



1. Application details

1.1. Permit application details

Permit application No.: 2893/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Paul Lubout & Jeanette McCullough

1.3. Property details

Property: LOT 4205 ON PLAN 82383 (SMITH BROOK 6258)
 LOT 4205 ON PLAN 82383 (SMITH BROOK 6258)

Local Government Area: Shire Of Manjimup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.9		Mechanical Removal	Fence Line Maintenance
7.6		Mechanical Removal	Timber Harvesting
		Mechanical Removal	Timber Harvesting

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 Associations: 1144: Tall forest; karri & marri (Corymbia calophylla) 3: Medium forest; jarrah-marri Mattiske Vegetation Complexes: Wheatly: Tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and tall open forest of Eucalyptus patens on valley floor in perhumid and humid zones. Crowea: Tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones.	The application is for the clearing of 0.9 hectares of native vegetation for construction of a fence, and the thinning for 7.6 hectares of native vegetation for silviculture.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation description and condition were determined from the Native Forest Management Plan (Bradshaw 2008), Regional Advice Report (TRIM ref DOC75106) and aerial imagery: Manjimup 50cm Orthomosaic (Landgate 2004).

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 application is to clear 0.9 hectares of native vegetation for fencing, and thinning of 7.6 hectares of native vegetation for silviculture. The vegetation under application is in good (Keighery 1994) condition (Bradshaw 2008).

The vegetation proposed for silviculture is in two stands - one to the South of the property and one to the North. The southern stand consists of Eucalyptus diversicolor (Karri) and Corymbia calophylla (Marri) regrowth approximately 60 years old. The understorey is described as sparse and there are scattered weeds. The north stand is two tiered marri/karri regrowth approximately 60 and 25years old. The understorey is described as good condition.

The application is surrounded by 9 conservation areas, and the local area (10km radius) is approximately 50% vegetated with native vegetation. Therefore, the 8.5 hectares under application is not considered to be a locally significant remnant in terms of biological diversity.

The clearing as proposed is not likely to be at variance to this principle.

Methodology Bradshaw (2008)
Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 16 Jan 09
- Mattiske Vegetation (01/03/1998)
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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**

Six rare and 2 priority fauna species have been recorded within the local (10km radius) area and likely to be found within the application area. The local area, however, is 50% vegetated with 9 conservation areas occurring within a 10km radius of the application area. The 8.5 hectares under application therefore may be providing significant habitat for native fauna. Additionally, some larger diameter trees occur within both sections to be thinned and may contain hollows utilised by fauna (DEC 2009). However, habitat trees (2 per ha) will remain (Bradshaw 2008) and their retention will be a condition of the permit.

Methodology DEC (2009)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- Mattiske Vegetation (01/03/1998)
- SAC Biodatasets - accessed 16 Jan 09
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

(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**

As no rare flora have been recorded within the local (10km radius) area, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS database:

- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 16 Jan 09
- Soils, Statewide DA 11/99

(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**

One threatened ecological community is located within a 10km radius. Cryptograms associated with *Trymalium floribundum* and *Chorilaena quacifolia* occurs within Pemberton vegetation complex 9.8km north east of the application area. The proposed clearing is therefore outside the buffer of any known threatened ecological community, and not likely to be at variance to this principle.

Methodology GIS Database:

- SAC Biodatasets - accessed 16 Jan 09
- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- Soils, Statewide DA 11/99

(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**

The application lies within the Shire of Manjimup and the Warren IBRA Bioregion, which retains 85.4% and 80.8% native vegetation respectively (Shepherd 2007). Orthomosaic imagery suggests the local (10km radius) area is approximately 75% vegetated.

The vegetation under application is of Beard Vegetation Associations 1144 and 3, both of which have more than 80% of the pre-European extent remaining (Shepherd 2007). The vegetation is also Mattiske Vegetation Complexes Wheatly and Crowea which have 78% and 70% remaining (Mattiske Consulting 1998).

The area is not considered to be extensively cleared, and therefore the vegetation under application is not a significant remnant in the local area. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology Mattiske Consulting (1998)
Shepherd (2007)
Shepherd et al (2001)

GIS Databases:

- Manjimup 50cm Orthomosaic - Landgate 2004
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Mattiske Vegetation - CALM 1/03/1998
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 16 Jan 09
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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**
Several minor perennial watercourses lie within the local (10km radius) area, however the closest is 115m south and therefore the application is outside the buffer area. The clearing as proposed is therefore not likely to include vegetation growing in association with a watercourse or wetland, and as such is not likely to be at variance to this principle.

Methodology GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

(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**
As the application is for silvicultural thinning and vegetation cover with minimum basal areas of 12m² and 18m² per hectare being retained (Bradshaw 2008), the proposed clearing is not likely to cause appreciable land degradation. Additionally, vegetation management conditions imposed on the permit will further reduce the potential for land degradation.

Methodology Bradshaw (2008)

GIS database:
- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02
- Hydrogeology, Statewide 05 Feb 2002

(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 may be at variance to this Principle**
The vegetation under application adjoins sections of Sir James Mitchell National Park and Warren State Forest, and is also near Tone State Forest, Donnelly State Forest, Smith Brook Nature Reserve, Whistler Nature Reserve, Eastbrook Nature Reserve, Gloucester National Park and Greater Dordagup National Park. The area under application is not likely to be providing significant ecological linkages between these areas as it is neighboured by plantation timber and agricultural land.

The clearing of 0.9ha for fencing, and the thinning of 7.6ha for silviculture, has the potential to increase the occurrence and spread of Phytophthora and weeds to these nearby conservation areas. As such, weed and dieback conditions will be placed on the permit. Additionally, vegetation management conditions to ensure the

recovery of the vegetation under application after clearing.

Methodology GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

(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**
Any potential sedimentation of waterways by the proposed clearing will be mitigated through retention of a minimum 30m buffer around watercourses (Bradshaw 2008), and this will be a condition of the permit. Additionally, the maintenance of a minimum basal area of 12m² per hectare (Bradshaw 2008) will reduce the potential impacts on nearby watercourses.

The application lies within Zone C of the Warren River catchment, a CAWS area. The Department of Water are not opposed the application provided a minimum basal area of 10m²/ha is retained (DOW 2009). The basal areas as stipulated in the Forest Management Plan (Bradshaw 2008) exceed this minimum, and will be a condition of the permit.

Methodology Bradshaw (2008)
DOW (2009)

GIS database:
- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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**
The application is for silvicultural thinning and a minimum basal area of 12m²/ha in the North stand and 18m²/ha in the South stand will be maintained (Bradshaw 2008). Additionally, the proposed thinning is surrounded by conservation reserve on one side and plantation timber on the other. The proposal is therefore not likely to cause or exacerbate the incidence or intensity of flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology Bradshaw (2008)

GIS database:
- Evapotranspiration Isopleths - WRC 29/09/98
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments
No submissions were received regarding this application.

Methodology

4. Assessor's comments

Comment
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 Principles (b) and (h), and is not likely to be at variance to the remaining clearing Principles.

5. References

Bradshaw (2008). Native Forest Management Plan P. Lubout & J. McCullough. TRIM Ref DOC70312.
DEC (2009) Warren Regional Advice. Department of Environment and Conservation Trim Ref DOC75106.
Department of Water (2008). Country Area Water Supply Advice. DEC TRIM Ref: DOC74807.
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of

WA (Inc). Nedlands, Western Australia.

Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

Shepherd, D.P. (2007). 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.

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)

