

Introduction

In April 2009, the NSW Auditor-General completed the Performance Audit Report No 185 'Sustaining Native Forests'.

Recommendation 4 required that the then Forests NSW publicly report the results of yield estimates for high quality large sawlogs, high quality (HQ) small sawlogs, low quality (LQ) logs and pulpwood for each region.

HQ Sawlogs represent high quality (linked to high value) sawlogs, LQ represents low quality and pulpwood refers to all merchantable residues that meet pulp specification.

As part of this ongoing process, Forestry Corporation of NSW (Forestry Corporation) has updated resource assessments for the North Coast.

Background

In May 2012, the NSW Government established a Steering Committee to investigate the issues associated with timber supply on the North Coast including sustainability of supply to the end of the term of current wood supply agreements in 2023 and over the long term.

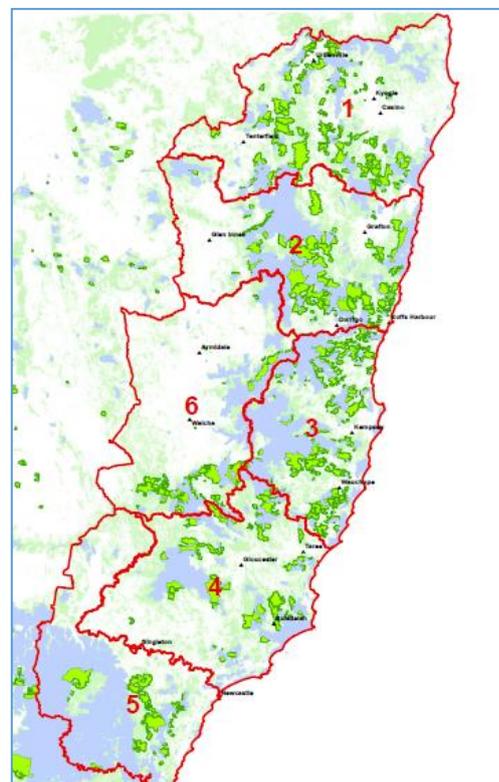


Figure 1: The areas covered by the 2015 North Coast Resource Assessment, showing supply zones.

Year	Net Mapped Area (Ha.)	Net Harvestable Area (Ha.)
1997- Pre RFA	732,800	553,600
1999 – Post RFA	459,100	374,100
2006	439,300	314,000
2015	416,500	306,700

Table 1: Changes in the area nominally available for harvest over time

The Steering Committee engaged URS Australia Pty Ltd to conduct a review of timber resources on the north coast including availability of hardwood timber in the period to 2023 and long term as well as industry’s position and market potential for hardwood timber products. The company was also tasked with developing options for ensuring long term sustainability of supply. URS presented its findings in two stages in October 2012 and February 2013.

Following the URS Project 2023 assessment, modelling was updated in 2015 to incorporate:

- Plantation inventory and growth models
- Contractual wood supply Constraints (Species and supply zone)
- Additional LiDAR and derived products, including drainage location, slope class analysis and Structural Index productivity stratification
- Updates to the Base Net Area (BNA)
- Revised silviculture simulation and reporting outputs to improve understanding of the importance of regeneration harvesting silviculture in Blackbutt forests between Grafton and Taree.

Results of this analysis were presented to industry in August 2015 at a forum organised by the Natural Resources Commission (NRC). Information presented at this forum is summarised below.

Outcomes

The updated modelling confirms that Forestry Corporation can continue to supply timber at the current harvest rate for a 100-year time horizon. Sustainable harvest rates of above 200,000 m³ can be maintained, rising slowly over time, particularly as young Blackbutt plantations increase contribution after 2050. The bulk of the resource continues to be sourced from selectively harvested native forest, with plantations playing an increasingly important part of the High Quality log supply over time. Smaller, but significant volumes will be sourced from Regeneration Harvest silviculture.

