



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2153/1

Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Thompson McRobert Edgeloe on behalf of J & P Metal

### 1.3. Property details

Property: LOT 1 ON PLAN 17429 ( PICTON EAST 6229)

Local Government Area: Shire Of Dardanup

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.27		Mechanical Removal	Industrial

## 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: 1000 - Mosaic: Medium forest; jarrah-marri/ Low woodland; banksia / Low forest; tea-tree ( <i>Melaleuca</i> spp.) (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal involves clearing approximately 0.27 hectares within three isolated patches of remnant vegetation.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The description of the clearing application area is based on a flora report undertaken by Bennett Environmental (2007) and a site inspection based on a previous clearing application for the same vegetation (CPS 1683/1), undertaken by DEC officers on 1 May 2007.
Hedde: - Southern River Complex: Open woodland of <i>E. calophylla</i> - <i>E. marginata</i> - Banksia species with fringing woodland of <i>E. rudis</i> - <i>M. raphiophylla</i> along creek beds (Hedde et al. 1980).	The applied area comprises an open low woodland of <i>Melaleuca raphiophylla</i> and Marri ( <i>Corymbia calophylla</i> ) over weed taxa (Bennett Environmental, 2007).		
	The area has been heavily grazed over many years, and more recently modified, through the impacts of heavy machinery (DEC Site Visit, 2007).		

## 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 3 isolated patches of remnant vegetation (0.27 ha) for the purpose of constructing an industrial pad. The vegetation under application is completely degraded (Keighery, 1994).

Given the scale (0.27 ha) and completely degraded condition of the area, the proposed clearing does not hold a high level of biodiversity and is not at variance to this Principle.

**Methodology** Keighery (1994);  
DEC Site Visit (2007);

GIS Databases:  
- Bunbury 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 may be at variance to this Principle**

The proposal is for the clearing of 3 isolated patches of remnant vegetation (0.27 ha) for the purpose of constructing an industrial pad. The vegetation under application is completely degraded (Keighery, 1994).

Within the local area (10km radius from the proposed area for clearing) there are several records of threatened and priority fauna, including *Calyptorhynchus baudinii* (Baudins Black Cockatoo; Threatened), *Pseudocheirus occidentalis* (Western Ringtail Possum; Threatened), *Calyptorhynchus banksii naso* (Naso Cockatoo; P3) and *Macropus irma* (Western Brush Wallaby; P4).

The applied area is mapped within the Maidens / Preston River ecological linkage, as recognised by the EPA (2003); clearing may reduce the values associated with this linkage.

Aerial photography shows that there are areas of remnant native vegetation remaining within the 10km local area that appear to be in similar or better condition than the application area. Therefore, fauna species within the 10km local area are likely to find habitat of equal or better condition within nearby remnants.

Given the small scale (0.27ha), recognise ecological linkage and the completely degraded condition of the application area, this proposal may be at variance to this Principle.

**Methodology** Keighery (1994);  
EPA (2003);

GIS Databases:

- Threatened Fauna, SAC Bio Dataset - 22/8/07;
- Bunbury 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 *Diuris drummondii* (DRF) surround the applied area, with populations located 2.8 km north and 3 km south west.

*Diuris drummondii* is a tuberous, perennial herb that flowers in November to January and occurs in low-lying swamps (DEC, Flora Base, 2007).

A flora survey undertaken by Bennett Environmental (2007) during flowering time for this species (November) did not identify any occurrences of this species; given this and the completely degraded (Keighery, 1994) condition of the applied area, it is not likely to be sustaining flora species of conservation significance, and is therefore not likely to be at variance to this Principle.

**Methodology** DEC, Flora Base (2007);  
Bennett Environmental (2007);  
Keighery (1994);

GIS Databases:

- DEFL, SAC Bio Datasets - 22/8/07;
- Bunbury 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 17 occurrences of 6 Threatened Ecological Communities (TEC's) within the local area (10 km radius); however given the application consists of 0.27 ha within three isolated patches in a grazed area (DEC Site Visit, 2007), the proposal is unlikely 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** DEC Site Visit (2007);

GIS Databases:

- Threatened Ecological Communities - CALM 12/04/05;
- Threatened Plant Communities - DEP 06/95;
- Environmentally Sensitive Areas - DoE 30/05/05

**(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 may be at variance to this Principle**

The State government is committed to the National Objective Targets for Biodiversity Conservation, which includes targets that prevent the clearing of ecological communities with an extent below 30% of that present pre-1750 (Department of National Resources and Environment, 2002; EPA, 2000).

Vegetation within the area under application is identified as a component of Beard Vegetation Association 1000 and Heddle Vegetation Complex Southern River Complex. These vegetation communities are identified as having 28.7% and 19.8% respectively remaining of their pre-European extent (Shepherd, 2006; EPA, 2006).

	Pre-European reserves/DEC-	Current area (ha)	Remaining % extent (ha)	Conservation	% in status***  managed land
Swan Coastal Plain	1,501,211	579,227	38.6*	Depleted	32.5
Shire of Dardanup	52,860	25,677	48.6*	Depleted	34.8
Beard vegetation association 1000	99,836	28,636	28.7*	Vulnerable	7.1
Heddle vegetation complex Southern River Complex	57,979	11,501	19.8**	Depleted	1.5

\* (Shepherd, 2006)

\*\* (EPA, 2006)

\*\*\* (Department of Natural Resources and Environment, 2002)

The proposed clearing of 0.27 ha is zoned Industrial under the Greater Bunbury Region Scheme (WAPC, 2000). The area is also within the Maidens / Preston River ecological linkage, as recognised by the EPA (2003).

