



1. Application details

1.1. Permit application details

Permit application No.: 1452/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd on behalf of C & S Catalano Pty Ltd

1.3. Property details

Property: LOT 520 ON DIAGRAM 98279 (STRATHAM 6237)

Local Government Area: Shire Of Capel

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.9		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 6: Medium Woodland; tuart & jarrah (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal includes clearing the remaining vegetation of a larger area under application that has been unlawfully cleared.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Observed during site visit: Approximately 85% of the area under application has been removed. A report by the EPA on an adjoining property describes the vegetation as 'supporting a low-represented vegetation complex, a landscape feature and an ecological linkage which are regionally significant ... this area is considered to contain a high level of biodiversity'.
Hedde Vegetation Complex: Karrakatta Complex Central and South; predominantly open forest of E. gomphocephala - E. marginata - E. calophylla and woodland of E. marginata - Banksia species (Hedde et al. 1980).	The remaining vegetation under application comprises of a degraded strip of scattered Melaleuca spp., marri, peppermints and other smaller shrubs, with a notable absence of understorey.		

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 remaining area under application on Lot 520 is in degraded condition (Keighery 1994) consisting of scattered Melaleuca spp. and isolated marri trees. The vegetation structure is isolated from other remnant vegetation by access roads to the existing sand pit and is severely disrupted due to the surrounding extractive industry (Additional DEC Site Visit 2007).

The vegetation under application forms part of the greater Dalyellup/Gelorup/Crooked Brook ecological linkage identified in the Environmental Protection Authority's report on the Greater Bunbury Regional Scheme (EPA 2003), which incorporates a nearby System 6 Conservation Reserve.

However, due to the small scale, isolated structure and surrounding landuses, it is unlikely that the area under application comprises a higher level of biological diversity than surrounding conservation reserves; therefore the proposal is unlikely to be at variance to this Principle.

Methodology

Additional DEC Site Visit (2007);
EPA (2003);
Keighery (1994);
GIS Databases:

- Register of National Estate - EA 28/01/03;
- Bunbury 1m Orthomosaic - DLI 03

(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

In limited surveys undertaken by the EPA (EPA 2003) for an adjoining property, and confirmed by the Biodiversity Coordination Section, DEC (2006), the local area (5km radius) is known to support a population of at least one rare species of fauna, the Western Ringtail Possum (*Pseudocheirus occidentalis*), the Western Brush Wallaby *Macropus irma* (P4) and is likely to also support the Chuditch *Dasyurus geoffroi* (Vulnerable), Brush-tailed Phascogale *Phascogale tapoatafa* (P3), Western False Pipistrelle *Falsistrellus mackenziei* (P4) and the Quenda *Isodon obesulus* (P5). In addition, at least 28 bird species are resident or utilise the site, including 9 bird species of regional significance, as they have declined on the Swan Coastal Plain (EPA 2003). The site may also support populations of Carnaby's Black Cockatoo *Calyptorhynchus latirostris* and Baudin's Black Cockatoo *Calyptorhynchus baudinii* (EPA 2003), both listed under the EPBC Act.

Due to the small scale and isolated nature of the vegetation under application, it is considered unlikely to be necessary for the maintenance of a significant habitat for fauna indigenous to Western Australia.

Methodology Biodiversity Coordination Section, DEC (2006);
EPA (2003);
GIS Databases:
- Bunbury 1m Orthomosaic - DLI 03

(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

The remaining vegetation under application comprises an isolated strip of *Melaleuca* spp., in degraded condition (Additional DEC Site Visit 2007).

Biodiversity Coordination Section, DEC (2007) advises two known Declared Rare Flora and several priority flora populations have been identified within the local area (10km radius); however none have been recorded within the area under application.

A botanical survey of Lot 520 (Bennett Environmental Consulting 2006) recorded a total of 53 vascular plant families, 120 genera and 153 taxa from the site. Of those species identified, only one Priority flora species was recorded on the property (*Eucalyptus rudis* subsp. *cratyantha* (P4), and was identified within a different vegetation complex to the area under application.

The Environmental Protection Authority (EPA) assessed a neighbouring property to the area under application in 2005, and although the findings indicated the presence of the declared rare *Caladenia huegelli* (Grand Spider Orchid) occurring on the property, rare flora was not mentioned as a significant issue in the report and recommendations (EPA 2005). This is also confirmed by the absence of this species in the flora survey undertaken in late September 2006 (Bennett Environmental Consulting 2006).

Given the above and considering the small scale and isolated structure of the notified area, it is therefore unlikely the area under application is necessary for the continued existence of rare flora.

Methodology Additional DEC Site Visit (2007);
Biodiversity Coordination Section, DEC (2006);
Bennett Environmental Consulting (2006);
EPA (2005);
GIS Databases:
- Declared Rare and Priority Flora list - CALM 01/07/05
- Bunbury 1m Orthomosaic - DLI 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 at variance to this Principle

The vegetation under application is inferred to be Floristic Community Type 21a (Bennett Environmental Consulting 2006), which is not listed as a Threatened Ecological Community (TEC).

Corporate data indicates the closest known TEC occurrence is approximately 8.2km north of the notified area and occurs within the same soil and vegetation type as the area under application, however no TECs were recorded from the site during the botanical survey in 2006 (Bennett Environmental Consulting 2006).

Therefore the proposal is not at variance to this Principle.

Methodology Bennett Environmental Consulting (2006);
GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95

(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 at variance to this Principle

The vegetation under application is a component of the Beard Vegetation Association 6 (Hopkins et al. 2001) of which there is 23.3% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of 'Vulnerable' 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 located within the South-west Botanical Province in the Drummond Subdistrict and the Spearwood System (Bennett Environmental Consulting 2006). The vegetation under application is a component of Heddle Vegetation Complex Karrakatta - Central and South (Heddle et al. 1980) of which there is 52% of the pre-European extent remaining in the Greater Bunbury Region (GBR) and 30% remaining in the southern Swan Coastal Plain (SCP), as recorded by the EPA (2002).

