushfires.

They were horrific. I was fortunate to be evacuated and not have to directly face the horror of the flames, as others did. But when I returned through the remains of the forest, I was devastated by the blackened apocalyptic landscape. Again, we were fortunate not to lose our home or outbuildings, thanks to the tireless efforts of our friends and neighbours to keep the fire at bay.

What followed was months of anxiety and coming to terms with the decimation of the forest. Fires happen. We all knew that. But this was unprecedented, as we have heard time and time again. Where were the Glossy Black Cockatoos that fed on the casuarinas at the top of our driveway? Their food was gone. Where were the Lyrebirds that scratched in the leaf litter and called in the rainforest gullies? Once we saw some Glossy Blacks at the dam. Then we never saw them again. Their feed trees are gone for miles around. A lyrebird came back. Then we found it dead. Starved.

Then the floods came and washed all the dry, scorched soil into the River. At least it was cooler and wetter now, maybe the forest would start to recover. Some green shoots were appearing – perhaps the trees will survive. Some grasses were coming back. People said the forest was recovering. Perhaps. But it will take decades or even centuries for it to become a real forest; a real ecosystem teeming with life. Not in our lifetime, but at least there was hope for the future...

Then came the loggers.

My heart is broken. Two months after the fires, struggling native trees taken for wood chips. More habitat destroyed. The forest further opened up, letting the baking sun in to the forest floor, promoting more frequent and more severe fires. Fires already out of control due to climate change.

More fires, more destruction, more death and less chance of forest recovery. An ever downward spiral.

For the sake of our grandchildren and future generations, the wilful destruction of our native forests must stop! Climate change, wild weather events, extreme bushfires, loss of habitat, loss of natural beauty.

I am frightened and lose sleep every night. My dream for our 'golden years' ruined.

But at least I had a golden childhood. One of the last of the lucky ones.

Name Withheld