



1. Application details

1.1. Permit application details

Permit application No.: 660/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Kim George Smith

1.3. Property details

Property: LOT 1678 ON PLAN 202987 (BOW BRIDGE 6333)
Local Government Area: Shire Of Denmark
Colloquial name: Valley of the Giants Road - Hay Location 1678

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		Mechanical Removal	Extractive Industry

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 Mattiske vegetation-Keystone (Ky) Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis on mild slopes of hills in perhumid zone and open forest to tall open forest of Eucalyptus brevistylis on slopes below outcrops in hyperhumid and perhumid zones.	The vegetation on site matched the Beard description and comprised jarrah-marri-sheoak forest with an understorey of snotty gobble, emu grass, Banksia grandis and hakea sp. The area under application is 3ha of a much larger area of vegetation (continuous with Frankland State Forest-proposed Walpole Wilderness area).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Vegetation type was determined at a site inspection on 21/6/05.

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 at variance to this Principle**
The area contains a level of biodiversity that is typical of the local area. The small area proposed to be cleared will not significantly impact on the biodiversity values of the Bioregion or local area. The proposal is not considered to be at variance with this Clearing Principle.

Methodology Site inspection (21/6/2005)

(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**
A site inspection (DoE 21/6/05) indicated that the vegetation condition of the area under application ranges from 'excellent' to 'good' (Keighery 1994). The area proposed to be cleared is a small area of vegetation that is part of a much larger parcel. Given the small area proposed to be cleared it is considered that the impacts on Specially Protected or otherwise significant fauna would be minimal and not likely to be at variance with this Clearing Principle.

Methodology Site inspection DoE (21/6/05)

(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

The nearest recorded Declared Rare Flora is 2km to the south west of the area proposed to be cleared and is not likely to be found in the soil type present in the area under application. The proposal is not likely to be at variance with this Clearing Principle.

Methodology GIS Databases: Declared Rare and Priority Flora List - CALM 13/08/03

(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 at variance to this Principle

The closest recorded Threatened Ecological Community (TEC) to the site is 9km to the south east (Showgrounds). The area under application is not likely to be a TEC and it is considered that the proposal is not at variance with the Clearing Principle.

Methodology GIS Databases: Threatened Ecological Communities - CALM 15/07/03

(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 at variance to this Principle

The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European (Department of Natural Resources and Environment 2002, EPA 2000). Known vegetation complexes in this application all have over 70% vegetation remaining (Shepherd et al 2001 and Matiske Consulting 1998). Therefore the clearing as proposed is not considered at variance to this Principle.

reserves/CALM-	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in managed land
IBRA Bioregion-Warren	851,529	739,273	86.3	Least concern	
Shire of Denmark	191,156	159,071	83.2	Least concern	
Matiske Veg- Ky	14,750	12,476	84.6	Least concern	>15%
Beard veg type-3	3,046,385	2,197,837	72.1	Least concern	10.1***

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** The benchmark of 15% representation in conservation reserves (JANIS, 1997) has not been met for vegetation association 3 but has been met for Matiske Ky.

Methodology Shepherd et al. (2001), Department of Natural Resources and Environment (2002), JANIS (1997), Matiske Consulting (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 is not at variance to this Principle

There are two watercourses - minor perennial, that run through the north and south east corners of the property. These flow to the east for 1.5km to the Bow River. Part of the adjacent area is on the Register of the National Estate (Tributary to Bow River). This is 3km to the north east and Owingup Swamp System (WAR008WA) is 12.5km south east. The proposed clearing will not impact on any wetlands or watercourses and is not at variance with this Clearing Principle.

Methodology GIS Databases:
- Hydrography, linear - DOE 01/02/04.
-ANCA Wetlands - CALM08/01
-Register of the National Estate - EA 28/01/03

(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

A desktop study by DAWA indicated that there are no concerns about land degradation as a result of clearing such a small area with the excavated area being rehabilitated. There is no data to indicate a risk of salinity related to this clearing proposal. The proposal is not likely to be at variance with this Clearing Principle.

Methodology DAWA (2005)
GIS Databases:

- Groundwater Salinity - Superficial Aquifers - DOE 01/04/05
- Groundwater Salinity - Confined Aquifers - WRC 10/01
- Salinity Risk LM 25m - DOLA 00
- Salinity Monitoring LM 50m - DOLA 00
- 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 at variance to this Principle

The nearest conservation area is the Frankland State Forest which is on the northern boundary. This area is part of the proposed Walpole Wilderness Area. The Walpole - Nornalup National Park is 3km to the south. The Gum Link Nature Reserve is 5km to the north east. The Quarram Nature Reserve is 7km to the south. The Mehinup Nature Reserve is 7km to the east and the Owingup Nature Reserve is 12.5km to the south east. Based on the small amount of vegetation expected to be cleared and management of surface water flow, there would be a negligible impact on neighbouring and surrounding CALM managed lands. The proposal is not at variance with the Clearing Principle.

Methodology GIS Databases:
-CALM managed Lands and Water - CALM 01/06/04

(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 at variance to this Principle

Proposed clearing is not expected to impact on groundwater tables and is not in a gazetted or proclaimed water catchment area. The proposal is not at variance with this Clearing Principle.

Methodology GIS Database:
- Public Drinking Water Source Areas (PDWSA) - DoE 04/11/04

(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 at variance to this Principle

The area under application has an elevation of 55m and a gentle to moderate slope to the east towards the Bow River. It is considered that the proposed clearing will not have an impact on peak flood height or duration and is therefore not at variance with this Clearing Principle.

Methodology Site inspection (DoE 21/6/05)
GIS Database:
-Topographic contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Denmark has raised no objections to the proposed clearing subject to the applicant obtaining an extractive industries license from the Local Authority (TRIM - A1749). Other submissions questioned the presence of tingle trees, the need for fencing and dieback management and staging and rehabilitation of the gravel extraction. There is no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear. The proposal is not at variance with any known planning instruments, previous EPA decisions or other matters.

Methodology Shire of Denmark (TRIM ref A1749).

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	3	Grant	It is recommended that the permit be granted as the proposal is either not likely or not at variance with the Clearing Principles. The applicant has committed to management strategies to mitigate impacts (surface water management). In addition, the proposed rehabilitation should mean that vegetation is restored in the medium to long term. The applicant has also committed to fence off a large area of vegetation to exclude stock.

5. References

- DAWA Land degradation advice and assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref IN22800.
- 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.

JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.

Keighery, BJ (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
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)