



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2560/1  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Shire of Augusta-Margaret River

### 1.3. Property details

Property: ROAD RESERVE ( BURNSIDE 6285)  
 ROAD RESERVE ( BURNSIDE 6285)  
 ROAD RESERVE ( MARGARET RIVER 6285)  
 ROAD RESERVE ( BURNSIDE 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:
	22	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 3: Medium forest; jarrah-marri (Shepherd et al. 2001)	The proposal involves clearing 22 trees (over approximately 0.1019ha) for the purpose of	Degraded: Structure severely disturbed; regeneration to good condition requires	
Mattiske vegetation C1: No current data.	improving the intersection of Carters Road and Blackside Road	intensive management (Keighery 1994)	

## 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 area under applications proposal is to selectively remove 22 trees for the purpose of improving the intersection of Carters Road and Blackside Road; the area is described as being in a degraded (Keighery 1994) condition, consisting of only isolated trees with little to no understorey.

The soil type of the area under application is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel: chief soils of the broad shallow valleys are acid grey earths sometimes containing ironstone gravels and possibly with some and/or soils also. Associated are leached sands in valley deposits and outwash areas; soils containing ironstone gravels on ridges and their slopes and areas of block laterite; and minor areas of various soils such as on river terraces (Northcote et al. 1960-68). The vegetation type can be summarised as Medium Forest; jarrah & marri (Shepherd 2001).

The proposed clearing is 8km south from a cluster of priority ecological communities (PEC), known as the Gracetown community and 4.9km east of a cluster of PECs, known as the Moonah community. The Gracetown occurrences are known as Gracetown 01, Gracetown 01b, Gracetown 02 and Gracetown 03. These PECs are described as low shrublands on acidic grey brown sand with a bleached surface derived from granite gneiss near the west coast of the Leeuwin-Naturaliste Ridge. The Moonah is described as low closed forest to closed forest of *Melaleuca lanceolata* occurring near the coastline of the Leeuwin-Naturaliste Ridge. All occurrences are in a different vegetation type as the proposed clearing, therefore the proposed clearing is unlikely to impact on the PECs.

Leeuwin-Naturaliste national park is 2.7km west of the area under application. This national park is also classed as a Registered National Estate known as Leeuwin - Naturaliste Ridge Area. This area is significant because of its fragile coastline system with caves containing archaeologically important fossils, diverse endemic eucalyptus

species and historic importance due to use by early settlers and pockets of karri forest (DEWHA 2008). The most eastern section of the Registered National Estate comprises the same soil and vegetation type as proposed clearing areas. As the area under application is to remove 22 trees, it is unlikely the clearing will have any impact on the Registered National Estate.

There are six records of priority flora species present within a 10km radius of the area under application: *Acacia cordifolia* (Priority 3), *Acacia subracemosa* (Priority 2), *Bossiaea disticha* (Priority 3), *Caladenia abbreviata* (Priority 2), *Dryandra sessilis* var. *cordata* (Priority 4) and *Gastolobium formosum* (Priority 3). All priority species grow in different vegetation type and soil type as the proposed clearing except *Acacia subracemosa* and *Gastolobium formosum*, which grow in the same soil type as the area under application.

Due to the small size of the proposed clearing and the degraded condition of the vegetation, it is not considered to hold significant biodiversity values and is therefore not at variance to this principle.

**Methodology** DEWHA (2008)  
Keighery (1994)  
Northcote et al. (1968)  
Shepherd (2001)  
GIS Database:  
- Busselton 50cm ORTHOMOSAIC - DLI04  
- CALM Managed Lands and Waters - CALM 01/06/05  
- DEFL, SAC Biodataset (3/07/08)  
- Register of National Estate - Environment Australia, Australian and world heritage division 12/03/02

**(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**  
Within the local area (10km radius from the proposed clearing) there are eight records of threatened fauna and four records of priority species. The threatened species include the *Atrichornis clamosus* (Noisy Scrub-bird), *Dasyurus geoffroii* (Chuditch), *Moggridgea tingle* (Tingle Moggridgea Spider), *Phascogale tapatafa* (Brush-tailed Phascogale), *Potorous platyops* (Broad-faced Potoroo), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Psophodes nigrogularis nigrogularis* (Western Whipbird) and *Setonix brachyurus* (Quokka). The Priority species include *Charadrius rubricollis* (Hooded Plover, priority 4), *Isoodon obesulus* (Quenda, priority 5), *Ixobrychus flavicollis australis* (Black Bittern, priority 2) and *Morelia spilota imbricata* (priority 4).

