



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: 5199/1

File Number: 2012/005659-1

Duration of Permit: From 19 October 2012 – 19 October 2019

### PERMIT HOLDER

Kimberley John Locke Skoss

Claire Therese Skoss

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 5 on Diagram 96804 (GLENORAN 6258)

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 11.2 hectares of native vegetation within the combined areas hatched yellow on attached Plan 5199/1.

### CONDITIONS

#### 1. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 19 October 2016.

#### 2. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

#### 3. Type of clearing authorised

To the extent authorised under authorised activity of this Permit, the Permit Holder may undertake the following activities within the area cross-hatched yellow on Plan 5199/1:

- (a) clearing and burning of *understorey*;
- (b) *thinning* of Marri (*Corymbia calophylla*) and Karri (*Eucalyptus diversicolor*) trees; and
- (c) *culling* and burning of unsaleable trees.

#### 4. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

## 5. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) shall only move soils in *dry conditions*;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## 6. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the areas shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised as habitat by fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice*.
- (b) Prior to undertaking any clearing authorised under this Permit, *habitat tree(s)* identified by condition 6(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice*.
- (c) Where fauna are identified in relation to condition 6(b) of this Permit, the Permit Holder shall ensure that no taking of identified fauna occurs unless approved by the CEO.

## 7. Vegetation management

- (a) Prior to undertaking any clearing authorised under this Permit, an *environmental specialist* must determine the species composition, structure and density of the *understorey* of areas proposed to be *thinned*.
- (b) The Permit Holder must retain a minimum of 2 *habitat trees* in each hectare authorised under this Permit.
- (c) A minimum retention rate of 14m<sup>2</sup>/ha *basal area* is required within the area of clearing authorised under this Permit.
- (d) Prior to undertaking any clearing authorised under this Permit, the Permit Holder must exclude all *stock* from the areas subject to *thinning* activities.
- (e) The permit holder shall not clear native vegetation within 30 metres of the *riparian vegetation* of any *watercourse* or *wetland* within and/or adjacent to the area cross-hatched yellow on Plan 5199/1.
- (f) Within two years of 19 October 2016, the Permit Holder must:
  - (i) engage an *environmental specialist* to determine the species composition, structure and density of the *understorey* of areas subject to *thinning*; and
  - (ii) where, in the opinion of an *environmental specialist*, there is evidence that *understorey* will not recover and develop towards its pre-clearing composition, structure and density determined under condition 7(a), the Permit Holder must undertake *remedial action* at an *optimal time* within the next 12 months to ensure re-establishment of *understorey* prior to expiry of this Permit.

## 8. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).

- (b) In relation to fauna management pursuant to condition 6 of this Permit:
  - (i) the location of each habitat tree identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
  - (ii) the species name of fauna reasonably likely to utilise, or that have been observed utilising, the habitat/habitat tree(s);
  - (iii) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees; and  
report.
- (c) In relation to vegetation management pursuant to condition 7 of this Permit:
  - (i) the species and number per hectare of *habitat trees* retained;
  - (ii) the location of *habitat trees* retained, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (iii) monitoring undertaken to ensure that the specified minimum *basal area* is retained;
  - (iv) photographs of the *understorey* taken at one year, two years and three years after completing clearing authorised under this Permit;
  - (v) a detailed description of the nature and extent of any *remedial actions* undertaken; and

## 9. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  - (i) of records required under condition 8 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 19 July 2019, the Permit Holder must provide to the CEO a written report of record required under condition 8 of this Permit where these records have not already been provided under condition 9(a) of this Permit.

## DEFINITIONS

The following meanings are given to terms used in this Permit:

***basal area*** is the method of expression of tree cover density in an area where the total area of tree trunk, whose diameter is measured at 1.5m above the ground, is expressed as square metres per hectares of land area;

***culled/ing*** means the selective removal and/or killing of unsaleable trees for *thinning*, using methods including notching, felling or machine pushing;

***dieback*** means the effect of *Phytophthora* species on native vegetation;

***dry conditions*** means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

***environmental specialist*** means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

***fill*** means material used to increase the ground level, or fill a hollow;

***fauna specialist*** means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

***habitat tree(s)*** means trees that have a diameter, measured at 1.5m above the ground, of 50cm or greater, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

***mulch*** means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

***optimal time*** means the period from April to June for undertaking *direct seeding*, and the period from May to July for undertaking *planting*;

***remedial action/s*** means for the purpose of this Permit, any activity that is required to ensure successful re-establishment of *understorey* to its pre-clearing composition, structure and density, and may include a combination of soil treatments and *revegetation*.

