Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1622/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Peter Bradley Harvey

1.3. Property details

Property: LOT 12 ON DIAGRAM 22501 (House No. 67 ROBINSON BRUNSWICK 6224)
Local Government Area: Shire Of Harvey
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6.1		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: 3 - Medium forest; jarrah-marri 1184 - Medium woodland-fringing; jarrah, marri, Eucalyptus rudis & Agonis flexuosa Mattiske Vegetation Complex: - Dwellingup (D1) - Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in mainly humid and subhumid zones. - Lowdon (Lo) - Open forest of Corymbia calophylla-Eucalyptus marginata subsp. marginata-Agonis flexuosa with some Eucalyptus wandoo and occasional Corymbia haematoxylon on slopes, and woodland of Eucalyptus rudis-Melaleuca rhaphiophylla on valley floor in the humid zone.	The parkland cleared vegetation of the application area appears to be comprised of Marri, Jarrah and Wandoo or Paperbark Wandoo.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Vegetation description and condition derived from site photographs (TRIM Ref DOC8852) included as supporting documentation with the clearing application.

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**
Site photographs submitted with the clearing application indicate that the vegetation proposed to be cleared is parkland cleared (trees over exotic pasture grasses or weeds). Given the lack of native understorey vegetation, the vegetation that is proposed to be cleared is not expected to represent high biological diversity.

Methodology Site Photographs (TRIM Ref DOC8852)

(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

Within the local area (10 kilometre radius), 12 species of Declared Threatened or Priority Fauna have been recorded. As site photographs indicate that the area under application is devoid of native understorey cover, it is unlikely that the majority of these species will occur within the clearing application area. Site photographs do however indicate that the clearing application area may contain some mature trees that potentially have value as habitat for a number of bird species. Advice received from DECs Principal Zoologist (15 August 2007) was that there is a possibility of Forest Red-Tailed Black-Cockatoos nesting in the area. However, given the extent of vegetation in a similar or better condition within the local area, it is not expected that the vegetation proposed to be cleared has significant value as nesting habitat. The proposed clearing is not likely to be at variance to this Principle.

Methodology

Site Photographs (TRIM Ref DOC 8852)
GIS Databases:
- SAC Biodatasets - DEC, 10/08/07

(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

There are 13 records of eight species of Declared Rare or Priority Flora within the local area (10 kilometre radius). A number of these species have habitat characteristics that are comparable to the site characteristics of the application area. Site photographs indicate a history of grazing has occurred within the application area, with no native understorey species evident. It is therefore unlikely that the Declared Rare or Priority Flora species with a herb or shrub habit that could have occurred within the application area exist. The proposed clearing is therefore unlikely to be at variance to this Principle.

Methodology

Site Photographs (TRIM Ref DOC8852)
Florabase (2007)
GIS Databases:
- Soils, Statewide - DA 11/99
- SAC Biodatasets - DEC, 10/08/07

(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

The closest recorded Threatened Ecological Communities (TECs) occur between 13.5 and 15 kilometres north-west of the clearing application area. These two communities are "Dense Shrublands on Clay Flats" (SCP09) and "Shrublands and Woodlands on Muchea Limestone (Muchea Limestone). The site characteristics of these two TECs are not conducive with those of the site under application. Furthermore, site photographs of the vegetation proposed to be cleared indicate that it is severely degraded. Therefore the proposed clearing is not likely to be at variance to this Principle.

Methodology

Site Photographs (TRIM Ref DOC8852)
GIS Databases:
- SAC Bio-datasets - DEC, 13/08/07

(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 status**	% Current Extent in DEC managed reserves
Shire*					
Harvey	168,294	101,085	60.1	Least Concern	N/A
Mattiske Vegetation Complex***					
Dwellingup (D1)	208404	191298	91.8	Least concern	N/A
Lowdon	17045	7207	42.3	Depleted	N/A
Beard Vegetation Complex****					
1184	63565	28717	45.2	Depleted	52.6
3	2661515	1863983	70.0	Least Concern	80.3
Heddle Vegetation Complex ***					
Dwellingup and Hester					

complex in high rainfall	248119	221438	89.2	Least Concern	4.1
Lowden Complex	63466	28366	44.7	Depleted	0.9

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

Site photographs indicate that the vegetation proposed to be cleared is comprised of trees over pasture and weed species, therefore the vegetation is considered to be parkland cleared and completely degraded. Due to the high percentage of representative vegetation types remaining 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

(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**
No watercourses or waterbodies occur within the clearing application area. The closest wetland to the application area occurs approximately two kilometres north-esat of the application area. The closest watercourse occurs approximately 40 metres east of the proposed clearing area, with this 40 metre wide section comprising similar parkland cleared vegetation. It is therefore unlikely that the native vegetation of the clearing application area is growing in, or in association with, an environment associated with a watercourse or wetland.