The Carpet Python, Noisy Scrub-bird and Broad-faced Potoroo are all historical records and due to the changing of the land and vegetation type since the recordings it is unlikely any of the aforementioned fauna species would occur near the area under application.

As the area under application is small and there are more suitable remnants of habitat nearby the application area, the proposed clearing is not considered to be significant habitat for the fauna. Due to the nature of the proposed clearing application areas (remove 22 road side trees, approximately 0.1019 ha) and the surrounding vegetation within a 10km radius (60%), it is unlikely that the clearing will pose a significant threat to habitat for fauna species and the clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology** GIS Database:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Busselton 50cm ORTHOMOSIAC - DLI04  
- Threatened Fauna, SAC Bio Dataset (3/07/08)

**(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**  
Within the local area (10km radius) of the site under application there is one record of rare flora which is *Caladenia excelsa* (The Giant-spider Orchid).  
  
The soil type of the area under application is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel: chief soils of the broad shallow valleys are acid grey earths sometimes containing ironstone gravels and possibly with some and/or soils also. Associated are leached sands in valley deposits and outwash areas; soils containing ironstone gravels on ridges and their slopes and areas of block laterite; and minor areas of various soils such as on river terraces (Northcote et al. 1960-68). The vegetation type can be summarised as Medium Forest; jarrah & marri (Shepherd 2001).

There are 18 records of *Caladenia excelsa* which grow within a 10km radius, the closest record is 1km west from the area under application. *Caladenia excelsa* grow in white, grey or brown sand, sandy loam (Florabase 2008).

The area under application is unlikely to be suitable habitat for the *Caladenia excelsa* due to the laterite soils in which the proposed clearing is in. Therefore the proposed clearing is unlikely to be at variance to this Principle.

**Methodology** Florabse (2008)  
Keighery (1993)  
Northcote et al. (1968)  
Shepherd et al. (2001)  
GIS Database:  
- DEFL, SAC Bio Dataset (1/07/08)  
- Busselton 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 at variance to this Principle**  
There are no known threatened ecological communities (TECs) occurring within a 10km area. Therefore the clearing as proposed is not at variance to this principle.

**Methodology** GIS Database:  
- TEC, SAC Bio Databset (3/07/08)

**(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**

Pre-European IBRA Bioregion	Current Extent	Remaining	
Warren Shire	833981.119	663141.775	79.5
Augusta-Margaret River Beard Veg	223265.759	150354.738	67.3
3	2661403.2	1846588.9	69.4

The area under application is located in the Warren Bioregion and is in the Shire of Augusta-Margaret River. The extent of pre-European vegetation (3) within this Bioregion is 79.5% (Shepherd et al. 2001) and within the Shire of Augusta-Margaret River is 67.3% (Shepherd et al. 2001); Vegetation has not been extensively cleared within this region, and is higher than the desirable 30% threshold level target identified by the EPA (2000).

As the area under application is considered to be in a degraded (Keighery 1998) condition, the vegetation under application is not considered to be representative of this vegetation type (3), therefore is not at variance to this principle.

**Methodology** EPA (2000)  
Shepherd et al. (2001)  
GIS Database:  
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
- Pre European Vegetation, SAC Bio Dataset (3/07/08)  
- Busselton 50cm ORTHOMOSAIC - DLI04

**(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 at variance to this Principle**  
There is one minor water course 267m north of the proposed clearing site and an earth dam 50m north of the area under application. The site is not considered to be in association with any water courses or wetlands and therefore clearing will have no impact on the tributary banks, habitat for aquatic fauna or water quality. The proposal is therefore is not at variance to this principle.

**Methodology** GIS Database:  
- 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 at variance to this Principle**  
The topography of the site is 95m AHD (Australian Height Datum); the land is situated on a plateau. The soil type of the area under application is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel: chief soils of the broad shallow valleys

are acid grey earths sometimes containing ironstone gravels and possibly with some and/or soils also. Associated are leached sands in valley deposits and outwash areas; soils containing ironstone gravels on ridges and their slopes and areas of block laterite; and minor areas of various soils such as on river terraces(Northcote et al. 1960-68).

The mean rainfall is 1100mm per annum and the evapotranspiration rate is 800mm. Given the soil type of area (earthy soils) and the size of the clearing (22 trees), water logging is unlikely to occur.

