Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2290/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: MR Michael Gill

1.3. Property details

Property: LOT 10903 ON PLAN 203844 (SMITH BROOK 6258)
LOT 10903 ON PLAN 203844 (SMITH BROOK 6258)
LOT 10903 ON PLAN 203844 (SMITH BROOK 6258)

Local Government Area: Shire Of Manjimup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.07		Mechanical Removal	Dam construction or maintenance

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: - Unit 1144 (Nornalup): Tall forest; karri & marri (Corymbia calophylla) (Hopkins et al., 2001; Shepherd, 2006). Mattiske: - Lefroy (LF): Tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and low woodland of Agonis juniperina-Callistachys lanceolata on lower slopes in hyperhumid and perhumid zones (Havel & Mattiske Consulting, 1998).	The proposal involves clearing approximately 0.07 hectares for the purpose of dam construction.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Description of the clearing application area is based on orthomosaic mapping.

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 proposal is for the clearing of approximately 0.07 hectares. The area under application is within a watercourse and the vegetation under application appears to be in good condition (Keighery, 1994).

The area under application is located within the Warren Bioregion, which retains approximately 86.8% (Shepherd, 2006) of the pre-clearing extent. The local area (10 kilometre radius) is approximately 70% vegetated, with the majority of that vegetation managed by DEC as State Forest.

Given the scale (0.07 hectares) and percentage of surrounding remnant vegetation the proposed clearing does not hold a high level of biological diversity and is therefore not at variance to this Principle.

Methodology Keighery (1994);
Shepherd (2006);

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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 at variance to this Principle

The proposal is for the clearing of approximately 0.07 hectares. The vegetation under application is within a watercourse and appears to be in good condition (Keighery, 1994).

There are several records of threatened and priority fauna species within a 10 km radius of the proposed clearing. The local area is approximately 70% vegetated, with the majority of that vegetation managed by DEC as State Forest. Therefore, given the scale (0.07 hectares) and percentage of surrounding local vegetation, the area under application is not considered significant habitat for fauna indigenous to Western Australia and is therefore not at variance to this Principle.

Methodology

Keighery (1994);

GIS Databases:
- Threatened Fauna - SAC Biodataset - 22/8/07;
- CALM Managed Lands and Waters - CALM 1/6/04
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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

Several populations of Caladenia christineae (DRF) and Caladenia harringtoniae (DRF) have been recorded within 10 kilometres of the area under application.

Both species are described as tuberous, perennial herbs that flower in September to November and occur in winter-wet flats, margins of lakes, creeklines and granite outcrops (DEC, Flora Base, 2008).

The soils of the area under application are described as hard acidic yellow and red mottled soils and brown earths, containing ironstone gravels; some on major stream terraces (Northcote et al., 1960-68).

Given the above the area under application has the potential to support local rare flora (i.e. occurs within a watercourse and consistent soil type); however given the scale (0.07 hectares), the proposed clearing is unlikely to be considered necessary for the continued existence of rare flora, and therefore is not likely to be at variance to this Principle.

Methodology

DEC, Flora Base (2008);
Northcote et al. (1960-68);

GIS Databases:
- DEFL, SAC Bio Dataset - 22/8/07;
- Soils, Statewide

(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

There are no known records of Threatened Ecological Communities (TECs) within a 10 kilometre radius of the proposed clearing; therefore the area under application is unlikely comprise the whole or part of, or be necessary for the maintenance of local TECs, and is therefore not likely to be at variance to this Principle.

Methodology

GIS Databases:
- TEC Database, SAC Bio Dataset - 22/8/07;
- Threatened Ecological Communities - CALM

(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 not at variance to this Principle

Pre-European area (ha)	Current extent (ha)	Remaining %	% in reserves/DEC-managed land

IBRA Region:				
- Warren	833,981	663,141	79.5*	82.4
Local Government Authority:				
- Shire of Manjimup	696,702	589,728	84.6*	59.4
Vegetation type:				
Beard:				
- Unit 1144 (Nornalup)	160,315	127,463	79.5*	42.6
Mattiske:				
- Lefroy (LF)	201,286	164,947	81.9**	N/A

* (Shepherd, 2006)
** (Mattiske & Havel, 1998)

The application is located within the Warren Bioregion in the Shire of Manjimup. The extent of native vegetation in these areas is 79.5% and 84.6% (Shepherd, 2006), respectively.

Given the percentage of vegetation remaining in the local area (70% in 10 kilometre radius), the proposed clearing is not considered significant remnant vegetation in an extensively cleared area and is therefore not at variance to this Principle.

Methodology Shepherd (2006);
Mattiske & Havel (1998);

GIS databases:
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00;
- Pre-European Vegetation - DA 01/01;
- Mattiske Vegetation - CALM 24/3/98;
- Local Government Authorities - DLI 8/7/04

(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 at variance to this Principle

The area under application is located within the Smith Brook (minor perennial watercourse); the area under application is therefore within an environment associated with a watercourse and at variance to this Principle.

