



1. Application details

1.1. Permit application details

Permit application No.: 1540/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: P & J Browne & Clegg

1.3. Property details

Property: LOT 5264 ON PLAN 138712 (GLENORAN 6258)

Local Government Area: Shire Of Manjimup

Colloquial name: Nelson Location 5264

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
9.82		Mechanical Removal	Hazard reduction or fire control
0	0	Mechanical Removal	Grazing & Pasture

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 3: Medium forest; jarrah-marri	The area under application comprises a large area of vegetation on an elevated ridge. The area is comprised mainly dense tall karri vegetation, with mid and understorey dominated by thick <i>Trymalium</i> sp. The area is fenced and the vegetation appears to be relatively intact, with minimal disturbance. The vegetation is in good to excellent condition with a full mid- and understorey.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The vegetation condition was determined through a DEC site visit (2007).
Beard vegetation association 1144: Tall forest; karri & marri (<i>Corymbia calophylla</i>)			
Mattiske vegetation complex Wheatley (WH1): Tall open forest of <i>Eucalyptus diversicolor</i> - <i>Corymbia calophylla</i> on slopes and tall open forest of <i>Eucalyptus patens</i> on valley floor in perhumid and humid zones.			
Mattiske vegetation complex Bevan 1 (BE1): Tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> on uplands in perhumid and humid zones.			

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 9.824 hectare of native vegetation for the purpose of firebreak and grazing.
	The application area is fenced and does not appear to have been grazed by livestock and is considered to be in very good to excellent condition (DEC site visit 2007, Department of Agriculture and Food, 2007, Keighery, 1994).
	The proposed clearing of 9.824 hectare is situated approximately 150 metres east of the Donnelly River Nature Reserve, BCS has advised that the proposed clearing may contribute incrementally towards reducing the

biodiversity values of the local area. Based on the information provided and available, it is unlikely that the vegetation represents an ecosystem or genetic diversity of higher ecological value than the other remnant native vegetation in the local area. This proposal is not likely to be at variance to this Principle.

Methodology Biodiversity Coordination Section, DEC (2007)
DEC site visit (2007)
DAFWA advice (2007)
Keighery (1994)
GIS databases:
-Donnelly 50cm orthomosaic - DL104
-CALM Managed Lands and Waters - 1/07/05

(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**
BCS 2007 has advised that there are extensive areas of native vegetation within the 5km radius that are likely to be in similar or better condition than the application area.

Given, the proposal is to clear 9.824 ha of native vegetation which is surrounded by areas of State Forest and a Nature Reserve it is unlikely to yield significant impacts to fauna habitat.

Methodology Biodiversity Coordination Section, DEC (2007)
GIS Databases:
-CALM Managed Lands and Waters - CALM 1/07/05
-Donnelly 50cm orthomosaic - DL04

(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 2 known records of the Declared Rare Flora (DRF) species *Caladenia harringtoniae* and 16 records of 5 Priority flora taxa occurring in the local area, (10km radius). The closest of the occurrence of the *C. harringtoniae* is approximately 9km north, north-east of the application area. DEC (2007) has advised that this DRF species is unlikely to be found within the notified area.

The Priority flora recorded from the local area (10km radius) are, *Deyeuxia inaequalis* (Priority 1), *Meeboldina thysanantha* (Priority 3), *Pultenaea pinifolia* (Priority 3), *Astroloma sp. Nannup* (R.D. Royce 3978) (Priority 4), *Stylidium ireneae* (Priority 4). The closest of these known occurrences is approximately 4km west of the application area. Habitat descriptions on the DEC's Florabase indicate that these species prefer sandy, gravely and/or loamy soils and accordingly may be found within the application area.

Deyeuxia inaequalis (Priority 1), *Astroloma sp. Nannup* (R.D. Royce 3978) (Priority 4) and *Stylidium ireneae* (Priority 4) have been found to occur on the Wheatley (WH1) and Bevan (BE1) RFA vegetation complexes within the local area. Records indicate that the Wheatley (WH1) and Bevan (BE1) RFA complexes occur within the application area.

