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

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NSW Parliamentary Inquiry: Long term sustainability and future of the timber and forest products industry

I am a forest ecologist who grew up on the mid-north coast region of NSW. After 20 years interstate, I have recently moved back to the Coffs Harbour region. I am very concerned to see the level of forestry which is taking place across the state, particularly after these forests were so heavily impacted by the 2019-2020 bushfires.

I have a PhD in forest ecology, which I gained in Tasmania, and I have studied Australia's forest ecosystems all along the east coast of the continent. I have been involved in research in many fields, including the impact of forestry on bushfires and the role that our forests play in carbon storage and sequestration.

It is my professional opinion that New South Wales should be phasing out native forest logging, as quickly as feasible. Victoria recently put an end to old-growth logging and is phasing out all native forest logging by 2030. NSW needs to set a target to phase out wood production and transition our forests into a tourism and carbon-trading economy.

This submission will cover points which are mainly relevant to section 1g of the Terms of Reference (the environmental impact and sustainability of native forest logging, including following the 2019/20 bushfire season), as which relate to my education and experience. However I will also briefly address other selected issues that I feel are of importance.

Impacts of 2019-2020 fires on Biodiversity

Australia is in the midst of a biodiversity crisis. We have the highest rate of mammal extinctions in the world, and we have many threatened species which are moving closer towards extinction. We urgently need to take action on this issue if we are to prevent further extinctions. Protecting NSW forests are particularly important, as the coastal forest region of NSW is listed as the world's 35th biodiversity hotspot¹. One of the simplest ways to address the biodiversity crisis is to end the destruction of habitat - this includes native forest logging.

The 2019-2020 bushfires had a significant impact on NSW wildlife, with an estimated 800 million animals killed in the fires². When wildlife populations are hit by a massive disturbance event, such as a large bushfire, it takes a long time for these populations to recover. Patches of unburnt or lightly burnt forests become critical to their survival, while the surrounding forests regenerate and regain the necessary habitat qualities.

For the long-term survival of NSW's wildlife, it is **absolutely essential** that the unburnt or lightly burnt forests be protected. To log these areas is to push already struggling populations towards local extinction.

This has been the findings from the Environmental Protection Agency (EPA). In their September 2020 report³ they found that critical refuges for wildlife were at threat of being eliminated by logging under the Coastal Integrated Forestry Operations Approvals. The loss of these important refuges would mean catastrophic population decline for species such as the Koala, Greater Glider and Yellow-bellied Glider.

Many threatened species have had significant areas of their habitat destroyed by fire. For instance, the Hastings River mouse, which is listed as endangered, had 82% of it's habitat burnt^{4. Y}et in 2020, logging took place in the Styx River State Forest which represent some of the last unburnt refuge for this endangered species.

Of concern, especially amongst members of the community, is the impact of the fires on Koala populations. In the northern NSW region, Koala populations have declined by 71% from the 2019-2020 bushfires⁵. Immediate action needs to be taken to protect remaining unburnt habitat in order to prevent further declines in Koala populations.

The science clearly illustrates that bushfires are increasing in severity and frequency under climate change. The 2019-20 bushfires are not the last catastrophic fire that we will see in the region. In fact, fires like this are likely to become the norm. It is therefore essential to consider the massive impact that fire will have on NSW forests in the next coming decades. This will no doubt have a detrimental effect on our wildlife. In order to properly protect wildlife it is important that all other disturbances be eliminated from their environments where possible. One of the biggest avoidable disturbances to forest-dependent species is logging.

I find it very concerning that the Forestry Corporation have abandoned the additional protections that the Environmental Protection Agency implemented following the fires. This shows that Forestry Corporation have a complete disregard for wildlife and that their priorities lie only meeting their contractual wood supply quotas. As a government enterprise, an institution who's first priority should be to the community and the environment, this is simply unacceptable.

Climate change

Climate change is likely to have a significant impact on the forestry industry, primarily through an increase in the severity and frequency of bushfires. The reality is that the 2019/2020 bushfires are not a one-off event and catastrophic fire events will become a regular occurrence in NSW.

This has dramatic consequences for the long term sustainability of the forestry industry. A recent review by NSW Forestry Corporation found that the 2019-20 bushfires reduced the amount of available timber in NSW forests by as much as 30%. The commercial wood supply available in NSW Forests is very likely to diminish further in the future due to increasing bushfires. This severely impacts the long term sustainability of the forestry industry.

Logging increases bushfire risk and severity

The clear and overwhelming evidence from several scientific studies is that logging makes forests more flammable. There have been multiple, peer-reviewed scientific studies which link logging and fire in Australian forests, plus various scientific reviews⁷⁻¹⁰.

