Independent Forestry Panel

Public submission

ANDREW HURFORD Submission ID: 204891

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1. Sustainability of current and future forestry operations in NSW

Hurfords is a fourth-generation family-owned business working in the native hardwood sector in NSW since 1932.

Hurfords employ more than 300 people directly, as well as harvest and haulage contractors and related service providers (at least another 150 people). The majority of positions in our business are full time permanent, with many staff having long term careers with the company over many decades and in some cases multi generations of the same family working in our business. Hurfords are vertically integrated from forest ownership and management through value added manufacturing with our own wholesale marketing and distribution outlets. We operate 18 sites which include five sawmills, three drymills, and ten wholesale distribution centres in Australia, New Zealand, Europe and the USA. The sawlog input to our mills is 55% from Forestry Corporation under Long Term Wood Supply Agreements and 45% from Private Native Forests.

Sustainability is at the core of what we do. We have managed our own PNF property since 1950. That forest was purchased from sawmillers and has been managed and harvested for timber for more than 100 years. Since our family purchased it, some three quarters of a century ago, timber has been harvested by my grandfather, my father, myself, and now my adult children. It continues to produce high quality durable hardwood timber today, while also providing habitat for a diverse range of native species. As long as it is carefully managed, it will continue to supply timber to my children's children and on and on in perpetuity.

A well-managed native forest is amongst the most sustainable and benign production systems on the planet, as it doesn't require clearing of the original vegetation and the imposition of a whole new specie on the landscape as with most farming and plantation systems. Instead, we are able to manage the forest to produce a quality product with minimal disturbance to the forest at the landscape level. Timber is harvested in relatively small mosaic areas and then regrown, while also retaining key hollow bearing habitat trees and young growing trees for the future. As the forest regenerates and regrows the patchwork of different age classes in the overall landscape provide habitat for the widest variety of plants and animals. Our access tracks double as fire trails which assist with conducting controlled burns, which are important for forest health and mitigation of wildfire risk.

In the public estate, State Forests have managed forests for more than 100 years, and have plans and sustainable supply models that look forward for the next 100 years, what other industry plans and thinks on these time scales?

The technology and expertise now employed by Forestry Corporation to ensure that a high level of environmental compliance can be achieved with their forest monitoring and harvesting should provide confidence to the community that the greatest effort and diligence is used in the production of timber in NSW.

Both public and private production forests in NSW are highly regulated with an aim to balance environmental and economic benefits.

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

Forests hold significant environmental, cultural, social and economic values.
In NSW 88% of State-owned forests are protected in National Parks and reserves with 12% available for sustainable timber supply. (NSW Government. (n.d.) NSW forest extent interactive reports. Retrieved from DPI) In any given year only 0.2% of these forests are subject to selective timber harvesting (Forestry Corporation. (2023) Sustainability reports). This is done under a stringent ruleset which has been developed to protect the most significant environmental and cultural values, including protecting threatened species and indigenous and other cultural heritage sites.

A report retrieved from NSW Dept of Climate Change, Energy, the Environment and Water (2021) titled NSW Forest Canopy Disturbance identified that over a ten-year period from 2011- 2020, showed that of the 20 million hectares of NSW Native Forests, canopy disturbance detected from timber harvesting was just 0.4%. All of this is regrown and harvested cyclically. It is illogical to imagine that this relatively small level of activity could lead to the extinction of any species, or that ending this harvesting would save any species. Old growth forests, rainforests, habitat trees and giant trees are all protected under current harvesting regulations, so why all the angst?

The community is rightly concerned to protect our iconic and threatened native species, but how solid is the data much of this concern is based upon?

The koala is just one such species where a high level of concern has been created.
In response to these growing concerns about koala populations, NSW DPI Forest Science commenced a novel method of monitoring for this cryptic species in 2015.

In 2018 the Australian Koala Foundation estimated that the koala population in NSW was 11,000-15,000 animals and alarmingly in 2021 announced that the population had fallen further to just 6,000-9,600 individuals, with many ENGOs projecting their ultimate extinction by 2050, clearly an alarming situation!

Bringing experience from successful monitoring of bats using acoustic monitoring, the team headed up by Dr Brad Law have been able to conduct the largest study of koala populations over the widest possible footprint. After seven years of data collection and analysis across 224 sites over 8.5 million hectares they concluded that koala populations in the hinterland forests of NSW are persisting and stable in areas of both reserved and timber producing forests and that there is no statistical difference in occupation levels between the two tenures.

Further to the NSW DPI research, the Federal Government provided funding to CSIRO to create the National Koala Monitoring Programme (NKMP). The latest national population estimate from the NKMP is 224,000-524,000 koalas. This compares to the AKF's opinion in 2021 that the national population was 32,065 – 57,920. As more study is done and data provided these doomsday estimates by ENGOs are starting to look ridiculous.

What about built and timber heritage?

The hardwood industry itself plays a significant role in supplying timber to repair, restore and build heritage buildings and infrastructure.
Among many iconic projects, Hurfords proudly supplied the spotted gum flooring to the restoration of the UNESCO World Heritage listed Royal Exhibition Centre in Melbourne (Built 1879-1880). Our beautiful, durable, NSW hardwood timber floors adorn galleries, museums, theatres, and parliaments across Australia. These iconic cultural institutions specify North Coast NSW hardwoods for their natural beauty, strength, hardness, and longevity. They will continue to perform in these highly demanding environments for generations to come. Surely there is a cultural heritage value in our own beautiful, sustainable Australian timber products?

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

The long-term trend for timber products of all types and grades remains strong and is predicted to grow into the future. Population growth in Australia continues to drive demand for housing and infrastructure. As architects, designers and builders come to realise the many strengths of using timber in their projects this demand will only continue to grow.

According to the Food and Agriculture Organisation of the United Nations (FAO) which published *The State of the World's Forests 2024* – global demand for timber is expected to rise by 49% from 2020 levels by 2050. In Australia, with significant population growth projected over the same period, market demand for timber is likely to be far greater than the global average.

Australia is already short of domestic supply of both softwood and hardwood. Any moves to further constrain the availability of either will further add to levels of importation from other countries to meet demand or worse, substitution with higher cost, higher CO2 emitting products such as steel, plastic, fibreglass or aluminium, so hardly a win for the environment.

There are important differences in the physical attributes of hardwood and softwood, which mean that the two are rarely interchangeable. Softwoods are typically used in the structural components of housing. Hardwoods are used in a myriad of uses where either beauty, strength, hardness, or natural durability are required.

The machinery and process to produce timber from the two is also quite different. Softwood is most often processed through large, highly automated production facilities made possible by the nature of the material, and required for the scale and efficiency to be globally competitive in the production of this important commodity product. Large resource estates within a supply hub, with supply upwards of 1-2 million tonnes per annum are required to support the value chain of manufacturing to make the whole process efficient and economically viable. (Whittle and Downham 2019 - Upscaling the Australian Softwood Industry).

The North Coast NSW pine estate has a sustainable annual production of only 90-100,000 tonnes of sawlog and 20,000 tonnes of pulp log (Forestry Corporation Grafton Management Area Timber Sale 2023). As such it is inadequate to support a globally competitive processing facility and consequently no local processing facility has been built following the destruction of the Rappville Tarmac pine mill in the wildfire of 2019. Those logs are now being transported north to major softwood processing facilities in SE Queensland as a top up volume only.

