



1. Application details

1.1. Permit application details

Permit application No.: 841/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd

1.3. Property details

Property: LOT 2143 ON PLAN 126564 (WAGERUP 6215)
Local Government Area: Shire Of Harvey & Shire Of Waroona
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		Mechanical Removal	Extractive Industry

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 3: Medium forest; jarrah-marri Mattiske vegetation complex Yarragil 1 (Yg1): Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on slopes with mixtures of Eucalyptus patens and E.megacarpa on the valley floors in humid and subhumid zones.	The proposal includes the clearing of 3ha within 16ha of partially cleared and degraded land for extractive industry purposes. Clearing will occur in three stages of 0.9, 0.7 and 2.5ha respectively.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition was obtained during a site visit on Tuesday 24th January 2006.
Heddle Vegetation Complex: Yarragil Complex deviation (minimum deviation swamps) in medium to high rainfall. Open forest.	The vegetation under application is located within and around areas that have been previously cleared for extraction activities. The vegetation on the previously cleared areas consists of very sparse regrowth of <i>Allocasuarina</i> sp., <i>Banksia</i> sp. and non-native species. These areas are surrounded by previously logged open forest of <i>Eucalyptus marginata</i> , and <i>E.calophylla</i> . The understorey within these areas is sparse and consists primarily of <i>Acacia</i> sp.		

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**
Although some of the vegetation under application is in good condition, the majority consists of sparse regrowth within previously cleared areas. Considering this, and the fact that an extensive area of vegetation of good or better quality in the state forest surrounding the property, it is not likely that the vegetation under application represents an area of higher biodiversity.

Methodology Site visit 2/2/06

(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**

Within the local area (10km radius of the application) there are 11 known populations of Specially Protected fauna and 10 populations of Priority fauna, the closest of which is located approximately 1km north. Large trees and woody debris within some of the area under application have the potential to provide some habitat for fauna species. However, given the limited size of these areas and that the property is adjacent to Dwellingup State Forest, the area under application is unlikely to provide significant habitat for native fauna. The proponent has also advised that the cleared vegetation, including woody debris, will be retained and then redistributed upon completion of gravel extraction. This will ensure that any habitat in the form of hollows will remain on site.

Methodology Site visit 2/2/06
GIS Database: Threatened Fauna - CALM 30/9/05

(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 application), there are six known populations of priority flora including *Senecio leucoglossus* (P3), *Grevillea prominens* (P3), and *Schizaea rupestris* (P2). There are also three known populations of Declared Rare Flora (DRF) including *Tetraria australiensis*, *Synaphea stenoloba*, and *Drakaea elastica*, the nearest of which is approximately 7km to the west.

One population of *Schizaea rupestris* is found on the same soil association as the area under application. However, given the level of disturbance within the areas under application the species is not likely to be present.

Methodology Site visit 2/2/06
GIS Databases:
Declared Rare and Priority Flora List - CALM 01/07/05
Heddl Vegetation Complexes - DEP 21/06/95
Soils, Statewide - DA 11/99

(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**

No Threatened Ecological Communities (TEC) are known to exist within the area under application, and none were identified during the site visit, however the database identified nine TECs approximately 7km to the west.

Given that the area under application is disturbed by previous extractive industry activity, is surrounded by a heavily vegetated area, and the distance from the nearest TEC, it is not considered likely that these communities would be adversely affected by the proposal.

Methodology Site visit 2/2/06
GIS Databases:
Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05
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 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 that present pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000).

The vegetation complexes within the area of application are at 87.9% (Mattiske Consulting 1998) and 72.1% (Shepherd et al. 2002) and are considered to be in the category of least concern (Department of Natural Resources and Environment 2002). Considering this high representation, and that the vegetation to be cleared is degraded in nature, the proposal is not likely to be at variance with this principle.

Methodology Department of Natural Resources and Environment 2002
EPA 2000
GIS Databases:
Mattiske Consulting 1998
Shepherd et al. 2002

(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

Stages 2 and 3 of the area under application are <200m from two multiple use wetlands, however the vegetation consists mainly of *Eucalyptus marginata* and *E.calophylla*, which are overstorey species and are not commonly associated with wetlands. The removal of vegetation in the area under application is therefore not likely to alter the hydrological or ecological values of the wetlands, and the proposal is not likely to be at variance with this principle.

