



Draft forest management plan 2014–2023 and wood availability

Legislation requires timber production from native State forest and timber reserves to be managed on a sustained yield basis, which is determined largely by:

- the net area available for timber harvesting
- attributes of the forest, such as species, age and size classes, and growth and mortality rates, which in turn are affected by soils, climate, natural disturbance, pests, diseases and management history
- the silviculture applied.

These factors, and the way in which they are taken into account, are discussed in more detail in the 'Productive capacity' chapter of the Draft plan. Significantly, the impact of a drying climate on forest growth has been explicitly incorporated into sustained yield calculations for the Draft plan, using CSIRO climate projections. Other key developments are:

- The standing wood inventories for jarrah and karri forests have been updated to 2010 (the current plan is based on 1990 inventory data).
- The introduction of a new forest estate-level computer modelling system which is used by forest planners around the world. Components of the new system were used for the sustained yield calculations in the Draft plan and the modelling for the proposed plan will be finalised using the system.
- The review of DEC's silviculture guidelines by an expert panel, as required under the current forest management plan. The panel found '*... a number of relatively minor issues... but overall, existing and proposed practices should sustain biodiversity and forest productivity at the local forest scale.*' Changes to the silviculture guidelines are proposed to address the issues identified, including the retention of large marri trees which provide food and nesting sites for black cockatoos.

The methodology and data used in the sustained yield calculations for the current forest management plan were reviewed independently. While much of the data and contributing systems have subsequently been updated, another independent panel will be appointed to conduct a further review of the calculations in the proposed plan.

For some issues, the Draft plan puts forward alternative management activities for community feedback. Some of these options could have an impact on the sustained yield, so from the various combinations available, two scenarios for calculating the yield are included.

In summary, Scenario 1 includes settings that, overall, provide for a higher sustained yield, while Scenario 2 includes settings that overall provide a lower sustained yield.

Sustained yield of first and second grade jarrah sawlogs

Scenario	Net area of jarrah/wandoo forest available for harvesting (ha)	Range in average annual yield for 10 years (cubic metres)
1	796,500	101,000 – 137,000
2	783,100	95,000 – 125,000

Sustained yield of first and second grade karri sawlogs

Scenario	Net area of karri forest available for harvesting (ha)	Range in average annual yield for 10 years (cubic metres)
1	59,900	54,000 – 70,000
2	59,100	44,000 – 56,000

The average annual sustained yields of jarrah and karri first and second grade sawlogs under the settings of the current forest management plan are 131,000 cubic metres and 54,000 cubic metres respectively.

Jarrah and karri first and second grade sawlogs are the main wood products harvested. The trees felled for this purpose also provide lower grade logs (referred to as other bole volume). Lower grade logs are also produced from trees removed to promote regeneration or growth of retained trees.

Availability of other bole volume

Species	Log grade	Range in average annual availability for 10 years (cubic metres)	
		Scenario 1	Scenario 2
Jarrah	Bole logs other than first and second grade sawlog	495,000 – 710,000	463,000 – 528,000
Karri	Bole logs other than first and second grade sawlog	180,000 – 240,000	160,000 – 200,000
Marri	All bole logs	180,000 – 270,000	140,000 – 200,000

Small volumes of wandoo, blackbutt and sheoak sawlogs are also expected to become available as a consequence of harvesting jarrah and karri sawlogs or harvesting for other purposes.

Given the strong community demand for collection of public firewood, options for public access to firewood from lands in the Draft plan area are included for feedback.

The *Draft Forest Management Plan 2014-2023* is available at www.conservation.wa.gov.au and is open for public comment until 7 November 2012.