



## 1. Application details

### 1.1. Permit application details

Permit application No.: 463/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Shire of Menzies

### 1.3. Property details

Property:	Snake Hill - Riverina Road	0.00 SLK to 27.00 SLK
	Leonora - Mount Ida Road	0.00 SLK to 38.5 SLK
	Yarri Road	0.00 SLK to 37.00 SLK
	Kookynie – Yarri Road Part 1	33.00 SLK to 39.00 SLK
	Kookynie – Yarri Road Part 2	48.00 SLK to 94.00 SLK

Local Government Area: Shire Of Leonora & Shire Of Menzies  
Colloquial name: Road Reserves within Shire of Menzies

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
177		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
Beard Vegetation Complex: 125: Bare areas; salt lakes.	The area under application consists of four separate areas comprising a total of 177ha. The purpose of the clearing is for road construction making the clearing long and linear in shape (approximately 8m wide by 30km long).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Existing road structure already in place, the proposed clearing is to widen and maintain existing roads.
Beard Vegetation Complex: 18: Low woodland; mulga (Acacia aneura)			A vegetation condition of 'Very Good' is used in this assessment on the assumption that the vegetation under application would have been subjected to edge effects including weed invasion and trampling (vehicles or pedestrian).
Beard Vegetation Complex: 20: Low woodland; mulga mixed with Allocasuarina cristata and Eucalyptus species			
Beard Vegetation Complex 39: Shrublands; mulga scrub			
Beard Vegetation Complex 251: Low woodland; mulga and Allocasuarina cristata			
Beard Vegetation Complex 389: Succulent steppe with an open low woodland; mulga over saltbush			
Beard Vegetation Complex 441: Succulent steppe with an open low woodland; mulga and sheoak over bluebush			
Beard Vegetation Complex 484: Shrublands; jam thicket			
Beard Vegetation Complex 529: Succulent steppe with an open low woodland; mulga and sheoak over bluebush			

Beard Vegetation Complex  
400: Succulent steppe with  
an open low woodland;  
mulga over bluebush

(Shepherd et al 2001,  
Hopkins et al 2001)

### 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 clearing as proposed consists of 4 sections of road that are to be maintained and widened. Given that these roads already exist, the vegetation under application would more than likely show signs of being affected by edge effects such as weed invasion. In addition, all vegetation associations within the area under application are well represented (all above 89% Pre-European extent remaining) (Shepherd et al 2001, Hopkins et al 2001). The Goongarrie National Park is located approximately 7km from the proposed clearing at Yarri Road. It is therefore unlikely that the clearing as proposed would have a higher biological diversity than the surrounding areas.

**Methodology**    Information provided by the proponent (DoE Trim Ref IN20030)  
Shepherd et al (2001)  
Hopkins et al (2001)  
GIS Databases:  
- Clearing Regulations - Environmentally Sensitive Areas - DOE 08/03/05  
- CALM Managed Lands and Waters - CALM 01/08/04

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

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

The following specially protected fauna species are known to occur in the local area (50km radius) of the proposed clearing:

Leipoa ocellata (Malleefowl);  
Falco peregrinus (Peregrine Falcon);  
Ardeotis australis (Australian Bustard); and  
Charadrius rubricollis (Hooded Plover)  
(CALM 2005).

It is possible that these and other fauna species utilise the habitat within the area under application (CALM 2005). However, as the proposed clearing is along already established transport routes and that surrounding areas have large tracts of remnant vegetation remaining, the likelihood of fauna being greatly affected by the proposed clearing is reduced (CALM 2005).

**Methodology**    CALM (2005) Land Clearing Proposal Advice (DoE Trim Ref IN25228)

#### (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**

No DRF are known to occur within 10 km of the areas under application (CALM 2005). Twenty-six Priority Flora species are known to occur within the local area (50km radius) of the proposed clearing (CALM 2005). CALM (2005) advised that of significance, the Priority 1 species *Eremophila eversa* occurs within 100m of the proposed clearing along Kookynie-Yarri Road and therefore has the potential to occur within this specific area under application.

However, upon further investigation it was determined that this population is fenced and may be located on private property. (DoE TRIM Ref E14872). As CALM have reported that this population is the only surveyed population, the Department advises that the proponent liaise with CALM, prior to the commencement of clearing in that section, so that appropriate management can be determined to ensure the conservation of this species. As the variance to this Principle specifically relates to DRF, the clearing as proposed is not likely to be at variance.

**Methodology**    CALM (2005) Land Clearing Proposal Advice (DoE Trim Ref IN25228)  
GIS Database:  
- Declared Rare and Priority Flora List - CALM 13/08/03  
- Clearing Regulations - Environmentally Sensitive Areas - DOE 08/03/05

**(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 occurrences of Threatened Ecological Communities within the area under application or the surrounding area (50km radius) (CALM 2005).

**Methodology** CALM (2005) Land Clearing Proposal Advice (DoE Trim Ref IN25228)  
GIS databases:  
- Threatened Ecological Communities - CALM 15/7/03  
- Environmentally Sensitive Areas - DOE 22/10/04.

