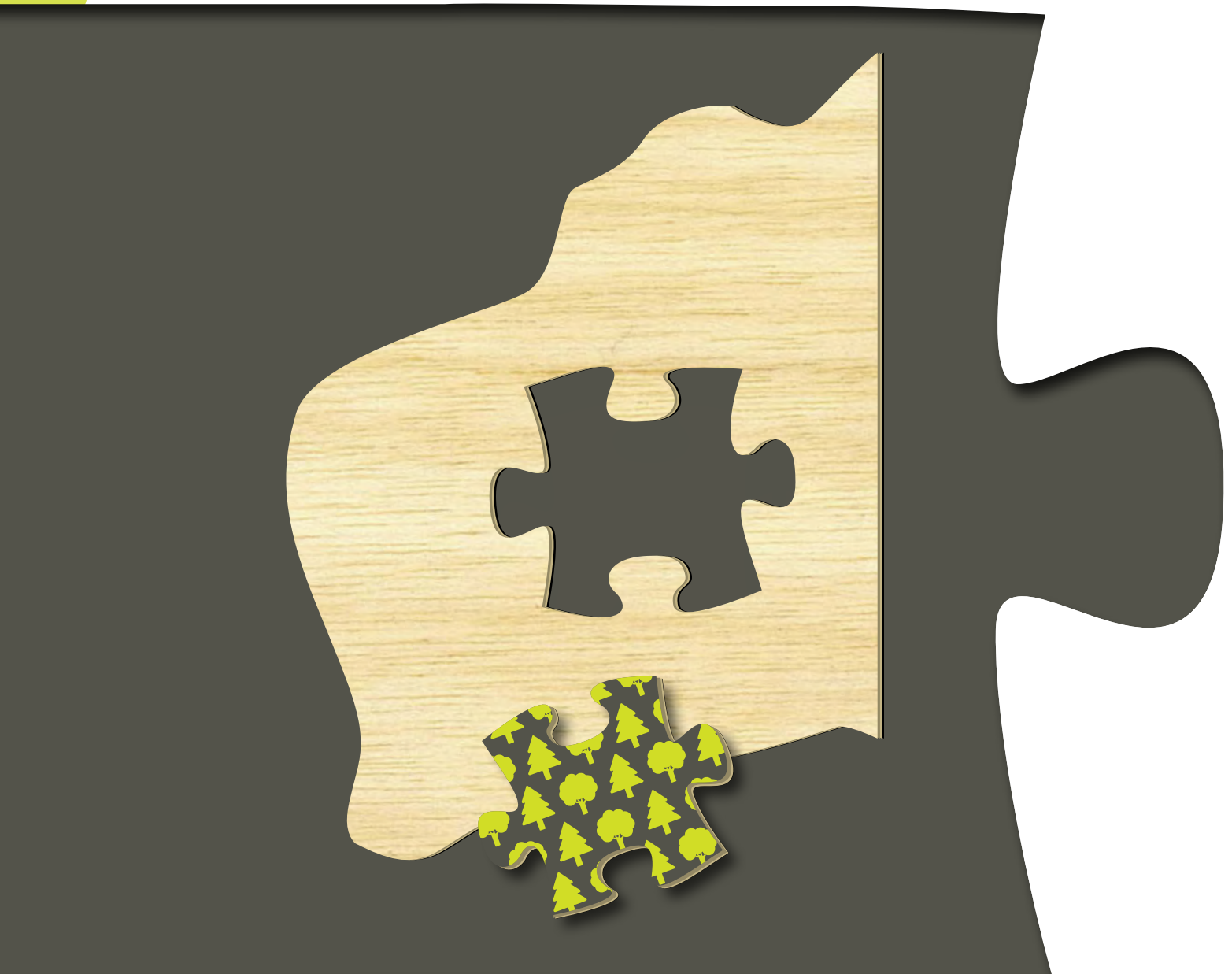


WESTERN AUSTRALIA
PLANTATIONS
THE MISSING PIECE OF THE PUZZLE



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INTRODUCTION

Throughout Australia investment in plantations has come to a standstill, as identified by the Australian Forest Products Association (AFPA) document 'Plantations the Missing Piece of the Puzzle'¹. In Western Australia this trend is far worse with the plantation estate in serious decline. This Forest Industries Federation of WA (FIFWA) document 'WA Plantations the Missing Piece of the Puzzle' should be read in conjunction with the AFPA document as a supplement to the original work to expand on the specific challenges of reigniting investment in plantations in Western Australia.

Without a fresh policy proposal to drive new investment in plantations, the industry anticipates that our total plantation estate will decline by more than 110,000 ha by 2025.

This comes at a time when demand for timber and fibre products is rapidly increasing.

While there are many reasons why demand for timber and fibre products is on the rise, perhaps the most understandable reason is simply because the population in WA is increasing. A growing population and a declining timber resource means that Western Australia is facing a growing forest and wood products deficit.

Without significant change this trend will only compound into the future, leaving Western

Australia increasing reliant on timber imports rather than responsibly supplying our own timber needs through local sustainably managed plantations.

To reverse this trend we must reignite investment in plantations in the right locations.

In Western Australia the right locations are strategically located 'hubs' defined by the 600mm rainfall isohyet within a 150km radius from major processing centres in the Lower Mid-West, South West and Lower Great Southern.

This policy proposal would see the State and Local Governments recognise the strategic value of industry hubs and work with industry to develop and implement well targeted policies to reignite investment in plantations in WA.

THE GOAL:

To deliver a total plantation estate of 225,000 ha within the 3 WA hubs.

This would include a target of 140,000 ha of hardwood plantations (Eucalypts) and a target softwood estate (pines) of 60,000 ha in the South-West Hub and 25,000 ha in the Lower Mid West Hub.



Eucalypt seedlings

¹ Australian Forest Products Association, *Plantations the Missing Piece of the Puzzle*, Canberra, 2015.

PLANTATION FIBRE MARKETS

The popularity of wood is growing. This is understandable given that wood is a highly valued renewable material which is durable, versatile, easy to work and environmentally friendly. Using wood helps to tackle climate change, by storing the carbon removed from the atmosphere by growing trees. It takes a lot less energy to produce timber than other materials such as concrete, steel and plastics, meaning wood has a low carbon footprint.

As the many benefits of wood become better known, and the population grows, demand for wood and fibre products continues to rise.

There already exists a broad and integrated market for plantation timber products that are processed and manufactured locally right here in WA. These markets are strong and support over 3,400 direct jobs² and approximately another 11,620 indirect jobs generated by the plantation industry in Western Australia.

Here are some examples of how existing Western Australian plantations are processed for local and international markets.

- Softwood sawn timber is primarily used in the WA housing and construction market as a structural grade timber. Wespine Industries located in Dardanup produces the majority of pine structural grade timber for the WA housing market. The recent boom in the housing market increased demand for softwood structural timber. An increase in demand compounds the need to expand the plantation estate in order to meet the requirements of the growing housing market with locally produced softwood.
- Laminated Veneer Lumber (LVL) is a high strength engineered wood product used primarily for structural applications. LVL is

² Dare, M and Schirmer, J, *Western Australia Forest Industry Survey unpublished data*, CRC for Forestry, Hobart, 2012.



“Currently, the majority of timber used in high rise buildings in Australia is imported from other countries...”

manufactured using a log peeler to create thin sheets of timber, bonding them together with glue to create a high strength timber that is easily cut to size. The Wesbeam LVL plant north of Perth is the only laminated veneer lumber manufacturer in Australia. Wesbeam produce high strength engineered construction timber. As one of the three major softwood manufacturers in WA the maintenance of an appropriate sized softwood estate is important to Wesbeam's continued development of its state of the art \$115m LVL investment.

- Particle board is created using mostly softwood residue material to produce high quality benchtops, cupboards, doors and partition walls. Western Australian produced particle board is used extensively in residential and commercial fitouts. The Laminex plant also located in Dardanup within the South-West Hub is Australia's largest particle board manufacturer
- Hardwood plantations are largely used for the production of high quality paper products. The expansion of the hardwood plantation estate will allow a greater volume of hardwood fibre to be exported through the Bunbury and Albany ports. The establishment, management, harvest, haulage and processing of hardwood timber locally in preparation for export generates significant employment opportunities and provides economic diversity particularly for regional WA communities.
- Timber packaging for the transport of goods particularly in the mineral and manufacturing industry is strong in Western Australia. Timber presents an affordable option for producing sturdy boxes and pallets. The WA softwood industry supplies the majority of the timber for local pallet and packaging material.

Chip export at the Bunbury port



EXAMPLES OF EMERGING OPPORTUNITIES FOR PLANTATION TIMBERS AND RESIDUES.

- Engineered wood products present significant opportunities for the expansion of timber markets. Some Engineered wood products include: Plywood: Flat timber veneers bonded together to produce a strong flat sheet of timber suitable for use in structural applications. Oriented Strand Board (OSB): OSB is produced by gluing together small rectangular chips of timber in cross-oriented layering. It produces high strength structural timber particularly suitable for load bearing applications. Glulam: Produced by taking laminated beams of timber and gluing them together to form longer, high strength structural pieces of timber.
- The National Building and Construction Code has recently been changed to allow for timber to be used in construction of buildings up to eight storeys high. This change will see a further increase in demand for plantation grown structural timber to be manufactured into various engineered wood products that are fit for purpose in high rise construction. Currently, the majority of timber used in high rise buildings in Australia is imported from other countries. Cross Laminated Timber (CLT) for example is a product that has great potential to expand wood's role in high rise construction in Australia. Currently, CLT is remanufactured in Australia using imported timbers. With the changes to the Building Code of Australia the demand for CLT is expected to rise rapidly.



