Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1577/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Peet & Co Ltd**

1.3. Property details

Property: LOT 29 ON DIAGRAM 30861 (House No. 10 GREATREX LOWER KING 6330)
Local Government Area: City Of Albany
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
20.23		Mechanical Removal	Miscellaneous

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 3: Medium forest; jarrah-marri.	The proposal includes clearing of 20.23 hectares for the purpose of residential subdivision.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Condition of vegetation was determined from historical flora survey, aerial photography, and external viewing.
Beard Vegetation Association 978: Low forest; jarrah, Eucalyptus staeri & Allocasuarina fraseriana.	The vegetation under application is ... (DEC Site Visit 02/11/2006).		

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 may be at variance to this Principle

The area proposed to be cleared can be described as Jarrah/Marri/Sheoak forest in 'good to excellent' condition (Keighery, 1994). The southern area under application is more disturbed and considered to be in 'good' condition, however vegetation in the north is considered to be in 'excellent' condition.

The priority four species, Banksia serra, is located within the application area. In previous advice (1998) the EPA recommended protection of this species.

Advice from regional staff indicates that the application area holds a significant level of biodiversity in a regional context, supporting a wide range of flora and fauna species. Two broad plant communities have been identified and it is likely that a diversity of microhabitats exist within these communities. The ages of flora species are varied, and although there is some weed disturbance it is limited to the southern portion of the application area.

Without further information, in the form of a flora survey, it is considered that the proposed clearing may be at variance to this principle.

Methodology

EPA, 1997
Keighery, 1994
GIS Databases:
- SAC Biodatasets - last accessed 23 June 08
- Albany Townsite 20cm Orthomosaic - Landgate01

(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 may be at variance to this Principle

There are numerous records of threatened and priority fauna within the local area (10km radius). Given, the vegetation is considered to be in 'good - excellent' condition (Keighery, 1994), the type of vegetation present, and density in some sections of the application area it is possible that the following threatened species would utilise vegetation within the proposed clearing area.

* Pseudocheirus occidentalis - Western Ringtail Possum - VU
* Dasyurus geoffroii - Chuditch - VU
* Calyptorhynchus banksii naso - Forest Red-tailed Black-Cockatoo - VU
* Phascogale tapoatafa ssp. - Brush-tailed Phascogale - VU

Additionally, it is likely to provide important habitat for other non-listed species, including reptiles and invertebrates, given the urban and cleared landscape the vegetation is within.

The area proposed to be cleared is also likely to be part of an ecological corridor, linking passages north to south and east to west and providing terrestrial conectivity to the ANCA wetland to the east .

Given these factors it is considered that the proposed clearing may be at variance to this principle.

Methodology

Keighery, 1994
GIS Databases:
- SAC Biodatasets - last accessed 23 June 2008
- Albany 1.4m Orthomosaic - DLI March 03
- DEC Managed Lands and Water 03

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposal may be at variance to this Principle

The local area (10km radius) has numerous species of priority and rare flora recorded. Condition of vegetation within the proposed clearing area is from 'good - excellent' (Keighery, 1994).

An historical flora survey was completed in 1997 (Robinson, 1997) which found the priority four species Banksia serra within the application area.

The lateritic soils and vegetation type are also indicative of the likely occurence of two species of rare flora, Banksia goodii and Banksia brownii. The proposed clearing may therefore be at variance to this principle.

Methodology

Keighery, 1994
Robinson, 1997
GIS Databases:
- Albany 1.4m Orthomosaic - DLI March 03
- SAC Biodatatsets - last accessed 23 June 2008
- Soils, Statewide, 1999

(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

Within the local area there are numerous sites of the Threatened Ecological Community (TEC) 'Banksia coccinea thicket'. This community is described as being 'Open Low Allocasuarina fraseriana Eucalyptus staeri woodland in association with Banksia coccinea thicket'.

The area proposed to be cleared shares similar characteristics and some flora species with the nearby TEC, however lacks the pure thicket indicative of this TEC and has different soil structure making it unlikely that the proposed clearing area contains this known TEC.

Methodology

GIS Databases:
- SAC Biodatasets - last accessed 23 June 2008
- Albany Townsite 20cm Orthomosaic - Landgate01

(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 may be at variance to this Principle

The area proposed to be cleared contains the following vegetation statisitics.

	Pre-European	Current extent	Remaining (ha)	% In reserves (ha)	(%)	DEC Managed Land
IBRA Bioregions						
Jarrah Forest		4,544,335	2,665,480	58.7	N/A	
City of Albany			427,257	152,274	35.6	24.9
Beard Vegetation Complex						
3			2,661,403	1,846,588	69.4	26.4
978			53,230	19,749	37.1	23.7

There is a regional survey being undertaken in the Albany area focusing on the regionally significant vegetation. This has arisen, in part, due to the speed of expansion and development within this area. The survey and results are yet to be completed, however advice from DEC regional staff is of the effect that the application area is of local and regional significance based on numerous factors such as vegetation condition, potential for reservation, landscape value and excellent floristic community example.

