



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2208/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Shire of August-Margaret River

### 1.3. Property details

Property: ROAD RESERVE ( PREVELLY 6285)  
LOT 4862 ON PLAN 91785 ( PREVELLY 6285)  
ROAD RESERVE ( PREVELLY 6285)  
Local Government Area: Shire Of Augusta-Margaret River  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.095		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 Association 1108 (Boranup): Shrublands; Acacia decipiens (Shepherd et al. 2001; Hopkins et al. 2001).	The proposal involves clearing approximately 0.095 ha for the purpose of road upgrades.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the clearing application area is based on orthomosaic mapping.

Mattiske Vegetation:  
- Gracetown Complex  
(GE): Closed heath of  
Olearia axillaris-Rhagodia  
baccata-Agonis flexuosa  
on seaward slopes in  
hyperhumid to humid  
zones  
(Mattiske Consulting,  
1998).

## 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 at variance to this Principle**  
The proposal is for the clearing of 0.095 ha for the purpose of road upgrades. The vegetation under application appears to be in good condition (Keighery, 1994).  
  
Given the application consists of a small area (0.095 ha) on a road verge the proposed clearing does not hold a high level of biological diversity and is not at variance to this Principle.

**Methodology** Keighery (1994);  
  
GIS Database:  
- Augusta 50cm ORTHOMOSAIC - DLI04

**(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 at variance to this Principle**

The proposal is for the clearing of 0.095 ha for the purpose of road upgrades. The vegetation under application appears to be in good condition (Keighery, 1994).

There are several records of threatened and priority fauna within close proximity of the area proposed for clearing. The local area (10 km radius) is approximately 40% vegetated with over half being DEC managed National Park. Therefore, given the scale (0.095 ha) and the surrounding local vegetation the area under application is not considered significant habitat for fauna indigenous to Western Australia and is not at variance to this Principle.

**Methodology Keighery (1994);**

**GIS Databases:**

- Threatened Fauna - SAC Bio Dataset - 22/8/07;
- CALM Managed Lands and Waters - CALM 1/07/05;
- Augusta 50cm ORTHOMOSAIC - DLI04

**(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**

Several populations of *Caladenia excelsa* (DRF) and numerous other priority flora populations have been recorded within 10 km radius of the proposed clearing.

*Caladenia excelsa* is a tuberous, perennial herb that flowers in September to October and occurs in white, grey or brown sand / sandy loam (DEC, Flora Base, 2007).

The soils of the area under application are described as coastal dunes with calcareous sands on the strongly undulating slopes of the dunes. Associated are small areas of other soils including limestone (Northcote et al. 1960-68).

The local area (10 km radius) is approximately 40% vegetated with the majority being DEC managed National Park.

Given the scale (0.095 ha); the surrounding local vegetation; and the soil types in the local area, it is unlikely the proposed clearing will be necessary for the continued existence of rare flora and is therefore not likely to be at variance to this Principle.

**Methodology DEC, Flora Base (2007);  
Northcote et al. (1960-68);**

**GIS Databases:**

- DEFL - SAC Bio Dataset - 22/8/07;
- CALM Managed Lands and Waters - CALM 1/7/05;
- Augusta 50cm ORTHOMOSAIC - DLI04

**(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 four known occurrences of the community type "Rimstone pools and cave structures formed by microbial activity on marine shorelines (EN)", with the closest approximately 3 km north of the proposed clearing. This community type comprises nodular crustaceans on limestone soils and occurs on the freshwater - seawater interface (TEC Database).

The soils of the area under application are described as coastal dunes with calcareous sands on the strongly undulating slopes of the dunes. Associated are small areas of other soils including limestone (Northcote et al. 1960-68).

Given the area under application does not occur on the freshwater - seawater interface; the scale (0.095 ha); and the surrounding local vegetation, the proposed clearing is not likely to comprise the whole or part of, or be necessary for the maintenance of a TEC and is therefore not likely to be at variance to this Principle.

**Methodology Northcote et al. (1960-68);**

**GIS Databases:/**



**(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 at variance to this Principle					area managed land
	Pre-European (ha)	Current extent (ha)	Remaining	% Conservation status***	% in reserves/DEC-	
IBRA Region:						
- Warren		833,981	663,141	79.5*		82.4
Shire of Augusta-Margaret River		223,265	150,354	67.3*		29.3
Beard Unit:						
- 1108 (Boranup)		9,060	8,133	89.8*		65.7
Mattiske:						
- Gracetown (GE)		48,236	47,019	97.5**		-
* (Shepherd, 2006)						
** (Mattiske Consulting, 1998)						
*** (Department of Natural Resources and Environment, 2002)						

The application is located within the Warren Bioregion in the Shire of Augusta-Margaret River. The extent of native vegetation in these areas is 79.5% and 67.3% (Shepherd, 2006), respectively. There is approximately 40% of native vegetation remaining in the local area (10 km radius), with the majority DEC managed National Park.