Water bottle made from Nano Crystalline Cellulose

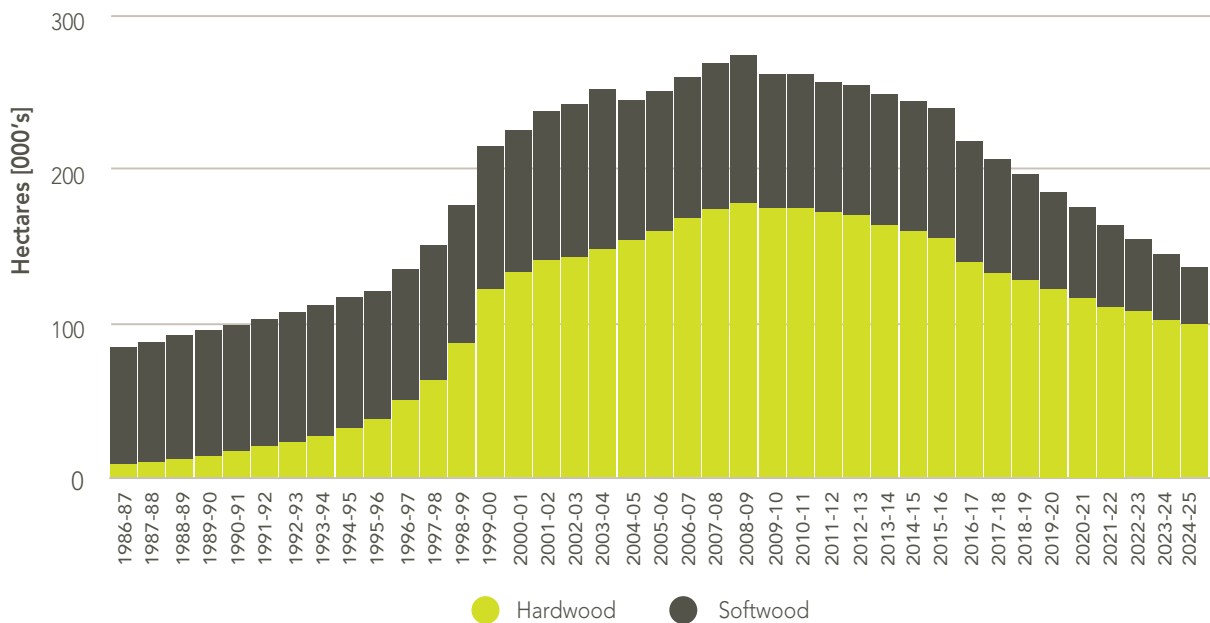
- Nano Crystalline Cellulose (NCC) is a pseudo-plastic product produced using the micro fibres of trees. NCC is an emerging product from timber and presents huge potential to manufacture a range of products. It is manufactured from wood pulp by breaking down the pulp into cellulose. NCC will have a wide variety of uses including food materials, paper, medical, paper replacements and cosmetics. It has been suggested that one day car parts could be manufactured using NCC³.
- The growing global trend towards a bioeconomy provides a unique opportunity for the forest products industry to use more of the tree to create innovative bio-products. The utilisation and establishment of new markets for forest residues allows the industry to consider domestic and international opportunities associated with bioenergy. There is the potential to utilise existing unused forest residues in a range of bioenergy markets including: pelletised fuels, or for replacing or co-firing with non-renewable fuel sources such as coal in existing power generation facilities. Forest residues are also a great source of biomass for the potential production of liquid fuels.

³ Ferguson, F, *Why wood pulp is world's new wonder material*, New Scientist, <https://www.newscientist.com/article/mg21528786-100-why-wood-pulp-is-worlds-new-wonder-material>, 2012, (accessed 28th July 2016).

WHY WE MUST START PLANTING

The total plantation estate in Western Australia peaked in 2009 with 164,000 ha of hardwood and 85,000 ha of softwood plantations. Since this time the total plantation estate has been in serious decline and unless action is taken this trend is forecast to continue.

Graph 1 Total Plantation Area in Western Australia (Source: ABARES and FIFWA)



SOFTWOOD PLANTATIONS

The majority of the softwood (pine) estate is owned by the State Government and was established from the early 1960's until the mid 1990's. These plantations created the base estate from which investors established significant local processing facilities including the Wespine Sawmill, the Wesbeam LVL plant and the Laminex particle board facility.

Attracting private investment in long rotation (25 – 30 years) softwood trees has presented a significant challenge for the industry. However since the 1990's there has been some smaller scale private investment in softwood plantations including a number of share-farm arrangements between private landowners and the State Government, which have contributed approximately another 10,000 ha of softwood plantations to the total estate.

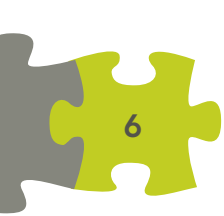
Significant areas of the existing share-farm plantations were established for environmental purposes and are either too fragmented or too far from processing facilities to enable economies of scale for harvest and haulage operations. This combined with the fact these same plantations produce lower quality and quantities of timber mainly due to poorer sites and lower rainfall, has

made many of these share-farm plantations either unviable to harvest or to replant after harvest.

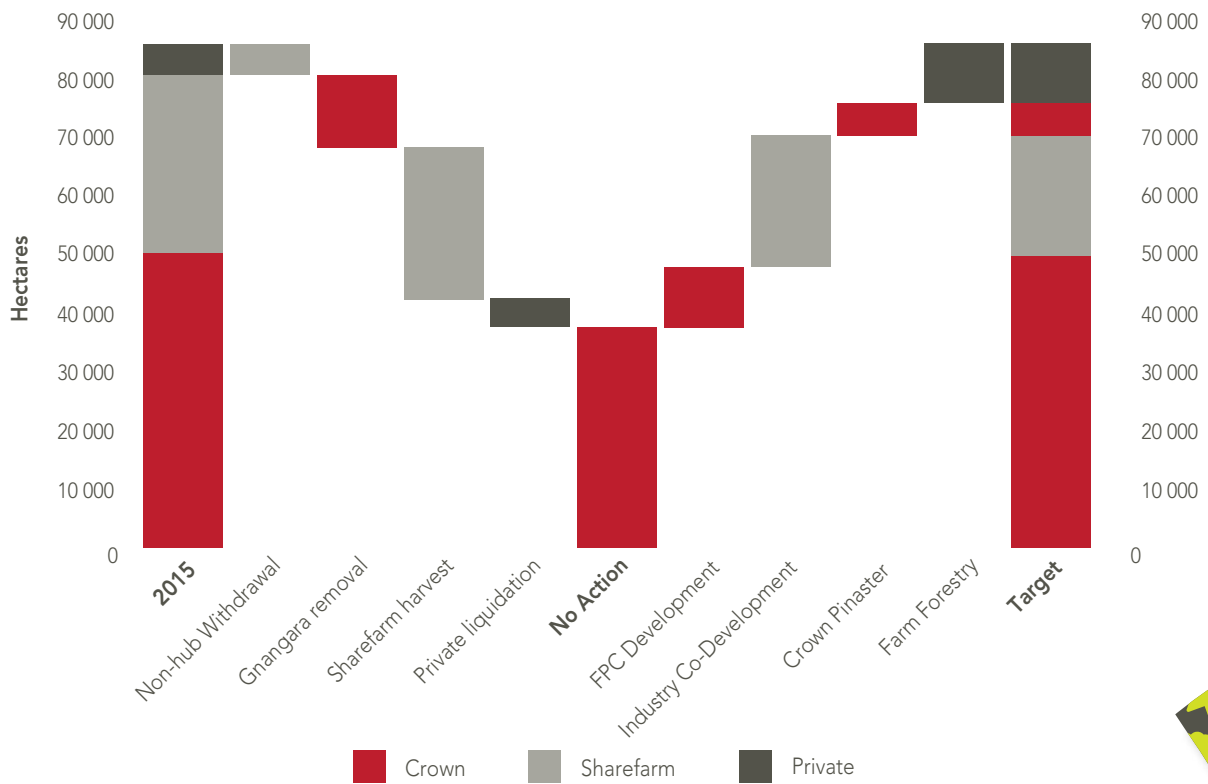
A combination of factors including drought, fire, a State Government decision not to replant the Gngangara pine plantation and a consolidation of share-farm plantations could reduce the softwood estate to less than 40,000 ha by 2025.

Without an additional 45,000 ha to bring the softwood estate within the strategic hubs to the industry target of 85,000 ha; local manufacturing loses economy of scale and therefore competitiveness in a global market.

