



1. Application details

1.1. Permit application details

Permit application No.: 646/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Rewards Lands Pty Ltd

1.3. Property details

Property: LOT M2077 ON PLAN 6263 (DANDARAGAN 6507)
Local Government Area: Shire Of Dandaragan
Colloquial name: Muthawandery Rd Lot M2077 on Plan 6263; Vol 1746 Fol 477

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	200	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 vegetation association 999: Medium woodland; marri. Beard vegetation association 1031: Mosaic: Shrublands; hakea scrub-heath / Shrublands; Dryandra heath. (Hopkins et al. 2001, Shepherd et al. 2001).	In the area under application the majority of paddock trees consists of Eucalyptus tottiana (Prickly Bark) with the remainder being Nuytsia floribunda (WA Christmas Tree). (ATA Environmental, 2005)	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Evidence of vegetation condition: In the area under application the majority of paddock trees are in a degraded state due to grazing from sheep and cattle in the past and surrounding crop and pasture activities (ATA Environmental, 2005). The proponent has also provided photographs of representative vegetation (TRIM Ref: 20484). Evidence provided suggests that the previous use of land (through agricultural activity and grazing) has significantly reduced species richness and density.

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 area under application falls within the Swan Coastal Plain Bioregion. In the area under application the majority of paddock trees are in a degraded state due to grazing from sheep and cattle in the past and surrounding crop and pasture activities (ATA Environmental, 2005). The majority of paddock trees consists of Eucalyptus tottiana (Prickly Bark) with the remainder being Nuytsia floribunda (WA Christmas Tree) (ATA Environmental, 2005). The proponent has also provided photographs of representative vegetation (TRIM Ref: 20484). Evidence provided suggests that the previous use of land (through agricultural activity and grazing) has significantly reduced species richness and density and the paddock trees would not provide a significant habitat to sustain fauna in the area, and therefore is not at variance to this Principle.

Methodology ATA Environmental, 2005.
GIS Databases:
- Interim Biogeographic Regionalisation of Australia-EA 18/10/00.

(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**
No Fauna survey has been conducted. In the area under application the majority of paddock trees are in a degraded state due to grazing from sheep and cattle in the past and surrounding crop and pasture activities. As such, the form and health of most of the paddock trees are poorer than trees in adjacent areas of remnant vegetation. In addition most paddock trees are well in excess of 50m from their nearest neighbour as evidenced in the photos provided (TRIM Ref: 20484). (ATA Environmental, 2005) Due to the degraded state of the paddock trees and the distance between the trees it is unlikely that the trees under application would provide an

ecological linkage or significant habitat for fauna and therefore is not likely to be at variance to this Principle.

Methodology ATA Environmental, 2005.
CALM's Threatened and Priority Fauna Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2005)].

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, significant flora.

Comments **Proposal is not at variance to this Principle**
In the area under application the majority of paddock trees consists of Eucalyptus todtiana (Prickly Bark) with the remainder being Nuytsia floribunda (WA Christmas Tree). Both these species have a Conservation Status as Not Threatened. The majority of paddock trees are in a degraded state due to grazing from sheep and cattle in the past and surrounding crop and pasture activities. As such, the form and health of most of the paddock trees are poorer than trees in adjacent areas of remnant vegetation. (ATA Environmental, 2005) No Declared Rare or Priority species have been identified within the project area and the vegetation has been substantially degraded limiting its potential conservation value (ATA Environmental, 2005). It is, therefore, unlikely that the proposed clearing will impact on significant flora and not at variance to this Principle.

Methodology ATA Environmental, 2005.
GIS Databases:
- Declared Rare and Priority Flora list - CALM 13/08/03.
CALM's Threatened and Priority Fauna Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2005)].

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments **Proposal is not at variance to this Principle**
The Threatened Ecological Community (TEC) data base did not highlight any TEC areas within the area under application and therefore the proposal is not at variance to this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 15/07/03

(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 Swan Coastal Plain Bioregion, Shire of Dandaragan and Beard vegetation association 1031 all have greater than 30% and up to 50% pre-European extent remaining, making them depleted by conservation status standards. Beard vegetation association 999 has less than 30% remaining, making this vegetation association type vulnerable by conservation standards. The property under application covers 740ha with only 80ha of remaining intact native vegetation (ATA Environmental, 2005) which is less than 30% leaving the remaining vegetation in a vulnerable state.

