Management Plan

to accompany

Application for a new permit to clear native vegetation (area permit)

(form NV-F01 v 14, Feb 2023)

from

Department of Water and Environmental Regulation

for

Alan Giblett

Background

Alan Giblett owns a 160hectare (approx.) property on Fernhill Road at the locality of Dingup, approximately 8 kilometres northeast of the town of Manjimup in the south-west of Western Australia.

Approximately 80 hectares (50%) of the property is a stand of regrowth native forest which Mr Giblett wishes to sustainably manage on a long-term basis, producing some revenue from the sale of timber products which will be used to pay for upgrades on the property. Sustainable management will involve silvicultural thinning from time to time. This thinning may be termed “ecological thinning”, a term used by some government agencies when describing thinning operations in native forest to mitigate potential effects from a drying climate.

Mr Giblett is also cognisant of the need to manage the threat of bushfire, hence a silvicultural thinning now, with removal of as much residue timber as possible, is seen as an important step in enabling him to safely conduct mild fuel reduction burning on a regular basis in future.

Current status of the native forest subject to this application

The regrowth native forest on this property has been subjected to harvesting for timber on possibly three occasions since early last century. The most recent timber harvesting operation took place approximately 25 years ago, the target species being marri for chip. Older and more recent stumps are evident. The forest type is a mixture of jarrah (*Eucalyptus marginata*) and marri (*Corymbia calophylla*), with some blackbutt (*Eucalyptus patens*) occurrence. The understorey is typical of southern jarrah forest.

The forest is fundamentally healthy with no evidence of “jarrah dieback” caused by *Phytophthora cinnamomi.* There is some silver wattle intrusion in patches near the forest edges.

Standing basal areas vary from approximately 25m2/ha to approximately 40 m2/ha. The forest now lends itself to some considered silviculture to release growing stock and to maintain the health and resilience of the forest in a drying climate.

Soils on the site are predominantly gravelly loams and clays.

Fig 1. Regrowth jarrah/marri forest in the middle/southern part of the stand.

Fig 2: Regrowth jarrah/marri in the middle of the stand. Basal area approximately 35m2/ha.

Fig 3. Jarrah/marri regrowth in southeast area of the stand. Note high number of stems per hectare.

Outline of silvicultural and harvesting prescription

- The silviculture prescriptions to be adopted will follow the principles contained within the "Silviculture Guidelines for Jarrah Forest", published as "FEM Guide No 1" by the Department of Parks and Wildlife (now DBCA) in 2014.
- In summary, the prescription for the property will be to promote the growth of selected retained trees by thinning to a target basal area of 15m2/ha.
- At least five habitat trees per hectare, on average, will be retained. Selection of habitat trees will target larger, sound trees and other elements with potential hollows for fauna.
- Harvesting machinery will be cleaned of any soil and plant matter before entering the property to minimise any risk of introducing disease or undesirable weeds.
- Harvesting and marketing of forest products will be managed by WAPRES foresters, with actual harvesting and transport of products carried out by an experienced and qualified local harvesting contractor using machinery suitable for harvesting in native forest. This will comprise a tree harvester to fell trees and cut boles into appropriate lengths. Extraction of logs will be carried out using a rubber-tyred skidder or forwarder. Logs will be loaded onto trucks using the forwarder. A mobile chipper will be used to process residue logs and branches on bush landings for sale as biomass.
- Extraction tracks will, where necessary, be created by the tree harvester and will use natural gaps between trees.

- Harvesting slash will be removed from around the bases of retained trees during harvesting.
- All harvesting activity will be conducted in accordance with the WA timber industry Codes of Practice, as published from time to time by the Forest Industries Federation (WA) Inc.
- The clay soils on the property mean that most of the harvesting will need to be restricted to dry soil conditions.
- Following harvesting, the thinned forest will be burnt under cool conditions in autumn or spring.
- Log landings (ie area where logs are stacked and then loaded onto truck) will be minimised to facilitate access by trucks from the north, south and west. Some log landings may be located on already cleared land.

Black cockatoos

Because of the importance of conservation of habitat trees for Western Australia's three species of black cockatoo (Carnaby's cockatoo, Baudin's cockatoo and Forest red-tailed cockatoo), trees with the potential to develop a hollow or hollows of a size suitable or potentially suitable for nesting by any of these three species will be retained as habitat trees. These trees will tend to be larger trees which are more likely to already have a broken branch which could possibly develop into a hollow.

Because of this commitment, a cockatoo habitat tree survey prior to harvesting is not considered necessary.

A thinning operation will also allow retained trees to develop larger and more spreading crowns which in turn will produce more flowers and fruit, hence seeds, for foraging by black cockatoos.

Fire management

The threats posed by bushfire are a constant concern to the landowner. The forest is currently carrying high fuel loads. A silvicultural thinning operation with a focus on removing the high proportion of low grade timber for biomass will go a long way towards enabling the landowner to conduct prescribed burning with relative ease after the thinning operation and in future years.

Estimated quantities of forest products to be harvested

The estimated quantities of forest products, by grade, that could be produced from the proposed operation are:

- Sawlog: 1,000 tonnes
- Residue log/biomass: 3500 tonnes
- **Total:** approx. 4,500 tonnes

Note: these are estimates only.

Future management

After the proposed silvicultural thinning and follow-up burn, the forest will need to be subjected to regular mild prescribed burning to reduce the risk of damage from bushfires, on a cycle of no more than five to seven years.

A further commercial thinning operation should be feasible approximately 20 to 30 years hence.

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