



1. Application details

1.1. Permit application details

Permit application No.: 2032/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Perenjori

1.3. Property details

Property: LOT 172 ON PLAN 194233 (PERENJORI 6620)
Local Government Area: Shire Of Perenjori
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.4		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 352: Medium woodland; York gum (Hopkins et al, 2001; Shepherd et al, 2001)	The vegetation under application consists mainly of a few individuals of Acacia sp., Melaleuca sp., flax, mallee and York gum. They are not interspersed with each other, but scattered as isolated individuals over different parts of the proposal area. The vegetation occurs as a discontinuous strip on the middle areas of the road reserve while either side consist mostly of bare ground. The south-eastern end of the proposal area consists mostly of bare ground or currant bush interspersed with grasses. The vegetation has little or no understorey. Wild oats, other grasses and broad- leaved weeds were present in the vegetation under application. (DEC Site Visit, 2007)	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description and condition of the vegetation under application were obtained through a site inspection conducted on 17 September 2007 (DEC Site Visit, 2007).

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 consists mainly of a few individuals of Acacia sp., Melaleuca sp., flax, mallee and York gum. They are not interspersed with each other, but scattered mostly as isolated individuals over different parts of the proposal area. The vegetation occurs as a discontinuous strip on the middle areas of the road reserve while either side consist mostly of bare ground. The south-eastern end of the proposal area consists mostly of bare ground or currant bush interspersed with grasses. The vegetation has little or no understorey. Wild oats, other grasses and broad-leaved weeds were present in the vegetation under application. (DEC Site Visit, 2007) The vegetation appears to be in a 'degraded' condition (Keighery, 1994).

Due to the disintegrated status of the vegetation, small area (approximately 0.4 ha), low species and ecosystem diversity and the edge effects from surrounding agricultural and residential land uses, the area under application

is not likely to be representative of high biodiversity.

Therefore, this proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
Keighery (1994)
DEC Site Visit (2007)

(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

There are two records of a Declared Threatened Fauna known as the Western spiny-tailed skink, one record of a Priority 4 Fauna known as White-browed babbler (Wheatbelt) and one record of an Other Specially Protected Fauna known as Peregrine falcon within a radius of 10 km. One of the Declared Threatened Fauna populations appears to occur at a distance of approximately 1.3 km from the proposal area. The other Significant Fauna occur at distances higher than approximately 7.5 km from the vegetation under application. The vegetation under application consists mainly of a few individuals of *Acacia* sp., *Melaleuca* sp., flax, mallee and York gum. The vegetation occurs as a discontinuous strip on the middle areas of the road reserve while either side consist mostly of bare ground. The south-eastern end of the proposal area consists mostly of bare ground or currant bush interspersed with grasses. The vegetation has little or no understorey. Wild oats, other grasses and broad-leaved weeds were present in the vegetation under application. (DEC Site Visit, 2007) The vegetation appears to be in a 'degraded' condition (Keighery, 1994).

DEC advised that the vegetation under application is not likely to be of high importance for the persistence of the Significant Fauna, namely the Western spiny-tailed skink, White-browed babbler and Peregrine falcon (DEC, 2007). The vegetation under application is providing shelter to common indigenous animals such as kangaroos (DEC Site Visit, 2007). However, given the small area (0.4 ha), the disturbed nature of the vegetation and edge effects from surrounding agricultural and residential land uses, these isolated patches of vegetation are not likely to provide quality habitat for the survival of the Threatened or other Significant Fauna.

Therefore, this proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:
- SAC Bio datasets 291107
Keighery (1994)
DEC (2007)
DEC Site Visit (2007)

(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

There is one record of a Declared Rare Flora (DRF) known as *Eremophila nivea* and one record of a Priority 2 Flora known as *Persoonia pentasticha* within a radius of approximately 10 km from the proposal area. However, the Significant Flora occur approximately 8-9 km away in the West Perenjori Nature Reserve; the soil type in these locations is different from the soil type of the proposal area. The vegetation under application consists mainly of a few individuals of *Acacia* sp., *Melaleuca* sp., flax, mallee and York gum. The vegetation occurs as a discontinuous strip on the middle areas of the road reserve while either side consist mostly of bare ground. The south-eastern end of the proposal area consists mostly of bare ground or currant bush interspersed with grasses. The vegetation has little or no understorey. Wild oats, other grasses and broad-leaved weeds were present in the vegetation under application. (DEC Site Visit, 2007) The vegetation appears to be in a 'degraded' condition (Keighery, 1994).

The DRF and Priority Flora are not likely to occur in the area under application since the soil types in the two sites are different. Furthermore, the proposal area is small (0.4 ha) and isolated by surrounding agricultural and commercial landuses. Therefore, the proposed clearing may not be of much significance for the existence of Rare or Priority Flora.

Therefore this proposal is not likely to be at variance with this Principle.

Methodology GIS Databases:
- SAC Bio datasets 291107
Keighery (1994)
DEC Site Visit (2007)

(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

There are no known occurrences of Threatened Ecological Communities (TECs) within a radius of 10 km from the area under application.

Therefore this proposal is not likely to be at variance with this Principle.

Methodology GIS Databases:
- SAC Bio datasets 291107

(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 may be at variance to this Principle

Pre-European %	Current area (ha)	Remaining extent (ha)	Conservation %*	Reserves/CALM- status**	managed land, Vulnerable
IBRA Bioregion - Avon Wheatbelt***	10.8	9,517,117	1,468,711	15.4	
Shire - Perenjori	833,844	31,564	8.4	Endangered	Not available
Beard veg type - 352	724,272	120,609	16.7	Vulnerable	2.3

* (Shepherd et al, 2001; Shepherd, 2006)
** (Department of Natural Resources and Environment, 2002)
*** Area within Intensive Landuse Zone

The vegetation under application is a component of Beard Vegetation Association 352 (Hopkins et al, 2001) of which there is 16.7 % of the pre-European extent remaining (Shepherd et al, 2006). The Shire of Perenjori has 8.4 % of the pre-European extent remaining (Shepherd et al, 2001). The Avon Wheatbelt Bioregion has 15.4 % of the pre-European extent remaining (Shepherd et al, 2006). The Avon Wheatbelt Bioregion and Beard Vegetation Association 352 have a 'vulnerable' status of biodiversity conservation while the Shire of Perenjori has an 'endangered' status of biodiversity conservation (Department of Natural Resources and Environment, 2002).

The area under application falls within EPA Position Statement No. 2 however it does not impact on this proposal as the clearing is not for agricultural purposes.

The Avon Wheatbelt Bioregion, the Shire of Perenjori and the Beard Vegetation Association 352 all have less than 30 % of Pre-European vegetation remaining, which is lower than the State Government's commitment to the National Objectives Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001) which includes a target that prevents clearance of ecological communities with an extent below 30 % of that present pre-1750 (Department of Natural Resources and Environment, 2002; EPA, 2000).

The vegetation under application consists mainly of a few individuals of Acacia sp., Melaleuca sp., flax, mallee and York gum. The vegetation occurs as a discontinuous strip on the middle areas of the road reserve while either side consist mostly of bare ground. The south-eastern end of the proposal area consists mostly of bare ground or currant bush interspersed with grasses. The vegetation has little or no understorey. Wild oats, other grasses and broad-leaved weeds were present in the vegetation under application. (DEC Site Visit, 2007) The vegetation appears to be in a 'degraded' condition (Keighery, 1994).

Due to the small area (0.4 ha), and possible long term disturbances from weed invasion and surrounding agricultural and residential landuses, the clearing of the native vegetation under application may be at variance to this clearing principle.

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
- EPA Position Paper No 2 Agriculture Region - DEP 12/00
AGPS (2001)
Department of Natural Resources and Environment (2002)
EPA (2000)
Hopkins et al (2001)
Shepherd (2006)
Shepherd 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 is not at variance to this Principle

There are no watercourses or wetlands within the area under application (DEC Site Visit, 2007). Therefore, this application is not at variance to this Principle.

