

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

2004 Softwood Project



2014-2015 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) 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 unit of Snowy Region.

Plantation Area

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 – Updated Net Stocked Area

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

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

Plantation Inventory

Year 10 inventory was conducted during the reporting period. Results are summarised in Tables 2 and 3.

Table 2 – Dr Vance Age ten inventory results

Measurement Parameter	Measurement Value	Comment
Stocking	880 stems per ha	Viable for a regime with two thinnings (T2)
Basal Area	28.6m ³ per ha	Very good for a second rotation site
Top Height	16.1m	Extremely high. Very few FCNSW sites are above 16m at age 10. Being so tall it would suggest that an early thinning would be desirable to minimise the risk of wind throw.
Total Recoverable Volume (TRV)	159m ³ per ha	Very high for age 10 and comfortably within the top 10% of the FCNSW resource. “A” grade fibre at 87.3% of the TRV. This suggests that virtually all of the trees are of very good form with potential to generate a high sawlog % in the future.

Overall – an excellent stand in both productivity and form.

Table 3 – The Valley Age ten inventory results

Measurement Parameter	Measurement Value	Comment
Stocking	769 stems per ha	There is a lot of variation with 20% of plots having stockings below 500 stems per hectare. Different silvicultural approaches may be needed across the block. A regime with two thinnings (T2) will be okay for the higher stockings but unthinned (UT) or single thinning (T1) regimes may be desirable on areas with lower stocking
Basal Area	30.2 m3 per ha	Basal area is high. If stocking results were more consistent it would be better again.
Top Height	15.4m	Well above average.
Total Recoverable Volume	160 m3 per ha	Total was similar to Dr Vance however Grade “A” out-turn was only 42.5%. This is a low figure compared to routine FCNSW results.

Overall – very good productivity but some follow up required on stocking/form and silvicultural management options.

Growing Season

Rainfall in the Tumut management unit was below average during the reporting period (figure 1) with dry spells occurring in spring and late summer. The dry periods were partially offset by above average rainfall in December and January. Total rainfall at Tumbarumba for 2014-15 was 765 mm compared to the long term average of 977 mm. Rainfall for Burrinjuck Dam was 789 mm compared to a long term average of 925 mm (refer Annexure A).

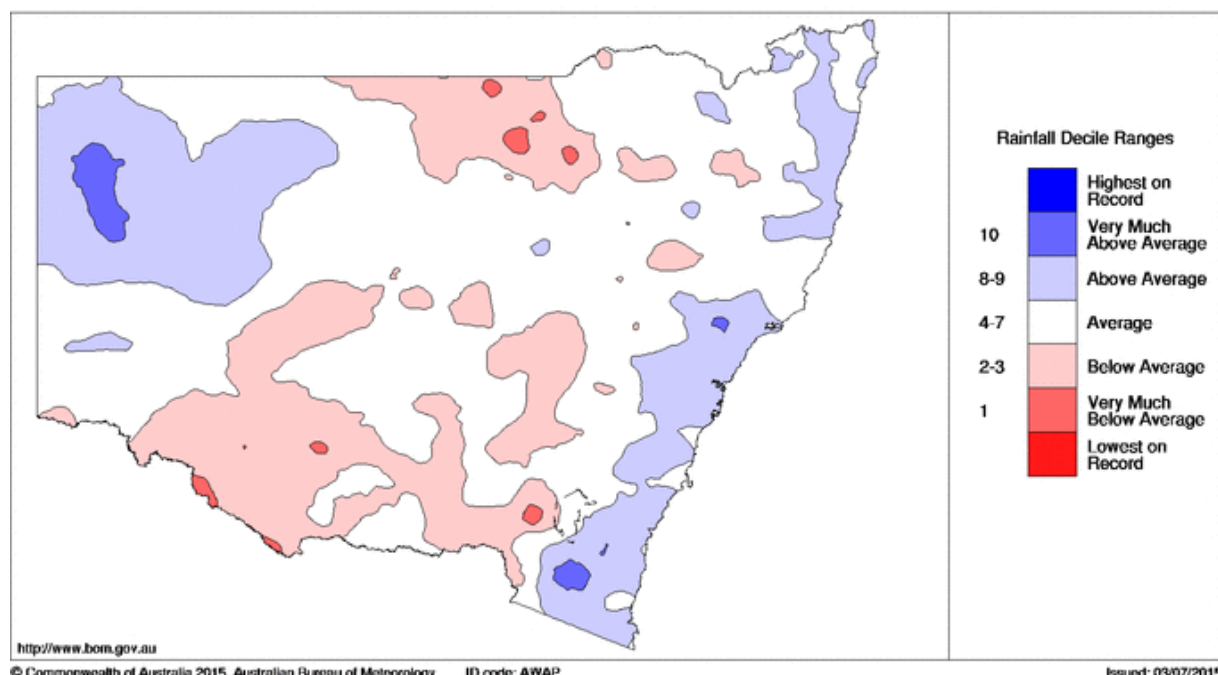


Figure 1 – New South Wales Rainfall Deciles – 2014-2015

Mean temperatures were above average (figure 2).

