Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 731/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Murray and Jenny Carson**

1.3. Property details

Property: LOT 10609 ON PLAN 209385 (WEST BINNU 6532)
Local Government Area: Shire Of Northampton
Colloquial name: Telegraph Road - Lot 10609 on Plan 209385

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
19		Mechanical Removal	Grazing & Pasture

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 408: Shrublands; scrub-heath on coastal association, yellow sandplain. (Hopkins et al. 2001, Shepherd et al. 2001)	The area under application consists of approximately 37ha of a 1320ha property. The vegetation under application consists mainly of Banksia sceptrum, B. prionotes, B. menziesii, B. attenuata, B. victoriae, Grevillea leucopteris, G. candelabroides, Eucalyptus Eudesmioides and E. jucunda. Other species were Acacia scirpifolia, Melaleuca scabra, Verticordia monadelpha, Actinostrobus arenarius, Patersonia occidentalis, Calothamnus quadrifidus and Eremaea beaufortioides. The area to be cleared is original vegetation with little disturbance, however there were signs of rabbits and feral pigs.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The description of the vegetation under application was obtained after a site visit to the property on Monday 8th August 2005.

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 area under application consists of small isolated patches of remnant vegetation within cleared paddocks. The vegetation is in excellent condition with intact structural diversity, however the habitat value for fauna and avifauna is limited to those species that can survive in small patches of remnant vegetation and few, if any, native mammals would survive in these areas (Site visit 8th August 2005). Given the small size and distance from the surrounding areas of bushland, it is unlikely that the area under application has a higher biodiversity than that represented in the 486ha of remnant vegetation on the Western side of the property or in the adjacent Kalbarri National Park. This proposal is therefore unlikely to be at variance with this Principle.

Methodology

Site visit (8th August 2005)
GIS Databases:
- Interim Biogeographic Regionalisation of Australia-EA 18/10/00.

(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

CALM advise that in total 6 taxa of Threatened fauna and 7 taxa of Priority fauna have been recorded within a 50km radius of the area under application. The nearest occurrence of Threatened fauna is located approximately 15.6km and one occurrence of Priority 5 taxa has been recorded approximately 6.2km from the area under application, both located in the Kalbarri National Park. The area under application consists of 26 small areas of remnant vegetation with the majority of these areas isolated within cleared paddock areas. While it is accepted that some fauna, such as spiders, invertebrates and small birds may utilise these remnant islands as they move through the landscape, it is unlikely that Threatened or Priority fauna will be detrimentally affected by this proposal. (CALM 2005) Therefore, this proposal is unlikely to be at variance with this Principle.

Methodology

CALM (2005)

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)].

(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

CALM advise that in total 16 taxa of Declared Rare Flora and 136 taxa of Priority flora (comprising in excess of 1000 records) have been recorded within 50km of the area under application. The nearest occurrences of Declared Rare Flora are three records of Drakaea concolor and one record of Caladenia hoffmanii, occurring together in the Kalbarri National Park and located approximately 12.7km from the area under application. According to database records an occurrence of Melaleuca oldfieldii (Priority 2), Scholtzia sp. Ajana (Priority 3) and Verticordia dichroma var. syntoma (Priority 3) have been recorded on this property within bushland adjacent to the area under application. (CALM 2005) No Declared Rare Flora or Priority Flora was noted during the site visit (8th August 2005). Due to the area under application consisting of small patches of remnant vegetation and surrounded by cropping land, it is unlikely that this proposal is at variance with this Principle.

Methodology

CALM (2005)

Site visit (8th August 2005)

GIS Databases:

- Declared Rare and Priority Flora list - CALM 13/08/03.

CALM's Threatened Flora Data Management System and CALM's Herbarium Specimen Collection 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 threatened ecological community.

Comments

Proposal is not likely to be at variance to this Principle

The Threatened Ecological Community (TEC) database did not highlight any TEC's within the area under application and there are no known occurrences of Threatened Ecological Communities within a 50km radius of the area under application (CALM 2005). This proposal is therefore unlikely to be at variance with this Principle.

Methodology

CALM (2005).

Site visit (8 August 2005).

GIS Databases:

- Threatened Ecological Communities - CALM 15/07/03

CALM's Threatened Ecological Community 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)].