The groundwater salinity is 1000 to 3000mg/L (Low salinity risk). Given the area to be cleared (22 trees) and the mean rainfall, salinity is not considered a risk.

The area under application is not at variance to this principle.

**Methodology** Northcote et al. (1968)  
GIS Database:  
- Evapotranspiration Isoleths - WRC 29/09/98  
- Groundwater Salinity Statewide DoW 13/07/06  
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05  
- Topographic Contours, Statewide - DOLA 12/09/02

**(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 at variance to this Principle**

The proposed clearing sites are surrounded by the Leeuwin-Naturaliste National Park (2.7km west from proposed clearing), Bramley National Park (900m east) and Keenan State Forest (1.8km east). Leeuwin-Naturaliste National Park stretches for 120 kilometres along the coast between Cape Naturaliste and Cape Leeuwin. The Leeuwin-Naturaliste National Park is also classed as a Registered National Estate known as Leeuwin - Naturaliste Ridge Area. This area is significant because of its fragile coastline system, caves containing archaeologically important fossils, diverse endemic eucalyptus species and historic importance due to use by early settlers and pockets of karri forest (DEWHA 2008). The most eastern section of the registered national estate comprises the same soil and vegetation type as proposed clearing areas.

Given the scale of the proposed clearing (22 roadside trees within approximately 0.1019ha), the area under application is unlikely to have any impact on the registered national estate or the national parks.

**Methodology** GIS Database:  
- CALM Managed Lands and Waters - CALM 01/06/05

**(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 at variance to this Principle**

The area under applications soil type is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel: chief soils of the broad shallow valleys are acid grey earths sometimes containing ironstone gravels and possibly with some and/or soils also. Associated are leached sands in valley deposits and outwash areas; soils containing ironstone gravels on ridges and their slopes and areas of block laterite; and minor areas of various soils such as on river terraces(Northcote et al. 1960-68). The mean annual rainfall is 1100mm per annum and the evapotranspiration rate is 800 mm.

Given that the small scale of the area under application is 22 trees (within approximately 0.1019 ha), that the proposed clearing is not associated with any wetlands, that it is 267m from a watercourse and 50m from an earth dam, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water and therefore is not at variance to this principle.

**Methodology** Northcote et al. (1968)  
GIS Database:  
- Evapotranspiration Areal Actual (30/09/2001)  
- Hydrogeology, Statewide (05/02/02)  
- Groundwater Salinity Statewide - DoW 13/07/06  
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05  
- Topographic Contours, Statewide - DOLA 12/09/02  
- Soils, Statewide DA 11/99

**(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 at variance to this Principle**

The topography of the site is 95m AHD (Australian Height Datum); the land is situated on a plateau. The soil

type of the area under application is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel: chief soils of the broad shallow valleys are acid grey earths sometimes containing ironstone gravels and possibly with some and/or soils also. Associated are leached sands in valley deposits and outwash areas; soils containing ironstone gravels on ridges and their slopes and areas of block laterite; and minor areas of various soils such as on river terraces(Northcote et al. 1960-68).

The mean rainfall is 1100mm per annum and the evapotranspiration rate is 800mm. Given the soil type of area (earthy soils) and the size of the clearing (22 trees), flooding is unlikely to occur. Therefore is not at variance to this principle.

**Methodology** Northcote et al. (1968)  
GIS Database:  
- Evapotranspiration Isopleths - WRC 29/09/98  
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05  
- Topographic Contours, Statewide - DOLA 12/09/02

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

##### **Comments**

There is two Native Title Claims (South West Bojarah and the Harris Family) over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Carters Road and Burnside Road are local roads, therefore these roads are vested with the Shire of Augusta-Margaret River.

**Methodology** GIS Database:  
- Native Title Claims - LA 2/5/07

#### **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 principles (a) and (c) and the remaining principles are not at variance.

#### **5. References**

- Department of the Environment, Water, Heritage and the Arts (2008) Leeuwin - Naturaliste Ridge Area(RNE), Department of the Environment, Water, Heritage and the Arts, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed July 2008
- 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.
- Flora base (2008) Flora Species Profile; *Caladenia excelsa*. Department of Environment and Conservation viewed electronically via <http://florabase.dec.wa.gov.au/browse/profile/13619> accessed on 7/07/08
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western 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., 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)

The report is a 1000m by 1000m map showing the location of the site and the surrounding area. The map is a 1:10000 scale map showing the site and the surrounding area. The map is a 1:10000 scale map showing the site and the surrounding area.

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