Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1510/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd

1.3. Property details

Property: LOT 42 ON DIAGRAM 67196 (House No. 35 STANLEY WELLESLEY 6233)
Local Government Area: Shire Of Harvey
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.4		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 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; tea-tree (Melaleuca spp.) (Hopkins et al. 2001; Shepherd et al. 2001). Heddle Vegetation Complex: Bassendean Complex Central and South - Woodland; jarrah-she oak-banksia / Low woodland; Melaleuca spp. (Heddle et al. 1980).	The proposal includes clearing 3.4ha for sand extraction. The vegetation under application is open jarrah/marri forest, including interspersed ti-trees, banksias, Xylomelum occidentale and Macrozamia riedlei. There is no distinct native middle storey or ground cover layer. (DEC Site Visit 2006).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Observed during site visit: the area contains a very open structure within a low woodland vegetation complex. Several areas have previously been cleared and contain severe weed invasion; however a portion under application (particularly near Stanley Rd) contains a thicker 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 proposed clearing of 3.4 ha is of degraded to good condition, native woodland consisting predominantly of Corymbia calophylla (marri) and Eucalyptus marginata (jarrah). The native middle storey and ground cover layers consists of few species and is very open with severe weed invasion occurring.

The vegetation under application is located in an area cleared for industry, including two of the largest refuse sites in the region and a sand extraction activity ongoing within the notified property.

The area is within 1km of a large DEC-managed state forest to the north and the Brunswick River to the south. The linear size and shape of the vegetation under application gives it a large edge:area ratio, and as such (without management effort), is likely to become further degraded due to edge effects from surrounding activities. The high level of disturbance at this site over many years suggests the original biodiversity has been significantly compromised.

Therefore, the area under application is unlikely to comprise a high level of biological diversity of impact on that of the local area.

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

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Bunbury 50cm ORTHOMOSAIC - DLI04

(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 site visit undertaken indicates that the vegetation under application may provide some habitat for fauna species and provides a vegetation link between DEC-managed land to the north and the Brunswick River to the south.

While there are no known occurrences in the local area (5km radius) regional biodiversity advice indicates the area contains vegetation known to support populations of Ringtail possums. However due to the size of the proposed clearing and given the degraded nature of the application area, the proposed clearing is considered unlikely to be at variance to this principle.

Methodology

Regional Biodiversity Advice, DEC (2007);
DEC Site Visit (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

Corporate data indicates seven known Declared Rare Flora populations and 25 Priority Flora populations within the local area (10km radius) of the proposed clearing; however regional Biodiversity advice confirms no known occurrences of DRF or Priority flora within the notified area.

From regional desktop mapping, there are no rare flora occurrences within a 5km radius; however a flora survey of a nearby block of vegetation considered to be a good representation of the notified area confirmed the presence of 2 Priority flora species; one P3 and one P4 (Outback Ecology 2006). Regional Biodiversity advice indicates the P3 species, Acacia semitruallata, is not of regional significance, and further advice on the P4 species, Caladenia speciosa, confirmed this species is also not of regional significance as the population on site is low.

Due to the distance, lack of vegetation links and the condition of the area under application, it is unlikely the proposed clearing would contain or be necessary for the continued existence of rare flora.

Methodology

DEC site visit (2006);
Outback Ecology (2006);
GIS databases:
- Declared Rare and Priority Flora List - CALM 13/08/03;
- 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 likely to be at variance to this Principle

Corporate data indicates one known occurrence of a Threatened Ecological Community (TEC) approximately 9.2km south of the notified area; however regional biodiversity advice confirms the proposal will not impact on any local TEC of regional significance.

Therefore, the proposal is unlikely to be at variance to this Principle.

Methodology

Regional Biodiversity Advice, DEC (2007);
DEC site visit (2006);
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 1000 (Hopkins et al. 2001) of which there is 24.6% (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 Swan Coastal Plain Bioregion in the Shire of Harvey of which there is 41.8% and 60.1% respectively (Shepherd et al. 2001).

The vegetation at the site is a component of Heddle Vegetation Complex Bassendean Complex Central and South (Heddle et al. 1980) of which there is 27.0% of the pre-European extent remaining and therefore of a "Vulnerable" status for biodiversity conservation (Department of Natural Resources and Environment 2002).

From aerial mapping approximately 55% of Lot 42 has been previously cleared for sand extraction. The area under application is the last remaining patch of vegetation in the southern end of the property, has been isolated and varies between degraded to good vegetation condition. Considering the current land uses of Lot 42, the area under application would not be considered to be a good representative of the remnant vegetation complex.

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

Methodology

DEC site visit (2006)
Keighery (1994)
Department of Natural Resources and Environment (2002)
Heddle et al. (1980)
Hopkins et al. (2001)
Shepherd et al. (2001)
GIS databases:
- 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

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

The Brunswick River is located 900m south of the area proposed to be cleared with a direct vegetation link. The Brunswick River and surrounding wetland is a Conservation category wetland. Due to the distance between the area under application and the nearest water course or wetland, the proposed clearing is unlikely to affect this watercourse.

Although there are direct vegetation links between the area under application and the above water course and wetland, the area under application is not considered to be growing in an environment associated with a watercourse or wetland, and 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
- Busselton 50cm ORTHOMOSAIC - DLI03
- 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 at variance to this Principle

DAFWA Land Degradation Assessment Report (2006) raises no potential land degradation issues for this proposal.

The area under application has no mapped risk of Acid Sulphate Soils (ASS), a groundwater salinity level of 500-1000mg/L and a low salinity risk.

Therefore the area under application is considered to be not at variance to this Principle.

Methodology

DAFWA (2006);
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

A 51(h) Reserve (DEC Managed Lands) is located 450m north of the notified area. This area is vegetatively linked to the area under application.

There is currently extractive industry occurring between the area under application and the DEC Managed Land.

Due to the current disturbances and the condition of the vegetation, the proposed clearing is unlikely to further impact on the environmental values of neighbouring conservation areas; therefore the proposal is unlikely to be at variance to this Principle.

Methodology

DEC site visit (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;
- System 1-5 and 7-12 Areas - DEP 06/95;
- 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-Lower Collie Hydrographic Catchment Area and the Bunbury RIWI ground water area, with a low salinity risk mapped for the area under application.

Although the proposed clearing may cause some short term degradation of local water quality, the required revegetation will mitigate any long term degradation of local water quality.

Methodology

GIS databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03
- RIWI Act, Groundwater Areas - WRC 13/06/00
- Salinity Risk LM 25m - DOLA 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

DAFWA (2006) advise "clearing of further vegetation is unlikely to significantly increase surface runoff, which would contribute to stream flows".

Due to the scale and proposed revegetation, the proposed clearing is unlikely to exacerbate the incidence or intensity of flooding.

Methodology

DAFWA (2006);
GIS Database:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The property is zoned Kemerton Buffer in the Shire of Harvey TPS.

The Shire of Harvey have advised they have received an application for extractive industry approval and that issues related with illegal clearing have been resolved, the application is currently being advertised (Trim Ref: DOC 52434).

Methodology

Trim Ref (DOC 52434)
GIS Databases:
- Town Planning Scheme Zones - MFP 08/98

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the

Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance to any of the clearing principles, however due to Developmental approval having not yet been shown to DEC it is recommended that application be refused.

5. References

DEC site visit report (2006) TRIM ref DOC7977.

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.

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.

Outback Ecology (2006). Vegetation Survey of Bushland at Lot 50 Stanley Road, Leschenault, and General Recommendations to Minimise Soil Erosion, Western Australia. TRIM Ref: DOC15919

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)