Seeking a New Path for Forestry in New South Wales

1. Executive Summary

Forestry is an essential and legitimate landuse activity that makes a valuable contribution to NSW society and its economy. Forestry in NSW has been downsized and neglected by previous Governments over a period of more than a decade. A new path is needed to take forestry forward.

The coastal/tableland Hardwood, Cypress and Red Gum forestry sectors are all in a state of decline, operating with a diminished number of rural forestry jobs and an absence of any new investment. Resource removal and increased sovereign risk arising from continuous loss of access to public native forest areas in favour of land use change to National Park have been the principal causes.

No new investment in long rotation plantation forests is currently occurring to counter resource loss within the native forestry sectors.

Existing regulatory regimes applying to native forest operations are restrictive and impractical. The regimes are highly prescriptive and complex and have not been successful in protecting environmental and heritage values as they have not been applied consistently across the variety of forested public land tenures.

Professional forestry organisations have been shut out of native forest policy debate and have not been meaningfully consulted for a long period of time. The perception of forestry as a legitimate profession has also been actively undermined over many years by anti-forestry campaigns. These campaigns have been effective in dissuading young people (with genuine interest in natural resource management) from considering forestry as career option. Anti-forestry campaigns have also been effective in casting doubt over forestry's 'greenhouse friendly' credentials.

The NSW plantation softwood sector has prospered from foundations laid down by foresters and Government policy makers dating back many decades and through the ongoing stewardship of Forests NSW, the State-owned forestry agency. Over the past 15 years wood processors have secured long term access to large scale plantation resource permitting them to commit to significant large scale valued-added investments.

The softwood sector's future is largely dependent on achieving greater economic efficiencies. The majority of all softwood timber resources within the large forestry regions is now fully committed under long term supply arrangements, limiting scope for further expansion or diversification..

New investment in new plantations is needed to grow and consolidate NSW's existing softwood estates and enable the dependent industries to remain competitive in the longer term.

The collapse of forestry managed investment schemes has left a major gap in capitalising new softwood plantations. If the softwood industry is to continue to support domestic demand then a new investment model for long rotation plantation estate expansion is urgently needed.

2. The need for a review of forestry policy in NSW

The Institute of Foresters believes that the new NSW Government is very well placed to change the direction of forestry in NSW to realise considerable benefits for rural and regional communities as well as the whole forestry and timber sector. Items regarded as currently important are set out below.

3. Issues

3.1 Need for a Policy Context and a Forest Industry Strategy

NSW needs a policy context for the forest and timber industry that provides strategic direction and enables long term resource planning for the next 10, 20 and 50 years. The policy should cover all sectors (private and state owned plantations, State Forest natural forests and private native forests).

What are the timber requirements of NSW, what type of wood processing industries do we want and need in NSW and what and how much wood product are we happy to import. Only by addressing these questions can we estimate what resource we require (by species, log specification and volume) to maintain and develop such an industry? These issues have never been adequately addressed and forest policy and landuse decisions have been taken in a vacuum for many years.

The previous government adopted a Regional Forest Agreement strategy of overcutting the public native forest areas through until 2023 when the available log cut from State forest areas would drastically reduce. At this point it was proposed that timber plantations would be available to supply the shortfall in log resource to industry. Plantations cannot however substitute for the species and log qualities from native forests, and the rate of plantation development within NSW has been insufficient to make up the projected shortfall in volume. There is thus a looming shortage of hardwood timber resources within NSW that will result in increased imports and loss of jobs across the industry.

This is why the development of a Forestry and Forest Industry Strategy for NSW is critical. The long term nature of forestry requires immediate forward planning to rectify a history of ad-hoc policy decisions that have dramatically reduced the area of forest available for production of logs and other forest products.

NSW already has a Biodiversity Strategy, a Conservation Strategy and a Farm Forestry Strategy. It is time for it to develop a Forestry and Forest Industry Strategy within a reinvigorated policy context or setting.

3.2 Global Forestry – Better knowledge to ensure an informed debate

There have been many exciting developments in forestry and natural resource management around the world in recent years. It is suggested that a delegation from NSW should embark on a fact finding mission to countries where these may be observed.

There is much to learn from countries like Sweden, Finland, Germany, US, Canada, South America (Chile, Brazil, Uruguay) and New Zealand where forestry and the forest industry is well advanced. In these countries examples of world best practice in management of native forests and plantations and timber processing may be readily observed.

