

AUSTRALIAN FORESTRY MANAGEMENT PTY  
LIMITED (AFM)

## 2005 SOFTWOOD PROJECT



2016-2017 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 2005 Softwood Project.

## Background

The 2005 Softwood Project comprises seven 2006 age class plantation blocks. Most of the plantation blocks are located within the Tumut Management Area (TMA) of FCNSW Snowy Region (formerly Hume Region) near Tumut or Tumbarumba. The exceptions include Vans, which is located in north east Victoria and Mingary Vale, which is located within Bathurst Management Area (BMA) of FCNSW Northern Softwoods Region (formally Macquarie Region) near Oberon.

## Plantation Area Review

A review of the net stocked area of plantation within the 2005 Softwood Project was undertaken in June 2015 using aerial photo coverage (Table 1). The review captured mortality and natural attrition that has occurred since plantation establishment.

**Table 1 –Net Stocked Area 2015**

<b>Plantation</b>	<b>Net Stocked Area in 2015 (ha)</b>
Maragle Park	193.8
Paddy's River	186.0
Parker	196.1
Ruby Creek	127.9
The Valley (2006 age class)	199.6
The Valley (2008 age class)	1.2
Mingary Vale	169.6
Vans	76.2
<b>Total</b>	<b>1150.4</b>

The updated net stocked area which includes Forestry Right Land and Adjoining Land constitutes a change of minus 4.8% from planting.

## 2015-16 Growing Season

Rainfall in the Tumut management area was above average during the reporting period (Figure 1) with a very wet winter and spring in 2016 and a relatively dry autumn in 2107. Total rainfall at Tumbarumba for 2016-17 was 1025 mm compared to the long-term average of 978 mm. Rainfall for Burrinjuck Dam was 1078 mm compared to a long term average of 927 mm (refer Annexure A).

Overall the plantations are performing well and are in good condition. Exceptions to this exist within sections of Parkers and Ruby Creek.

The Bathurst Management Area experienced a warmer and drier growing season than average. Although the annual rainfall was within the area average, it was not evenly

distributed and most of the rain occurred over winter (figure 1, Annexure A). Summer rainfall was the lowest since 1978 and average (figure 2) and maximum temperatures (figure 3) were well above average.

