



## CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

<b>Purpose Permit number:</b>	CPS 2478/2
<b>Permit Holder:</b>	Shire of Manjimup
<b>Duration of Permit:</b>	12 July 2008 – 12 July 2015

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 airfield maintenance.

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

Lot 774 on Plan 216990

**3. Area of Clearing**

The Permit Holder must not clear more than 10 hectares of native vegetation within the area cross hatched yellow on attached Plan 2478/2.

**4. 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.

**5. Type of clearing authorised**

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the power to clear native vegetation for those activities under the *Local Government Act 1995* or any other written law.

**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 – MANAGEMENT PROCEDURES

**7. Dieback and Weed Control**

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

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- avoid the movement of soil in wet conditions;
- ensure that no *dieback*-or *weed* affected soil, *mulches* or *fill* or other material is brought into an area to be cleared; and
- restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## 8. Vegetation Management

Within two years of completing clearing of native vegetation authorised under this Permit, the Permit Holder must:

- (a) determine the species composition, structure and density of the *understorey* of areas subject to clearing; and
- (b) 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 8(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.

## PART III – RECORD KEEPING AND REPORTING

### 9. Records must be kept

- (a) The Permit Holder must maintain the following records for activities done pursuant to this Permit 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 vegetation management pursuant to condition 8 of this Permit:
  - (i) prior to clearing native vegetation authorised under this Permit, the species composition, structure and density of *understorey*;
  - (ii) photographs of the *understorey* taken at one year, two years and three years after completing clearing authorised under this Permit; and
  - (iii) a detailed description of the nature and extent of any *remedial actions* undertaken.

### 10. 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 9 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 12 April 2015, the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

## Definitions

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

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

*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;

*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 May to June for undertaking *planting*;

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

*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;

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

*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 *Agricultural and Related Resources Protection Act 1976*.



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Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

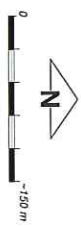
26 March 2009

# Plan 2478/2



## LEGEND

- Clearing Instruments
- Areas Approved to Clear
- Road Centrelines
- Cadastre
- Local Government Authorities
- Manjimup Shire Orthomosaic - Landgate 2004



Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion/measurements inaccuracies.

*Koiki Faulkner*  
Koiki Faulkner  
Date: 24/3/07

Officers 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.: 2478/2  
 Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Shire of Manjimup

### 1.3. Property details

Property: LOT 774 ON PLAN 216990 (Lot No. 774 FRANKLIN MANJIMUP 6258)  
 Local Government Area: Shire Of Manjimup  
 Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		Mechanical Removal	Miscellaneous
		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
Beard Vegetation Association 3: Medium forest; jarrah-marri	The purpose of the application is to remove tall trees to comply with Civil Aviation Safety Regulations. The vegetation is considered to be in a degraded (Keighery, 1994) condition, consisting mainly of regrowth karri trees (DEC, 2009).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition was assessed through aerial photographs and a site visit (DEC, 2009).
Mattiske Vegetation Associations: BEVAN 1 (BE1) : Tall open forest of Corymbia calophylla (Marri) - Eucalyptus marginata subsp. marginata (Jarrah) on uplands in perhumid and humid zones.			
PEMBERTON (PM1) : Tall open forest of Eucalyptus diversicolor (Karri) with mixtures of Corymbia calophylla (Marri) on valley slopes and low forest of Taxandria juniperina (Wattie) - Banksia seminuda (River Banksia) - Callistachys lanceolata (Wonnich) on valley floors in the perhumid zone.			
CROWEA (CRy) : Tall open forest of Corymbia calophylla (Marri) with mixture of Eucalyptus marginata subsp. marginata (Jarrah) and Eucalyptus diversicolor (Karri) on uplands in hyperhumid and perhumid zones.			

## 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 purpose of the application is to remove tall trees to comply with Civil Aviation Safety Regulations. Some understorey vegetation will be disturbed to fell trees.

The vegetation is described as closed Karri forest over *Personia longifolia* over a groundcover of *Pteridium esculentum* (DEC, 2009). The application area has been heavily disturbed and the vegetation is considered to be in a degraded (Keighery, 1994) condition, consisting mainly of regrowth karri trees (DEC, 2009). Understorey vegetation has also been disturbed and contains weeds such as blackberries (DEC, 2009).

