Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2006/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: John Troode

1.3. Property details

Property: LOT 11206 ON PLAN 204910 (CARLOTTA 6275)
Local Government Area: Shire Of Nannup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	25	Mechanical Removal	Hazard reduction or fire control

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 - 999 - Medium woodland; marri Mattiske Vegetation Complex: - DS - Mosaic of open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla, with some admixtures with Eucalyptus laeliae in the north (subhumid zone), with occasional Eucalyptus marginata subsp. elegantella (mainly in subhumid zone) and Corymbia haematoxylon in the south (humid zone) on deeper soils adjacent to outcrops, woodland of Eucalyptus wandoo (subhumid and semiarid zones), low woodland of Allocasuarina huegeliana on shallow soils over granite outcrops, closed heath of Myrtaceae-Proteaceae species and lithic complex on or near granite outcrops in all climate zones.	Information on the clearing application form states that the proposed clearing is for 25 'very old redgums, most of which are dead'. Orthophotography indicates that the trees are scattered across the predominantly cleared land of Lot 11206. It is therefore inferred that the vegetation to be cleared is 'parkland cleared' with no native understorey vegetation, and is therefore completely degraded in condition.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation description is derived from the information stated on the clearing application form and orthophotography.

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**
Orthophotography of the area under application indicates that the trees proposed to be cleared are

predominantly scattered paddock trees with no native understorey vegetation. Approximately 80% of the local area (10 kilometre radius) is forest managed by DEC with the varying purposes of State Forest, Timber Reserve and National Park. It is likely that these areas of DEC-managed forest represent areas of much higher biodiversity value in comparison to that of the application area. Given the degraded nature of the vegetation proposed to be cleared and the extent of native vegetation that exists within the local area, this proposal is not likely to be at variance to this principle.

Methodology GIS Databases:
- Orthophotography - DEC 2004
- CALM Managed Lands and Waterrs - CALM 1/07/05

(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 28 records of seven fauna species of conservation significance within the local area (10 kilometre radius), with the closest record 2.3 kilometres from the application area. From orthophotography and tenure information is has been established that approximately 80% of the local area is comprised of native vegetation that is managed by DEC as National Parks, State Forest andTimber Reserves. Orthophotography indicates that the vegetation proposed to be cleared is predominantly isolated paddock trees with no native understorey vegetation. Given the condition of the vegetation proposed to be cleared and the high extent of native vegetation within the local area, it is unlikely that the vegetation proposed to be cleared is significant habitat for native fauna.

Methodology GIS Databases:
- SAC Biodatasets - DEC, 24/08/07
- Orthophotography - DEC 2004
- CALM Managed Lands and Waters - CALM 1/07/05

(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**
Seven species of flora of conservation significance have been recorded within the local area (10 kilometre radius), including one species that is a Declared Rare Flora (DRFF). The DRF species is Caladenia harringtoniae which is a perennial herb that occurs in winter-wet flats, margins of lakes, and creeklines with granite outcrops (Florabase). Although two watercourses occur in proximity to the application area (with the nearest point of a watercourse approximately 200 metres from the application area), no watercourses intersect the application area so it is unlikly that this species of DRF would occur within the application area. Orthophotography indicates that vegetation proposed to be cleared consists of isolated paddock trees with no native understorey, potentially due to grazing. It is therefore unlikely that flora species of conservation significance exist within the clearing application area.

Methodology Florabase (28/08/07)
GIS Databases:
- Orthophotography - DEC 2004
- SAC Biodatasets - DEC 24/08/07
- Hydrography, Linear - DoE 1/2/04

(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**
No Threatened or Priority Ecological Communities have been identified within the local area (10 kilometre radius), with the nearest Threatened Ecological Community (TEC) occurring approximately 36 kilometres south west of the application area. This community, the Scott River Ironstone Association, is a very site specific community and is not likely to occur within the application area.

Methodology GIS Databases:
- SAC Biodatasets - DEC, 24/08/07

(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**

Pre-European		Current extent (ha)	Remaining (ha)	Conservation** (%)	% In reserves status	DEC Managed Land
IBRA Bioregions****						
Jarrah Forest^	4506675	2426080	53.8	Least Concern	N/A	

Shire*					
Nannup	275,524	293,198	94.0	Least Concern	N/A
Mattiske Vegetation Complex***					
DS	291,043	126,045	43.3	Depleted	N/A
Heddle Vegetation Complex***					
Kingia Complex	79882	71967	90.1	Least Concern	0.7
Beard Vegetation Complex****					
3	2661515	1863983	70.0	Least Concern	80.3
999	115712	15161	13.1	Vulnerable	14.0

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)
*** (CALM, 2004)
**** (Shepherd et al. 2006)
^ Area within Intensive Land Use Zone

The State Government is committed to the national Objectives and Targets for Biodiversity Conservation, which includes a target that prevents the clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment, 2002). Orthophotography indicates that the vegetation proposed to be cleared is comprised of scattered trees, potentially parkland cleared with no native understorey, therefore the vegetation is considered to be degraded. Although the status of Beard Vegetation Complex 999 is below 30% and classified as Vulnerable, the degraded condition of the vegetation proposed to be cleared indicates that this vegetation does not represent a significant remnant of this Vegetation Complex. Due to the high percentage of representation for the remaining vegetation types, the high proportion of vegetation within the local area, and the degraded condition of the vegetation proposed to be cleared, the area proposed to be cleared is not considered to be a significant remnant within an extensively cleared area.

