



1. Application details

1.1. Permit application details

Permit application No.: 1230/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd

1.3. Property details

Property: LOT 359 ON PLAN 89857 (BOYANUP 6237)

Local Government Area: Shire Of Capel

1.4. Application

Clearing Area (ha)	Method of Clearing	For the purpose of:
2.13	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 1181: Medium Woodland, jarrah & Eucalyptus haematoxylon (Whicher Range) (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal includes clearing of 2.13ha of completely degraded vegetation and scattered paddock trees for the purpose of extractive industry.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Observed during site visit: The area to be cleared is a small remaining patch of completely degraded vegetation within an area that has been extensively cleared for and highly disturbed by extractive industry. Several large mature <i>Kingia australis</i> remnants remain, including several grass trees, that will be re-planted in an existing area of remnant vegetation on the property.
Mattiske Vegetation Complex Whicher Scarp (WC): Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on escarpment with some Corymbia haematoxylon, 4 Banksia attenuata and Xylomelum occidentale in the humid zone. (Mattiske Consulting 1998).	The vegetation under application is an open medium forest comprising approximately 0.6ha of completely degraded remnant vegetation and approximately 20 scattered trees and severe weed invasion. <i>Kingia australis</i> and <i>Xanthorrhoea preissii</i> are sparsely scattered throughout.		

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 application of 2.13ha is in completely degraded condition, consisting of native woodland overstorey of predominantly *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah) with scattered *Banksia attenuata* (Candle Banksia) and *Xylomelum occidentale* (Woody Pear) and a sparse understorey. The vegetation structure of the area proposed to be cleared and the surrounding area is severely disrupted due to previous extractive industry activities (DEC 2006).

The vegetation under application is located in an area extensively cleared for agriculture and extractive industry and is comprised of Beard vegetation association 1181 (Hopkins et al. 2001) of which there is 45% (Shepherd et al. 2001) of the pre-European extent remaining.

A few mature habitat trees remain within the area which the applicant is required to place into nearby remnant bushland. There are also many very mature *Kingia australis* (*Kingia*) and *Xanthorrhoea preissii* (Grass Tree) throughout the clearing area, in which translocation has been advised to the applicant.

The high level of disturbance at this site and lack of native species density suggests the original biodiversity has

been significantly compromised, and does not contain a high level of biodiversity. Therefore, it is unlikely this proposal is at variance with this Principle.

Methodology DEC Site Visit (2006);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS Databases:
- Busselton 50cm ORTHOMOSAIC - DLI03

(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 area under application is completely degraded (Keighery 1994) with few mature habitat trees. The canopy cover is less than 5%, with ground cover entirely weed dominated and no distinct native midstorey. The area proposed to be cleared is surrounded by a completely cleared landscape.

The Boyanup State Forest is located on the southern and eastern boundaries of the property and is likely to be preferable habitat for native fauna than the area under application; therefore the area proposed to be cleared is unlikely to comprise significant fauna habitat or significantly impact on local habitat values.

Methodology DEC site visit (2006);
Keighery (1994).

(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**

Two populations of Declared Rare Flora (DRF) have been recorded within the vicinity (10km radius) of the proposed clearing. The closest, *Drakea elastica*, is located 900m southeast of the area under application, and is located within the same vegetation complex (Mattiske (WC) Whicher Scarp; Hedde Kingia Complex). One population of *Eucalyptus x mundijongensis* has also been recorded 4.3km north of the area under application, however is not within the same vegetation complex.

One population of Priority 1 species *Caustis* sp. Boyanup has been recorded 160m southeast of the area under application, and is located within the same vegetation complex. Two populations of *Carex tereticaulis* (P1) have also been recorded approximately 8.3km north of the area under application.

Four populations of Priority 3 species *Acacia semitrullata* have been recorded within the vicinity (10km radius) of the area under application. None has been recorded in the same vegetation complex as the proposed area.

Thirteen Priority 4 species populations have been recorded in the local area (10km radius). The closest, being eight populations that have been recorded interspersed along a diagonal line stretching 6km in length, have been recorded approximately 4km east of the area under application. None has been recorded in the same vegetation complex as the proposed area.

The area under application is Completely Degraded (Keighery 1994) with no distinct native ground cover or midstorey layer. Weeds and leaf litter densely cover the ground, therefore decreasing the chances of any DRF or priority species existing within the site.

Due to the condition of the vegetation under application, it is unlikely the area contains or is necessary for the maintenance of rare flora, and is therefore unlikely to be at variance with this Principle.

Methodology DEC site visit (2006);
Keighery (1994);
GIS databases:
- Declared Rare and Priority Flora List - CALM 13/08/03;
- Mattiske Vegetation - CALM 24/3/98;
- Hedde Vegetation Complexes - DEP 21/06/95;
- Bunbury 1m Orthomosaic - DLA 03

(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**

Two Threatened Ecological Communities (TEC) occur within the local area (10km radius). The nearest is located approximately 7.3km northwest from the notified area and therefore, it is not expected that this proposal will impact upon any of these known occurrences.

There are no records of Threatened Plant Communities (TPC) in the vicinity (10km radius) of the proposed

clearing.

The area under application is Completely Degraded (Keighery 1994) with no distinct native middle storey or ground cover layer.

Due to the condition of the vegetation and distance between the area under application and recorded TECs, it is unlikely the proposed area contains or is necessary for the maintenance of a Threatened Ecological Community.

