



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2623/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Greenwest Pty Ltd

### 1.3. Property details

Property: LOT 13041 ON PLAN 175308 ( BOORARA BROOK 6262)  
Local Government Area: Shire Of Manjimup  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
25.3		Mechanical Removal	Miscellaneous

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
<p>Vegetation is a mixture of mattsike complexes:</p> <p>Coy1: Tall open forest to woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis-Allocasuarina fraseriana on low hills and with Allocasuarina decussata on slopes in perhumid and humid zones.</p> <p>The vegetation type within the proposed clearing is Beard 1144: Tall forest; karri &amp; marri (Corymbia calophylla) and 3: Medium forest; jarrah-marri</p>	<p>As per a regional site inspection (DEC, 2008) the condition of the entire forest is very good (Keighery, 1994) and healthy with little or no weed invasion. It is a closed regrowth forest dominated by Karri (Eucalyptus diversicolor). The understorey vegetation is in very good (Keighery, 1994) condition, though there is a likelihood of dieback being present (DEC, 2008).</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)</p>	<p>Condition of vegetation was determined by site inspection report (DEC, 2008), the forest management plan (2008) and site photos.</p>

## 3. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

#### Comments Proposal may be at variance to this Principle

The area proposed to be cleared is 25.3ha for the purpose of silviculture. As per a regional site inspection (DEC, 2008) the condition of the entire forest is very good (Keighery, 1994) and healthy with little or no weed invasion. It is a closed regrowth forest dominated by Karri (Eucalyptus diversicolor). The understorey vegetation is in very good (Keighery, 1994) condition, though there is a likelihood of dieback being present (DEC, 2008).

Within the long unburnt areas of forest it is suspected that a Priority Ecological Community exists, which is named 'Epiphytic Cryptogams of the karri forest' and is listed as a P3 community. Given the dynamic nature of the community it is unlikely that selective clearing will significantly impact up on it. Additionally it is likely that the community lives within the creek line areas which are demarcated from clearing in the forest management plan (2008).

Given that the clearing is to selectively thin karri, blackbutt, marri and jarrah trees, disturbance to the



biodiversity is expected to be minimal and short term. As the proposed clearing area is adjacent to national park and state forest, recruitment post clearing should be healthy and diverse. A condition for weed and dieback management be imposed to avoid potential spread into conservation areas.

**Methodology** Keighery, 1994  
Forest Management Plan, 2008  
DEC, 2008  
SAC biodatasets - accessed 15 August 2008  
GIS Databases:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Donnelly 50cm Orthomosaic - DLI04

**(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
The proposed clearing is for the selective thinning of Karri (*Eucalyptus diversicolor*), Blackbutt (*Eucalyptus patens*), Marri (*Corymbia calophylla*) and Jarrah (*Eucalyptus marginata*) trees within a 25.3ha area. A site inspection (DEC, 2008) found that the area was in very good (Keighery, 1994) condition and had a dense scrub layer and substantial leaf litter which would provide habitat for numerous species of native fauna. This is consistent with forest existing on State Forest lands adjacent to the application area (DEC, 2008).

Given the nature of the clearing there will be some disturbance to this habitat but only in the short term and only to some areas of the forest. The area proposed to be cleared is surrounded by state forest and national parks which are likely to be providing more significant habitat. Additionally, the Forest Management Plan (2008) advises that potential habitat trees will be retained, and a condition on the permit will be to retain 5 potential habitat trees per hectare.

**Methodology** Native Forest Management Plan (2008)  
DEC (2008)  
SAC biodatasets - accessed 15 August 2008

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments** **Proposal may be at variance to this Principle**  
There are two records of rare flora within the local area (10km radius), *Kennedia Glabrata* found in the same soil and vegetation type as the application area and *Meziella Trifida* found in the same vegetation type but differing soils. Vegetation and soil types within the area are common and found in secure tenure. *K. glabrata* is known to be associated with granite outcrops, such as those situated within the application area (DEC, 2008). The forest management plan (2008) demarcates a 20m buffer around all rocky outcrops, and this will be a condition on the permit.

**Methodology** DEC (2008)  
Forest management plan (2008)  
SAC Biodatasets - accessed 15 August 2008  
GIS Databases:  
- Matiske Vegetation (01/03/1998)  
- Soils, Statewide - DA 11/99

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
There are no known Threatened Ecological Communities within the proposed clearing area, the clearing is unlikely to be at variance to this principle.

**Methodology** SAC biodatasets - accessed 15 August 2008

**(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
As represented in the table below, vegetation within the local and regional area is well represented and found within secure tenure.

