



1. Application details

1.1. Permit application details

Permit application No.: 1547/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Department of Environment and Conservation (DEC)

1.3. Property details

Property: WILLIAMS LOCATION 11372 (BOUNDAIN 6312)
Local Government Area: Shire Of Narrogin
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.51		Mechanical Removal	Restoration

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
The vegetation at the site is a component of the Beard Vegetation Association No. 947 (medium woodland; Powder Bark and Mallet).		Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	There was no clearing description provided, therefore orthomosaic mapping was used to assess the vegetation condition. From analysis of aerial mapping (TRIM ref DOC15389) by the proponent and Department (TRIM ref DOC18096) areas of vegetation within the application appear to be in a degraded condition. Documentation (TRIM ref DOC15389) provided by the proponent indicates that the internal area bordering the application was used as an extraction gravel pit, therefore, the application area which borders the immediate area next to the gravel pit may have been degraded by this historical activity.

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 area under application is in a degraded condition (Keighery, 1994) and consists of remnant Powderbark and Mallet (Shepherd et al. 2001).

The application area is unlikely to contain rare flora and is unlikely to be associated with any Threatened Ecological Communities.

Orthomosaic mapping indicates that there are areas of native vegetation surrounding the application area.

Given the application area size (0.51ha) and that the application is for gravel pit rehabilitation the proposed clearing is not likely to be at variance to this principle.

Methodology Keighery (1994)
Shepherd et al. (2001)

(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 Red-tailed Phascogale, *Phascogale calura* (listed as 'Endangered' in the EPBC Act 1999 and the WC Act 1950), occurs within the 10km local area (SAC Bio Datasets 230507). The vegetation that has been applied to be cleared would be of limited value to this taxon and other local fauna populations.

Aerial photographs show that there is remnant vegetation surrounding the application area that appear to be in similar or better condition than the application. Therefore, the fauna species listed above are likely to find habitat of equal or better condition within these remnants.

This application is not likely to be at variance to this principle.

Methodology SAC Bio datasets (230507)

(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 are 24 records of 3 Declared Rare Flora (DRF) taxa and 55 records of 7 Priority Flora taxa occurring within the 10km local area. The closest record (*Gastrolobium ovalifolium*, Priority 4) is approximately 2.6km south west of the application (SAC Bio Datasets 230507).

All the DRF found within the 10km local area are associated with the same soil complexes but only one of the DRF is associated with the same vegetation association (Shepherd et al., 2001).

The application area is unlikely to constitute a 'significant' habitat for these flora species due to the degraded condition of the application area.

Methodology Shepherd et al. (2001)
SAC Bio Datasets (230507)

(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 occurrences of Threatened Ecological Communities within the 10km local area. The closest record, community type 'Toolibin', is situated approximately 26.6km from the application (SAC Bio Datasets 230507)

The TEC is described as a 'perched wetland of the wheatbelt region with extensive stands of *Casuarina obesa* and *Melaleuca strobophylla* and is associated with different soil and vegetation associations than those found within the application area (SAC Bio Datasets 230507).

Given the above it is unlikely that the native vegetation within the application area includes any EPBC Act listed or state listed TEC's.

Methodology SAC Bio Datasets (230507)

(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**

The vegetation at the site is a component of the Beard Vegetation Association No. 947 (medium woodland; Powder Bark and Mallet). There is 30% (Shepherd et al., 2001) of the pre-European extent remaining and therefore a 'Vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment, 2002).

The vegetation under application is also within the Avon Wheat belt P2 Bioregion and the Narrogin Shire of which 29.9% and 13.6% (Shepherd et al. 2001) of pre-European extent remaining respectively.

The National Objective and Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001) recognises that the retention of 30% or more of the pre-clearing extent of each ecological community is the target.

Given the application area size (0.51ha) and that the application is for gravel pit rehabilitation the proposed clearing is not likely to be at variance to this principle.

Methodology Shepherd et al. (2006)
Department of Natural Resources and Environment (2002)
AGPS (2001)
GIS Database:
-Pre-European Vegetation - DA 01/01

(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

There are no wetlands within the 10km local area of the proposed clearing (GIS Database). There are no rivers within the 10km local area.

Given the distance between wetlands and rivers to the area under application the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:

- ANCA, Wetlands - CALM 08/01
- RAMSAR, Wetlands - CALM 14/02/03

(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

GIS Database mapping shows low disturbance risk of Acid Sulfate Soils and a low disturbance risk of salinity.

GIS Database mapping also shows that the application is associated with low relief (320-330m AHD).

Given the small area (0.51 hectares) proposed to be cleared and the application is for gravel pit rehabilitation the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:

- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC
- Salinity Risk LM 25m - DOLA 00\
- Topographic Contours, Statewide - DOLA 12/09/02

(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 application areas are located in Crown Reserve 19817.

GIS Database records indicate that the closest DEC reserve to the application area is Manning Road Nature Reserve approximately 2.6km south, south-east of the application.

Given the small area to be cleared (0.51 hectares) and the application area is for gravel rehabilitation the proposed clearing is unlikely to be at variance to this principle.

Methodology GIS Database:

- CALM Managed Lands and Waters - CALM 1/07/05
- Cadastre - DLI

(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 application is located within the Hardy Estuary - Blackwood River catchment (GIS Database) further database mapping shows ground water salinity to be >35,000mg/L.

Given the small area proposed to be cleared (0.51 hectares) and that the application area is for gravel pit rehabilitation the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:

- Hydrographic Catchments - Catchments - DOW
- Hydrographic Catchments - Basins - DOW
- ANCA, Wetlands - CALM 08/01
- RAMSAR, Wetlands - CALM 14/02/03
- Hydrography, linear - DOE 1/2/04
- Groundwater Salinity, 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

GIS Database mapping shows that the application is associated with low relief (320-330m AHD) on the mid-

slope and further database mapping shows that the application is associated with grey sandy duplex (shallow and deep), sandy gravel and red deep sandy duplex soils. Therefore the site is likely to be free draining due to associated sandy soils.

Given the above, the small area proposed to be cleared (0.51 hectares) and the clearing is associated with gravel pit rehabilitation it is not likely that this proposed clearing will be at variance to this principle.

Methodology GIS Database:
 -Topographic Contours, Statewide - DOLA 12/09/02_1
 -Soils, Statewide - DA 11/99
 -Spot Heights

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

Comments

A submission (TRIM ref DOC15386) received from the Department of Planning and Infrastructure states that there no objections to the Department of Environment and Conservation's proposed rehabilitation works on reserve 19817.

The proposed clearing is for gravel pit rehabilitation.

Methodology The area is zoned Public Purpose in the Shire of Narrogin Town Planning Scheme No.2
 GIS Database:
 -Public Drinking Water Source Areas (PDWSAs) - DOW
 -RIWI Act, Groundwater Areas - DOW
 -RIWI Act, Surface Water Areas - DOW
 -RIWI Act, Areas - DOW
 -RIWI Act, Irrigation Districts - DOW
 -RIWI Act, Rivers - DOW
 -WRL Properties
 -Cadastre - DLI
 - Town Planning Scheme Zones - MFP 8/98_1

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Restoration	Mechanical Removal	0.51		<p>The principles have been assessed and the clearing is not likely to be at variance to all 10 clearing principles.</p> <p>Conditions on revegetation and to avoid, minimise etc clearing have been suggested to be imposed.</p>

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- Department of Environment and Conservation (2007) SAC Bio Datasets (230507), Department of Environment and Conservation, Western Australia.
- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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)

