Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1901/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Colin Edward Barber

1.3. Property details

Property: LOT 9635 ON PLAN 203095 (LINFARNE 6258)

Local Government Area: Shire Of Manjimup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
8		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 Vegetation Association 3: Medium forest; jarrah-marri (Shepherd et al. 2001). Yanmah (YN1) Complex: Mixture of tall open forest of Eucalyptus diversicolor and tall open forest of Corymbia calophylla-Eucalyptus patens-Eucalyptus marginata subsp. marginata over Agonis flexuosa and Agonis juniperina on valleys in perhumid and humid zones (Mattiske Consulting, 1998).	The proposal is for approximately 8 hectares of native vegetation for construction of a dam and upgrades to the existing boundary fence line. The vegetation varies in condition from degraded to good (Keighery, 1994), with little to no understorey. The majority of the area has been previously cleared and burned for the construction of a dam. The area is currently grazed by stock.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the clearing application area is based on a site inspection conducted by DEC officers on 3 October 2007.

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 proposal is for the clearing of approximately 8 ha for the construction of a dam and fence line maintenance. The area under application is disturbed, and as such varies in condition between degraded and good (Keighery, 1994).

The local area (10 km radius) is approximately 50% vegetated, with approximately 85% of that vegetation managed by DEC for conservation purposes (including National Parks, State Forests and Nature Reserves).

Given the application comprises 8 ha of disturbed remnant vegetation within an area well represented by National Parks, State Forest and Natures Reserves, the proposed clearing is not likely to hold a high level of biological diversity and is not likely to be at variance to this Principle.

Methodology Keighery (1994);

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 8 ha for the construction of a dam and fence line maintenance. The area under application is disturbed, and as such varies in condition between degraded and good (Keighery, 1994).

There are several records of threatened and priority fauna within 10 km of the proposed clearing. The local area (10 km radius) is approximately 50% vegetated, with the majority being DEC managed State Forest; therefore given the condition of the vegetation under application and the 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:
- CALM Managed Lands and Waters - CALM 1/07/05;
- Threatened Fauna SAC Bio Dataset - 05/06/07;
- 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 harringtoniae (DRF) have been recorded within a 10 km radius of the proposed clearing.

Caladenia harringtoniae is a tuberous, perennial herb that flowers in October to November and occurs on on swamps and flats, which are inundated for several months of the year, and along creeklines in Jarrah and Karri forests (CALM, 2004; DEC, Florabase, 2007).

The nearest recorded occurrence is 6.3 km east of the applied area, on a road verge. Despite this species being recorded within the same soil and vegetation type as the applied area, it is considered unlikely this species would be present within the area under application, given the disturbance and condition of the area.

The local area (10 km radius) is approximately 50% vegetated with the majority being DEC managed State Forest.

Given the condition of the vegetation under application and the surrounding local vegetation, the proposed clearing is not likely to be necessary for the continued existence of rare flora and is therefore not likely to be at variance to this Principle.

Methodology

CALM (2004);
DEC, Florabase (2007);

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

(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 Threatened Ecological Communities or Priority Ecological Communities within a 15 km radius of the proposed area.

Given the condition of the vegetation under application; the surrounding local vegetation; and the distance from the nearest recorded TEC occurrence, the proposed clearing is not likely to comprise the whole or part of, or be necessary for the maintenance of a TEC and is therefore not likely to be at variance to this Principle.

Methodology

GIS database:
- TEC Database - SAC Bio Datasets; 22/8/07

(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	Current extent reserves/CALM (ha)*	Remaining (ha)*	(%)*	Conservation		% In **status managed land
IBRA Bioregions						
- Warren	851,529	724,014	86.6	Least Concern		
Shire of Manjimup	705,670	591,748	83.9	Least Concern	75	
Vegetation type:						
Beard: Unit 3	2,390,534	1,661,219	69.5	Least Concern		16.3
Mattiske:						
Yanmah (YN1)	195,125	157,050	80.5	Least Concern		

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

The area under application is located within the Shire of Manjimup, in the Warren Bioregion. The extent of pre-European vegetation within these areas is 83.9% and 86.6%, respectively (Shepherd et al., 2001).

