Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 164/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Ronald Gordon & Dora Faye Lindsay**

1.3. Property details

Property: LOT 4 ON PLAN 12312
Local Government Area: Shire Of Gingin
Colloquial name:

1.4. Application

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

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
Heddle vegetation complex: Karrakatta Complex North, predominantly low open forest and low woodland of Banksia species; less consistently open forest of tuart and blackbutt (Heddle et al. 1980, Government of Western Australia 2000). Beard vegetation complex 1008: medium open woodland, marri. Beard vegetation complex 1948: low woodland, banksia on limestone (Shepherd et al. 2001, Hopkins et al 2001).	Area has been parkland cleared previously and remaining vegetation is very sparse, consisting of mainly Xanthorrhoea species (grass trees) and regenerational growth from previous parkland clearing (DAWA 2004).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The area under application has been parkland cleared previous to this application. Scattered Xanthorrhoea spp. and a few large trees remain (Site visit 02/03/05).

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 areas under application have been previously parkland cleared and the remaining vegetation is very sparse, degraded and consists mainly of native grasses, grass trees and Christmas trees (DAWA 2004). Remnant Banksia woodland on the property is of higher biodiversity value and is to be retained. Due to the degraded nature of the vegetation in the areas under application, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology DAWA (2004) (Trim Reference: EI 409)
Site visit (02/03/05)

(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

In the local area (10km radius) there has been one record of the Western Brush Wallaby. Due to the terrestrial nature and habitat requirements of this species it is unlikely that the Wallaby inhabits the area under application (CALM 2005). Kangaroos, Rosellas and other bird species were seen during the site visit, however it is unlikely

that the proposed clearing will have a significant affect on fauna habitat.

Methodology CALM (2005) (HD19418)
Site visit (02/03/05)

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

Comments

Proposal is not likely to be at variance to this Principle

Two species of declared rare flora occur in the local area (10km radius); Eucalyptus argutifolia (Wabling Hill Mallee) and Eucalytpus x mundijongensis (CALM 2005). Both of these species are found on the same vegetation complexes as the areas under application. However due to the degraded nature of the areas under application there is a low probability of these species being present.

Methodology CALM (2005) (HD19418)
GIS Databases:
- Declared Rare and Priority Flora List - CALM 13/08/03

(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 likely to be at variance to this Principle

The Threatened Ecological Community (TEC) SCP26a ('Melaleuca huegelii - M.acerosa shrublands of limestone ridges') occurs within 5km of the areas under application, however the soil and surface geology is dissimilar (CALM 2005). The areas under application have previously been parkland cleared. Therefore based on unsuitable and degraded habitat, there is a low probability of the clearing as proposed being at variance to Principle.

Methodology CALM (2005) (HD19418)
GIS Databases:
- Threatened Ecological Communities - CALM 15/7/03

(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

The vegetation under application is part of Beard vegetation association 1008 and 1948 with only 18% and 21.4% remaining (Hopkins et al. 2000, Shepherd et al.2001). The vegetation under application is also of Heddle Karrakatta Complex North that has only 20% remaining (Hopkins et al. 2001, Government of Western Australia 2000).
The State Government is committed to the National Objectives Target for Biodiversity Conservation which includes targets that prevents clearance of ecological communities with an extent below 30% of that present pre-European (Department of Natural Resources and Environment 2002, EPA 2000). Vegetation complexes in this application are below the recommended minimum of 30% representation. However the areas under application have been previously parkland cleared and may not be an accurate example of these vegetation complexes.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in reserves/CALM-managed land
IBRA Bioregion – Swan Coastal Plain	1,529,235	657,450	43	Depleted	
Shire - Gingin	315,560	177,688	56.3	Least concern	
Heddle Karrakatta Complex North	5,155	1,027	20	Vulnerable	
Beard vegetation complex 1008	5,369	967	18	Vulnerable	0.8
Beard vegetation complex 1948	81,022	17,315	21.4	Vulnerable	15.6

