



1. Application details

1.1. Permit application details

Permit application No.: 375/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Chapman Valley

1.3. Property details

Property: LOT 11764 ON DIAGRAM 47611 (HOWATHARRA 6532)
Local Government Area: Shire Of Chapman Valley
Colloquial name: Realignment of Bella Vista Road

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		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 vegetation association 675: mixed thicket (Melaleuca and Hakea). (Hopkins et al. 2001, Shepherd et al. 2001).	Native vegetation to be cleared includes mixed Scrub Heath on a brown loamy sandy gentle slope. Forty-seven species from 24 families have been recorded: Anthericeae (2 species), Apiaceae (1 species), Asteraceae (5 species), Colchicaceae (1 species), Cyperaceae (1 species), Dilleniaceae (1 species), Dioscoraceae (1 species), Droseraceae (1 species), Epacridaceae (1 species), Euphorbiaceae (1 species), Goodeniaceae (4 species), Haemodoraceae (3 species), Loranthaceae (1 species), Mimosaceae (1 species), Myrtaceae (8 species), Orchidaceae (1 species), Papilionaceae (3 species), Poaceae (3 species), Proteaceae (5 species), Portulacaceae (1 species), Sapindaceae (1 species), Stylidiaceae (1 species), Xanthorrhoeaceae (1 species) and Stylidiaceae (1 species) [CALM, 2003].	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Observed during site visit: the vegetation was in good condition, however there were signs of minor disturbance and some introduced weed species on the fringes from neighbouring cropped paddocks (TRIM Ref: GD306).

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 at variance to this Principle**
The area under application falls within the Geraldton Sandplains Bioregion, recognised as hotspot of biodiversity. A Department of Conservation and Land Management (CALM) officer carried out a field inspection in September 2003 and found the vegetation community to be highly biodiverse with over 30 taxa recorded in a 20 x 20 metre area. The proposed clearing is at variance to this Principle, however CALM have recommended the proposal be approved for road safety reasons provided the existing road is rehabilitated to their satisfaction.

Methodology GIS Databases: Interim Biogeographic Regionalisation of Australia-EA 18/10/00.
CALM, 2004.
CALM, 2005.
Site visit, DoE Officer, 2005.

(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**
Idiosoma nigrum (Shield Backed Trapdoor Spider - Priority 1) and Pomatostomus superciliosus subsp. ashbyi (White Browed Babbler - Priority 4) have been known to occur more than 20 kilometres from the area under application, however no significant fauna have been recorded in the Howatharra Nature Reserve (CALM, 2005).

Methodology CALM's Threatened and Priority Fauna Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2005)].
CALM, 2005.

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

Comments **Proposal is at variance to this Principle**
Caladenia hoffmanii subsp. hoffmanii, Eucalyptus cuprea, Eucalyptus blaxellii, Drummondita eriacoides and Grevillea bracteosa occur in the general area however no Declared Rare Flora will be impacted by this proposal (CALM, 2003). The Priority 3 species, Verticordia densiflora var. roseostella will be affected by this application (TRIM Ref: GD 303), however CALM have recommended the proposal be approved for road safety reasons provided the area is rehabilitated satisfactorily.

Methodology GIS Databases: Declared Rare and Priority Flora list - CALM 13/08/03.
Site visit, DoE Officers, 2005.
CALM, 2005.

(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 at variance to this Principle**
The Threatened Ecological Community (TEC) data base indicates there is a site of interest 88.5m from the nearest impact area. The TEC requires a 500m buffer zone that will not be accommodated by this proposal, however CALM have approved this proposal provided the rehabilitation is carried out to their requirements.

Methodology GIS Databases: Threatened Ecological Communities - CALM 15/07/03
CALM, 2005.

(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 at variance to this Principle**
The Geraldton Sandplains Bioregion, the Shire of Chapman Valley and the Beard vegetation association 675 all have less than 30% of the native vegetation remaining. Remaining remnant vegetation less than 30% indicates a vulnerable conservation status, therefore the clearing proposal is at variance to this Principle.