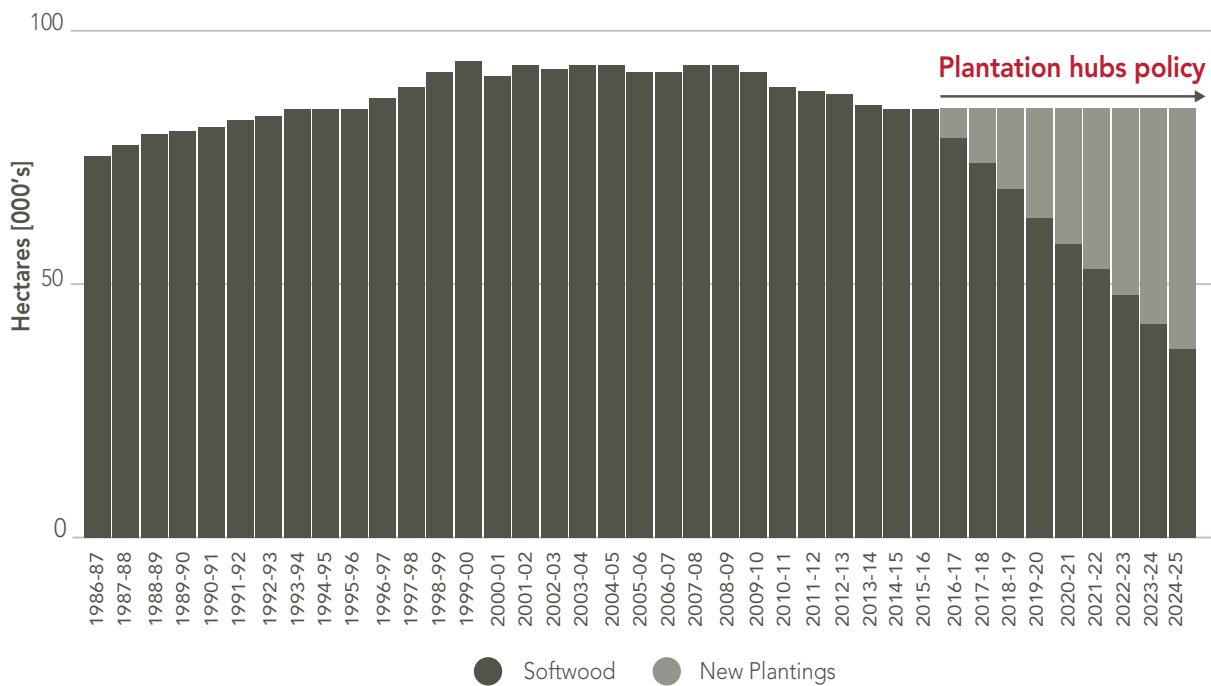
The industry target of 85,000 ha of softwood plantations through public and private investment in the Lower Mid-West and South-West Hubs is essential.



Graph 2 Softwood Decline and Rebuild - Western Australia



Graph 3 Softwood Plantation Area in Western Australia (Source: ABARES and FIFWA)



HARDWOOD PLANTATIONS

Off the back of the National Forest Policy⁴ and the Plantations 2020 Vision⁵, the hardwood plantation industry expanded rapidly in Western Australia. This attracted significant investment in local processing facilities and port infrastructure to accommodate the growing export market opportunities.

Of the 980,000 ha of hardwood plantations established in Australia over 160,000 ha were established in Western Australia primarily grown as short rotation for Hardwood fibre.

Regrettably some of these plantations were not ideally located to enable economical harvesting and haulage, resulting in low financial returns.

The hardwood industry has undergone a major rationalisation in recent years, and many of these unviable plantations either have been or will be reverted to other land uses.

Again however without reinvestment in new hardwood plantations within the strategic hubs it is anticipated the existing hardwood plantation estate will continue to decline significantly, during which time demand for hardwood fibre is forecast to increase.

The hardwood plantation sector has been a significant regional economic contributor for more than 20 years. Commercial plantations generate income for landowners through sales of product or rents received and for contractors through silvicultural management, harvesting and haulage services. Processors and exporters, including the Port Authorities, have invested greatly

in fixed infrastructure from which they derive significant income.

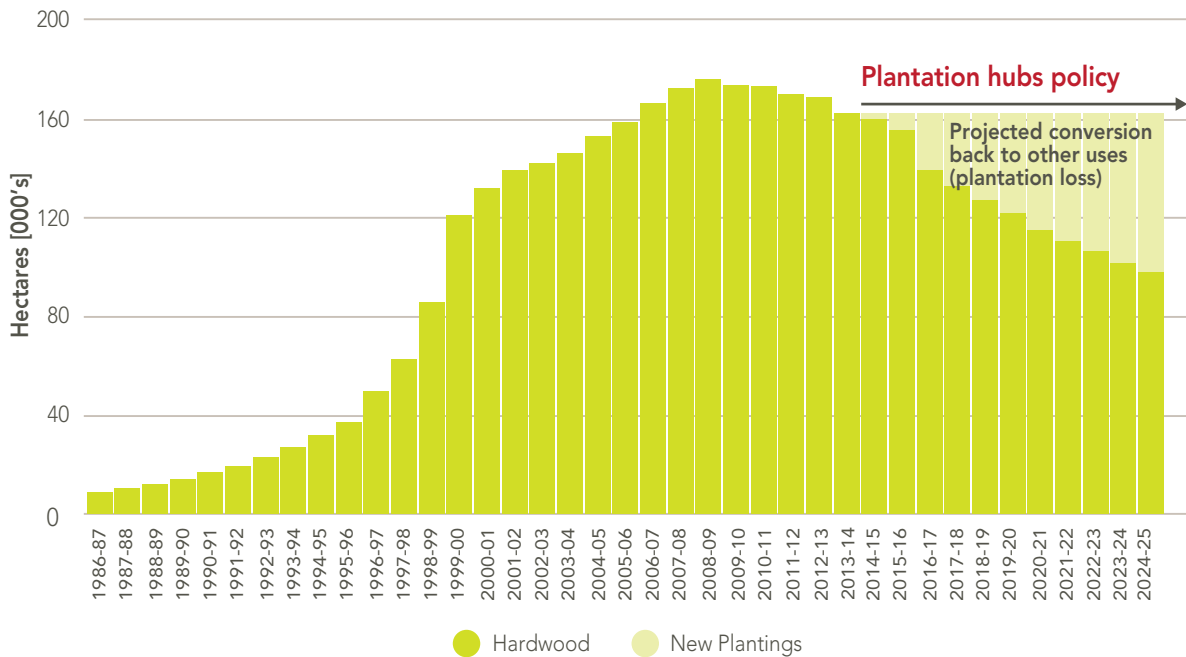
It is estimated that this sector generates more than \$250 million annually, which is reinvested throughout the regions. A declining hardwood plantation estate will see this economic and employment contribution decline significantly, with the State missing the opportunity to capitalise on an increasing global demand.

The Lower Great Southern region has achieved an estate of more than 130,000 ha and is capable of supporting a minimum target estate of 80,000 ha within the hub which will sustain investment and export activity through the Port of Albany. It is estimated that, without intervention, the longer term estate will decline to less than 40-50,000 ha.

The South-West Hub has a target estate of 60,000 ha. The current estate is estimated to be approximately 45,000 ha and declining.

Across the two hubs, the Industry is seeking to ensure 14,000 ha pa is (re)established. This level of investment needs to commence now in order to avoid a substantial decline in activity after 2021.

Graph 4 Hardwood Plantation Area in Western Australia (Source: ABARES and FIFWA)



⁴ National Forest Policy, *A New Focus for Australia's Forests*, Commonwealth of Australia, Canberra. 1995.

⁵ Ministerial Council on Forestry, Fisheries and Aquaculture, *Plantations for Australia: the 2020 vision*, Canberra, 2002.

STRATEGIC HUBS

The concept of 'Strategic Hubs' is to attract investment in plantations, supporting infrastructure and downstream processing within an economic transport distance of existing integrated forestry processing centres, through well-targeted policy measures.

In Western Australia the industry has identified 3 'hubs' based on existing major processing centres and port facilities in the Lower Mid-West, South-West and Lower Great Southern.

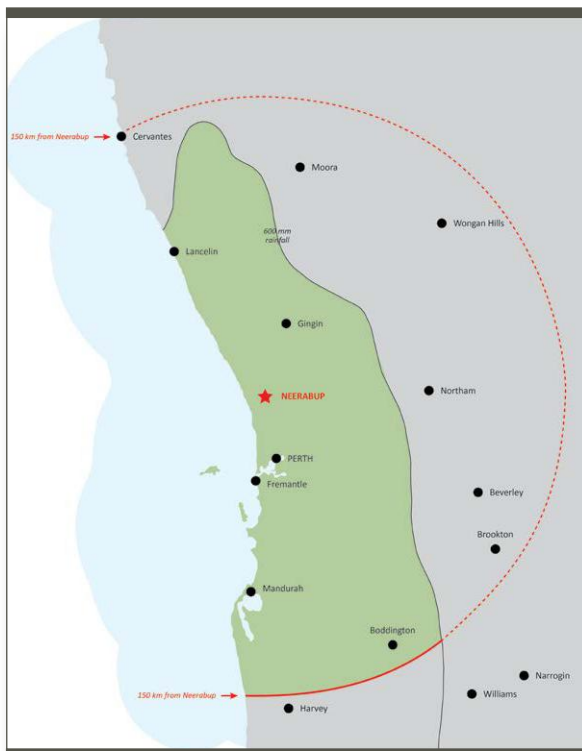
In WA the relatively flat terrain and direct transport routes generally allow for economic haul distances of up to 150km.

The perimeters of the three hubs follow the 600mm rainfall isohyets (ensuring adequate rainfall to support healthy plantation development) within the 150km economical haul distance of the major processing centres. The perimeter of the Lower Mid-West Hub and the South-West hub overlap in this area allowing for plantations to be established that could service both hubs efficiently.

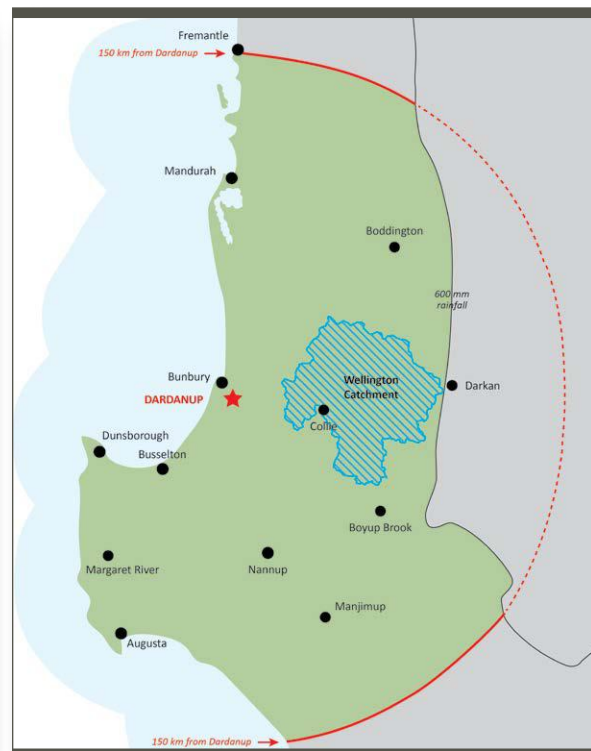
It is important to the plantation forest industry to have integrated processing capacity to make use of all of the products from plantations. This includes logs for sawn timber, LVL, pulpwood for paper and opportunities to make full use of all the residues generated from harvesting, thinning and processing.