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

Methodology Shepherd et al. (2001)
Hopkins et al. (2001)
Department of Natural Resources and Environment (2002)
EPA (2000)
Government of Western Australia (2000)
GIS Databases:
- Pre-European Vegetation - DA 01/01
- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographical 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 at variance to this Principle

The area under application contains no wetlands or watercourses. However immediately north and adjacent to the area under application is an area mapped as Conservation Category Wetland (CCW). The proponent provided information from a Department of Environment officer that the CCW is not on the register for the Draft Swan Coastal Plains Wetland Policy (EI456). Furthermore, Mr Lindsay applied to have the wetland re-classified. As of 8th March 2005, the wetland is now afforded the category of Resource Enhancement (EI670). As such, it is unlikely that the clearing as proposed is at variance with this Principle.

Methodology

Information from Department of Environment Officer (2004) (EI456)
Information from Department of Environment Officer (2005) (EI670)
GIS Databases:
- ANCA Wetlands - CALM 08/01
- EPP Wetlands (draft) - DEP 21/07/04
- Geomorphic Wetlands (Mgmt Categories) 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 may be at variance to this Principle

The proposed clearing has the potential for eutrophication and wind erosion to occur (DAWA 2004). Risks from other forms of land degradation was considered to be low (DAWA 2004). The areas under application have no known risk of shallow or deeper Acid Sulphate Soils (ASS) or Potential Acid Sulphate Soils (PASS). There is a moderate to high risk of ASS or PASS associated with the wetland adjacent to the proposed areas to be cleared. The potential for serious land degradation is considered to be low.

Methodology

DAWA (2004) (EI409)
GIS Databases:
- Acid Sulphate Soil risk map, SCP - DOE 01/02/04

(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 may be at variance to this Principle

Adjacent to the property containing the areas under application is the Gingin Stock Route Nature Reserve (CALM 2005). CALM recommends that appropriate management procedures be implemented to ensure that the reserve is not degraded by potential impacts such as spray-drift or groundwater utilisation. It is considered that there is a medium probability of this Principle being at variance. A Nutrient Irrigation Management Plan will be assessed by the Water and Rivers Commission as part of the Groundwater Licence.

Methodology

CALM (2005) (HD19418)
GIS Databases:
- CALM Managed Lands and Waters - CALM 01/08/04

(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 at variance to this Principle

The area under application is located within a groundwater resource area, however it is unlikely that the proposed parkland clearing will cause deterioration in the quality of surface or underground water.

Methodology

GIS Databases:
- Public Drinking Water Supply Areas (PDWSAs) - DOE 04/11/04
- Groundwater Resources

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing as the nearest watercourse is over 10km away. Land adjacent to the areas under application is prone to seasonal inundation and waterlogging. However the proposed clearing is unlikely to have a significant affect on these areas.

Methodology

GIS Databases:
- Geomorphic Wetlands, Swan Coastal Plain - DOE 15/09/04
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The proponent has applied for a licence to take groundwater that is still under assessment. The proponent has provided a Nutrient Irrigation Management Plan to the Water and Rivers Commission outlining their proposed monitoring of nutrient and groundwater levels.

Submission from Shire of Gingin details that they have no objection to the proposal on the understanding that the proposed clearing is not to be commenced until Planning Consent has been obtained for Irrigated Horticulture (EI527).

Methodology Pers Coms James Yuen, Licensing Officer 14/02/05
Submission from Shire of Gingin (EI527)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	10	**Grant**	The assessible criteria have been addressed and the clearing as proposed is at variance with Principles e and may be at variance with Principles g and h. However, given the historical disturbance of the area under application and its current degraded nature, the assessing officer recommends that the permit should be granted.

5. References

CALM (2005) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref HD19418.

DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref EI409.

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 (2001) Environmental Protection of Wetlands. Preliminary Position Statement No.4. Perth, 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, 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.