



1. Application details

1.1. Permit application details

Permit application No.: 2626/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: MR S N Dunnet

1.3. Property details

Property: LOT 5192 ON PLAN 229257 (YEAGARUP 6260)
LOT 7586 ON PLAN 140125 (YEAGARUP 6260)
Local Government Area: Shire Of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
18		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
3: Medium forest; jarrah-marri 1144: Tall forest; karri & marri (Corymbia calophylla)	As per a regional site inspection (DEC, 2008) the condition of the vegetation is very good. It is a closed regrowth forest consisting of Jarrah, Marri and Karri. The middle storey is comprised of Sheoke and peppermint trees. The application area has been previously cleared or heavily selection cut and possibly some grazing has occurred. Understorey vegetation is in very good condition (DEC, 2008).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Condition of vegetation was determined by site inspection report (2008), the forest management plan (2008) and site photos.
Mattiske Vegetation: Q: Mosaic of low open woodland of Eucalyptus marginata subsp. marginata-Banksia ilicifolia-Nuytsia floribunda and low open woodland of Eucalyptus patens-Melaleuca preissiana-Nuytsia floribunda on less undulating flats in hyperhumid and perhumid zones. CRd: Open forest to tall open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on uplands in hyperhumid and perhumid zones. PM1: Tall open forest of Eucalyptus diversicolor with mixtures of Corymbia calophylla on valley slopes and low forest of Agonis juniperina-Banksia seminuda-Callistachys lanceolata on valley floors in the perhumid zone.			

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 may be at variance to this Principle**

The area proposed to be cleared is 18ha for the purpose of silviculture, consisting of regrowth Jarrah, Marri and Karri forest. The condition of vegetation within the proposed clearing is very good (Keighery, 1994). The middle storey is comprised of Sheoke and peppermint trees. The application area has been previously cleared or heavily selection cut and possibly some grazing has occurred. Understorey vegetation is in very good condition (DEC, 2008).

Within the long unburnt areas of forest it is suspected that a Priority Ecological Community exists, which is named 'Epiphytic Cryptogams of the karri forest' and is listed as a P3 community. Given the dynamic nature of the community it is unlikely that selective clearing will significantly impact up on it. Additionally it is likely that the community lives within the creek line areas which are demarcated from clearing in the forest management plan (2008).

Given that the clearing is to selectively thin karri, marri and jarrah trees, disturbance to the biodiversity is expected to be minimal and short term. As the proposed clearing area is adjacent to national park and state forest, recruitment post clearing should be healthy and diverse. It is recommended that weed and dieback management conditions be imposed on the permit.

Methodology Keighery, 1994
Forest Management Plan, 2008
DEC, 2008
SAC biodatasets - accessed 15 August 2008
GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05
- Donnelly 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 is not likely to be at variance to this Principle**

The proposed clearing is for the selective thinning of Karri (*Eucalyptus diversicolor*), Marri (*Corymbia calophylla*) and Jarrah (*Eucalyptus marginata*) trees within a 18ha area. A site inspection (DEC, 2008) found that the proposed clearing area consisted of understorey that was in very good condition which would provide habitat for numerous species of native fauna.

Given the nature of the clearing there will be some disturbance to this habitat but only in the short term and only to some areas of the forest. The area proposed to be cleared is surrounded by state forest and national parks which are likely to be providing more significant habitat. Additionally, the Forest Management Plan (2008) advises that potential habitat trees will be retained at the rate of two per hectare, which will be a condition of the permit.

Methodology Native Forest Management Plan (2008)
DEC (2008)
SAC biodatasets - accessed 15 August 2008

(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 is one record of rare flora within the local area (10km radius). *Caladenia harringtoniae* recorded 2.4kms north of the application area and found in the same soil and beard vegetation type, but not mattiske vegetation type as the proposed clearing area. Vegetation and soil types within the area are common and found in secure tenure. It is unlikely that the proposed clearing area is necessary for the continued existence of threatened flora.

Methodology SAC Biodatasets - accessed 15 August 2008
GIS Databases:
- Mattiske Vegetation (01/03/1998)
- 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**

There are no known threatened ecological communities within the proposed clearing area, the clearing is unlikely to be at variance to this principle.

Methodology SAC biodatasets - accessed 15 August 2008

(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**

As represented in the table below, vegetation within the local and regional area is well represented and found within secure tenure.

