



1. Application details

1.1. Permit application details

Permit application No.: 842/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Works Manager Shire of West Arthur

1.3. Property details

Property:

Local Government Area: Shire Of West Arthur & Shire Of Woodanilling

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
15.8		Mechanical Removal	Road construction or maintenance
		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 Unit 4: Medium woodland; marri & wandoo ; Beard Unit 3: Medium forest; jarrah-marri ; Beard Unit 992: Medium forest; jarrah & wandoo (Eucalyptus wandoo)	Roads - Consists of scattered shrubs and large trees, highly disturbed by weed and pasture species within road verge.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Ref: Site Visit (Dec 2005) Dinninup 1m Orthomosaic - DOLA 01 Bunbury 1m Orthomosaic - DOLA 11/00 Bridgetown 1m Orthomosaic - DOLA 01 Darkan 1m Orthomosaic - DOLA 03/01 Kojonup 1.4m Orthomosaic - DOLA 01 Wagin 1.4m Orthomosaic - DOLA 01

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**
All road reserves sited whilst undertaking the site visit were considered to be in Degraded to Completely Degraded condition due to the intensive use of surrounding land for cropping, pasture and livestock. The vegetation within road reserves consisted of scattered trees and shrubs with high disturbance by pasture and weed species. The applicant has advised that no understorey or middlestorey will be removed only the large trees that are a threat to road safety. This type of clearing may change the structure in parts of the road reserve however it is not considered that the proposed clearing will significantly effect biological diversity within the local area.

Methodology Site Visit (Dec 2005)
Dinninup 1m Orthomosaic - DOLA 01
Bunbury 1m Orthomosaic - DOLA 11/00
Bridgetown 1m Orthomosaic - DOLA 01
Darkan 1m Orthomosaic - DOLA 03/01
Kojonup 1.4m Orthomosaic - DOLA 01
Wagin 1.4m Orthomosaic - DOLA 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 may be at variance to this Principle**
The proposed clearing consist of large trees that may contain habitat value for fauna within the area.

In order to mitigate potential risk to fauna negotiations were held with the applicant. Resulting in Fauna

Management conditions being placed on the permit that will provide for reduction in potential habitat loss and relocation if required.

Methodology Site Visit (Dec 2005)

(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 proposed clearing consists of Mature Jarrah (*Eucalyptus Marginata*) and Marri (*Corymbia Calophylla*) with an occasional Wandoo (*Eucalyptus Wandoo*). Disturbance to understorey species will be minimal due to the condition of the vegetation and the limited understorey species. It is therefore unlikely the proposed clearing will effect the continued existence of rare flora.

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 likely to be at variance to this Principle

Mapping indicates there are no existing ecological communities within the Shire, the proposal is therefore unlikely to be at variance to this principle.

Methodology GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- 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 Jarrah Forest Bioregion in the Shire of West Arthur. The extent of native vegetation in these areas is 58.3% and 29.8% respectively.

The vegetation proposed to be cleared is a component of: Beard Vegetation Association 4 of which there is 23.5% of the pre-European extent remaining and therefore of a 'Vulnerable' status of biodiversity conservation ; Beard Vegetation Association 3 of which there is 72.1% of the pre-European extent remaining and therefore of a 'Least Concern' status of biodiversity conservation and Beard Vegetation Association 992 of which there is 22.4% of the pre-European extent remaining and therefore of a 'Vulnerable' status of biodiversity conservation.

The applicant has agreed to revegetation conditions within two road reserves, totaling 2.7ha, with local endemic species indigenous within a radius of 10km from the revegetation sites.

As the proposed clearing consist of the removal of mature trees with minimal impact on lower and middle storey vegetation within the proposed road reserves the proposed clearing is not likely to impact on the extent of Native Vegetation Complexes represented within the local area.

Methodology Department of Natural Resources and Environment (2002)
Hopkins et al. (2001)
Shepherd et al. (2001)

GIS databases:
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04
- 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 at variance to this Principle

The application under assessment is not associated with bridge or culvert infrastructure, clearing in or near watercourses was undertaken in previous years and as such proposed clearing is not associated with watercourses or wetlands.

Methodology GIS databases:
- Hydrography Linear - DoE 1/2/04
- Hydrography Linear (hierarchy) - DoE 13/4/05

(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

Clearing mature trees within road reserve will not alter the soil structure of the area and is unlikely to cause land degradation issues such as nutrient loading or water logging.

The proposal to widen existing roads may cause some short term land degradation issues in terms of flooding and soil erosion during works. However these issues should be minimal as the existing roads already have road side infrastructure in place to prevent land degradation associated with roads ie. Table drains and culverts. Therefore the proposed clearing is unlikely to cause appreciable land degradation.

Methodology GIS databases:

- Salinity Mapping LM 25m - DOLA 00
- Salinity Monitoring LM 50m - DOLA 00
- Salinity Risk LM 25m - DOLA 00.
- Groundwater Salinity, Statewide - 22/02/00

(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

Proposed clearing of select mature trees within road reserve is not considered to have any likely impacts on adjacent or nearby conservation or timber reserves.

Methodology GIS database:

- CALM Managed Lands and Waters - CALM 1/06/04

(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 likely to be at variance to this Principle

The Shire of West Arthur is within two hydrographic catchments being Hardy Estuary - Blackwood and the Wellington Dam - Collie River. the Wellington Dam Catchment is a gazetted Country Areas Water Supply Catchment, the North West corner of the shire sits within a high risk zone in relation to salinity within the collie river and tributaries (Zone A). Clearing within this high risk zone is limited to select mature trees within road reserve. Groundwater salinity within the Shire ranges from 3000 to 14000 mg/L.

As the proposed clearing consist of the removal of mature trees with minimal impact on lower and middle storey vegetation and the structure of remaining vegetation will remain within the proposed road reserves. The proposed clearing is not likely to cause deterioration in the quality of surface or underground water.

Methodology GIS databases:

- CAWSA Part2A clearing control catchment - DoE 17/11/05
- Hydrographic Catchments, Catchments - DoE 3/4/03

(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 scale and nature of the proposed clearing it is unlikely to exacerbate flooding in the local area.

Methodology GIS databases:

- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

No submissions from the public have been received.

Advice was sent to the West Arthur LCDC in regards to this proposal as yet no response has been received.

Native Title - All roads including those subject to this application are listed on the State of Construction maps as issued by Main Roads Western Australia as roads being under the total care, control and management of the Shire of Broomehill. Therefore, as all areas proposed to be cleared are vested in the Shire, the granting of a clearing permit is not a future act under the Native Title Act.

Methodology

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Road construction or maintenance	Mechanical Removal	15.8	Grant	It is recommended to grant a permit to clear 15.8ha for road widening with Management Conditions addressing Dieback, Fauna, Weeds, Recording, Reporting, Replanting and Maintenance.
Road construction or maintenance	Mechanical Removal			Realignment Clarke Road

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.
- 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.

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)