



1. Application details

1.1. Permit application details

Permit application No.: 2082/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: The Laminex Group -- Dardanup

1.3. Property details

Property: LOT 2 ON DIAGRAM 46933 (House No. 184 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:
0.26		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
Beard Vegetation Association 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; tea-tree (Melaleuca spp.) (Shepherd et al. 2001; Hopkins et al. 2001).	The area under application consists of a woodland of Jarrah, Marri, Peppermint, Banksia attenuata and tea-tree with an intact understorey in very good to excellent condition (Keighery, 1994; DEC Site Visit, 2007).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Description of the clearing application area is based on a site inspection conducted by DEC officers on 11 October 2007.
Hedde Vegetation: - Southern River Complex: Open woodland of marri-jarrah-banksia on elevated areas and fringing woodland of E. rudis-M. raphiophylla along streams (Hedde et al. 1980).	The vegetation is located on a sandy ridge and has been left relatively untouched in the corner of an industrial site.		

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
	<p>The vegetation on Lot 2 is predominantly in very good condition (Keighery, 1994), comprising a woodland of Jarrah (Eucalyptus marginata), Marri (Corymbia calophylla), Peppermint (Agonis flexuosa) and Banksia (Banksia attenuata) over an intact understorey (DEC Site Visit, 2007). The vegetation is consistent with Beard association 1000 (Shepherd et al. 2001), of which there is 25.7% (Shepherd et al. 2006) of the pre-1750 extent remaining.</p> <p>The applied area is situated within a light industrial area and much of the remaining vegetation within the local area (10 km radius) is fragmented due to such land clearing and development; however given the scale (0.26 ha) of the applied area, it is unlikely to comprise high biological diversity within the local context.</p>
Methodology	<p>Keighery (1994); DEC Site Visit (2007); Shepherd et al. (2006); Shepherd et al. (2001);</p> <p>GIS Databases:</p>

- Heddle Vegetation Complexes - DEP 21/6/95;
- Pre-European Vegetation - DA 01/01;
- 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 0.26 ha for the purpose of accessing fill on an industrial site. The vegetation is considered to be in very good condition with an intact understorey (Keighery, 1994; DEC Site Visit, 2007).

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); however given the scale (0.26 ha) of the applied vegetation, it is unlikely to be providing significant habitat for WA indigenous fauna in the local context.

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

A desktop study found several known populations of the declared rare *Diuris drummondii* (VU) 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* (VU) 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; however given the scale (0.26 ha) of the clearing proposed, it is unlikely to be providing significant habitat values for threatened or priority flora in the local context.

Methodology GIS Database:
- 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). The closest of the records, community type SCP08 (Herb rich shrublands in clay pans) is approximately 4.5 km west of the applied area.

Given the scale (0.26 ha) of the applied area, it is unlikely to be supporting, or be necessary for the maintenance or continued existence, of any known TEC.

Methodology GIS Databases:
- TEC SAC Bio Datasets 05/06/07;
- TEC Database - DEC

(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 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 reserves/DEC-	Current area (ha)	Remaining % extent (ha)	Conservation	% in status**** managed land
Swan Coastal Plain	1,529,235	657,450	38.1**	Depleted	-
Shire of Dardanup	53,995	28,182	52.2*	Least Concern	-
Beard vegetation association 1000	275,380	32,451	24.6**	Vulnerable	8.9
Heddle vegetation complex Southern River Complex	57,979	11,501	19.8***	Depleted	1.9

* (Shepherd et al. 2001)

** (Shepherd et al. 2006)

*** (EPA, 2006)

**** (Department of Natural Resources and Environment 2002)

The proposed clearing of 0.26 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). Given the area is recognised within a regionally significant ecological linkage the vegetation proposed for clearing may be considered to be a significant as a remnant within the Greater Bunbury Regional Area, and therefore may be at variance to this Principle.

Methodology WAPC (2000);
Department of Natural Resources and Environment (2002);
EPA (2000);
EPA (2003);
EPA (2006);
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 is not likely to be 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:
- ANCA, Wetlands - CALM 08/01;
- EPP Areas - DEP 06/95;
- EPP Lakes - DEP 28/07/03;
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04;
- Hydrography Linear - DoE 1/2/04;
- RAMSAR, Wetlands - CALM 21/10/02

(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 area proposed to be cleared has a low salinity risk (GIS Database) and a groundwater salinity of 500-1000mg/L (GIS Database). Given the above and the scale (0.26 ha) of the proposed clearing, appreciable land degradation is unlikely to occur.

Methodology GIS databases:

- Salinity Risk LM 25m - DOLA 00;
- Groundwater Salinity, Statewide - 22/02/00

(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 no formal conservation reserves within an 8 km radius; given the scale of proposed clearing, it is unlikely to impact on the values of any conservation reserve.

The vegetation is within, the Maidens/Preston River Ecological Linkage, recognised by the EPA in their recommendations on the Draft Greater Bunbury Region Scheme (EPA, 2003). Given the scale (0.26 ha) of the applied area, clearing is unlikely to significantly impact on the values of this recognised ecological linkage.

Methodology EPA (2003);

GIS Databases:

- CALM Managed Lands and Waters - CALM 1/06/04;
- Register of National Estate - EA 28/01/03;
- 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

There is a permanent wetland located approximately 50 metres down slope from the area under application.

Groundwater salinities and salinity risk are low and the area is mapped as having a moderate to low risk of ASS.

Given the scale (0.26 ha) of clearing proposed, it is considered unlikely that the deterioration in the quality of surface or underground water will result.

Methodology GIS Databases:

- Hydrographic Catchments, Catchments - DoE 3/4/03;
- Acid Sulphate Soil risk map, SCP DOE 01/02/04;
- Salinity Risk LM 25m - DOLA 01

(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 position on the landscape and the scale (0.26 ha), the clearing proposed is not likely to cause or exacerbate the incidence or intensity of flooding.

Methodology GIS Databases:

- Topographic Contours, Statewide - DOLA 12/09/02;
- Bunbury 50cm ORTHOMOSAIC - DLI04

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 Shire of Dardanup has been provided the opportunity to comment on the proposal and no comment has been received to date.

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 / Licence is not required (SW Region, 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);

GIS Database:
- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	0.26	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: DOC39543.
- 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 (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.
- EPA (2003). Greater Bunbury Region Scheme: Report and recommendations of the Environmental Protection Authority, Bulletin 1108, Perth, Western Australia.
- 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.
- Hedde, 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. (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.
- 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)