The area under application is surrounded by remnant vegetation which is immediately adjacent to areas of nature reserve and state forest which contains vegetation in similar or better condition. The proposed clearing is unlikely to be necessary of the continued existence of rare flora.

Methodology Biodiversity Coordination Section, DEC (2007)
GIS databases:
-DEFL SAC Bio Datasets 10/05/07

(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 no known Threatened Ecological Communities or Priority Ecological Communities within a 20 km radius of the proposed area.

Methodology Biodiversity Coordination Section, DEC (2007)
GIS databases:
-TEC SAC Bio Datasets 10/05/07

(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 not likely to be at variance to this Principle					
Pre-European	Current extent (ha)*	Remaining (ha)*	Conservation (%)*	% In reserves/CALM **status	managed land	
IBRA Bioregions - Warren	834,053.950	657,114.138	78.8	Least Concern	46.7	
Shire of Manjimup	705,670	591,748	83.9	Least Concern		
Vegetation type:						
Beard: Unit 3	2,661,514.99	1,863,982.73	18.4	Least Concern	18.4	
Beard: Unit 1144	160,322.42	127,060.61	34.4	Least Concern	34.4	
Mattiske:						
Wheatley Complex	183,280	142,945	78	Least Concern		
Bevan Complex	767,844	657,120	85.6	Least Concern		

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** Within the Intensive Landuse Zone

The area under application is located in the Warren Bioregion. The extent of pre-European vegetation within this area is 78.8% (Shepard et al., 2001). The proposal site falls within the Shire of Manjimup, of which there is 83.9% remaining of pre-European vegetation (Shepherd et al 2001).

The Mattiske vegetation complex Wheatley (WH1) that occurs within the notified area is described as a tall open forest of *Eucalyptus diversicolor* (Karri) and *Corymbia calophylla* (Marri) on slopes with open forest areas of *Eucalyptus patens* (Blackbutt) on valley floors. 78% of the Pre-European extent of Wheatley is remaining.

The Bevan (BE1) complex associated with the application area is described as tall open forest of *Eucalyptus marginata subsp. Marginata* (Jarrah) and *Corymbia calophylla* (Marri). 85.6% of the Pre-European extent of Bevan is remaining.

Although only a small percentage of both vegetation complexes occur within conservation reserve, large areas remain uncleared and on this basis, this proposal is not likely to be at variance to this Principle.

Methodology Biodiversity Coordination Section, DEC (2007)
GIS datasets:
-Donnelly 50cm Orthomosaic - DL04
-Mattiske Vegetation - CALM 24/3/98

(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**
There are no watercourses or wetlands within the area under application. The closest watercourse is a minor perennial watercourse approximately 100m south of the area under application which joins Mount Brook another minor perennial running 200m northwest of the boundary. These are tributaries to the Donnelly River which is 1.3km West of the area under application.

Given the distance to nearest watercourse and the vegetation complex present the area under application is unlikely to contribute to the values of the watercourse and is therefore not likely to be associated with the watercourse.

Methodology GIS Databases:
-Hydrography, Linear - DOE 1/2/04
-ANCA Wetlands - CALM 06/95
-EPP Area - DEP 06/95
-EPP Lakes - DEP 1/12/92
-RAMSAR, Wetlands - CALM 14/02/03

(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

DAFWA Land Degradation Assessment Report (2007) raises no potential land degradation issues for this proposal. The area under application occupies the upper and mid slope positions in the landscape however due to the low-medium slope gradients, short slope lengths to un-cleared land and soil types present the risk of water erosion affecting the nearby watercourses is greatly reduced (DAFWA 2007). The risk of salinity, eutrophication, wind erosion and water erosion causing land degradation is low. Therefore the area under application is considered to be not likely to be at variance to this principle.

