



1. Application details

1.1. Permit application details

Permit application No.: 2820/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Paul Barnsby

1.3. Property details

Property: LOT 5 ON DIAGRAM 96347 (EASTBROOK 6260)
Local Government Area: Shire Of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
13		Mechanical Removal	Cropping
16		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 Association 1144: Tall forest; karri & marri (Corymbia calophylla).	The application is for the clearing of 13 hectares of native vegetation in very good condition for cropping, and the thinning of 16 hectares of native vegetation in excellent condition.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation condition was determined from DEC Site Visit (2008) and aerial photography Manjimup 50cm Orthomosaic (DLI04).
Mattiske Vegetation Complex Wheatley: 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.			
Mattiske Vegetation Complex Crowea: Tall open forest of Corymbia calophylla-Eucalyptus diversicolor on upper slopes with Allocasuarina decussata-Banksia grandis on upper slopes in hyperhumid and perhumid 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 application is for the clearing of 13ha of native vegetation of very good condition for cropping/grazing, and thinning of 16ha of native vegetation in excellent condition. The area is natural karri regrowth forest approximately 50 years old, and has been logged approximately 20 years ago.

The vegetation under application is a component of associations and complexes which are well represented, and the application area is 400m from Warren State Forest, and 885m from Gloucester National Park.

The application area is therefore not considered to comprise of a locally high level of biological diversity, and the clearing as proposed is therefore not likely to be at variance to this principle.

Methodology DEC site visit (2008)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 2 Dec 08
- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- 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 is not likely to be at variance to this Principle

Four rare and three priority fauna species which occur within the local (10km radius) area may utilise the vegetation under application. The Site Visit Report (2008) stated, as the area is regrowth with no trees over 50 years old, there was no evidence of significant habitat trees within the application area.

Additionally, the vegetation types are well represented within the IBRA bioregion, and locally, and large areas of conservation land occurs within the local area. The surrounding vegetation is also providing more significant ecological linkages than the area under application.

The local area is well vegetated with approximately 75% native vegetation remaining within 10km radius of the application area. It is therefore not locally significant as a remnant for fauna habitat.

The vegetation under application is therefore not considered to be significant habitat for rare or priority fauna. The clearing as proposed is not likely to be at variance to this principle.

Methodology DEC site visit 2008

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- Mattiske Vegetation (01/03/1998)
- SAC Biodatasets - accessed 2 Dec 08

(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

One record of rare flora species occurs within the local (10km radius) area of the application. *Caladenia christineae* occurs 2.5km south, however it is associated with a different vegetation type and occurs within the margins of winter-wet flats, swamps, and freshwater lakes (Florabase, 2008). A minor perennial watercourse lies adjacent to the application area, and a buffer condition will be placed on the permit to protect the riparian vegetation along it. It is unlikely, therefore, that this species will occur within the application area outside buffers for watercourses.

Two priority flora species occur within the same vegetation and soil types of the application area within the local (10km radius) area, *Thomasia brachystachys* (P1) and *Xanthoparmelia xanthomelanoides* (P2). The closest recorded occurrences of these species are 8km and 5.6km respectively, and large areas of good condition vegetation exist throughout the area. The 13 hectares of native vegetation proposed for clearing is therefore not likely to be providing significant habitat to these species.

The vegetation under application is therefore not likely to be necessary for the continued existence of rare or priority flora species. Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology DEC site visit (2008)
DEC Florabase (2008)
Mattiske Consulting (1998)

GIS database:

- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 2 Dec 08
- 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

As there are no records of threatened ecological communities within the local (10km radius) area. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS Database:

- SAC Biodatasets - accessed 2 Dec 08
- 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 is in the Warren IBRA Bioregion and the Shire of Manjimup, within which 80.85% and 85.4% of the pre-European extent of native vegetation remains. It is also a component of Beard Vegetation Association 1144, and Mattiske Vegetation Complexes Wheatley and Crowea, all of which are well represented, with 82.15%, 78% and 81.2% remaining. Additionally, the local (10km radius) area contains approximately 75% native vegetation.

The 28ha application area is therefore not considered to contain a significant remnant of native vegetation in an area that has been extensively cleared. The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology DEC site visit (2008)
Mattiske Consulting (1998)
Shepherd (2007)
Shepherd et al (2001)**

GIS Databases:

- 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 2 Dec 08
- 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 at variance to this Principle

A minor perennial watercourse intersects the area proposed for thinning, and borders the proposed clearing area. The vegetation is therefore growing in association with a watercourse, and is at variance to this principle.

Methodology DEC site visit (2008)

GIS Databases:

- 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

The application area is not mapped as salinity or acid sulphate soils risk, and the groundwater salinity is 500-1000 mg/L. The chief soil types are hard and as such the risk of soil erosion is reduced.

The relief across the area to be cleared for grazing and cropping is medium, and although the thinning area is steeper, the remaining vegetation should prevent significant water erosion from occurring.

The clearing as proposed is therefore not likely to cause appreciable land degradation and as such is not likely to be at variance to this principle.

Methodology DEC site visit (2008)

GIS database:

- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02

(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 application area lies adjacent to a Nature Reserve, 400m South west of Warren State Forest and 885m south west of Gloucester National Park. The vegetation under application may be providing some ecological linkages between conservation values, however these are unlikely to be significantly impinged as a result of the proposed clearing as larger areas of linkages exist south of the application.

The proposed clearing has the potential to result in the spread of weeds and dieback into the neighbouring nature reserve, and as such may be at variance to this principle.

Methodology DEC site visit (2008)

GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05

(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 may be at variance to this Principle

The ground water salinity of the area is mapped as 500-100mg/L, and there is no known risk of acid sulphate soils. The topographical contours suggest the application area drains into a dam. As the local area is well vegetated, and half of the application is for thinning only, the risk of deterioration in surface or groundwater is reduced.

A minor perennial watercourse exists adjacent to the application area.

The application exists within Country Area Water Supply Act Zone D. Department of Water (2008) have advised that native vegetation must remain on at least 10% of the original holding, which might not be the case if the clearing granted under permit CPS 1584/1 has been carried out. It is therefore possible the clearing as proposed may be at variance to this principle.

Methodology DoW (2008)

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 topographical contours suggest the application area drains into a dam, and as such the clearing is not expected to cause flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS database:

- 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

The property is zoned Rural under the Town Planning Scheme.

A current clearing permit (CPS 1584/1) exists for the area surrounding the watercourse south and west of the application area. The permit will not cover the clearing of native vegetation within the already permitted area, or within areas required to be revegetated under permit CPS 1584/1.

The application exists within Country Area Water Supply Act Zone D. Department of Water (2008) advice states that whilst the clearing proposed under this application would retain the required 10% native vegetation on the proponent's holding, this calculation does not take into consideration any clearing done under CPS 1584/1. Information regarding the extent of clearing and the amount of revegetation carried out under CPS 1584/1 is required. No information on this matter has been received by DEC.

Methodology DoW (2008)

GIS database:

- Cadastre - Landgate Dec 07
- Town Planning Scheme Zones - MFP 31/08/98
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006

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 Principle (f), (h) and (i) and is not likely to be at variance to the remaining clearing Principles.

5. References

- DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2820/1, Lot 1 Vasse Hwy, Eastbrook. Site inspection undertaken 1/12/08. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC70070).
- Department of Water (2008). Country Area Water Supply Advice. DEC TRIM Ref: DOC71669.
- 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.
- 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.
- 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.
- 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.
- Western Australian Herbarium (1998?). FloraBase ? The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed xx/xx/xxxx).

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)

