Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2413/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Shire of Manjimup**

1.3. Property details

Property: ROAD RESERVE (YEAGARUP 6260)
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Local Government Area: Shire Of Manjimup

Colloquial name: Old Vasse Road Reserve -Pemberton

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4		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
The vegetation is comprised of three Beard vegetation associations which include:- Beard 1: Tall forest; karri (Eucalyptus diverscolor) Beard 1112: Mosaic:Tall forest; karri/tall forest jarrah & marri Beard 3: Medium forest; tuart (Eucalyptus gomphocephala) & Beard 1144: Tall forest; karri & marri (Corymbia calophylla)	Beard vegetation association 1 is the dominant association present along the length of the application area. Beard association 1112 was recorded near Treen Brook and the eastern end of the road. The vegetation is considered to be in a very good (keighery 1994) condition.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition and description of the vegetation under application was obtained via the use of orthomosaic mapping and environmental assessments conducted by OPUS Consultants (2008)

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 vegetation under application is considered to be in a good to very good (Keighery 1994) condition and is within the road reserve adjoining Pemberton National Park.

There were 8 Priority listed flora species present within the local area (10km radius) which share either common soil or vegetation types, or both. None of these were recorded on the application area in field surveys conducted by OPUS Consultants in 2007.

There are several sections of the application area which have been deemed "infested" with P.cinnamonmi (Dieback) by a qualified interpreter. At the eastern end of the application area infested sites are located 1.8km and 700m from the application area. There is also an infested site at the beginning of the western side of the application area (OPUS Consultants 2008).

Regional advice noted the presence of a proposed Threatened Ecological Community (TEC) occurring within the application area. This community is unlikely to be impacted by the proposed clearing (Regional Advice 2008).

A survey conducted by OPUS Consultants (2008) detailed that one species of a declared weed was found within the area under application along Old Vasse Road being Rubus laudatus (Blackberry). Other species of environmental weeds were noted on site visits, which included:
-Eragrostis curvula (African Lovegrass)
-Centuarium erythraea
-Vinca
-Watsonias

The vegetation under application is unlikely to be representative of an area of outstanding biodiversity due to the small size of the proposed cleared area, the large amounts of surrounding vegetation remaining in the local area and the degraded nature of the road due to its current use.

Due to the presence of the previously mentioned weed species within the local area, and the areas susceptibility to dieback invasion, a weed control and dieback condition will be imposed on the permit.

Methodology OPUS Consulting (2008)
GIS Datasets:
- Donnelly 50cm Orthomosaic DLI04
SacBioDataSet (accessed 24/5/08)

(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 vegetation under application is considered to be in a very good (Keighery 1994) condition and is within a road reserve adjoining a National Park. The Quokka (Setonix brachyurus), closest recorded occurrence was 1.9km south east of the application area.

The Pouchy lamprey had a closest recorded occurrence at 500m from the application area. This species is restricted to streams and rivers and is unlikely to be impacted by the proposed clearing.

The water rat (Hydromys chrysogaster) had a closest recorded occurrence at 300m south west of the application area. The Carpet Python (Morlelia spilota) was recorded 3.8km south of the application area.

With the exception of the Pouch lamprey, the aforementioned fauna species may be able to utilise the application area as habitat as there are a combination of vegetation associations which are in very good (Keighery 1994) condition. The tall trees that make up the majority of the application areas vegetation are the most likely habitat for a number of tree dwelling fauna species such as the Carpet Python. It is recommended that trees be inspected prior to any clearing to ensure no threatened fauna has established residence within these trees (OPUS Consulting 2008).

However, given that the application area is adjoining a National Park that is well vegetated throughout, the size of the proposed area to be cleared (4 hectares), and considering that the proposed clearing is mainly confined to the already maintained road verge and shoulder, which is regularly slashed, graded and sprayed (OPUS Consulting 2008), it is considered unlikely that the area under application is significant as a habitat for fauna.

