

**Australian Forestry Management Pty Limited
(AFM)**

2004 Softwood Project



2015-2016 Annual Report

Legal Context

This annual report has been prepared in accordance with Schedule 1 Part 3(h) of the Forestry Management Contract between Australian Forestry Management Pty Limited and the Forestry Commission of New South Wales (now known as the Forestry Corporation of NSW (FCNSW)) for the 2004 Softwood Project.

Background

The 2004 Softwood Project comprises two properties – Dr Vance and The Valley – which are both located within the Tumut Management Area (TMA) of Snowy Region.

Plantation Area Review

A review of the net stocked area of plantation within the 2004 Softwood Project was undertaken in June 2015 using new aerial photo coverage (Table 1). This is the first review that has been undertaken since the completion of post plant survival assessments. It captures the natural attrition and mortality that has occurred over the last ten years.

Table 1 – Current Net Stocked Area

Plantation	Net Stocked Area in 2015 (ha)
Dr Vance	92.5
The Valley*	752.0
Total	844.5

*Includes 8.3ha of 2012 ageclass, replanted due to fire damage.

The updated net stocked area which includes Forestry Right Land and Adjoining Land constitutes a change of minus 4.4%

Growing Season

Rainfall in the Tumut management unit was average during the reporting period (Figure 1) with a drier spell occurring in spring, periodic rainfall in summer and above average rainfall in June. Total rainfall at Tumbarumba for 2015-16 was 979 mm compared to the long term average of 977 mm. Rainfall for Burrinjuck Dam was 1038 mm compared to a long term average of 927 mm (refer Annexure A).

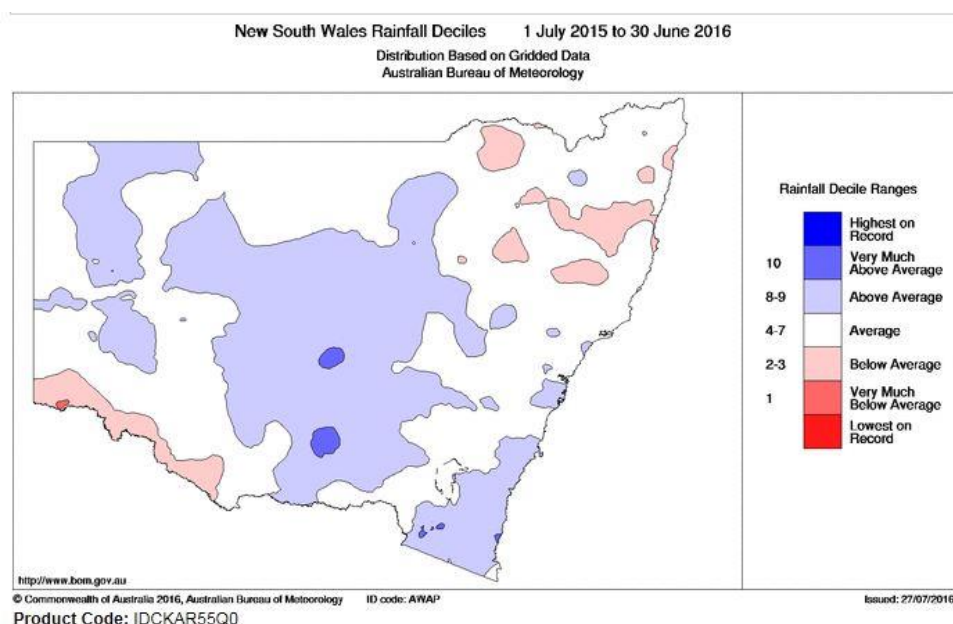


Figure 1 – New South Wales Rainfall Deciles – 2015-2016

Mean temperatures were above average (Figure 2).