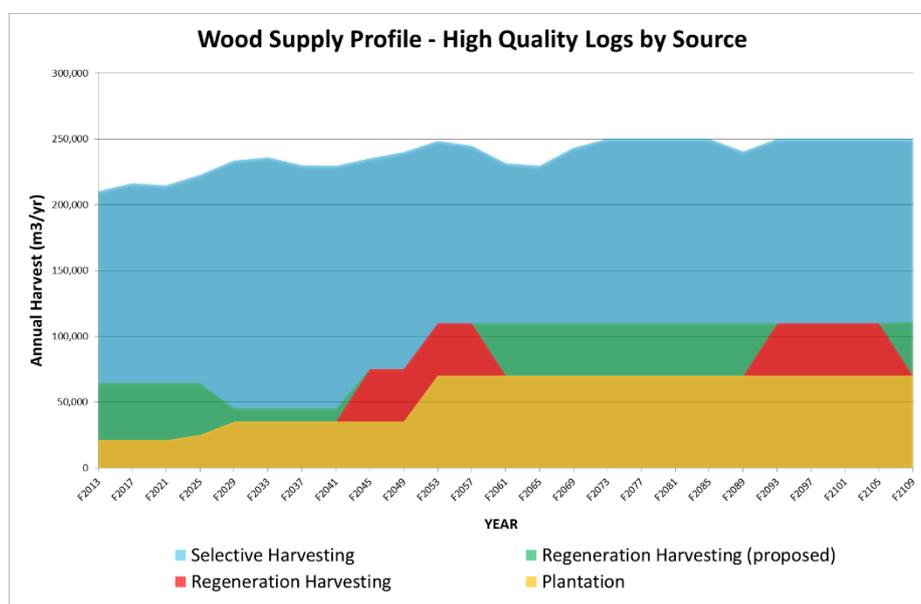


Figure 2: Available timber volume over time differentiated by source

Figure 3 (below) shows estimated species mix over time as generated by the new modelling. Whilst overall species mix is relatively constant when viewed at this scale, actual species mix in any given year is only indicative as actual available species mix in any period will be constrained by Forestry Corporation’s ability to schedule appropriate harvest units which can be influenced by local weather, forest productivity and growth as well as management history.

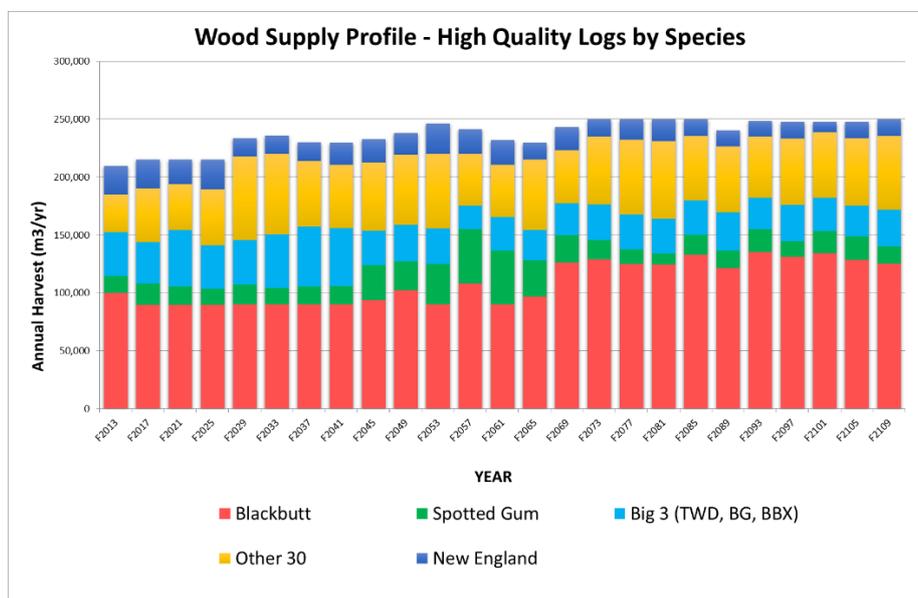


Figure 3: Available timber supply differentiated by species

Future work

Our long-term wood supply projections are constantly being updated and reviewed to ensure that harvesting levels remain sustainable. It is also prudent to continue update resource modelling to incorporate new and improved information sources, such as LiDAR mapping and updated inventory, as well as addressing any changes to environmental regulation or wood supply requirements that may impact on forest yields over time. The outcomes of the 2015 wood supply report will be refined further by applying new information derived from:

- Further LiDAR data acquisitions
- Inventory programs in native forests and plantations
- Development of a spatial wood flow model.