Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 696/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Metropolitan Cemeteries Board**

1.3. Property details

Property: LOT 9959 ON PLAN 214546
Local Government Area: City Of Joondalup
Colloquial name: Pinnaroo Cemetry

1.4. Application

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

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 6: Medium woodland; tuart & jarrah 998: Medium woodland; tuart 1026: Mosaic: Shrublands; Acacia rostellifera, A. cyclops (S) & Melaleuca cardiophylla (N) thicket (Hopkins et al. 2001, Shepherd et al. 2001). Heddle vegetation complex: Karrakatta complex - central and south: Predominantly open forest of Eucalyptus gomphocephala - E. marginata - E. calophylla and woodland of E. marginata - Banksia species. (Heddle et al 1980)	The area under application consists of a 89ha mosaic of native vegetation. Bush Forever site 303 borders the northern, southern and eastern boundaries of the proposed area to be cleared. The western boundary abuts a residential area. The vegetation under application was seen to be in good to excellent condition and consisted predominantly of Tuart forest with the understorey in various stages of condition (site visit 12/05/05). A flora survey of Bush Forever site 303 adjacent to the area under application found a total of 235 native taxa and 66 weed taxa. (Government of Western Australia 2000).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Information pertaining to the vegetation descriptions was obtained from a site visit (12/05/05). The following GIS Databases were also used: - Swan Coastal Plain - DOE 15/09/04 - Swan Coastal Plain North 1m Orthomosaic - DLI 01/04.

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

Bush Forever site 303 abuts the northern, eastern and southern boundaries of the area under application. A total of 235 native flora taxa, 66 weed taxa, 36 species of birds, 3 species of native mammals, 19 species of reptiles and 2 species of amphibians were identified within the Bush Forever site 303. (Government of Western Australia 2000)

The area under application has a network of bushtracks scattered throughout, substantial road infrastructure to service the funeral parlour and areas which have been parkland cleared to enable the development of gravesites. This has resulted in the establishment of weed species through edge effects and disturbance of habitat for native fauna. There is evidence of rabbits within the area. (Site Visit 12/05/05)

As a result it is likely that the area under application does not have a higher level of biodiversity than that of the surrounding Bush Forever site 303. Consequently clearing as proposed is unlikely to be at variance to this principle.

63,446ha (88%) and 6 has 18,398ha (23.3%) remaining of their pre-European extents (Shepherd et al. 2001, Hopkins et al. 2001).

The vegetation associations in the area under application have been mapped by Beard (Shepherd et al. 2001) and Heddle (et al. 1980). Beard's study was significantly broader and more dated than Heddle's which was primarily confined to the Swan Coastal Plain. Beard vegetation association 6 makes up approximately 70% of the area under application. In this instance, for the same area of native vegetation, the Beard and Heddle studies provide a disparity in pre-European vegetation representation (23.6% for Beard and 29.5% for Heddle). If the more comprehensive Heddle Vegetation Complex was used to the exclusion of Beard's Vegetation associations it is still marginally below the 30% threshold.

Methodology

Heddle et al (1980)
Shepherd et al (2001)
Hopkins et al (2001)
Department of Natural Resources and Environment (2002)
EPA (2000)
GIS databases:
- Pre-European Vegetation - DA 01/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Heddle Vegetation Complexes - DEP 21/06/95.

(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 three EPP Lakes in association with seven Conservation Category Wetlands (CCW) within 5.1km of the area under application, the nearest CCW being 2.3km from the proposed area. Given the distance to these wetlands, it is considered that the vegetation under application is not wetland or watercourse dependent. As such the clearing as proposed is not at variance to this Principle.

Methodology

GIS databases:
- Geomorphic wetlands (Mgmt Categories) - Swan Coastal Plain - DOE 15/09/04.
- EPP, Lakes - DEP 28/07/03.
- EPP, Wetlands (draft) - DEP 21/07/04.
- Clearing Regulations - Environmentally Sensitive Areas - DOE 8/03/05

(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

Acid sulfate soil risk maps show no known risk of shallow or deeper Acid Sulphate Soils (ASS) or Potential Acid Sulphate Soils (PASS) (class 3) in the area under application. Although the area under proposal is for 89ha, clearing is to be carried out gradually on an as needs basis over the next 20-25 years and is to be landscaped once grave sites have been filled. It is unlikely that the clearing as proposed will cause appreciable land degradation.

Methodology

Information from Proponent (TRIM ref IN22157)
GIS databases:
- Acid Sulphate Soil risk map, SCP DOE 01/02/04.
- Soils, Statewide - DA 11/99

(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

Lake Joondalup Nature Reserve is located 3km to the north east of the area under application. It is the only CALM managed conservation reserve within the local area (5km radius).

Bush Forever site 303 borders the northern, southern and eastern sections of the area under application. The northern section of Bush Forever site 303 is intersected by Whitfords Ave effectively isolating the northern section of the area under application from the southern section of Bush Forever site 303.

The eastern boundary of the proposed area is adjacent to a thin strip (< 15m) of native vegetation which separates the Mitchell Freeway from the area under application and makes up the eastern portion of Bush Forever site 303. Degradation through edge effects caused by the proposed clearing is likely to impact upon the eastern strip of Bush Forever site 303. However the area has already been impacted upon through the construction of the freeway and access tracks servicing electrical infrastructure which separate the proposed area from Bush Forever site 303. (Site Visit 12/05/05)

address the edge effects which will impact upon Bush Forever site 303, and report on the extent of clearing which is carried out within each calendar year.

5. References

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.

CALM (2006) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref: IN 25380

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.

Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.

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.

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
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)