

Public submission

MICHAEL COMBE

Submission ID: 205296

Organisation: *N/A*

Location: *New South Wales*

Supporting materials uploaded: *Attached overleaf*

Submission date: 10/13/2024 11:14:33 PM

Topic 1 Sustainability of current and future forestry operations in NSW

Sustainability can be defined as the ability for a good, service, activity or process to be supplied and supported continuously over an indefinite period or at least for a very long time. There is no precise definition of sustainability and sustainability criteria is yet to be defined or is contested. Sustainability is categorised as Environmental (En), Social (S) and Economic (Ec). The sweet spot for the practice of sustainable forestry occurs where En, S and Ec sustainability overlap to provide for the Planet, for People and for Profit respectively in perpetuity. En sustainability is focused on resource conservation while S sustainability involves diversity, inclusion and equity to ensure enterprises can maximise their engagement. Ideally En and S sustainable projects will be economically sustainable providing long term economic growth on a local, regional and national scale. It is about striking the right balance.

Our forests in NSW are dominated by Eucalypt species. Often perceived as pristine, fragile and scarce, in fact our native forests are highly productive, aggressive and persistent and have expanded in area in the last 70 years as evidenced by the aerial photographic record since post WWII.⁽¹⁾ Eucalypt forests are disturbance adapted ecosystems that have evolved with fire in the landscape for millennia. Disturbance is an important and widespread phenomenon and an intrinsic function – a mechanism for reversing declining rates of nutrient cycling and or relieving stand stagnation.⁽²⁾ Conversely for example, where a fully stocked mature forest is not disturbed for a long time, both species diversity and biological productivity may decline.⁽³⁾ Native forests have high sustainability features across a wide range of socioeconomic and environmental criteria in comparison to most other forms of landuse. Native forest are dynamic living ecosystems composed of an assemblage of flora, fauna and organisms.

Within the Crown estate of NSW, over 7M ha or 88% of crown forests are already conserved within National Park or reserves. This is a strong tribute to environmental conservation efforts. Only 12% of Crown forests or about 1M ha is State Forest (SF) and available to Forestry Corporation of NSW (FCNSW) for timber harvesting operations to meet current Wood Supply Agreements. Within the available SF area about half is subject to harvest disturbance due to environmental protections of the comprehensive *Integrated Forestry Operations Approval* (IFOA) protocols. Forest operations on State Forests are audited against the IFOA protocols by the NSW Environment Protection Authority (EPA). The 2,000 or so IFOA rules underpin comprehensive environmental protection on SF and integrate with a reserve system across the landscape.

Since 1997 FCNSW developed and uses the Forest Resource and Management Evaluation System (FRAMES) for strategic timber yield prediction. The FRAMES modelling has been reviewed by various authors and authorities in 1998, 2002, 2009, 2010, 2012 and 2016 and all found that “the FRAMES model design, structure and operation provided a solid and reliable basis for strategic yield prediction”.⁽⁴⁾ FRAMES proved its worth in informing decision makers about the impacts on forest stocks and supply capacity following the 2019/20 wildfires and 2021/22 floods on the North Coast. In light of these impacts the sustainable timber supply levels were adjusted

The forest industry is fully invested in maintaining healthy vigorous forests for all values and timber supply is demonstrably sustainable. Simply stated, there can be no forestry and no timber industry without forests! The essential elements to sustainable forest management and yield regulation include: a secure area of land dedicated to forestry production including a mix of planted forests and regrowth native forest; creditable field data on current tree stocks identified by species and size; reliable data on tree growth rates; an eye to timber market demand and supply commitments and; a

Submission

set rotation period. With respect to the first element, since the 1990's more than half of State Forest has been given over to conservation and biodiversity protection without due regard to the sustainability of timber supply. Short-term political expediency has given rise to an ever-shrinking area available for forestry practice and is a primary issue of concern to the timber industry. At the same time Federal and State Governments are looking at ways to increase house supply. Forestry is a long-term endeavour (100 yrs+) that uses science to implement active and adaptive sustainable forest management and sustain regional and rural communities. Confidence in a future timber industry will be lifted with 20 year rolling equitable wood supply agreements (WSAs) to secure investment in a fundamental viable industry. All WSAs should be the same for all WSA holders in all terms and conditions other than the volume of allocation.