Given the State Government is committed to the National Objectives Targets for Biodiversity Conservation, which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment, 2002), the proposed clearing is at variance to this Principle.

Methodology Bennett Environmental Consulting (2006);
EPA (2002);
Shepherd et al. (2001);
Hopkins et al. (2001);
Department of Natural Resources and Environment (2002);
GIS Databases:
- Pre-European Vegetation - DA 01/01
- Heddle Vegetation complexes - DEP 21/06/98
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 may be at variance to this Principle

The proposed clearing will occur 300m to the east of a conservation category wetland and at a 20m elevation. As there is an old Pine Forest and a largely cleared area between the proposed clearing area and the wetland, it is unlikely that the vegetation proposed to be cleared is providing a buffer to the wetland.

The proposed clearing is located approx 500m to the east and 35 metres uphill of a Conservation category wetland, which is described as being a Sumpland. The Sumpland adjoins another wetland area classified as Multiple Use. This multiple use wetland lies between the conservation category wetland and the proposed clearing. Adjoining the multiple use wetland is an older pine forest that covers approximately 3.6ha and lies between the wetlands and the proposed clearing.

The Water and Rivers Commission Wetlands Position Statement (WRC 2001) recommends a buffer of 2000 metres for protection of groundwater quality for Conservation category wetlands. Due to this the proposed clearing maybe at variance to this principle.

Methodology Water and Rivers Commission (2001);
Site Visit Report
GIS Databases:
- Topographic Contours, Statewide - DOLA 12/09/02
- Preston-Gelorup-Bunbury Townsite 20cm Orthomosaic

(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 consists of a soil landscape classified as steep dune slopes with siliceous sands. There is no known risk of acid sulphate soils or salinity within the area under application.

Given the extractive industry on the property there is the potential for wind erosion to cause problems, however the applicant is required to submit a rehabilitation plan, including recovering the surface to reduce the risk of

wind erosion occurring.

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

- Methodology** GIS databases:
- Acid Sulfate 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

Two Conservation Reserves are located within the local area (10km radius):

- the System 6 area C71 (Dalyellup Reserves) located less than 800m north of the proposed clearing; and
- the DEC-managed Tuart Forest National Park/ Ludlow-Wonnerup Area (Register of National Estate) located approximately 5km South-west.

The area under application forms part of the larger Dalyellup/Gelorup/Crooked Brook ecological linkage identified in the EPA's report on the Greater Bunbury Regional Scheme (EPA 2003), which incorporates the abovementioned C71 reserve.

Due to the percentage of surrounding remnant vegetation, regional Biodiversity advice confirms that adequate safeguards and hygiene measures must be adopted by the proponent to avoid the introduction or spread of Phytophthora and weeds. Conditions have been imposed on the permit to address this risk.

Considering the small scale and isolated nature of the area under application, the proposal is unlikely to impact on the conservation values of nearby reserves.

- Methodology** EPA (2003);
GIS Databases:
- Bunbury 1m Orthomosaic - DLI 03;
 - CALM Managed lands and waters - CALM 01/07/05;
 - Register of National Estate - EA 28/01/03;
 - 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 seasonally inundated sumplands down slope from the proposed clearing are listed as Environmentally Significant Areas under the Environmental Protection (Environmentally Sensitive Areas) Notice 2006.

The proposed clearing lies within the Five Mile Brook Catchment. The salinity levels in this area are listed as being between 1000-3000 TDS, with an average annual rainfall of 850mm to 900mm and the soils do not have a high salt store. This indicates that salinity in local groundwater areas is not considered to be a high risk.

The proposed clearing is on soils that are at risk to nutrient loss, however eutrophication is unlikely due to the clearing activities.

- Methodology** Water and Rivers Commission (2001);
GIS Databases:
- Topographic Contours, Statewide - DOLA 12/09/02
 - Geomorphic Wetlands (Classification), Swan Coast Plain
 - Clearing Regulations - Environmentally Sensitive Areas - DOE 30/05/05

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing due to the small scale, position on the landscape and the surrounding land uses.

Therefore, the proposal is not likely to be 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 property is zoned Rural under the Shire of Capel TPS.

Planning consent was issued on 28 February 2006 by the Shire of Capel for extractive industry on Lot 520, covering the area under application. This consent lapses on 13 June 2008.

The application lies within a RIWI Act groundwater approved Plan area.

No public submissions have been made to date for this proposal.

Methodology

GIS Databases:

- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	1.9	Assessable criteria have been addressed and the proposal is at variance to Principle (e) for significant vegetation; and may be at variance to Principle (l) for underground water. The assessing officer therefore recommends that the permit be granted, subject to revegetation and reporting conditions, and dieback conditions.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- Bennett Environmental Consulting Pty Ltd (2006). Flora and Vegetation of LOT 520 Stratham, Western Australia. TRIM Ref: DOC11372
- Biodiversity Coordination Section, DEC (2007). Department of Environment and Conservation, Western Australia. TRIM ref DOC 11142
- DEC (2006) Biodiversity advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received DATE. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia.
- 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 (2003). Southern Extension of Sandpit, Lot 2 Calinup Road, Gelorup, Shire of Capel - report and recommendations of the Environmental Protection Authority, Perth. TRIM Ref:
- 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.
- 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.
- Water and Rivers Commission (2001). Water and Rivers Commission Position Statement: Wetlands. Water and Rivers Commission, Perth.

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
WRC

Threatened Ecological Community
Water and Rivers Commission (now DEC)