A Priority Ecological Community exists approximately 6km south east of the application area, which is named 'Epiphytic Cryptogams of the karri forest' and is listed as a P3 community. The community is located in Tone State Forest, which makes up the majority of vegetation within the local area (10km radius). It is likely that the community lives within creek lines of which none are present in the application area. There is a thin vegetated

link to the State Forest from the application area being a road reserve corridor.

Given the above and that vegetation within the local area is in similar or better condition than the application area, it is unlikely that the proposal is at variance to this principle, however weed and dieback management conditions will be placed on the permit to limit the spread of disease.

**Methodology** DEC (2009)  
Keighery (1994)  
GIS Databases:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Manjimup 50cm Orthomosaic - DLI04  
- SAC biodatasets - accessed 16 February 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**  
Within the local area (10km radius) there is approximately 40% native vegetation coverage remaining, most of this vegetation is within secure tenure. The vegetation is considered to be in a degraded (Keighery, 1994) condition, as it has been heavily disturbed and contains regrowth trees (DEC, 2009) which are not considered to be significant habitat for native bird species that are known to the area. No trees with hollows were observed opportunistically during a site inspection (DEC, 2009), however, a full survey was not part of the site visit.

There are numerous records of significant fauna within the local area. Fauna sightings within the Manjimup town site (north of the application area) have limited vegetation connectivity to the application area.

There is a thin vegetated road reserve corridor connecting the application area to Tone State Forest. The majority of fauna sightings in the local area have been within this state forest. The vegetation in the state forest is in a similar to better condition than that of the area proposed to be cleared.

Given the degraded (Keighery, 1994) condition of the application area, and the extent of surrounding vegetation within the local area, it is unlikely that the proposal is at variance to this principle.

**Methodology** DEC (2009)  
Keighery (1994)  
GIS Layers:  
SAC biodatasets - accessed 16 February 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 three known records of rare flora species located within a 10km radius of the application area. Two are found within the same vegetation and soil type as the area proposed to be cleared.

*Andersonia annelsii* prefers sandy loam or clay, skeletal soils, found on low quartzite ridges and granite outcrops (WA Herbarium, 2009). *Caladenia christineae* prefers sand, clayey loam and laterite as is found on the margins of winter-wet flats, swamps, and freshwater lakes (WA Herbarium, 2009).

Three priority flora species are also found within the same vegetation and soil types as the application area. *Caladenia erythrochila* (P2) prefers grey sand over laterite and well-drained lateritic soils; *Calytrix pulchella* (P3) prefers grey over white sand over laterite; and *Deyeuxia inaequalis* (P1) prefers loamy soils.

The application area has been described as closed regrowth karri that has been heavily disturbed, with the understorey containing numerous weed species (DEC, 2009). Chief soils are hard acidic yellow mottled soils with some hard acidic red mottled soils and brown earths, all containing ironstone gravels (Northcote, 1960-68).

Given the differing vegetation habitats of the rare and priority flora species to those found within the application area, it is unlikely that the proposal is at variance to this principle.

**Methodology** DEC (2009)  
Keighery (1994)  
Northcote (1960-1968)  
GIS Databases:  
- Mattiske Vegetation (01/03/1998)  
- Soils, Statewide - DA 11/99  
- SAC Biodatasets - accessed 16 February 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**

There are no known Threatened Ecological Communities within the local area (10km radius), therefore, the clearing is unlikely to be at variance to this principle.

**Methodology** GIS Database:  
- SAC biodatasets - accessed 16 February 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**

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions***				
Jarrah Forest	4,506,655	2,440,940	54.16	N/A
Shire*				
Manjimup	697,359	595,561	85.40	N/A
Mattiske Vegetation Complex**				
BE1	767,844	657,120	85.6	N/A
CRy	337,605	236,268	70	N/A
PM1	258,061	169,317	65.6	N/A
Beard Vegetation Complex*				
3	2,390,590	1,657,274	69.32	

\* (Shepherd et al. 2007)

\*\* (Mattiske Consulting 1998)

Within the local area (10km radius) there is approximately 40% native vegetation coverage remaining, most of this vegetation is within secure tenure. Given this, clearing of 10 hectares of degraded (Keighery, 1994) vegetation is unlikely to be at variance to this principle.