The opportunity on the North Coast would be to convert as many hectares as possible of the softwood estate to durable North Coast hardwoods. This would see the downstream value adding jobs created here in NSW. It would also reduce freight costs and keep the resource local for all the bioeconomy opportunities this could present. It would support existing local processing facilities to expand and provide new opportunities.

Due to the nature of the resource, and the specialised products derived from it, the hardwood industry operates at much smaller scales. On the North Coast there are at least 50 hardwood processors, many of whom specialise in a particular quality of resource and specie range to manufacture a range of products for a defined use and customer base.
Examples are –
Sawmills (such as Hurfords) which produce boards for kiln drying and further processing to produce flooring, decking, cladding and joinery.
There are those who focus on sawing high durability timbers for architectural specifications (hardwood has a high natural Bushfire Attack Level rating, BAL29). This is important when building in bushfire prone areas.
Others focus on fencing and landscaping typically from lower quality resource, again natural durability is important, yes you can use treated pine for fencing, but it is not as strong and many don't like the high level of chemicals required in the treatment, along with end-of-life disposal issues (not to mention fire resilience).
Others utilise roundwood to produce rural fencing, again strength and natural durability is important.
Some mills exclusively produce timber for pallets, what a waste you might say, but these are sawn from the lowest quality resource recovered either from the branchy top of a tree of from thinning younger forests to allow the best to grow larger. Hardwood pallets are preferred by the logistics industry as they have a lifespan of ten years, they are used over and over again in that service life, around five times the life of a pine pallet, in fact most pine pallets are single use only.
There are processors who specialise in girders and piers for our wharfs and bridges.
Pole producers focused on treating poles for infrastructure such as the delivery of electricity to our homes.
Plywood producers making high strength high durability engineered timber products along with decorative plywood for homes and commercial fit-outs.
And even the humble woodchip, produced from the lowest quality grade of log, unsuitable for any other use, is being manufactured into a naturally durable high quality exterior wall cladding known as Weathertex.
As you can see, we are a diverse and specialised industry.
Due to the specialised nature of the material and products produced, hardwood supports a much larger workforce per cubic metre of log volume than softwood.

Softwood (pine) kiln dried timber framing typically wholesales between $400 to $500- per cubic metre, green sawn durable hardwood $1,500 to $2,200, kiln dried North Coast NSW Tongue and Groove hardwood flooring is around $3,000-. As you can see the value points and the value the market places on the two are quite different, and as discussed the cost of production and labour intensity and end use, are also worlds apart.

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

Hurfords own and manage 5,000 hectares of forested land incorporating both hardwood plantations and private native forests. These supplement our supply from State Forests and third-party private farm forests. We have managed our own native regrowth forests for timber production since 1950 and commenced our hardwood plantation programme in 2004. This year we celebrate one million seedlings planted over the last twenty years. These plantations are just beginning to provide small trial volumes of resource to our business, but in the next ten years will begin to compliment our existing supplies and assist us in meeting the growing demand for our products.

Australia should rightly be proud of our substantial plantation timber programmes. The major ones being the radiata pine, southern pine, hoop pine and blue gum plantation estates. These major plantation species were developed over long periods (50 years plus) backed by Federal and State governments with the necessary R&D, tree breeding, genetic selection, silvicultural trials, and wood technology research. It is only in recent times that many of these major estates have been sold from public ownership and now managed by investment companies. Without the long-term commitment and financial support of government it is unlikely that any of these estates would exist.

NSW State Forests is the largest grower of durable hardwood plantations in Australia. Their plantation forests make up around 15% of their sustainable hardwood timber output in the near term and a greater percentage in the future as younger plantations mature. The most common hardwood species grown by NSW State Forests are Blackbutt, Spotted Gum, Dunns White Gum, Flooded Gum, and Sydney Blue Gum. Of these the Blackbutt and Spotted Gum have the highest value, being durable, strong, and stable timbers. Quality solid wood products are able to be produced from these. The other three would not be considered by the industry or it's customers to have these qualities, the worst of these being the Dunns White Gum (E. Dunneii). As a timber product it is unstable, prone to cell collapse when drying, and even after drying continues to have a high movement response (shrinking and swelling) to any changes in environmental moisture levels. As such it is unsuitable for the sort of high-quality wood products which the North Coast industry produces. It is very suitable as pulp for paper manufacture, but as we are a long way from a port and have no paper manufacturing industry, it has little value. It has been grown due to its frost tolerance and ability to withstand heavy soils and wet feet. Much of it has been cleared by private forest owners and reverted to pasture. There would be a great benefit in further trials and research to investigate the suitability of other durable species for establishment in these zones which make up a large percentage of plantable land.

Native forests in general supply a much wider range of species than plantations and are generally accepted as producing a higher quality timber due to the way native forest regenerate, which is hard to emulate in plantations.

Hurfords belong to a small but passionate group known as the Durable Hardwood Growers Group. We are a collection of medium sized growers from across Australia and New Zealand who have been planting and growing durable hardwoods in plantations for over twenty years.

We have come together to share our knowledge and experience, so that we can learn from and assist each other to fill knowledge gaps and solve problems.
Growing durable hardwoods has challenges which require specialist knowledge which differs significantly from most of the large industrial scale plantations. Australia, being the home of the Eucalypts, means that we are also the home of all the pathogens and insects which predate upon Eucalypts. These are usually present at background levels in native forests where you have mixed species and ages of trees. However, when a plantation is established, you have many hectares of trees planted at one time with fresh leaf growth which is like a banquet for leaf chewing and sap sucking insects. These can defoliate the trees, and in some circumstances lead to tree mortality and the complete failure of the plantation. They certainly interfere with future form, health and timber quality of the trees. Eucalypts are specialised at the micro site level, this makes matching species to soil type, moisture profile and topography critical. Growers use a number of strategies to mitigate against these challenges. There remains however much work and research to do to improve plantation health and productivity. There has been no significant tree breeding or research to improve seedling genetics and plantation productivity in durable eucalypts for more than 15 years. Any policy to increase hardwood plantation establishment in NSW needs to be supported by a long-term significant R&D and tree breeding programme.

NSW DPI Plantation division is under resourced. There are barely enough staff to perform their basic regulatory functions, but no capacity or intent to provide extension services to landholders who may be interested in establishing a tree farm on their land. They do not have current data on the species and status of the existing hardwood plantation estate making it hard to project future supply volumes outside the Forestry Corporation estate. Further resourcing will be required if NSW wishes to attract the interest of industry and landholders to invest further in plantations. Another approach could be adopted which would be to hand the extension services for plantations across to LLS, who are well connected with the farming community and better resourced and staffed to do the job. Further, LLS could be tasked with the authorisation of plantations, as they do for PNF, making them a one stop shop for Farm Forestry. Regulatory and compliance functions could be maintained by DPI or a new specialist body created, such as the Forest Practices Authority in Tasmania.