Methodology Government of Western Australia (2000)
GIS Database:
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE 15/9/04
Hydrography, linear (hierarchy) - DOE 13/4/05

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

Comments Proposal may be at variance to this Principle

The area under application contains two soil landscape units including the Hester subsystem and the Yarragil subsystem. These soils have a high risk of water erosion (Department of Agriculture 2005), however there is a low salinity and acid sulphate soil risk. The Department of Agriculture (2005) advises that as the proposed land use is extractive industry, nutrient loss and eutrophication is not considered likely. The clearing of vegetation under application will further expose soils to the elements and has the potential to exacerbate land degradation in the form of erosion if not appropriately managed. Therefore the proposal may be at variance to this principle.

Methodology Department of Agriculture (2005)
GIS Databases:
Acid Sulphate Soil risk map, SCP - DOE 4/11/04
Salinity Risk LM 25m - DOLA 00
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

Within the local area there are four CALM-managed reserves including the Dwellingup State Forest, which is directly adjacent to the western and southern boundaries of the property. A timber reserve and a nature reserve are also located approximately 7km to the west of the area under application. A System 6 conservation area is also located approximately 4km to the northeast. Considering the distance to the nearest conservation reserve and the degraded condition of the vegetation under application, it is not likely that the clearing as proposed will impact the ecological values of any nearby or adjacent conservation area.

Methodology GIS Databases:
Bushforever - MFP 07/01
CALM Managed Lands and Waters - CALM 1/07/05
System 6 Conservation Reserves - DEP 06/95

(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 may be at variance to this Principle

The southwest portion of Stage 1 is located within a Priority 2 Public Drinking Water Source Area (PDWSA), however the retention of vegetation in these areas is not a requirement of the Country Areas Water Supply Act. As this portion is located on a higher gradient than the remainder of the property, the proposed clearing is not considered likely to affect ground water quality.

A multiple use wetland is located on the property, within 200m of the northern boundary of each stage. Stage 3 is <200m west from another multiple use wetland. Bancell Brook and Yalup Brook are also located within 2km of the area under application. Although the vegetation under application is limited and degraded in nature, due to relatively high rainfall (1200mm per year) in the region and the gradient sloping towards the wetlands, the removal of the vegetation has the potential to increase surface water run-off. This may cause sedimentation of the adjacent wetlands, therefore the proposal may be at variance to this principle.

Methodology Site visit 2/2/06
Country Areas Water Supply Act
GIS Databases:
Hydrography, linear (hierarchy) - DOE 13/4/05

(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**
 Due to relatively high rainfall (1200mm per year) in the region and the gradient sloping towards the nearby wetlands, the removal of vegetation in the area of application has the potential to result in an increase in surface run-off. However, the vegetation under application is limited and degraded in nature and it is not considered likely that its removal will cause or exacerbate the incidence of flooding.

Methodology Site visit 2/2/06
 GIS Database: Rainfall, Mean Annual - BOM 30/09/01

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

Comments
 Shire of Waroona has advised that the Extractive Industry Licence will be issued upon receipt of the Clearing Permit.

The lot under application 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.

No other statutory approvals are required for this proposal.

Methodology Native Title Claims - DLI 7/11/05

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	3	Grant	<p>The assessable criteria have been addressed and the clearing as proposed may be at variance to Principle (g) and (i).</p> <p>Principle (g): The removal of vegetation has the potential to result in land degradation in the form of erosion due to the soil associations and the steep gradient of the site. Principle (i): The removal of vegetation has the potential to result in sedimentation of the adjacent wetlands due to water erosion of soils.</p> <p>The proponent has committed to storm water control and rehabilitation measures as outlined in the Extractive Industry Licence application. These measures, when included in the conditions of the Extractive Industry Licence, should adequately manage water erosion and therefore any sedimentation of adjacent wetlands, and will assist in rehabilitation of the area under application.</p> <p>Given active management of Principles (g) and (i), the assessing officer recommends that the clearing permit should be granted.</p>

5. References

Country Areas Water Supply Act 1947

DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref IN24704.

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.

Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth 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, BJ (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.

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)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoE)