



1. Application details

1.1. Permit application details

Permit application No.: 1865/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Busselton

1.3. Property details

Property: ROAD RESERVE (WONNERUP 6280)
 Local Government Area: Shire Of Busselton
 Colloquial name: Intersection of Tuart Drive and Layman Road

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	3	Cutting	Road construction or maintenance
		Cutting	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 Unit: 2 - Tall woodland; Tuart (E. gomphocephala) (Shepherd, 2006)	The proposal involves clearing three (3) individual <i>Agonis flexuosa</i> trees for improving sightlines for a new roundabout. The three trees are relatively large in size, however contain no nesting hollows or dreys. The trees have no native understorey or biodiversity value in their own right.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The description of the clearing application area is based on aerial photography and photographs submitted with application.
Mattiske Vegetation Complex: LW - (complex not described)		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	

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 three *Agonis flexuosa* (peppermint) trees under application are within an Environmentally Sensitive Area attributed to the Register of National Estate Ludlow-Wonnerup Area as well as being on the edge of a System 1 conservation area.

Despite the fact that these trees are within and adjacent to these conservation areas, the trees are in a completely degraded (Keighery, 1994) portion of land with no native understorey, alongside the existing road. The trees themselves are also not in very good condition.

It is therefore concluded that the three trees are not considered to be a good example of the vegetation complexes within the bioregion and do not constitute a high level of biological diversity.

Methodology Keighery (1994)
 GIS Databases:
 - Clearing Regulations - Environmentally Sensitive Areas - DoE 30/5/05

- Register of National Estate - EA 28/01/03
- System 1 to 5 & 7 to 12 areas - DEP 06/95

(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 at variance to this Principle

Records indicate 14 threatened or priority fauna species occur within the local area (10km radius) of the three trees under application, including the Western Ringtail Possum (*Pseudocheirus occidentalis*) known to inhabit and utilise peppermint trees.

A site visit undertaken by DEC staff identified Western Ringtail Possum scats around each of the three trees however there were no dreys.

Although there is evidence of indigenous fauna utilising the trees under application, the vegetation within the conservation areas and in proximity to the three trees is of a better condition and would therefore be of a higher habitat value. The three trees are therefore not considered to be significant habitat for indigenous fauna.

Even though the trees are not considered to be significant habitat, it is recommended that it be a condition of the clearing permit that a fauna specialist be onsite immediately before the commencement of clearing in order to inspect the trees and remove and relocate any indigenous fauna that may be within the trees at the time of clearing.

Methodology GIS Databases:
 - SAC Bio datasets - Threatened and Priority Fauna - DEC

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

Comments Proposal is not at variance to this Principle

A large number of declared rare and priority flora species have been identified within the local area (10km radius) of the three trees under application with the closest being a Priority 3 species, *Lasiopetalum membranaceum*, approximately 436m away.

However, the three *Agonis flexuosa* (peppermint) trees exist along the edge of the existing road which has had all of the native understorey species removed from this area. There is therefore no declared rare or priority flora species occurring within the vicinity of the three trees which could potentially be impacted by this clearing proposal.

It is therefore concluded that the proposal is not at variance to this principle.

Methodology GIS Databases:
 - SAC Bio datasets - DEFL
 - SAC Bio datasets - southwest_blackwood_waherb

(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

There are 15 Threatened Ecological Communities (TEC) and 3 Threatened Plant Communities (TPC) within the local area (10km radius). The closest TEC and TPC to the three trees under application are approximately 6.5km and 6.4km respectively.

Due to the proposal being only for three trees in a completely degraded area (Keighery, 1994), it is concluded that the three trees are not necessary for the maintenance of nearby TEC's or TPC's nor are they likely to be within a threatened ecological or plant community. Therefore, the proposal is not at variance to this principle.

Methodology Keighery (1994)
 GIS Databases:
 - SAC Bio datasets - Threatened & Priority Ecological Communities - DEC
 - Threatened Plant Communities - DEP 06/95

(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 proposed clearing is located in the Swan Coastal Plain region in the Shire of Busselton. The extent of native vegetation remaining in these areas are 41.2% (Shepherd, 2006) and 44.5% (Shepherd et al, 2001) respectively and are therefore considered to be of a 'depleted' status (Department of Natural Resources and Environment, 2002).

The vegetation at this site is a component of the Beard Vegetation Association 2 - Tall woodland; Tuart (*E. gomphocephala*) of which there is 66.3% of the pre-european extent remaining (Shepherd, 2006). This vegetation type is therefore of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment, 2002). The vegetation is also within the Mattiske vegetation complex LW, which has not been described.

Due to the proposal being for the clearing of three *Agonis flexuosa* (peppermint) trees in a completely degraded area (Keighery, 1994), they are not considered to be a good representation of the vegetation associations and complexes within which they occur and are not considered to be a significant remnant in an extensively cleared area. It is therefore concluded that the proposal is not at variance to this principle.

Methodology Keighery (1994)
Shepherd et al (2001)
Shepherd (2006)
Department of Natural Resources and Environment (2002)
GIS Databases:
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01
- Mattiske Vegetation - CALM 24/3/98
- Busselton 50cm Orthomosaic - DLI04

(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

The closest watercourse to the proposed clearing area is the Abba River which is approximately 250m from the trees under application.