Integrated processing hubs create efficiencies, reduce waste and reduce the need for double handling and transport of lower market value materials.

The South-West Hub is an outstanding timber processing precinct where integrated processing already exists. In the South-West Hub high value sawlogs are processed at the sawmill, and all resulting residues are utilised by the particleboard

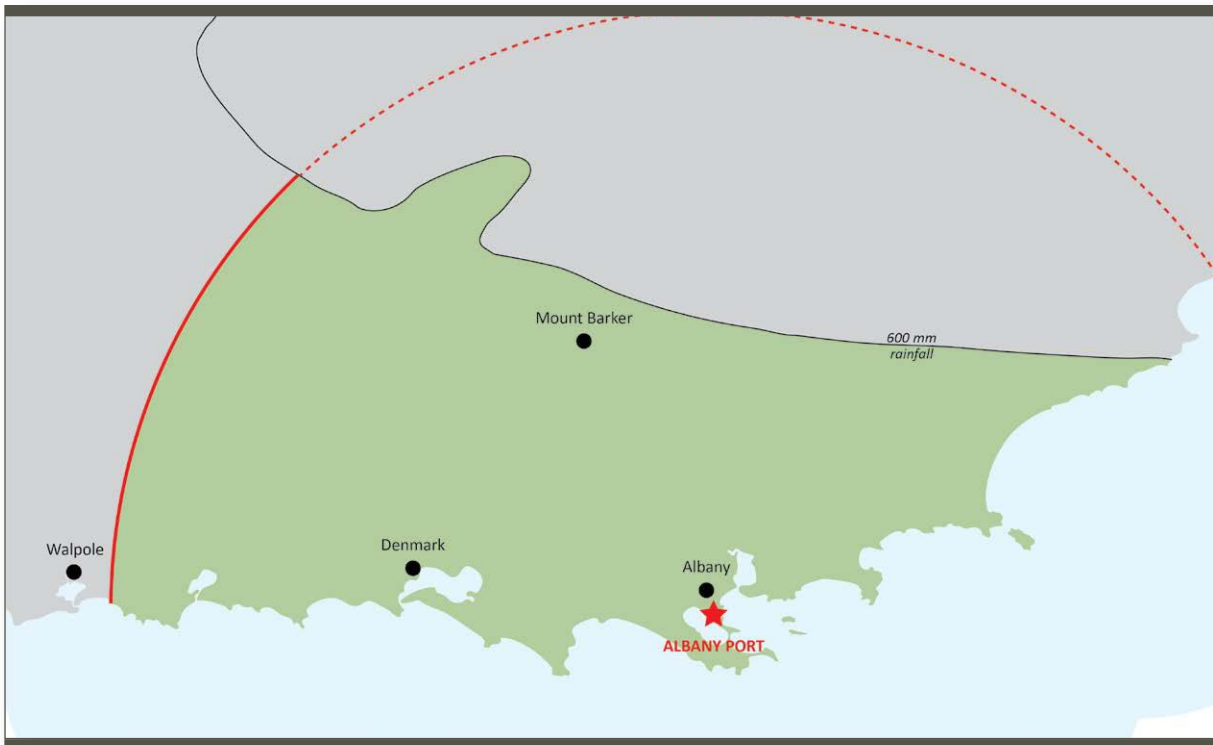


Lower Mid-West Hub



South-West Hub⁶

⁶ The Wellington catchment provides opportunities for plantation establishment to significantly improve water quality.



Lower Great Southern Hub

manufacturer. Chip logs are processed at the chip mill and wood fibre is exported via the bulk handling facilities at the Bunbury port to make paper and packaging products. Other processing facilities in the precinct include a glue manufacturer and a timber treatment plant. LVL logs are directed to the largest LVL plant in Australia located in the Lower Mid-West Hub.

The Lower Great Southern Hub is recognised for its potential to develop further into a fully integrated processing centre with well-targeted policy measures to focus new manufacturing investment in the Great Southern region. Already the Lower Great Southern Hub encompasses the Mirambeena Timber Processing Precinct where the rail to port access has enabled significant pulpwood

processing and export opportunities. Attracting complementary investment such as for engineered wood products and processing of residues for fuel or energy generation would complement the hub significantly.

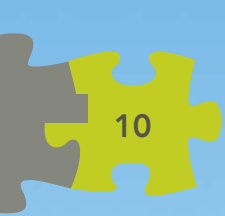
The Lower Mid-West Hub is based primarily around the existing infrastructure of the Fremantle Port and the Wesbeam processing facility in Neerabup. LVL logs from the Gnangara/Pinjar/ Yanchep and Hills plantations feed into the mill to manufacture high strength structural LVL products. Within the next five years, it is expected that LVL logs from the Mid-West plantations will commence to be delivered to the Wesbeam LVL plant for processing.



Integrated processing provides a resilient plantation industry. Attracting new plantation establishment within the identified strategic hubs is essential to support existing globally competitive processing facilities beyond 2025.

RECOMMENDATION 1:

State and local Governments recognise the strategic hubs concept and the existing 3 WA strategic hubs as identified by industry. It is recommended Government use these hubs to prioritise policy measures aimed at encouraging investment in plantations, supporting infrastructure and downstream processing.



STATE POLICY INSTRUMENTS



FOUR POLICY INSTRUMENTS FOR PLANTATION HUBS: IN DETAIL

FACILITATING INVESTMENT

There are three core considerations in facilitating investment in new plantations:

1. Addressing risk
2. Creating economic incentives from the benefits of plantations
3. Raising public awareness and support for the forest products industry.

1. ADDRESSING RISK

A key consideration in facilitating public or private investment in new plantations is to implement measures to ensure plantations are protected until they fall due for harvest. Depending on the purpose, a plantation may take anything from 10-35 years to reach maturity for harvest. Plantations must be protected from a range of external pressures until this time.

INCREMENTAL DECLINE

It had been common practice for State owned plantations to be sacrificed for a range of public works projects such as building new roads or installing new services (e.g. power lines). Plantations have readily been cleared early to allow for mining or land redevelopment projects. Incrementally these losses have amounted to over 15,000 ha of pine plantations in the past 15 years alone.

The States' Forest Management Plan 2014-2023⁷ (FMP) is designed to maintain the productive capacity of the forest and recognises the threat of incremental decline to the plantation estate. It is currently a requirement of the FMP to establish offsets for plantations which have been permanently lost to development. However under this arrangement the years invested in growing the trees are lost while a new plantation is re-established from seedlings. This can create supply gaps for the industry into the future. Therefore the industry recommends the area of offset be multiple times the area impacted by the development to build a buffer against this type of incremental decline.

It is essential the State Government continues with the intention of the Forest Management Plan, by maintaining the productive capacity of the State owned plantations.

RECOMMENDATION 2:

Industry supports the State Government to continue the intention of the existing Forest Management Plan by requiring all projects, which remove State owned plantations, to establish an offset plantation. Further the industry recommends that the offset sufficiently compensates the total lost productivity of the plantation. This may require an offset multiple times the area impacted by the development.

PROTECTING PLANTATION ASSETS FROM FIRE.

In recent years there has been an increase in the frequency and severity of bushfires largely due to a drying climate⁸. These bushfires have resulted in heavy losses to the total plantation estate in Western Australia.

The risk of wildfires to plantations has been exacerbated through a build-up of fuels in the States forests with reduced active native forest management.

There is a clear link between fuel reduction strategies and the scale and intensity of bushfires in WA. The intensity of a fire, and thus its ability to be fought by firefighters, is directly proportional to the amount of forest fuels per hectare. Of particular importance to the plantation industry, is the native forest areas with high fuel loads which neighbour plantations.

It is essential plantations are recognised as the valuable assets that they are and given due consideration in fire prevention and mitigation planning as well as during a fire incident.

RECOMMENDATION 3:

The State to review existing tools for bushfire prevention planning to ensure plantations are adequately recognised and protected as valuable assets.

- Plantation protection should be specifically recognised in the State's Code of Practice for Fire Management, in the mapping of fire prone areas, as well as given due consideration in the wildfire threat analysis process for prescribed burning.
- Industry supports the 2016 Waroona Fire Special Inquiry⁹ which recognises plantations as valuable assets. Identifying the highest priority settlements and critical assets should be informed by a committee of stakeholders which should include the industry through FIFWA.

⁷ Conservation Commission of Western Australia, *Forest Management Plan 2014-2023*, Conservation Commission of Western Australia, Perth, 2013, p. 84.

⁸ CSIRO and BoM, *Climate change in Australia: Projections for Australia's Natural Resource Management Regions, technical report*, CSIRO and Bureau of Meteorology, Australia, 2015.

⁹ Ferguson, E. *Reframing Rural Fire Management Report of the Special Inquiry into the January 2016 Waroona Fire*, Public Sector Commission, Perth, 2016.



*Low intensity fuel reduction burn in a Pine plantation
Photo credit: Owen Donovan*

FUEL REDUCTION

While prescribed burns offer a partial solution, relying on burning alone is not enough. Mechanical fuel reduction methods also have a role to play. According to a Deloitte Access Economics report¹⁰ mechanically removing fuels from forested areas in conjunction with prescribed burning has the potential to reduce the severity and extent of future fires.

The Keelty Margaret River Review¹¹ made recommendations to explore alternatives to prescribed burning. Mechanical fuel removal/thinning is one clear option.

