



1. Application details

1.1. Permit application details

Permit application No.: 2267/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Mendosa Holdings Pty Ltd

1.3. Property details

Property: LOT 32 ON PLAN 46641 (House No. 325 HARMANS WILYABRUP 6280)

Local Government Area: Shire Of Busselton

Colloquial name:

1.4. Application

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

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 - Unit 3 (Boranup): Medium forest; jarrah - marri; (Hopkins et al., 2001; Shepherd, 2006).	The proposal involves clearing approximately 5.0 hectares for the purpose of planting vineyard. The area appears to be 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 orthomosaic mapping.

Mattiske:

- Cowaramup (C2):
Open forest of Eucalyptus
marginata subsp.
marginata-Corymbia
calophylla-Banksia grandis
on lateritic uplands in
perhumid and humid zones
(Havel & Mattiske
Consulting, 1998).

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 5.0 hectares for the purpose of planting vineyard. The vegetation under application appears to be in good condition (Keighery, 1994).

In local context the vegetation under application is considered to be a scattered remnant; the surrounding landscape has been significantly altered by previous land clearing, and as a result, has become highly fragmented. The local area (10 kilometre radius) is approximately 40% vegetated, with the majority concentrated along the coastline. Most of this vegetation is freehold; however approximately 40% is vested in the Leeuwin Naturaliste and Yelverton National Parks.

Given the application consists of 5.0 hectares in a grazed area, the proposed clearing is not likely to hold a high level of biological diversity, and is therefore not likely to be at variance to this Principle.

Methodology Keighery (1994);

GIS Databases:

- CALM Managed Lands and Waters - CALM 1/6/04;

- Environmentally Sensitive Areas - DoE 30/5/05;
- Busselton 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 may be at variance to this Principle

The proposal is for the clearing of approximately 5.0 hectares for the purpose of planting vineyard. The vegetation under application appears to be in good condition (Keighery, 1994).

There are several records of threatened and priority listed fauna within close proximity to the area under application (10 km radius). The local area is approximately 40% vegetated, with the majority being concentrated along the coastline (3 kilometres west of the area under application).

The surrounding landscape has been significantly altered by previous land clearing, and as a result, has become highly fragmented; the area under application is one of many isolated remnants (5 hectares in size) within a 10 km radius. The proposed clearing therefore may interrupt fauna connectivity between other isolated remnants and may be at variance to this Principle.

If approved, conditions addressing the loss of fauna habitat connectivity are recommended.

Methodology Keighery (1994);

GIS Databases:

- Threatened Fauna, SAC Bio Dataset - 22/8/07
- CALM Managed Lands and Waters - CALM 1/6/04;
- Busselton 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 excelsa* (DRF), *Acacia subracemosa* (P2) and numerous other priority listed taxa have been recorded within 10 km of the area under application.

Caladenia excelsa is a tuberous, perennial herb that flowers in September to October and occurs on white, grey or brown sand / sandy loam (DEC, Flora Base, 2008).

The soils of the area under application are described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel; chief soils are acid grey earths sometimes containing ironstone gravels (Northcote et al. 1960-68). The soils of the area under application are therefore consistent with local records of threatened and priority listed flora; however the proposed clearing is unlikely to be necessary for the continued existence of rare flora when considering the scale (5.0 ha) and grazed condition.

Methodology DEC, Flora Base (2008);

GIS Databases:

- DEFL, SAC Bio Dataset - 22/8/07

(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 several records of the floristic community "Low shrublands (Gracetown)" within 10 kilometres of the area under application. This community comprises a low shrubland or heath structure, and occurs on acidic grey-brown sands (TEC Database).

The soils of the area under application are described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel; chief soils are acid grey earths, sometimes containing ironstone gravels (Northcote et al. 1960-68). The soils of the area under application are therefore consistent with local TECs; however the proposed clearing is not likely to be necessary for maintenance of a significant ecological community when considering the scale (5.0 ha) and grazed condition.

Methodology GIS Databases:

- TEC Database, SAC Bio Dataset - 22/8/07;
- Threatened Ecological Communities - CALM

(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				area (ha)
Pre-European	Current extent (ha)	Remaining %	% in reserves/DEC-managed land		
IBRA Region:					
- Warren	833,981	663,141	79.5*	82.4	
- Shire of Busselton	145,239	61,780	42.5*	17.6	
Vegetation type:					
Beard:					
- Unit 3 (Boranup)	2,661,403	1,846,588	69.4*	26.4	
Mattiske:					
- Cowaramup (C2)	128,733	44,578	23.0**	6.6	
* (Shepherd, 2006)					
** (Havel & Mattiske Consulting, 2002)					

The area under application is located in the Shire of Busselton in the Warren Bioregion, which retain approximately 42.5% and 79.5% (Shepherd, 2006), respectively of the pre-European extent.

