

**Submission
No 150**

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

Name: Mr Jim Morrison

Date Received: 28 May 2021

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

Thank you for this opportunity to provide input into NSW Parliamentary Inquiry: Long term sustainability and future of the timber and forest products industry.

Introduction

I have tertiary qualifications in Ecology as well as Geography and Planning. I have been involved in projects related to eucalypt forest health for more than twenty years. My role as Chairman of the Bell Miner Dieback Working Group (BMADWG) for fifteen years provided extensive insights into appropriate forest management. The BMADWG managed State and Federally funded projects totalling several million dollars through this period. I continue to work as a volunteer, expert consultant on the Federally funded Regional Land Partnerships Program, Protection World Heritage values by mitigating Bell Miner Associated Dieback (BMAD). Additionally I have firsthand experience of Forest corp management while residing as a near neighbour to Forest corp on the Richmond Range where I have lived for 35 years. Through this time I have observed the average size of logs going to the mills decrease, while the intensity of logging has increased as has the proliferation of lantana and the development of BMAD spread along the Richmond Range.

Australia's geographical location and geological history have resulted in a dry, highly variable climate and generally poor soils. Although it supports the tallest flowering trees in the world as well as small areas of dense rainforest, Australia is the least naturally forested of the worlds inhabited continents. At the time European settlement Australia was only about 9% forested, presently only around 5% remains intact. Since colonisation some 40% of our forests have been cleared, 35% partly logged and only 25% remain relatively unaffected by clearing or harvesting, some 20% of forests are protected in National Parks. Australia's biophysical attributes dictate that its forest growth rates are relatively slow and unpredictable and the fragility of many ecosystems make them vulnerable to collapse through reckless exploitation. (Bell Miner Associated Dieback is a good example of this trend.)

While the Forest Act 1916 may have slowed rate of the decline in total forest cover from land clearing occurring at that time,, much of the remaining forests have since been severely degraded due to unsustainable practices, particularly over the last thirty years. This is related to increasing mechanisation, coupled with over committed supply contracts beyond the forests ability to meet in a sustainable way and declining resources directed at appropriate post logging restoration. The long term sustainability and future of the timber and forest products industry can be best achieved by a rapid transition to a totally plantation based resource and our native forests managed for their intrinsic non timber values including carbon capture and storage, catchment values including enhanced water yield and quality and biodiversity values.

The ongoing weakening of regulations

Despite decades of knowledge of the impending climate and biodiversity crisis now upon us, timber industry lobbyists, supported by Forest corp, under successive state governments have sought to increase the rate and intensity of forest harvesting. At each opportunity industry lobbyists seek to weaken regulations and legislation to allow access to areas previously off limits to logging, as these areas contain the last of the large trees in the landscape, aside from National Parks. Slope limits have steadily increased while stream buffers and habitat protection for Threatened species have decreased. This applies to both public and private forestry regulations. These changes have not been informed by best available objective science, rather through industry lobbyists and industry' experts', supported by compliant governments. In addition to the ever weakening of regulations there is a lack of adequate enforcement and political will to ensure compliance, resulting in unacceptable environmental degradation.

Loss of social license

There was a recent push to reassess mapped old growth forest with the specific intent of delisting much of this critical fauna habitat to allow it to be logged. Similarly there were plans to trial 'cable logging' on the mid north coast to source previously inaccessible steep country formally considered off limits to logging. Fortunately widespread community outrage prevented these perverse initiatives becoming a reality, for now. However what is abundantly clear is that Forest corp has largely lost its social licence to operate on a business as usual basis.

A 2016 survey for the timber industry of 12,000 people found that native forest logging was considered unacceptable by 65% of rural/regional residents across Australia, and acceptable by just 17% of rural residents. It is becoming increasingly clear that that the community prioritise wildlife, water and carbon storage values of forests above commercial timber production. Logging of native forests has very low levels of social license and is clearly not in the public interest. It is likely that the unprecedented 2019-20 wildfires that burned extensive areas of NSW forests, impacting native flora, fauna and available timber resources has further reinforced this negative community sentiment for industrial logging of our public native forests.

Ecologically Sustainable Forest Management. BMAD a case study.

The NSW forestry sector describes itself as a sustainable industry practising Ecologically Sustainable Forest Management.(ESFM). The inability to manage BMAD post logging in moist 'at risk forests' is just one example that belies any claims of sustainable forest management as espoused by Forest corps and its industry and academic proponents.