Further, the Report of the Special Inquiry into the January 2016 Waroona Fire¹² notes there is

a significant opportunity to explore options for mechanical thinning of forests for the purpose of bushfire mitigation.

With the right government policy settings and support, it is possible that much of the excess fuel in the forest could be mechanically removed and utilised in some of the many emerging markets for bio-products.

Nationally the Australian Government has provided \$15 million over 3 years for the delivery of the National Bushfire Mitigation Programme (NBMP), of this \$1.5 million has been allocated to mechanical Fuel Load Reduction Trials.

This policy would be funded by attracting Commonwealth National Bushfire Mitigation Funds to support local mechanical fuel reduction trials, and matched with State funding from the existing \$16.2 million for the Enhanced Prescribed Burning program (money allocated to reduce forest fuel). The Policy would be complemented by a public awareness and education campaign to support market development initiatives for use of forest residues removed by the fuel reduction trials.

RECOMMENDATION 4:

Industry supports the mechanical fuel reduction trials that have been implemented in WA State forests as a method for reducing forest fuel loads to protect communities and assets.

- The State Government will continue to facilitate local trials and to undertake a public awareness campaign to support market development initiatives for use of forest residues.
- Industry will support these trials by continuing to develop residue markets, including assessing all opportunities for increasing domestic investment.

¹⁰ Deloitte Access Economics, *Scoping study on a cost benefit analysis of bushfire mitigation, report for the Australian Forest Products Association*, Deloitte Access Economics, Sydney, 2014.

¹¹ Keelty, MJ, *Appreciating the Risk Report of the Special Inquiry into the November 2011 Margaret River Bushfire*, Public Sector Commission, Perth, 2012.

¹² Ferguson, E. *Reframing Rural Fire Management Report of the Special Inquiry into the January 2016 Waroona Fire*, Public Sector Commission, Perth, 2016.



INDUSTRY FIRE BRIGADES

Through FIFWA, commercial plantation growers and managers actively participate in a Plantation Fire Co-operative. The purpose of this fire cooperative to date has been to facilitate a coordinated approach to fire preparedness, mitigation and when necessary, suppression. Within this co-operative are minimum requirements and specifications for plantation companies fire appliances that are agreed and updated yearly. This agreement involves the sharing of resources when fire threatens another company's assets. The industry also participates in staff training to ensure DFES requirements are met.

The plantation industry has not been recognised by the DFES system as a legitimate fire suppression resource. Often industry is prevented from attending fires that

threaten their assets or participate in emergency fire response. With full industry participation in this co-operative, a fire management authority could call upon the plantation industry as a significant resource.

The recognition of the plantation industry as a Forest Industry Brigade is important to the reframing of rural fire management in WA. The Waroona Inquiry notes that "the value that the farming, forestry and private business can bring to the response to bushfires needs to be recognised and harnessed"¹³. The fire management authorities must be aware of plantation assets in their areas as plantation managers are capable of providing resources for fire suppression to assist in asset protection.

In order for the formation of Forest Industry Brigades to be implemented successfully legislation should be amended to allow, subject to minimum levels of training and equipment standards, Forest Industry Brigades to be registered that have the same status, legal protection and powers to suppress fires (on and off their own land) as Bush Fire Brigades.

RECOMMENDATION 5:

- The State Government to support Recommendation 9 made by the Waroona Inquiry to implement a system for voluntary registration of Forest Industry Brigades. Further the industry requests the brigades are fully integrated into the recommended Rural Fire Service¹³.
- Industry will ensure training and equipment standards are maintained.
- Industry supports Recommendation 8 from the Waroona Inquiry to form an integrated Incident Management Team and recommends that a standing position be created within each team for a Forest Industry Liaison officer¹³.

¹³ Ferguson, E. *Reframing Rural Fire Management Report of the Special Inquiry into the January 2016 Waroona Fire*, Public Sector Commission, Perth, 2016.

2. CREATING ECONOMIC INCENTIVES FROM THE BENEFITS OF PLANTATIONS

The second core consideration in facilitating investment in plantations is by creating economic incentives from the social and environmental public-good benefits of plantations.

For the industry the primary benefit of plantations is the timber yields for processing, however plantations provide a much broader range of public-good benefits. For example the plantation industry provides economic diversity and employment opportunities particularly in regional areas, noting that every 100 ha of plantations generates 1.5 direct jobs in management, harvesting, haulage and processing¹⁴. Plantations also provide a number of environmental benefits, some of these have been addressed in the AFPA document such as plantations for carbon storage. This document uses the State relevant environmental benefits of water quality and cockatoo habitat as examples.

Through the creation of a State 'Plantations for Timber and the Environment' policy, the social and environmental benefits of plantations to the State could be realised and used to facilitate private investment.

2.1 PLANTATIONS FOR TIMBER AND WATER QUALITY

It is well documented that plantations have a positive role to play in reversing stream salinity, and therefore greatly improving water quality. Within the strategic hubs there are many examples where plantations have reversed the effects of stream salinity.

Wellington Dam



An excellent example of this is the Denmark River in the Lower Great Southern Hub, the first river in Australia to be completely recovered from salinity. Following the re-forestation of the upper Denmark catchment with 5,000 ha of commercial plantations the total dissolved solids in the river were lowered from undrinkable saline levels to below 500mg/L, making the water fresh¹⁵.

While the industry can point to many such examples where commercial plantations have significantly reversed stream salinity, these same watercourses are now at great risk of degrading in water quality due to the total plantation estate decline.

Plantations are one of the most efficient and cost effective ways to improve water quality. This is a benefit to the environment and to the farmers who access much of this water to produce food.

Under the Water for Food program the WA State Government has allocated over \$40 million dollars of Royalties for Regions funding to identify water and land resources to enable Western Australia's fresh food and animal protein production to increase its contribution to regional economies into the future.

Through the Water for Food program land for priority plantation development to combat stream salinity within the 3 strategic hubs will be identified.

¹⁴ URS Australia, Employment Model, Australia's Forest Industry Database Project (2010) and Bureau of Rural Sciences (2005).

¹⁵ Department of Water, Denmark River water resource recovery plan, Salinity and Land use impacts series, Perth, December 2011.

CASE STUDY: WELLINGTON DAM

The Collie River Catchment and the Wellington Dam is the second largest water reservoir in Western Australia. However a declining water quality has resulted in number of farmers in the Collie River Irrigation District (CRID) handing back their water allocations because the water they receive from the Wellington Dam is too salty for their farms.

Unfortunately with a contracting plantation estate this trend is set to become worse.

If the plantation estate could be expanded by 10,000 ha in the upper Collie River Catchment, bringing the total plantation area to around 15,000 ha, this would greatly improve the water quality by reducing the dam salinity to below 750mg/L.

With 25,000 ha of plantation area the water in the Wellington dam could be fresh once again, providing valuable water and timber resources to industry and regional communities in the South West.

A State ‘Plantations for Timber and the Environment’ policy would encourage plantation development in priority areas within the strategic hubs where plantations will assist to combat water salinity.

Gifting tradeable Water Access Entitlements on these priority areas would provide an incentive for private plantation development in the right locations. Reserving available Crown land, direct land purchases and facilitating public-private leases or share farm agreements with private landholders would aid the implementation of this policy.

Funding from the existing \$40 million Water for Food Program could be used to identify land potentially available for plantation establishment to combat water salinity with in the 3 strategic hubs. State funding to offset upfront plantation establishment costs could be sourced from the

creation of Green Bonds¹⁶ or by redirecting funds from the \$315 million Integrated Water Supply Scheme.

Industry will support the adoption of a State ‘Plantations for Timber and the Environment’ Policy by providing direct industry investment in plantation establishment, either privately or through joint venture arrangements with the State Government. Commercial forest managers will seek independent forest certification under an internationally recognised certification scheme and maintain an industry Code of Practice for Timber Plantations in Western Australia to promote best practice in forestry management for Western Australia.

Wellington Dam



¹⁶ Pallas MP, T, Victorian Green Bonds an Australian and World First, <http://www.premier.vic.gov.au/victorian-green-bonds-australian-and-world-first/>, 2016, (accessed 4th August 2016).

2.2 PLANTATIONS FOR TIMBER AND COCKATOOS

Urban residential and industrial development on the Swan coastal plain has removed much of the natural food source for the threatened Carnaby's cockatoo. With declining native vegetation through land clearing for commercial and residential developments, cockatoos have turned to pine cones to supplement their diet. The benefits of pine plantations as foraging habitat for cockatoos have been extensively documented in recent years¹⁷.

When plantations are managed on a sustainable basis, trees that are harvested for timber production are re-established for future timber production. In this way commercial plantations serve a dual purpose, the managed plantation provides both a sustainable supply of timber for local value-added manufacturing and also provides a sustainable forest area for cockatoos.

Unfortunately the current trend of a declining pine plantation estate will not provide this sustainable balance. We must start planting now to avoid critical shortfalls in both respects in the future.

While re-establishing the State owned pine plantations is critical, achieving a greater level of private investment in pines is also necessary. Attracting private investment in long rotation (25 – 30 years) trees has presented a challenge for the industry.

The environmental benefit of pines as a food source for cockatoos has a clear value to the State. There are many examples worldwide where this type of environmental benefit is realised in economic terms and private landholder involvement is rewarded. One such example is the Afforestation Grant Scheme in New Zealand¹⁹. In New Zealand the primary environmental concern is erosion. Private land holders are compensated by way of grants to establish tree plantations on their property to address erosion. The grant assists private investors with the upfront establishment costs, this combined with the longer term financial returns from timber sales provides sufficient incentive to encourage private investment in plantations.

A State 'Plantations for Timber and the Environment' Policy would encourage commercial pine plantation development within the strategic hubs where plantations will contribute to the foraging habitat of threatened cockatoos and the long term timber supply to the industry.

