



1. Application details

1.1. Permit application details

Permit application No.: 2186/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: R & EB Pessotto

1.3. Property details

Property: LOT 2732 ON PLAN 129243 (WILGARRUP 6258)
 LOT 2684 ON PLAN 129244 (WILGARRUP 6258)
 LOT 2684 ON PLAN 129244 (WILGARRUP 6258)
 PART LOT 2340 ON PLAN 125356 (WILGARRUP 6258)
 PART LOT 2340 ON PLAN 125356 (WILGARRUP 6258)
 PART LOT 2339 ON PLAN 129244 (WILGARRUP 6258)
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 PART LOT 2340 ON PLAN 125356 (WILGARRUP 6258)
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 Local Government Area: Shire Of Bridgetown-Greenbushes & Shire Of Manjimup
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
60		Mechanical Removal	Grazing & Pasture
		Mechanical Removal	Grazing & Pasture
		Mechanical Removal	Grazing & Pasture
		Mechanical Removal	Grazing & Pasture
		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: - Unit 3 (Bridgetown): Medium forest; jarrah - marri (Hopkins et al., 2001; Shepherd, 2006).	The proposal involves the thinning of 60 hectares for the purposes of log removal for the sawmilling and to increase pasture area for stock.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Description of the clearing application area is based on a site inspection undertaken by DEC officers on 19 February 2008. (TRIM ref DOC50622)
Mattiske: - Bevan (BE2): Open forest to woodland of Eucalyptus marginata subsp. marginata with some Corymbia calophylla on lateritic uplands in humid and subhumid zones (Havel & Mattiske Consulting, 1998).	The area under application is semi-parkland cleared and has been grazed by stock for over 50 years. The vegetation is predominantly jarrah-marri woodland, with some blackbutt.		
Hedde: - Catterick Complex in Medium to High Rainfall: open forest of jarrah-marri and a fringing woodland of E. rudis - M. rhapsiophylla			

with stands of *B. littoralis*
on the valley floors
(Heddle et al., 1980).

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 thinning of approximately 60 hectares of private native forest. The vegetation under application is considered to vary between degraded and very good (Keighery, 1994).

The area under application is located within the Warren Bioregion, which retains approximately 86.8% (Shepherd, 2006) of the pre-clearing extent. The local area (10 km radius) is approximately 75% vegetated, with the majority of that vegetation managed by DEC as State Forest, including the Mersa and Yardup State Forests, which lie adjacent to the area under application.

The area under application is semi-parkland cleared and has been extensively grazed for more than 50 years.

Despite the scale (60 hectares), the proposed clearing does not hold a high level of biological diversity and is not at variance to this Principle when considering the parkland-cleared nature of the area under application and the percentage of surrounding vegetation.

Methodology Keighery (1994);
Shepherd (2006);

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- Manjimup 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 proposal involves thinning approximately 60 hectares of predominantly jarrah-marri woodland, that varies in condition from degraded to very good (Keighery, 1994), in the Warren Bioregion. The area under application is surrounded by State Forest.

There are several records of threatened and priority fauna species within a 10 km radius of the proposed clearing, including the Western Ringtail Possum (*Pseudocheirus occidentalis*; VU), and the Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*; P3).

Although the proposal is to thin approximately 60 hectares of jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*) it is selective thinning over a much larger area. The area proposed to be cleared is surrounded by state forest and national parks which are likely to be providing more significant habitat.

However, given that appropriate habitat trees within Jarrah and Marri forests are becoming restricted, conditions will be placed on the permit to retain habitat trees.

Methodology Keighery (1994);
GIS Databases:
- SAC Biodataset - 22/8/07 - Reaccessed 6/05/08
- CALM Managed Lands and Waters - CALM 1/6/04
- Manjimup 50cm ORTHOMOSAIC - DLI04

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

Comments **Proposal may be at variance to this Principle**

Several populations of *Caladenia christineae* (rare flora) and *Caladenia harringtoniae* (rare flora) have been recorded within 10 kilometres of the area proposed for clearing. DEC Advice in regards to these species states that they are likely to occur within low lying seasonally inundated areas, particularly around creeklines. They are unlikely to occur in degraded areas. Given these factors it is possible these species may occur within the lot under application.

A condition will be imposed to exclude clearing within 50m of the watercourse to prevent the possible clearing of these species.

Methodology GIS Databases:
- SAC Bio Dataset - 22/8/07 - reaccessed 6 May 2008

(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 records of Threatened Ecological Communities (TECs) within 10 km radius of the proposed clearing and the area applied to be cleared retains no indicative TEC characteristics. The clearing is therefore unlikely to be at variance.

Methodology GIS Databases:

- TEC Database, SAC Bio Dataset - 22/8/07 - reaccessed 06/05/08;
- Manjimup 50cm ORTHOMOSAIC - DLI04
- Topographic Contours, Statewide
- Soils, Statewide

(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 %	% in reserves/DEC-	area (ha)
			managed land	

Warren	833,981	663,141	79.5*	82.4
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Shire of Manjimup	696,702	589,728	84.6*	59.4
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Vegetation type:

Beard:

- Unit 3 (Bridgetown)	2,661,403	1,846,588	69.4*	26.4
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Mattiske:

- Bevan (BE2)	458,253	416,086	90.8**	N/A
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Heddle:

- Catterick Complex in Medium to High Rainfall	36,285	26,298	72.5***	N/A
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* (Shepherd, 2006)

** (Mattiske & Havel, 1998)

*** (Heddle et al., 1980)

The application is located within the Warren Bioregion in the Shire of Manjimup. The extent of native vegetation in these areas is 79.5% and 84.6% (Shepherd, 2006), respectively.