At the national level, there has been a disconnect between Federal Government policy announcements and incentives to establish new forestry plantations and delivery on the ground with individual farmers and property owners. Most policies aimed at increasing plantation area have been poorly designed, resulting in poor uptake. One example of this was a long-term low interest plantation loan programme which was launched with much fanfare through the Regional Investment Corporation (RIC) under the previous government. It was not possible to successfully apply for one of these loans, as a non-negotiable requirement for receiving a loan approval was that the applicant had crop insurance for the trees (yet to be planted). At the time there was no plantation insurance available in Australia, consequently not a single loan was granted, despite there being a number of high-quality applications.

The current Federal Government has a well-intentioned grant available to assist with establishing timber plantations of up to $2,000- per hectare (Forestry Industry Support Plantation Establishment 2024–25).
To date, take up has been modest at best, with approximately 4,000 hectares established under this grant (mostly softwood) in the last 12-month period. In the same period 20,000 hectares of plantation have been cleared for conversion back to agriculture, so we are still well short of even holding the current plantation area, let alone beginning to grow it.

While $2,000- per hectare is not insignificant, the cost of establishing high quality durable hardwood plantations on the North Coast of NSW is in the region of $20,000- per hectare. Around $10,000 per hectare for the net plantable land area, and approximately $10,000- for the establishment, thinning, pruning and maintenance of the trees. In this context you can see why $2,000- has not led to a mass take up of the grant. The greater opportunity is ability to register the project for Australian Carbon Credit Units (ACCUs). At the current market rate of $36.00 per ACCU, this could represent a potential income over the first fifteen years of the plantation of $10,000- per hectare. When these two instruments are put together you would have a compelling case to invest in plantations. Unfortunately, this is where it gets more complicated! See this excerpt below from page 7 of the 29 page Support Plantation Establishment – Grant Opportunity guidelines –

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If Support Plantation Establishment Program applicants are also interested in undertaking an Australian Carbon Credit Unit scheme (ACCU scheme, formerly called the Emission Reduction Fund) project in the same project area, **applicants will need to have the project declared (approved) by the Clean Energy Regulator6 before applying to the Support Plantation Establishment Program in order to meet the ACCU scheme's newness eligibility requirements.** Assessment of new ACCU scheme project applications to the Clean Energy Regulator may take up to 90 days (or longer if additional information requirements are requested from applicants) for a project to be approved.

The above shows that if you apply for and accept the grant before having your ACCU project approved, you will be ineligible for ACCUs. This means you must apply for ACCU's, receive authorisation for that, then apply for the grant. Sounds ok, but if we think about the time frames here –

Purchase or take an option on land for your project - search, conduct due diligence, negotiate, get into contract - 3 months
Conduct detailed design of plantation including professional forester input – 3 months
Submit application for project, wait for response - 3 months
Respond to any requests from CER and further state planning requirements- 6 months
Achieve approval of project from CER (hopefully)
Wait for next funding round for SPEP to open, say - 2 months
Submit application on opening of round and wait for approval – 5 months
Await sign-off of funding deed - 3 months
Total delay to project- around 2 years (assuming all goes well)

So, two years of delay to your plantation project to weave your way through the processes required to receive the funding attached to both of these methodologies. This hardly seems like best practice if we are actually wanting to encourage timber plantation establishment in Australia. There are further impediments as well. The regulations under The Commonwealth Emissions Reduction Fund (CERF) who authorise and approve projects for the accumulation of ACCUs are so proscriptive and complex as to make it extremely challenging for the average landholder to engage directly in the process. To assist with this, you can engage a professional forest scientist with skills in this area at your own cost, or as most do, sign up with one of the so called 'carbon cowboys' - firms which specialise in wrangling these projects through and over the many hurdles created by the regulator. The cost for these services is typically 30% of the ACCUs accrued by the project. Again, this hardly seems

effective or efficient. There are no extension services by government to assist landholders to work through this, which after all assists Australia to meet its climate and net emissions goals under international treaty.

Softwood and hardwood plantations will continue to provide an important component of supply to Australia, however the total area of plantations in Australia has been shrinking for more than a decade now and this continues to this day. Factors causing this are many and varied, but largely relate to a belief by farmers that they can make a greater return from other forms of agriculture. For more information on returns from plantations in Northern NSW - (Cassidy and Palmer, 2024) Evaluation of the financial performance of existing hardwood plantations, here is the link -
North East NSW Forestry Hub | Report » Evaluation of the financial performance of existing hardwood plantations (nenswforestryhub.com.au).

Many plantations have been cleared and converted to pasture or other cropping. A lack of access to carbon markets to keep these properties under trees has caused a lost opportunity. In Australia, the only achievable method for an existing plantation to achieve ACCUs is from a method known as 'Conversion to permanent forest' this means that there will be no further production of timber (and very little management or silviculture allowed) for at least twenty-five years. This is does nothing to encourage those who have invested in plantations to produce timber, and have the skills required, to continue to do so.

It could have been so much different; we only have to look across the Tasman to New Zealand which has increased its area under plantation significantly over the past ten years, while Australia has been going backwards. NZ took a much more proactive approach by allowing existing plantations to accrue carbon credits once they signed into their programme. They provided extension officers to assist farmers to do so at modest cost. This meant that farmers could see their neighbours earning real money from carbon credits and so created a momentum where new landholders wanted to get on board. In Australia, by taking a much harder approach to additionality, by only allowing new greenfield plantations to enter the market, many existing plantation owners have elected to clear their trees and return to pasture or cropping, creating a snowballing effect of "if my neighbour is clearing an existing plantation then why would I plant a new one?".

There is also a belief, with some foundation, by landholders in Australia that trees on their land (particularly native hardwood species) represent a sovereign risk to their future ability to manage their land without interference from government agencies. So why would you deliberately plant more of them on your land? A better understanding of the harvest guarantee provided under the Plantation and Reaforestation Act and Authorisation would allay much of this concern, hence the need for extension services from DPI Plantations (or LLS). For a greater understanding of landholder attitudes to establishing and managing trees on their land see Cassidy and Palmer, 2024 Landholder survey, here is a link -
North East NSW Forestry Hub | Report » Landholder barriers and incentives to timber production (nenswforestryhub.com.au)

PNF has a capability of supplying more timber and increasing forest heath and resilience.

Local Land Services (LLS) Farm Forestry division are well resourced and staffed by knowledgeable, helpful professionals, they provide extension services and field days to help educate landholders in their legal obligations when managing their Private Native Forests (PNF) and advice on good silviculture, in fact one improvement might be to create a one stop Farm Forests service through LLS for landholders which would include PNF and plantations, and leave DPI to continue with regulation and compliance. Or, create a new specialist entity more like Tasmanian Forest Practices Authority, which is a specialist regulator for the forestry sector, rather than the EPA which should be focused on serious environmental pollution issues, not sustainable forestry.