**Methodology** Keighery (1994)  
Mattiske Consulting (1998)  
Shepherd (2007)  
GIS Databases:  
- Mattiske Vegetation (01/03/1998)  
- Pre European Vegetation - DA 01/01

**(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**

The application area is approximately 1.6km south of Manjimup Brook and 900m west of Smith Brook.

The vegetation within the application area is not considered to be riparian or a buffer to a wetland or watercourse. Given the distance from the application area to the nearest watercourse, it is unlikely that the proposal is at variance to this principle.

**Methodology** 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**

The application area lies within the Warren River Catchment. The area proposed to be cleared lies within Zone C of the Country Areas Water Supply Act 1947. DoW (2009) advises that this is a low salinity risk area where no salinisation of the water resources will result provided a minimum basal area of 10m<sup>2</sup>/ha is retained over the works area. The proposed clearing will be in excess of this minimal basal area. However, further DoW advice (2009) states that the application area appears to have understorey species that maintain a high leaf area index. Groundwater recharge after the proposed works should not be excessive provided any damaged

vegetation regenerates to a satisfactory condition (DoW, 2009). Revegetation conditions for the understorey will be placed on the permit to mitigate excessive groundwater recharge.

The proposed cleared vegetation is not considered to be growing in association with a wetland or watercourse. Due to the sloping nature of the application area and given the chief soils contain ironstone gravel (Northcote et al 1960-1968), it is unlikely that the proposed clearing will cause any land degradation issues.

**Methodology** Department of Water (2009)  
Northcote (1960-1968)  
GIS Databases:  
- Manjimup 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 application area is approximately 1.3km west of the Tone State Forest. The state forest represents approximately 30% of the remaining vegetation within the local area (10km radius).

Given the distance of the state forest from the application area, it is unlikely that the proposal is at variance to this principle, however dieback management conditions will be placed on the permit to limit the spread of disease.

**Methodology** GIS Databases:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Manjimup 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 application area lies within the Warren River Catchment. The area proposed to be cleared lies within Zone C of the Country Areas Water Supply Act 1947. DoW (2009) advises that this is a low salinity risk area where no salinisation of the water resources will result provided a minimum basal area of 10m<sup>2</sup>/ha is retained over the works area. The proposed clearing will be in excess of this minimal basal area. However, further DoW advice (2009) states that the application area appears to have understorey species that maintain a high leaf area index. Groundwater recharge after the proposed works should not be excessive provided any damaged vegetation regenerates to a satisfactory condition (DoW, 2009). Revegetation conditions for the understorey will be placed on the permit to mitigate excessive groundwater recharge.

The vegetation proposed to be cleared vegetation is not considered to be growing in association with a wetland or watercourse. Due to the sloping nature of the application area and given the chief soils contain ironstone gravel (Northcote et al 1960-1968), it is unlikely that the proposed clearing will cause any land degradation issues.

**Methodology** Department of Water (2009)  
Northcote et al. (1960-1968)  
GIS Databases:  
- Manjimup 50cm Orthomosaic - DLI04  
- Groundwater Salinity, Statewide DoW 13/07/06

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

**Comments** **Proposal is not likely to be at variance to this Principle**  
Given the nature of the proposed clearing (removal of tall trees and minimal understorey) and that the application area is not prone to inundation, it is unlikely that the proposal will cause or exacerbate the incidence or intensity of flooding.

**Methodology** GIS Databases:  
- Topographic Contours, Statewide - DOLA 12/9/02

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

**Comments**  
The application has been amended to change the amount of clearing from 50 trees to 10 hectares.

Contained within the area cross hatched yellow on Plan 2478/1, was a section of Lot 689 on Plan 175853. This has been removed on the amended Plan as this Lot is not a part of the application.



#### 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 is not likely to be at variance to any of the clearing Principles.

#### 5. References

- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 2478/2, Lot 774 on Plan 216990, Manjimup. Site inspection undertaken 13/02/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC76777).
- DoW (2009). Department of Water. Country Area Water Supply Advice. DEC TRIM Ref: DOC78449 and DOC79258.
- 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. (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)