Methodology Keighery (1994)
OPUS Consulting (2008)
GIS DataSets:
- Donnelly 50cm Orthomosaic DLI04
SacBioDataSets (accessed 24/05/08)

(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 vegetation under application is considered to be in a very good (Keighery 1994) condition and is comprised of Beard vegetation associations 1,3,1112 & 1144, with the dominant vegetation association present along the length of the application area consisting of Beard vegetation association 1.

No Rare Flora were recorded along the length of the application area (Opus Consulting 2008). There were a number of rare flora recorded in the local area (10km radius). Caladenia harringtoniae which was recorded 6.8km north west of the application area and Caladenia christineae recorded 9.5k north of the application area. While these flora species can occur on the same or similar conditions to that of the application area, due to the amount of surrounding vegetation, which is likely to be in a better condition than the application area, it is

considered unlikely that the area proposed to be cleared is a significant habitat for rare flora.

Methodology Keighery (1994)
OPUS Consulting (2008)\
SacBioDataSets (accessed 24/05/08)
GIS DataSets:
-Donnelly 50cm Orthomosaic DLI04

(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**
At present there are no known Treatened Ecological Communities (TECs) on or within the application area. Therefore the proposed clearing is not at variance to this principle.

Methodology SacBioDataSets (accessed 24/05/08)
GIS DataSets:
- Donnelly 50cm Orthomosaic DLI04

(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 vegetation present along the length of the application area is comprised of a combination of vegetation associations consisting of Beard 1, 3, 1144 &1112. The dominant association identified by OPUS Consulting in a field survey conducted in 2007 was Beard association 1: Tall forest; karri (Eucalyptus diverscolor).

All associations present along the application area are above the recommend 30% threshold of retained pre-European native vegetation (Commonwealth 2001) within the Warren bioregion, shire and as an association itself. Due to all vegetation associations being well represented, the proposed clearing of 4 hectares of native vegetation is not at variance to this principle.

Vegetation Reps	Pre-European extent	Current extent	% remaining
Beard Veg 1	72409	57115	78.9%
Within bioregion (Warren)	69117	54630	79%
Within Shire (Manjimup)	40510	38096	94%
Beard Veg 3	2661403	1846588	69.4%
Within Bioregion	250261	199967	79.9%
Within Shire	287389	243028	84.6%
Beard Veg 1144	160315	127463	79.5%
Within bioregion	159668	127227	79.7%
Within Shire	150785	118498	78.6%
Beard Veg 1112	11189	10457	93.5%
Within bioregion	11085	10357	93.4%
Within Shire	10029	9379	93.5%

Methodology Commonwealth (2001)
OPUS Consulting (2008)
GIS DataSets:
- Donnelly 50cm Orthomosaic DLI04
SacBioDataSets (accessed 24/05/08)

(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**
Warren River is located 800m and Treen Brook (line stream) is located 200m from the eastern tip of the application area. While these watercourses are within close proximity to the application area, no riparian flora was identified on site visits conducted by OPUS Consutlants (2008).

Therefore the proposed clearing is considered unlikely to be at variance to this principle.

Methodology OPUS Consulting (2008)
GIS DataSets:
- Donnelly 50cm Orthomosaic DLI04
- Hydrography, linear (13/07/06)
- Hydrography, linear (Hierachy) (13/07/06)

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal may be at variance to this Principle**
Rainfall for the area is 900mm. Elevation is between 90-160m. Due to the elevation and high rainfall in the area, the water runoff from the construction process could cause sediments to run off into adjacent vegetation (OPUS Consulting 2008). Therefore the proposed clearing may be at variance to this principle.

It is recommended that sediment traps be installed and monitored to ensure the integrity of the area is maintained.

