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Topic 1. Sustainability of current and future forestry operations in NSW

Current and future native forest logging is unsustainable in NSW. For decades it has been known amongst many logging contractors that both public and private forests are being over cut, at increasingly shorter rotations. This view, with examples has been shared with me by forestry contractors whom I have worked with in my capacity as the project ecologist supervising and monitoring clearing works as part of local council approved developments. These contractors have commented to me how many forest patches (both public and private) had previously been subject to repeated harvests, on long rotations with good yields by themselves and previous generations however this was no longer possible as the rotations had been dramatically reduced and that these forest patches were now severely over cut and would take upwards of 60-80 years to return to a state in which harvestable saw logs could be taken. This over cutting has simplified forest areas across NSW so that they are dominated by young, even aged trees with reduced species diversity. Such forests have a greatly elevated fire risk and are more likely to burn at higher severity (Lindenmayer and Zylstra. 2024), (see further points regarding fire below). The over-commitment of sawlog quotas by Forestry Corporation to Boral Timber (now Plentarch Timber) is well known on the mid-north coast, at least two smaller sawmilling companies have publicly complained (Australian Solar Timber and Hurford's Hardwoods) and called for enquiries into contracts issued by Forestry Corporation to Boral Timber. Since 2001 Forestry Corporation and the NSW Government have provided compensation to Boral Timbers for being unable to supply sawlogs and meet the contracted supply quotas on at least three occasions with also legal proceedings being brought against Forestry Corporation by Boral Timber though those outcomes remain confidential.

It is clear that there has been a systemic overstatement of the availability of native timber (and also the associated levels of direct employment). The yield from public native forests has declined by 40% since 2010 (Department of Agriculture & Water Resources 2018, Australia's State of the Forests Report). In the context of the 2019/2020 Black Summer fires, the Forestry Corporation has estimated sustainable yields for the Southern, Tumut and Eden Regional Forest Agreement (RFA) areas to 2034. They estimate there will be between a further 13% and 30% reduction in sustainable yield of high quality logs in the study areas. Given Forestry Corporations consistent over estimation of yields this is likely to be an under-estimation but the trend line is clear even from Forestry Corporations own assessments. Given Forestry Corporation report approximately 50% of their managed native forests were impacted by the 2019/2020 fires lower yields will occur in all the RFAs effected by that fire and most likely to a greater extent than estimated. Severe wildfires are now so frequent it is no longer possible to maintain a viable native forest logging industry according to Cary et al (2021). Due to the frequency of wildfires trees may never grow old enough to become sawlogs and that there is an 80% chance the forests will burn before the trees reach the harvestable age (Cary et al 2021). This situation is worsened by ongoing climate change and associated increasing frequency and severity of wildfire. The ability to manage a resource sustainability is dependant on an accurate and precise measurement of the resource available.

Despite the evidence to show that the native timber resource has been systematically over-estimated, that sustainable yields are diminishing and the effects of climate change coupled with increasing wildfire frequency and severity will severely reduce future yields the response from Forestry Corporation has been to seek further extraction by targeting previously inaccessible steep slopes in upper catchments via cable logging, target other difficult access areas, engage in controversial post fire harvesting, increase the size of clearfells, reduce Koala feed tree retention rates, increase the size of old trees that can be logged and use LIDAR to find those small remaining patches of large, tall trees for extraction. Rather than face and deal with this unsustainable mis-management of timber resources in native forests the timber industry astonishingly has repeatedly called for access to National Park estate for logging. This attitude and type of management bears all the hallmarks of unsustainable resource exploitation that inevitably leads to resource and industry collapse as well as ecosystem degradation, simplification and extinctions. The move to make NSW state managed native forestry a 'private' corporation (despite still requiring massive injections of NSW tax payer funds) and embracing industrial logging technologies and practices together with severe over estimations of available timber resources has led to a dwindling 'resource' and the sustainability of operations into the future under this current model is impossible. Successive NSW Governments over the decades have failed to invest properly in successful plantations of both native hardwood and exotic softwood species located in ecologically appropriate locations that do not increase severe fire risk for communities. Such plantations, planned, undertaken and managed well could be sustainable and offer a truly sustainable alternative to logging NSW's public and private native forests as well as being economically stimulatory for regional economies.

