Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 255/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **David & Rosetta Tognella**

1.3. Property details

Property: LOT 688 ON PLAN 126809 (WAROONA 6215)
Local Government Area: Shire Of Waroona
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		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 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; tea-tree (melaleuca spp.) Beard vegetation association 126: Bare Areas; freshwater lakes (Hopkins et al. 2001; Shepherd et al. 2001) Heddle Vegetation Complex - Southern River Complex (Heddle et al. 1980)	A vegetation survey conducted by Bennett Environmental Consulting (2003), identifies the vegetation under application as Low Woodland of Banksia attenuata, Eucalyptus marginata subsp marginata and Allocasuarina fraseriama over a Low Open Shrubland dominated by Hibbertia hypercoides and a Grassland of introduced species in sandy soil.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Observed during site visit 25/2/2005: The majority of the area (10ha) to be cleared is quite degraded, mainly as a result of on-going landuse practises. The area is currently open to stock grazing, and as a result, understorey vegetation is mostly absent from the area. Upperstorey vegetation appears quite degraded and old, indicating that regeneration of vegetation within the area under application is not occurring. Property also contains an area classified as Multiple Use Wetland which, despite grazing pressures, is in relatively good condition, with much of the vegetation structure in tact.

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

A site inspection on the 25 February 2005 found that the area under application is quite degraded, with understorey vegetation is predominantly absent and upperstorey vegetation appearing quite deteriorated. This finding is in contrast to vegetation observed within close proximity to the site, which appears in good condition, and is not to the same degraded condition as that under application.

Surveys into both the flora and fauna, outlined by Strategen (2004), identify that the area does not contain any significant habitat, flora, or ecological communities, and thus is not likely to be representative of an area of higher biological diversity than surrounding vegetated areas.

Methodology Site inspection
Strategen (2004)

(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

A Fauna Survey conducted by Bamford Consulting Ecologists found that overall, the area under application is

not considered to represent an area of significant habitat for indigenous fauna (Strategen 2004).

The survey identified that with the degraded condition of the application area, upperstorey vegetation supports few tree hollows, and that the noted presence of feral honeybees in the area would potentially impact on the availability of nursing hollows. With understorey being predominantly absent from the application area, the survey indicates that vegetation present within other areas of the property, and adjoining properties, are much more likely provide a broader range of habitat for indigenous fauna.

Methodology Site inspection - 25/2/05
Strategen (2004)

(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

The local area, defined as a 10km radius surrounding the proposed site, contains 26 known populations of Rare and/or Priority Flora. Of these, five exist within the same vegetation type as that under application.

Despite the possibility of Declared Rare or Priority Flora, a flora survey conducted by Bennett Environmental Consulting in September 2003, identified no Declare Rare or Priority Flora within the area under application, or in any of the other vegetated areas on the property.

Methodology Bennett Environmental Consulting Pty Ltd (2003)

(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 Communities (TEC) database has identified 10 known TEC populations within the local area, defined as a 10km radius surrounding the proposal. Of these, no populations are known to exist within the same vegetation complex as that under application.

A survey of the area under application by Bennett Environmental Consulting (2003), did not identify any Threatened Ecological Communities within the boundaries of the property.

Methodology Bennett Environmental Consulting (2003)

(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 defined as Beard vegetation association 1000 (Hopkins et al. 2001) and Heddle vegetation complex 'Southern River Complex' (Heddle et al. 1980), both of which are identified as having a representation of below 30%.

The State Government is committed to the National Objective Targets for Biodiversity Conservation, which includes targets that prevent clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment 2002; EPA 2000). Beyond this value, species extinction is believed to occur at an exponential rate and any further clearing map have irreversible consequences for the conservation of biodiversity and is, therefore, not supported.

	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 of Waroona	83,508	50,761	60.8%	Least concern	
Local Area (ie 10km radius)	~34,472	~4,082.26	~11.8%	Vulnerable	
On the property	64.73	39.7	61.3%	Least concern	
Beard vegetation associations					
- 1000	119,340	29,396	24.6%	Vulnerable	13%
-126	224,442	207,137	92.3%	Least concern	2%
Heddle vegetation complex - Southern River Complex		57,979	11,501	19.8%	
	Vulnerable	1.5%			

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

Methodology Shepherd et al. (2001)
Hopkins et al. (2001)
Heddle et al. (1980)

Department of Natural Resources and Environment (2002)
EPA (2000)

(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

The area under application is not considered to contain vegetation associated with a watercourse or wetland. The property does however contain a Multiple Use Wetland, approximately 200 metres to the south of the proposed clearing.

