



1. Application details

1.1. Permit application details

Permit application No.: 397/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Main Roads

1.3. Property details

Property: PART LOT 0 ON PLAN 7066

PART LOT 0 ON PLAN 7073

Local Government Area: Shire Of Kalamunda

Colloquial name: P7066/0 & P7073/0

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	3	Mechanical Removal	Road Maintenance (old)

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
Hedde vegetation complex: Southern River Complex - open woodland of <i>Corymbia calophylla</i> , <i>Eucalyptus marginata</i> , <i>Banksia</i> species with fringing woodland of <i>E. rudis</i> , <i>Melaleuca raphiophylla</i> along creek beds (Government of Western Australia 2000). Beard vegetation association 999: medium woodland, <i>marri</i> (Shepherd et al 2001, Hopkins et al 2001).	The vegetation under application consists of three trees alongside a major roadway (Tonkin Highway). Two Flooded gums (<i>Eucalyptus rudis</i>) are located on the western verge of the north-bound section of the highway. The other tree under application is a single paperbark (<i>Melaleuca raphiophylla</i>) on the western verge of the south-bound section of the highway. The trees are isolated from other stands of vegetation and surrounded by grass. They trees appear to be in a healthy condition.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Digital photos of the trees under application were provided by the proponent (DoE Trim No. IN19692). The description of the trees under application and their condition was assessed from these photos and supporting documentation.

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 vegetation under application consists of three trees alongside a major roadway (Tonkin Highway). Two Flooded gums (<i>Eucalyptus rudis</i>) are located on the western verge of the north-bound section of the highway. The other tree under application is a single paperbark (<i>Melaleuca raphiophylla</i>) on the western verge of the south-bound section of the highway. The areas immediately adjacent are Bushforever sites and these would be of a higher biological diversity value than the three trees under application.
Methodology	Information provided by the proponent (DoE Trim No. IN19692) GIS Databases: - Bushforever - MFP 07/01

(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 three trees that are basis of the clearing permit application are located alongside a major road. The areas adjacent to the road reserves in which the trees are situated are Bushforever sites. Therefore it is unlikely that the three trees would provide habitat qualities required by any Specially Protected or Priority fauna that may inhabit the area.

Methodology Information provided by the proponent (DoE Trim No. IN19692)
GIS Databases:
- Bushforever - MFP 07/01

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

Comments Proposal is not likely to be at variance to this Principle

The Declared Rare Flora species *Conospermum undulatum* and *Dryandra mimica* are known to occur within 500m of the trees under application. From the photographs provided with the application the trees under application are in isolation and are surrounded by grass with no shrub or other understorey species present. It is unlikely that the clearing as proposed would have any significant impact on these Declared Rare Flora species.

Methodology Information provided by the proponent (DoE Trim No. IN19692)
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 significant ecological community.

Comments Proposal is not likely to be at variance to this Principle

There are no Threatened Ecological Communities (TEC) within the immediate vicinity of the three trees under application. The nearest TEC is located approximately 1.5km to the east and it is unlikely that the clearing as proposed would affect this ecological community.

Methodology GIS Databases:
- Threatened Ecological Communities - DEP 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 likely to be 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% (Department of Natural Resources and Environment 2002, EPA 2000). The area under application has been mapped as being of the Heddle vegetation complex Southern River and the Beard vegetation association 999 both of which have a representation below this 30% minimum (see table below)(Heddle et al 1980, Shepherd et al 2001, Hopkins et al 2001). Given that this application consists of three isolated trees, it is considered that this is not an accurate representation of the vegetation complexes and associations and therefore this Principle is not deemed to be at variance.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in reserves/CALM-managed land
IBRA Bioregion:					
Swan Coastal Plain	1,529,235	657,450	43	Depleted	
Shire: Kalamunda	No information available				
Heddle vegetation complex:					
Southern River Complex	57,979	11,501	19.8	Vulnerable	
Beard vegetation association:					
999	275,380	32,451	11.8	Vulnerable	8.1

* Shepherd et al. (2001)

** Department of Natural Resources and Environment (2002)

Methodology Department of Natural Resources and Environment (2002)
EPA (2000)
Heddle et al (1980)
Shepherd et al (2001)
Hopkins et al (2001)

(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 may be at variance to this Principle

The two Flooded gums located on the western verge of the north-bound section of Tonkin Highway are located within a Resource-enhancement Wetland. The single paperbark located on the western verge of the south-bound section of Tonkin Highway is located on the edge of a Conservation Category Wetland. Given that the clearing as proposed is three trees isolated from other stands of native vegetation associated with Conservation Categories Wetlands, it is unlikely to have a significant impact on the protected wetlands in the area. There are no other waterbodies in the vicinity of this application.

Methodology Information provided by proponent (DoE Trim No. IN19692)
GIS Databases:
- Geomorphic wetlands (Mgmt categories) - Swan Coastal Plain - DOE 15/09/04

(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 clearing of the three trees as proposed in this application would be unlikely to cause appreciable on or off-site land degradation. There would be little to no risk of wind or water erosion as the trees are surrounded by grass. There would also be no risk of eutrophication as there are no waterbodies within the vicinity of the area under application.

Methodology Information provided by proponent (DoE Trim No. IN19692)
GIS Databases:
- Hydrography, linear - DOE 01/02/04

(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 nearest CALM managed land is Lesmurdie Falls National Park, which is located 3km to the east. It is unlikely that the clearing as proposed would have a significant impact on this National Park. Immediately adjacent to the road reserve containing the three trees under application are the Bush Forever sites 320 and 387. The proponent has sought permission from the Department of Planning and Industry (DPI) (department responsible for the Bush Forever sites) and no objection to the clearing was raised by the DPI.

Methodology E-mail from Bush Forever office to Main Roads (within information provided by the proponent) (DoE Trim No. IN19692)
GIS Databases:
- CALM Managed Lands and Waters - CALM 01/08/04

(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

The three trees under application are not within a Public Drinking Water Source Area (PDWSAs) and the Conservation Category Wetland located in the vicinity is a palusplain (seasonally water-logged flat). It is unlikely that the clearing as proposed would have a significant effect on surface or ground water quality.

Methodology GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments Proposal is not at variance to this Principle

The proposed clearing of three trees is unlikely to have a significant impact on peak flood height or duration due to the flat terrain and location.

Methodology GIS Databases:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The clearing is required for the widening of Tonkin Highway at the Welshpool Road intersection as the three trees under application will be within the verge clearance zone. The trees are located within a gazetted road reserve.

Methodology Information provided by the proponent (DoE Trim No. 19692)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road Maintenance (old)	Mechanical Removal	3	Grant	<p>The assessable criteria have been addressed and the clearing as proposed may be at variance with Principles e and f.</p> <p>In relation to Principle e, the three trees that form the basis of this application are not accurate representations of the Heddle vegetation complex Southern River or the Beard vegetation association 999 (both of which have representations under 30% of that present pre-European).</p> <p>For Principle f, the single paperbark (<i>Melaleuca raphiophylla</i>) is on the edge of a Conservation Category Wetland. However the removal of this single tree is unlikely to have a significant impact on the Conservation Category Wetland.</p> <p>Therefore, the assessing officer recommends that this permit should be granted.</p>

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.
- 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.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- 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.
- 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.