There are currently a number of constraints limiting the potential of PNF in NSW to realise its full potential. The council-by-council Local Environment Plans (LEPs) mean that in some council areas although PNF is regulated under a State Act and Code of Practice, with a well-funded agency in LLS to provide advice and authorisation, and a regulator being the EPA, you are also required to get approval from the local council under a Development Approval (DA). In general, this is unachievable as the DA process was designed for projects or events (Constructing a building etc) They are not designed to cater for sustainable forest management and no other rural activities require one, eg sugar cane harvesting, horticulture, cropping, cattle production etc. This can change when an LEP is reviewed or a council changes, so landholders have no certainty of future regulation which severely hampers the ability to make the long-term plans and interventions you need to make with forestry growth cycles.

This could be resolved by allowing farm foresters to enter a long-term timber covenant on their land for a term of say 100 years, with mutual obligations, which would give that farmer the ability to make long term plans for the management of their forest, without interference created by the whim of different local councils.

We certainly need more plantations in Australia to meet demands of our growing population, coupled with continuing political decisions over the past twenty five years to convert productive regrowth forests into reserves, causing further supply constraints.
The question needs to be asked, if large modern western economies such as the USA, Canada, France, Sweden, etc can produce more than enough timber for their own domestic requirements and still have enough volume left to export timber to other markets, why can't Australia? We are after all, the sixth most forested nation on earth, with a large land mass and relatively small population.

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.**

State Forests have played and will continue to play an important role in delivering on triple bottom line outcomes. Unfortunately, State Forests ability to effectively employ adaptive management across their estate has become increasingly hampered by the proscriptive conditions of the IFOA on the one hand and the need to produce timber to meet contracted volumes of particular species and sizes on the other. We have qualified forest scientists reduced to managing contracts while trying to work through a maze of ever-increasing complexity mandated by the NSW EPA, whose attitude seems to be that less forestry is good forestry.

This outsized focus on sustainable timber harvesting is hard to justify when we know that the greatest threat to our NSW forests and the biodiversity contained therein comes from drought and wildfire, with forest canopy disturbance from forestry barely detectable at the landscape level. (Hislop, Haywood, Alaibakhsh, Nguyen, Soto-Berelov, Jones, Christine 2021; A reference data framework for the application of satellite time series to monitor forest disturbance).

To accomplish their full potential State Forests need to be allowed to apply best practice silviculture to actively manage forests for greater resilience to climate change and associated wildfire. This should include, but not be limited to, much greater use of low intensity burning, and forest thinning, to maintain forest health and reduce bushfire risks. There should be a much greater focus on creating more fire and drought resilient forested landscapes.

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**

Looking ahead, it is becoming increasingly evident that the shift towards a climate-neutral economy will have to encompass all aspects of sustainability - environmental, social and economic. This is where sustainable wood products come in. Wood based products can provide renewable alternatives to fossil based and carbon intensive materials. By sourcing raw materials from sustainably managed forests and processing them in a resource efficient way that minimises waste and enhances circularity, wood can become even more important as a building block of a circular bioeconomy that brings even more jobs to regional and rural areas.

Wood and timber products offer both traditional and innovative solutions to our increasing demand for cost effective, climate friendly construction methods.
"Wood's unique cellular structure makes it ten times more insulating than concrete, 400 times more than Steel and 1700 times more than Aluminium" (Commonwealth of Australia 2008, Your Home Technical Manual. Australia's guide to environmentally sustainable homes).

Carbon markets offer a great opportunity to increase our managed forest estate. One of the challenges of plantation investment is the long lead times to a return without positive cashflow. The registration of a plantation for Australian Carbon Credit Units (ACCUs) provides an opportunity for tree plantings to offset other activities by an owner/investor or to monetise by selling the ACCUs to assist with funding the cost of establishment and provide an important early cash flow. Emerging interest in biodiversity markets could also provide a premium on the value of ACCUs for carefully designed plantations and well managed productive native forests.

Thank you for considering our submission, while we have presented some of the many challenges we face, we remain positive and passionate about our industry, our people, the products we produce, and the forests we manage.

We love both the timber and the trees and see this as such a worthwhile, if at times poorly understood, industry.

This is an important process, as the wise management of our forests for all the benefits they can provide, is critical to the future of both our biodiversity and our society.

"The best friend of man on earth is the tree. When we use the tree respectfully and economically, we have one of the greatest resources of the earth"

-Frank Lloyd Wright

2024 NSW Hardwood Forestry

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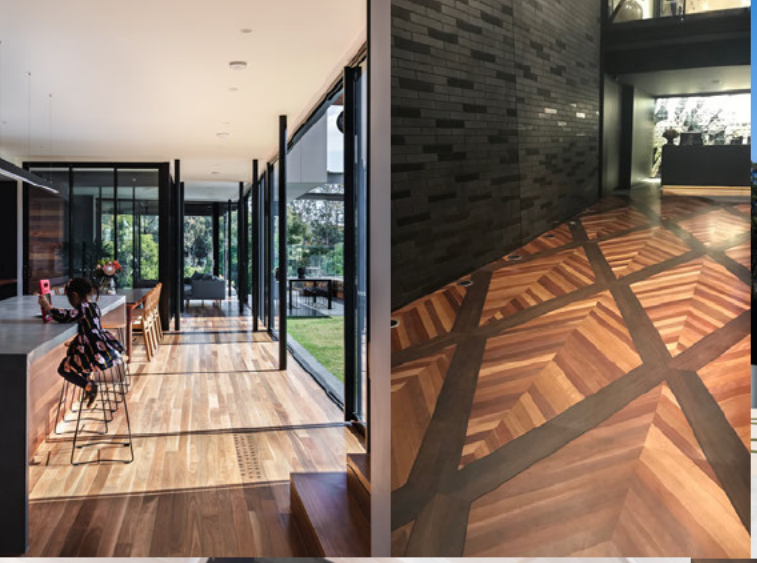
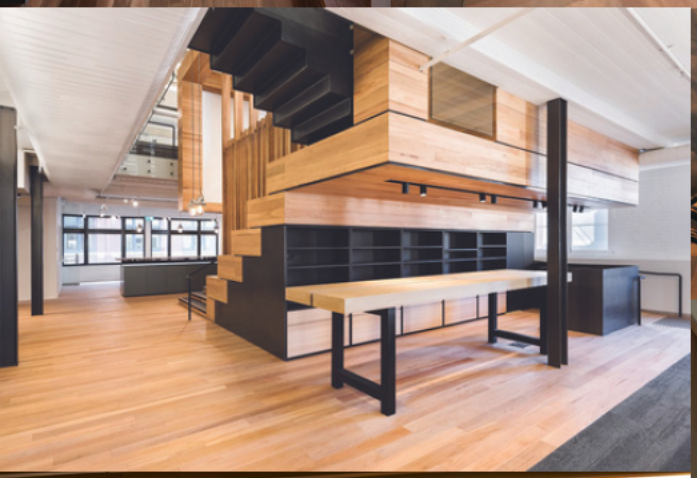











1.0 NSW Hardwood Industry Overview

The native hardwood industry is a significant contributor to the State's economy generating $2.9 billion p.a. in revenue and employing 8,900 people [1]. 88% of NSW public native forests are protected in National Parks and reserves with 12% available for sustainable timber supply [2]. In any given year only 0.2% of these forests are subject to selective timber harvesting [3]. Harvested forests are always regrown so the forest area remains constant.