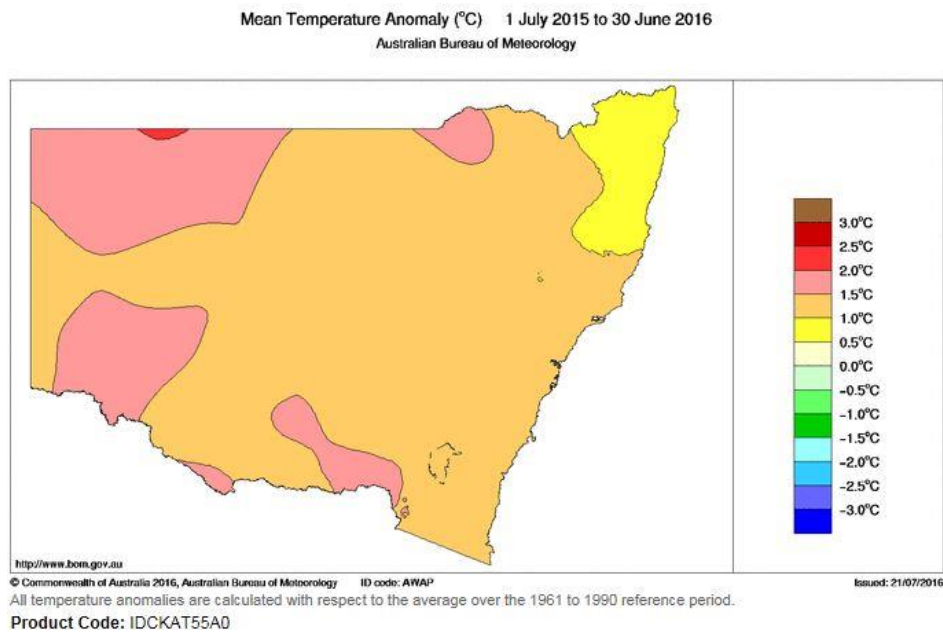


Figure 2 – New South Wales Temperature Deciles – 2015-2016

Stand Condition

Dr Vance

In line with previous reports, the Dr Vance plantation continues to perform well, with trees displaying superior growth and form. Forest inventory completed in 2015 has identified that the Dr Vance block has an exceptionally high volume per hectare for this age.



Figure 3: Dr Vance (2005 Age Class) Aug 2016 – good growth, excellent tree form and healthy trees

The Valley

As previously reported, The Valley plantation continues to maintain good growth over the majority of the plantation and above average performance where stocking is adequate and particularly on lower and mid slope sites.

The seedlings planted in 2012, in the area burnt by wildfire in 2010, have generally established successfully, excluding localised areas where there is significant surface rock. No additional treatments are recommended for this area.



Figure 4: The Valley (2005 Age Class) – good growth. Area of shorter height growth



Figure 5: The Valley 2005 - Area of taller trees

Forest Health & Biosecurity

Aerial forest health surveillance was undertaken in early August 2016 (Figure 6) and followed up with ground inspections. Preliminary reporting indicates no significant forest health issues are presenting in the 2004 Softwood Project properties.