Methodology GIS Databases:
- Hydrography, Linear - DoE 1/2/04
- Geomorphic wetlands - Swan Coastal Plain - DOE 15/09/04

(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**
There is no known Acid Sulfate Soils risk (<3 metres from surface) within the area proposed to be cleared. The area proposed to be cleared occurs on the mid and lower slopes of a small hill. Given the nature of the proposed clearing, involving scattered trees, the risk of erosion is reduced. The proposed clearing is not likely to cause appreciable land degradation.

Methodology GIS Databases:
- Acid Sulfate Soils Risk Map, Swan Coastal Plain - DEC
- 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 closest conservation areas to the clearing application area are the Wellington National Park (approximately 8.4 kilometres south-south-west), Benger Swamp Nature Reserve (approximately 7 kilometres north-east) and the Harris River State Forest (approximately 3.4 kilometres east). Given the distance to these conservation areas, the vegetation proposed to be cleared is therefore unlikely to be contributing significantly to the environmental values of or providing a buffer to the conservation areas. The vegetation proposed to be cleared may provide a minor ecological linkage function for birds flying between the coastal plain and the more vegetated Darling Plateau, however given the extent of vegetation in a similar or better condition it is not expected that the vegetation proposed to be cleared has significant value in this context.

Methodology GIS Database:
- CALM Estate - CALM, 06/06
- Orthophotography - CALM, 12/04

(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 proposed clearing is within the Leschenault Estuary - Lower Collie surface water catchment. No drainage lines, watercourses or waterbodies intersect the clearing application area, however the head of a tributary that flows to the east occurs approximately 40 metres east of the application area. The vegetation of this 40 metre section is comparable to that of the application area. The established pasture and/or weed cover and trees existing within this section are likely to reduce any sediment and nutrient transport into this minor tributary. There are numerous Conservation, Multiple Use and Resource Enhancement Wetlands within the local area, with the closest occurring approximately two kilometres north-east of the application area. Given the severely degraded condition of the vegetation of the application area and that there are no drainage lines or watercourses flowing through or from the application area, it is unlikely that the proposed clearing will impact on nearby surface waters.

The groundwater salinity of the area is classified as low, mapped as 500-1000mg/L. The area receives a relatively high annual rainfall of 900mm. Given the condition of the vegetation to be cleared and the extent of similar or denser vegetation within the local area (10 kilometre radius), the proposal is not likely to significantly exacerbate groundwater salinity.

Methodology

Orthophotography - DEC 12/04
GIS Databases:
- Groundwater Salinity, Statewide - DOW
- Rainfall, Mean Annual - BOM 30/09/01
- Hydrography, linear - DOE 01/02/04
- Geomorphic wetlands - Swan Coastal Plain - DOE 15/09/04

(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

Site photographs submitted with the application indicate that the vegetation proposed to be cleared is parkland cleared, with scattered or groups of trees present over pasture and weed species. Given the nature of the proposed clearing, predominantly with scattered trees to be cleared, and the extent of remnant 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

Site Photographs (Trim Ref 8852)

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

Comments

Advice has been received from the Shire of Harvey that the Extractive Industry operation at Lot 12 Robinson Road has been refused, and therefore the Shire would not support the proposed application to clear native vegetation.

There is a registered Native Title Claim, by the Gnaala Karla Booja, over the greater area encompassing the clearing application area.

Methodology

Shire of Harvey (TRIM Ref 31263)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	6.1	Shire of Harvey confirmed that they will not be issuing an Extractive Industry Licence.

5. References

Department of Conservation and Land Management (2004). System 6 and RFA Analysis.

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.

Florabase (2007). Accessed at http://florabase.dec.wa.gov.au/ on 15 August 2007.

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.

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.

MBS Environmental (2006). Site photographs submitted with application to clear. TRIM Ref DOC 8852.
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)