



1. Application details

1.1. Permit application details

Permit application No.: 1520/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Fiona Flugge on behalf of Stewart Phillip Cranswick

1.3. Property details

Property: LOT 301 ON PLAN 38612 (ROSA BROOK 6285)
Local Government Area: Shire Of Augusta-Margaret River

1.4. Application

Clearing Area (ha)	Method of Clearing	For the purpose of:
8.4	Mechanical Removal	Equestrian play field, meeting hall & chalet centre

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 (Shepherd et al. 2001).	The proposal is for clearing approximately 8.4 ha of regrowth for the purpose of establishing an equestrian playing field, meeting hall and chalet centre (DEC Site Visit, 2007).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Kelghery 1994)	The description of the clearing application area is based on a site inspection conducted by DEC officers on 6 February 2007.
Treeton (T) Complex: Woodland to open forest of jarrah-marri on valley slopes and woodland of paperbark on valley floors (Mattiske Consulting, 1998).	The vegetation under application is a regenerating jarrah-marri forest, with interspersed Xanthorrhoea preissii, Melaleuca spp. and bracken fern. The understorey varies in condition and density from good and thick to degraded and thin; however a majority is dominated by pasture grasses and weeds (DEC Site Visit 2007).		
	The area comprises several disturbed and previously cleared areas; although a majority of the vegetation under application retains a basic structure. Many of the mature jarrah trees have been selectively removed. The area has historically been grazed by stock, however no stock (grazing) are currently on the property. The area also contains horse walking trails, which are currently utilised for this purpose (DEC Site Visit, 2007).		

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 proposed clearing is for approximately 8.4 hectares of regrowth in the Southern Jarrah Forest IBRA region. This region is well represented with approximately 58.7% of pre-European vegetation remaining (Shepherd et al. 2001).

The condition of the vegetation under application varies from degraded to good (Keighery, 1994). The area has been severely disrupted due to a history of stock grazing and previous clearing activities, with regrowth jarrah and marri forest (DEC Site Visit, 2007).

The local area (10 km radius) is approximately 50% vegetated, with approximately 95% of that vegetation managed by DEC for conservation purposes (including National Parks, State Forests and Nature Reserves).

The area under application is considered unlikely to represent an area of higher biological diversity than that found in the nearby National Parks, State Forests and Nature Reserves.

Based on the above information, the proposal is unlikely to be at variance to this Principle.

Methodology Keighery (1994);
DEC Site Visit (2007);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- Busselton 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 may be at variance to this Principle**

The area proposed for clearing is one of many isolated stands of remnant vegetation within the local area (10 km radius), and may be providing a linkage between other isolated areas and State forest.

There are several records of threatened and priority fauna within 10 km of the proposed clearing, including the Mardo (*Antechinus flavipes leucogaster*; O), Quenda (*Isodon obesulus fusciventer*; O), Western Brush Wallaby (*Macropus irma*; P4), Quokka (*Setonix brachyurus*; T); and Western Ringtail Possum (*Pseudocheirus occidentalis*; T).

The proposed clearing may interrupt fauna habitat connectivity between other isolated areas and State forest, and to offset this loss of revegetation the proponent has agreed to revegetate an area within the property as identified on the attached plan.

Methodology Threatened Fauna Database - DEC;
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/7/05;
- Busselton 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 is not likely to be at variance to this Principle**

A desktop study revealed one population of the declared rare *Drakaea micrantha* being recorded within 5 km of the proposed clearing. This species occurs within the same soil (Tc5) and vegetation type (Treeton) as the application area. A spring flora survey targeting this species did not identify any specimens within the application area (Coffey Environments, 2007).

16 records of Priority Flora species are also known to occur within a 5km radius; all occurring in the same soil and vegetation type as the area under application. It is possible that priority flora species may occur within the area proposed for clearing; however it is considered unlikely, given the sparse nature of the under storey and ground cover vegetation due to stock impacts and previous clearing activities.

Therefore, it is unlikely the proposal is at variance to this Principle.

Methodology Coffey Environments (2007);
GIS Databases:
- DEFL -
- Matisse Vegetation - CALM 24/3/98;

(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

The closest known record of a threatened ecological community (TEC) is approximately 13 km from the application area and is not within the same vegetation or soil type.

There is no evidence to suggest the vegetation under application may constitute a TEC according to the condition and species present; therefore the proposal is unlikely to be at variance to this Principle.

Methodology GIS Databases:
 - Threatened Ecological Communities - CALM 12/04/05;
 - Threatened Plant Communities - DEP 06/95;
 - Environmentally Sensitive Areas - DOE 30/05/05

(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	Remaining	Conservation	% In **status
	reserves/CALM (ha)*	(ha)*	(%)*	managed land
IBRA Bioregions - Jarrah Forest	4,503,156	2,624,301	58.3	Least Concern
Shire of Augusta-Margaret River	222,718	159,679	71.7	Least Concern
Vegetation type: Beard: Unit 3	2,390,534	1,661,219	69.5	Least Concern 16.3
Mattiske: Treeton (T)	278,263	146,624	52.7	Least Concern

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** Within the Intensive Landuse Zone

The area under application is located within the Shire of Augusta-Margaret River, in the Jarrah Forest Bioregion. The extent of pre-European vegetation within these areas is 71.7% and 58.3%, respectively (Shepherd et al., 2001).