Methodology OPUS COnsulting (2008)
GIS Datasets:
- Donnelly 50cm Orthomosaic DLI04
- Topography contours, Statewide (12/09/02)
- Rainfall, Mean Annual (01/12/99)

(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 may be at variance to this Principle**
The application area is within a road reserve adjoining the Pemberton National Park. The proposed area to be cleared is 4 hecates of native vegetaton. The vegetation is considered to be in a very good conditon (Keighery 1994). There are several section of the application area which have been deem "Infested" with P.cinnamonmi (Dieback) by a qualified interpreter. At the eastern end of the application area infested sites are located 1.8km and 700m from the eastern end. There is also an infested site at the beginning of the western side of the application area (OPUS Consultants 2008).

A survey conducted by OPUS Consultants (2008) detailed that one species of declared weed species was found within the area under application along Old Vasse Road, Rubus laudatus (Blackberry). Other species of environmental weeds were noted on site visits, which included:
-Eragrostis curvula (African Lovegrass)
-Centuarium erythraea
-Vinca
-watsonias

Due to the size of the proposed clearing and given that the clearing of vegetation is to take place on a pre-existing road, where road maintance is already occuring, it is considered unlikely that the loss of the vegetation will effect the environmental values of the nearby conservation areas.

Weed and dieback conditions will be placed on a permit to protect the environmental values of adjoining conservation areas.

Methodology OPUS Consulting (2008)
GIS Datasets:
- Calm Managed Lands & Waters (01/11/03)
- Donnelly 50cm Orthomosaic DLI04
- Rainfall, Mean Annual (01/12/99)
- Topography,Statewide (12/09/02)

(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**
In the area under application the soils are descrbed as steep hilly to hilly dissected lateritic plateau with steep valley side slopes: chief soils are hard, and also sandy, neutral, and also acidic, yellow and yellow mottled soils,with conspicuous but relatively smaller areas of red earths (Northcote et al. 1960-68).

The elevation ranges from 90-160m. Rainfall is 900mm annually and the current groundwater salinity level is between 500-1000 TDS mg/L. Due to the size of the proposed area to be cleared and the presence of large

amounts of vegetation within the surrounding area, it is considered unlikely that the proposed clearing will reduce the quality of surface or underground water quality.

Methodology Northcote et al. (1960-1968)
GIS DataSets:
- Donnelly 50cm Orthomosaic DLI04
- Topography, Statewide (12/09/02)
- Groundwater Salinity, Statewide (13/07/06)
- Rainfall, Mean Annual (01/12/99)

(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**
The annual rainfall and evapotranspiation in the local area are both 900mm. The elevation ranges from 90-160m along the length of the application area. Due to the size of the proposed clearing and the large amount of surrounding vegetaion nearby, the proposed clearing is unlikely to lead to an increase in flooding height or duration.

Methodology GIS DataSets:
- Donnelly 50cm Orthomosaci DLI04
- Topography contours, statewide (12/09/02)
- Rainfall, Mean Annual (01/12/99)

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

Comments

The area is part of the Balck Spot Funding plan due to there being 7 recorded accidents between 2000-2005 on the Road

Due to the application area residing within a road reserve adjoining a National Park, approval from the conservation commission is required. The application area is with the Pemberton National Park, which is registered on the Register of the National Estate and the Warren National Park (which is included in Pemberton National Park)

The area under application is within a Road Reseve, therefore the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

Methodology OPUS Consultants (2008)
(Regional advice 2008 Trim Ref:DOC55786)
SacBioDataSets (accessed 24/05/08)
GIS Datasets:
- Calm Managed Lands & Waters (01/11/03)
- Clearing Regulations-Environmentally Sensitive Areas (30/05/05)
- Register of National Estate (12/03/02)

4. Assessor's comments

Comment
The assessment against clearing has found:

- Principles (d) & (e) are not at variance
- Principles (a), (b), (c), (f), (i) & (j) are not likely to be at variance
- Principles (g) & (h) may be at variance

5. References

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

National Objectives and Targets for Biodiversity Conservation2001?2005, (2001), Canberra.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

OPUS Consulting Albany (2008) Environmental Management Plan: Old Vasse road Upgrade, Shire of Manijmup (Trim Ref: DOC48522)

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.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001a) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia (updated 2006).

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)