Afforestation grants as payment for the environmental benefit would assist private landowners with the upfront establishment costs and provide incentive for private pine plantation development in the right locations. Reserving available Crown land, facilitating public-private leases or share farm agreements with private landholders would aid the implementation of this policy

CASE STUDY: CARNABY'S COCKATOO

The northern Gnangara, Pinjar and Yanchep pine plantations provide up to 57% of the food source for the Carnaby's Cockatoo on the Swan Coastal Plain.

This was not well understood at the time of the 1996 Cabinet decision to liquidate the majority of the State owned pine plantations over the Gnangara Mound, resulting in the permanent removal of 23,000 ha of pine plantations in the North Metro-Mid West Strategic Hub by 2020.

The Draft Green Growth plan states the State Government has committed to replanting 5000 ha in the Yanchep region however this will not be managed as traditional plantation¹⁸.

Re-establishing at least 10,000 ha of commercial pine plantations in the Gnangara, Pinjar or Yanchep region and by ensuring the remainder of the plantation (13,000 ha) is off-set elsewhere within the Strategic Hubs, would ensure both a sufficient ongoing timber supply to support existing manufacturers and a sufficient ongoing supply of foraging habitat for the cockatoos.

A clear 'win, win' situation for the industry and the environment.

¹⁷ Stock, W, *Pine as fast food: foraging ecology of an endangered cockatoo in a forestry landscape*, Carnaby's Black-Cockatoo 2013 Symposium, Perth, 2013.

¹⁸ Minister for Primary Industries, *Afforestation Grant Scheme*, <https://www.mpi.govt.nz/funding-and-programmes/forestry/afforestation-grant-scheme/>, 2016, (accessed 1st June 2016).

¹⁹ Department of Premier and Cabinet, *Draft Perth and Peel Green Growth Plan*, <https://www.dpc.wa.gov.au/Consultation/StrategicAssessment/Pages/Draft-Green-Growth-Plan-documents.aspx#commonwealth>, 2016, (accessed 13 July 2016).

Industry will support the adoption of a State 'Plantations for Timber and the Environment' Policy by providing direct industry investment in plantation establishment either privately or through joint-venture arrangements with the State Government. The industry will maintain a Code of

Practice for Timber Plantations in Western Australia, with specific management objectives for the health and safety of cockatoos during the life of the plantation, and to promote best practice in forestry management for Western Australia.

RECOMMENDATION 6:

The State Government to adopt a 'Plantations for Timber and the Environment' policy, supported by industry to encourage plantation development in the right locations to provide timber to the industry and provide environmental benefits.

- The State Government to develop an Afforestation Grant Scheme to develop the 'Plantations for Timber and the Environment' policy.
- This could be aided by the State Government securing land and water access entitlements.
- The Industry to provide direct investment in plantation establishment either privately or through joint-venture arrangements with the State Government.

Carnaby's Cockatoo



3. RAISING PUBLIC AWARENESS AND SUPPORT FOR THE INDUSTRY

The final consideration in facilitating investment in new plantations is to inform the broader community as to the benefits of plantations and the significant contributions they make to the environment and the economy in Western Australia.

3.1 WOOD ENCOURAGEMENT POLICIES

Building strong community support for the forest products industry is paramount to the success of the industry into the future. Community support for the industry can be showcased through local and state governments adopting supportive pro-industry policies such as a Wood Encouragement Policy (WEP).

A WEP is designed to encourage the use of sustainably sourced local timber as the first choice of building material in all government buildings and structures.

By adopting a WEP local governments can show support for the forest products industry which provide economic diversity in their region, whilst also making fantastic use of highly valued, renewable and locally sourced timbers. As timber takes a lot less energy to produce than other materials such as concrete,

steel and plastics, adopting a WEP will result in buildings and structures that have a much smaller carbon footprint.

In Western Australia, the **Shire of Nannup** was the first WA Local Government to adopt a Wood Encouragement Policy. The Nannup WEP encourages wood as the preferred building material and demonstrates a commitment to the development of the local forest and wood products industry. Other LGA's in WA, particularly those located within the Lower Mid-West, South-West and Lower Great Southern Strategic Hubs are also encouraged to adopt Wood Encouragement Policies.

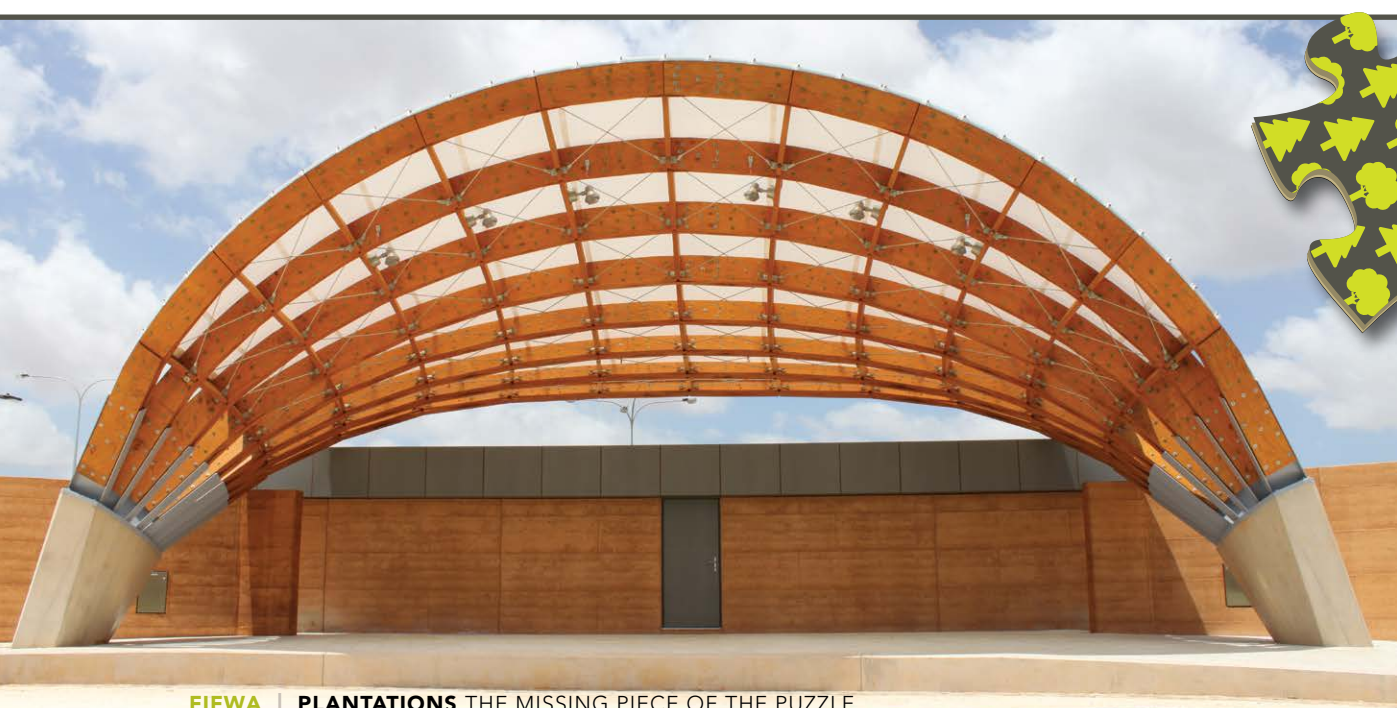
The adoption of a Wood Encouragement Policy by the State Government would go a long way to widely promote the values and benefits of the local forest products industry. A State wide WEP would undoubtedly increase demand and therefore confidence to invest in the plantation industry.

RECOMMENDATION 7:

State and local governments to adopt Wood Encouragement Policies, designed to encourage timber as the environmentally friendly building material of choice and support and promote the local forest products industry.

South Hedland Performance Shell

Photo credit: Concept and Design. ATC Studio. Director Patrick Beale. AADipl. [London] RAIA



FARM FORESTRY

Private farm forestry can be complementary to other farm activities, such as by providing wind breaks for crops, shade and shelter for livestock, erosion control, reversing surface water salinity as well as the financial returns from timber sales.

Providing a real opportunity for farmers to have a commercial stake in the Western Australian forest products industry is also a fantastic opportunity to increase community engagement with the industry.

Unfortunately past experiences have resulted in many disjointed, highly dispersed small parcels of plantations often consisting of tree species not suited to established markets, or too far from processing facilities to launch a commercial harvest and haulage operation. Marketing of small scale wood lots has also presented a challenge for farm foresters. Often private growers lack the tools and resources to engage effectively with industry. Many farmers find themselves alone until the day they try to harvest and sell their timber.

Many of these obstacles could be overcome if there was a more co-ordinated approach to farm forestry in Western Australia. The availability of effective forestry extension services could make a considerable difference.

Readily available information on forest management practices, site and target tree species selection (hardwoods and softwoods), assistance for farm foresters to access carbon markets, coordination of group certification and improving the understanding of the forest products industry and markets would represent a valuable extension service. Making clear what constitutes a commercial plantation lot to enable a cost effective harvest operation is essential. Some growers may also benefit from a cooperative marketing service.

Under the Forest Products Act 2000, one of the core functions of the Forest Products Commission (FPC) is 'to promote and encourage the development of the forest production requirements of the State'²⁰. The FPC has been active in facilitating farm forestry in the past. However, the agency has not had the resources to undertake a proactive role since staff numbers were reduced in 2010. The industry would welcome the FPC facilitating an effective extension service that would be complementary to its core function. The Act also stipulates the FPC will maintain seed or propagation orchards for forest products, which could be shared with private farm foresters. The industry supports the ongoing role of FPC's pine breeding program, in conjunction with the nursery and seed centre in Manjimup, to assist farm forestry projects where required.

