



## 1. Application details

### 1.1. Permit application details

Permit application No.: 181/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: MR Laurie Blurton Manager Technical Services Shire of Dardanup

### 1.3. Property details

Property:

Local Government Area: Shire Of Capel & Shire Of Dardanup & Shire Of Harvey

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
25.4		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance
		Mechanical Removal	Road construction or maintenance

## 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
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## 3. Assessment of application against clearing principles

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

#### Comments

Listed under principle (e) assessment are the roads, widths and areas under application, totalling 26.4ha. Widths of clearing into road reserve vary from 1.5 to 5 meters.

Based on DoE Site Visit and areas of vegetation under application lacking in vegetation structure (consisting of mature trees with no middle or lower storey) the areas proposed to be cleared are considered to have a low level of biological diversity within the local area and are unlikely to effect Conservation, Flora and Fauna values or exacerbate land degradation and water quality issue in the area.

To mitigate loss of surrounding biodiversity the proposed clearing will be carried out in accordance with fauna management conditions and dieback and weed control conditions. The applicant has also agreed to conditions that ensure an equivalent area to that cleared is replanted and maintained within the Shire boundary.

Methodology DoE Site Visit (2004)

### (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

Six Threatened fauna taxa (4 listed under the EPBC Act), 1 Schedule 4 fauna taxon and 8 Priority fauna taxa have been recorded within the local area (CALM advice, 2006).

Sixteen records of the threatened fauna species *Pseudocheirus occidentalis* (western ringtail possum) were recorded in the local area, the closest being approximately 700m from some of the proposed clearing. Other Threatened fauna within the local area are: *Calyptorhynchus banksii naso* (forest Red-tailed Black-Cockatoo), 1 record; *Claytonorchus baudinii* (Baudin's Black-Cockatoo), 2 records; *Dasyurus geoffroyi* (Chuditch), 11 records; *Psophodes nigrogularis nigrogularis* (Western Whipbird, western heath subsp.), 1 record; and *Setonix brachyurus* (Quokka), 15 records.

Given the above, the proposed clearing maybe at variance to this principle. To mitigate any loss of habitat within the areas proposed to be cleared conditions will be placed on the permit to ensure surveys are undertaken by a fauna specialist to identify trees that may be suitable as habitat for specially protected fauna under the Wildlife Conservation Act and where applicable translocation of fauna is undertaken.

**Methodology** CALM Advice (2006)

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

**Comments**

A total of 3 Declared Rare flora taxa (all listed under the EPBC Act) and 37 Priority flora taxa have been recorded within the local area (CALM Advice, 2006).

A total of 5 records have been recorded of Declared Rare Flora within the local area. The nearest records of are approximately 1.2km from the areas under application being *Drakaea elastica* (Glossy-leaved Warty Hammer Orchid) and *Eleocharis keigheryi* (Keighery's Eleocharis). The closest priority flora is 200m from the areas under application.

Due to the vegetation under application ranging from Completely Degraded to Very Good (Keighery, 1994). (Some of the areas under application contain large mature trees but do not contain an intact middle storey or lower storey structure) and the distance between the areas under application and declared rare flora and priority flora the proposed is unlikely to contain declared rare flora.

**Methodology** CALM Advice (2006)  
Keighery 1994  
GIS database:  
- Declared Rare and Priority Flora List - CALM 13/05/03

**(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**

CALM have advised that there are several occurrences representing 6 types of Threatened Ecological Communities occurring within the local area (CALM advice, 2006).

The nearest occurrence of a TEC is approximately 4.3 kilometres from the areas under application.

Based on the distance between known occurrences of TECs and the areas under application, and the condition and structure of the proposed clearing it is unlikely that there will be a significant impact on the threatened ecological communities within the local area.

**Methodology** CALM Advice (2006)  
GIS databases:  
- Threatened Ecological Communities - CALM 15/7/03  
- Threatened Plant Communities - DEP 06/95.

**(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**

A breakdown of vegetation complexes and associations can be found in assessment activities due to limited space.

Following is a breakdown of the roads under application and the areas proposed to be cleared on each.

Road Name	Length (km)	Width (m)	Area (ha)
Lennard	4.27	5 - 10	3.1Richards
	4.16	7 - 9	3.6Henty 2.32
7	6.5 - 7	1.6	Collie River 7.2
		5	Joshua Creek 10.75
S.8Warburton Brook	2.01	8 - 9	3.5 - 10
	5.77	6 - 8	1.7Crooked
	36.48	-	4.5TOTAL
			28.4

Width in the table above account for both sides of the given road and should be halved to estimate width on one side of road

Mapped vegetation complexes with a conservation status of Vulnerable\*\* (10-30% remaining) occur within Leonard Road, Joshua Creek Road, Crooked Brook Road, Warburton Road and Collie River Road.

A mapped vegetation complex with a conservation status of Presumed Extinct\*\* (0% remaining) occurs within Collie River Road. The proposed area to be cleared for this complex is 1.6ha. The vegetation consists of large mature trees with little to no understorey and does not represent the complex.