	Pre-European (ha)	Current extent (ha)	Remaining (%)
IBRA Bioregions*			
Warren	833,981	663,141	79.5
Shire			
Manjimup	696,702	589,728	84.6
Mattiske Vegetation Complex***			
Q	149,548	142,078	95.0
CRd	19,048	14,973	78.6
PM1	258,061	169,317	65.6
Beard Vegetation Complex*			
1144	160,315	127,463	79.5
3	2,661,403	1,846,588	69.4

*** (Mattiske Consulting 1998)

* (Shepherd et al. 2001)

Clearing of selective trees of the species Marri (*Corymbia calophylla*), Karri (*Eucalyptus diversicolor*) and Jarrah (*Eucalyptus marginata*) is unlikely to be at variance to this principle.

Methodology Shepherd, 2006
SAC Biodatasets - accessed 15 August 2008
GIS Databases:
- Mattiske Vegetation (01/03/1998)

(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 may be at variance to this Principle**

Some of the clearing proposed will be alongside a minor perennial watercourse running through the property. The clearing is selective removal of Karri (*Eucalyptus diversicolor*) and the occasional Marri (*Corymbia calophylla*) and Jarrah trees, however some wet dependent species may also be removed or damaged by the harvesting operations. A forest management plan (2008) demarcates the stream area by 50m, and a buffer of 50m from the watercourse will be imposed as a condition of the permit.

Methodology Forest Management Plan (2008)
GIS Databases:
- 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**

Clearing is for the purpose of silviculture so it is unlikely that erosion will increase due to the clearing. No evidence of salinity or inundation was noted during a site inspection (DEC, 2008). The application area will be selectively cleared of native vegetation proposed within the 18ha applied to clear, and so is unlikely to affect salinity, water logging or acid sulfate soils.

Methodology DEC (2008)
GIS Databases:
- Donnelly 50cm Orthomosaic - DLI04
- Groundwater Salinity, Statewide DoW 13/07/06

(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 proposed to be cleared is surrounded by conservation land on its western boundary. The clearing as proposed is for the purpose of silviculture and therefore will not result in cleared land so buffering capacities, fauna corridors and ecological linkages should not be significantly impacted.

A condition relating to dieback management will be imposed to prevent the possible transfer of disease into the conservation areas.

Methodology GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05
- Donnelly 50cm Orthomosaic - DLI04

(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 proposed to be cleared lies within the Donnelly River catchment area. The area receives high rainfall (1300mm), with a high evapotranspiration rate (900mm). Despite the large area applied for clearing (18ha) it is unlikely that groundwater recharge will be affected as the clearing is proposed to be selective over this area.

Some clearing of selected trees is proposed to occur alongside a minor perennial watercourse, which may have a short term impact on sedimentation and turbidity, however it is unlikely to have a significant effect.

Additionally, the Forest Management Plan (2008) for the proposed clearing area advises that streams are demarcated by a 50m buffer, which will assist in reducing sedimentation, and will be a condition of the permit.

Methodology Native Forest Management Plan (2008)

GIS Databases:

- Public Drinking Water Source Areas (PDWSAs) - 07/02/06
- Hydrographic Catchments - Catchments - DoW 01/06/07
- Evapotranspiration Isopleths - WRC 29/09/98
- Rainfall, Mean Annual Isohytes (1975 - 2003) - DEC 02/08/05
- Hydrography, linear - DOW 13/7/06

(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 nature of the proposed clearing (silviculture) it is unlikely to cause or exacerbate the incidence or intensity of flooding, as the clearing is thinning of Karri, Jarrah and Marri trees over a large area and a sustained period of time, and regeneration will occur. Therefore, the clearing is not likely to be at variance to this principle.

Methodology GIS Databases:

- Topographic Contours, Statewide - DOLA 12/9/02

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

Comments

The applicant has applied for a Owner's Identification code from the Department of Environment and Conservation (DEC TRIM Ref: DOC57901).

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 (a) and (f) and is not likely to be at variance to the remaining clearing Principles.

5. References

- Bradshaw, J. 2008, Native Forest Management Plan, unpublished. DEC TRIM Ref: DOC61166.
Department of Environment and Conservation (DEC) (2008). Site Inspection Report 09/09/08, DEC Bunbury, Western Australia. TRIM Ref: DOC63396
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.

Sac Bio Datasets (22/8/07). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia. Re-accessed 15/08/08

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)