	Pre-European Reserves/CALM- area (ha)	Current extent (ha)	Remaining %*	Conservation status**	managed land,
%					
IBRA Bioregion -					
Geraldton Sandplains	2,474,401	663,290	26.8	Vulnerable	Not available
Shire - Chapman Valley	396,565	32,312	10.4	Vulnerable	Not available
Beard veg type - 675	59,708	12,985	21.7	Vulnerable	3.0

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology GIS Databases: Interim Biogeographic Regionalisation of Australia - EA 18/10/00, Pre-European Vegetation - DA 01/01, Local Government Authorities - DLI 08/07/04.
Shepherd et al, 2001.
Department of Natural Resources and Environment, 2002

(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

No watercourses or wetlands occur within the area under application, therefore the proposed clearing is not at variance to this Principle.

Methodology GIS Databases: Hydrography, linear - DoE 01/02/04

(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 vegetation proposed to be cleared is a relatively small area (0.5 hectare) that experiences average rainfall and does not fall within the salinity risk area. The site proposed to be cleared will form part of a new road reserve and is unlikely to cause appreciable land degradation issues on or off site provided works are carried out in accordance with CALM and Conservation Commission recommendations.

Methodology Site visit, DoE Officers, 2005.
GIS Databases - Rainfall, Mean Annual - BOM 30/09/01, Salinity Risk LM 25m - DOLA 00.
CALM, 2004.
Conservation Commission WA, 2004.

(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 at variance to this Principle

The area under application forms part of the Howatharra Nature Reserve vested with the Conservation Commission and gazetted for the conservation of flora and fauna. The Conservation Commission of Western Australia have recommended that excision of land to upgrade the intersection be approved for road safety reasons with a maximum excision width of 40 metres (TRIM Ref: GD302).

Methodology GIS Databases - CALM Regional Parks - CALM 12/04/02, WRC Estate - WRC 05/99, CALM Managed Lands & Waters - CALM 01/06/04, Proposed National Parks FMP-CALM 19/03/03, Register of National Estate - EA 28/01/03
Conservation Commission of WA, 2004.
CALM, 2005.

(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 area under application falls within the Greenough River basin in the Chapman River catchment however it is not a public drinking water source area (PDWSA) nor is it part of a PDWSA protection zone. The area under application is relatively small (0.5 hectare) and is unlikely to impact on groundwater quality.

Methodology GIS Databases - Current WIN data sets, PDWSA Protection Zones - DOE 07/01/04, Public Drinking Water Sources (PDWSAs) - DOE 29/11/04, Hydrographic Catchments - Catchments - DOE 03/04/03.

(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 likely to be at variance to this Principle

The area of the proposed clearing lies within the 500mm rainfall zone that is average for Western Australia. Given the relatively small area under application (0.5 hectare) and the large amount of vegetation remaining, it is unlikely that the proposal will increase the risk of flooding.

Methodology Site visit, DoE Officers, 2005.
GIS Databases - Rainfall, Mean Annual - BOM 30/09/01

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

Comments

The Shire of Chapman Valley has not indicated that there are any planning requirements/approvals that would affect the clearing.

Methodology

4. Assessor's recommendations

Purpose	Method Applied	Decision	Comment / recommendation
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	area (ha)	trees	
Road construction or maintenance	Mechanical Removal	0.5	Grant

The assessable criteria have been addressed and it was found that the proposal was at variance with a number of Principles. These were Principles a) High level of biological diversity, c) Significant flora d) Significant ecological community e) A remnant in a cleared area and h) Adjacent to a conservation area. Both the Department of Conservation and Land Management (CALM) and the Conservation Commission of Western Australia (CCWA) have given approval for the proposed clearing provided the clearing is done in accordance with their recommendations. The assessing officer therefore recommends that the permit should be granted with no additional conditions other than the ones provided by CALM and CCWA.

5. References

- CALM Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref GD344.
- Conservation Commission Western Australia, 2004. Extract of minutes of meeting held 12 July 2004 regarding Howatharra Nature Reserve. Crawley, Western Australia.
- Department of Conservation and Land Management, 2003. Correspondence detailing the results of a flora survey carried out September 2003. Geraldton, Western Australia.
- Department of Conservation and Land Management, 2004. Correspondence to the Chief Executive Officer of the Shire of Chapman Valley regarding the proposed road alignment of the Howatharra Nature Reserve. Geraldton, 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.
- 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.
- 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, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Moses, P., 2003. Road safety audit report for the Nanson-Howatharra and Bellavista roads. Traffic Investigations and Safety Services, 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.