Given the percentage of vegetation remaining in the local area (75% in 10 km radius), the proposed clearing is not considered a significant remnant vegetation in an extensively cleared area and is therefore not at variance to this Principle.

**Methodology Shepherd (2006);
Mattiske & Havel (1998);
Heddle et al. (1980);**

GIS databases:

- Interim Biogeographic Regionalisation of Australia - EM 18/10/00;
- Pre-European Vegetation - DA 01/01;
- Mattiske Vegetation - CALM 24/3/98;
- Heddle Vegetation Complexes - DEP 21/06/95;
- Local Government Authorities - DLI 8/7/04

(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

The Wilgarrup River, a major tributary to the Warren River, lies within the area under application; therefore the vegetation under application is associated with a watercourse and is at variance to this Principle.

The Wilgarrup River has recorded significant improvements in water quality over the past ten years due to the

success in managing salinity within the catchment. The Warren River has been identified as a future potable water source by the Water Corporation and the Department of Water; therefore forest management within this catchment must be sustainable.

A condition will be placed on the permit to exclude clearing within 50m of the watercourse and wetland.

Methodology GIS Databases:
- Hydrography, Linear - DoE 1/2/04;
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03;
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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 soils of the area under application are described as hard acidic yellow and red mottled soils and brown earths, containing ironstone gravels; some on major stream terraces (Northcote et al., 1960-68).

The groundwater salinity is 500 to 1000 mg/L and the hydrogeology consists of rocks of low permeability with local aquifers in fractured and weathered rocks.

Despite the scale (60 hectares), the proposed thinning method within a semi-parkland cleared landscape is unlikely to cause appreciable land degradation as the area over which the thinning is proposed is large and the thinning will be staged. The proposed clearing is not likely to be at variance to this principle.

Methodology Northcote et al. (1960-68)
GIS Databases:
- Salinity Risk LM25m - DOLA 00;
- Hydrogeology, Statewide - DoW;
- Groundwater Salinity, Statewide - DoW

(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 area under application lies adjacent to the Mersa and Yardup State Forests, an area mapped as being sensitive to dieback (*Phytophthora cinnamomi*).

Given the distance to conservation areas the proposed clearing may increase the risk of dieback and / or weeds impacting State forest; therefore the proposal may be at variance to this Principle. Conditions addressing dieback and weed management will be placed on the permit to prevent the transference of pathogens and weeds.

Methodology GIS Databases:
- Register of National Estate - EA 28/01/03;
- CALM Managed Lands and Waters - CALM 1/07/05

(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

Given the scale (60 hectares) of the applied area, the proposed clearing may increase groundwater levels particularly if the clearing was to clear fell native forest. However, as the clearing is thinning of Jarrah and Marri trees over a large area and a sustained period of time, and regeneration will occur, it is unlikely that the clearing will impact on groundwater levels significantly. To ensure that regeneration will occur a condition relating to stock exclusion will be placed on the permit.

There may be an increase in sedimentation as a result of clearing into the Wilgarrup River, which lies within the area under application. A condition excluding clearing within 50m of the watercourse will be placed on the permit.

Methodology GIS Databases:
- Hydrographic Catchments, Catchments - DoW;
- Topographic Contours, Statewide - DOLA 12/9/02;
- Groundwater Salinity, Statewide - DoW;
- Hydrogeology, Statewide - 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 likely to be at variance to this Principle

The proposed selective thinning method within a semi-parkland cleared landscape is unlikely to cause or exacerbate the incidence or intensity of flooding, as the clearing is thinning of 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 proponent advises that a percentage of the salvaged vegetation will be sold; the proponent has applied for a Producer's Nurseryman's Licence under the Wildlife Conservation Act 1950 to the DEC, Flora Licensing Branch. This licence is currently pending on the proponent providing a clearing permit.

The area under application falls within Zone B of the Warren River Water Reserve, managed under the Country Areas Water Supply Act 1947. No compensation has been paid, therefore a licence through CAWSA is not required if a clearing permit is granted.

No public submissions have been received for this proposal.

Methodology DEC, Flora Licensing Branch (2008);
WRC (1996);

GIS Database:
- CAWSA Part IIA Clearing Control Catchments - DoW;
- Public Drinking Water Source Areas (PDWSAs) - DoW

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s510 of the Environmental Protection Act 1986, and the proposed clearing:

- is at variance to Principle (f);
- may be at variance to Principles (h) and (i); and
- is not or is not likely to be at variance to the remaining clearing Principles.

5. References

- DEC, Flora Licensing Branch (2008). TRIM Ref: DOC
- Department of Environment and Conservation (DEC) (2007). Site Inspection Report, DEC Bunbury, Western Australia. TRIM Ref: DOC47458.
- Department of Environment and Conservation (DEC) Warren Region (2008). TRIM Ref: DOC48519.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- 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, 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 mapping in the South West of Western Australia. Department of Conservation and Land Management, Perth.
- 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.
- Sac Bio Datasets (22/8/07). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia. Re-accessed 06/05/08
- Shepherd, D.P. (2006). 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.
- Water and Rivers Commission (WRC) (1996). Policy and Guidelines: Granting of Licences to Clear Indigenous Vegetation in Catchments Subject to Clearing Control Legislation, Regional Services.

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)