A 'Facilitating Farm Forestry' Policy would encourage a coordinated approach to farm forestry within the W.A strategic hubs. The policy would see the FPC engage with farm foresters to establish an effective extension services through the provision of dedicated staff to service the strategic hubs. This would ensure the right species are grown in the right locations.

The Industry will support a 'Facilitating Farm Forestry' Policy by adopting and promoting clear pathways to market for farm foresters; an example of this could be offering upfront off-take agreements for private growers.

RECOMMENDATION 8:

The State Government to adopt a facilitating WA Farm Forestry policy supported by industry to ensure commercially viable plantations are established in the strategic hubs.

- The State Government to supply effective extension services through the FPC.
- Industry to support a Farm Forestry policy by promoting clear pathways to market.

²⁰ Forest Products Act 2000 (WA), p 7.

INFRASTRUCTURE

Consolidating investment in infrastructure is necessary to address bottlenecks and sub-standard support infrastructure which contribute to lost time and inefficiencies experienced by the plantation forest industry.

Targeting infrastructure improvements within the strategic hubs represents the most disciplined spend of public resources to remove red-tape and streamline transport linkages for all industries transporting goods within the hubs and to the major port facilities.

PORT ACCESSIBILITY AND INFRASTRUCTURE

Within the hubs there is an urgent need to fast-track arterial road upgrades feeding the ports, in order to cater for efficient heavy freight traffic flows and to improve the overall road safety for mixed traffic on shared public roads, as well as the need to prioritise specific port infrastructure upgrades to accommodate increased demand for port facilities in the regions.

Lower Great Southern Hub

The aging and under-engineered arterial roads which feed the Albany Port are inadequate for the increasing heavy freight traffic. Arterial roads requiring upgrade in the Lower Great Southern Hub include: Hassell Hwy, Chesterpass Road and South Coast Hwy. The width of seal and geometry of these arterial roads is a known safety risk factor, particularly on the South Coast highway. The need to upgrade these arterial roads has been raised numerous times over many years including: by the Western Australian Planning Commission in the Great Southern Regional Planning and Infrastructure Framework (2014)²¹, Regional Development Australia Great Southern Regional Plan 2013 to 2018²² and Western Australian Planning Commission City of Albany Local Planning Strategy (2010)²³.

Traffic into the Albany Port tends to 'bottleneck' particularly east bound freight from the South Coast Hwy. The Albany Ring Road Project has been designed to address this problem as well as provide improved access to the Mirambeena industrial estate. While stage 1 of the Ring Road Project was completed in 2007, stages 2 and 3 designed to connect the Albany Hwy to the Port of Albany have not progressed since this time, despite being listed in numerous planning documents, such as The Great Southern Development Commission's Great Southern Regional Investment Blueprint (2015)²⁴ and Western Australian Planning Commission Lower Great Southern Strategy (2016)²⁵.

Albany port trade throughput continues to grow annually. Woodchips and grain are the primary products exported through the Albany port at present while fertiliser and petroleum are the primary imports. Largely an export-oriented port the lack of a containerisation facility limits the export opportunity from other sectors, such as manufacturing. The major advantage of the Port is the significant opportunity to expand the shipping channels and the excess surrounding land for port development.

Overall the Albany Port facilities require expansion investment to meet the growing demand, including; the lengthening of the existing Dolphin woodchip berth to increase loading efficiencies, deepening the shipping channel to allow for larger vessels to doc at the Port and the addition of a berth to accommodate container handling.

²¹ Western Australian Planning Commission, *Great Southern Regional Planning and Infrastructure Framework*, http://www.planning.wa.gov.au/dop_pub_pdf/Great_Southern_Regional_Planning_and_Infrastructure_Framework_Part_A.pdf, 2015, (accessed 4th August 2016).

²² Regional Development Australia Great Southern WA, *Regional Plan 2013-2018*, http://www.rdagreatsouthern.com.au/pdf/RDA_RegionalPlan_web.pdf, 2013, (accessed 4th August 2016).

²³ Department for Planning and Infrastructure, *City of Albany Local Planning Strategy*, http://www.planning.wa.gov.au/dop_pub_pdf/Albany_Local_Planning_Strategy.pdf, 2010, (accessed 4th August 2016).

²⁴ Great Southern Development Commission, *Great Southern Regional Investment Blueprint*, <http://www.gsd.c.wa.gov.au/activities/stratplan/blueprint>, 2015, (accessed 4th August 2016).

²⁵ Western Australian Planning Commission, *Lower Great Southern Strategy 2016*, <http://www.planning.wa.gov.au/7648.asp>, 2016, (accessed 4th August 2016).

South–West Hub

The Bunbury Outer Ring Road (BORR) was identified by the Western Australian Planning Commission in the Greater Bunbury Structure Plan (2011)²⁶ and again in the Greater Bunbury Infrastructure Investment, Roads to Export, Plan (2009, 2013)²⁷ as being critically important infrastructure to link the four major Highways with the Bunbury Port Access Road. Stage 1 of the BORR was completed in 2013, however despite the importance of the project, stages 2 and 3 remain unfunded in the forward estimates.

Completion of the BORR and the Bunbury Port Access Road will improve freight access to the Bunbury Port, improve freight travel time efficiency, reduce congestion on existing roads, provide an effective by-pass for inter-regional traffic (such as heavy tourist traffic to the south west) and improve safety for all road users.

While export of timber, grains, mineral sands and alumina is growing the Bunbury port is restricted in capacity. Engineering and design studies have been progressed to increase the berth capacity at the port. Increasing the capacity of the Bunbury Port would have the added benefit of reducing freight pressure and need for travelling to the Fremantle Port.

There is over \$42 billion allocated to the Commonwealth Infrastructure Investment Programme to address regional roads and other infrastructure needs in Australia. Much of this funding is accessible through co-funding

arrangements (usually shared 80:20) between the Federal and State Governments.

While State funding is confined there are existing funding streams which are well aligned to the major infrastructure projects which could be accessed over the forward estimates to commence these priority projects. The Royalties for Regions funding is set to be strategically guided by the Committee of Economic Development for Australia's (CEDA) State of the Region Report²⁸, culminating in the WA regional investment blueprints. In both the Great Southern and the Southwest regional investment blueprints, the port upgrades, the completion of the BORR Project and the Albany Ring Road Project have been identified as necessary projects for the economic development of the regions^{29 30}.

Given the importance of infrastructure upgrades with in the strategic hubs this policy would see the State Government;

- **Bring forward critical arterial road upgrades which have been stalled for many years.**
- **Prioritise the Bunbury Outer Ring Road, the Albany Port Access Road and the Bunbury and Albany Port upgrades as high priority infrastructure projects for the State.**
- **Actively pursue 80% of project funding from the Commonwealth Governments' Infrastructure Investment Programme to initiate these projects.**

RECOMMENDATION 9:

The State Government to bring forward arterial road upgrades and prioritise port access and port infrastructure for Albany and Bunbury.

²⁶ Western Australian Planning Commission, *Greater Bunbury Strategy 2013*, <http://www.planning.wa.gov.au/publications/6678.asp>, 2013, (accessed 4th August 2016).

²⁷ South West Development Commission, *Roads to Export: Greater Bunbury Infrastructure Investment Plan*, http://www.swdc.wa.gov.au/media/67459/roads%20to%20export_18oct2010.pdf, 2010, (accessed 4th August).

²⁸ Committee for Economic Development of Australia, *WA State of the Regions Series*, http://www.ceda.com.au/events/ceda_series/regional-series, 2016, (accessed 4th August 2016).

²⁹ Great Southern Development Commission, *Great Southern Regional Investment Blueprint*, <http://www.gsdw.wa.gov.au/sites/www.gsdw.wa.gov.au/files/images/Great%20Southern%20Investment%20Blueprint%20October%202015.pdf>, 2015, accessed 15th June.

³⁰ South West Development Commission, *South West Regional Blueprint*, http://www.swdc.wa.gov.au/media/230871/sw%20blueprint_final_web.pdf, 2014, Accessed 15th June.

STREAMLINING THE ROAD PERMIT APPLICATION PROCESS

Unlike annual crops which involve significant, regular transport primarily along the same transport routes, plantations usually only require one or two thinning operations and one final harvest over the total life of the plantation. This generally means the road use is occasional and short term. It also means the permit application for the road use is being assessed for the first time in many instances.

Obtaining transport permit approvals in a timely manner is critical to the overall efficiency of the plantation forest industry. Delays in assessing and approving proposed haulage routes for transport is currently an area of concern for the industry.

A central element of the WA State Governments **Regulatory Reform Policy** is to promote a whole of government approach to drive innovation, reduce barriers to productivity, investment, and employment by cutting red tape. **Streamlining the permit application process would go a long way to reducing red tape and improving logistic efficiencies for the plantation industry.**

This could be achieved by improving the communications between Main Roads and the applicant to ensure the correct feedback is passed through to the applicant particularly on

a provisionally declined permit. Improving these communication channels allow applications to be resubmitted with the required changes (such as traffic management plans) to ensure approval of the permit.

Industry will support the streamlining of permits application process by working with Main Roads to ensure due consideration has been given to local road conditions before submitting the application. Industry will continue to strive to improve safety systems through the industry Codes of Practice and self-regulation, including maintaining the 'Safety and Health Code for Native Forest/Hardwood Logging and Plantation Logging'³¹ and 'FIFWA WA Code of Practice for Chain of Responsibility'³² which governs the industry safety systems in place with respect to mass, dimensions, load restraint, fatigue and speed.

RECOMMENDATION 10:

The State Government to uphold the Regulatory Reform Policy, cutting 'red-tape' by streamlining the RAV permits application process.



³¹ Forest Industries Federation of WA, *Safety and Health Code for Native Forest/Hardwood Logging and Plantation Logging*, Perth, 2016.

³² Forest Industries Federation of WA, *FIFWA WA Code of Practice for Chain of Responsibility*, Perth, 2015.