In the private forest sector in NSW there is about 7M ha of private native forest (PNF managed or neglected by thousands of individual landholders. Only a small number of landholders actually practice private native forestry. All PNF operations must be implemented in accordance with a Code of Practice for sustainable forestry as authorized by Local Land Services and auditable by EPA. PNF already contributes to the timber supply chain to private mills or to supplement supply to Crown mills. PNF contributes to the welfare of farmers, nature conservation and biodiversity, rural communities and regional economies. PNF constitute about one third of forests in NSW, are almost entirely regrowth forest, are diverse, multi-aged, exhibit a range of species and sizes, are dominated by Eucalypt and *Corymbia* species and provide a full range of forest values, goods and services.⁽⁵⁾ PNF are currently underutilised and have high potential for expanding sustainable levels of high value outputs.⁽⁶⁾ PNF can be integrated into existing farm systems via property management plans to immediately provide diversification of rural income.

For a long time PNF has been subject to selective timber harvesting where the biggest and best formed trees are removed for timber (high-grading), leaving a degraded residual forest with an abundance of inferior, poorly formed suppressed and moribund trees. While some of these elements are necessary for habitat, much of it is unhealthy and unproductive. Silviculture is the art and science of controlling the establishment, growth, composition, health, and quality of forests to meet human needs and values such as timber. There is tremendous potential for intelligent silviculture to increase productivity, biological values and forest resistance in PNF. Regrettably, the PNF Codes of Practice limit harvest practices to mostly selective harvest and the opportunity to gain vigorous regeneration, release of immature stock and restoration of forest health and resilience. Descriptive terms like *nature repair*, *ecological sustainable forest management*, *nature positive* and *regenerative agriculture* are now part of the common lexicon to restore the environment. Unfortunately such innovative restoration policy settings to improve productivity, carbon stock and biological values of PNF is yet to be applied to the vast area of PNF to any great extent. Finding markets for the abundant low grade woody material can feed into biofuel markets and remove material that constitutes a fire hazard and will ultimately get burnt as the environment is predicted to get hotter and dryer. In no way am I advocating land clearing by clear felling of forests but rather restoring forest vigor and health with planned disturbance by thinning from below or creating gaps in the canopy to promote regeneration.

Native forests contain many species in different age classes and sizes with superior biological stores than timber plantations that for the most part tend to be monocultures and more akin to agriculture. Timber plantations cannot replace native forestry because there is not the available cleared land area to establish plantations, the cost to purchase land is very high and the time to crop maturity is too long to make it financially viable. Plantation must be established on cleared land and compete directly with existing rural cropping and grazing. Incentives to establish plantations via managed investment schemes have in the past failed due to poor policy settings for investors and increasing risk associated with a long-term crop and climate change. Some SF mature and growing plantations have transferred to the National Park estate (eg Spriabo SF pine plantation, Gympie Messmate in Mebbin SF, spotted gum and blackbutt plantation in Kiola SF to name just some. Such nonsense by government and bureaucracy pursuing a misguided conservation agenda serve to raise the level of risk associated with plantation. Protestors near Belligen further highlighted the risk to plantation

Submission

investment by repeatedly disruption to harvest of the blackbutt plantation in Tarketh SF, denying it was a planted forest and claiming to protect native forest and habitat.

References:-

1. Mott I (1997) *Land use change and forestry – did the National greenhouse inventory get it right?* Australian Forest Grower 19, 4 Supplement, 8pp
2. Aber J.D & Melillo (1991) *Terrestrial Ecosystems* Saunders College Publishing Holt Reinhard and Winston Orlando, Florida pp 252
3. Florence R.G. (1996) *Ecology and Silviculture of Eucalypt Forests*. CSIRO 413pp.
4. FCNSW (2016) *FRAMES – A report on its development and implementation 30/6/2016*.
5. Combe M, Unwin GL, Dyason R & Peacock RJ (1998) *Resource profile of high-graded dry hardwood forests: implications for improving productivity*. Coombell Farm Forestry Centre via Casino, and Forest Research & Development Division, State Forests NSW
6. O'Neill M (1994) *North Coast Forest and Plantation Resource Study*. Northern Rivers Regional Development Board, Casino NSW.