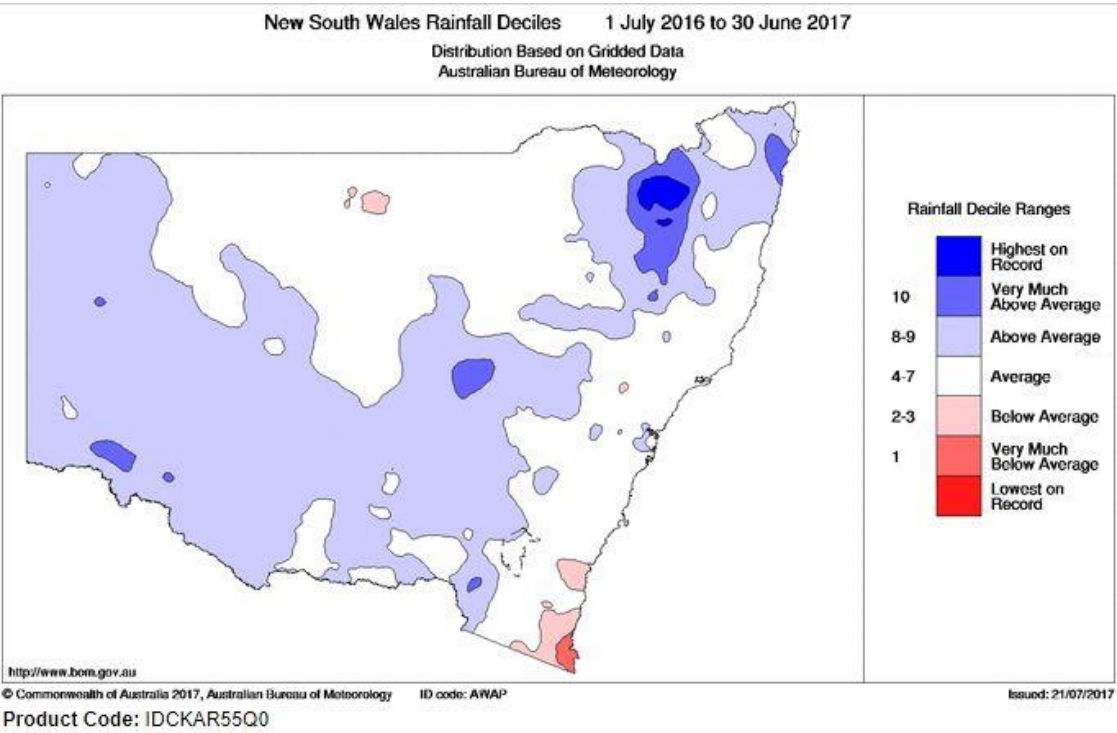
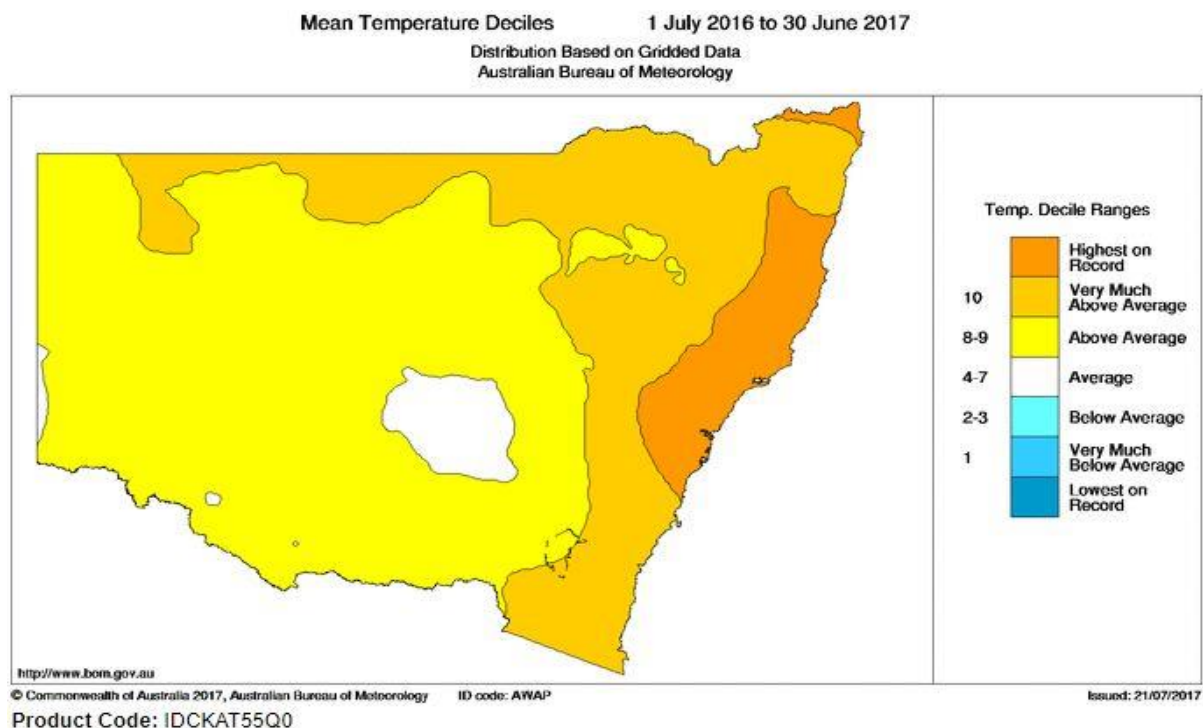