Pre-European (ha)	Current extent (ha)	Remaining (%)
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IBRA Bioregions*			
Warren	833,981	663,141	79.5
Shire			
Manjimup	696,702	589,728	84.6
Mattiske Vegetation Complex***			
COy1	228,751	192,244	84.0
Beard Vegetation Complex*			
1144	160,315	127,463	79.5
3	2,661,403	1,846,588	69.4

\*\*\* (Mattiske Consulting 1998)

\* (Shepherd et al. 2001)

The clearing of selective trees of the species Marri (*Corymbia calophylla*), Blackbutt (*Eucalyptus patens*), Karri (*Eucalyptus diversicolor*) and Jarrah (*Eucalyptus marginata*) is unlikely to be at variance to this principle.

**Methodology** Shepherd (2006)  
SAC Biodatasets - accessed 15 August 2008  
GIS Databases:  
- Mattiske Vegetation (01/03/1998)

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments** **Proposal may be at variance to this Principle**  
Some of the clearing proposed will be nearby Boorara Brook, a watercourse running 650km west of the property. The clearing is selective removal of Karri, blackbutt, Marri and Jarrah trees by the harvesting operations. A forest management plan (2008) demarcates stream areas, and this will be a condition on the permit.

**Methodology** Forest Management Plan (2008)  
GIS Databases:  
- Hydrography, linear (hierarchy) - DoW 13/7/06

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
Clearing is for the purpose of silviculture so it is unlikely that erosion will increase due to the clearing. The application area will be selectively cleared of native vegetation proposed within the 25.3ha applied to clear, and so is unlikely to affect salinity, water logging or acid sulfate soils.

**Methodology** GIS Databases:  
- Donnelly 50cm Orthomosaic - DLI04  
- Groundwater Salinity, Statewide DoW 13/07/06

**(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
The area proposed to be cleared is surrounded by conservation land on most boundaries. The clearing as proposed is for the purposes of silviculture and therefore will not result in cleared land so buffering capacities, fauna corridors and ecological linkages should not be significantly impacted.

A condition relating to dieback and revegetation management will be imposed to prevent the possible transfer of disease into the conservation areas.

**Methodology** GIS Databases:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Donnelly 50cm Orthomosaic - DLI04



**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

**Comments Proposal is not likely to be at variance to this Principle**

The area proposed to be cleared lies within the Gardner River catchment area. The area receives high rainfall (1200mm), with a high evapotranspiration rate (900mm). Despite the large area applied for clearing (25.3ha) it is unlikely that groundwater recharge will be affected as the clearing is proposed to be selective over this area.

Some clearing of selected trees is proposed to occur alongside Boorara Brook, which may have a short term impact on sedimentation and turbidity, however it is unlikely to have a significant effect. Additionally, the Forest Management Plan (2008) for the proposed clearing area advises that streams are demarcated by a buffer, which will assist in reducing sedimentation, and this will be a condition on the permit.

**Methodology Native Forest Management Plan (2008)**

GIS Databases:

- Public Drinking Water Source Areas (PDWSAs) - 07/02/06
- Hydrographic Catchments - Catchments - DoW 01/06/07
- Evapotranspiration Isopleths - WRC 29/09/98
- Rainfall, Mean Annual Isohyets (1975 - 2003) - DEC 02/08/05
- Hydrography, linear - DOW 13/7/06

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Comments**

Given the nature of the proposed clearing (silviculture) it is unlikely to cause or exacerbate the incidence or intensity of flooding, as the clearing is thinning of Karri, Blackbutt, Jarrah and Marri trees over a large area and a sustained period of time, and regeneration will occur. Therefore, the clearing is not likely to be at variance to this principle.

**Methodology GIS Databases:**

- Topographic Contours, Statewide - DOLA 12/9/02

**Planning instrument, Native Title, Previous EPA decision or other matter.**

**Comments**

The Shire of Manjimup has no specific policies in place regarding the clearing of land. They do request the following footnote to be included on the clearing permit if granted:

"The applicant is advised to confer with the Shire of Manjimup with respect to the need to comply as relevant with all requirements relating to its Town Planning Scheme, local laws and legislation relating to the movement of heavy vehicles and the repair of road damage resultant from the use of those vehicles".

**Methodology**

**4. Assessor's comments**

**Comment**

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing:

- may be at variance to Principles (a), (c) and (f); and
- is not or is not likely to be at variance to the remaining clearing Principles.

**5. References**

- Bradshaw, J, 2008, Native Forest Management Plan, unpublished. DEC TRIM Ref: DOC57758.  
Department of Environment and Conservation (DEC) (2007). Site Inspection Report, DEC Warren, Western Australia. TRIM Ref: DOC63398.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Sac Bio Datasets (22/8/07). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia. Re-accessed 06/05/08
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.





## 6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)

