Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 844/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Dundas

1.3. Property details

Property: NORSEMAN SUBURBAN LOT 5 (House No. 2 DOUGLAS NORSEMAN 6443)

Local Government Area: Shire Of Dundas

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4		Mechanical Removal	Road construction or maintenance

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 9: Medium woodland; coral gum (E. torquata) & Goldfields blackbutt (E. lesouefii) (Hopkins et al. 2001, Shepherd 2006)	The proposal includes the clearing of 4 hectares of vegetation for the construction of a new approach road into the townsite of Norseman. Photographs of the area under application show vegetation in a degraded condition, consisting of small populations of Blackbutt and Coral Gum, with a relatively sparse understorey of saltbush species.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description based on information provided by the applicant (TRIM ref: IN23215)

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 vegetation under application is a component of Beard Vegetation Association 9, described as Medium woodland; coral gum (E. torquata) & Goldfields blackbutt (E. lesouefii) of which there is approximately 99.7% (239,898 ha) of the Pre-European extent remaining (Shepherd 2006 & Hopkins et al. 2001).

Biodiversity Coordination Section (BCS) (2006) recognises that given the vegetation is well represented and extensive at the regional level and the area under application is relatively small in size (approximately 4ha), it is unlikely that the clearing will cause any appreciable impact on regional biodiversity. Further, given that it is close to the townsite of Norseman, it is likely to have been subject to human disturbance and therefore degraded in condition. It is therefore considered unlikely that the area is representative of a high level of biological diversity.

Methodology

References:
- BCS (2006) (TRIM Ref: DOC10903)
- Shepherd (2006)
- Hopkins et al. (2001)

GIS Databases:
- Bushforever - MFP 07/01

(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 vegetation in the area includes small populations of Goldfields blackbutt (Eucalyptus lesouefii) and coral gum (Eucalyptus torquata) (Hopkins et al. 2001, Shepherd 2006), and as such these trees may provide refuge and nesting sites for local fauna and birdlife.

BCS (2006) identified the Shy Heathwren (Hylacola cauta whitlocki), a Priority 4 species, as occurring within a 10km radius of the proposed clearing. Based on the limited available information regarding the structure and composition of the vegetation under application and the limited records of known significant fauna in the area, it is difficult to determine the potential impact of the proposed clearing on local fauna habitat. However, given the extensive and well represented nature of the vegetation under assessment in the local context and adjacent well vegetated areas, there is likely to be similar habitat in adjacent uncleared areas to sustain local fauna.

It is therefore considered that the vegetation under application is unlikely to contain significant habitat, and is therefore unlikely to be at variance to this Principle.

Methodology

References:
- BCS (2006) (TRIM Ref: DOC10903)
- Shepherd (2001)
- Hopkins et al. (2001)

(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

BCS (2006) advises that DEC Corporate Datasets show 41 records of two species of Declared Rare Flora and 126 records of 17 Priority Flora species within a 10km radius.

Declared Rare Flora (DRF) recorded from the area are described as follows;

-Eucalyptus platydisca - Jimberlana mallee. This species has a very restricted habitat and is known only from north-east of Norseman, approximately 7 km from the area under application, over a geographic range of 18km. It grows in dark brown, sandy loam amongst granite boulders. Based on the limited amount of information available, and the description of the site as flat to undulating land with small valleys with some clay pans and salt lakes, it is unlikely that the area has suitable habitat to support Eucalyptus platydisca.

- Daviesia macrocarpa (Norseman pea) is known from three populations approximately 6 km north-east of Norseman, amongst red-clay loam and weathered gravel with calcrete nodules, in association with poverty bush (Eremophila), Eucalypts and Saltbush (Atriplex). The recorded populations are located approximately 6km north-east of the proposed clearing area on the same vegetation type. Therefore, given the paucity of information pertaining to the soil and vegetation characteristics of the site and the likelihood of Eucalyptus species occurring within the site, it is possible that Daviesia macrocarpa may occur within the area that is proposed to be cleared.

A flora survey was conducted by Botanica Consulting in July 2007. No drf or priority flora were found.

Given the above the proposed clearing is not likely to be at variance with this principle (Botanica, 2007).

Methodology

Reference:
- BCS (2006) (TRIM Ref: DOC10903)
- Botanica (2007) (TRIM Ref: Doc36060)

GIS Databases:
- Topographic Contours, Statewide - DOLA 12/09/02

(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

BCS (2006) advise that there are no known Threatened Ecological Communities identified within the 10km local area of the proposal. According to DEC Corporate datasets, the closest known TEC is 74.8km north east of the notified area. It is therefore considered that the proposed clearing is not likely to be at variance to the Principle.

