



1. Application details

1.1. Permit application details

Permit application No.: 2164/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Danello Pty Ltd

1.3. Property details

Property: LOT 239 ON PLAN 218765 (House No. 5 MINCHIN MARGARET RIVER 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:
0.18		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
The area under application is located within Beard Vegetation Association Unit 3 (Medium forest; jarrah-marri) and within the Mattiske Cowaramup (C1) Vegetation Complex (Open to tall open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis on lateritic uplands in the hyperhumid zone).	The proposed clearing comprises an area of 0.18 hectares within the Shire of Augusta-Margaret River for the purpose of 'industrial use.'	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Aerial photography suggests the vegetation is in very good condition. (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 proposed clearing comprises an area of 0.18 hectares within the Shire of Augusta-Margaret River for the purpose of 'industrial use.'

Aerial photography suggests the vegetation is in very good condition (Keighery, 1994).

Considering the condition of vegetation, the unlikely impacts on fauna, TECs and flora and the small scale of the proposed clearing (0.18ha) it is not likely to comprise a high level of biological diversity.

Methodology Keighery, 1994
 GIS Database
 -SAC Bio Datasets
 -CALM Managed Lands and Waters - CALM 01/07/05

(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**
 There are thirteen records of conservation significant fauna within a 5km radius.

The following conservation significant fauna records are within the same Beard vegetation association and Mattiske vegetation complex as the proposed clearing area:

- 1) *Dasyurus geoffroii* (Chuditch) - a Declared Threatened (Vulnerable) marsupial recorded at approximately 1.6km N of the proposed clearing area
- 2) *Isoodon obesulus fusciventer* (Quenda) - a Priority 5 marsupial recorded at 1.6km N of the proposed clearing area
- 3) *Kwaniphila pachomai* - a Priority 1 insect recorded at approximately 3.9km SE of the proposed clearing area.

In regards to the records for Quenda and Chuditch, aerial photography suggests that there are no evident ecological linkages between them and the application site as the local area has been modified by urban development.

Similarly, aerial photography indicates that there are no significant ecological corridors between the recorded location of *K. pachomai* and the proposed clearing site as the area has been altered by prior clearing activities.

In addition to that, the application site is adjacent to a larger vegetated area that appears to be in good condition and may offer better habitat requirements for indigenous fauna.

Given the small scale of the proposed clearing (0.18ha) in light of the above information, it is unlikely to comprise the whole or a part of or be necessary for the maintenance of a significant habitat for fauna indigenous to Western Australia.

Methodology GIS Database
-SAC Bio Datasets
-Pre- European Vegetation - DA 01/01
-Mattiske Vegetation - CALM 24/3/98

(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**
Three records of conservation significant flora were identified within a 5km radius of the proposed clearing area.

One of the records was for the Declared Rare Flora (DRF) species *Caladenia excelsa* situated at approximately 3.7km from the application site. *C. excelsa* was found in a Mattiske vegetation complex, Beard vegetation association and soil type different from the proposed clearing area.

The two remaining records are for the 'Priority 3' species *Gastrolobium formosum* situated at approximately 2.4km from the application site. Whilst one record of *G. formosum* was found in the same Beard vegetation association as the proposed clearing site, they are situated in different Mattiske complexes and soil types.

Considering that *C. excelsa* falls within a Mattiske vegetation complex, Beard vegetation association, and soil type different from the proposed clearing area and that there are no evident ecological linkages between them, native vegetation within the application site is not likely to include, or be necessary for the continued existence of this rare species.

Methodology GIS Database
-SAC Bio Datasets
-Pre- European Vegetation - DA 01/01
- Mattiske Vegetation - CALM 24/3/98
- Soil 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**
The only record of a threatened ecological community (TEC) identified within a 10km radius of the proposed clearing area is the 'Aquatic Root Mat Community Number 2 of Caves of the Leeuwin Naturaliste Ridge' situated at approximately 10km from the application site.

Since this TEC is confined to the cave streams and pools of the Leewin Naturaliste Ridge, native vegetation within the proposed clearing area is not likely to comprise the whole or a part of this threatened ecological community, or be necessary for its maintenance.

Methodology GIS Database
-SAC Bio Datasets

(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 proposed clearing area is located in the Shire of Augusta-Margaret River and within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) region.

The Warren IBRA region has a 79.5% of the Pre-European vegetation extent remaining with a conservation status classified as 'Least concern.'

The vegetation proposed to be cleared is a component of Beard vegetation association 3 (Medium forest; jarrah-marri) of which 70 per cent of its Pre-European extent remains with a conservation status classified as 'Least concern.'

Whilst the area under application is within the Mattiske Cowaramup (C1) Complex of which 39.5 per cent of its Pre-European extent remains with a conservation status of 'Depleted,' native vegetation within the Shire of Augusta-Margaret River is classified as 'Least concern' with 71.7 per cent remaining.

The National Objectives and Targets for Biodiversity Conservation 2001-2005 specified as a goal for all jurisdictions to have 'clearing controls in place that prevent clearance of ecological communities with an extent below 30 per cent of that present pre- 1750' (Department of Environment and Heritage, 2001. National Objective and Targets for Biodiversity Conservation 2001-2005, Canberra).