***stock*** means the horses, cattle, sheep, pigs and other non-indigenous grazing animals kept or bred on a property;

***thinned/ing*** describes a silvicultural activity to promote the growth of selected trees by removing competing trees;

***understorey*** means, for the purpose of this Permit, all native vegetation that does not include trees to be *culled* or subject to harvest.

***watercourse*** has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

***weed/s*** means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

***Wildlife Conservation (Specially Protected Fauna) Notice*** means those fauna taxa gazetted as rare fauna pursuant to section 14(4)(a) of the *Wildlife Conservation Act 1950* (as amended).



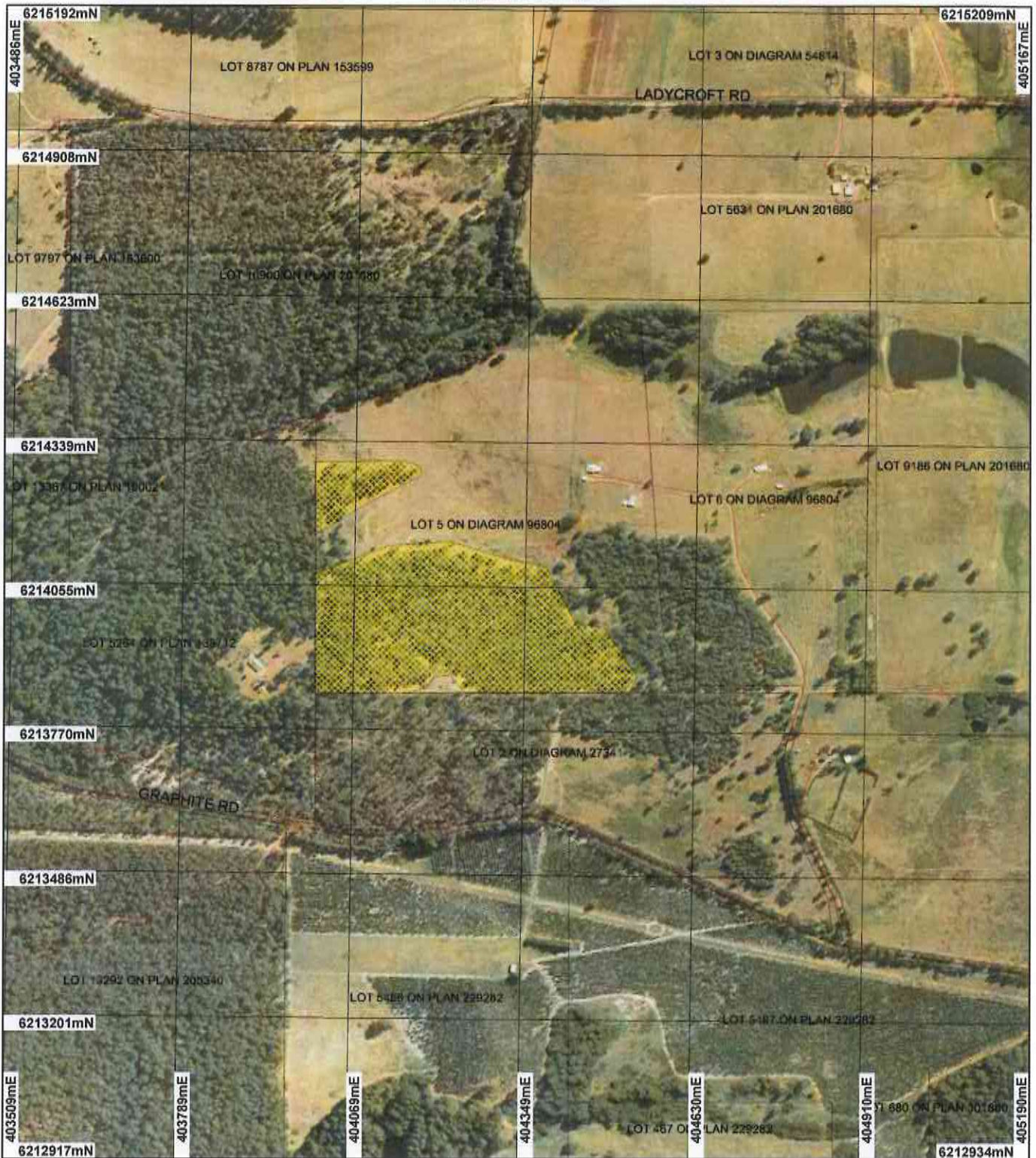
Roxane Shadbolt  
A/MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

