Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1829/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd

1.3. Property details

Property: LOT 2413 ON PLAN 131325 (House No. 3115 GOODWOOD PAYNEDALE 6239)

Local Government Area: Shire Of Donnybrook-Balingup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4.7		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 1185: Medium woodland; jarrah, marri & blackbutt (Hopkins et al. 2001, Shepherd et al. 2001). Mattiske Vegetation Complex: Bidella (BD) - Low woodland of Melaleuca preissiana-Banksia littoralis-Hakea lasianthoides on valley floors and open forest to woodland of Eucalytpus marginata subsp. marginata-Corymbia calophylla-Eucalytpus patens on slopes in perhumid and humid zones; Kingia (KI) - Open forest of Eucalytpus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Banksia grandis-Xylomelum occidentale on lateritic uplands in perhumid and humid zones (Mattiske Consulting 1998). Heddle Vegetation Complexes: Jarrahwood Complex - open forest of jarrah-marri on the slopes; Kingia Complex - Open forest of jarrah-marri (Heddle et al. 1980).	The proposal includes clearing of 4.7 hectares of regrowth that was cleared approximately 15 years ago (DEC Site Visit 2006). The vegetation under application is a medium native forest of Corymbia calophylla, with interspersed Macrozamia riedlei, Xylomelum occidentale and Acacia pulchella (DEC Site Visit, 2006. A previous clearing proposal on this property initially incorporated the entire vegetated area, with the proposal returning the cleared area to pasture; this resulted in the exclusion of the area under this application (see CPS877/1). Further negotiations between DEC and the proponent resulted in the agreement to return the cleared area to native vegetation, post-extraction; however the initially excluded area was omitted from the approved area. This area is now being applied for.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the clearing application area is based on a site inspection conducted by DEC officers on 2 February 2006.

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 proposal is for the clearing of 4.7 hectares for the purpose of gravel extraction.

The area under application is considered to be in degraded to good condition (Keighery, 1994), and has been severely disrupted due to a history of stock grazing and previous clearing activities (DEC Site Visit, 2006).

The vegetation under application is located in an area cleared for agriculture and is comprised of Beard vegetation association 1185 (Hopkins et al. 2001) of which there is over 90% (Shepherd et al. 2001) of the pre-European extent remaining. The local area is approximately 70% vegetated with approximately 90% of that vegetation in DEC managed state forest.

Based on the unlikelihood of the area representing high biological diversity in comparison to other, larger areas of remnant vegetation within the local area (Biodiversity Coordination Section, DEC, 2006); the proposal is unlikely to be at variance to this Principle.

Methodology

Keighery (1994);
DEC Site Visit (2006);
Biodiversity Coordination Section, DEC (2006);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- Donnybrook 50cm ORTHOMOSAIC - Landgate 04

(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 unlikely to provide habitat for any threatened fauna species, nor significant habitat for fauna within the local area (10km radius) due to its degraded condition, species composition, age of the vegetation and the lack of nearby fresh water streams.

Given the above factors, the area proposed to be cleared is unlikely to comprise significant fauna habitat or significantly impact on local habitat values. Conditions to revegetate the area cleared on completion of extraction will be imposed.

Methodology

DEC Site Visit (2006);
Biodiversity Coordination Section, DEC (2006)

(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

One population of Declared Rare Flora (DRF) Daviesia elongata subsp. elongata has been recorded within 9.2km of the proposed clearing. The area proposed for clearing is not the same vegetation complex.

Three populations of Priority 1 species have been recorded within the local area (10km radius) of the proposed clearing. The closest, Boronia humifusa, is located 5.3km north west of the area proposed to be cleared and occurs within the same vegetation type as the proposed clearing (Mattiske Kingia (KI)).

Five populations of Priority 3 species have been recorded within the local area of the proposed clearing. The closest, Acacia semitrullata, is located 160m east of the area proposed to be cleared and occurs in the same vegetation type as the proposed clearing (Mattiske Bidella (BD)). There is a direct vegetation link between two (500m east and 1.1km south east) of the Priority 3 populations and the area under application.

It is possible that the Priority 3 species may occur within the area proposed to be cleared, however the probability is lessened given the sparse nature of the under storey and ground cover vegetation due to stock grazing and previous clearing.

Therefore, it is considered unlikely that this proposal is at variance with this principle.

Methodology

Biodiversity Coordination Section, DEC (2006);
GIS databases:
- Declared Rare and Priority Flora List - CALM 13/08/03;
- Busselton 50cm Orthomosaic - DLI 03;
- Mattiske Vegetation - CALM 24/3/98

(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

There are no known occurrences of Threatened Ecological Communities (TEC) or Threatened Plant Communities (TPC) within the local area (10 km radius) of the proposed clearing.

There is no evidence to suggest the vegetation under application may constitute a Threatened Ecological Community according to the species present.

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

Methodology

DEC Site Visit Report (2006);
Biodiversity Coordination Section, DEC (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 not likely to be at variance to this Principle

The vegetation proposed to be cleared is a component of Beard Vegetation Association 1185 (Hopkins et al. 2001) of which there is 93.8% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of 'Least Concern' status for Biodiversity conservation (Department of Natural Resources and Environment 2002). The vegetation under application is also within the Donnybrook-Balingup Shire of which there is 72% of pre-European extent remaining.