Approximately 30% of native vegetation remains within the local area (10 km radius). Given the area is recognised within a regionally significant ecological linkage the vegetation proposed for clearing is considered to be a significant as a remnant within the Greater Bunbury Regional Area, and therefore clearing is at variance to this Principle.

Given the small scale (0.27ha), highly modified and completely degraded condition and recognise ecological linkage the proposed clearing may represents a 'significant' remnant of native vegetation. Therefore, the application may be at variance to this principle.

**Methodology** WAPC (2000);  
Department of Natural Resources and Environment (2002);  
EPA (2000);  
EPA (2003);  
EPA (2006);  
Shepherd (2006);  
Heddle et al. (1980);

GIS databases:

- Heddle Vegetation Complexes - DEP 21/06/95

- 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 at variance to this Principle**

GIS Database analysis indicates that the application area is associated with a dampland and a palusplain.

A major drain runs through the northern section of the application area. The closest record of a wetland is an EPP wetland approximately 800m west, north-west of the application area.

Sections of the application are associated with a dampland and a palusplain. The native vegetation within the application is completely degraded (Keighery, 1994). The vegetation understorey has been highly modified and consists mainly of introduced pastoral grasses and annual weeds. The property appears to have been heavily grazed over many years, and more recently modified, through the impacts of heavy machinery working on the northern half of the property (Site Visit ,DEC, 2007).

Given the above, the proposal is at variance to this principle as the application is associated with a dampland and a palusplain, however, the completely degraded (Keighery, 1994) condition of the application has

significantly modified the value of the native vegetation and therefore the association with these geomorphic wetlands.

**Methodology** DEC Site Visit (2007);

GIS Databases:

- EPP Lakes - DEP 28/07/03;
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04;
- Bunbury 50cm ORTHOMOSAIC - DLI04

**(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 soils of the area under application are described as sandy acidic yellow mottled soils, some of which contain ironstone gravel (Northcote et al. 1960-68).

The groundwater salinity is 500-1000mg/L and the hydrogeology consists of surficial sediments, shallow aquifers.

Given the application consists of 0.27 ha within three isolated patches in a grazed area; the level of groundwater salinity; and the hydrogeology of the area, the proposed clearing is unlikely to cause appreciable land degradation, and is therefore unlikely to be at variance to this Principle.

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

GIS Databases:

- Salinity Risk LM 25m - DOLA 00;
- Hydrogeology, Statewide - DoW;
- Groundwater salinity, Statewide - DoW

**(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 application consists of isolated stands of trees in a grazed area, 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 1/6/04;
- System 6 Conservation Reserves - DEP 6/95;
- Bunbury 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 soils of the area under application are described as sandy acidic yellow mottled soils, some of which contain ironstone gravel (Northcote et al. 1960-68).

The groundwater salinity is 500-1000mg/L and the hydrogeology consists of surficial sediments, shallow aquifers.

The slope of the property under application is 15 metres AHD (Australian Height Datum) over 500 m. The nearest watercourse is a minor tributary of the Brunswick River, approximately 2 km north east of the applied area.

Given the application consists of 0.27 ha within three isolated patches in a grazed area, the proposed clearing is unlikely to cause appreciable land degradation and is not likely to be at variance to this Principle.

**Methodology** GIS Databases:

- Hydrography, linear - DoE 1/2/04;
- Topographic Contours, Statewide - DOLA 12/9/02;
- 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 application consists of 0.27 ha within three isolated patches in a grazed area, 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 Principle.

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

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

**Comments**

The land is zoned General Industry under the Shire of Dardanup TPS and Industrial under the Greater Bunbury Region Scheme (WAPC, 2000). The applicant has provided an extract of the development approval on Lot 1 from the shire, approving the filling of undeveloped portions of the site for future development potential.

There is one Native Title claim over the area under application, as the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

There is no required RIWI Act Licence, Works Approval or EP Act Licence that affects the area under application.

**Methodology** WAPC (2000);

GIS Databases:  
- Town Planning Scheme Zones - MFP 08/98;  
- Native Title Claims - DLI 07/11/05

**4. Assessor's comments**

Purpose	Method	Applied area (ha)/ trees	Comment
Industrial	Mechanical Removal	0.27	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 at variance to Principles (f); - may be at variance to Principle (b) and (e); and - is not or is not likely to be at variance to the remaining clearing Principles.

**5. References**

Bennett Environmental Consulting Pty Ltd (2007). Flora and Vegetation Survey of CPS1683/1, South Western Highway Bunbury, Kalamunda. TRIM Ref: DOC41350.

DEC Site Visit (2007). Site Inspection Report, Department of Environment and Conservation (DEC). Bunbury, Western Australia. TRIM Ref: DOC38922.

DEC, Flora Base (2007). <http://florabase.calm.wa.gov.au/browse/profile/10796>. (Retrieved 12 December 2007).

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.

Environmental Protection Authority (EPA) (2006). Guidance for the Assessment of Environmental Factors - level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

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.

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.

Western Australian Planning Commission (WAPC) (2000). Greater Bunbury Regional Scheme - Scheme Report, August 2000.

## 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)