27 September 2012



# Plan 5199/1



## LEGEND

- |   |  |
|---|--|
| <p><b>Clearing Instruments</b></p> <ul style="list-style-type: none"> <li> Areas Approved to Clear</li> <li> Road Centrelines</li> <li> Cadastra</li> </ul> | <p><b>Cadastra for labelling</b></p> <p>Pemberton 1.4m Orthomosaic<br/>- Landgate 1999</p> |
|---|--|

0 -300 m
  
**Scale 1:10000**  
*(Approximate when reproduced at A4)*

**Geocentric Datum Australia 1994**  
*Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.*

*R. Shadbolt* Date *27/9/12*  
 Roxane Shadbolt

Officer with delegated authority under Section 20 of  
 the Environmental Protection Act 1986  
 Information derived from this map should be  
 confirmed with the data custodian acknowledged  
 by the agency acronym in the legend.





## 1. Application details

### 1.1. Permit application details

Permit application No.: 5199/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Kimberley John Locke and Claire Therese Skoss

### 1.3. Property details

Property: LOT 5 ON DIAGRAM 96804 (House No. 1806 GRAPHITE GLENORAN 6258)  
Local Government Area: Shire of Manjimup

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.2		Mechanical Removal	Timber Harvesting

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 27 September 2012

## 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>The vegetation under application is mapped as:</p> <p>Beard Vegetation Association: 1144: Tall forest; karri and marri and</p> <p>3: Medium forest; jarrah marri (Hopkins et al 2001; Shepherd 2009).</p> <p>Mattiske vegetation complex: (BE1): Tall open forest of <i>Corymbia calophylla</i>-<i>Eucalyptus marginata</i> subsp. <i>marginata</i> on uplands in perhumid and humid zones and</p> <p>(WH1): Tall open forest of <i>Eucalyptus diversicolor</i>-<i>Corymbia calophylla</i> on slopes and tall open forest of <i>Eucalyptus patens</i> on valley floor in perhumid and humid zones.</p>	<p>The proposed clearing of 11.2 ha within Lot 5 on Diagram 96804, Glenoran is for the purpose of silvicultural thinning.</p> <p>The vegetation proposed to be cleared consists of Marri / Karri / Jarrah overstorey, a midstorey containing <i>Acacia pentadenia</i> and <i>Agonis flexuosa</i> and an understorey containing <i>Hibbertia hypericoides</i> and weed species such as Bracken Fern. The vegetation is in good (Keighery 1994) condition.</p>	<p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)</p>	<p>The condition and the description of the vegetation under application has been determined by aerial imagery (Pemberton 1.4m - Orthomosaic Landgate 1999), supporting information supplied by the applicant (Skoss 2012) and a site inspection carried out by Department of Environment and Conservation officers on the 20 September 2012. (DEC 2012).</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 is not likely to be at variance to this Principle

The application is to selectively thin up to 11.2 hectares of native vegetation for the purpose of silvicultural thinning.

The proposed clearing area is predominantly Karri (*Eucalyptus diversicolor*) and Marri (*Corymbia calophylla*) regrowth forest with dense understorey and some weed invasion and occurs in a good (Keighery 1994) condition (DEC 2012).

No priority ecological communities have been mapped within the local area (10km radius).

Several priority flora and fauna species have been recorded within a 10km radius of the application area. A site inspection was conducted by a DEC officer on 20 September 2012 (DEC 2012) where no evidence was found of any of these species and the preferred habitat for these species was not present within the application area (DEC 2012).

As the proposal is for thinning rather than broad scale clearing, the trees retained after thinning will provide habitat in the future. In addition, the vegetation within the local area surrounding the application is well represented with approximately 70 per cent of its pre-European vegetation remaining. It is considered for the local area to contain similar habitat as the area under application. The applicant has also advised habitat trees will be retained at a rate of two per hectare (Skoss 2012). Therefore, the proposed clearing does not contain significant fauna habitat.

Given that the local area has a high level of vegetation remaining and that the application is for silvicultural thinning as opposed to broad scale clearing, the proposed clearing is not likely to comprise of a high level of biodiversity, nor is it likely to impact upon the biological diversity of the area.

Therefore, the application is not likely to be at variance to this principle.