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

Environmental and cultural values of forests are well protected by IFOA rules agreed to and implemented on a daily basis by FCNSW on Crown Land and by the Private Native Forest Codes of Practice (4 regionally specific Codes) administered by Local Land Services. All forest operations are audited by EPA. The Coastal IFOA is particularly difficult as the overlapping rule set creates a complex minefield for harvest operators to navigate.

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

Timber is a preferred natural building material because it is renewable, sustainable, sequesters carbon, is strong, tough and durable and used in a wide range of applications. Hardwood poles make up about 85% of the 7 million poles estimated to be in service across all of Australia for electricity distribution to our homes, farms and businesses. Hardwood poles are sourced most notably from the NSW North Coast because the species that grow there are durable, hard, tough and strong, are natural insulators, and have the lowest embodied carbon footprint compared to any other material (steel, concrete, fibreglass). Further hardwood poles are the least expensive option for electricity distributors with other material poles 3 to 5 times more expensive. The estimated additional cost of moving away from hardwood poles to electricity distributors is about \$100M per annum. No doubt higher prices will be passed onto the electricity consumer already impacted by increased electricity use charges. Hardwood poles have a long service life (average 62 years) and most sizes used in the electricity network can be grown in native forest or plantation in 20-40 years so pole production is highly sustainable. All 4 pole manufacturing companies are located on the North Coast close to the high quality pole resource. Australian hardwood poles are exported to NZ, Philippines, Samoa, Kirabati and Fiji and have an important role in our geopolitical relations and trade with near Pacific nations.

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

Submission

Efforts to expand the plantation resource in close proximity to existing timber production facilities is supported. There is existing hardwood milling capacity and pole manufacturers to plant or expand hardwood plantation on the North Coast to capture high value product and to feed thinning material into biofuel production or electricity generation. Plantation economics improve with early thinning sales of pulp material or biofuels to offset sunken costs of land purchase and plantation establishment. In the first instance timber production from plantations must feed into existing timber processors with a resident skilled rural work force and community. Timber plantation should be treated as a crop like any other form of agriculture and not be burdened by over the top bureaucratic regulation.

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

Multiple use management of State Forests is current practice by FCNSW. A hierarchical system of preferred management priority provides for protection of cultural heritage biodiversity, historical sites, rainforest, old growth, scenic amenity, recreation and environmental values before timber production. In many instances timber production is fully or partially compatible with other forest values. As mentioned before forest disturbance is in many instances a natural phenomenon with positive outcomes, eg the application of low intensity fire to reduce fire hazard. Discretely implemented hazard reduction burning of dry fire adapted forest types under cool to moderate conditions can effectively protect more fire sensitive gully vegetation and rainforest. Forestry Corporation and in particular its former entities had a much stronger distributed workforce embedded in rural and regional communities that actively managed forests on a day to day basis. A well resourced local workforce to maintain fire trails, monitor forest values and oversee forest operations provided for superior forest protection and outcomes than workers coming from locations remote to the forest in my opinion. Grazing in SF reduced fire fuel levels and engendered a sense of forest care and stewardship among local graziers. Similarly, bee keeping in SF provided for a community involvement in the forest and fostered a sense of awareness and in forest dynamics. Benign recreation activities like horse riding, bike riding, bushwalking, walking the dog and camping that bring people into the forest provides that biophilic element, perhaps a better appreciation of forests and multiple use management. As populations grows the demand on forests and adventure tourism is only set to increase.

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

A warmer and hotter climate is predicted with climate change and the risks to forests from uncontrollable wildfire will increase. Eucalypt forests in particular are among the highest biomass production forests anywhere with accumulated fuel levels returning to equilibrium within 5 years. To protect against the severe impacts of catastrophic wildfires planned and implemented hazard reduction will need to be more strategic and extensive. This can involve mechanical hazard reduction but to achieve any significant area coverage more regular hazard reduction by burning is recommended.