Therefore, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology DEC site visit (2006);
Keighery (1994);
GIS databases:
- Threatened Ecological Communities - CALM 15/7/03;
- Threatened Plant Communities - DEP 06/95;
- Bunbury 1m Orthomosaic - DLI 03

(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 proposed to be cleared is a component of Beard Vegetation Association 1181 (Hopkins et al. 2001) of which there is 45.3% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of a 'Depleted' status for Biodiversity conservation (Department of Natural Resources and Environment 2002). The vegetation under application is also within the Capel Shire of which there is 35.9% of pre-European extent remaining.

The vegetation at the site is a component of Mattiske Vegetation Complex Whicher Scarp (Havel 2002) of which there is 76.0% of the pre-European extent remaining and therefore of a 'Least Concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to clear is also a component of Heddle Cartis Complex (Heddle et al. 1980) of which there is unknown percentage of the pre-European extent remaining.

Due to the Completely Degraded (Keighery 1994) condition of the vegetation and the high percentage of vegetation remaining within representative vegetation types, the proposed clearing is not considered to be a significant remnant within an extensively cleared area.

Methodology DEC site visit (2006);
Keighery (1994);
Department of Natural Resources and Environment (2002);
Havel (2002);
Heddle et al. (1980);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS databases:
- Mattiske Vegetation - CALM 24/3/98;
- Heddle Vegetation Complexes - DEP 21/06/95;
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00;
- Local Government Authorities - DLI 8/07/04;
- Pre European Vegetation - DA 01/01;
- Bunbury 1m Orthomosaic - DLI 03

(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

No EPP areas, RAMSAR wetlands or ANCA wetlands are located within the vicinity (10km radius) of the proposed clearing.

Joshua Creek is located 2km south of, and the Preston River is located 2.8km west of the area proposed to be cleared.

A large multiple use wetland is located 1.3km west of, and a conservation category wetland is located 2.9km west of the area under application.

Many small EPP lakes are located within the vicinity (10km radius) of the proposed clearing. The closest is located 3.5km west of the area under application. None are located within the same vegetation complex as the

area under application.

Due to the distance and the scale of the proposed clearing, the area proposed to be cleared is not considered to be growing in or in association with a watercourse or wetland. Therefore, it is unlikely the proposal is at variance with this Principle.

Methodology DEC Site Visit (2006);
GIS databases:
- ANCA, Wetlands - CALM 08/01;
- EPP Areas - DEP 06/95;
- EPP Lakes - DEP 28/07/03;
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04;
- Hydrography Linear - DoE 1/2/04;
- RAMSAR, Wetlands - CALM 21/10/02;
- Bunbury 1m Orthomosaic - DLI 03

(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 proposed to be cleared has a low risk of Acid Sulphate Soils occurring, a low salinity risk and a groundwater salinity level of 1000-3000 mg/L.

The proposed clearing is unlikely to cause appreciable land degradation due to its size.

Methodology GIS databases:
- Acid Sulphate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00
- Groundwater Salinity, Statewide - 22/02/00

(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 Dardanup Conservation Park (System 6 Conservation Reserve) is located 3.5km north east of the area proposed to be cleared.

The Boyanup State Forest borders the property under application on the southern and eastern boundaries.

Due to the relatively cleared nature of the property under application and the degraded vegetation condition, it is not expected that this proposal will have significant direct long-term impacts on the nearby conservation reserve, therefore this proposal is not likely to be at variance to this Principle.

Methodology GIS databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Register of National Estate - EA 28/01/03;
- Bunbury 1m Orthomosaic - DLI 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 area proposed to be cleared is within the Leschenault Estuary-Preston River Hydrographic Catchment Area and the Bunbury RIWI Groundwater Area.

A groundwater licence (GWL) exists on the property for domestic use up to 1500kL/a. The proposed clearing and end use will not impact on this GWL.

Due to the scale of the proposed clearing, it is unlikely that the proposal is at variance to this Principle.

Methodology GIS databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03
- RIWI Act, Groundwater Areas - WRC 13/06/00

(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**
Flooding impacts are unlikely to occur as a result of the proposed clearing due to its size and location. Lot 359

is located approximately 3.5km from the Preston River, at an elevation between 20 - 25 metres. It is considered that the removal of vegetation from this site would have no impact on peak flood height or duration.

Therefore, it is not likely the proposal is at variance to this Principle.

Methodology GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The area proposed to be cleared is zoned rural under the Town Planning Scheme.

A groundwater licence (GWL) exists on the property for domestic use up to 1500kL/a. The proposed clearing and end use will not impact on this GWL.

An Extractive Industries Licence (EIL) has been approved by the Shire of Capel on the property, which incorporates the area under application.

One public submission focuses on the requirement for a flora survey, given the location (Whicher Scarp). This is addressed in Principle (c), where it was determined highly unlikely any significant flora exists within the area to be cleared due to the very dense weed cover and leaf litter.

Methodology DEC site visit (2006);
GIS databases:
- Town Planning Scheme Zones - MFP 8/98
- WRL, Properties, Ground Water Licences - WRC (Current)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	2.13	Assessment of the application area revealed the proposal is not likely to be at variance to all ten clearing principles. Given the purpose for clearing is Extractive Industry, revegetation and fencing conditions are recommended.

5. References

- DEC site visit (2006) TRIM ref DOC7994.
- 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.
- Havel, J.J. and Mattis Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- 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.
- 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.
- Mattis 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
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)