Much of Australia's imported timber comes from the Asia-Pacific region. It would be of value for the delegation to gain a first hand insight into the forest practices and standards which are employed in these countries and how they differ from Australia. A focus on wood trade would also enable appreciation of how forest policy decisions in one country can affect forestry policy decisions in surrounding countries. Countries such as Malaysia, Indonesia, Solomon Islands and China are all major supplies of timber that is imported to Australia.

The key objective of the mission would be to gain confidence in implementing new policy directions for NSW and to create ongoing information networks for benchmarking and monitoring world forestry trends**.**

3.3 Review past landuse decisions

Since 1995 a total of 1,749,837 hectares of State forest have been transferred to National Park. Transfers in the last ten years have all been taken hastily to achieve specific political objectives with no objective assessment or regard to the bona fides of particular parcels of land or the long term interests of sustainable wood supply.

This approach has resulted in significant supply pressure on remaining timber producing areas. It has also led to unwanted outcomes such as forested land being reserved for "rainforest" or "old growth" values when the lands did not have these values. Indeed there are multiple cases of timber plantation that has been included in National Park or other formally reserved areas.

It is submitted that areas that are reserved for particular ecological characteristics should in fact exhibit those characteristics and not simply be reserved from wood production.

The NSW Red Gum decision in 2010 sector is the most recent example of a political expedient decision that has already led to the transfer of 75,000 hectares of well managed regrowth from State forest into conservation reserve despite unanimous opposition from local communities. The Red Gum forests contained no old growth or wilderness values and had a long history of intervention by humans, including managed forest flooding and timber harvesting. Threatened species and 'ancient trees' within the forest were both well protected under the former stewardship of Forests NSW.

3.4 Ecologically Sustainable Forest Management

Forest monitoring programs across all public forest tenures

There is an urgent need for a more consistent approach to the monitoring and management of forest values with particular attention needed in the area of biodiversity and threatened species management.

Every year hundreds of pre-operational flora and fauna surveys are undertaken on native State forests to comply with Integrated Forest Operation Approvals (IFOA). The findings of these surveys trigger a myriad of complex regulations which are based upon the precautionary principle. The implementation of these regulations is operationally costly however their environmental value often remains uncertain. At the same time there are no comparable environmental surveys or standards applied to operations and infrastructure within National Parks and other Crown-timber Lands or private property logging operations.

Most importantly, there is no consistent and ongoing program of monitoring put in place to ensure that management practices are maintaining or enhancing biodiversity conservation outcomes within forests set aside specifically for this purpose.

There are an increasing number of cases where threatened species populations continue to decline, despite an increasing land bank of national parks. The population of koalas in Australia and NSW has steadily declined over the past 20 years, despite a major expansion of the parks and reserves in that period. Studies indicate that bushfires, Chlamydia disease, predation by dogs, land clearing for urban development and road kills are the major causes. Despite the evidence, timber harvesting continues to be publicly portrayed as a major threat.

It is important that the results of forest monitoring, particularly in relation to rare and threatened species, be made publicly available so that the wider community may be more objectively informed. It is also submitted that all such forest areas should operate under a common outcome focussed environmental standard.

Utilise Forest Residues

For decades foresters have been concerned about the waste generated in native forests harvesting operations and the need to improve utilisation standards. When a forest tree is cut down for timber it is common for up to half of its above ground biomass to be left to waste on the forest floor.

Leaving high levels of biomass on the forest floor creates a fire hazard that puts post harvest forest regeneration at risk and creates a physical impediment to future forest management. The carbon stored in the harvesting residues is currently emitted to the atmosphere as greenhouse gases without any economic or social benefit. This may occur rapidly in the event of a wildfire or more slowly if the material decays naturally.

Emerging demand for renewable energy is creating a market for forest biomass. Utilisation of residue biomass from timber harvesting is an imminently sensible and practicable solution that will both improve the environmental sustainability of native forest timber production and support the growth of clean energy production.

The former NSW Government introduced regulations that prevent the utilisation of native forest harvesting residues for bio-energy (electricity) production. The regulations were introduced to specifically address the concerns of non-government organisations which do not support any timber production in native forests. The IFA advocates that this regulation be repealed.

The IFA does however support regulation to ensure the sustainable extraction of biomass to ensure that soils catchment and wildlife values are protected. This should allow a large investment in sustainable production of energy and energy products, with negligible carbon cost throughout rural NSW.

Current opportunities for biomass utilisation exist in the following areas:

- Public and private hardwood forests of coastal and tableland NSW which are being harvested today could supply large volumes of residue timber while maintaining high standards of forest conservation.
- Biomass grade material is being recovered from plantation operations in the Hume Region. With appropriate incentives and coordination, harvesting of biomass could be extended to the other smaller plantation regions.
- There are large areas of densely stocked private cypress forests in Western NSW (as documented by Natural Resources Commission). Thinning of this resource for

products including small sawlogs, vineyard posts and biomass would be a welcome economic activity for the relevant communities.

- In Western NSW there is a large area of woody weed infestation that could also provide a biomass feedstock while increasing the productive capacity of these agricultural areas.
- In the Riverina the Natural Resources Commission recognised the need for 'ecological thinning' of River Red Gum regrowth to maintain forest health and to manage forest water use. Established firewood industries could significantly benefit from this program.

Proactive management of forest health

There is a need for proactive management of identified forests to mitigate the impacts of fire, insect attack and other damage agencies. This includes some national parks where the existing forest is an artefact of human intervention, and where the growth habits of the species require treatment to achieve objectives. Examples are Cypress and Red Gum forests and north coast Bell Minor Associated Dieback (BMAD).

There is also a perception (belief) within the IFA that public and private forest growers are often reluctant to commit resources to restore or rehabilitate once highly productive native forest on favourable topography and good access due to the sovereign risk associated with resource withdrawal after expenditure has been incurred and a healthy, productive forest is returned to the site(s).

The United States has recently changed policy in this aspect of forestry after suffering heavy losses of forest as a result of fire and insect attack. The timber industry there is now conducting thinning and sanitation harvesting in ponderosa forests in Arizona after these areas were closed to harvesting by environmental pressure decades ago. Environmentalists are part of the decision making and are supportive of this policy.

Actively manage forests for carbon storage

There is growing political interest in proposals to cease timber harvesting in native forests on the basis that they will allow forest carbon stocks to increase and in doing so help to reduce atmospheric carbon dioxide levels. The IFA is concerned that the principles supporting these proposals are simplistic and narrow in outlook and focus.

To make an informed and objective assessment of the fait of carbon in forests subject to timber harvesting it is important to undertake a full life cycle assessment (LCA). Life cycle assessment is appropriate because it assesses environmental impacts associated with all the stages of a product's life from cradle-to-grave not just those which occur in the forest at the time of a harvesting event. Life cycle assessment also enables comparisons to be made with alternative competing products. For example, if hardwood timber production were to cease in native forests we may expect it to be replaced by a combination of imported tropical hardwoods and substitute products such as concrete, steel, and tiles. Through life cycle assessment we know that increasing production of these products (to replace native forest timber) will lead to increased atmospheric carbon dioxide levels.

The IFA is also concerned that the objective to 'protect' native forest carbon stocks ignores the role of fire in the Australian landscape. Over the last ten years catastrophic wildfires have burnt over a million hectares of NSW National Park causing the release of tens of millions of tonnes of carbon dioxide into the atmostphere and a dramatic

reduction in the amount of carbon stored within the affected forests. Over the same period we are aware that native State forests have also been affected by wildfire however the percentage of burnt forest has been much lower.

Victoria has had a similar experience with the State's Department of Sustainability and Environment reporting that an estimated 70 million tonnes of carbon dioxide has been emitted from bushfires over the past decade.

This history suggests that setting aside native forests in National Parks may actually put forest carbon stores at greater risk than if they are retained under multiple use State forest management.

Lastly, the IFA is concerned that the science advocating the cessation of timber harvesting to promote carbon storage is neither balanced nor objective. A 2008 report titled 'Green Carbon, The role of natural forests in carbon storage.' is the principal reference for those advocating enhanced carbon storage through native forest reservation. This report was funded directly by the Wilderness Society and was not made available for scientific peer review prior to release.

3.5 Private Native Forestry and Commercial Farm Forestry

Private Native Forestry (PNF) has been regulated by Property Vegetation Plans under the Native Vegetation Act 2003. This approval process is administered by the Office of Environment and Heritage (formerly DECCW) an agency which has been unsympathetic to timber production in native forests. PNF regulation should be brought into the Department of Primary Industries (DPI) or a government agency that has expertise in forest management. The approval process needs to be streamlined and more effort put into encouraging private forest owners to apply professional management to their forests as a means of increasing their value for biodiversity and production.