Methodology
Shepherd et al. (2001)
Department of Natural Resources and Environment (2002)
CALM (2004)
Shepherd et al. (2006)
GIS Databases:
- Pre-European Vegetation - DA 01/01
- Heddle Vegetation Complexes - DEP 21/06/95
- Mattiske Vegetation - CALM 24/3/98
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Orthophotography - DEC 2004

(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 at variance to this Principle

The clearing application area occurs within the Red Gully sub-catchment of the greater Hardy Estuary-Blackwood River Catchment. Barlee Brook (a major, perennial river) occurs approximately 3.8 kilometres south-east of the application area, whilst Carlotta Brook (a minor river) and Red Gully (a significant stream) occur approximately 2.6 kilometres north-north-east and 4.6 kilometres south-west of the clearing application area, respectively. The heads of two minor, perennial watercourses that flow to the west occur within the lot in which clearing is proposed. The clearing application area occurs approximately 200 metres from one, and 260 metres from the other. No wetlands have been mapped within or in proximity to the application area.

Given the distances to the two watercourses identified, that the land around these mapped watercourses appears to be cleared, and the type of vegetation to be cleared (predominantly scattered trees), the native vegetation is not considered to be growing in, or in association with, these watercourses.

Methodology
GIS Databases:
-Orthophotography - DEC 2004
- Hydrography, linear - DOE 01/02/04
- Hydrography, linear (hierarchy) - DOW
- Hydrographic Catchments - Catchments DOW
- Hydrographic Catchments - Subcatchments 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 is for 25 trees that appear to be scattered across the northern half of Lot 11206, with orthophotography indicating that the Lot is predominantly already cleared. The area proposed to be cleared occurs on the mid to lower slopes of a gently undulating landscape. Given the size and nature of the proposed clearing, the risk of water or wind erosion is not likely to be exacerbated. The proposed clearing is not likely to cause appreciable land degradation.

Methodology

GIS Databases:
- 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 eastern boundary of the Lot in which the application area occurs is adjacent to Barlee Brook State Forest, whilst the western boundary is adjacent to a Timber Reserve. Easter National Park is situated approximately 700 metres south of the clearing application area. Milyeannup National Park and Hilliger National Park also occur within the local area, approximately 2.8 and 8.5 kilometres from the application area, respectively. As the proposed clearing is for 25 trees and the clearing application area is down-slope from the State Forest to the east, it is unlikely that the proposed clearing will result in significant adverse impacts on these conservation areas.

Methodology

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/07/05

(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 clearing application area occurs within the Red Gully sub-catchment of the greater Hardy Estuary-Blackwood River Catchment. Barlee Brook (a major, perennial river) occurs approximately 3.8 kilometres south-east of the application area, whilst Carlotta Brook (a minor river) and Red Gully (a significant stream) occur approximately 2.6 kilometres north-north-east and 4.6 kilometres south-west of the clearing application area, respectively. The heads of two minor, perennial watercourses that flow in a westerly direction occur within the lot in which clearing is proposed, between approximately 200 metres and 260 metres from the clearing application area. Given the distance to these watercourses and that the proposed clearing is for 25 scattered trees, the proposed clearing is unlikely to impact on surface water quality.

DEC tenure information indicates that approximately 80% of the local area (10 kilometre radius) is DEC-managed forest. The groundwater salinity of the application area is of a low level, mapped as 500-1000 mg/L. Orthophotography indicates that a further 5% (approximately) of the local area that is not DEC-managed forest is also vegetated, including areas of plantation forest. Given the condition of the vegetation to be cleared and the high proportion of vegetation within the local area, the proposal is not likely to significantly exacerbate groundwater salinity.

Methodology

GIS Databases:
- Groundwater Salinity, Statewide - DOW
- Rainfall, Mean Annual - BOM 30/09/01
- Hydrography, linear - DOE 01/02/04
- Orthophotography - DEC 2004
- CALM Managed Lands and Waters - CALM 1/07/05

(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

Given the nature of the clearing proposed, predominantly with scattered trees to be cleared, and the high proportion of native vegetation within the local area (10km radius), it is unlikely that the proposed clearing will cause or exacerbate the incidence or intensity of flooding.

Methodology

GIS Databases:
- Orthophotography - DEC 2004

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

Comments

The clearing application area does not occur within a RIWI, CAWSA or PDWSA area.

	The area under application is within the South-West Boojarah 2 Native Title Claim area. No Aboriginal Sites of Significance occur within or in proximity to the clearing application area.
Methodology	GIS Database: - Native Title Claims - DLI - Aboriginal Sites of Significance - DIA

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Hazard reduction or fire control	Mechanical Removal	25	The clearing proposal has been found to be not at variance or not likely to be at variance to the ten clearing 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.

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.

Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.

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.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001a) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia (updated 2005).

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)