The North Coast region is a major hub for hardwood timber production with around 850,000 tonnes of hardwood timber produced each year from State Forests and private land [4]. The industry produces a wide range of products including infrastructure such as power poles, bridges, wharfs and walkways and housing such as flooring, cladding and decking. Lower grades of timber are recovered for pallets and packaging which are critical for logistics. All of these items are essential for various sectors and contribute to the quality of life and cost of living for NSW residents.

Despite its economic importance, the NSW hardwood industry faces several challenges including the establishment of the Great Koala National Park and recent forestry shutdowns due to changes by the EPA to control measures surrounding the southern greater glider. These new measures were implemented with no notice & based on no known science.

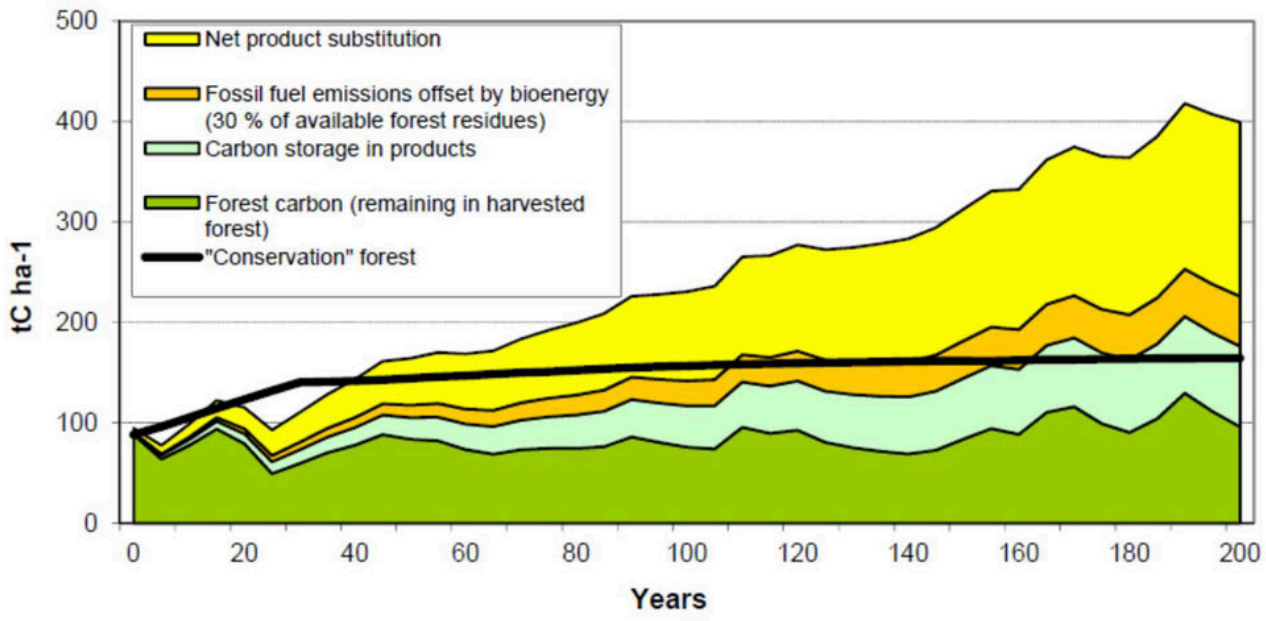
Further restrictions or closure of our sustainable industry will result in negative impacts for the NSW economy along with perverse environmental outcomes with imports from poorer managed nations & substitution with higher carbon emitting products such as concrete, steel and plastic. While we are locking up working hardwood forests, other first world economies such as Europe & North America continue to manage their forestry and legislate for greater use of carbon friendly timber in their built environment.

NSW State forest following completion of selective harvesting - Note retained Habitat and young trees to grow on for the future

2.0 Timber Production Increases Carbon Sequestration

In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit [23].

Fig 1: Greenhouse Gas (GHG) implications of the "Conservation" and "Production" scenarios (tC ha-1 sequestered or displayed) for NC forests modelled over a 200 year period [5]



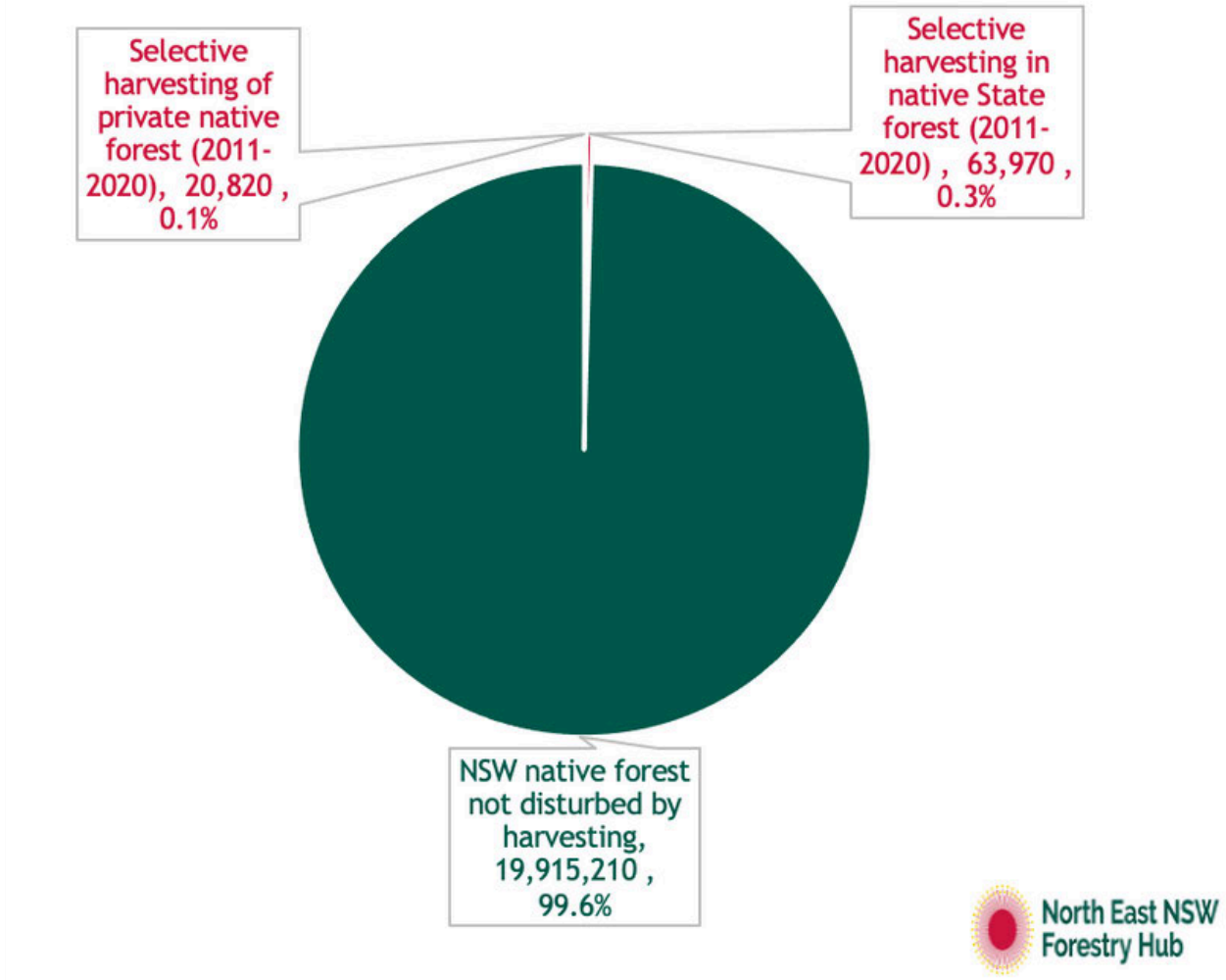
This study was the first to include effects of product substitution and bioenergy offsets for native forestry in Australia, representing more closely what the atmosphere "sees" in relation to emissions.