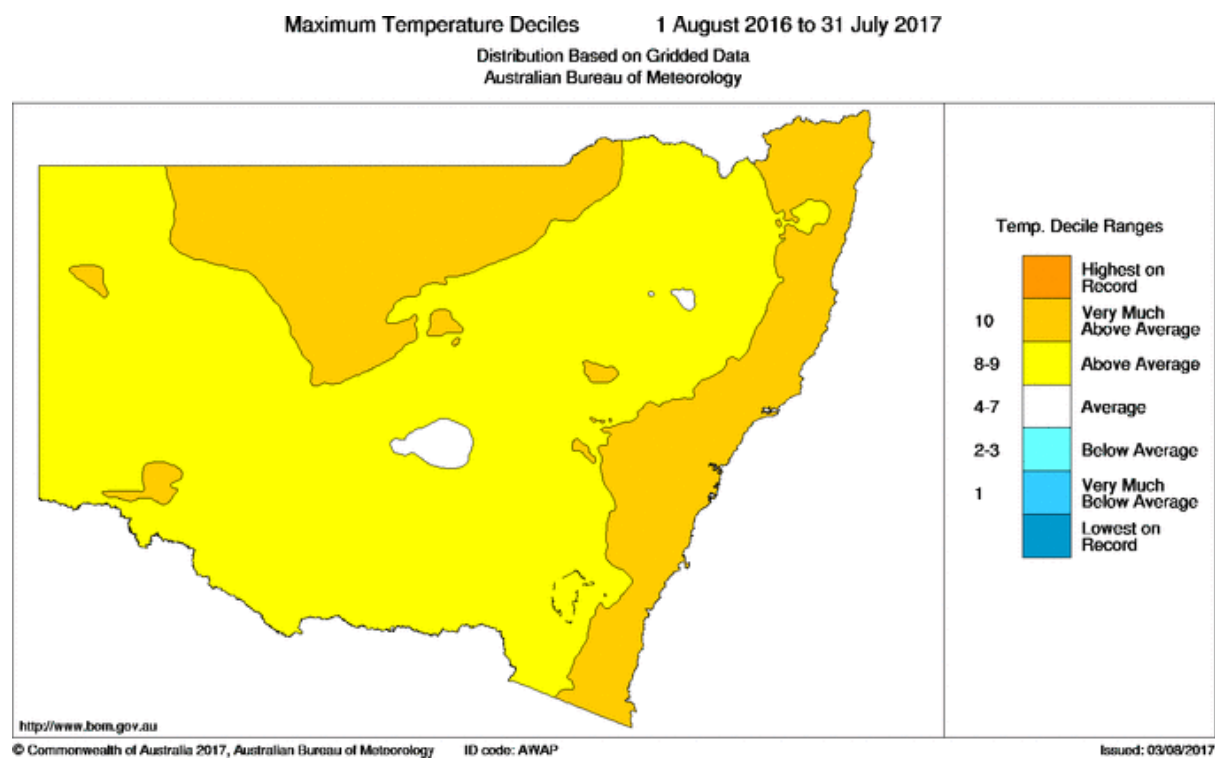