The vegetation under application appears to comprise thick riparian vegetation, i.e. tea-tree, Juncus spp., and other swamp reeds, etc., which are characteristic of watercourses throughout the greater Warren region. Given the scale (0.07 hectares), the proposed clearing is unlikely to significantly impact on the environmental values of the watercourse.

Methodology GIS Databases:
- Hydrography, Linear - DoE 1/2/04;
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03;
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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 soils of the area under application are described as hard acidic yellow and red mottled soils and brown earths, containing ironstone gravels; some on major stream terraces (Northcote et al., 1960-68).

The groundwater salinity is 500 to 1000 mg/L and the hydrogeology consists of rocks of low permeability with local aquifers in fractured and weathered rocks.

Given the percentage of surrounding vegetation (70% in 10 kilometre radius), the groundwater salinity and the hydrogeology, the proposed clearing of 0.07 hectares is unlikely to cause appreciable land degradation and therefore is not likely to be at variance to this Principle.

Methodology Northcote et al. (1960-68);

GIS Databases:
- Salinity Risk LM25m - DOLA 00;

- Hydrogeology, Statewide - DoW;
- Groundwater Salinity, Statewide - DoW

(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 upstream from DEC estate; the vegetation between the two areas along the watercourse is thick and would provide significant filtering of the water prior to reaching downstream areas; thereby reducing the impacts of sedimentation (DoW, 2008).

The local area (10 kilometre radius) is well represented with conservation estate (i.e. predominantly DEC managed State Forest); given the scale (0.07 hectares) the proposed clearing is unlikely to directly impact on the environmental values of any nearby area managed for conservation and is therefore not likely to be at variance to this Principle.

Methodology

DoW (2008);

GIS Databases:
- Register of National Estate - EA 28/01/03;
- CALM Managed Lands and Waters - CALM 1/07/05

(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

Clearing is proposed during the summer months; DoW Manjimup (2008) advises there will be minimal, if any, stream flow during this time of the year. Vegetation downstream from the area under application is thick and will provide substantial filtering prior to reaching downstream areas (including DEC estate); thereby minimising the impact of sedimentation from disturbing the beds and banks of the watercourse.

Given the above, the proposed clearing of 0.07 hectares is unlikely to cause significant deterioration in the quality of surface or underground water and is therefore not likely to be at variance to this Principle.

Methodology

Northcote et al. (1960-68);

GIS Databases:
- Hydrographic Catchments, Catchments - DoW;
- Topographic Contours, Statewide - DOLA 12/9/02;
- Groundwater Salinity, Statewide - DoW;
- Hydrogeology, Statewide - DoW

(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 likely to be at variance to this Principle

The proposed clearing of 0.07 hectares is unlikely to cause or exacerbate the incidence or intensity of flooding and is therefore not likely to be at variance to this clearing principle.

Methodology

GIS Databases:
- Soils, Statewide;
- Leeuwin 50cm ORTHOMOSAIC - DLI04;
- Topographic Contours, Statewide - DOLA 12/9/02

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

Comments

The area under application is within the Warren River and tributaries surface water management area, gazetted for surface water management under the Rights In Water and Irrigation Act 1914 (RIWI). The Department of Water (DoW) (2008) advises the proponent has submitted an application to interfere with Beds and Banks (PMB), to create a header dam for a domestic hydro electric plant. Given the proposed use is non-consumptive, DoW consider the proponent to be expressing his "riparian right", and therefore does not require the proponent to hold a surface water licence.

The area under application falls within Zone C of the Warren River Water Reserve, managed under the Country Areas Water Supply Act 1947; dam construction is considered a compatible activity with CAWS policy in Zone C. The granting of a clearing permit under the EP Act will exempt the proponent from obtaining a CAWS licence to clear.

The area is within an unassigned Public Drinking Water Source Area (PDWSA) of the abovementioned water

reserve. At present, additional restrictions do not apply in unassigned PDWSAs.

The Shire of Manjimup advises that development approval is not required for this purpose.

No public submissions have been received for this proposal.

Methodology

DoW (2008);

GIS Database:
- CAWSA Part IIA Clearing Control Catchments - DoW;
- Public Drinking Water Source Areas (PDWSAs) - DoW

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction o maintenance	Mechanical Removal	0.07	The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing: - is at variance to Principle (f); and - is not or is not likely to be at variance to the remaining clearing Principles.

5. References

Department of Environment and Conservation (DEC), Flora Base (2008) http://florabase.dec.wa.gov.au (Retrieved 5 March 2008).

Department of Water (2008). TRIM Ref: DOC47589.

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.

Mattiske, E.M. and Havel, J.J. (1998). Vegetation mapping in the South West of Western Australia. Department of Conservation and Land Management, Perth.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Sac Bio Datasets (22/8/07). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia.

Shepherd, D.P. (2006). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)