In terms of ecological sustainability native forest logging fails. It reduces biomass and carbon storage and removing mature trees takes away valuable food sources and hollow bearing trees. Reduced time between logging rotations and clearfelling together with increased fire severity and losses of large hollow bearing trees to storm and wind throw post logging has meant that there is a critical lack of recruitment occurring of hollow bearing trees necessary for a suite of threatened fauna (Lindenmayer et al 2012). This loss and lack of recruitment of hollow bearing trees is recognised in the NSW Scientific Committees Determinations for a raft of species and loss of Hollow-bearing Trees is listed as a Key Threatening Process by the NSW Government. 174 species in NSW rely on hollows for dens and nests, logging reduces the number of hollows that will be created in native forests. There is general widespread agreement amongst Scientists that we are now living either within or on the cusp of the 6th Great Extinction event (Bradshaw et al, 2021; IPBES, 2019; Cowie et al, 2022). The Anthropocene extinction event can be linked to human impact on the environment (Bradshaw et al, 2021; IPBES, 2019). Australia's extinction rate is one of the worst in the world (Woinarski et al. 2015), and the rate of biodiversity decline and loss is continuing unabated (Ward et al. 2019). It is estimated that in the 2019/2020 Black Summer Wildfires 3 billion native animals were killed or displaced (WWF 2020). In another demonstration of NSW Forestry Corporations lack of ecological sustainability, it engaged in post fire 'salvage logging' and logging so soon after these fires in both burnt areas and in unburnt refugia important for recovering wildlife. This activity by Forestry Corporation is likely to have been a major causal factor in local extinctions and severe population declines for a suite of native fauna. Native forest logging has a profoundly negative effect on many species, one of these is the Endangered Greater Glider. Multiple studies have shown that the Endangered Greater Glider is highly sensitive to logging (DPE 2022. Final Determination to list *Petauroides volans* (Southern Greater Glider) as an Endangered species. NSW Threatened Species Scientific Committee). There are multiple impacts including loss of hollow bearing trees during logging, lack of recruitment of hollow bearing trees in subsequent years and post logging hollow bearing tree collapse due to increased exposure. Critically for Greater Gliders logging alters the microclimate in forests; logged and regenerating

forest have a less stable temperature and can be 5 degrees hotter with higher temperatures also occurring into the night. Greater Gliders are sensitive to fire, disturbance, fragmentation and amplified predation all of which are associated with logging. Recovery of Greater Glider subpopulations following logging is slow leaving such populations at even greater risk of local extinction due to fire. This is just one of many species that native forest logging is driving towards extinction.

Native forest logging increases fire threat and intensity, erosion and water way pollution, and the penetration of weeds and other invasive species. Native forest logging also reduces the function and health of waterways, including streams and rivers.

Native forest logging represents a severe opportunity cost to the development of world class ecotourism business and associated service industries. This is recognised in the Frontier Economics and UNU 2021 report, 'Comparing the value of alternative uses of native forests in Southern NSW' and in the Cross et al 2023 report, Branching Out: Exploring Alternate Land Use Options for the Native Forests of NSW, that ending native forest logging now would provide the best economic and environmental outcome. Using cost-benefit analysis modelling Cross et al (2023) found that ending native forest logging in 2023,24 instead of 2039-40 (the date that the North East Regional Forestry Agreement is currently scheduled to expire), and instead utilising the land for carbon sequestration and tourism will deliver a net benefit valued at \$45 million in present-day dollars. This includes the estimated cost of providing transitional packages to the industry as it shuts down, as well as the cost of breaking wood supply agreements that extend to 2028.

It is time to permanently cease logging native forest in NSW immediately.