Given the above the application maybe at variance to this principle. However, to mitigate any long term loss of remnant vegetation within the road reserves the applicant has agreed to replant, and maintain an equivalent area to that cleared across 5 sites within the Shire boundary for conservation purposes.

**Methodology** DoE site visit 2004  
Havel (2002)  
Hopkins et al. (2001)  
Applicant Correspondance (SWD43896)  
Keighery 1994  
Shepherd et al. (2001).  
GIS databases:  
- Matiske Vegetation - CALM 24/3/98  
- Hedde Vegetation Complexes - DEP 21/06/95  
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00  
- 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**

All of the areas under application are within road reserves of roads that already exist. All watercourses have previously been diverted through culverts or under bridges (in some cases upgrades of these diversions are planned as part of the road widening). Discussions with proponents during DoE site visit (2004) confirmed that water movement in dieback (*Phytophthora cinnamomi*) areas will be diverted away from healthy vegetation and has resulted in dieback management conditions for the proposed clearing.

Some of the rivers that cross the roads under application or are in close proximity are: Crooked Brook, Joshua Creek, Hough Brook, Collie River and Henty Brook.

A multiple use wetland is mapped across most of Crooked Brook Road and also the town site of Dardanup. The closest wetland besides the multiple use wetland is an EPP Lake at 1.1km.

Due to the vegetation under application being contained in road reserves where existing roads exist and the distance between EPP Lakes, Conservation Category and Resource Enhancement wetlands this proposal is not likely to be at variance to this principle.

**Methodology** DoE site visit (2004)  
GIS databases:  
- EPP Lakes - DEP 28/07/03  
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04  
- Hydrography Linear - DoE 1/2/04

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

**Comments**

DAWA advise that the major degradation hazard of clearing for road widening and maintenance in these areas would be the increased risk of water erosion. Indicating that the applicant generally has a good track record in managing degradation risks associated with road construction and maintenance.

The proposal to widen existing roads may cause some short term land degradation issues in terms of flooding and soil erosion during works. However these issues should be minimal as the existing roads already have road side infrastructure in place to prevent land degradation associated with roads ie. Table drains and culverts. Therefore the proposed clearing is unlikely to cause appreciable land degradation.

**Methodology** DAWA (2004).

(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

Sections of the following roads neighbour CALM managed lands. Joshua Creek Road (4.4km), Warburton Road (2km) and Crooked Brook Road (1km). A section of Crooked Brook Road also neighbours a system 5 reserve.

The proposed clearing is unlikely to significantly impact these conservation areas as the majority of clearing will be selected trees and some understorey, 1.5 to 5 meters either side of the existing roads.

Methodology

CALM Advice (2006)

GIS databases:

- CALM Managed Lands and Waters - CALM 1/06/04

- System 5 Conservation Reserves - DEP 06/95

(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

Hydrogeological advice indicates that the Shire of Dardanup is partly within a high rainfall and well drained area, being the portion within the Darling Scarp and that high salinity risk is associated with low lying, swampy, clayey areas within the Swan Coastal Plain. The road side vegetation within the areas under application are not considered to be in areas associated with high salinity risk.

Crooked Brook Road and Joshua Creek Road are within the Bunbury RIWI groundwater area and the Busselton-Capei RIWI groundwater area respectively, however clearing of the small areas within these road reserves is unlikely to impact on Surface Water or Groundwater quality.

As the areas under application are not significantly large area, with respect to the Shire as a whole (less than 1%), the proposed clearing is not likely to adversely effect Surface Water and Goundwater quality.

Methodology

Hydrogeological advice (Supervising Hydrogeologist, DoE, pers. comm. 2004)

GIS databases:

- CAWSA Part2A clearing control catchment - DoE 17/11/05

- Public Drinking Water Source Areas (PDV/SAs) - DoE 1/6/04

- RIWI Act Groundwater Areas WRC 13/06/00

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

Comments

Due to the scale of the proposed clearing, flooding impacts are unlikely to occur.

Methodology

Hydrogeological advice (Supervising Hydrogeologist, DoE, pers. comm. 2004)

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

Comments

The areas under application are road reserves.

Native Title - All roads including those subject to this application are listed on the State of Construction maps as issued by Main Roads Western Australia as roads being under the total care, control and management of the Shire of Broomehill. Therefore, as all areas proposed to be cleared are vested in the Shire, the granting of a clearing permit is not a future act under the Native Title Act.

Methodology

State of Construction Map, Shire of Dardanup

GIS database:

- Town Planning Scheme Zones - MFP 8/98.

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction or maintenance	Mechanical Removal	26.4		Henty Rd
Road construction or maintenance	Mechanical Removal			Collie River Road
Road construction or maintenance	Mechanical Removal			Richards Road

Road construction or maintenance	Mechanical		Juanita Creek Flood
Road construction or maintenance	Mechanical		Drookan Brook Road (NH End)
Road construction or maintenance	Mechanical	Grant	It is recommended to grant a permit to clear 26.4ha for road widening with Management Conditions addressing Dieback, Fauna, Weeds, Recording, Reporting, Replanting and Maintenance.
Road construction or maintenance	Mechanical		Lennard Road
Road construction or maintenance	Mechanical		Warburton Rd

## 5. References

## 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)