3.0 NSW Forest Canopy Disturbance

3.1 Harvesting Native Forest

Over a 10 year period, canopy disturbance to the 20 million hectares of NSW Native Forest from timber harvesting was 0.4% - all of which is regrown and harvested cyclically. It is illogical to imagine that this relatively small level of activity could lead to the extinction of any specie or that ending this harvesting would save any species.

Fig 2: NSW forest canopy disturbance attributable to native timber harvesting Ten years 2011-2020 (hectares & percentage) [6]



3.2 Increasing Forest Canopy Cover Since 1995

Forest canopy cover extent showed a gradually increasing trend across NSW since 1995. By 2018, forest canopy cover extent in the Regional Forest Agreement regions had increased by around 5 percent compared with 1995 figures (from 8.6 million hectares to 9.1 million hectares – an increase of around 518,580 hectares) [7]. Most increases were on private land, where forest canopy cover increased by around 12 percent or 441,480 hectares [7]. This is attributed to a thickening of cover in private tenures adjacent to public forest estates, or preservation of existing cover that is regenerating and thickening over time. Forest canopy cover extent on national parks and state forests during this time remained largely stable.

Fig 3: Change in forest canopy cover extent by tenure in the Regional Forest Agreement area (1998-2020) [8]

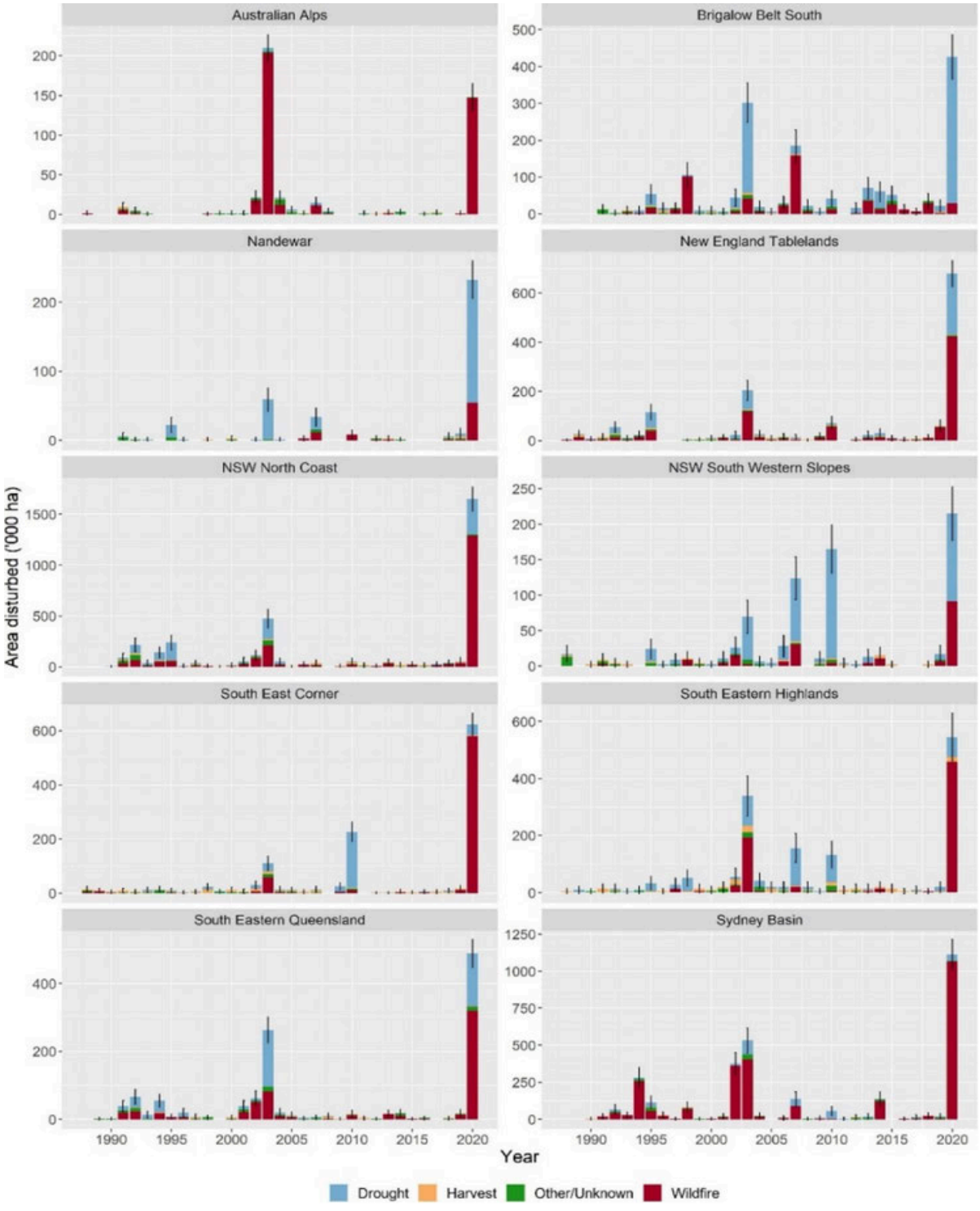
The reduction in forest canopy cover recorded in 2020 was completely attributable to the drought in 2019 and the resultant wildfire in late 2019 and early 2020 known as the Black Summer Fire event. It is notable that National Parks & Wildlife Service (NPWS) was the worst performing tenure during the fires with private native forestry being the best performer. This reflects a higher level of forest management and fire risk in the private sector. Much of the state forest's fire damage occurred in their pine plantation estate which is particularly susceptible to fire and has since been replanted.

According to the UN Food and Agricultural Organisation's (FAO) State of the World's Forests 2024 report, Australia has the second-highest rate of forest area increase in the world from 2010 to 2020, with an annual addition of 446,000 hectares of forest cover [22].

3.3 Major Forest Disturbances 1990-2020

As demonstrated in the graphs below, drought & wildfire are the two major forest disturbances with sustainable timber harvesting barely detectable at a landscape level.

Fig 4: Area of forest disturbed each year, by bioregion & disturbance agent (1990-2020) [9]



4.0 Is The National Park Model Working?

The doubling in area of National Parks over the past 30 years, has done nothing to slow the growth of listed threatened species over the same period.
Why would we continue on the same failed path?