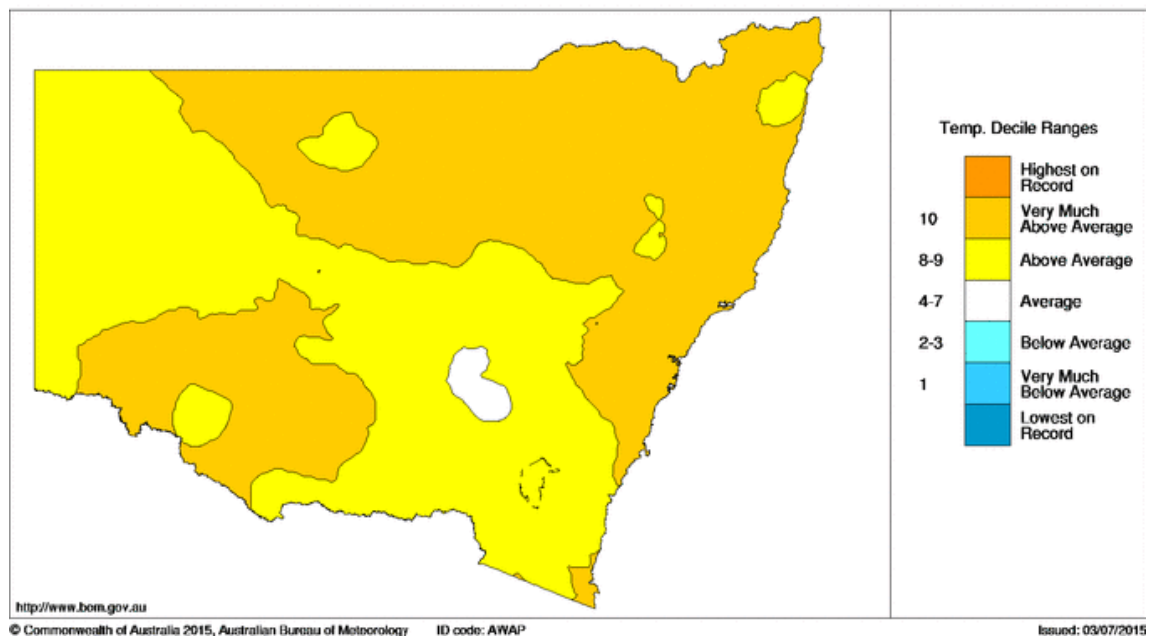


Figure 2 – New South Wales Temperature Deciles – 2014-2015

Stand Condition

Dr Vance

The Dr Vance plantation continues to perform well, with trees displaying superior growth and form (figure 3).



Figure 3: Dr Vance (2005 Age Class) July 2014 – good growth 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, particularly on lower and mid slope sites (figure 4).



Figure 4: The Valley (2005 Age Class) – well stocked & good growth

On upper slopes, some individual trees have some signs of nutrient deficiency, causing restricted foliage growth and growing tip dieback in affected trees. The occurrence of these symptoms appears to be associated with localised areas of shallower soil profiles, where rock is closer to the ground surface. Also apparent is the section of plantation in compartment 207, which has grown poorly in terms of height, compared to what is expected for trees of this age, see figure 5. This area was identified as having poor soil conditions, in terms of the soil profile being compacted clay/granite, at the time of planting



Figure 5: The Valley (2005 Age Class) – area of poor height growth in south eastern section of the plantation.

Forest Health Surveys

The timing of this year's annual forest health survey was rescheduled to ensure that reports from NSW DPI Forest Health unit could be received in advance of AgriWealth's annual reporting deadline (forest health reports have traditionally been one year in arrears as they are received after the annual report submission date).

Aerial forest health surveillance was undertaken in June-July 2015 (figure 6) and followed up with ground inspections in July-August 2015.

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

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.

