

#### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:

CPS 3313/1

Permit Holder:

John Howard Akehurst Rachel Mary Smeeton

Duration of Permit:

22 November 2009 – 22 November 2017

The permit holder is authorised to clear native vegetation subject to the following conditions of this Permit.

## PART I - CLEARING AUTHORISED

# 1. Purpose for which clearing may be done

Clearing for the purpose of silvicultural thinning.

## 2. Land on which clearing is to be done

Lot 10293 on Plan 203137 (Shannon 6262) Lot 10294 on Plan 203137 (Shannon 6262)

## 3. Area of clearing

The Permit Holder must not clear more than 25 hectares of native vegetation within the areas cross-hatched yellow on attached Plan 3313/1.

# 4. Application

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

# 5. Type of clearing authorised

- (a) The Permit Holder may undertake the following activities:
  - (i) clearing of *understorey* within the areas cross-hatched yellow on Plan 3313/1;
  - (ii) clearing for the establishment of *log landings* each to be no larger than 0.25 hectares in size;
  - (iii) thinning of Karri (Eucalyptus diversicolor) trees;
  - (iv) thinning of Marri (Corymbia calophylla) trees;
  - (v) culling of unsaleable trees; and
  - (vi) burning of cleared understorey and culled trees.

(b) Clearing authorised under this Permit must be completed by 22 November 2013, being four years from the date from which this Permit becomes valid.

# 6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

# PART II - ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

### 7. 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.

#### 8. Dieback and weed control

- (a) 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*:
  - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
  - (ii) shall not move soils in wet conditions;
  - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
  - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the *term* of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

## 9. Vegetation management

The Permit Holder shall not clear native vegetation within 30 metres of the *riparian* vegetation of any watercourse or wetland.

## 10. 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 within the area of clearing authorised under this Permit in each hectare authorised under this Permit.
- (c) A minimum retention rate of 18m²/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) Within one month of completing clearing, the Permit Holder must *rehabilitate* any *log landings* established within native vegetation by scarifying the soil surface to reduce compaction and facilitate natural regeneration.
- (f) Within two years of completing clearing of native vegetation authorised under this Permit, the Permit Holder must:
  - (i) 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 10(f)(i), 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.

# PART III - RECORD KEEPING AND REPORTING

# 11. Records to be kept

- (a) In relation to the clearing of native vegetation undertaken pursuant to 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 vegetation management pursuant to condition 10 of this Permit:
  - (i) prior to clearing native vegetation authorised under this Permit, the species composition, structure and density of *understorey*;
  - (ii) the species and number per hectare of habitat trees retained;
  - (iii) 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;
  - (iv) monitoring undertaken to ensure that the specified minimum basal area is retained;
  - (v) number of log landings established;
  - (vi) the location of log landings, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (vii) photographs of the *understorey* taken at one year, two years and three years after completing clearing authorised under this Permit; and
  - (viii) a detailed description of the nature and extent of any remedial actions undertaken.

#### 12. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 11 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 22 August 2017, the Permit Holder must provide to the CEO a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(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, measured at average adult human breast height, 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;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

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;

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, 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;

log landing/s means an area established for the purpose of stockpiling commercially harvested trees, to enable loading for collection;

**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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

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

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

**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*.

revegetate/ed/ion means the re-establishment of a cover of local provenance native vegetation in an area using methods such as regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

*riparian vegetation* has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

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

term means the duration of this Permit, including as amended or renewed;

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; and

wetland/s means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

Keith Claymore

A/ ASSISTANT DIRECTOR

NATURE CONSERVATION DIVISION

Kich Claymore

Officer delegated under Section 20 of the Environmental Protection Act 1986

22 October 2009

# Plan 3313/1





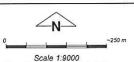
Clearing Instruments

Areas Approved to Clear

✓ Road Centrelines

☐ Cadastre

Hydrography, linear NorthCliffe 50cm Orthomosaic - Landgate 2004



(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.

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 acknowleged by the agency acronym in the legend.



\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



# **Clearing Permit Decision Report**

# 1. Application details

Permit application details

Permit application No.:

Permit type:

Purpose Permit

Proponent details

Proponent's name:

**Brian Roche** 

**Property details** 

Property:

LOT 10294 ON PLAN 203137 ( SHANNON 6262) LOT 10294 ON PLAN 203137 ( SHANNON 6262) LOT 10293 ON PLAN 203137 ( SHANNON 6262) LOT 10293 ON PLAN 203137 ( SHANNON 6262)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of: **Timber Harvesting** 

Mechanical Removal

## **Site Information**

# Existing environment and information

# 2.1.1. Description of the native vegetation under application

**Vegetation Description** Beard Vegetation Types:

1: Tall forest; karri

1144: Tall forest; karri and

zones.

