Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1783/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Dynea Australia Pty Ltd

1.3. Property details

Property: LOT 7 ON DIAGRAM 64331 (House No. 210 MOORE DARDANUP WEST 6236)
Local Government Area: Shire Of Dardanup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.8		Mechanical Removal	Industrial

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.) (Hopkins et al. 2001; Shepherd, et al. 2001). Heddle Southern River Complex: Open Woodland of marri-jarrah-banksia on elevated areas with a fringing woodland of E.rudis-M rhaphiophylla along streams (Heddle et al. 1980).	The proposal involves clearing approximately 0.8 ha for construction of a stormwater dam. The area is degraded and comprises scattered Eucalyptus marginata, Banksia attenuata and Xylomelum occidentale, over Stirlingia latifolia, Macrozamia riedlei and Kunzea glabresecens (DEC Site Visit, 2007). The area under application has been subject to previous clearing, irrigation practices and heavy fire damage (DEC Site Visit, 2007).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description of the clearing application area is based on a site visit conducted by DEC officers on 7 June 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 at variance to this Principle

The proposal is for the clearing of approximately 0.8 ha for the purpose of constructing a stormwater dam. The vegetation is considered to be in degraded condition (Keighery, 1994).

Given the application consists of scattered vegetation in a degraded area, the proposed clearing does not hold a high level of biological diversity and is not at variance to this Principle.

Methodology Keighery (1994);

GIS Databases:
- Bunbury 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 likely to be at variance to this Principle

The proposal is for the clearing of approximately 0.8 ha for the purpose of constructing a stormwater dam. The vegetation is considered to be in degraded condition (Keighery, 1994).

Within the local area (10km radius from the proposed area for clearing) there are several records of threatened and priority fauna, including but not limited to, Calyptorhynchus baudinii (Baudins Black Cockatoo; Threatened), Pseudocheirus occidentalis (Western Ringtail Possum; Threatened), Calyptorhynchus banksii naso (Naso Cockatoo; P3) and Macropus irma (Western Brush Wallaby; P4).

The local area remains predominantly cleared; however there are several areas within close proximity that contain scattered remnant vegetation associated with the Maidens / Preston River ecological linkage, as recognised by the EPA (2003); given the scale (0.8 ha) and degraded condition the area under application is unlikely to be providing significant habitat for WA indigenous fauna and is not likely to be at variance to this Principle.

Methodology

Keighery (1994);
EPA (2003);

GIS Databases:
- Threatened Fauna SAC Bio Dataset - 05/06/07;
- Bunbury 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 Diuris drummondii (DRF) have been recorded scattered within a 10 km radius, with the closest known population approximately 1.2 km north of the proposed clearing. One population of Eleocharis keigheryi (DRF) has also been recorded approximately 6.6 km south east of the applied area.

Several Priority listed species are also known to occur in the local area; including, but not limited to Carex tereticaulis (P1), Verticordia attenuata (P3), Platysace ramosissima (P3) and Aponogeton hexatepalus (P4). All known species have been recorded on similar soil and vegetation types as the applied area.

Given the similarities in habitat the applied area has potential to support rare flora; however it is unlikely the area under application is necessary for the continued existence of rare flora when considering the scale (0.8 ha) and degraded condition; and is therefore not likely to be at variance to this Principle.

Methodology

GIS Databases:
- Threatened Flora Database (DEFL) - DEC 17/04/07;
- Bunbury 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 17 occurrences of 6 Threatened Ecological Communities (TEC's) within the local area (10 km radius); however given the scale (0.8 ha) and degraded condition the area under application is not likely to be supporting, or 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 at variance to this Principle

The State government is committed to the National Objective Targets for Biodiversity Conservation, which includes targets that prevent the clearing of ecological communities with an extent below 30% of that present pre-1750 (Department of National Resources and Environment 2002; EPA 2000).

Vegetation within the area under application is identified as a component of Beard Vegetation Association 1000 and Heddle Vegetation Complex Southern River Complex. These vegetation communities are identified as having 24.6% and 19.8% respectively remaining of their pre-European extent (Shepherd 2006; EPA 2006).

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

				managed land
Swan Coastal Plain	1,529,235	657,450	38.1*	24.1
Shire of Dardanup	52,860	25,677	48.6*	34.8
Beard vegetation association 1000	275,380	32,451	24.6*	8.9
Heddle vegetation complex Southern River Complex	57,979	11,501	19.8**	1.9

* (Shepherd et al. 2006)
** (EPA, 2006)

The proposed clearing of 0.8 ha is zoned Industrial under the Greater Bunbury Region Scheme (WAPC, 2000). The area is also within the Maidens / Preston River ecological linkage, as recognised by the EPA (2003).