The National Objective and Targets for Biodiversity Conservation 2001 - 2005 (AGPS 2001) recognises that the retention of 30% or more of the pre-clearing extent of each ecological community is the target. EPA's Position Statement No. 2 (EPA 2000) also identified a 30% threshold level for vegetation types, beyond which species extinction is believed to occur at an exponential rate. Any further clearing may have irreversible consequences for the conservation of biodiversity and is, therefore, not supported.

	Pre-European Reserves/CALM- area (ha)	Current extent (ha)	Remaining %*	Conservation status**	managed land,
%					
IBRA Bioregion - Swan Coastal Plain	1,498,297	626,512	41.8	Depleted	Not available
Shire - Dandaragan	668,507	326,283	48.8	Depleted	Not available
Property - Lot 2077 Muthawandery Road ***	Not available	740ha	80ha	10.8	Vulnerable
Beard veg type - 999	275,380	32,481	11.8	Vulnerable	18.3
Beard veg type - 1031	312,772	109,127	34.9	Depleted	38.6

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** (ATA Environmental, 2005)

Methodology GIS Databases:

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Pre-European Vegetation - DA 01/01
- Local Government Authorities - DLI 08/07/04.
- EPA Position Paper No. 2 Agriculture Region - DEP 12/00
Shepherd et al, 2001.
Department of Natural Resources and Environment, 2002
ATA Environmental, 2005.

(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

There is one minor non-perennial watercourse that runs through the property, however no trees or vegetation will be removed along the Minyolo Brook or in the large area of remnant vegetation that acts as a buffer to the watercourse (ATA Environmental, 2005). The Minyolo Brook and all large areas of vegetation are not included in this application and therefore the proposed clearing is not at variance to this Principle.

Methodology ATA Environmental, 2005.
GIS Databases:
- Hydrography, linear - DoE 01/02/04

(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 vegetation proposed to be cleared is a relatively small area (200 trees - 2 hectares) that experiences good rainfall of 600mm. The area under application falls under a low risk salinity area however, due to the majority of the area already cleared for agricultural uses and most of the 200 trees under application being more than 50m apart it is unlikely that the proposal will cause appreciable land degradation issues on or off site.

Methodology GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 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 at variance to this Principle

The area under application does not fall within, provide a buffer for, or contribute an ecological linkage to a conservation area and therefore, is not at variance to this Principle.

Methodology GIS Databases:
- CALM Regional Parks - CALM 12/04/02
- WRC Estate - WRC 05/99
- CALM Managed Lands & Waters - CALM 01/06/04
- Proposed National Parks FMP-CALM 19/03/03
- 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 area under application falls within the Minyolo Caren Caren catchment and does not fall within any Public Drinking Water Source Area (PDWSA) Protection Zones or Areas. The area under application covers 200 trees throughout the property, most of which are more than 50m apart. The vegetation along the Minyolo Brook does not come under the application and will be retained. Due to the area already being extensively cleared for agricultural uses and the small area of trees under application the proposal is not likely to cause deterioration in the quality of surface or underground water (Midwest Gascoyne Hydro Unit, 2005).

Methodology GIS Databases:
- Current WIN data sets
- PDWSA Protection Zones - DOE 07/01/04
- Public Drinking Water Sources (PDWSAs) - DOE 29/11/04
- Hydrographic Catchments - Catchments - DOE 03/04/03.
Midwest Gascoyne Hydro Unit, 2005.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments Proposal is not at variance to this Principle

The area of the proposed clearing lies within the 600mm rainfall zone that is average for Western Australia. Given the relatively small area under application (200 trees - approximately 2 ha) and that the trees are dotted around the 740ha property already cleared and used for agricultural purposes, it is not likely that the proposed clearing will lead to an incremental increase in peak flood height or duration and therefore is not at variance to this Principle.

Methodology GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01

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

Comments

The Shire of Dandaragan have not indicated that there are any planning requirements or approvals that would affect the clearing.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	200	Grant	The assessable criteria have been addressed and the proposal is at variance to Principle (e), however an outcome has been negotiated whereby approximately 10ha of native vegetation will be planted in and around the existing large area of remnant vegetation along the Minyolo Brook and maintained. The assessing officer therefore recommends that the permit should be granted.

5. References

ATA Environmental, 2005, Assessment of vegetation of Lot 2077 Muthawandery Road, Perth, Western Australia.
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.
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, BJ (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.