The BMAD problem has been known since the mid 1900's however it became well recognised as a serious problem in the late 1990's when a number of State Forests were heavily logged then handed over to National Parks. The development of management plans for the new parks identified it as a serious threat. However Environment group's calls for the BMAD issue to be acknowledged and addressed during negotiations leading up to the NSW RFA's in the 1990's were ignored. Following the signing of the RFAs , NSW State Forests were obliged to participate in a community driven initiative which led to the formation of the BMAD Working Group.

The BMADWG included representatives of relevant state government agencies including Forest corps, NPWS, DECC as well as representatives from universities, timber industry lobby groups, conservation groups and impacted private landholders

The BMADWG endeavoured to understand the causes of BMAD and develop methods to bring it under control. It was supported by several million dollars of state and federal funding over fifteen years and achieved a number of positive milestones. However it was handicapped by Forest corp and industry lobbyists being unable to accept that logging played a major role in its development. This is despite the fact that in the late nineties a well respected Forest corp research scientist concluded that 'canopy disturbance' ie logging , was likely the primary causal factor in the development of BMAD. Similarly in 2005 the NSW Scientific Committee determined 'Forest eucalypt dieback associated with over abundant psyllids and Bell Miners' (BMAD) as a Key Threatening Process. The committee made a conclusive finding that: "Over-abundant psyllid populations and Bell Miner colonies tend to be initiated in sites with high soil moisture and suitable tree species where tree canopy has been reduced by 35 – 65% and which contain a dense understorey."

Most independent ecologists agree that the resultant proliferation of understory shrubs, predominately lantana, following canopy disturbance (ie logging) provides enhanced nesting success and survival opportunities for the Bell Miners, while the abundant growth of new soft eucalypt leaf tissue provides enhanced resources for sap sucking psyllids .The sugar based secretions of the psyllids form a scale called a lerp which bell miners utilise as a food source. Their particular feeding habits allow them to remove the lerp without killing the psyllid which continues to produce lerp. Other birds which would kill the psyllids are driven away by the aggressive, territorial behaviour of the Bell Miners which also eliminate invertebrate psyllids predators such as spiders and wasps. The psyllids defoliate the trees which are successively

attacked as new regrowth emerges, eventually leading to tree death. The end result of unmitigated BMAD is total ecosystem collapse which is apparent across the northern parts of the Richmond Range and the Border Ranges. In badly impacted sites there are areas of 10-20 hectares where all susceptible eucalypts are now dead stags over a sea of lantana. There is no chance of natural regeneration as seed production is reduced prior to tree death. The most susceptible eucalypt species are Flooded Gum, Blue Gum, Grey Gum and Ironbark. The moist, productive, escarpment forests are particularly susceptible, although if unchecked the problem extends into drier forest types and additional eucalypt species.

BMAD has increased in distribution and intensity over the past twenty years. It extends from SE Qld to Victoria. There are at least 100,000 hectares of forest currently impacted in NE NSW alone. Through the efforts of the BMADWG it was declared a Key Threatening Process under NSW Legislation in 2005.

The forest corp and industry reps on the BMADWG doubted the views of their own researcher and continued to argue that logging was not the main cause, rather that it was likely related to reduced fire frequency and undertook projects to prove this hypothesis.

NSW Environmental Trust funding was used to undertake a number of adaptive management trials including by Forest Corp to address BMAD at Mt Lindsay and Donaldson State Forests in NE NSW. Treatment of various plots included combinations chemical treatment, mechanical clearing and burning. They hoped to prove that logging could be carried out in these forests while also controlling BMAD. After more than ten years the trials have failed to demonstrate that Forest Corp have an understanding of how to deal with this significant forest health issue. All of the plots where work was undertaken exhibited higher densities of lantana and bell birds than the controls. Forest corp did provide some useful information on costs of treatment for BMAD ranging from \$200-2500/hectare depending on severity.

A relatively recent independent, systematic literature review of BMAD once again clearly indicates that canopy disturbance is the primary causal factor in the development of BMAD. (Silver, MJ and Carnegie AJ, 2017; 'An independent review of bell miner associated dieback'. Final report prepared for the Project Steering Committee: systematic review of bell miner associated dieback.)