Approximately 80% of the land area within a 10km radius of the proposed clearing has been deemed to be a classification of wetland, with the majority of which classified as multiple use. The Vasse-Wonnerup RAMSAR system extends to include the Tuart Forest National Park between Tuart Drive and the Vasse-Wonnerup wetlands. This area is across the road from the proposed clearing, approximately 16km away. The nearest EPP Lakes, Conservation Category Wetlands (CCW) and ANCA wetlands are approximately 1km from the three trees under application.

Given the distances of the three trees to the watercourses and wetlands and the fact that the proposed clearing is in a completely degraded condition (Keighery, 1994), it is unlikely that the removal of these trees will adversely impact the watercourses and wetlands. The proposal is therefore not at variance to this principle.

Methodology Keighery (1994)
GIS Databases:
- Hydrography, linear - DoE 1/2/04
- Hydrography, linear (hierarchy) - DoW
- EPP, Lakes - DEP 1/12/92
- RAMSAR wetlands - CALM 14/02/03
- Geomorphic wetlands (Mgmt categories), Swan Coastal Plain - DEC
- ANCA wetlands - CALM 08/01

(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 three trees proposed for clearing lie within a moderate to low acid sulfate soil risk area and a moderate salinity risk area with a groundwater salinity ranging from 500-1000mg/L.

Due to the proposed clearing area having a topographic range of 5-10m AHD, a high mean annual rainfall of 800mm and given the proposal is for the removal of three trees, it is unlikely that the removal of the trees will cause land degradation in this area.

Methodology GIS Databases:
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC
- Salinity Risk LM 25M - DOLA 00
- Groundwater Salinity, Statewide - 22/02/00
- Topographic Contours, Statewide - DOLA 12/09/02
- Rainfall, mean annual - BOM 30/09/01

(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 proposed clearing lies within the Ludlow-Wonnerup Area which is a registered National Estate.

Two DEC managed lands also exist within the local area (10km radius), with the closest being Tuart Forest National Park which is across the road from the proposed clearing and is recognised internationally as part of the Vasse-Wonnerup RAMSAR system. The trees are also on the edge of a System 1 conservation area.

The three *Agonis flexuosa* (peppermint) trees do not contribute to the environmental values of the conservation areas within the local area due to the degraded condition of the trees themselves and the completely degraded (Keighery, 1994) condition of the area in which the trees exist. It is therefore concluded that the proposal is not likely to be at variance to this principle.

Methodology Keighery (1994)

GIS Databases:

- CALM Managed Lands & Waters - CALM 1/07/05
- Register of National Estate - EA 28/01/03
- RAMSAR wetlands - CALM 14/02/03
- System 1 to 5 & 7 to 12 areas - DEP 06/95

(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 lies within the Vasse Wonnerup Estuary catchment area and the Busselton-Capel Ground Water Area which is managed under the Rights in Water and Irrigation (RIWI) Act 1914.

The groundwater salinity for the area ranges between 500-1000 mg/L with a moderate-low risk of acid sulfate soils and a moderate risk of salinity. However, given the mean annual rainfall is 800mm and that the proposed clearing is only for three trees, it is unlikely that the clearing will cause further deterioration in the quality of surface or groundwater.

It is therefore concluded that the proposal is unlikely to be at variance to this principle.

Methodology GIS Databases:

- Hydrographic Catchments, Catchments - DoW
- RIWI Act, Groundwater Areas - DoW
- Evaporation Isopleths - BOM 09/98

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing due to it being for only three trees with no understorey. The location from which the trees are to be removed is of a low relief with a topography ranging from 5-10m AHD. It is therefore concluded that the removal of the three trees from the site would have no impact on peak flood height or duration.

Methodology GIS Databases:

- Topographic contours, Statewide - DOLA 12/09/02
- Busselton 50cm Orthomosaic - DLI04

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

Comments

The location containing the three trees is within the road reserve of Tuart Drive and therefore does not have an allocated zone under the Town Planning Scheme.

There is no requirement for the Shire to obtain a licence to take water from DoW as water will not be taken from the site in conjunction with the works.

The proposed clearing is within the the Ludlow-Wonnerup Area included within the Register of National Estate (RNE), maintained by the Australian Heritage Council (AHC). This area is not protected under the EPBC Act as it is not included within an area listed under the EPBC Act National Heritage nor is it a requirement of the AHC Act 2003 for proponents to seek approval for actions within RNE places (DEWR, 2007). The minimal impact of the proposed clearing is not likely to impact on this conservation area.

Methodology DEWR (2007)

GIS Databases:

- Town Planning Scheme Zones - MFP 8/98
- RIWI Act, Groundwater Areas - DoW
- Register of National Estate - EA 28/01/03

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Road construction o maintenance	Cutting	3	It is recommended that the clearing proposal of three <i>Agonis flexuosa</i> (Peppermint) trees be granted with a condition that a fauna specialist inspect the trees and remove any fauna immediately before the commencement of clearing.
Road construction o maintenance	Cutting		

5. References

- 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.
- DEWR (2007) Email correspondence - Status of the Register of the National Estate, Canberra, ACT. TRIM ref DOC28290.
- 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. (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.
- 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)