Figure 1: New South Wales Rainfall Deciles – 2016-2017

Mean temperatures were above average (Figure 2).



**Figure 2: New South Wales Temperature Deciles – 2016-2017**

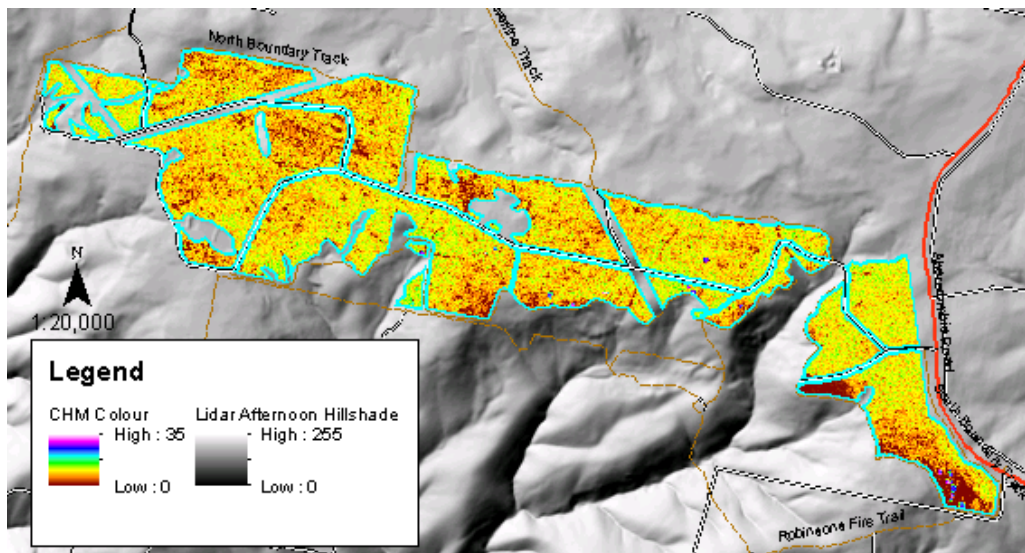


**Figure 3: New South Wales Maximum Temperature Deciles – 2016-2017**

## Stand Condition

### Mingary Vale (Transgrid)

The condition of the stand continues to be reasonable. It is well stocked, healthy, vigorous and with moderate form. When the stand was inspected in August 2017 the crop did not appear to have been subjected to any conditions that had impacted on survival, health or form (see Figures 4 - 8 below).



**Figure 4: Canopy Height Model (CHM) and Hillshade processed from LiDAR captured across the BMA Estate in 2015. The CHM shows some variation in height & consistency across the site (August 2017).**





**Figure 5: Mingary Vale. Eleven-year-old trees – a healthy, uniform and vigorous crop (August 2017). Some variation in height and vigour throughout the stand.**



**Figure 6: Mingary Vale. Evidence of strong growing season in previous year (August 2017)**



**Figure 7: Moderate form of eleven year old trees in Mingary Vale (August 2017)**



**Figure 8: Mingary Vale. Access around the block remains very good (August 2017). There are a small number of thriving blackberry shrubs appearing throughout the plantation.**



## Maragle Park

Consistent with previous years, this plantation continues to exhibit very good condition and growth. No significant issues have been observed during the reporting period.



**Figure 9: Maragle Park. Very good growth and plantation condition – August 2017**

## Paddys River

This plantation also continues to exhibit very good condition and growth. No significant changes to the plantation condition during the reporting period.



**Figure 10: Paddy's River - August 2017**

## Parkers

The Parkers plantation is continuing to grow with satisfactory performance when considering its poorer condition at a younger age, as noted in initial reports. Areas where initial tree stocking was low generally have poorer tree form usually associated with lower tree stocking. These areas are often sites with poorer drainage or rocky outcrops.





**Figure 11: Parkers 2006 AC May 2017 – Roadside pruning for fire protection access**



**Figure 12: Parkers 2006 AC – heavy branching on some trees, acceptable stem form**

## Ruby Creek

This plantation remains affected by stocking and growth issues as previously reported. There are no significant changes to the plantation condition occurring during the reporting period. Growth during the reporting period has been good, considering the overall condition of this plantation.



**Figure 13: Ruby Creek – area of acceptable stocking and growth. Weed spaying to maintain fire access– August 2017**



## The Valley

The Valley plantation continues to exhibit acceptable tree growth and vigour. As previously reported, there are localised areas that are unstocked.



**Figure 14: The Valley 2006 AC- plantation – August 2017**



## Vans

The Vans plantation continues to grow very well, with no significant changes to its condition during the reporting period. Like previous years *Dothistroma* needle blight has been present at low infection levels during the year but has not impacted overall tree growth for the majority of the plantation.