The area under application is mapped as the Cowaramup complex (C2), which retains less than 30% of the pre-European extent (Havel & Mattiske Consulting, 2002). Although this vegetation type is poorly represented, much of the remaining extent is protected within large areas of surrounding State Forest.

Given the scale (5.0 ha) and grazed condition of the vegetation under application, the proposed clearing is not likely to be considered significant remnant vegetation within the Greater Busselton area, and is therefore not likely to be at variance to this Principle.

Methodology Shepherd (2006);
Havel & Mattiske Consulting (2002);

GIS databases:
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00;
- Mattiske Vegetation - CALM 24/3/98;
- Pre-European Vegetation - DA 01/01;
- Local Government Authorities - DLI 8/7/04

(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**
A small tributary of Red Gully is located adjacent to the area under application; however the vegetation comprises an isolated remnant not directly associated with this watercourse; therefore the proposed clearing is not associated with a wetland or watercourse and is not at variance to this Principle.

Methodology GIS Databases:
- Hydrography, Linear - DoE 1/2/04;
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- Busselton 50cm ORTHOMOSAIC - 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 gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel; chief soils are acid grey earths, sometimes containing ironstone gravels (Northcote et al. 1960-68).

The groundwater salinity is 1000 to 3000 mg/L and the hydrogeology consists of rocks of low permeability with local aquifers in fractured and weathered rocks.

Given the scale (5.0 ha), level of groundwater salinity and hydrogeology, the proposed clearing is not likely to cause appreciable land degradation and therefore is not likely to be at variance to this Principle.

Methodology Northcote et al. (1960-68);

GIS Databases:

- Salinity Risk LM25m - DOLA 00;
- Hydrogeology, Statewide - DoW;
- Groundwater Salinity, Statewide - DoW

(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 under application does not lie within or adjacent to areas set aside for conservation. Given the scale (5.0 ha) and grazed condition of the area under application, the proposed clearing is not likely to impact on the environmental values of any nearby areas managed for conservation.

Methodology GIS Databases:

- Register of National Estate - EA 28/01/03;
- CALM Managed Lands and Waters - CALM 1/07/05

(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 gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel; chief soils are acid grey earths, sometimes containing ironstone gravels (Northcote et al. 1960-68).

The groundwater salinity is 1000 to 3000 mg/L and the hydrogeology consists of rocks of low permeability with local aquifers in fractured and weathered rocks.

The slope of the land under application is 105 to 115 metres AHD (Australian Height Datum) over 500 metres, with a small tributary of the Red Brook located adjacent to the area under application.

Despite the soils containing gravel and a watercourse occurring adjacent to the area under application; given the scale and low gradient slope 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:

- Hydrographic Catchments, Catchments - DoW;
- Topographic Contours, Statewide - DOLA 12/9/02;
- Groundwater Salinity, Statewide - DoW;
- Hydrogeology, 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 scale (5.0 hectares) and soils of the area under application, the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding and is therefore not likely to be at variance to this clearing principle.

Methodology GIS Databases:

- CALM Managed Lands and Waters - CALM 1/07/05;
- Topographic Contours, Statewide - DOLA 12/9/02

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

Comments

The area under application has previously been approved for clearing under CPS354/1, which expired 2 July 2007. Clearing of this area commenced prior to the expiry date, however difficulties in obtaining contractors has subsequently prolonged further clearing. In addition, the property under the previous application (Lot 2) has since been subdivided (Lot 32).

The Shire of Busselton (2008) advises the vegetation may be providing useful fauna habitat, and its removal will diminish landscape values of the area.

There are four native title claims over the area under application (South West Boojarah and Harris Family); however as the property is privately owned the granting of a clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

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

Methodology Shire of Busselton (2008);

GIS Databases:

- Native Title Claims - DLI 7/11/05

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Horticulture	Mechanical Removal	5	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 (b); and - is not or is not likely to be at variance to the remaining clearing Principles.

5. References

- Department of Environment and Conservation (DEC), Florabase (2008) <http://florabase.dec.wa.gov.au/browse/profile/13619>. (Retrieved 29 January 2008).
- Havel, J. and Matisse Consulting Pty Ltd, (2002). Review of management options for poorly represented vegetation complexes. Conservation Commission.
- 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.
- Matisse, E.M. and Havel, J.J. (1998). Vegetation mapping in the South West of Western Australia. Department of Conservation and Land Management, Perth.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Sac Bio Datasets (22/8/07). Department of Environment and Conservation, Sac Bio Datasets, Kensington, 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.
- Shire of Busselton (2008). TRIM Ref: DOC45287.

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)