DEVELOPING A WA BIOENERGY MARKET

Plantation forestry is an underutilised sustainable fuel source that can contribute to lower reliance on coal powered energy and assist WA in meeting renewable energy demands. The development of current small scale bioenergy projects in the Great Southern region has demonstrated the possibility for viable energy production from plantation residues. Continuing the development of a residue biomass power generation market will require correct infrastructure investment within the strategic hubs to support the plantation industry in delivering residues cost effectively.

Plantation residue is a key product that growers must find a market for in order to maintain operational efficiency. Currently, residues are utilised as wood chips or for export into overseas biofuel markets. Current demand for WA residues for overseas biofuel markets is strong and contributing to the efficiency of the industry. A WA biomass energy market is paramount as WA strives to meet the Federal 2020 renewable energy target.

Power generation from biomass can be accomplished through a variety of different processes. Typically, there are two pathways for wood waste use in power generation, the first is by using wood wastes as a partial substitute in conjunction with coal in a co-firing energy plant. The second is a standalone power plant, usually of smaller scale, running on a steady supply of biomass providing communities with baseload power generation.

The Clean Energy Finance Corporation estimates a potential investment opportunity in bioenergy from plantation wood waste in the range of \$450-\$650 million in Australia³³. As WA holds a good proportion of Australia's plantation, this represents a significant potential investment as WA transitions to meeting its commitment to the 2020 renewable energy target.

The Plantation forest industry is only one of many industries that will benefit from the infrastructure upgrades that will improve freight efficiencies and access to the major WA port facilities.



³³ Clean Energy Finance Corporation, *The Australian bioenergy and energy from waste market: A market report by the Clean Energy Finance Corporation*, Sydney, 2015.

TRAINING AND SKILLS

The forest products industry offers a diverse range of employment opportunities in Western Australia; however the majority of jobs in the industry require a specialised skill set or training in technical trades which are specific to the industry. While demand for skilled workers is relatively consistent, businesses are now experiencing skills shortages and skills gaps in training delivery.

Currently there are no university education programs directly relevant to the forestry products industry in Western Australia; however there are a few training providers delivering nationally recognised Vocational Education and Training (VET) courses.

TRAINING NEEDS AND PROMOTION

Generally the industry is best suited to on-the-job training models for VET education. On the job training in regional locations is resource intensive and as a consequence presents challenges for training providers. Training providers often experience difficulty in recruiting and retaining lecturers with suitable experience and qualifications to deliver training for specific skill sets such as harvesting machine operators³⁴.

While industry demand for skilled workers is steady, actual enrolments in training can be relatively low, therefore training providers may not be able to offer full time work to trainers further compounding the recruitment and retention challenge³⁵.

The industry recognises the need for continued development of existing employees and the need to attract new and younger workers to the industry, however the challenge being faced by the local industry is the high cost of training, time lost for on the job training, the bureaucracy of the sign-up process, and the inability to complete all training modules within Western Australia.

The Western Australian Government has recently reformed the WA training sector. This includes

the formation of a South Regional TAFE college (encompassing all of the existing state training providers in the South-West and Lower Great Southern Hubs). This represents an opportunity to develop a more extensive training program which meets the needs of the Industry in this region, while maintaining linkages through the South Regional TAFE to the Albany based Forest Training Centre (primarily involved in certification of harvesting operators).

This policy would see the industry engage a service provider to undertake a Training Needs Analysis to develop an effective Forestry Workforce Development Plan considering skills training, and career development pathways. Industry and the FPC will facilitate the development of a trainee program that will emphasise the development of young recruits to the industry.

Attracting new employees to rural industries still remains a challenge. Since 2015 students must achieve either an Australian Tertiary Admission Rank or a minimum Certificate II to graduate with a WA Certificate of Education. There are now Forest industry specific Certificate II courses available for VET in schools (VETiS) delivery however this is not well known.

To promote the forest product industry as a real career choice and to improve the take-up of forest industry specific VETiS training, the development and delivery of promotional material should be targeted at schools within the 3 strategic hubs.

RECOMMENDATION 11:

- Industry to engage a training provider to undertake 'Training Needs Analysis' for the forest products industry, to create an effective 'Forestry Workforce Development Plan' to overcome critical skill shortages and address gaps in training delivery.
- Industry and the FPC will facilitate the development of a trainee program that will emphasise the development of young recruits to the industry.
- Industry will support the development and delivery of promotional material targeted at schools within the 3 strategic hubs.

³⁴ Food Fibre and Timber Industries Training Council WA, *Industry Workforce Development Plan 2015/16 Supporting workforce development in the food, fibre and timber industries through research and advice to industry, government, and training providers*, Perth, 2015.

³⁵ Food, Fibre and Timber Industry Training Council, *RTO Workforce Development Survey*, Perth, 2012.



INDIGENOUS TRAINING AND ENGAGEMENT

Aboriginal and Torres Strait Islander people have always been involved in the forest Industry, now native title and Indigenous entrepreneurship are providing new opportunities in forest growing and processing³⁶. Locally in Western Australia the industry believes there may be real potential to expand on these opportunities particularly in the areas of applying mechanical fuel reduction techniques in native forests and in protecting assets from fire through the deployment of industry-indigenous fire brigades.

With the right training programs Indigenous people could increase their participation in forest management activities, working in an outdoor environment on traditional lands, while learning transferable skills such as how to

operate equipment and machinery. For example a dedicated Indigenous crew could undertake much needed mechanical fuel reduction and thinning in the native forest around valuable assets like towns, farms and plantations to protect them from bushfires.

Under this policy the State would facilitate a pilot training program to establish a forest fuel mitigation crew, equipped with necessary harvesters to reduce the fuel load in native forests surrounding valuable assets

This policy would see the State allocate funding to provide training and equipment for a trial Indigenous forestry crew, specialising in fuel mitigation activities.



RECOMMENDATION 12:

The State government to fund a pilot training program to develop Indigenous Forestry Initiatives in WA.

³⁶ Forest Industry Advisory Council, *Transforming Australia's Forest Products Industry: Recommendations from the Forest Industry Advisory Council*.

2017/2018 STATE POLICY RECOMMENDATIONS

#	RECOMMENDATION	
1	State and local Governments recognise the strategic hubs concept and the existing 3 WA strategic hubs as identified by industry. It is recommended Government use these hubs to prioritise policy measures aimed at encouraging investment in plantations, supporting infrastructure and downstream processing.	9
2	Industry supports the State Government to continue the intention of the existing Forest Management Plan by requiring all projects, which remove State owned plantations, to establish an offset plantation. Further the industry recommends that the offset sufficiently compensates the total lost productivity of the plantation. This may require an offset multiple times the area impacted by the development.	11
3	<p>The State to review existing tools for bushfire prevention planning to ensure plantations are adequately recognised and protected as valuable assets.</p> <ul style="list-style-type: none"> Plantation protection should be specifically recognised in the State's Code of Practice for Fire Management, in the mapping of fire prone areas, as well as given due consideration in the wildfire threat analysis process for prescribed burning. Industry supports the 2016 Waroona Fire Special Inquiry which recognises plantations as valuable assets. Identifying the highest priority settlements and critical assets should be informed by a committee of stakeholders which should include the industry through FIFWA. 	11
4	<p>Industry supports the mechanical fuel reduction trials that have been implemented in WA State forests as a method for reducing forest fuel loads to protect communities and assets.</p> <ul style="list-style-type: none"> The State Government will continue to facilitate local trials and to undertake a public awareness campaign to support market development initiatives for use of forest residues. Industry will support these trials by continuing to develop residue markets, including assessing all opportunities for increasing domestic investment. 	12
5	<p>The State Government to support Recommendation 9 made by the Waroona Inquiry to implement a system for voluntary registration of Forest Industry Brigades. Further the industry requests the brigades are fully integrated into the recommended Rural Fire Service.</p> <ul style="list-style-type: none"> Industry will ensure training and equipment standards are maintained. Industry supports Recommendation 8 from the Waroona Inquiry to form an integrated Incident Management Team and recommends that a standing position be created within each team for a Forest Industry Liaison officer. 	13
6	<p>The State Government to adopt a 'Plantations for Timber and the Environment' policy, supported by industry to encourage plantation development in the right locations to provide timber to the industry and provide environmental benefits.</p> <ul style="list-style-type: none"> The State Government to develop an Afforestation Grant Scheme to develop the 'Plantations for Timber and the Environment' policy. This could be aided by the State Government securing land and water access entitlements. The Industry to provide direct investment in plantation establishment either privately or through joint-venture arrangements with the State Government. 	17

#	RECOMMENDATION	
7	State and Local Governments to adopt Wood Encouragement Policies, designed to encourage timber as the environmentally friendly building material of choice and support and promote the local forest products industry.	18
8	The State Government to adopt a facilitating WA Farm Forestry policy supported by industry to ensure commercially viable plantations are established in the strategic hubs. <ul style="list-style-type: none"> • The State Government to supply effective extension services through the FPC. • Industry to support a Farm Forestry policy by promoting clear pathways to market. 	19
9	The State Government to bring forward arterial road upgrades and prioritise port access and port infrastructure for Albany and Bunbury.	21
10	The State Government to uphold the Regulatory Reform Policy, cutting 'red-tape' by streamlining the RAV permits application process.	22
11	<ul style="list-style-type: none"> • Industry to engage a training provider to undertake 'Training Needs Analysis' for the forest products industry, to create an effective 'Forestry Workforce Development Plan' to overcome critical skill shortages and address gaps in training delivery. • Industry and the FPC will facilitate the development of a trainee program that will emphasise the development of young recruits to the industry. • Industry will support the development and delivery of promotional material targeted at schools within the 3 strategic hubs. 	24
12	The State government to fund a pilot training program to develop Indigenous Forestry Initiatives in WA.	25



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