(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 proposed to be cleared is part of Beard vegetation association 408 (Hopkins et al. 2001). There is 40.4% of this association remaining, making it depleted by conservation status standards, however the Geraldton Sandplains Bioregion and Shire of Northampton have 26.8% and 19.6% respectively of the native vegetation remaining within the intensive agricultural area. The proposed clearing is therefore at variance to this Principle.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	Reserves/CALM-managed land, %
IBRA Bioregion - Geraldton Sandplains					

	2,474,401***	663,290***	26.8	Vulnerable	Not available
Shire - Northampton	1,354,323	83,759	19.6	Vulnerable	Not available
Beard veg type - 408	382,507	154,708	40.4	Depleted	62.6

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)
*** Area within the Intensive Landuse Zone

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**
No watercourses or wetlands are present within 10km of the area under application. The Murchison River lies approximately 11km to the northeast of the proposal. Due to the distance from any watercourse the proposal is therefore not at variance to this Principle.

Methodology GIS Databases:
- Hydrography, linear - DoE 01/02/04

(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**
The area under application falls within the 500mm rainfall zone which is average for Western Australia. The proposal does not fall within an acid sulphate soil risk area, however does exhibit a low risk of salinity. Given the small area (19ha) of remnant vegetation proposed to be cleared it is considered unlikely that the clearing will adversely impact on groundwater quality (DAWA 2005). The loose sandy nature of the soil surface makes the wind erosion risk of the soil type high. However the minimum tillage sowing techniques the farmer uses ensures cover on the soil surface at all times and therefore the clearing should not pose a significant risk for land degradation (DAWA 2005). Therefore the proposal is not likely to be at variance to this Principle.

Methodology DAWA (2005)
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- 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 is not at variance to this Principle**
The Kalbarri National Park lies adjacent to the property and approximately 2.5km from the area under application. The vegetation under application consists of small isolated patches within cleared paddocks and has been disturbed from agricultural activities and does not contribute to an ecological linkage or provide a buffer to the Kalbarri National Park. In addition there is still approximately 486ha of remnant vegetation remaining on the property and Beard vegetation association 408 is well represented with 62.6% reserved on conservation land. Therefore the proposal is 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

(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 falls within the Hutt River catchment and does not fall within any Public Drinking Water Source Areas (PDWSA) or Protection Zones. The area to be cleared is relatively small (19ha) in comparison to the remaining remnant vegetation (486ha) and is 11km from the Murchison River. Due to the distance from any watercourse and the relatively small amount to clear it is unlikely that the proposal will cause

deterioration in the quality of surface or underground water and is therefore not at variance to this Principle (Midwest Gascoyne Hydro Unit, 2005).

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.
Midwest Gascoyne Hydro Unit, 2005.

(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 at variance to this Principle**
No floodways or areas of flooding exist within the area under application. The property is located approximately 11km from the Murchison River and located on mainly yellow earthy sands. Given the large area the proposal is spread over and the transmissive nature of the sandy soil, the proposed clearing is unlikely to cause or exacerbate the incidence of flooding and is therefore, not at variance to this Principle.

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

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

Comments

The Shire of Northampton has indicated that the Council has no objections or comments to make in regards to the proposed clearing.

An Environmental Impact Assessment (EIA) was conducted over the area under application as part of the Geraldton Region Plan which identified proposed areas for infrastructure and areas of conservation within the Midwest region. This EIA does not affect this application as the property in question is already partly cleared for agricultural purposes and was not identified as an area of interest (EPA Bulletin Number 891).

The area under application is on freehold land and therefore Native Title is extinguished.

There is no further requirement for a RIWI Act Licence, Works Approval or EP Act Licence for the area under application.

The area under application was reduced to exclude part of the property, which was exempt under a previous Notice of Intent to Clear (NOIC). Had this area been included in the application it would not have been at variance with the clearing principles.

Methodology Submission - Shire of Northampton
EPA Bulletin Number 891

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Grazing & Pasture	Mechanical Removal	19	**Grant**	The assessable criteria have been addressed and the clearing as proposed is at variance to Principle e. For Principle e - The Geraldton Sandplains Bioregion and the Shire of Northampton both have less than 30% of remnant vegetation remaining in addition to Beard vegetation association 408 with 40.4% remaining. The applicant is in discussion with Greening Australia to collect the seed stock prior to clearing and to use the vegetation removed for brushing on a Hutt River Catchment project. In addition, given that this vegetation association is well represented in conservation estate and that there is approximately 486ha of remnant vegetation remaining on the property the assessing officer therefore 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 IN24904.

DAWA (2005) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref IN23314.

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 Bulletin Number 891 (1998) Environmental Impact Assessment, Geraldton Region Plan. Environmental Protection Authority. 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.

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)