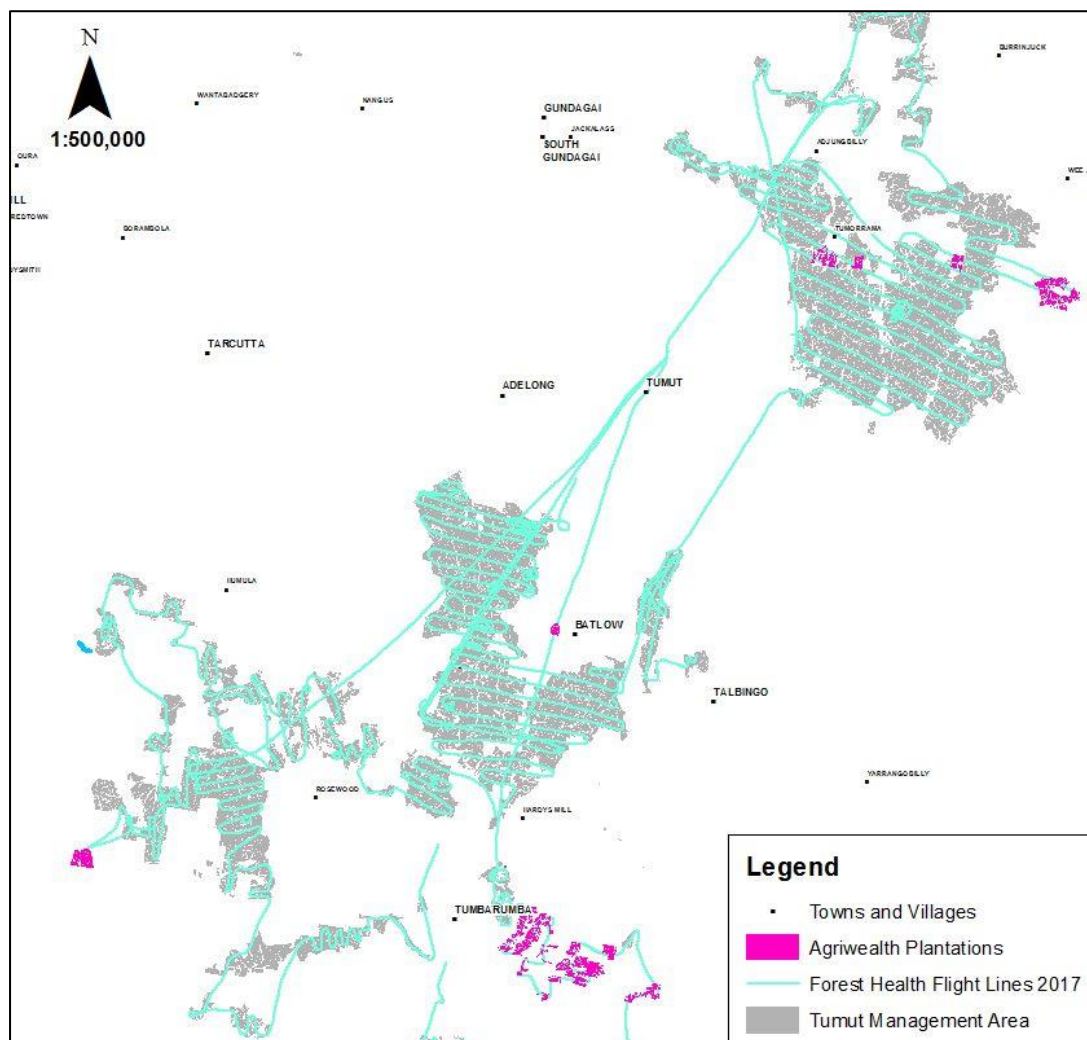
**Figure 15: Vans plantation – good health and growth August 2107**