Logging removes the canopy of a forest, which dries out the understory and soil. Furthermore, the younger, regenerating trees increase the level fine flammable material. Most branches that burn in a bushfire are smaller than the diameter of a human thumb. Young trees burn almost completely while big, tall trees often remain alive and standing after fire.

As the threat of bushfire increases under climate change, the NSW government needs to be doing all that it can to protect the community from fire. Logging increases the risk of fire to nearby communities. Phasing out logging in proximity to people's homes and infrastructure is essential.

Forests for climate

Native forests play an important role in the fight against climate change. They are essential for mitigating climate change by drawing CO₂ down from the atmosphere and storing it long-term. Australia's forest sequester tens of millions of tonnes of carbon each year and have the potential to sequester carbon equivalent to 25% of our current annual emissions¹¹.

Old-growth and mature forests dominated by sizable eucalypt trees are excellent at storing large amounts of carbon in the vegetation and soil. Protecting old-growth and mature forests prevents significant amounts of carbon being released into the atmosphere. Meanwhile, protecting

regenerating forests provides an excellent opportunity for forests to sequester carbon and store it long-term.

There is significant economic opportunity in protecting our forests under carbon trading schemes. Research from The Australia Institute showed that for the Southern Forestry Region of NSW, an estimated \$222 million dollars between 2014-2033 could be generated through the sale of carbon credits. This is substantial, considering that the same paper outlines that Forestry Corporation is projected to lose \$40 to \$77 million over the same period.

Biomass burning of native forests

I am very concerned about the growing demand for native forests for biomass energy. The Redbank biomass plant will be fuelled using biomass from forests in the northern NSW region. I am concerned to see that forests from the Tarkeeth State Forests were used for this very reason.

Biomass burning is a serious threat to NSW's wildlife and will unlock carbon which has been stored in our forests for decades. Biomass burning is not carbon neutral and emits more carbon per unit of energy than coal¹³. It takes many decades to centuries for forests to regrow and recapture carbon.

While Forestry Corporation claim that only residue will be used for biomass burning, there is serious concern that once biomass plants are established, industrial scale logging of NSW forests will be primarily for this purpose. Just like native forest logging for timber and woodchips, logging for bioenergy would be heavily reliant on government subsidies and would not create a meaningful or sustainable number of jobs.

Additional Comments

As a recently returned resident of the Mid-North Coast of NSW, I have concerns about the state of my local environment. I feel strongly that the forests should be managed for the protection of Koalas and other threatened species. I am also deeply concerned about the impact of logging to adjacent rivers and wetlands, and how they will be impacted by the increased sedimentation. Many of the logging areas around the Kalang, Bellingen and Newry areas have steep slopes and highly erodible soil.

I also feel that the Mid-North Coast region is a tourism hotspot, and would benefit greatly from the implementation of the Great Koala National Park. This excellent National Park proposal would be a significant benefit to the regional community, by creating sustainable tourism opportunities. The implementation of walking tracks and mountain bike trails would increase visitation to the region and boost the local economies. Furthermore, it would improve the local communities' health and wellbeing by providing greater outdoor recreational opportunities.

The other resounding issue is that native forest logging in NSW does not make any money - in fact it runs at a loss. With predicted losses of about \$15 million a year from 2022 to 2024¹⁴, it will be enviable that State Government subsidies will end up propping up the industry. This money could be better spent in ways that would better serve the community such as climate change mitigation, healthcare and education. Given all the other issues with forestry in NSW - the impact to wildlife and climate, the increased fire risk - why are our forests being logged if it is not making any money?

A recent study found that the Great Koala National Park would create close to 10,000 full time jobs and increase total economic output for the region by \$1.18 billion over 15 years¹⁵. This is a far better economic use of our forests than logging them for a loss.

Recommendations

It is my professional recommendation that the NSW Government should aim to phase out native forest logging as quickly as possible. This is essential in order to protect our declining wildlife

populations and to urgently address climate change. The first step in this process would be to not renew the several wood supply contracts that are due to expire in 2023. Investing in an immediate expansion of the plantation estate would mean a continued and sustainable wood supply into the future.

All forests of high conservation value should be placed into National Parks, with an increase in funding to help support their additional workload. Other degraded or regenerating forests should be managed to help promote forest growth and carbon storage.

As there are only 800 jobs in native forest logging in NSW, these workers could easily be supported by the government to transition into other industries. Employment opportunities could be created for forest managers, by undertaking reforestation works, weed management and by maintaining roads to help in fire-fighting capabilities. Existing forestry workers would be ideal for these roles. Further job opportunities could be created by government funded, forest specific fire-fighting teams which will be desperately needed in the future as climate change increases the frequency and severity of bushfires.

It is my view that two of the most important issues that NSW faces is the biodiversity and climate change crises. By immediately phasing out of native forest logging we have a real opportunity to address these two issues. By protecting NSW's forest we can ensure a successful future our regional communities and our unique wildlife.

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