Approximately 30% of native vegetation remains within the local area (10 km radius). The area under application is recognised within a regionally significant ecological linkage, therefore the vegetation proposed for clearing is considered to be significant as a remnant within the Greater Bunbury Regional Area.

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

Methodology WAPC (2000);
Department of Natural Resources and Environment (2002);
EPA (2000);
EPA (2003);
EPA (2006);
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 is not at variance to this Principle

The nearest watercourse is the Preston River, located approximately 1.4 km west of the applied area. A series of palusplain surround the local area, although the applied area is located on a ridge at an elevation from these areas.

A man-made wetland (stormwater sump) in degraded condition is located approximately 50m west of the applied area.

The proposed clearing is therefore not considered to be associated with or impact on the values of any nearby watercourse or wetland.

Methodology GIS databases:
- EPP Lakes - DEP 28/07/03;
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04;
- Hydrography Linear - DoE 1/2/04

(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 sandy dunes with intervening sandy and clayey swamp flats: chief soils are leached sands, sometimes with a clay D horizon below 5 ft, on the dunes and sandy swamps (Northcote et al. 1960-68).

The groundwater salinity is 1000 - 3000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.

Given the application consists of scattered vegetation in degraded condition; the level of groundwater salinity;

the hydrogeology of the area; and the scale (0.8 ha), the proposed clearing is not likely to cause appreciable land degradation and is therefore not likely to be at variance to this Principle.

Methodology Northcote et al. (1960-68);

GIS Databases:
- Hydrogeology, Statewide - DoW;
- Groundwater Salinity, Statewide - DoW;
- Bunbury 50cm ORTHOMOSAIC - DLI04

(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 does not lie within or adjacent to areas set aside for conservation. Given the area comprises 0.8 ha of scattered vegetation in degraded condition, the proposed clearing is unlikely to impact on the environmental values of any nearby conservation areas in the local area.

Methodology GIS Databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- 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 soils of the area under application are described as sandy dunes with intervening sandy and clayey swamp flats: chief soils are leached sands, sometimes with a clay D horizon below 5 ft, on the dunes and sandy swamps (Northcote et al. 1960-68).

The groundwater salinity is 1000 - 3000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.

The slope of the land under application is 15 to 25 m AHD (Australian Height Datum) over 100m. The nearest major watercourse (Preston River) is located approximately 1.2 km west of the applied area.

Given the application consists of scattered vegetation in degraded condition; the level of groundwater salinity; the hydrogeology of the area; and the scale (0.8 ha), the proposed clearing is not likely to cause 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:
- Hydrography, Linear - DoE 1/2/04;
- Topographic Contours, Statewide - DOLA 12/9/02;
- Hyrdogeology, Statewide - DoW;
- Groundwater Salinity, 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

Given the application consists of 0.8 ha of scattered vegetation in degraded condition, the proposed clearing is not likely to cause or exacerbate the incidence or intensity of flooding and is therefore not likely to be at variance to this Principle.

Methodology GIS Databases:
- Topographic Contours, Statewide - DOLA 12/09/02;

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

Comments

The property is zoned General Industry under the local Town Planning Scheme, and Industrial under the Greater Bunbury Region Scheme (WAPC, 2000).

The proposal occurs within the boundaries of a prescribed premises under the Schedule 1 of the EP Regulations 1987. Given the clearing is not for the construction of any new works on site, a Works Approval is not required (Information supplied by applicant, 2007).

No other approvals are required from the Department of Environment and Conservation.

	No public submissions have been received by the Department.
Methodology	WAPC (2000); Information supplied by applicant (2007); GIS Database: - Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Industrial	Mechanical Removal	0.8	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 (e).

5. References

DEC Site Visit (2007). Site Inspection Report, Department of Environment and Conservation (DEC). Bunbury, Western Australia. TRIM Ref: DOC24849.

Environmental Protection Authority (EPA) (2003). Greater Bunbury Region Scheme: Report and recommendations of the Environmental Protection Authority, Bulletin 1108, Perth, Western Australia.

Environmental Protection Authority (EPA) (2006) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.

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.

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. (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.

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.

Western Australian Planning Commission (WAPC) (2000). Greater Bunbury Regional Scheme - Scheme Report, August 2000.

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)