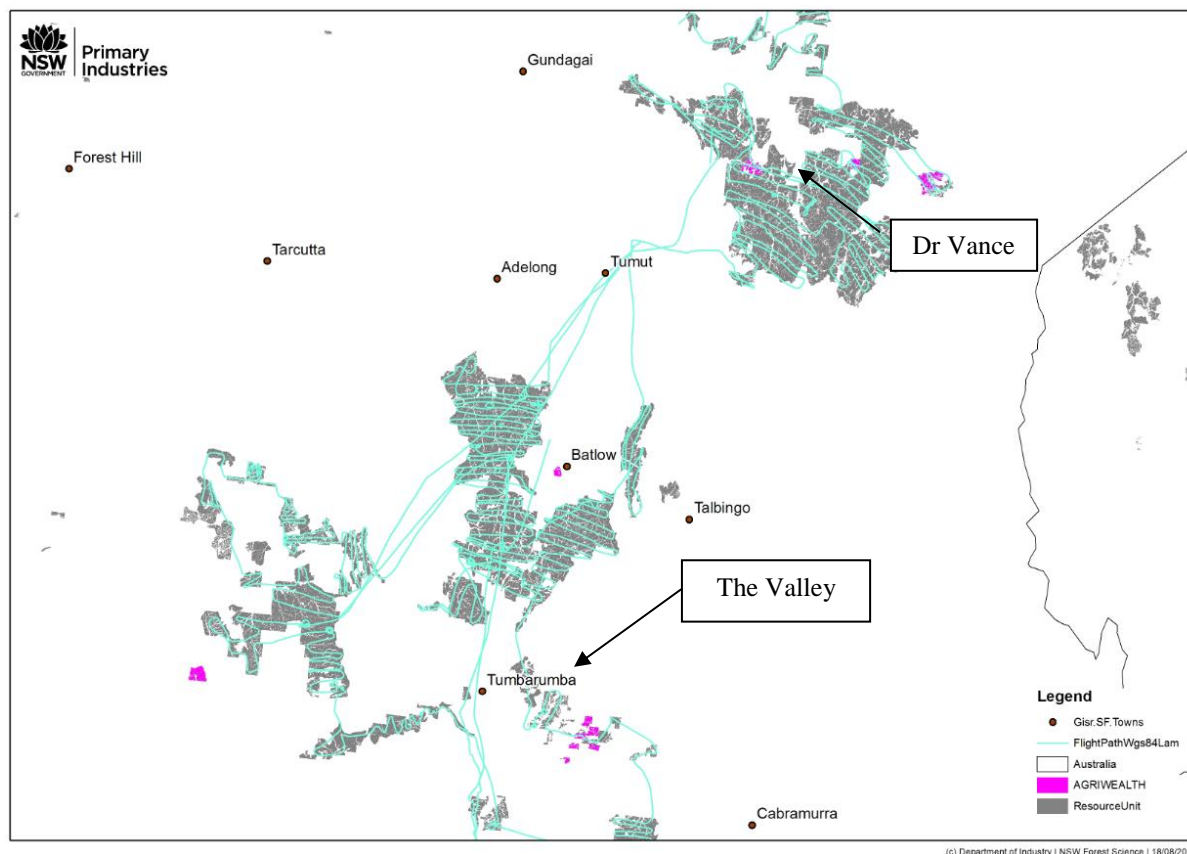


Figure 6: Forest health aerial surveillance flight paths over Tumut plantations – August 2016.

Pest animals are present on all properties, but are not causing any significant damage due to the size and height of the trees. No other significant issues were identified.

Dothistroma needle blight is present in The Valley in low levels, similar to other plantation areas in the region. Infection levels are generally low following seasonally dry conditions during late summer and early autumn. Treatment of Dothistroma is not recommended for the low level of infection currently observed.

Sirex wood wasp is present though out plantations in Southern Australia, and with a higher level of infestation identified in The Valley during 2015. This property is included in FCNSW's routine control program to release and monitor biological control agents.

Operational Activities

Fire trail and road maintenance and noxious weed control has also been undertaken on an as-needed basis.

Forestry Corporation completed a successful hazard reduction burn in an 88 ha of native forest immediately adjacent to Dr Vance's plantation. The burn was completed in March 2016.



Figure 7: Hazard reduction burning adjacent to Dr Vance's.

Fire Incidents

There were no fire incidents within or in close proximity to the 2004 Softwood Project plantations.

Harvest Planning

Forestry Corporation has commenced preliminary planning of the roading network that will be required in The Valley to facilitate log haulage for first thinning. This has including consultation with Agriweath Pty Ltd, for providing off property access, where this is required to access the main road network.

Other Management Issues

The 2005 planted crop was measured in April 2015 using a conventional ground based forest inventory approach. Tree volume per hectare at year ten is a useful benchmark to assess stand performance and the inventory determined that the Agriwealth 2005 crop was performing well above average for plantations in the locality. The Dr. Vance block in particular had an exceptionally high volume per hectare for this age.

In August 2016 FCNSW commenced implementation of a new inventory technique across their own and the Agriwealth estate that is expected to largely replace conventional ground based inventory for young and intermediate aged plantations. The approach uses laser pulses (LiDAR) emitted from a sensor on a plane to very accurately measure tree height and forest canopy structure. This data is subsequently matched with a series of ground based plots to derive stand level estimates of stocking, tree height and volume and has the advantage of providing these estimates for the entire forest landscape. It is anticipated that results from this work will be available towards the end of 2016.

The residual effects of the significant replant program in the first three years of the plantation establishment has resulted in ongoing variation in tree size and stocking. Generally, growth in subsequent years has been significant, however it is anticipated that there may be some impact on the future productivity (timber yield) of these areas.

There are some remaining areas of up to 10 hectares of 2005 AC plantation that is severely under stocked due to wet and swampy ground conditions and very heavy blackberry regrowth. These sites are not considered to be practical to replant as it is likely that poor survival of seedlings on these sites will preclude successful plantation establishment. These affected areas were originally reported in the 2008-09 report.

Planned Activities for 2015/2016

- Aerial and ground forest health surveillance
- Maintenance of tracks and access roads
- Fire risk reduction works and surveillance
- Harvest planning activity to facilitate 1st thinning

Report Prepared by

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STEWARDSHIP AND FIRE MANAGER
SNOWY REGION

For
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Monthly Rainfall Statistics