Methodology GIS Databases:

- Hydrography, linear - DoE 01/02/04
- Hydrographic Catchments - Catchments - DoE 23/03/05
- DEC Site Visit (2007)

(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 proposal area consists of a flat topography. Chief soils are hard alkaline red soils. On average the area has a medium risk of salinity. The area under application is located within the 400 mm mean annual rainfall region.

The proposed clearing is small (0.4 ha) and therefore clearing may not increase the risk of salinity and water logging. The area is flat and the regional rainfall is low (400 mm per annum) and therefore the proposed clearing may not exacerbate surface runoff or flooding. The engineering measures such as the construction of table drains, compaction and bituminization are likely to prevent water and wind erosion of surface soils.

Therefore this proposal is not likely to be at variance with this Principle.

Methodology GIS Databases:

- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide - DA 11/99
- Topographic Contours, Statewide - DOLA 12/09/02

(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 West Perenjori Nature Reserve is situated approximately 7.6 km southwest of the area under application. Due to the large distance, the proposed clearing is not likely to impact on the environmental values of this NR. Furthermore, due to the distance and isolation from the NR by vast agricultural areas, the area under application is not likely to create opportunities to serve as a stepping stone for ecological linkages.

Therefore, this proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:

- CALM Regional Parks - CALM 12/04/02
- CALM Managed Lands & Waters - CALM 01/07/05
- Proposed National Parks FMP-CALM 19/03/03
- Register of National Estate - EA 28/01/03

(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 is situated within the Yarra-Monger catchment. The area under application is not situated within a Public Drinking Water Source Area (PDWSA). The Perenjori Water Reserve, which is a PDWSA (DOW, 2007), is located approximately 750 m west of the proposal area; a protection status is not assigned for this reserve. The groundwater shows salinity levels of 7000-14000 mg/L. Chief soils are hard alkaline red soils.

Due to the small area of clearing (0.4 ha) and the manner in which clearing for road construction is expected to take place, i.e. narrow strips of vegetation clearing in a linear manner, the proposed clearing is not likely to deteriorate the existing water quality any further.

Therefore, this proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:

- Groundwater Salinity, Statewide - 22/02/00
- Public Drinking Water Source Areas (PDWSAs) - DOE 09/08/05
- Hydrographic Catchments - Catchments - DOE 23/03/05

- Hydrography, linear - DoE 01/02/04
DOW (2007)

(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 proposal area consists of a flat topography. Chief soils are hard alkaline red soils. The area under application is located within the 400 mm mean annual rainfall region. Data are not available to estimate the depth to groundwater.

Due to the relatively low average annual rainfall in the region (400 mm) and the area of vegetation removal is small and expected to be narrow, the proposed clearing is unlikely to exacerbate flooding.

Methodology GIS Databases:
- Current WIN data sets
- Rainfall, Mean Annual - BOM 30/09/01
- Soils, Statewide - DA 11/99
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Perenjori (2007) advised that 'it supports the approval of the Clearing Permit. They are necessary for the road construction to make available new residential and light industrial land to facilitate population growth in the Perenjori townsites'.

There is no further requirement for a RIWI Act Licence, Works Approval or EP Act Licence for the area under application.

There are no Native Title claims or Environmental Impact Assessments over the area under the application.

There are no Aboriginal Sites of Significance in the area under application.

Methodology GIS Databases:
- Aboriginal Sites of Significance - DIA 28/02/03
- Environmental Impact Assessments - DOE 24/10/05
- Native Title Claims - DLI 7/11/05
DEC (2007)
Shire of Perenjori (2007)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Road construction or maintenance	Mechanic Removal	0.4	The assessable criteria have been addressed and no objections were raised.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- DEC (2007) Advice. Department of Environment and Conservation (DEC), Western Australia. DEC TRIM Ref DOC39251.
- DEC Site Visit (2007) Department of Environment and Conservation (DEC), Western Australia. DEC TRIM Ref DOC40735.
- 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.
- DOW (2007) Public Drinking Water Source Areas of Western Australia - A register of drinking water catchments within each local government municipality. Department of Water, Government of Western Australia, Perth.
- 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, 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.
Shire of Perenjori (2007) Submission. DEC TRIM Ref DOC32819.

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)