Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2126/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Peter Domenic Giumelli

1.3. Property details

Property: LOT 116 ON PLAN 302284 (BENGER 6223)
LOT 1 ON DIAGRAM 47024 (House No. 226 MITCHELL BENGER 6223)
Local Government Area: Shire Of Harvey
Colloquial name: 100 trees

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.2	100	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 968: Medium woodland: jarrah, marri & wandoo (Shepherd et al. 2001; Hopkins et al. 2001). Heddle Vegetation Complex: Guildford Complex: mixture of an open-forest of marri-jarrah-wandoo, with minor components including fringing woodland of E. rudis-M. rhaphiophylla along the streams (Heddle et al. 1980).	The proposal involves clearing approximately 100 scattered paddock trees and 0.2ha for the purpose of constructing a centre pivot. The vegetation comprises scattered Melaleuca rhaphiophylla (paperbark), with one small wet area supporting shrub species. The applied area is completely degraded (Keighery, 1994) and currently used as intensive, flood irrigated paddocks, that have been almost completely cleared.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Description of the clearing application area is based on a site inspection conducted by DEC officers on 2 November 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 100 scattered paddock trees and 0.2ha of native vegetation for the purpose of constructing a centre pivot.

The area proposed to be cleared is completely degraded (Keighery 1994; DEC Site Visit, 2007). The area has been heavily parkland cleared and consists of pasture and grazing species and has no native under storey species, save a small wet area that comprises shrub species (DEC Site Visit, 2007).

Based on the unlikely significance of the area to contribute to the maintenance of rare flora and TECs and the low significance of the areas habitat values, it is unlikely that the vegetation proposed for clearing comprises high biological diversity.

Methodology Keighery (1994);
DEC Site Visit (2007);

GIS databases:
- CALM Managed Lands and Waters - 1/07/05;
- Bunbury 50cm ORTHMOSAIC - 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 likely to be at variance to this Principle

The proposal is for the clearing of approximately 100 scattered paddock trees and 0.2ha of native vegetation for the purpose of constructing a centre pivot. The vegetation lacks native understorey and is considered to be completely degraded (Keighery, 1994).

Within the local area (10km radius from the proposed area for clearing) there are three known records of Declared Rare Fauna, the Numbat (T), the Chuditch (T) and the Quokka (T), all approximately 7 km east of the proposed area and associated with the Harris River State forest. There are also several known records of Priority fauna within the local area, including the Black Striped Minnow (P3), Little Bittern (P4) and Water rat (P4).

Given the nature of the clearing and the surrounding vegetated area, the area under application is not considered to be significant habitat for fauna indigenous to Western Australia.

Methodology

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/07/05;
- Threatened Fauna SAC Bio Dataset - 05/06/07

(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

A desktop study found several records of the declared rare Drakaea micrantha (DRF) and Drakaea elastica (DRF) within the local area (10km radius) of the proposed clearing; however given the nature of the applied area it is unlikely to include or is necessary for the continued existence of, rare flora.

Methodology

GIS database:
- DEFL SAC Bio Datasets 05/06/07

(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 two known threatened ecological communities (TECs) within a 10 km radius of the proposed clearing; however given the nature of the applied area, it is unlikely to be necessary for the maintenance or continued existence of any known TEC.

Methodology

GIS database:
- TEC SAC Bio Datasets 05/06/07

(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 likely to be at variance to this Principle

Pre-European	Current extent reserves/CALM (ha)	Remaining (ha)	(%)	Conservation	% In status**** managed land
IBRA Bioregion					
Swan Coastal Plain	1,498,297	626,512	41.8*	Depleted	N/A
Shire of Harvey	168,294	101,085	60.1*	Least Concern	N/A
Vegetation type:					
Beard: Unit 968	200,651	78,150	38.9**	Depleted	19.6
Heddle:					
Guildford Complex	92,497	4,662	5.0***	Endangered	0.2***

* (Shepherd et al. 2001)
** (Shepherd 2006)

*** (EPA, 2006)
**** (Department of Natural Resources and Environment 2002)

The area under application is located in the Swan Coastal Plain Bioregion. The extent of pre-European vegetation within this area is 41.8% (Shepherd et al., 2001). The applied area is associated with Beard Vegetation Association 968; despite this association retaining 38.9% of pre-European extent (Shepherd et al. 2006), much of this association has been heavily cleared on the Swan Coastal Plain, with 6.2% of the pre-European extent remaining (Shepherd et al. 2006).

