



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1545/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Rex A & Pamila C Cahill

### 1.3. Property details

Property: Lot 404 on Plan 21178 (No. 1137 Estuary Road BOUVARD 6210)  
Local Government Area: City Of Mandurah  
Colloquial name:

### 1.4. Application

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

## 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
Heddie Complex: Karrakatta Central and South: open forest of <i>E. gomphocephala</i> - <i>E. marginata</i> - <i>E. calophylla</i> and woodland of <i>E. marginata</i> - <i>Banksia</i> species	The proposal includes the clearing of one <i>Eucalyptus marginata</i> tree as it is a safety hazard. The tree has dieback disease and white ants. The understorey is completely absent.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Vegetation clearing description based on a site visit conducted by DEC officers (Swan Region, Mandurah) on Friday 15 September 2006.
Beard Association 6: Medium woodland; tuart and jarrah			

## 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 vegetation under application comprises one *Eucalyptus marginata*, is considered to be completely degraded, and is therefore not considered to comprise a high level of biodiversity.

**Methodology** DEC site visit 15/9/06

### (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 vegetation under application comprises one *E. marginata* and is considered to be completely degraded. There were no hollows observed that have the potential to be used as habitat for species such as Carnaby's Cockatoo. The vegetation under application is therefore not considered likely to comprise significant habitat for fauna.

**Methodology** DEC site visit 15/9/06

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

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

There are no known occurrences of Declared Rare Flora (DRF) within a 5km radius of the applied area. Given that the applied vegetation comprises one tree, the proposal is not considered to be at variance to this Principle.

**Methodology** DEC site visit 15/9/06  
GIS Database: Declared Rare and Priority Flora List - CALM 01/07/05

**(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 at variance to this Principle**

There are no known occurrences of Threatened Ecological Communities (TEC) within a 5km radius of the applied area. Given that the applied vegetation comprises one tree, the proposal is not considered to be at variance to this Principle.

**Methodology** DEC site visit 15/9/06  
GIS Database: Threatened Ecological Communities - CALM 12/4/05

**(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 is not likely to be at variance to this Principle**

The vegetation under application is identified by Heddle et al. (1980) as 'Karrakatta Complex - Central and South', which is described as open forest of *E. gomphocephala* - *E. marginata* - *E. calophylla* and woodland of *E. marginata* - *Banksia* species. There is 29.5% of pre-European vegetation in this Complex remaining, and it is considered to be -vulnerable- for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation under application is also part of Beard vegetation association 6 of which there is 27.6% remaining (Shepherd et al. 2002), and which is also considered to be 'vulnerable' (Department of Natural Resources and Environment 2002).

Although the identified vegetation complexes have less than the recommended minimum 30% remaining, the applied vegetation comprises one *E. marginata* and is considered to be in a completely degraded condition. The proposal is therefore not considered likely to be significant as a remnant in an area that has been extensively cleared.

	Pre-European area (ha)	Current extent (ha)	Remaining %
IBRA Bioregion - Swan Coastal Plain	1,529,235	657,450	43.0*
LGA - City of Mandurah	18,611	8,933	48.0*
Local Area (~10km radius)			
Heddle vegetation complex			
Karrakatta Complex - C & S	19,912	14,729	29.5**
Beard vegetation associations - 6			
	79,001	18,398	23.3%*

\* (Shepherd et al. 2001)

\*\* (EPA, 2003)

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

**Methodology** DEC Site visit 15/9/06  
Department of Natural Resources and Environment (2002)  
EPA (2000)  
Shepherd et al. (2001)  
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 not at variance to this Principle**

The area under application is located approximately 170m to the east of the Peel Inlet Waterbody, which is classified as a Conservation Category Wetland (CCW). Wetlands in this category support a high level of ecological attributes and functions and have the highest priority for management (Water and Rivers Commission 2001).

Although a CCW is located nearby to Lot 404, it is at a distance of 170m, and the applied vegetation includes one *E. marginata*. The proposal is therefore not considered to be at variance to this Principle

**Methodology** DEC site visit 15/9/06  
Water and Rivers Commission (2001)  
GIS Database:  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC

**(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 area under application is identified as Spearwood S4b phase, which is flat to gently undulating sand plain with shallow to moderately deep siliceous yellow-brown and grey-brown sands with minor limestone outcrops. These soils have a low risk of erosion, salinity and eutrophication, but have a high risk of Acid Sulphate Soils (State of Western Australia 2005).

The vegetation under application comprises one *E. marginata* tree and is located on a lot with minimal slope, and therefore the proposal is not considered likely to cause appreciable land degradation.

**Methodology** DEC Site visit 15/9/06  
State of Western Australia (2005)

**(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 Peel Inlet Waterbody is located approximately 170m to the east of the applied area and Yalgorup National Park is located approximately 360m to the southwest. Given that the proposed clearing comprises one *E. marginata*, the proposal is not likely to have an impact on the environmental values of any nearby conservation reserve.

**Methodology** DEC site visit 15/9/06  
GIS Database:  
CALM Managed Lands and Waters - CALM 1/07/05  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC

**(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 applied area is located approximately 170m from the Peel Inlet Waterbody, which is a Conservation Category Wetland (CCW), and is situated at an elevation of 5 metres with minimal slope. The applied area is not located within a Public Drinking Water Source Area (PDWSA). Groundwater salinity in the local area is 500-1000 mg/L and there is a high risk of acid sulphate soils.

Given that the proposed clearing comprises one tree and is located within an area with minimal slope, it is not expected to impact groundwater tables or cause deterioration in the quality of surface or underground water.

**Methodology** DEC site visit 15/9/06  
GIS Databases:  
Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04  
Groundwater Salinity, Statewide - 22/02/00  
Hydrography, linear (hierarchy) - DOW  
Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06

**(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**  
Lot 404 is located approximately 170m from the Peel Inlet Waterbody, at an elevation of 5 metres. The proposed clearing comprises one tree and it is not considered likely that its removal from site would have an impact on peak flood height or duration.

**Methodology** DEC site visit 15/9/06  
GIS Databases:  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC  
Topographic Contours, Statewide - DOLA 12/09/02

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

### Comments

Lot 404 Estuary Road is part of a Native Title Claim however, since it is privately owned the Native Title has been extinguished under the Native Title Act. Therefore the clearing as proposed should not fall under the future acts process of the Native Title Act 1993.

**Methodology** GIS Database: Native Title Claims DLI

## 4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Miscellaneous	Mechanical Removal	1	Grant	The assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit be granted.

## 5. References

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.

EPA (2003) 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.

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.

Site Visit 15/09/06, Department of Environment and Conservation (DEC), Western Australia. TRIM ref DOC6879.

## 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAFWA	Department of Agriculture
DEC	Department of Environment and Conservation
DoE	Department of Environment (now DEC)
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)