**Methodology**    References:  
- DEC (2012)  
- Skoss (2012)  
-Keighery ( 1994)  
GIS Database:  
- Pemberton 1.4m Orthomosaic - Landgate 1999  
- SAC Bio Datasets - accessed 31 August 2012

**(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**  
Numerous fauna species which are rare or likely to become extinct under the Wildlife Conservation Act 1950 including; *Bettongia penicillata* subsp. *ogilbyi* (Woylie, Brush-tailed Bettong), *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Pseudocheirus occidentalis* (Western Ringtail Possum) and *Setonix brachyurus* (Quokka) have been recorded within the local area (10km radius) (DEC 2007-).

Most of the vegetation under application is regrowth and not mature enough to contain well developed hollows (DEC 2012). However, there are some trees with hollows present within the application area (DEC 2012). The applicant advised that these trees would be retained under their Native Forest Management Plan (DEC 2012 and Skoss 2012). Fauna management practices will ensure that habitat trees will be identified and inspected for fauna species where located and that a minimum of 2 habitat trees are retained per hectare.

There is a large amount of native vegetation remaining (approximately 70 per cent) within the local area. Aerial photography indicates that adequate vegetation and associated corridors within the area under application (and adjoining land parcels) will remain post thinning. Therefore, the area under application is not likely to contain significant habitat or be necessary for the maintenance of native fauna.

The proposed clearing is not likely to be at variance to this principle.

**Methodology**    References:  
- Skoss (2012)  
- DEC (2007-)  
- DEC (2012)  
GIS Database:  
- Pemberton 1.4m 50cm Orthomosaic - Landgate 1999

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

**Comments**    **Proposal is not likely to be at variance to this Principle**  
One rare flora species *Caladenia harringtoniae* has been mapped within the local area (10 km radius). The closest records being approximately 9km south-west and 9km north-east from the proposed clearing area on the same vegetation and soil type.

*Caladenia christineae* is described as a tuberous, perennial herb found within margins of winter-wet flats, lakes, creeklines and granite outcrops (Western Australian Herbarium 1998-).

The area under application consists of Marri and Karri woodland (DEC 2012) and does not contain the preferred habitat of this rare flora species. Therefore, the proposed clearing is not considered likely to impact on this rare flora species.

Given the above, the clearing as proposed is not likely to be at variance to this principle.

**Methodology**    References:

- DEC (2012)
- Western Australian Herbarium (1998-)
- GIS Databases:
  - SAC Bio Datasets - accessed 31 August 2012
  - Soils, statewide

**(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**  
 No Threatened Ecological Communities have been mapped within the local area (10 km radius). The closest TEC is the Scott River Ironstone Associations located approximately 45km west of the application area.

Given the distance to the known TEC, the proposed clearing is not likely to be at variance to this principle.

**Methodology**    GIS Database:  
 -SAC Bio Datasets - accessed 31 August 2012

**(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**  
 The area under application is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 80 per cent of its Pre European vegetation extent remaining (Government of Western Australia 2011). The application occurs within the Shire of Manjimup which has approximately 84 per cent of its pre- European vegetation extent remaining (Government of Western Australia 2011).

The vegetation under application is mapped as Beard Vegetation Associations 3 and 1144 both of which have approximately 80 per cent of their Pre European extent remaining in the Warren bioregion (Government of Western Australia 2011). The vegetation under application is also mapped as Mattiske Vegetation Complexes BE1 and WH1 which have approximately 84 and 81 per cent of their Pre European extent remaining respectively (Mattiske and Havel 1980).

Digital imagery (Manjimup 50cm Orthomosaic - Landgate 2007) indicates that the local area (10 km radius) surrounding the area under application retains approximately 70 per cent vegetation cover.

The Beard vegetation association retains more than the threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

Given the above, the vegetation under application is not regarded as significant as a remnant in an extensively cleared landscape.

Therefore, the clearing as proposed is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Warren Region	833,982	664,123	80	83
Shire*				
Shire of Manjimup	287,390	242,922	85	93
Beard Vegetation Association in Bioregion*				
3	250,262	198,873	80	85
1144	159,668	126,978	80	91
Mattiske Vegetation Complex **				
BE1	76,781	65,556	84	78
WH1	18,325	14,864	81	72

\*Government of Western Australia (2011)

\*\*Mattiske and Havel (1998)

**Methodology**    Reference:  
 -Government of Western Australia (2011)  
 -Commonwealth of Australia (2001)



- Mattiske and Havel (1998)

GIS Databases:

- IBRA Australia
- Local Government Authority
- Pemberton 1.4m Orthomosaic - Landgate 1999
- Pre-European vegetation
- NLWRA, Current Extent of Native Vegetation

**(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 is not likely to be at variance to this Principle**

A minor watercourse runs past the application area, approximately 30m outside the south-east corner boundary at its closest point.

