Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1392/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: ALLAN AND KERRY ANNE DEAN

1.3. Property details

Property: LOT 1 ON DIAGRAM 43277 (Lot No. 1 DUCANE NORTH BOYANUP 6237)
Local Government Area: Shire Of Capel
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.06		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
Heddle: Southern River Complex - Open woodland of marri-jarrah-banksia on elevated areas. Fringing woodland of E. ruids-M rhaphiophylla along streams.	The area under application appears to have only scattered trees remaining and is considered to be parkland cleared with very little understorey remaining.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition determined using orthomosaic mapping (Bunbury 50 cm 2004)

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

Aerial photography indicated that the area under this application was Degraded (Keighery 1994). It appeared to be parkland cleared and looked likely to no longer have an intact structure, with few native mid or understorey species.

The apparent high level of disturbance at this site suggests the original biodiversity value has been significantly compromised. Given the vegetation appears to have been in Degraded condition (Keighery, 1994), it is not likely to be at variance to this principle.

Methodology

Keighery 1994
GIS database:
- Bunbury 50cm Orthomosaic - DLI 04
- Sacbiodata Sets - 180607

(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 may be at variance to this Principle

There are 17 Threatened and 9 Priority fauna known to occur within the local area (10km radius). Of these species there are 2 known occurrences of Baudins Black Cockatoo, 1 of the Forest Red Tailed Black Cockatoo and 1 of Carnabys Black Cockatoo. It is considered that the Jarrah, Marri and Banksia woodlands within the area under application may provide a feeding ground and nesting site for all three of the above Cockatoos.

Given the degraded condition of the vegetation under application it is unlikely the area under application will provide a good habitat for the remaining noted fauna.

Therefore the proposed clearing may be at variance with this principle.

To mitigate the impacts of loss of habitat for the three above cockatoos fauna management conditions will be placed on the permit resulting in a requirement to undertake a fauna survey. If the cockatoos are identified in the area under application a programme must be implemented, in consultation with relevant experts, for the establishment of compensatory nesting habitat for black-cockatoos so as to create a net gain in the number of breeding hollows within the property.

Methodology Keighery 1994
GIS Database:
- SAC Bio datasets 180607

(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**
There are 5 populations of Declared Rare Flora (DRF) and 36 populations of priority flora within the local area (10km radius). Of these 2 DRF and 8 priority populations occur within the same Heddle Vegetation Complex (Southern River) and Soil type.

However the area under application is of a degraded nature (Keighery 1994) and given the apparent absence of understorey species it is considered unlikely any DRF or Priority species would be present within the area under application.

It is therefore unlikely the proposed clearing is at variance to this principle.

Methodology Keighery 1994
GIS Database:
- SAC Bio datasets 290507
- Heddle Vegetation Complexes - DEP 21/06/95
- Soils, Statewide - DA 11/99

(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 7 Threatened Ecological Communities (TEC) with 17 occurrences recorded within a 10km radius of the proposed clearing. With the closest being 3.2km East of the area under application.

Aerial photography indicated that the area under this application is Degraded (Keighery 1994).

Due to the condition of the vegetation, distance to the nearest TEC and surrounding land use, it is considered unlikely the area under this application comprised of, or is necessary for the maintenance of TEC's.

Methodology Keighery (1994)
GIS databases:
- Sacbiodata Sets 180607
- Bunbury 50cm Orthomosaic - DLI 04

(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 may be at variance to this Principle**
The area under application is located in the Swan Coastal Plain Bioregion in the Shire of Capel. The extent of native vegetation in these areas is 37.5% and 35.9% respectively.

The vegetation is a component of Heddle Southern River Complex of which there is 19.8% of the pre-European extent remaining and also a component of the Beard Vegetation Association 1000 of which 25.7% of Pre-European vegetation is remaining therefore both are of a 'vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-1750 (Commonwealth of Australia 2001a).

The vegetation under application is not considered to represent vegetation complexes mapped due to te condition of the vegetation however it may provide a feeding ground and nesting site for the Baudins Black Cockatoo, Forest Red Tailed Black Cockatoo and Carnabys Black Cockatoo. Therefore the proposed clearing may be considered a significant remnant within an extensively cleared area.

If the cockatoos are identified in the area under application a programme must be implemented, in consultation with relevant experts, for the establishment of compensatory nesting habitat for black-cockatoos so as to create a net gain in the number of breeding hollows within the property.

Additionally to mitigate the impacts on loss of wetland vegetation if clearing is approved conditions to revegetate the area under application will be imposed.

Methodology Sheperd et al. (2001)
Department of Natural Resources and Environment (2002)
Commonwealth of Australia 2001a
GIS Database:
- Pre-European Vegetation - DA 01/01
- Mattiske Vegetation - CALM 24/03/98
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Heddle Vegetation Complexes - DEP 21/06/95

(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

A perennial swamp is located on the property, 180m south west and the Preston River is located 2.6km east of the area under application. There are no vegetation links between the area under application and the above mentioned watercourse and wetland.

