



1. Application details

1.1. Permit application details

Permit application No.: 1955/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Nannup

1.3. Property details

Property:
 ROAD RESERVE (LAKE JASPER 6260)
 ROAD RESERVE (PEERABEELUP 6260)
 NELSON LOCATION 13390 (LAKE JASPER 6260)
 LOT 13101 ON PLAN 211137 (LAKE JASPER 6260)
 LOT 13101 ON PLAN 211137 (LAKE JASPER 6260)
 ROAD RESERVE (LAKE JASPER 6260)
 ROAD RESERVE (LAKE JASPER 6260)
 Local Government Area: Shire Of Nannup
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5		Mechanical Removal	Road construction or maintenance

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 Associations: - 3 & 975 (Nornalup): Medium woodland; jarrah-marri; Low woodland; jarrah	The proposal involves clearing approximately 5.0 hectares of native vegetation for road upgrades.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description of the clearing application area is based on a site inspection by DEC officers on 12 September 2007.
- 23 (Scott River): Low woodland; jarrah-banksia (Shepherd et al. 2001)	The vegetation under application comprises predominantly understorey species, i.e. <i>Taxandria</i> sp. that ranges from good to excellent condition, and approximately 10 jarrah trees (DEC Site Visit, 2007).		
Scott (Sd), (Sd2), (Swd): Low open forest and low woodland of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> - <i>Agonis flexuosa</i> with some <i>Eucalyptus patens</i> and <i>Banksia</i> spp. on low dunes to low woodland of <i>Melaleuca preissiana</i> - <i>Banksia littoralis</i> on inter-dune depressions in hyperhumid and perhumid zones. (Mattiske Consulting, 1998).	The existing road reserve contains a 4m wide sand track that requires widening up to 10m and at 6 water crossings up to 20m wide. A majority of the vegetation is regrowth from previous slashing/clearing activities (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 proposal is for the clearing of approximately 5 hectares of understorey regrowth and several individual trees for the purpose of road upgrades. The vegetation under application is considered to vary in condition from

good to excellent (Keighery, 1994; DEC Site Visit, 2007).

The road reserve under application is located within the DEC-managed D'Entrecasteaux National Park and is surrounded by an extensive vegetated area comprising a diversity of complexes and landscapes, in better condition than that proposed for clearing.

Based on the above information, it is considered unlikely the proposed clearing represents a high level of biodiversity, in comparison to the larger areas of remnant vegetation within the local setting.

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

The proposed clearing site falls within a dieback risk area. Dieback conditions are recommended to ameliorate the spread of dieback to uninfected areas.

Methodology Keighery (1994);
DEC Site Visit (2007);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- 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 majority of vegetation under application comprises regrowth shrub species and approximately 10 jarrah trees (DEC Site Visit, 2007).

Despite the applied area occurring within the D'Entrecasteaux National Park, the proposed clearing is unlikely to be providing significant habitat for indigenous fauna, given its small size (5 ha) and linear shape (10m wide).

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

Methodology DEC Site Visit (2007);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;

(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 applied track has been previously cleared and maintained by DEC for park maintenance purposes and fire hazard reduction. A majority of the vegetation under application is regrowth within this area.

Despite records of several populations of rare and threatened flora within a 10 km radius, the applied area is an existing track through a large National Park managed for conservation purposes. Considering these factors, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology GIS Databases:
- Vegetation Complexes - DEC 14/9/07;
- Soils, Statewide - DA 11/99;
- DEFL SAC Bio dataset 14/9/07

(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 occurrences of threatened ecological communities (TECs) within 27 km of the proposed clearing.

Therefore, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 12/4/05;
- Environmentally Sensitive Areas - DoE 30/5/05

(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			Conservation Status	% In reserves/CALM managed land
	Pre-European	Current extent	Remaining		
	(ha)*	(ha)*	(%)*		
IBRA Bioregions - Warren	834,053.950	657,114.138	78.8	Least Concern	46.7
Shire of Nannup	293,198	275,524	94.0	Least Concern	
Vegetation type:					
Beard: Unit 3	69,130	54,304	72.1	Least Concern	36.2
Beard: Unit 23	50,127	33,700	67.2	Least Concern	
Beard: Unit 975	20,924	15,971	76.3	Least Concern	
Mattiske Veg:					
Scott (Sd)	377,148	198,161	52.5	Least Concern	
Scott (Sd2)	1,010	858	84.9	Least Concern	
Scott (Sdw)	103,813	77,505	74.7	Least Concern	

The area under application is located in the Shire of Nannup and within the Warren Bioregion. The extent of pre-European vegetation within these areas is 94.0% and 78.8% respectively (Shepherd et al., 2001; Shepherd, 2006).