References

Bradshaw CJA, Ehrlich PR, Beattie A, Ceballos G, Crist E, Diamond J, Dirzo R, Ehrlich AH, Harte J, Harte ME, Pyke G, Raven PH, Ripple WJ, Saltr   F, Turnbull C, Wackernagel M and Blumstein DT (2021) Underestimating the Challenges of Avoiding a Ghastly Future. *Front. Conserv. Sci.* 1:615419. doi: 10.3389/fcosc.2020.615419

Cary, Foster and Lindenmeyer (2021) Effects of altered fire regimes on critical timber production and conservation rotations. *International Journal of Wildland Fire* 30:322-8

Cowie, R.H., Bouchet, P. and Fontaine, B. (2022), The Sixth Mass Extinction: fact, fiction or speculation?. *Biol Rev*, 97: 640-663. <https://doi.org/10.1111/brv.12816>

Cross, D, M. Ouliaris, L. Williams, C. Poulton and J. Lubberink. (2023) Branching Out: Exploring Alternate Land Use Options for the Native Forests of NSW

Department of Agriculture & Water Resources (2018), Australia's State of the Forests Report DPE 2022. Final Determination to list *Petauroides volans* (Southern Greater Glider) as an Endangered species. NSW Threatened Species Scientific Committee.

Frontier Economics and UNU. (2021) Comparing the value of alternative uses of native forests in Southern NSW. Frontier Economics and ANU, Singapore

IPBES (2019). Global Assessment Report on Biodiversity and Ecosystem Services. Paris: IPBES Secretariat.

Lindenmayer, D. B., and P. Zylstra. (2024). Identifying and managing disturbance-stimulated flammability in woody ecosystems. *Biological Reviews* 99:699,714.

Lindenmayer, D. B., Blanchard, W., McBurney, L., Blair, D., Banks, S., Likens, G. E., Franklin, J. F., Laurance, W. F., Stein, J. A. R., & Gibbons, P. (2012). Interacting Factors Driving a Major Loss of Large Trees with Cavities in a Forest Ecosystem.

Cross, D, M. Ouliaris, L. Williams, C. Poulton and J. Lubberink. (2023) Branching Out: Exploring Alternate Land Use Options for the Native Forests of NSW

Ward MS, Simmonds JS, Reside AE, Watson JEM, Rhodes JR, Possingham HP, Trezise J, Fletcher R, Taylor M (2019). Lots of loss with little scrutiny: The attrition of habitat critical for threatened species in Australia. *Conservation Science and Practice* 2019; 1:e117

Woinarski JCZ, Burbridge AA, Harrison PL (2015). Ongoing unravelling of a continental fauna: Decline and extinction of Australian mammals since European settlement. *Proceedings of the National Academy of Sciences of the United State of America* 112(15), 4531-4540.

World Wide Fund for Nature Australia, (2020). Australia's 2019-2020 Bushfires: The Wildlife Toll (Interim Report, 1 June 2020).

Topic 2. Environmental and cultural values of forests, including threatened species and Aboriginal cultural heritage values

Healthy and unlogged forests are critical to the whole environment and both First Nations and non-First Nations culture and identity. Forests, particularly healthy, mature forests, generate rainfall, cool the landscape and clean the air. 150 threatened species in NSW are directly impacted by logging native forests. Mature and unlogged native forests are critical for pollinators and play a key role in pollination across the landscape, both inside and outside of forests. Native forests provide recreation and improved health outcomes to locals and visitors alike and are a source of community pride and connection to place. Native forests in NSW hold significant cultural and spiritual value for First Nations people. First Nations people and communities have ongoing connection to native forests and forest landscapes are an integral part of cultural practice and knowledge. There are 269 nationally listed threatened species in NSW and the landscape scale significance of native forests means that native forest logging compromises many ecosystems and habitats throughout NSW

Topic 3. Demand for timber products, particularly as relates to NSW housing, construction, mining, transport and retail