The Water and Rivers Commission Position Statement: Wetlands (2001) provides recommended buffer widths in regards to landuse proximity to significant wetlands. With the proponents' commitments to revegetation and reserve, a vegetated buffer of approximately 200 metres between the proposed works and the wetland will exist. This distance is in line with those recommended within the Position Statement.

Dr. Robin Smith (personal communication, 15 March 2005), Supervising Hydogeologist with the Department of Environment, has indicated that the proposed clearing of vegetation, and future landuse, should not have an appreciable impact on the wetland, provided that normal conditions for extractive industries apply.

Methodology Water and Rivers Commission (2001)

(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 Department of Agriculture Land Degradation Assessment Report (DAWA 2004) raises no potential land degradation issues for this application. The report indicates that proposed 'cell clearing', and associated on-going revegetation, will minimise the potential low risk issues of wind / water erosion, salinity, waterlogging, and eutrophication.

Methodology DAWA (2004)

(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 area under application is located approximately 1.5 kilometres north from Buller Nature Reserve, a CALM managed Class A Reservation.

While all vegetation located within Lot 688 and surrounding properties would contribute to the size and ecological linkages within this remaining stand of vegetation, it is not considered that vegetation from the area under application would contribute significantly to the environmental values of the nearby reserve. Taking into account the current quality of vegetation within the area under application, it is not considered that the vegetation would represent a significant ecological linkage or contain habitats not well represented on the conservation land.

Methodology GIS Database - CALM Managed Lands and Waters - CALM 1/6/2004
Site Inspection 25/2/2005

(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

Dr. Robin Smith (personal communication, 15 March 2005), Supervising Hydogeologist with the Department of Environment, has indicated that the proposed clearing of vegetation, and future landuse, should not have an appreciable impact on the groundwater or surface water quality, provided that normal conditions for extractive industries apply.

Methodology Site inspection 25/2/2005

(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 likely to be at variance to this Principle

Dr. Robin Smith (personal communication, 15 March 2005), Supervising Hydogeologist with the Department of Environment, has indicated that the proposed clearing of vegetation, is not likely to cause of exacerbate the incidence of flooding, as the area primarily contains sandy soils, with quite good drainage.

While the clearing of vegetation from the property will most likely increase the infiltration and recharge of

groundwater on site, the proposed Staged clearing of the area under application, and subsequent Staged revegetation should keep this impact to a minimum.

Methodology Site inspection 25/2/2005

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

Comments

No comment.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	10	**Grant**	The assessable criteria have been addressed, and the application has been found to be at variance to Princple (e). Although the area under application contains vegetation under-represented at both a local regional scale, the proponents commitments to both revegetation and management of an additional 10, and the revegetation of the proposed sand extraction site, should yield a more positive environmental result than continuance of the status quo. The Department of Environment recommends this application for approval, with the following conditions and advice. Conditions: 1. The permit holder shall establish and maintain native vegetation in the area hatched green on Plan 255/1-1 in accordance with the following conditions: (a) the vegetation to be established shall consist of overstorey, midstorey and understorey species that are native to the area to an average planting density of 1000 plants per hectare; (b) seed used in the replanting shall be sourced from within a 5 kilometre radius of the land subject to this permit; and (c) the plantings are to commence before 31 August 2005 and be substantially completed by 31 August 2006. 2. The Permit Holder shall adequately manage or fence the area outlined in red on attached Plan 255/1-1 to exclude all classes of livestock. 3. The Permit Holder shall selectively remove or kill all plant species that are not native vegetation within the area hatched green on attached Plan 255/1-1 every year during the months of June and July. Advice: 1. The Permit holder should endeavour to actively manage non-native vegetation / weed infiltration through all stands of native vegetation within the property. 2. It is recommended that, at the completion of revegetation for the sand extraction area, the Permit Holder enter all native vegetation into a Conservation and Land Management Nature Conservation Covenant.

5. References

Bennett Environmental Consulting Pty Ltd (2003) Vegetation of proposed sand extraction site at Lot 688 Buller Road Waroona West.

DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref CEO131/05.

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.

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, 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.
Strategen (2004) Land clearing for sand extraction, Lot 688 Buller Road, Waroona West.