Additionally, the proposed clearing is within the boundaries of EPA Position Statement No 2 (Agriculture Region). This document advises that clearing for agriculture is no longer supported within these boundaries, based on the impact historical land practices have had on those areas. While the purpose of clearing is not agricultural, it is an indication that the surrounding land is suffering from heavy clearing and the associated impacts.

It is considered that the proposed clearing may be at variance to this principle.

Methodology Shepherd et al. 2006
GIS Databases:
- Albany Townsite 20cm Orthomosaic - Landgate01
- SAC biodatasets - last accessed 23 June 08
- Interim Biogeographic Regionalisation of Australia
- EPA Position Paper No 2 Agriculture Region_1

(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 area proposed to be cleared lies high in the landscape and is not mapped as having watercourses or wetlands. Advice given by the Environmental Protection Authority (EPA, 1998) identifies a seasonal watercourse within the proposed clearing area. This watercourse appears to function as a drainage line and only flows in response to rainfall events or seasonality.

Methodology EPA, 1998
GIS Databases:
- Hydrography, linear 04
- Albany Townsite 20cm Orthomosaic - Landgate01

(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**
The area proposed to be cleared sits atop a ridge and is composed of lateritic gravelly soils. Vegetation within the application area ranges from 'good - excellent' condition (Keighery, 1994).

The substrate is of low permeability, however soil structure allows for reasonably good drainage and there is a drainage line within the application area so water logging is unlikely to be a concern.

The slope from the ridge drops 30 metres over 300 metres which is relatively gradual, however clearing could result in some water erosion, particularly after larger rainfall events which are known to occur in this area.

Wind erosion is unlikely to occur given the heavy, large soil particles. Although the proposed clearing is for a larger area (20 ha) it is unlikely that salinity will be caused or exacerbated, given local salinity measurements.

Methodology Keighery, 1994
Northcote et al, 1960-68
GIS Databases
- Groundwater Salinity, Statewide

- Albany Townsite 20cm Orthomosaic - Landgate01
- Topographic Contours, Statewide
- Soils, Statewide

(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 may be at variance to this Principle

The area proposed to be cleared is 20ha of good - excellent condition (Keighery, 1994) vegetation in a vegetated corridor. The application is not within proximity to be providing buffering functions to any nearby conservation areas.

Oyster Harbour lies 1km to the east and is an ANCA (Australian Nature Conservation Agency) Wetland. The area proposed to be cleared may be providing terrestrial habitat for marine birds, thereby aiding the environmental values of that conservation area.

Given the area of vegetation to be cleared is large, lies within a vegetated corridor which may be assisting in genetic transfer and is likely to be associated with the nearby ANCA wetland, the clearing may be at variance to this principle.

Methodology

Keighery, 1994
GIS Databases:
- South Coast Significant Wetlands
- ANCA, Wetlands
- CALM Managed Lands and Waters
- Albany Townsite 20cm Orthomosaic - Landgate01

(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 ridge upon which the proposed clearing is to occur, slopes down towards the King River, which flows into Oyster Harbour (ANCA Wetland). It is possible that clearing 20 ha of vegetation will result in an excess of runoff into the river, which is approximately 650m to the north.

Groundwater salinity levels in the local area are at a low level and the clearing is unlikely to impact on these levels.

Methodology

GIS Databases:
- Hydrography, linear (hierarchy)
- Groundwater Salinity, Statewide
- Topographic Contours, Statewide
- Albany Townsite 20cm Orthomosaic - Landgate01

(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 may be at variance to this Principle

As the proposed clearing sits atop a ridge which slopes into a valley there may be some increase in runoff. In high rainfall events this may cause some small scale localised flooding in the King River.

Methodology

GIS Databases:
- Hydrography, linear (hierarchy)
- Topographic Contours, Statewide
- Albany Townsite 20cm Orthomosaic - Landgate01

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

Comments

The proposed clearing lies within EPA Position Paper No.2 Agriculture Region.

This proposal was referred to the EPA and under s.48a the level of assessment was set as sheme not assesed advice given. Advice was given relating to watercourses and priority flora.

The EPA is currently assesing another subdivision application approx 4.4km south of the proposed clearing.

There is currently a co-ordinated survey being undertaken to assess the regional significance of vegetation in the Albany area.

The proponent has an application with West Australian Planning Commission (WAPC) for subdivision approval. This application is awaiting an endorsed Outline Development Plan to be submitted.

Methodology

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 principle (d) and is may be at variance to the remaining principles.

5. References

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. December 2000. Environmental Protection Authority.

EPA, 1998, EPA Advice for Lot 29 Lower King Rd, Trim Ref DOC 3151

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Robinson, 1997, Vegetation Assessment of Pt Lot 29 Elizabeth St Albany, Trimref DOC3151

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)