The Gracetown complexes represent the area proposed for clearing. The majority (97.5%) of this type still remains (Mattiske Consulting, 1998), and most is protected within the DEC managed Leeuwin Naturaliste National Park.

Given the scale (0.095 ha) and the remaining vegetation in the local area (40% in 10 km radius), the proposed clearing is not considered significant remnant vegetation in an extensively cleared area and is therefore not at variance to this Principle.

Methodology	Shepherd (2006); Mattiske Consulting (1998);
	GIS databases: - Interim Biogeographic Regionalisation of Australia ? EM 18/10/00; - Mattiske Vegetation ? CALM 24/3/98; - Pre-European Vegetation - DA 01/01; - Local Government Authorities - DLI 8/7/04

**(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	<b>Proposal is not at variance to this Principle</b> The mouth of the Margaret River is located approximately 450m north of the proposed clearing and there are no other watercourses or wetlands within the vicinity; therefore the area under application is not in association with a watercourse or wetland and is not at variance to this Principle.
Methodology	GIS Databases: - Hydrography, Linear - DoE 1/2/04; - EPP Areas - DEP 6/95

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

Comments	<b>Proposal is not likely to be at variance to this Principle</b> The soils of the area under application are described as coastal dunes with calcareous sands on the strongly undulating slopes of the dunes. Associated are small areas of other soils including limestone (Northcote et al. 1960-68).
	The groundwater salinity is 1000 to 3000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.
Given the scale (0.095 ha); the level of groundwater salinity; the hydrogeology of the area; and the surrounding native vegetation, the proposed clearing is not likely to cause appreciable land degradation and is therefore not	

likely to be at variance to this Principle.

**Methodology** Northcote et al. (1960-68);

GIS Databases:

- Hydrogeology, Statewide ? DOW;
- Groundwater Salinity, Statewide ? DOW;
- CALM Managed Lands and Waters - CALM 1/07/05

**(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 area proposed for clearing does not lie within or adjacent to areas set aside for conservation.

Given the scale (0.095 ha) and the remaining surrounding vegetation in the local area (40% in 10km radius), the proposed clearing is unlikely to impact on the environmental values of any nearby conservation areas in the local area.

**Methodology** GIS Databases:

- CALM Managed Lands and Waters - CALM 1/07/05;
- Register of National Estate - EA 28/1/03

**(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 soils of the area under application are described as coastal dunes with calcareous sands on the strongly undulating slopes of the dunes. Associated are small areas of other soils including limestone (Northcote et al. 1960-68).

The groundwater salinity is 1000 to 3000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.

The slope of the area under application is 30 to 35 m AHD (Australian Height Datum) over 170m.

Given the scale (0.095 ha) and the low gradient slope, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water and is therefore not likely to be at variance to this Principle.

**Methodology** Northcote et al. (1960-68);

GIS Databases:

- Hydrography, linear - DOE 1/2/04;
- Topographic Contours, Statewide - DOLA 12/09/02;
- Hydrogeology, Statewide ? DOW;
- Groundwater Salinity, Statewide ? DOW

**(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 scale (0.095 ha) and the remaining surrounding vegetation in the local area (40% in 10km radius), the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding and is therefore not likely to be at variance to this clearing principle.

**Methodology** GIS Databases:

- CALM Managed Lands and Waters - CALM 1/07/05;
- Register of National Estate - EA 28/1/03

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

**Comments**

Lot 4862 comprises part of an Class A reserve under management order (Shire of Augusta-Margaret River) for the purpose of recreation.

No public submissions have been received for this proposal.

**Methodology**

**4. Assessor's comments**



Purpose	Method	Applied area (ha)/ trees	Comment
Road construction or maintenance	Mechanical Removal	0.095	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 at variance or not likely to be at variance to all ten clearing Principles.

## 5. References

- DEC, Florabase (2007) <http://florabase.dec.wa.gov.au/browse/profile/13619>. (Retrieved 21 December 2007).
- 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, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- 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.
- Sac Bio Datasets (22/8/07). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia.
- Shepherd, D.P. (2006). 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.
- 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
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)