Based on the remaining vegetation in the area, the proposed clearing is not considered to be a significant remnant vegetation in an extensively cleared area.

Methodology Shepherd et al. (2001);
 Hopkins et al. (2001);
 Department of Natural Resources and Environment (2002);
 EPA (2000);
 Mattiske (1998);
 GIS Databases:
 - Pre-European Vegetation - DA 10/01;
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00;
 - 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

The Margaret River is located approximately 1.3 km north of the application area. The proposed clearing is unlikely to affect this watercourse due to the distance between the river and the proposed clearing.

A minor underground stream is mapped flowing through the centre of the area under application, however it is considered unlikely any impacts will occur as a result of the proposed clearing.

Therefore, the proposal is unlikely to be at variance to this Principle.

- Methodology** GIS databases:
- ANCA, Wetlands - CALM 08/01
 - EPP Areas - DEP 06/95
 - EPP Lakes - DEP 28/07/03
 - Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04
 - Hydrography Linear - DoE 1/2/04
 - RAMSAR, Wetlands - CALM 21/10/02
 - Busselton 50cm ORTHOMOSAIC - DLI03

(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 has no known Acid Sulphate Soils risk, a low salinity risk and a groundwater salinity of 500mg/L.

Therefore, the proposal is unlikely to be at variance to this Principle.

- Methodology** DAFWA (2007);
GIS Databases:
- Acid Sulphate Soils Risk map, SCP DOE 01/02/04;
 - Salinity Risk LM 25m - DOLA 01;
 - Salinity Mapping LM 25m - DOLA 00

(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 local area is well represented with conservation areas, including the Bramley National Park, the Blackwood State Forest and the Leeuwin Naturaliste National Park, which surround the application area. Approximately 50% of the land within 10 km of the proposed clearing is DEC managed for conservation purposes.

The Donnybrook Sunklands Areas (Interim Register of National Estate) has been identified within 5km of the proposed clearing.

Given the high percentage of surrounding vegetation in the local area, the vegetation under application is unlikely to function as an ecological linkage to nearby conservation areas.

- Methodology** GIS databases:
- CALM Managed Lands and Waters - CALM 1/06/04
 - Register of National Estate - EA 28/01/03
 - System 6 Conservation Reserves - DEP 06/95
 - System 1-5 and 7-12 Areas - DEP 06/95
 - Busselton 50cm Orthomosaic - DLI 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 likely to be at variance to this Principle

The area under application is located in the Margaret River Catchment Area and within the Margaret River Catchment Public Drinking Water Source Area. The area under application has an annual rainfall of 1100mm with regional groundwater salinity less than 500mg/L.

The area to be cleared comprises patches of degraded areas with little or no vegetation; although 8ha is proposed to be removed, a majority of this contains few large mature trees; therefore their removal will not significantly alter groundwater quality.

Given the above, the proposal is unlikely to be at variance to this Principle.

- Methodology** GIS databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03
 - Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04
 - RIWI Act Groundwater Areas WRC 13/06/00

(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

DAFWA Land Degradation Assessment Report (2007) advises "there is nil to moderate risk of waterlogging or flooding".

Therefore, the proposal is unlikely to be at variance to this Principle.

Methodology DAFWA (2007);

GIS Database:

- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The property is zoned Special Use within the Augusta-Margaret River TPS. The Shire (2006) made the following comments and recommendations:

- Council supports revegetation of an equivalent area to be cleared;
- Council recommends investigating options to reposition the equestrian centre to limit the amount of vegetation to be removed; and
- Council recommends the proponent engage a bush land management plan that addresses weed control and limiting the impact of horse trails on the remaining vegetation.

One public submission raises concerns about a) a wetland dependent vegetation around a seasonal streamline through application area, and b) the current clearing proposal does not consider the requirements for building/hazard protection zones under the Bushfires Act.

A vegetated buffer of 50m will remain around the seasonal streamline, whereby no clearing of vegetation is required. A site inspection confirms this area is degraded (Keighery, 1994) and the vegetation comprises mainly introduced pasture grasses and weeds. A Bushfire Management Plan has been submitted to the Shire.

Development approval has been issued for the area under application (Shire of AMR, 2007).

Methodology Shire of AMR (2007);

GIS Databases:

- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	8.4	Assessment of the clearing application area revealed the proposal may be at variance to Principle (B) and is not likely to be at variance to the remaining clearing principles. To mitigate the identified impacts (principle (b)) the proponent has agreed to revegetate areas as identified on the attached plan.

5. References

- Coffey Environments (2007). Targeted flora survey of Lot 301 Rosa Brook Road, Rosa Brook. TRIM Ref: DOC
- DAFWA Land Degradation Assessment Report (2006). Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. TRIM Ref: DOC9243.
- DEC Site Visit Report (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC15505
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
- 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 Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- 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)