**(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 State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of the present pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000). There are 10 different Beard vegetation associations within the area under application, all of which have over 89% of their pre-European extent remaining (Shepherd et al 2001, Hopkins et al 2001). Although a number of these vegetation associations are not well represented in conservation reserves (CALM 2005), it is considered the proposed clearing will not significantly reduce the current extent of any of these vegetation associations.

**Methodology** CALM (2005) Land Clearing Proposal Advice (DoE Trim Ref IN25228)  
Department of Natural Resources and Environment (2002)  
EPA (2000)  
Shepherd et al (2001)  
Hopkins et al (2001)

**(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**

There are no major watercourses within the areas under application, there are however, a number of minor, non-perennial watercourses within some of the areas under application. However due to their non-perennial nature, it is unlikely that the vegetation under application is watercourse dependent. In addition, the proponent has maintained that salt-lakes in the vicinity of the proposed clearing are to be avoided. It is therefore considered that the clearing as proposed is not likely to be at variance to this Principle.

**Methodology** Information provided by the proponent (DoE Trim Ref IN20030)  
GIS Database:  
- Geodata, Lakes - GA28/06/02  
- Hydrography, linear - DOE 01/02/04

**(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 majority of soil types within the areas under application are loamy and red gravel based. It is considered that there would be potential for wind erosion to occur following the clearing of native vegetation for the removal of gravel for road construction. However, given that the proposed clearing is to be conducted along existing road reserves as well as it being comprised of four separate linear areas, it is considered that the clearing as proposed is not likely to cause appreciable land degradation.

Currently, the existing roads lie below the surrounding environment, which during and after heavy rain periods causes the rain to flow into the roads and creates a river bed effect. The clearing as proposed is to widen these roads and at the same time build up the roads to be higher than the surrounding landscape to prevent this excess stormwater collecting on the running surface of the roads. In addition, side drains and cut-off drains are part of the engineering design of the road maintenance.

**Methodology** GIS Databases:  
- Soils, Statewide - DA 11/99

**(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 Bullock Holes Timber Reserve, Goongarrie National Park and a number of other smaller un-named reserves occur within a 50km radius of the proposed clearing (CALM2005). The nearest occurrence of a CALM

managed land is the Goongarrie National Park which is located approximately 8.7km from the Yarri Road section of clearing (CALM 2005). It is considered that the distance to this conservation area and the long, linear nature of the area under application would not have a significant impact on the conservation values of these areas.

**Methodology** CALM (2005) Land Clearing Proposal Advice (DoE Trim Ref IN25228)  
GIS Database:  
- CALM Managed Lands and Water - CALM 01/08/04

**(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**  
There are a number of salt lakes surrounding the areas under application, including two ANCA wetlands namely Lake Ballard and Lake Marmion. Within the four areas are numerous flow lines with a flow direction towards these salt lakes. Given that the clearing as proposed is along existing transport corridors, additional clearing along these lines is unlikely to significantly effect surface water flow regimes. The proponent has also stated that these salt lakes are to be avoided.

The groundwater salinity within the surrounding area varies from 1,000 - 35,000mg/L. In addition, there are no groundwater protection zones within the surrounding area. Therefore the quality of the groundwater is unlikely to be affected by the proposed clearing.

**Methodology** GIS Database:  
- Hydrography, Linear - DOE 01/02/04  
- ANCA Wetlands - CALM 08/01  
- Groundwater Salinity, Statewide - 22/02/00  
- Public Drinking Water Source Areas (PDWSAs) - DOE 09/08/05

**(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**  
The area is recorded as receiving an annual average of 200-300mm of rain per annum. In addition, the relatively flat topography and the significant distance to the nearest watercourse or wetland (2km), indicates that the clearing as proposed is unlikely to cause, or exacerbate, the incidence or intensity of flooding.

**Methodology** GIS Databases:  
- Hydrography, linear - DOE 01/02/04  
- Topographic contours, Statewide - DOLA 12/09/02.  
- Rainfall, mean annual 30/09/01  
- FMD 100 Year ARI Extent of Flooding and Floodway Limit

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

**Comments**  
All roads including those subject of this application are listed on the State of Construction maps as issues by Main Roads Western Australia as roads being under the total care, control and management of the Shire of Menzies. 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.

There is no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear.

**Methodology**

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction or Removal maintenance	Mechanical	177	Grant	The proposal has been assessed and the clearing as proposed is not likely to be at variance to the clearing Principles.  In granting this permit the Department advises that the P1 species <i>Eremophila eversa</i> is located approximately 100m from a section of the proposed clearing. CALM have indicated that this population is fenced and may be located on private property.. As CALM have reported that this population is the only surveyed population, the Department advises that the proponent liaise with CALM, prior to the commencement of clearing in that section, so that appropriate management can be determined to ensure the conservation of this species.

## 5. References

- CALM (2005) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref IN25228.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales ; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- 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.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

## 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)
SLK	Straight Line Kilometre
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoE)