

# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 1916/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Electricity Networks Corporation/Western Power (Western Power)

### 1.3. Property details

Property: ROAD RESERVE ( KORRELOCKING 6485)  
Local Government Area: Shire Of Wyalkatchem  
Colloquial name: For powerline to exclude reserve.

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.6		Mechanical Removal	Infrastructure 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 1049: Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet	The proposed area is in a road reserve which appears to be degraded by edge effects. The vegetation appears to be patchy comprising of mainly trees with a disturbed understorey.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition determined using orthomosaic mapping (Dowerin 50cm 2004)

## 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 may be at variance to this Principle**

The proposed clearing is linear in shape and connected to a larger area of intact vegetation. The area under application is located in a road reserve and the vegetation is considered to be in good condition (Keighery 1994), however there are signs of disturbance due to edge effects. There is a limited amount remaining of this vegetation type and the area is possible habitat for the Threatened fauna (Tree Stem Trapdoor Spider).

Given the good vegetation condition, limited remaining vegetation of the same type and possible occurrences of the Tree Stem Trapdoor Spider in the area, it may contain a high level of biological diversity and therefore may be at variance with this principle.

Methodology Keighery 1994  
GIS Database:  
- SAC Bio datasets 16/08/07

### (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**

There are two threatened and two priority fauna known to occur within the local area (10km radius). The closest occurrence is the Tree Stem Trapdoor Spider 365m South of the proposed area and there are another three occurrences 2km to the west. Given the close proximity, the fact that these occurrences occur in connected vegetation and the very limited amount of vegetation within the local area the proposed clearing may be at variance with this principle. A condition of a targeted Tree Stem Trapdoor Spider survey is proposed if clearing is approved.

Methodology GIS Database:  
- SAC Bio datasets 16/08/07

**(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 are no known populations of Declared Rare Flora (DRF) or priority flora within the local area (10km radius). It is unlikely that the proposed clearing will impact on any known DRF.

**Methodology** GIS Database:  
- SAC Bio datasets 16/08/07

**(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 records of Threatened Ecological Communities (TEC) within a 10km radius of the proposed clearing. It is unlikely that the proposed clearing will impact on any known TEC's.

**Methodology** GIS Database:  
- SAC Bio datasets 16/08/07

**(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 proposed clearing is located in the Shire of Wyalkatchem and within the Avon Wheatbelt Bioregion. The extent remaining within these areas is 4.9% and 15% respectively. The vegetation is a component of the Beard Vegetation Association 1049 of which 3.6% of Pre-European vegetation is remaining.

The conservation status is 'Vulnerable' for the Bioregion and 'Endangered' for the Shire and Beard Vegetation Association (Department of Natural Resources and Environment 2002). All of these levels are below the target level of 30% as per the National Objectives and Targets for Biodiversity Conservation 2001-2005 (Commonwealth of Australia 2001a)

Given the above the proposed clearing is considered to be a significant remnant of vegetation in a highly cleared area. Given the very low levels of vegetation remaining an offset condition should be imposed if the proposed clearing is approved.

**Methodology** Sheperd et al. (2001)  
Department of Natural Resources and Environment (2002)  
GIS Database:  
- Pre-European Vegetation - DA 01/01  
- Matiske Vegetation - CALM 24/03/98  
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
- Heddle Vegetation Complexes - DEP 21/06/95

**(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**

There are no mapped wetlands within a 10km radius of the proposed clearing. The proposed area is 28m South and 35m East of two unnamed minor non perennial watercourses.

The vegetation condition has been compromised and the watercourses nearby being are non perennial. However the area under application may contain riparian vegetation due to the close proximatey to the watercourse. Therefore proposed clearing maybe at variance with this principle.

**Methodology** GIS Database:  
- Hydrography, linear - DOE 01/02/04  
- EPP, Areas - DEP 06/95  
- EPP, Lakes - DEP 28/07/03  
- EPP, Wetlands - DEP 21/07/04  
- Anca Wetlands - CALM 08/01  
- Geomorphic Wetlands - Swan Coastal Plain - DEC

**(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 area has no mapped acid soil sulphate risk, a low to medium salinity risk and a ground water salinity of 7000-14000mg/L. The evaporation rate is 2400mm and the rainfall rate is 350mm. Due to the high evaporation rate, low rainfall rate and hard soils it is unlikely that water or wind erosion will occur.

Given the above and the small size of the area under application the proposed clearing is not likely to be at variance with this principle.

**Methodology GIS Database:**

- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC
- Groundwater Salinity, Statewide - DOW
- Hydrogeology, Statewide - DOW
- Soils, Statewide - DA 11/99
- Topography Contours, Statewide - DOLA 12/09/02
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOW

**(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**

There are 5 'C' class Nature Reserves within the local area (10km radius). The closest being the Korrelocking Nature Reserve 2.7km North West of the proposed area. There are no links to any of the Nature Reserves and the proposed clearing is considered unlikely to impact on environmental values of the nearby conservation areas.

**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 proposed area is in the Swan Avon Mortlock Catchment area and is not in a Public Drinking Water Source Area. Topography shows the area under application has low relief and a very high groundwater salinity of 7000-14000 mg/L. The evaporation rate is 2400mm and the rainfall rate is 350mm.

Soil geology mapping shows the area has low permeability with granatoid rock (hard and gritty soil), resulting in little ground water recharge.

Given the above the proposed clearing is unlikely to impact on groundwater or surface water quality.

**Methodology GIS Database:**

- Topography Contours, Statewide - DOLA 12/09/02
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOW
- Hydrogeology, Statewide - DOW
- Soils, Statewide - DA 11/99
- Groundwater Salinity, Statewide - DOW

**(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 soil in the area under application consists of granatoid rock with low permeability but the annual rainfall is 350mm and the annual evaporation rate is 2400mm.

Given the above it is considered unlikely to be at variance with this principle.

**Methodology GIS Database:**

- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOW
- Hydrogeology, Statewide - DOW

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

**Comments**

No submissions were received.

There are no Native Title claims over the area under application.

No Aboriginal Sites of Significance are listed within the area under application. It is the responsibility of the proponent to ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

The proposed area is within the RIWI area of Avon River System.

#### Methodology

### 4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Infrastructure Maintenance	Mechanical Removal	0.6	The assessable criteria have been addressed, and the proposal is at variance to principle (e), may be at variance to Principle (a), (b) and (f) and is not likely to be at variance to Principles (c), (d), (g), (h), (i) and (j). Conditions will be imposed to manage and offset the principles at variance.

### 5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- 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 2005).

### 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)