Fig 5: Change in the Number of Listed Threatened Species [10]

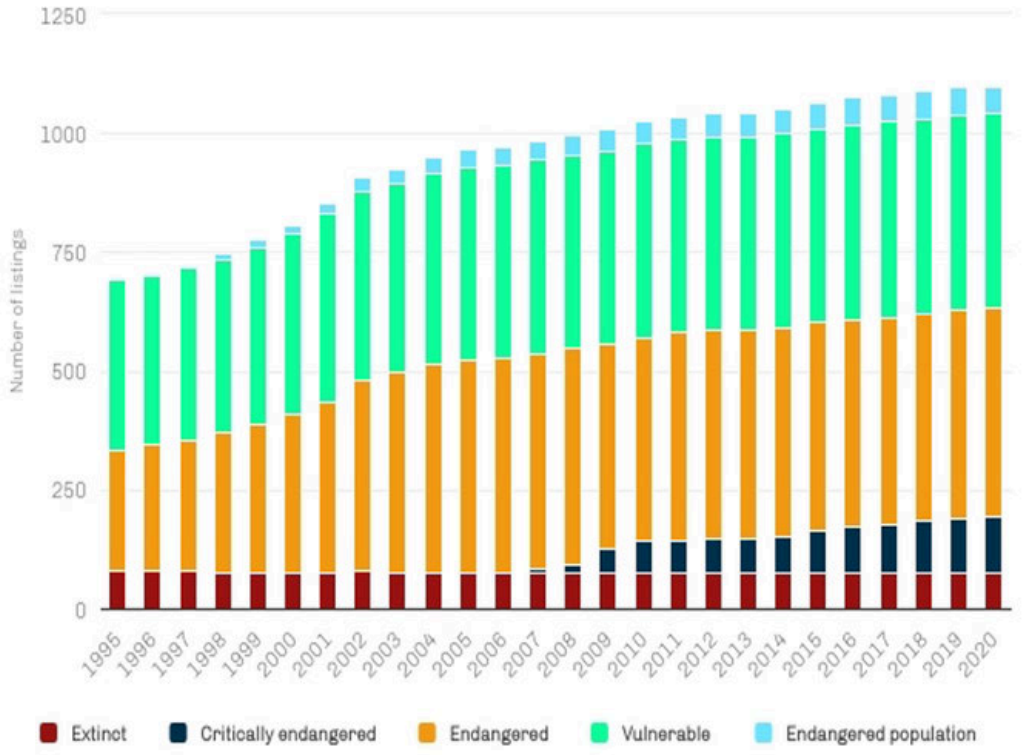
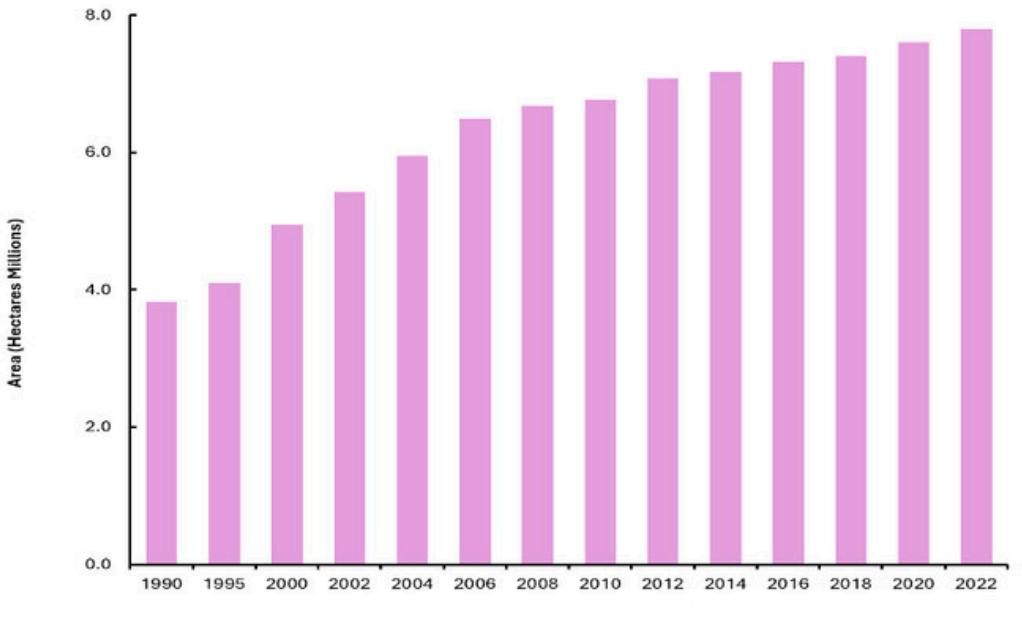


Fig 6: Change in the Size of NSW National Parks and Reserves [11]



5.0 Active Management Reduces Fire Risk

Managed Farm Forest in North East NSW

In 2019, the wildfire spread from the unmanaged National Park into the managed farm forest.

NATIONAL PARK

An overcrowded National Park (left) overhanging the fence line and firebreak.

Due to its intensity and height, the fire breached the fire break and spread into the farm forest.

FARM FOREST

Farm forests are multi use forests, managed for timber, beef production and provide a habitat for native plants and animals. The use of cattle, chemical and mechanical means as well as mosaic burning slowed the raging fire to a manageable low flame.

The fire was stopped in the farm forest by private forestry employees working through the night.

Active forest management allows for protecting assets and provides a safe zone for wildlife escaping unmanaged public land. A peer reviewed World Wildlife Fund study [12] found the 2019 fires devastated local forests and wildlife. The NSW Natural Resources Commission uncovered that Private Forestry, who actively manage the land, lost the least amount of canopy cover (6%) between 2018-2020 compared to National Parks (19% canopy cover loss) [8]. During the 2019 wildfires, Koala survival was five times more likely in areas where forest canopies were unburnt/partially burnt, compared to fully burnt canopies [12]. For the future prosperity of Australia's flora and fauna, it is clear actively managed forests are the answer.

6.0 Koala Population

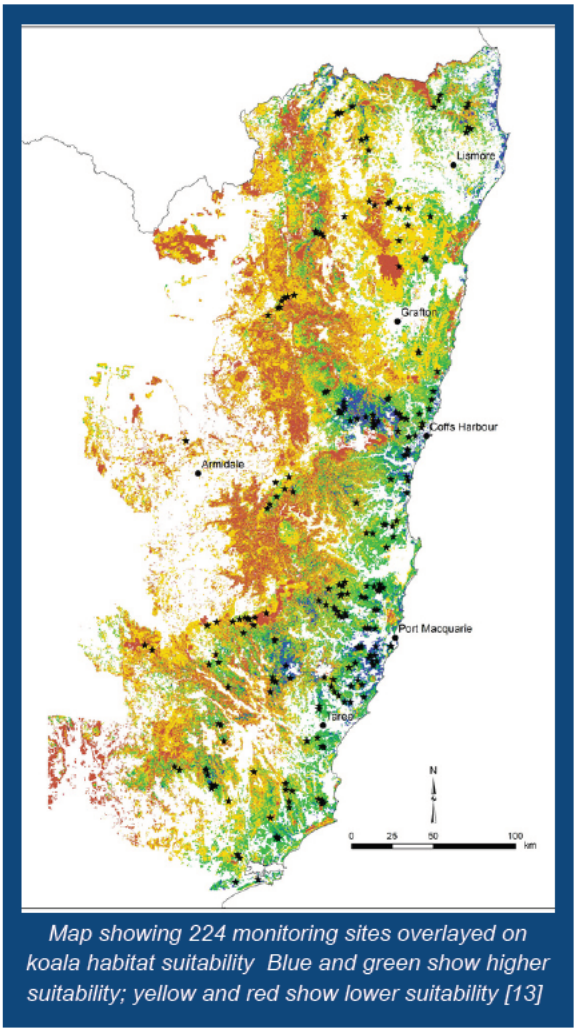
6.1 North Coast

Largest study to-date shows Koala population is stable & thriving in North Coast forests!