Methodology DAFWA advice (2007)

(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

Donnelly River Nature Reserve and South East Nannup State Forest are adjacent to the property and within 100m of the area under application for clearing. Within the local area (10km radius) there are three state forests in addition to the South East Nannup State Forest, these include the North Donnelly State Forest, the Barlee Brook State Forest and the Donnelly State Forest. The Karri Management Priority Area (a Registered National Estate) is 1.3km east, northeast of the applied area and within part of the above mentioned State Forests. In addition there is conservation park (Blackbutt), a national park (Greater Beedelup), a 5(1)(g) reserve and three Executive Director Freehold areas in the local area.

The local area is highly vegetated and the area proposed to be cleared is in very good to excellent condition. BCS (2007) advise that the area that has been applied to be cleared forms part of a buffer with the adjacent remnant vegetation on private properties for the Donnelly River Nature Reserve and as such clearing of the proposed area will increase the edge effects in the Donnelly River Nature Reserve thereby reducing the total area of original habitat.

This proposal involves clearing 9.824ha of remnant vegetation to allow for hazard reduction/fire control and grazing. The proposed clearing may impact on the existing buffering that exists with local conservation areas. However, the area under proposal is not adjacent to the surrounding conservation areas and a buffer, approximately 100m, will remain between the application area and the nearby nature reserve and state forest.

Methodology Biodiversity Coordination Section, DEC (2007)
DEC site visit (2007)
Keighery (1994)
GIS databases:
- CALM Managed Lands and Waters - CALM 1/07/05
- 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 at variance to this Principle

The proposed clearing is within the Donnelly River Catchment and is within the Donnelly River Water Reserve a Public Drinking Water Source Area (PDWSA). The Donnelly River Water Reserve has not been assigned a priority. Average rainfall is 1100mm/year. The area to be cleared is not adjacent to any watercourses and occupies the upper and mid slope positions in the landscape away from the main waterway. The soil types present the risk of phosphorus loss is low. Due to the small scale clearing (9.8ha) in relation to the area left vegetated on the property (21.79ha) and the neighbouring State Forests and nature reserve it is unlikely to significantly degrade water quality within the area.

Methodology DAWFA advice (2007)
GIS databases:
-Hydrographic Catchments, Catchments DOW
-Rainfall, Mean Annual BOM 30/09/01
-Public Drinking Water Source Areas (PDWSA) 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 at variance to this Principle

DAFWA advise that as the proposed clearing occupies the upper and mid slope positions in the landscape away from the main waterway the risk of waterlogging and flooding is low. In addition aerial photography indicates that the area and waterways are surrounded by native vegetation.

Methodology DAFWA advice (2007)

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

Comments

The area proposed to be cleared is zoned rural in the Town Planning Scheme.

The Shire of Manjimup submitted a letter raising concerns about whether there was justification for clearing from the point of view of fire control and grazing. The clearing of additional land for farming would not be consistent with ongoing natural resource management. In addition the clearing is part of a larger vegetated area; the integrity of which would be diminished by clearing.

The need for removal of vegetation cannot be addressed in clearing principles however the purposes of the clearing have been noted.

There is a Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian Newspaper constitutes legal notification of the Native Title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Methodology

Shire of Manjimup Submission 2006

GIS databases:

-Town Planning Scheme Zones - MFP8/98

-Native Title Claim

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Grazing & Pasture	Mechanical Removal	0 0	
Hazard reduction or fire control	Mechanical Removal	9.82	The assessable criteria have been addressed, and the proposal is not at variance to Principles (i), (j) and (j); and is not likely to be at variance to Principles (a), (b), (c), (d), (e), (f), (g) and (h).

5. References

- DAFWA (2007) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. TRIM ref DOC16291.
- DEC (2007) Biodiversity advice for land clearing application. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia. TRIM ref DOC18519
- DEC (2007) Site visit report. TRIM ref DOC14568
- 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)