In adhering to this national objective, the EPA acknowledges that 'the threshold level below which species loss appears to accelerate exponentially at an ecosystem level is regarded as being at a level of 30% of the pre-clearing extent of the vegetation type' (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).

Accordingly, the Pre-European extent remaining in a local context (71.1 per cent within the Shire of Augusta-Margaret River) suggests that native vegetation within the application site is unlikely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

Methodology Shepherd et al., 2001
CAR Reserve Analysis 2006
Mattiske (1998) RFA

GIS Database:
-Interim Biogeographic Regionalisation of Australia - EA 18/10/00
-Pre- European Vegetation - DA 01/01
- Mattiske Vegetation - CALM 24/3/98

(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

There are two minor non perennial watercourses on each side of the application site. These watercourses lie at approximately 387m NE, 600m SE, 619m W, and 649m NW of the proposed clearing area.

Additionally, the Margaret River runs at approximately 2.4km N of the application site.

Aerial photography suggests that native vegetation in the proposed clearing area is not growing in, or in association with, an environment associated with these watercourses.

Methodology GIS Database:
-Hydrography, linear DOE 01/2/04
-Hydrography Linear (hierarchy) DOW

(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 proposed clearing area is characterised by a low relief elevation of 95m AHD [Australian Height Data] and its soil type is described as extensive block laterite and ironstone gravels.

The mean annual rainfall in the area is 1200mm.

Groundwater salinity in the application site has been mapped for 1,000-3,000mg/L Total Dissolved Solids [TDS].

The application site is situated in an area that has been identified as 'Class 3' with no known Acid Sulphate Soil (ASS) risk.

Given the small scale of the proposed clearing (0.18 ha) it is not likely to cause appreciable land degradation in the surrounding areas.

Methodology GIS Database:
-Soil Statewide DA 11/99
-Acid Sulphate Soil Risk Map
-Groundwater Salinity Statewide DOW
-Rainfall, Mean Annual - BOM 30/09/01
-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 likely to be at variance to this Principle**
The Bramley National Park is located at approximately 2.4km NE of the application site. Although not uniformly, defined areas of the Bramley National Park are in the same Beard vegetation association (NE of the application site), Mattiske vegetation complex, and soil type (W of the application site) as the proposed clearing area.

The Keenan State Forest is situated at approximately 2.9km NE of the proposed clearing area. Whilst its Mattiske vegetation complex and soil type differ from the area under clearing application, the Keenan State Forest is within the same Beard vegetation association as the proposed site.

Given the small scale of the proposed clearing (0.18 ha) and that there are no evident ecological linkages between these conservation areas and the application site, the clearing of native vegetation in the application site is unlikely to have an impact on their environmental values.

Methodology GIS Database
-SAC Bio Datasets
-CALM Managed Lands and Waters - CALM 01/07/05
- Mattiske Vegetation - CALM 24/3/98

(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 application site is located within the Margaret River hydrographic catchment.

The Margaret River runs at approximately 2.4km N of the application site.

There are two minor non perennial watercourses on each side of the application site. These watercourses lie at approximately 387m NE, 600m SE, 619m W, and 649m NW of the proposed clearing area.

Aerial photography suggests the proposed clearing area is not associated with any of these watercourses.

The application site is situated in an area that has been identified as 'Class 3' with no known Acid Sulphate Soil (ASS) risk.

Groundwater salinity in the application site has been mapped for 1,000-3,000mg/L Total Dissolved Solids [TDS].

Considering the small scale of the proposed clearing (0.18 ha) in light of the above information, it is not likely to cause deterioration in the quality of surface or underground water.

Methodology GIS Database:
-Rivers DoW
-Hydrography Linear DoE 01/02/04
-Hydrographic Catchment - DoW
-Topographic contours, Statewide DOLA 12/09/02
-Rainfall, Mean Annual - BOM 30/09/01
-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**
The proposed clearing area is characterised by a low relief elevation of 95m AHD [Australian Height Data] and

its soil type is described as extensive block laterite and ironstone gravels.

The mean annual rainfall in the area is 1200mm.

Considering the small scale of the proposed clearing (0.18ha) in light of the above information, it is not likely to cause, or exacerbate, the incidence or intensity of flooding in the local area.

Methodology GIS Database:
-Topographic Contours, Statewide - DOLA 12/09/02
-Rainfall, Mean Annual - BOM 30/09/01
-Soil Statewide DA 11/99

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

Comments

The property under application is zoned industry.

Direct Interest Submission received from Shire of Augusta Margaret River:

- it should be noted that the vegetation is in good condition. (Condition of vegetation has been considered in clearing assessment)
- in particular a screen of vegetation along the front boundary of the site adjacent to Minchin way should be considered for amenity purposes. (amenity purposes can not be assessed within the clearing principles).

Methodology GIS Database:
- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Industrial	Mechanical Removal	0.18	The assessable criteria have been addressed and the proposal was found not likely to be at variance to all principles.

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.
- Keighery, B.J. (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. (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.

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)