There are over fifty EPP Lakes within the local area of the proposed clearing. The closest is located 180m south west of the area under application. Although this lake is mapped as an EPP Lake aerial mapping shows that this wetland currently has an extractive industry sand pit on it's boundary with a road to service the sand pit running through its centre. This same wetland is also mapped as a multiple use wetland under Department of Environment wetland mapping.

There are many Multiple Use wetlands and Resource Enhancement wetlands within the local area of the proposed clearing. Multiple Use wetlands are considered to be 'Wetlands with few important ecological attributes and functions remaining' (Wetlands Position Statement 2001).

The description of mapped Heddle vegetation, Southern River Complex indicates the vegetation contains open woodland of marri-jarrah-banksia on elevated areas. Fringing woodland of E. ruids-M rhaphiophylla along streams.

Given the surrounding mapped wetlands, the possible presence of E. ruids and M. rhaphiophylla (indicative of wetland areas) and the topography of the area in relation to surrounding areas the vegetation under application may be at variance to this principle.

Additionally to mitigate the impacts on loss of wetland vegetation if clearing is approved conditions to revegetate the area under application will be imposed.

Methodology Wetlands Position Statement, Water and Rivers Commission (06/06/2001)
Keighery (1994)
GIS Database:
- Hydrography, linear - DOE 01/02/04
- EPP, Areas - DEP 06/95
- EPP, Lakes - DEP 28/07/03
- EPP, Wetlands - DEP 21/07/04
- Anca Wetlands - CALM 08/01
- Geomorphic Wetlands - Swan Coastal Plain - DEC

(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 Acid Sulphate Soil risk is medium to low, the area has no mapped salinity risk and a low ground water salinity of 1000-3000mg/L. The soil type consists of surficial sediments with shallow aquifers, with an undulating topography and medium relief. Therefore salinisation and waterlogging are unlikely to increase. It is considered unlikely that wind or water erosion will increase due to the soil type and annual rainfall of 750-800mm.

Therefore the proposed clearing is not likely to be at variance with this principle.

Methodology GIS Database:
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC

- Groundwater Salinity, Statewide - DOW
- Hydrogeology, Statewide - DOW
- Soils, Statewide - DA 11/99
- Topography Contours, Statewide - DOLA 12/09/02
- Mean Annual Rainfall Isohyets (1975-2003)

(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

There are only four System 6 Conservation Reserves within the 10km radius, with the closest being 4.7km West of the area under application. There are no direct vegetation links between any of the System 6 Reserves and the area under application.

Given the degraded condition of the area and the distance to nearby reserves, it is considered unlikely that the proposed clearing will affect the environmental values of nearby reserves.

Methodology

GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04
- System 6 Conservation Reserves - DEP 06/95

(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 area under application is within the Preston River Catchment and the Bunbury proclaimed ground water area. The closed watercourse is 2.6km to the east.

The proposed clearing is unlikely to degrade ground or surface water quality due to the areas degraded condition and distance to nearest watercourse.

Methodology

GIS Database:
- Public Drinking Water Source Areas (PDWSAs) - DOW
- Hydrographic Catchments - Subcatchments - DOW
- RIWI Act, Surface Water Areas - DOW
- RIWI Act, Rivers - DOW
- RIWI Act, Irrigation Districts - DOW
- RIWI Act, Groundwater Areas - DOW
- RIWI Act, Areas - 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 soil in the area under application consists of surficial sediments with high permeability, rainfall of 750-800mm and an evaporation rate of 1200-1400mm. Given this and the undulating topography it is considered unlikely that the proposed clearing will increase the incidence of flooding.

Methodology

GIS Database:
- Topography Contours, Statewide - DOLA 12/09/02
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOW
- Hydrogeology, Statewide - DOW

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

Comments

The area under this application is zoned rural under the Town Planning Scheme Zones. There is one Native Title claim (Gnaala Karla Booja) 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.

The area under application is also within the DRAFT Greater Bunbury Regional Scheme and has not been recognised within an ecological linkage by EPA (EPA, 2003).

The property under application currently has an active ground water licence for stock watering. The proposed clearing is for the purpose of sand extraction. The Department of Water has confirmed with the applicant's consultant that no extra water would be needed from the current GWL on the property for sand suppression. The proposed area is within the RIWI Groundwater area of Bunbury, however a RIWI license is not required.

An Extractive Industry License (EIL) is required for this application from the Shire of Capel. The Shire have confirmed that they are not prepared to grant an EIL until the proponent has dealt with the formal letter of warning.

Methodology EPA (2003)
GIS database:
- Town Planning Scheme Zones - MFP 8/98
- WRL, Properties, Ground Water Licences - WRC (Current)
- Native Title Claims - DLI 7/11/05
- Aboriginal Sites of Significance

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	11.06	Completed assessment has found principles (b), (e) and (f) may be at variance and all other principles are not likely to be at variance.

5. References

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.

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 (2003). Greater Bunbury Regional Scheme - Bulletin 1108. Perth

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.

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)