

LIZA MCGUIGAN

Submission ID: 201024

Organisation: N/A

Location: New South Wales

Supporting materials uploaded: N/A

Submission date: 9/27/2024 3:29:56 PM

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

There is a discrepancy between the assertion that current forestry operations are sustainable over the long term, and long-term observations of size and quality of regrowth and native hardwood plantation forests. Prior to the advent of heavy machinery, less intensive harvest operations resulted in fewer clear-felling disturbance events, which preserved the integrity of soil structure, microbial communities, rates of infiltration and water-holding capacity. Heavy machinery compacts soil substantially, which poses a barrier to recruitment. One example of this is in Dingo State Forest, where there is still no significant regrowth other than groundlayer and shrub/lower midstorey species.

The current approach of converting native forests to 'plantations' ignores one of the fundamental pillars of sustainable agroforestry, which is diversity of species, structure and genetics, which results in enhanced pest and disease resistance as well as improving yields. Over the long-term, equivalent practices in agriculture (ie monocultures) have led to a worldwide decline in crop and soil health, requiring significant off-site inputs but resulting in lower quality products.

In order for forestry operations to remain viable over the long term, we must adopt principles of regenerative agriculture, which result in increasing productivity with less human input as systems increase in complexity. The first and easiest change to implement is to immediately halt all future harvesting in native forest remnants and instead focus on converting already degraded sites which have much lower habitat value into new plantations.

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

In our current pace of rapid ecosystem transformation, any loss of biological or structural complexity such as occurs during harvesting operations poses significant damage to remaining habitat. Hundreds of species which are currently and some that are soon to be threatened, are excluded from the highly degraded remnants in urban and agricultural areas, and rely on state forests for habitat. Because they are adjacent to many national parks and other gazetted reserves, state forests provide habitat continuity in places which are usually remote and receive less visitation than the smaller habitat fragments adjacent to metropolitan areas. Such places are highly significant to indigenous Australians as they represent aspects of their connection to country that urban and rural areas cannot "ie access to living being whose spiritual, medicinal and cultural dimensions intersect with the continual unfolding of Dreaming across our landscapes. There is no substitute for such connection in the abstract recording of history via written or even oral tradition. Songlines cross country in places that remind indigenous Australians of the biogeographic processes which shaped this land, and the flora and fauna that occur in state forests are a part of that living library. Present harvesting and management regimes must be halted immediately in order to address the imminent extinction threat to those species already listed, those which are soon to be listed, and those whose habitat will be reduced through future extreme weather events.

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

At present, State Forests management prioritises the delivery of economic returns, at the cost of environmental, social and ecological returns. Aboriginal forest management models have the potential to drastically improve not only long-term sustainability but also create immediate increases in social and environmental outcomes, through their focus on interconnectedness and a return to low-impact, highly selective harvest regimes. This would require the adoption of an integrated indigenous cultural model, which incorporates not only Australian indigenous perspectives, but draws on the cultural heritage of the indigenous roots of all cultures represented in Australia today; ie at its basis a complete culture-shift from harvesting to meet a target to an emphasis on collaborating with forests processes. There have been many examples of sustainable harvest and multi-use models in Europe, Asia and the Americas. One recent example in South America, utilises *Inga edulis*, an understory species native to the Amazon, to drive assisted reforestation and diverse agroforestry through mimicking successional patterns. Successful integration of food, fuel and habitat species there has been achieved in less than 2 decades.

Although they are utilised extensively for recreation, State Forests are not regularly policed or protected from vandalism and as such, are commonly used as places to illegally dump rubbish. Camping areas are not bookable and because they are free, are often subject to intensive use during informal raves, concerts and unadvertised festivals. The site degradation and pollution left in such places is often a discouragement to utilisation by socioeconomic groups who are in greater need of nature connection but are lower-impact, ie individuals on the autism spectrum, those who are healing from chronic illness, young children and the elderly. I have personally witnessed and voluntarily cleaned up many such places, filling up multiple carloads with rubbish and recyclables. It is my personal observation that places become degraded in this way when they are regarded at an institutional and cultural level as resources for exploitation, rather than as refuges or places worthy of inherent respect. It is interesting to note that ecological degradation usually preceeds socially degrading behaviour, even to the extent that weed infestations which constitute a breach of ecological integrity, are both a sign of and precursor to other activities which further damage sites eg heavy modification by 4wd users.

If State Forests are to meet the demand for ecotourism that National Parks can no longer provide, they must be better equipped for such activities, with a user-pays system that is enforced, regulated run in partnership with local Aboriginal communities, and local residents as well. Greater community consultation and enhanced accessibility, especially when it comes to long-term harvest plans, are essential to preserve current volunteer-run facilities and events such as bike and walking trails and flora/fauna monitoring, whilst expanding the capacity of forests and sites which have been neglected or wilfully targeted for illegal activity. I would like to bring your attention to the community-led proposal for the establishment of Kiwarrak Flora reserve, a very small proportion of the entire Kiwarrak State Forest. Rather than seeing this proposal as an opportunity to safeguard the viability of future operations through the spillover of biomass and the retention of soil integrity, reduced fire risk and overall site stability, not to mention the lower costs associated with weed control, this proposal has thus far been ignored. It could take literally a few hours of legal work to guarantee this space free from future harvest operations.

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

Any living tree sequesters more carbon than a dead one. Intact, mature native forest sequesters more carbon than regrowth, plantations (especially during establishment) and exotic woody or herbaceous vegetation. By leaving the rest of native forests intact and focussing instead on converting paddocks into plantations, we are not only protecting our current carbon and biodiversity stocks but improving our ability to capture and sequester carbon. Aside from any economic gains, this proactively protects our air, water and soil quality which results in benefits to human and other animal health, which is a multi-million dollar industry in itself. Restoring land that is already degraded through establishing new plantations, rather than causing further degradation via harvesting is one way to meet both biocontrol and silvicultural targets. Developing diverse systems which incorporate stock for weed control or trial syntropic assemblages is another way to enhance productivity, offset agricultural emissions, and maximise local food production which in itself reduces the emissions involved in importing produce. Increasing forest cover lowers our risk of catastrophic fires associated with extreme weather events, by moderating temperatures and enhancing rainfall. Such outcomes could be achieved by partnering with landholders (for examples see <https://farmingtogether.com.au/our-work/collaborative-carbon-farming/>).