(SAC Bio Datasets 14/10/2009; Shepherd,

2007)

Mattiske Vegetation Types: Crowea (CRb) - Tall open forest of Corymbia calophylla-Eucalyptus diversicolor on upper slopes with Allocasuarina decussata-Banksia grandis on upper slopes in hyperhumid and perhumid

Granite Valleys (S1) - Tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes with some Eucalyptus patens and Eucalyptus megacarpa on valley floors in hyperhumid and perhumid zones. (Mattiske and Havel, 1998)

### Clearing Description

The application is for the clearing of 25 hectares of native vegetation for the purpose of silviculture.

The area under application can be described as karrimarri closed forest in very good (Keighery, 1994) condition, with a history of thinning and grazing (DEC 2009).

#### **Vegetation Condition**

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)

#### Comment

The condition of the native vegetation under application was sourced from the site inspection (DEC, 2009).

# 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 clear 25 hectares of native vegetation for the purpose of silviculture. The vegetation under application is in very good (Keighery, 1994) condition (DEC, 2009). The area under application contains

regenerated Eucalyptus diversicolor (Karri) and Corymbia calophylla (Marri) forest, and has a history of grazing and thinning (Bradshaw, 2009; DEC, 2009), and is considered to have limited habitat value.

One priority flora species Hemigenia rigida (P1) has been recorded in the local area (5 km radius). The priority species occurs within different vegetation, but on similar soils as those of the applied area. It is considered unlikely the vegetation is supporting priority flora species.

Given history of disturbance and limited habitat value, the 25 ha of vegetation under application is not considered to comprise a locally high level of biological diversity. Therefore, the clearing as proposed is considered not likely to be at variance to this Principle.

#### Methodology Re

References:

- Bradshaw (2009)
- DEC (2009)
- Keighery (1994)

GIS Database:

- SAC Bio Datasets 14/10/2009
- (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

Two fauna species of conservation significance, Quenda and Brush-tailed Phascogale, have been recorded within the local area (5 km radius). The closest record is ~3 km north of the areas under application.

Quokkas and Bandicoots may occur in the neighbouring DEC managed land; however, during a site inspection no of evidence of these animals or any tree hollows were observed (DEC, 2009). As the vegetation is regrowth and has been subjected to historical disturbances from thinning and grazing, the number of mature habitat trees is limited (Bradshaw, 2009).

As the vegetation is regrowth, the trees have limited habitat value and trees retained after thinning would provide opportunity for trees to provide habitat in the future. The local area is well vegetated, with approximately 97% native vegetation remaining including large areas of state forest and national parks. These areas are likely to be providing fauna habitat of greater local significance than the vegetation under application. Therefore, the clearing as proposed is considered not likely to be at variance to this Principle.

## Methodology

References:

- Bradshaw (2009)
- DEC (2009)
- Keighery (1994)

GIS Database:

- NLWRA, Current Extent of Native Vegetation
- SAC Bio Datasets 14/10/2009
- (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

There are two known records of rare flora species Brachyscias verecundus within the local area (5 km radius). This species is located 3.8 km and 4.9 km south-east of the areas under application.

This annual herb species is known to occur wet areas, moss swards and on granite outcrops (Western Australian Herbarium, 1998-). The area under application does not comprise this habitat; therefore, there is a low likelihood of this species occurring within the area under application. Therefore, it is not considered likely that clearing as proposed is at variance to this Principle.

#### Methodology

Reference:

- Western Australian Herbarium (1998-)

GIS Databases:

- SAC Bio Datasets 14/10/2009
- (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 known Threatened Ecological Communities (TEC) have been recorded within the local area (5 km radius), the closest record is Scott River Ironstone Association (Endangered) located ~ 82 km north-west of the area under application.

Given the distance to the TEC it is not considered likely that the vegetation under application comprises or is

necessary for the maintenance of a TEC.

Methodology

GIS Database:

- SAC Bio Datasets 14/10/2009

# (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 vegetation within the areas under application is identified as a component of Beard vegetation types 1 and 1144, of which there is 81.1% and 91% of Pre-European extent remaining within the Warren Bioregion, respectively (Shepherd, 2007); and Mattiske vegetation types Crowea and Granite Valleys, of which there is 81.2% and 84.6% of Pre-European extent remaining, respectively (Mattiske and Havel, 1998).

The Environmental Protection Authority (EPA) supports a 30% threshold level as recommended in the National Objectives Targets for Biodiversity Conservation; below which species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000). The vegetation associations under application retain more than this 30% threshold level.

Given the current representation levels of the Beard and Mattiske vegetation types and the extensive area of remnant vegetation remaining in the local area (97%), it is not considered likely that the vegetation under application is significant as a remnant. Therefore, the clearing proposal is not likely to be at variance to this Principle.