7 YEARS

In an extensive seven-year study using passive acoustic monitoring devices, researchers have demonstrated that NSW koala populations are stable and thriving, **even in areas with regulated timber harvesting** [13].

The study, covering **over 224 sites and 8.5 million hectares**, found both private and state owned native forests see high koala occupancy rates irrespective of forestry activities [13].



Map showing 224 monitoring sites overlayed on koala habitat suitability Blue and green show higher suitability; yellow and red show lower suitability [13]

The study highlights the effectiveness of sustainable forest management in supporting wildlife conservation, **current harvesting regulations are working to protect our iconic koalas.**

6.2 North Australia

Population Estimate:

2022 **92,184**

The combined koala populations of QLD, NSW, and the ACT (North Australia population) was up-listed to 'Endangered' under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) [14]. Population estimates were derived from Adams-Hosking et al. (2016) with a percent decline based on expert-elicitation values.

Population Estimate:

2023 **117,050 - 244,440**

The $10 million CSIRO National Koala Monitoring Program (NKMP) provided a "preliminary national baseline population estimate for koalas". The estimate of koalas in the North Australia population was updated to 1.2-2.65 times greater than the 2022 estimate [15].
The NKMP figure was based on the best available historic datasets to generate new estimates, collating koala presence, absence and abundance data from a wide range of sources (individuals, research organisations, community groups, local governments, and state governments) [15].

Population Estimate:

2024 **95,000 - 238,000**

The NKMP provided the first estimate of koala population based solely on data, and not expert opinion about distribution and abundance [15]. The population change from 2023 to 2024 is due to methodology changes, not a reflection of koala mortality. Figures are expected to both rise and become more precise with the recent increases in koala surveys and the use of improved search methods such as drones, heat sensing, acoustic tools and sniffer dogs.

Table 1. The variation in koala population estimates over the last 10 years

(Adapted from CSIRO NKMP, 2024)

Year	2014	2016	2018	2020	2021	2022	2023	2024
Source	IUCN (a) (Opinion)	Adams-Hosking (b) (Opinion)	AKF (c) (Opinion)	NSW Gov (d) (Opinion)	AKF (Opinion)	Federal CA (e) (Opinion)	NKMP (f) (Opinion + Data)	NKMP (Data)
Australia	300,000 (100k-500k)		45,745-82,170		32,065-57,920			224,000-524,000
Northern Population		115,614				92,184	117,050-244,440	95,000-238,000
NSW			11,010-15,520	20,000 (15k-30k)	6,040-9,605			
QLD + NSW			21,100-34,670		12, 495-21, 690			

(a) International Union for Conservation [16]
(b) Adams-Hosking et al. 2016 [14]
(c) Australian Koala Foundation [17]
(d) NSW Government [18]
(e) Federal Conservation Advice: Department of Agriculture, water and Environment. Note: Population estimates are based on Adams-Hosking et al. (2016) with a percent decline based on expert-elicitation values for bioregional population declines. [19]
(f) CSIRO National Koala Monitoring Program [15]

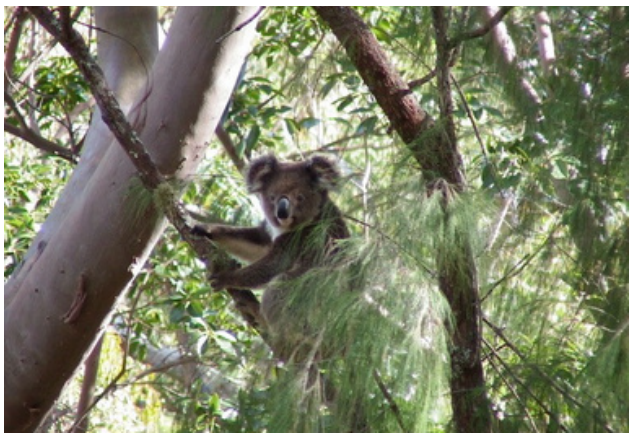
Future Data

Further data collection is currently being undertaken and gaps in knowledge about koala populations are recognised by the NSW government who state:
'There is still much more to learn about koala populations and the best way to effectively manage them over time. We need to identify the most appropriate method of surveying koala populations and establish baseline population and health data for koala populations. We also need to fill important gaps in our understanding of key threats to koalas' [20].
'The NSW Government is investing $20.5 million to deliver a baseline of the current statewide occurrence, distribution and relative abundance of koalas… by 2025. This information will provide essential data to inform the management and conservation of koala populations' [20].

Changing Forest Tenure

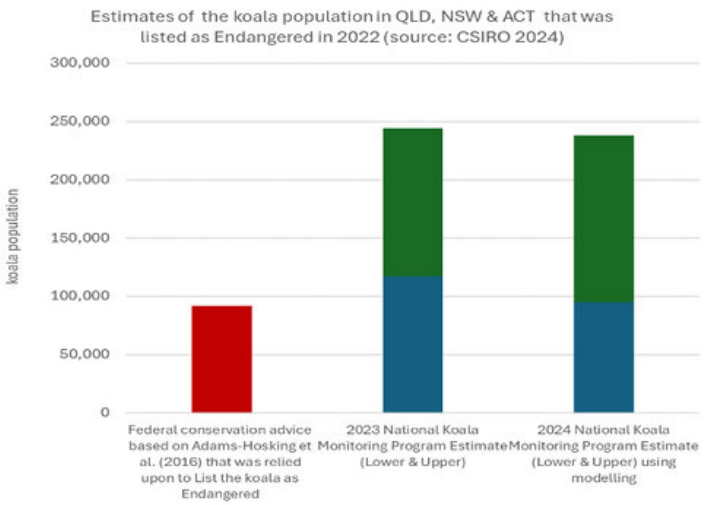
In NSW, 88% of state owned forest is unavailable for timber harvesting. In the proposed footprint of the Great Koala Park more than 75% of the state owned forest is currently unavailable for harvesting [2]. Only a fraction of productive forest is harvested annually under strict guidelines [21].

Before locking up a valuable, renewable resource, shouldn't solid facts and figures be available first?



A Koala in a private Farm Forest

<u>Fig 7:</u> Updated estimates of the koala population in the QLD,NSW and ACT [15]



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Additional Koala Research

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Contacts:

We appreciate your interest in our sustainable industry. If you require any further information or have additional questions you would like answered, the contact below is available to assist.

Andrew Hurford

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