Logging in native forests accounted for only 9% of the total log production in Australia in the year 2023. Native forest logging contributes only 2.4 million of the total 25 million cubic metres for that year. Half of the logs taken from native forests in 2023 were turned into woodchip and exported. Hardwood logs taken from plantations made up 8.5 million cubic metres, and just 8% of these logs were saw and veneer logs. 87% of hardwood plantation logs were exported as wood chips. Hardwood sourced from native forests are no longer necessary for any of the uses identified in this section. Sawn and treated softwood logs and composite timber products made from softwoods can substitute for all current uses for native forest and even plantation hardwoods. The market and demand for native forests is declining rapidly, the recent example of Essential Energy moving away from power poles harvested from native forests is just one example.

Topic 4. The future of softwood and hardwood plantations and the continuation of Private Native Forestry in helping meet timber supply needs

Plantations already provide 91% of Australia's log production. A higher proportion of harvested logs from plantations should be prioritised as saw and veneer logs, rather than exporting them as wood chips. Subsidising the logging of public native forests by the Forestry Corporation is non-competitive and distorts the market away from the more profitable softwood plantation industry. High-end and luxury native hardwood products should only be selectively harvested on private land and under strict conditions whilst a hardwood plantation industry is built and sited upon degraded farmlands (not within existing native forest). Critically the location, planning and set up of plantations must be done so that they do not exacerbate the catastrophic fire risk present in

the context of a changing climate. We must ensure that in Australia we do not develop the type of industrial tree plantations that caused the deaths of 66 people in Portugal in the 2017 mega fires.

Topic 5. The role of State Forests in maximising the delivery of a range of environmental, economic and social outcomes and options for diverse management, including Aboriginal forest management models

Native forests that are not logged have real and tangible benefits to the entire ecology and economy of NSW. Native state forests cover an area of 2 million hectares in NSW and impact on a diverse set of living conditions for many towns, from water quality in reservoirs, to greater tourism industry opportunities, and carbon storage and abatement. The native forest hardwood division of the Forestry Corporation operates at a loss that runs into tens of millions of dollars, at the expense of the NSW public. It also additionally receives tens of millions of dollars in regular equity injections. Forestry Corporation is also a recidivist offender in the NSW Land and Environment Court with hundreds of thousands dollars of fines accrued all paid for ultimately by the NSW ratepayer. The Land and Environment Court recently agreed that Forestry Corporation is a serial offender, that there was a high likelihood of re-offending and that it does not have a good prospect for rehabilitation

(<https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD-1820781676-96355>). Forestry Corporation needs to be dissolved, they should have no further role in managing public native forests or any plantations. The people of NSW should not be paying millions of dollars to destroy the biodiversity of our own state and critical habitat for threatened species. Public native forests have a much higher economic value when they are allowed to function naturally and without the repeated disturbance from logging. First Nations Ranger Programs have been hugely successful at managing the recovery and health of native forests. Programs like the Githabul Rangers have shown how First Nations knowledge and management can restore the natural and critical function of forests in the landscape

Topic 6. Opportunities to realise carbon and biodiversity benefits and support carbon and biodiversity markets, and mitigate and adapt to climate change risks, including the greenhouse gas emission impacts of different uses of forests and assessment of climate change risks to forests

Native forest logging in NSW is estimated to release 3.6 million tonnes of carbon every year. Ending native forest logging would be the equivalent to removing 840 thousand cars from the roads per year. Logging in a native forest reduces the amount of stored carbon by more than half of the original value. Ending native forest logging will allow previously logged forests to regain lost carbon and make a significant contribution to meeting our emissions targets. Climate change is driving increased risks for forest health and continued logging in native forests is exacerbating that risk. Forests that have not been logged are more resilient to the changing climate and catastrophic fires that are occurring as a consequence.

Submission to the Independent Forestry Panel

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I am a Consulting Ecologist (29 years experience), specialising in Vegetation Ecology and Restoration Ecology with extensive field experience across NSW particularly within Forest ecosystems. I am also a Rural Fire Service member and Bushfire Management Committee member for the NSW Nature Conservation Council.