It is clear that productive moist sclerophyll forests at risk of BMAD are extremely difficult and costly to appropriately manage post logging, due primarily to weed invasion which requires ongoing active treatment over many years to overcome. This is almost impossible across rugged terrain, as in the escarpment forests. The cost of appropriate mitigation would far exceed the returns from logging. Many of these BMAD impacted forests are now considered beyond commercially viable management.

Yet Forest Corp continue to log BMAD affected and at risk forests leading to a downward spiral in forest health. The reduction in regenerative capacity of our native forests cannot be considered to be either economically or ecologically sustainable.

Negligible economic returns

The returns to the taxpayer from Forest operations has been predominately negative over the past decade. The NSW Auditor General reported forestry losses of \$14.4 mill 2007-08, \$8.1 mill in 2009-10. A marginally positive result of \$13.5 mil over five years 2015-2019 was reported.

However it is difficult to separate profits from the plantation sector with losses from the native forest sector. It is also difficult to keep track of all the various subsidies that have been provided to the forest sector over this time. These include structural adjustment packages, industry development grants, workers assistance and business exit assistance as well as the recent bushfire recovery grants and additional stimulus funding. It is difficult to separate the budgets of the native forest sector with the plantation sector, although it is well known that plantations are the major money earner for the forest sector and the greater source of employment.

Based on the Forestry Corporation's 2018/19 Annual Report they only return a notional average profit of \$0.63 per hectare for hardwoods. By comparison in 2018/19 the Forestry Corporation's Softwood Plantations Division managed 242,738 hectares of pine plantations in NSW and returned 'normalised earnings' of \$73 million, which is \$301 per hectare. The pine plantations provide relatively reliable growth estimates and much higher timber volumes per hectare than native forest harvesting. There are newly developed treatment technologies which can produce equally durable timber products. The transition of NSW Forestry to a totally plantation based resource is already well underway, the sooner it is achieved the better the return from forestry to the taxpayers will be

The extent and quality of the native forest timber resource has been under steady decline for decades and it is clear that our native forest timber sector is neither economically or ecologically sustainable. The recent unprecedented drought and bushfires should provide the impetus to rapidly transition to a plantation based resource and manage our public native forests for their intrinsic non timber values

Catchment values

It is well known that young forests are heavy users of water while mature forests use less water and better regulate beneficial hydrological processes to protect both water yields and quality. The intensive relatively short rotation logging regimes planned by Forest corp will ensure those key areas of the catchment are always net users of water. The proper accounting and pricing of reduced water yields should be included in the cost of logging operations.

Under global warming trends extended droughts are predicted to increase in intensity. Our native forests are far more valuable left undisturbed to enhance catchment protection and water yields than being logged for very limited community benefit.

Biodiversity

The loss of more than a billion animals in the recent fires was devastating and evoked a strong community response of support for decisive action to protect our biodiversity. Koalas in particular were supported with millions of dollars in donations. Considerable government funding was also provided. How ironic it is that on one hand biodiversity is embraced yet at the same time extensive habitat destruction and subsequent animal suffering and loss is endorsed through government legislation regarding logging of our public native forests.

Our forests provide key habitat for much of the fauna the community values. Many critical habitat components such as large hollows are in decline due to extensive logging which is driving threatened arboreal species closer to extinction.

Climate and fire mitigation

There is general consensus among fire and climate experts that the severity and extent of the recent bushfires were driven by climate warming as a result of increased atmospheric Co2 and that these levels need to be rapidly reduced. Our forests provide an efficient mechanism for carbon capture and storage if left to grow old and are properly managed.

Recent studies have indicated that mature forests are less likely to carry crown fires than dense young regrowth forests or disturbed forests with dense understoreys.

The Future

The future viability of NSW Forests industries is in a totally plantation based resource. Yields from plantations are significantly greater per hectare than native forests, growth rates and yields from plantations are more predictable and reliable. The plantation sector currently employs more people and delivers better economic returns than public native forest logging. Downstream processing of plantation based products could easily be expanded to employ the few left in native forest processing.

The future of our native forests would be best ensured through directing existing subsidies for the logging industry towards extensive forest restoration which could provide meaningful employment to displaced native forest workers and reap rewards in enhanced catchment values, increasing carbon storage and biodiversity restoration and conservation. These intrinsic values

far outweigh the alternative 'business as usual' model of increased subsidies, declining timber yields and considerable environmental cost of this demonstrably unsustainable public native forest industry.