The vegetation proposed to be cleared is a component of Beard Vegetation Associations 3, 23 and 975 (Hopkins et al., 2001) of which there is 72.1%, 67.2 and 76.3% respectively of the pre-European vegetation extent remaining (Shepherd, 2006). These vegetation types are considered as having a conservation status of Least Concern (Department of Natural Resources and Environment, 2002).

The proposed clearing also forms a component of the several Scott Complexes (Sd), (Sd2) and (Sdw), of which there is 52.5%, 84.9% and 74.7% respectively remaining (Mattiske Consulting, 1998) and also has a conservation status of Least Concern (Department of Natural Resources and Environment, 2002).

The proposed clearing does not fall within an extensively cleared area and the pre-European extent of the Warren Bioregion, Beard Vegetation Associations and Mattiske Vegetation Complexes of the area under application meet the National Objectives Targets for Biodiversity Conservation 2001 - 2005 (being greater than 30% of that present pre-1750). Based on this, the vegetation under application is not considered to be significant as a remnant within an area that has been extensively cleared.

Methodology Shepherd et al (2001);
Shepherd (2006);
Hopkins et al., 2001;
Mattiske Consulting (1998);
Department of Natural Resources and Environment (2002);
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 at variance to this Principle**
There are numerous permanent wetlands and areas subject to inundation associated with the proposed clearing. The Donnelly River, 400m east, also runs parallel with the road reserve under application.

The road reserve transects several water crossings and wetlands, therefore the proposed clearing is within an environment associated with watercourses and wetlands.

The clearing of riparian vegetation is therefore at variance to this Principle.

Methodology GIS Databases:
- Hydrography, Linear - DOE 1/2/04;
- Rivers, DOW;
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03

(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

The purpose of clearing is for road upgrades of an existing track. The topography of the local area is of low relief with very shallow gradients, ranging from 10 - 25m AHD. The vegetation under application is not considered to be in an area associated with high salinity risk, and has a moderate to low risk of Acid Sulphate Soils, due to the surrounding wetlands.

Given the small and linear nature of the application area, it is unlikely that the proposed clearing would cause appreciable land degradation.

Methodology GIS Databases:

- Topographic Contours, Statewide - DOLA 12/09/02;
- Acid sulphate Soil Risk Map, Lower south West - DEC;
- Salinity Risk 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 road reserve under application is located within the DEC-managed D'Entrecasteau National Park, an area of high conservation value.

The proposed clearing is to improve the current access into the National Park, to assist with fire breaks and aid management purposes.

The small and linear nature of the application area is unlikely to compromise the environmental values of the National Park. However, due to the proposed clearing site falling within a dieback risk area, dieback conditions are recommended to ameliorate the spread of dieback to uninfected areas.

Methodology GIS Database:

- 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 is not likely to be at variance to this Principle

The proposed clearing site falls within the Hardy Estuary - Blackwood River Catchment. The region is of low relief with an annual rainfall of 1100mm. Groundwater salinity is mapped at less than 500mg/L TDS (Total Dissolved Solids).

The small and linear nature of the application area is unlikely to cause deterioration of local water quality.

Methodology GIS Databases:

- Hydrographic Catchments - Catchments - DOE 23/03/05;
- Rainfall, Mean Annual - BOM 30/09/01;
- Topographic Contours, Statewide - DOLA 12/09/02;
- Groundwater Salinity, Statewide - 22/02/00

(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

Due to the topography within the local area and the scale and nature of the proposed clearing, it is unlikely to exacerbate the incidence of flooding within the local area.

Methodology GIS Database:

- Topographic Contours, Statewide DOLA 12/09/02

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

Comments

The road reserve is vested to the Shire of Nannup and services the DEC-managed D'Entrecasteaux National Park. The proposal is a joint project between the Shire, DEC and Main Roads WA.

No submissions have been received for this proposal.

There is a Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian Newspaper constitutes legal notification of

the Native Title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Methodology GIS Database:
- Native Title Claims - DLI 07/11/05

4. Assessor's comments

Purpose	Method Applied	Applied area (ha)/ trees	Comment
Road construction or maintenance	Mechanical Removal	5	Assessment of the clearing application area revealed the proposal is at variance to Principle (f) and is not likely to be at variance to the remaining clearing principles. Dieback and weed management conditions are recommended on the permit.

5. References

DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC33969.

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.

Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.

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 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)