## Biosecurity & Forest Health

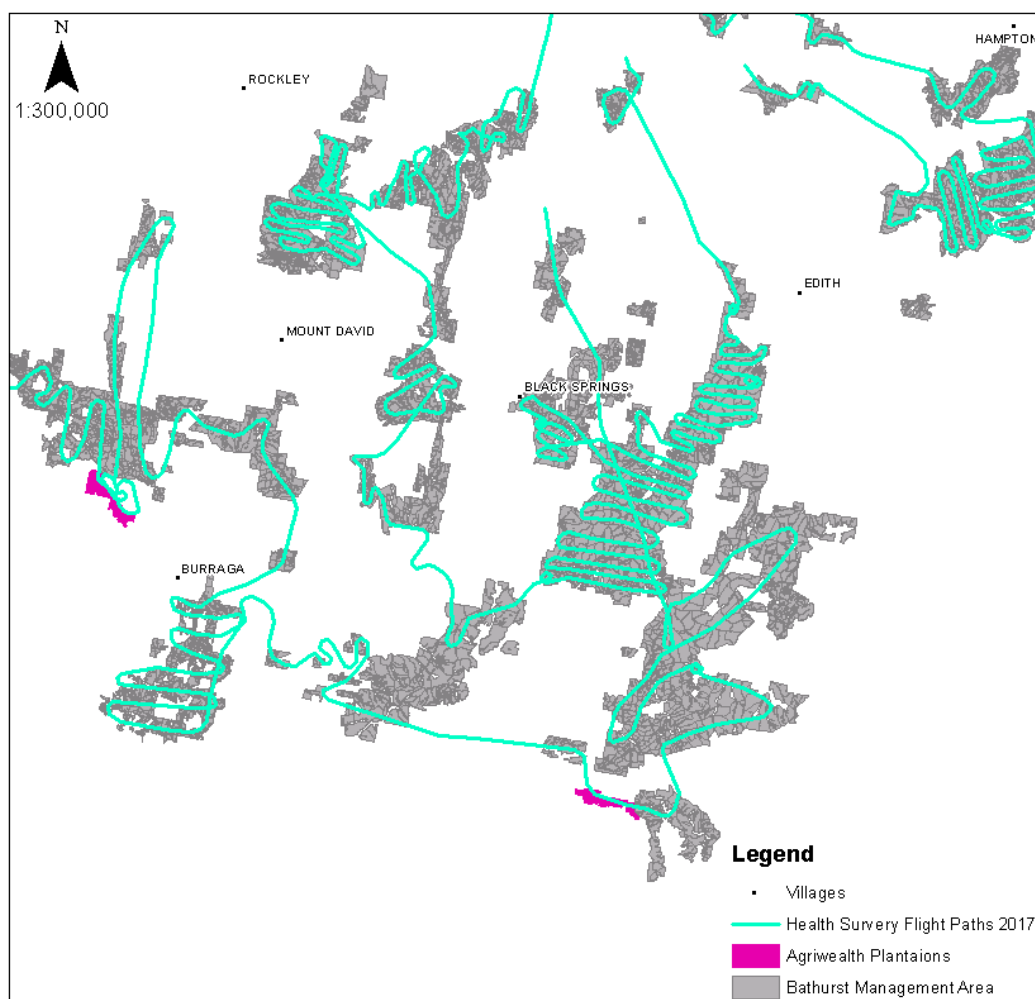
Aerial forest health surveillance was undertaken in July 2017 over Tumut Management Area (Figure 16) and Bathurst Management Area (Figure 17). Aerial forest health surveillance was followed up with ground inspections. No significant forest health issues are presenting in the 2005 Softwood Project properties in Tumut or Bathurst.

Dothistroma needle blight is present, at low levels, in lower lying areas of the plantation in the Tumut Management Area, 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 throughout plantations in Southern Australia. Ruby Creek, Paddy's River and Maragle Park properties are included in FCNSW's routine control program to release and monitor biological control agents (Figure 18). Billets were sampled from plot trees at Mingary in November 2016 with no emergence detected for sirex, Ibalia or megarhyssa.



**Figure 16: Tumut Management Area forest health aerial surveillance flight path – June 2017.**



**Figure 17: Bathurst Management Area forest health aerial surveillance flight path – June 2017.**



**Figure 18: Paddy's River 06. Trees that have been inoculated with the Sirex preventing nematode (August 2017)**

## Fire Management

There were no fire incidents within or near the plantations. Fire risk reduction works and surveillance were undertaken during the reporting period, including roadside blackberry control and trail maintenance in the Tumut MA plantations.

Mingary Main Road was cleared to provide access for a Cat 1 tanker over the 2016/2017 fire season. The Mingary perimeter road remains on the strategic fire trail maintenance program.

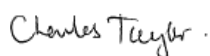
## Other Management Issues

Nil

## Summary of Activities Planned for 2017/2018

- Pre-harvest road planning
- Aerial forest health surveillance and monitoring
- Maintenance of roads and tracks
- Fire risk reduction works and surveillance
- Grazing where fencing is available

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### Monthly Rainfall Statistics

