Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 506/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Shire of Coorow**

1.3. Property details

Property: LOT 10 ON DIAGRAM 68611 (House No. 2 BRISTOL COOROW 6515)
Local Government Area: Shire Of Coorow
Colloquial name: The Midlands Road - Location 2023 Part 10

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		Mechanical Removal	Building or Structure

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 551: Shrublands; Allocasuarina campetsris thicket (Hopkins et al. 2001, Shepherd et al. 2001).	Native flora species that will be affected by this proposal include Acacia acuminata, A. ligulata or microbyta, Grevillea teretifolia, Hakea arida, Dianella revoluta, Melaleuca viminea or nematophylla and Orobanche minor (Williams, 2005).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Observed during site visit: the area covered by clearing permit 506 consisted of sparse cover with Hakea sp., Eucalyptus sp., and Acacia sp., with no understorey and extensive weed invasion (TRIM Ref: GD484).

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 at variance to this Principle

The area under application falls within the Avon Wheatbelt Bioregion; an area recognised for its biodiversity, however the vegetation under application may have been cleared between 15 and 30 years ago (Williams, 2005), with only 7 endemic plant species remaining. Victoria Location 2023 hosts an extensive weed population, with species such as Avena barbata, out-competing native plants. The previous disturbance of this site, extensive weed invasion and limited native species density suggests that the original biodiversity has been significantly compromised. This proposal is therefore not at variance to this Principle.

Methodology

GIS Databases: Interim Biogeographic Regionalisation of Australia-EA 18/10/00.
Site visit, DoE Officer, 2005.
Williams, D., 2005.

(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 previous disturbance of this site, extensive weed invasion and limited native species density suggests that the original biodiversity has been significantly compromised. This vegetation is therefore unlikely to provide a significant habitat for specially protected fauna species.

Methodology

CALM's Threatened and Priority Fauna Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2005)].
Site visit, DoE Officer, 2005.

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

Comments

Proposal is not at variance to this Principle

No specially protected flora species have been recorded within the area under application. In addition, the site visit revealed limited endemic species regrowth (all of which have been identified and found not to be listed in CALM's Threatened and Priority Flora Database) after clearing and extensive weed invasion. This proposal is therefore not at variance to this Principle.

Methodology

GIS Databases: Declared Rare and Priority Flora list - CALM 13/08/03.
Site visit, DoE Officer, 2005.
Florabase, 2005.
CALM's Threatened and Priority Flora Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2005)].

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments

Proposal is not at variance to this Principle

The Threatened Ecological Community (TEC) data base did not include the vegetation affected by this application, therefore this proposal is not at variance to this Principle.

Methodology

GIS Databases: Threatened Ecological Communities - CALM 15/07/03

(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 at variance to this Principle

There is greater than 30% pre-European vegetation remaining in the Shire of Coorow but less than 30% in the Avon Wheatbelt Bioregion and Beard vegetation association 551. The Avon Wheatbelt is an area recognised as being extensively cleared and is considered to be vulnerable. This proposal is therefore at variance to this Principle.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	Reserves/CALM-managed land, %
IBRA Bioregion - Avon Wheatbelt	8,967,527	924,828	10.3	Vulnerable	Not available
Shire - Coorow	424,583	164,895	38.8	Depleted	Not available
Beard veg type - 551	422,337	102,167	24.2	Vulnerable	18.8

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)

Methodology

GIS Databases: Interim Biogeographic Regionalisation of Australia - EA 18/10/00, Pre-European Vegetation - DA 01/01, Local Government Authorities - DLI 08/07/04.
Shepherd et al, 2001.
Department of Natural Resources and Environment, 2002

(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 area under application falls within the Moore River catchment and lies approximately 175m from a minor non-perennial watercourse. The site under consideration does not include any wetlands or watercourses of environmental significance therefore, this proposal is not at variance to this Principle.

Methodology

GIS Databases: Hydrography, linear - DoE 01/02/04, Hydrographic Catchments (Basins and Catchments) - DoE 03/04/03.

(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 vegetation under consideration exists in a relatively low rainfall zone (400mm) on a broad, flat valley. The chief soils are hard, alkaline, yellow and mottled. As the site has been previously cleared and now supports only sparse native species with extensive weed invasion, the removal of this vegetation is unlikely to further increase on or off site land degradation.

Methodology

Department of Agriculture (2005) Map Unit Database.

Site visit, DoE Officer, 2005
DAWA, 2005.

(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 at variance to this Principle

The vegetation under application does not contribute to, provide a buffer for, or provide an ecological linkage to a conservation area. This proposal is therefore not at variance to this Principle.

Methodology

GIS Databases - CALM Regional Parks - CALM 12/04/02, WRC Estate - WRC 05/99, CALM Managed Lands & Waters - CALM 01/06/04, Proposed National Parks FMP-CALM 19/03/03, Register of National Estate - EA 28/01/03
Site visit, DoE Officer, 2005.

(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 area under application is in the Moore River catchment and does not include any Public Drinking Water Source Areas (PDWSA) or PDWSA Protection Zones. Coorow is east of the Darling Fault in granite country. The nature of this geology is such that the underground water conditions are highly localised therefore it is difficult to judge the impact of clearing on specific sites. The cumulative effect of clearing is likely to contribute to a rise in groundwater tables, however this proposal, assessed on it's own merits, is not likely to increase sedimentation, erosion, turbidity, eutrophication, or pH. There is a possibility that clearing may increase the risk of salinity however the degraded nature of the remaining vegetation suggests that this is unlikely. This proposal is therefore unlikely to be at variance to this Principle.

Methodology

GIS Databases - Current WIN data sets, PDWSA Protection Zones - DOE 07/01/04, Public Drinking Water Sources (PDWSAs) - DOE 29/11/04, Hydrographic Catchments - Catchments - DOE 03/04/03.
DAWA, 2005.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments

Proposal is not at variance to this Principle

The vegetation under application lies in an extensively cleared Bioregion in an area that experiences relatively low rainfall. The area is not low lying near a significant watercourse and is therefore unlikely to lead to an incremental increase in peak flood height or duration.

Methodology

GIS Databases - Rainfall, Mean Annual - BOM 30/09/01, Interim Biogeographic Regionalisation of Australia - EA 18/10/00, Pre-European Vegetation - DA 01/01, Local Government Authorities - DLI 08/07/04.
Shepherd et al, 2001.
Department of Natural Resources and Environment, 2002

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

Comments

The Shire of Coorow has not indicated that there are any planning requirements/approvals that would affect the clearing.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Building or Structure	Mechanical Removal	3	**Grant**	The assessable criteria have been addressed and one objection was raised. The proposal to clear 3 hectares of vegetation falls in an extensively cleared area. Given the degraded, isolated and sparse nature of the remaining vegetation, the site could not be considered to be representative of an area that is environmentally significant; nor would it contribute significantly to ecological processes. The assessing officer therefore recommends that the clearing permit be granted.

5. References

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

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, BJ (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.
Williams, D., 2005. Proposed Coorow transfer/recycling depot a report on the flora and other environmental matters on Victoria location 2023 under the control of the Shire of Coorow. Badgingarra, Western Australia.