In particular areas of NSW that are within range of timber processing centres, there is opportunity to encourage, promote and support small scale commercial forestry on farms to contribute to total timber supply within the state. This will require the provision of extension and training programs for farmers to increase their skills in integrated farm forestry management.

3.6 Value Adding Hardwood - Technology Investment

Investment in the NSW hardwood timber industry is stagnant because of the sovereign risk associated with resource withdrawal. A clear policy direction will solve this underlying problem, however value adding and investment in timber processing technologies will require support from government at the local level.

Opportunities for expanding regional employment and investment in timber processing need to be promoted and expressions of interest sought for new proposals. For example, there are 60,000 hectares of young plantation in Northern NSW that urgently requires the establishment of a new local industry to utilise small diameter logs from thinnings. There is also an opportunity for a new sawmill at Eden to utilise the large regrowth resource that is developing there.

3.7 Regional plantation investment to keep Softwood Industry Competitive

In the Hume and Macquarie, NSW's largest softwood forestry regions demand for fibre is now in excess of available supplies. This situation is not expected to change with domestic demand continuing to grow.

The industry's current prosperity and investment levels are a product of the vision of foresters and policy makers many decades ago who foresaw the growing need for softwood lumber. The Commonwealth and NSW Governments invested heavily in softwood plantations in these two regions in the period from the mid 1960s to the mid 1990s. The looming shortage of domestic softwood timber in the next 20 to 30 years is a significant opportunity for Governments to again take the lead in policy to stimulate investment in an expanded plantation estate. A key issue is to attract the large initial capital funding required to establish the plantations.

Softwood timber is an industrial commodity that is transported around the world. To survive in the long term, softwood processors must remain internationally competitive. Market pressure to increase efficiency and reduce production costs is most reliably achieved through increases in scale and throughput. For the Hume and Macquarie Regions economies of scale may only be achieved through access to additional plantation resources.

Over the last five years only two forestry Managed Investment Scheme (MIS) companies have been successful in securing capital for new long rotation softwood plantations. The largest company, Willmott Forests Ltd, went into administration in 2010 and is currently proposed for liquidation. The other company AgriWealth Pty Limited is continuing its development of new long rotation plantations using investor funds, but on a smaller scale. Since 2010 the reputation of Forestry MIS in Australia has suffered a major setback and can no longer be relied upon to solely address the demand for new plantations.

Investment in long rotation plantations requires an initial cost of acquiring or leasing land, then establishment, involving site preparation, purchasing plants, planting, weed control, then protection from fires and pests over a long term to deliver a relatively low return, at current pricings, with exposure to environmental risks along the way. There is a private sector market for established immature plantations once they reach at least 10 years of age.

The IFA believes that with the right policy settings funding for new plantations can be forthcoming possibly involving Government Future Funds, superannuation companies and companies who understand the long term carbon market, despite current uncertainties.

In the absence of government assistance, a price on carbon represents the best prospect for improving the financial attractiveness of long rotation plantation investments however the required carbon price (ca. $35+/t CO2-e) may not be achievable in the short term.

Because of the long term nature of plantation investments, the decisions made by today's policy makers will determine the shape of the industry's future, 20 to 30 years from now.

3.8 Education and Awareness

There is a critical skills shortage at the forest operations, sub-professional and professional levels within the forest sector and there is a critical skills shortage in some areas of timber processing such as saw doctors and head sawyers.

The perception of forestry particularly amongst the younger generation has been effectively distorted through the systematic anti-forestry campaigns of certain environmental non-government organisations. These campaigns have been ongoing for nearly 30 years pervading the psyche of many young people as well as school teachers and other secondary and tertiary educators.

Far fewer people now consider forestry as a career option than did 15 years ago despite continuing demand for graduate foresters and the high esteem with which the profession is held on other countries around the world. The poor perception of forestry and the profession in NSW has contributed to the downgrading and recent closure of Australia's two pre-eminent forestry undergraduate degree courses at the Australian National University and the University of Melbourne. This has lead to some states recruiting professional foresters from overseas. The only remaining place in Australia that students may undertake a Bachelor of Science Degree in Forestry is Southern Cross University at Lismore.

Policies to expand education opportunities within the forestry sector through schools, TAFE and universities and the promotion of career paths and the benefits of a vibrant, sustainable timber industry need to be urgently developed and implemented. Part of ensuring a sustainable forest future in NSW and Australia is to ensure that skills acquisition and tertiary training standards are invigorated and restored.

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