Based on the remaining vegetation in the area, the proposed clearing is not considered to be a significant remnant vegetation in an extensively cleared area, and is therefore not at variance to this Principle.

Methodology

Shepherd et al. (2001);
Hopkins et al. (2001);
Department of Natural Resources and Environment (2002);
EPA (2000);
Mattiske (1998);
GIS Databases:
- Pre-European Vegetation - DA 10/01;
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00;
- Mattiske Vegetation - CALM 24/3/98;

(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 purpose of the proposed clearing is for construction of a dam; therefore the area under application is within an environment associated with a watercourse.

Given the above, the proposal is at variance to this Principle; however the disturbed nature and degraded to good (Keighery, 1994) condition of the area has significantly modified the value of the native vegetation and therefore the association with this watercourse.

Methodology

Keighery (1994);

GIS databases:
- Hydrography Linear - DoE 1/2/04;
- Manjimup 50cm ORTHMOSAIC - 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 mottled soils with some hard acidic red mottled soils and brown earths, all containing ironstone gravels (Northcote et al. 1960-68).

The groundwater salinity is 500 - 1000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.

Given the condition of the vegetation under application; the level of groundwater salinity; the hydrogeology of the area; and the remaining vegetation in the local area (50% in 10 km radius), the proposed clearing is not

likely to cause appreciable land degradation and is not likely to be at variance to this Principle.

Methodology Northcote et al. (1960-68);

GIS databases:
- Groundwater Salinity, Statewide 22/02/00;
- Hydrogeology, Statewide - DoW;
- CALM Managed Lands and Waters - CALM 1/7/05

(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 proposed for clearing lies adjacent to the North Donnelly State Forest.

Given the condition of the vegetation under application and the remaining vegetation within the local area (50% in 10 km radius), the proposed clearing is not likely to impact on the environmental values of any nearby conservation areas in the local setting, and is therefore not likely to be at variance to this Principle.

Methodology GIS databases:
- CALM Managed Lands and Waters - CALM 1/07/05;
- 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 likely to be at variance to this Principle**
The application is located within the Manjimup Brook / Yanmah-Dixvale subcatchment of the Donnelly River Catchment. The area proposed to be cleared has a low salinity risk (GIS Database) and a groundwater salinity of 500-1000mg/L (GIS Database).

Given the condition of the vegetation under application and the remaining vegetation within the local area (50% in 10 km radius), the proposed clearing is not likely to cause deterioration of water quality and is therefore not likely to be at variance to this Principle.

Methodology GIS databases:
- CAWSA Part2A clearing control catchment - DoE 17/11/05;
- Evaporation Isopleth - BOM 09/98;
- Hydrogeology, statewide - WRC 05/02/02;
- Hydrographic Catchments, Catchments - DoE 3/4/03;
- PDWSA, Gazetted - WRC 01/11/02;
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04;
- Rainfall, Mean Annual - BOM 30/09/01;
- RIWI Groundwater Areas - WRC 13/06/00;
- RIWI Surface Water Areas - WRC 18/10/02

(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**
Given the size of the application area and the high percentage of vegetation within the local area, the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

Methodology GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02;
- Manjimup 50cm ORTHOMOSAIC - DLI04

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

Comments

The proposed clearing is within the Upper Donnelly surface water catchment area gazetted for surface water management under the Rights in Water and Irrigation Act 1914 (RIWI). The Department of Water (DoW) Manjimup have issued a permit to interfere with beds and banks (PMB) on Lot 9635 (DoW, 2007).

The Shire of Manjimup advised that they have no comment to make on this application (Shire of Manjimup, 2007).

No public submissions have been received to date by the Department for this proposal.

Methodology DoW (2007);

Shire of Manjimup (2007)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction o maintenance	Mechanical Removal	8	Assessable criteria have been addressed and the assessment of the vegetation under application revealed the proposal is at variance to Principle (f).

5. References

DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC36468.

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.

DoW (2007). Department of Water, Manjimup, Western Australia. TRIM Ref: DOC41508.

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 Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.

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.

Shire of Manjimup (2007). Comments on clearing proposal. TRIM Ref: DOC30379.

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)