	Pre-European (ha)	Current extent Remaining (ha) (%)		In secure tenure (%)
IBRA Bioregion* Warren (W)^	835,925	675,836	80.8	
Shire of Manjimup* Local area (10km radius)	697,359 31,400	595,561 ~30,500	85.4 ~97	
Beard vegetation types*				
1 (within W)	69,119	56,119	81.1	81.3
1144 (within W)	159,668	131,169	82.1	91.0
Mattiske vegetation types**				
Crowea (CRb)	527,433	428,454	81.2	NA
Granite Valley (S1)	255,050	215,886	84.6	NA

<sup>\* (</sup>Shepherd, 2007)

# Methodology

# References:

- EPA (2000)
- Mattiske and Havel (1998)
- Shepherd (2007)

GIS Databases:

- Interim Biogeographic Regionalisation of Australia
- NLWRA, Current Extent of Native Vegetation
- SAC Bio Datasets 14/10/2009

# (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 at variance to this Principle

A minor perennial watercourse, a tributary of Shannon River, is immediately adjacent to the northern area under application. A site inspection observed a defined stream bed and associated riparian vegetation (DEC, 2009a). Therefore, the clearing as proposed is at variance with this Principle.

A 30 meter vegetated buffer will be retained as a condition of the permit to ensure adequate protection of riparian vegetation.

### Methodology

Reference:

- DEC (2009a)

GIS Databases:

- Hydrography, linear

<sup>\*\* (</sup>Mattiske and Havel, 1998)

<sup>^</sup> Area within Intensive Land Use Zone

- Rivers

# (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 application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 18m2/ha (Bradshaw, 2009). Vegetation management conditions will be placed on the permit to minimise land degradation concerns.

Given the proposed clearing is for thinning and not broad scale clearing, the proposal is not considered likely to cause appreciable land degradation.

Methodology

Reference:

- Bradshaw (2009)

# (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 F

### Proposal may be at variance to this Principle

The Lots 10293 and Lots 10294 (includes the application areas) are surrounded by conservation areas, being Shannon National Park to the east (immediately adjacent); Greater Dordagup National Park to the north-west (immediately adjacent) and Jane National Park to the west (~700m) of the applied areas.

The proposed clearing may indirectly impact on the environmental values of the adjoining conservation reserves through the spread or introduction of weed species or dieback by machinery. The consequences associated with the spread of such exotic species into areas reserved for conservation, include the significant degradation of the reserve and the potential local extinction of species.

Given the indirect impact through the spread of weeds and dieback; it is considered likely that the clearing as proposed may impact on the environmental values of nearby conservation areas. Therefore, the clearing as proposed may be at variance to this Principle.

To mitigate any impacts from the proposed clearing a weed control and dieback condition will be imposed on this permit.

### Methodology

Reference:

- DEC (2009)

GIS databases:

- Cadastre
- DEC Managed Lands and Waters

# (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

A minor perennial watercourse, a tributary of Shannon River, is immediately adjacent to the northern area under application. A site inspection observed a defined stream bed and associated riparian vegetation (DEC, 2009a).

The areas under application are not located in a Public Drinking Water Source Area and there is a low salinity risk.

The application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 18m2/ha (Bradshaw, 2009). Therefore, surface and groundwater quality is unlikely to be adversely impacted by the proposed clearing.

A 30 meter vegetated buffer will be retained as a condition of the permit to ensure adequate protection of riparian vegetation.

## Methodology

Reference:

- Bradshaw (2009)

GIS Databases:

- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)
- Rivers
- Salinity Risk LM 25m DOLA 00

# (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 18m2 per hectare will be maintained (Bradshaw, 2009), 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:

- Bradshaw (2009)

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

#### Comments

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).

There is no RIWI Act Licence, Works Approval or EP Act Licence that affects the area under application.

The Shire of Manjimup (2009) advised that the applicant is to confer with the Shire with the need to comply as relevant with all Shire requirements.

A DEC Commercial Producers Licence remains outstanding for this proposal.

## Methodology

Lots 10293 and 10294 are freehold land and are zoned rural under the local Town Planning Scheme. References:

- DEC (2005)

- Shire of Manjimup (2009)

GIS databases:

- Cadastre
- -Town Planning Scheme Zones

#### 4. Assessor's comments

#### Comment

The assessable criteria have been addressed and the clearing as proposed is at variance to Principle (f); and may be at variance to Principle (h)

## 5. References

Bradshaw (2009) Native Forest Management Plan (Trim Ref: DOC97123).

DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3313/1, Lots 10293 and 10294. Site inspection undertaken 9/10/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC101120).

DEC (2009a) Additional DEC Regional advice for Clearing Permit Application CPS 3313/1. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC101643).

Department of Environment and Conservation (2005) Silvicultural Practice in the Karri Forest. Department of Conservation and Land Management. SFM Guideline No.3

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.

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.

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.

Shire of Manjimup (2009) Direct Interest Submission for Clearing Permit Application CPS 3313/1 (TRIM Ref DOC99779 and DOC99980).

Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. http://florabase.dec.wa.gov.au/ (Accessed 14/10/2009).