Methodology

Reference:
- BCS (2006) (TRIM Ref: DOC10903)

(c) 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 under application belongs to Beard Vegetation Association 9, described as Medium woodland; coral gum (E. torquata) & Goldfields Blackbutt (E. lesouefii) of which there is approximately 239,898 hectares and 99.7% of the Pre-European extent remaining (Shepherd 2006 & Hopkins et al 2001).

The State government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents a clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000).

	Pre-European area (ha)	Current extent (ha)	Remaining %	Conservation status**	% in reserves/DEC-managed land
IBRA Bioregion - Coolgardie	12,912,208	12,707,623	98.4%	Least concern	
LGA - Shire of Dundas	N/A	N/A	N/A	N/A	N/A
Beard vegetation associations - 9	240,509	239,898	99.7%	Least concern	7.7%

* (Shepherd 2006)
**(Department of Natural Resources and Environment 2002)

Given that the vegetation proposed to be cleared is well represented in the region and well above the EPA 30% threshold, the area under application is considered unlikely to be significant as a remnant in a local or regional context.

Methodology

References:
- EPA (2000)
- Department of Natural Resources and Environment (2002)
- Shepherd (2006)
- Hopkins et al. (2001)

GIS Databases:
- 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 may be at variance to this Principle

The vegetation under application is located directly adjacent to Lake Cowan, a non-perennial salt lake. Aerial photography of the area does not demonstrate a noticeable boundary between vegetation likely to be growing in association with the wetland system, and that present adjacent to the Lake.

Based on the degraded condition of the vegetation under application, it is considered unlikely that the proposed clearing would have an appreciable impact on the environmental values or buffer areas of the nearby Lake. Despite this, the vegetation under application may still contain vegetation growing in association with the Lake, and thus may be at variance to this Principle.

Methodology

GIS Databases:
-Hydrography, linear - DOE 01/02/04
- Hydrographic Catchments - Catchments - DOE 23/3/05
- Norseman 1.4m Orthomosaic - DLI03

(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 comprises flat to undulating land with small valleys, with some clay pans and salt lakes. Chief soils in the area are brown and grey-brown calcareous earths with loamy surface soils.

The area is located in a medium to high groundwater salinity risk area (i.e. 14000-35000mg/l) and a high risk groundwater salinity risk area lies 800m to the east of the area. The area does not lie in an Acid Sulphate Soil Risk area.

Due to the sparse and degraded nature of the vegetation, and the relatively flat landscape and calcareous earths, there is limited potential for water or wind erosion to appreciable increase. The proposed clearing is therefore unlikely to be at variance with this Principle.

Methodology GIS Databases:
-Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04
-Groundwater Salinity, Statewide - 22/02/00
-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**
BCS (2006) advise that there are no conservation areas or reserves within a 10 kilometre radius of the proposal.

Given the relatively high representation of native vegetation within the local area, the proposed clearing is considered not at variance to this Principle.

Methodology Reference:
- BCS (2006) (TRIM Ref: DOC10903)
GIS Databases:
-CALM Managed Lands and Waters - CALM 01/08/04
-Register of National Estate - EA 28/01/03

(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 subject area is part of the Bandy Creek Hydrographic Catchment area and flow lines within the area indicate that the area is associated with a non-perennial lake. The area is also located within a medium to high groundwater salinity risk area (14000-35000mg/l). Other than Bandy Creek there are no other surface water bodies within 10km of the site area.
Given the relatively small area under application (approximately 4ha) and the non-perennial nature of the lake with a small amount of wetland dependent vegetation, it is considered unlikely that the clearing will cause a significant deterioration in the water quality of surface or underground water in the local area.

Methodology GIS Databases:
- Hydrography, linear - DOE 01/02/04
- EPP, Lakes - DEP 1/12/92

(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**
Annual rainfall for the Norseman region averages approximately 300mm. Given the degraded nature and limited amount of vegetation within the applied area, it is considered that the proposed clearing is unlikely to have an impact on the level of flooding within the local area.

Methodology GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01

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

Comments
The Shire of Dundas has provided a signed clearance from the local representative of the Njadu people.

Shire of Dundas has advised that they have authority to carry out the works associated with the road widening as described under Section 3.1 of the Local Government Act 1995.

Approximately 1ha of the area under application has been cleared, the Shire of Dundas advise that the rest of the area under application is not required to be cleared.

Methodology

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Road construction maintenance	Mechanical Removal	4	Assessment against the Principles of Clearing Native Vegetation, as listed in Schedule 5 of the Environmental Protection Act 1986, has been completed, and the proposal may be at variance to Principles (c) and (f).

5. References

Biodiversity Coordination Section (2006) Advice for land clearing application to Director General, Department of Environment and Conservation (DEC), Western Australia. DEC TRIM ref: DOC10903

Botanica Consulting (2007). Draft Vegetation Survey of a Diversion Road. Prepared for the Shire of Dundas, July 2007.

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 (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.

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. (2006). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

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)