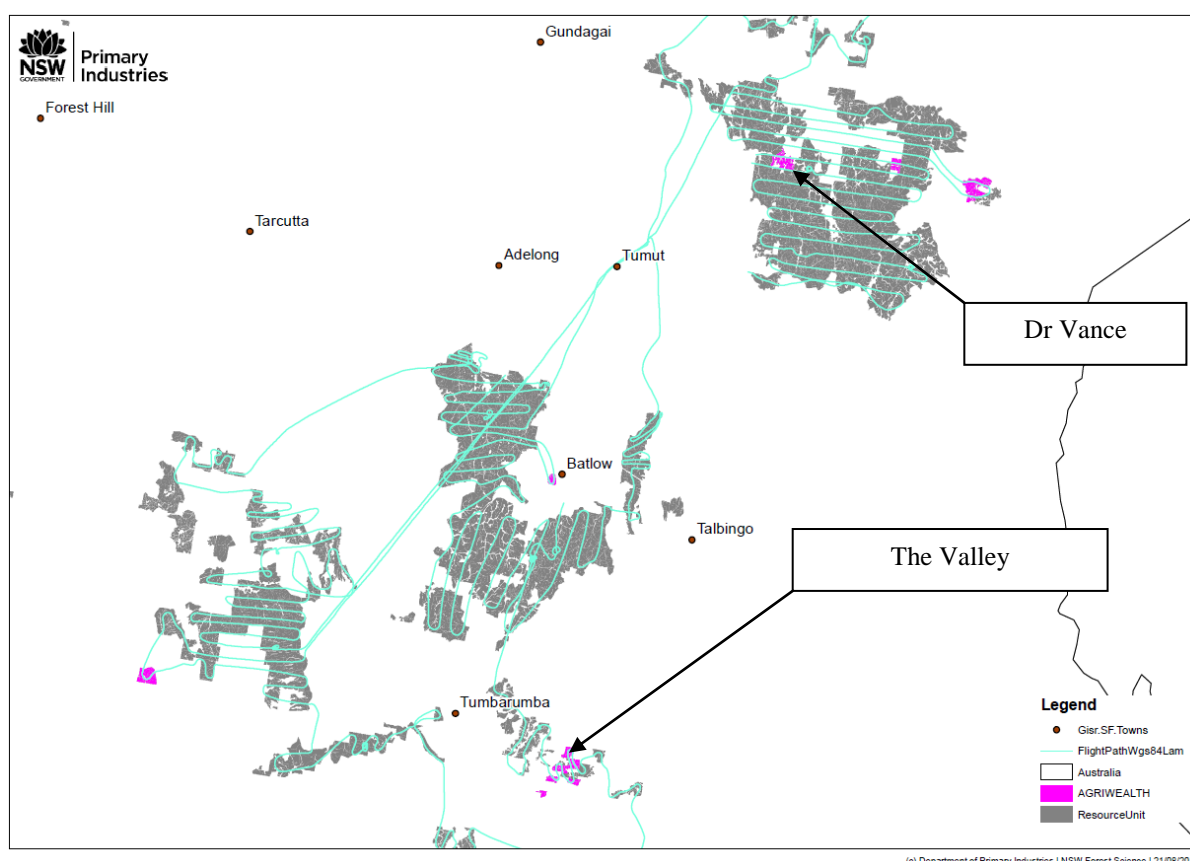


Figure 6: Forest health aerial surveillance flight paths over Tumut plantations – Winter 2015.

Biosecurity

In October 2014 Giant Pine Scale (*Marchalina hellenica*) was detected in suburban Melbourne and Adelaide. Giant Pine Scale is a scale insect that lives by sucking the sap of pine, fir and spruce trees. Trees impacted by large populations of giant pine scale suffer severe dehydration and dieback of branches, and can eventually die. Representatives from the Commonwealth, State and industry have agreed to a national eradication program which is currently underway in Melbourne and Adelaide. Each state jurisdiction has also agreed to undertake monitoring in amenity and production pine plantings. During this year's survey no Giant Pine Scale was detected in AgriWealth plantations nor in the region.

Operational Activities

Grazing of cattle has continued in part of The Valley to minimise grass fuels and associated bush fire hazard.

Fire trail and road maintenance and noxious weed control has also been undertaken, with a significant blackberry spraying program to maintain access for firefighting on plantation roads and tracks completed during 2014.

Fire Incidents


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

Other Management Issues

Nil

Planned Activities for 2015/2016

- Aerial and ground forest health surveillance
- Grazing in suitable areas to reduce grass fire hazard
- Maintenance of tracks and access roads
- Fire risk reduction works and surveillance
- Identification and signage of plantation fire roads to comply with amendments to the Plantations and Reafforestation Code.

Report Prepared by**Charlie Taylor**

STEWARDSHIP AND FIRE MANAGER
SNOWY REGION

For
Bob Germantse
Regional Manager Snowy

Monthly Rainfall Statistics