The vegetation at the site is a component of Mattiske Vegetation Complex Bidella (BD) (Havel 2002) of which there is 96.4% 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 a component of Mattiske Kingia (KI) (Havel 2002) of which there is 97.3% of the pre-European extent remaining and therefore of a 'Least Concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

Conditions will be imposed on the permit to revegetate the area cleared on completion of extraction.

Therefore, it is unlikely this proposal is at variance to this Principle.

Methodology

Biodiversity Coordination Section, DEC (2006);
Department of Natural Resources and Environment (2002);
EPA (2000);
Havel (2002);
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

(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 no EPP areas, EPP lakes, RAMSAR wetlands or ANCA wetlands within the local area (10km radius) of the proposed clearing.

There is a minor perennial watercourse on the property under application but not directly within the area proposed to be cleared.

The Preston River is located 4.1km north of the area proposed to be cleared. The proposed clearing is unlikely to affect this watercourse due to the distance between the river and the proposed clearing.

There are two Resource Enhancement wetlands within the local area (10km radius) of the proposed clearing.

The closest is located 4.2km west of the area proposed to be cleared. However, due to the distance between this wetland and the area under application it is unlikely the proposed clearing would impact on this wetland.

It is unlikely the proposed clearing would impact on local watercourses and wetlands.

Methodology 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;
- Donnybrook 50cm ORTHOMOSAIC - Landgate04

(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**
DAFWA Land Degradation Assessment Report (2006) indicates that a small portion of the area proposed to be cleared has a high to very high risk of wind and water erosion. However, it is considered unlikely to occur in an area cleared for gravel extraction and that the risk of other forms of land degradation is considered low. DAFWA concluded that the proposed clearing may be at variance with this principle and recommended that a rehabilitation plan be developed that should include completion criteria.

Therefore the proposed clearing may be at variance to this principle and conditions will be imposed to ensure revegetation of the area cleared is undertaken on completion of extraction.

Methodology DAFWA (2006)

(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**
No Registered National Estates have been identified within the local area (10km radius) of the proposed clearing.

One System 6 Conservation Reserve located 4.2km north east of the area proposed to be cleared.

The Boyanup State Forest boarders the eastern boundary of the area under application.
The Jarrahwood State Forest is located 4.8km south of the area proposed to be cleared. The Jarrahwood State Forest and the area proposed to be cleared are both within vegetation type Mattiske Kingia (KI).

Biodiversity Coordination Section, DEC (2006) advise that adequate safeguards and hygiene measures must be adopted by the proponent to avoid the introduction or spread of Phytophthora and the proponent should be required to develop and implement an adequate weed hygiene and management protocol.

Dieback and weed management conditions have been imposed on the permit to address this risk; therefore this proposal is unlikely to be at variance to this principle.

Methodology Biodiversity Coordination Section, DEC (2006);
GIS databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Register of National Estate - EA 28/01/03;
- System 6 Conservation Reserves - DEP 06/95;
- Donnybrook 50cm ORTHMOSAIC - Landgate04;
- 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 area proposed to be cleared is within the southern part of the Leschenault Estuary - Preston River Hydrographic Catchment Area and not within a Public Drinking Water Source Area.

The area proposed to be cleared is within the Busselton-Capel RIWI Ground Water Area. The quality of this groundwater resource is not likely to deteriorate as a result of the proposed clearing.

DAFWA, 2006 advice indicates that five percent of Kingia soil system is rated as having a very high risk of phosphorus loss and twenty percent and four percent of Bidella soil system is rated as having an extreme and

very high risk of phosphorus loss respectfully. This loss would most likely be tied to area of pale deep sand, wet and semi wet soils within the landscape. Once the extraction process has been completed the risk of eutrophication will depend on the end use of the site.

As a condition to revegetate on completion of extraction will be imposed on this permit the risk of eutrophication is considered low, therefore the proposed clearing is not likely to be at variance to this principle.

Methodology DAFWA (2006);
GIS databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03;
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04;
- 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 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 2413 is located approximately 800m east of Mill Brook, an intermittent watercourse, at an elevation of 110m. It is considered that the removal of vegetation from this site would have no impact on peak flood height or duration.

Therefore, this proposal is not at variance with 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 general farming.

The Shire of Donnybrook-Balingup advises it has no objection to the proposal (Shire of Donnybrook-Balingup Advice, 2007).

A current Extractive Industries Licence (EIL) has been issued for the area under application.

No public submissions have been received for the proposal.

Methodology Shire of Donnybrook-Balingup advice;
GIS databases:
- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	4.7	Assessment of the vegetation under application revealed the proposal: - may be at variance to Principle (g); - not likely to be at variance to Principles (a), (b), (c), (d), (e), (f), (h) and (i); and - not at variance to Principle (j). Given the purpose of the proposed clearing is for gravel extraction, a condition to revegetate the area after extraction is completed has been recommended.

5. References

Clearing Assessment Unit's biodiversity advice for land clearing application. Advice to Director General, Department of Environment and Conservation (DEC), Western Australia. TRIM Ref: DOC3787.

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. TRIM Ref: IN26081.

DEC Site Visit report (2006). Department of Environment and Conservation, Western Australia. TRIM Ref: SWO28817.

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 Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.

Heddle, 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.
Shire of Donnybrook-Balingup advice (2007). TRIM Ref: DOC26956.

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)