The Native Forest Management Plan (Skoss 2012) states that no clearing will be conducted within 30m of the watercourse and this buffer should be sufficient to protect the watercourse and any associated riparian vegetation.

Given the above, the clearing as proposed is not likely to be at variance to this principle.

**Methodology**

References:

- Skoss (2012)

GIS Databases:

- Hydrology, linear

**(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**

The area under application is mapped as soil type Uc1 which is described as steep hilly to hilly dissected lateritic plateau with steep valley side slopes: chief soils are hard, and also sandy, neutral, and also acidic, yellow and yellow mottled soils, with conspicuous but relatively smaller areas of red earths. Associated are areas of block laterite, gravelly and bouldery soils on tops of rises and their colluvial slopes; some areas of leached sands (Northcote et al 1960-8)

The application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 14 to 16 meters squared per hectare (Skoss 2012). Given the proposed clearing is for thinning and not broad scale clearing, the proposal is not considered likely to cause appreciable land degradation.

The application is not likely to be at variance to this principle.

**Methodology**

References:

- Northcote et al (1960-8)

- Skoss (2012)

GIS Database:

- Soils, statewide

**(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 application area is surrounded by conservation areas to the north, south and west. Donnelly River Nature Reserve is 500m to the west of the application area. South East Nannup State Forest is 200m to the south west and 1.5km to the north west and North Donnelly State Forest is 2km to the north.

As the clearing proposed is for silvicultural thinning it is unlikely that it will sever any ecological linkages to these conservation areas.

Considering the above, the proposed clearing may be at variance to this principle.

**Methodology**

GIS Databases:

- DEC Tenure

**(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 application area falls within the unassigned Public Drinking Water Source area of 'Donnelly River Water Reserve' and the 'Donnelly River System Surface Water Area' as proclaimed under the Rights in Water and Irrigation Act 1914.

A minor watercourse runs past the application area, approximately 30m outside the south-east corner boundary at its closest point.

The Native Forest Management Plan (Skoss 2012) states that no clearing will be conducted within 30m of the watercourse and this buffer should be sufficient to protect water quality.

Given the above, the clearing as proposed is not likely to be at variance to this principle.

**Methodology**

Reference:

- Dow (2012)

- Skoss (2012)

GIS Databases:

- Hydrology, linear

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

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

Given the application is for silvicultural thinning and a minimum basal area of 14 to 16 meters squared per hectare will be maintained (Skoss 2012), the proposal is not likely to cause or exacerbate the incidence or intensity of flooding.

Therefore, the clearing as proposed is not likely to be at variance to this Principle.

**Methodology**

Reference:

- Skoss (2012)

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

**Comments**

The proposed clearing of 11.2 ha within Lot 5 on Diagram 96804, Glenoran is for the purpose of silvicultural thinning.

The application area falls within the unassigned Public Drinking Water Source area of 'Donnelly River Water Reserve' and the 'Donnelly River System Surface Water Area' as proclaimed under the Rights in Water and Irrigation Act 1914. The Shire of Manjimup advised there are no planning or other matters that would affect the proposal (Shire of Manjimup 2012).

No public submissions were received regarding this application.

The application area is zoned as priority agriculture under the Town Planning Scheme Zones.

A Commercial Producer's licence under the Wildlife Conservation Act 1950 from the Department of Environment and Conservation is required for the purpose of selling harvested logs.

Vegetation management conditions have been added to the permit to restore the understorey disturbed by the silviculture operations, retain mature trees and a set basal area for habitat and exclude stock to ensure the remaining vegetation can continue to function due to the disturbance and will recover in the future. These conditions are consistent with DEC Sustainable Forest Management (DEC, 2005).

**Methodology**

References:

- DEC (2005)

- Shire of Manjimup (2012)

GIS Databases:

- Town Planning Scheme Zones

**4. References**

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.  
DEC (2005) Silvicultural Practice in the Karri Forest. Department of Environment and Conservation. SFM Guideline No.3  
DEC (2012) Site Inspection Report for Clearing Permit Application CPS 5199/1, Lot 5 on Diagram 96804, Glenoran. Site inspection undertaken 20/09/2012. Department of Environment and Conservation, Western Australia (DEC Ref:

A548943).

- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- 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.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- 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.
- Shire of Manjimup (2012) Advice regarding CPS 5199/1. Shire of Manjimup, 28 August 2012 (DEC Ref: A540326).
- Skoss (2012) Native Forest Management Plan. Western Australia. (DEC Ref:A545286)
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 14/09/2012).

## 5. 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)