Given the applied vegetation comprises scattered, isolated paddock trees, the proposed clearing is not likely to be considered a significant remnant of vegetation in an extensively cleared area.

Methodology Department of Natural Resources and Environment (2002);
Shepherd et al. (2001);
Shepherd (2006);
Heddle et al. (1980);

GIS databases:
- Heddle Vegetation Complexes - DEP 21/06/95;
- Pre-European Vegetation - DA 01/01

(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 may be at variance to this Principle

The applied area is mapped as a seasonally inundated sump land, however has been broad acre cleared and replaced with pasture species for flood irrigation practices. There is one small wet land (0.2 ha) within the applied area that has not been farmed and supports several shrub species; therefore clearing may be at variance to this Principle.

Benger Swamp (ANCA wetland) is located approximately 900 metres south of the applied area, however given the nature of the vegetation under application, it is unlikely to contribute to the values of the swamp and is therefore not likely to be in association.

Methodology GIS Databases:
- Hydrography, Linear - DOE 1/2/04;
- ANCA Wetlands - CALM 06/95;
- EPP Area - DEP 06/95;
- EPP Lakes - DEP 1/12/92;
- RAMSAR, Wetlands - CALM 14/02/03

(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

Due to the nature of the clearing, scattered, isolated paddock trees, there will likely be no impact on the area leading to land degradation as the area will be managed as an intensive centre pivot operation.

Methodology GIS Databases:
- Soils, Statewide - DA 11/99
- Salinity Mapping LM 25m - DOLA 00;
- Salinity Risk LM 25m - DOLA 01;
- Acid Sulphate Soil risk map, Swan Coastal Plain, DEC

(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 DEC-managed Benger Swamp is located approximately 900 metres south of the applied area. Given the nature of the clearing, the applied area is highly unlikely to function as ecological linkages to nearby conservation areas.

Methodology Keighery (1994);

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

Due to the nature of the clearing, scattered, isolated paddock trees, it is unlikely to impact on the quality of surface or underground water as the area will be managed as an intensive centre pivot operation.

Methodology

GIS databases:
- Hydrographic Catchments, Catchments DOW;
- Rainfall, Mean Annual BOM 30/09/01;
- Public Drinking Water Source Areas (PDWSA) 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

Due to the nature of the proposed clearing, it is unlikely to cause or exacerbate flooding within the local area.

Methodology

GIS databases:
- Hydrography, linear - DOE 01/02/04;
- Topographic Contours, Statewide - DOLA 12/09/02;
- Rainfall, Mean annual - BOM 30/09/01

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

Comments

The Environmental Protection Authority considered a development proposal on Lot 1 for construction of the dairy in September 1999. The proposal was not assessed, but public advice was given; as this advice is for the dairy only, it is not applicable to the assessment for the centre pivot clearing application.

Lots 1 & 116 are located within the Harvey Irrigation District. The proponent has an entitlement with Harvey Water to source water from the Harvey Water piped scheme.

Lots 1 & 116 are zoned Rural under the Shire of Harvey TPS No.2. The shire has advised no planning approvals are required, providing the pivot is to service an existing dairy. The shire has been provided the opportunity to comment on the proposal; however no response has been received to date.

There is one Native Title claim over the area under application, as the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

There is no required RIWI Act Licence, Works Approval or EP Act Licence that affects the area under application.

Methodology

GIS Database:
- Town Planning Scheme Zones - MFP 08/98;
- Native Title Claims - DLI 07/11/05

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees		Comment
Grazing & Pasture	Mechanical Removal	0.2	100	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 may be at variance to Principle (f).

5. References

DEC Site Visit (2007). Site Inspection Report, Department of Environment and Conservation (DEC). Bunbury, Western Australia. TRIM Ref: DOC38922.

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.

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, B.J. (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.
Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001a) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia (updated 2005).

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)